

# OFFICERS'

# Pulse

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## Coverage.

The Hindu  
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## At a Glance & In Depth.

Polity and Social Issues  
Economy  
International Relations  
Environment  
Science and Tech  
Culture.

# CURRENT AFFAIRS WEEKLY

THE **PULSE** OF UPSC AT  
YOUR FINGER TIPS.



# News @ a Glance

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# News @ a glance

## Polity and Social issues

### Dowry givers as victims

#### Why in news?

- Kerala State Administrative Reforms Commission (ARC) has proposed to treat those giving dowry as victims than as perpetrators and exempt them from punishment to overcome the hurdles in implementing the Kerala Dowry Prohibition Act, 1961.
- Kerala Dowry Prohibition Act, 1961, provide for a provision to punishing both the givers as well receivers of dowry on similar grounds.

#### Need for the change

- It was observed that in most cases dowry is given under pressure from those demanding it and also from various social norms.
- Hence an empathetic approach should be adopted to those compelled to yield to such demands.
- There are practical problems in implementing the Act and observation have shown that despite attempts to lend more teeth to the law, social acceptance of dowry is on the rise.

### Private member Bill

#### About private bill

- If a bill is introduced in the house by a minister, it is called government bill or public bill. If the bill is introduced by any other member than a minister, it is called private member bill.
- A private member bill can be introduced by both ruling party and opposition MPs.
- Private member -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 law-making process.

#### How is private bill different from Govt bill?

- While Government bill needs a seven-day notice for its introduction, private bill needs one-month notice.
- While Government bill has more chances to get clear, private bills are generally withdrawn or get lapsed.
- While government Bills can be introduced and discussed on any day, private member's Bills can be introduced and discussed only on Fridays.

#### Why in news?

- Nominated Member of Rajya Sabha Rakesh Sinha said he would bring a private member's Bill on the Ram Temple.
- 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.
- 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.

### Usage of the term 'Dalit'

#### Why in news?

- The Ministry of Information and Broadcasting had on August 7 issued a circular 'advising' the media to refrain from using the word "Dalit" while referring to those belonging to Scheduled Castes.
- It had directed that the Constitutional term 'Scheduled Caste' in English, and its translation in other national languages should alone be used for all official transaction, matters, dealings, certificates etc. for denoting the persons belonging to the Scheduled Castes.
- The circular was issued following a June 6 order of the Bombay High Court on a PIL seeking direction to the Centre, state

government and media houses restraining them from using the word 'Dalit' as it was derogatory against persons/communities so identified.

### Regarding the word Dalit

- Dalit, meaning "broken/scattered" in Sanskrit and Hindi, is a term mostly used for the castes in India that have been subjected to untouchability.
- The word 'Dalit' is a self-chosen name, a "positive self-identifier and as a political identity", to describe the pan-Indian community of all those who have been affected by the caste system and the practice of untouchability for several centuries and thus deprived of social, economic, political and cultural rights.
- In the 1930s, the word "Dalit" was popularised and reintroduced into the public imagination by Dr. B.R. Ambedkar to refer to the pan Indian community of historically oppressed people.

### Changing name of cities

#### Why in news?

- Recently, the Uttar Pradesh Cabinet has officially adopted a proposal to rename the historic city of Allahabad as Prayagraj.
- The city was known as Prayag before 16th-century Mughal emperor Akbar built a fort near the confluence of the Ganga and the Yamuna and named it "Ilahabad".
- His grandson Shah Jahan renamed the entire city "Allahabad". An area near the confluence of the river continues to be known as Prayag.

#### Standard procedure for renaming cities

- Renaming of a city comes under the ambit of State Legislators. To complete the renaming of a state, the State Legislator should follow a guideline that will rule the validity of a particular renaming done by the said authority.
- The first step involves raising of a request in form of a resolution by any Member of Legislative Assembly (MLA) which proposes the renaming of any particular city or street.
- On the basis of the request of the MLA, the issue would be deliberated upon and the consequences of the same shall be discussed upon.
- The final step involves voting of the validity of the resolution. If there are majority votes in favour of the resolution,

Officers IAS Academy, Chennai the said resolution shall be declared passed. The majority here involves simple majority.

- Recent example being renaming of the Aurangzeb Road in Lutyens's Delhi as Dr APJ Abdul Kalam Road. The resolution was unanimously passed by the New Delhi Municipal Council.

### Seaplanes in UDAN 3

#### Why in news?

- Seaplanes may soon be operating commercial passenger flights in India with the Centre inviting bids for connecting selected destinations under the regional connectivity scheme (RCS).
- Major 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

- UDAN (Ude Desh ka Aam Nagrik) is a regional connectivity scheme launched by Ministry of Civil Aviation which envisages on providing connectivity to un-served and under-served airports of the country.
- Features
  1. 50% seats for each flight to be offered at Rs. 2500 for one hour travel.
  2. Viability Gap Funding to finance operators offering half of the seats at low price. Regional Connectivity Fund (RCF) to be created to meet Viability Gap Funding requirements.
  3. Concessions to operators in form of lowering of VAT in ATF, no landing & parking charges, free fire services etc.
  4. Equitable allocation under the scheme to 5 categorized regions (North, South, East, West & North East).

### All health conditions be covered

#### Why in news?

- Government appointed a working committee to examine which health conditions arising after the inception of a health insurance policy should be covered.
- Committee recommended that All health conditions arising after the inception of a health insurance policy should be covered and cannot be permanently excluded.

#### Observations of the committee

- Committee, as part of its methodology, met various stakeholders of the health insurance industry including representatives of health insurers, general insurers, life insurers, insurance brokers, third-party administrators, agents, Ministry officials, NGOs, consumer activists, medical experts and reinsurers, and collected their views.
- There should not be any permanent exclusions in the policy wordings for any specific disease conditions, whether they are degenerative, physiological, or chronic in nature.
- Insurers must be allowed to incorporate permanent exclusions with due consent of the proposer, which will allow a wider section of the population to be insured under health insurance.
- Insurers may be allowed to incorporate waiting periods (duration when a claim is not admissible) for any specific disease condition, however to a maximum of 4 years.

## Women of India National Organic Festival 2018

### Why in news?

- The 5<sup>th</sup> edition of the 10-day Women of India National Organic Festival 2018 organised by the Ministry of Women & Child Development culminated on the 4<sup>th</sup> November.
- Over the 10 days, women farmers and entrepreneurs from across the country, participated with vast variety of organic products ranging from food and fabrics to wellness and personal care participated in this festival, which is an annual affair.

### About festival

- The main objective of the Festival has always been to support and encourage women and women-led groups that promote organic farming.
- Also supporting their local community's economy, creating jobs and keeping farmers thriving, in addition to spreading proper awareness about the benefits of organic products.
- The participants of Women of India National Organic Festival 2018 also had the opportunity to enroll themselves in Mahila-E-Haat.

### About Mahila-e-haat

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- Mahila E-HAAT is an online marketing platform to facilitate women entrepreneurs to sell their products to buyers.
- It is an initiative mainly for women across the country and is part of Union Government's flagship 'Digital India' and 'Stand Up India' initiatives.
- Joint initiative of: Union Women and Child Development Ministry and Rashtriya Mahila Kosh (RMK) for meeting the needs of women entrepreneurs.

## Agri-price forecast model

### Why in news

- The Centre is planning for studying and emulating Karnataka's innovative market intelligence model for agri price forecasting, which would help in undertaking swift market intervention when there is a price crash.

### About agri price forecasting

- The purpose is to achieve predictability as well as stability of farm incomes. Knowing the market situation in advance, it will help farmers, policymakers and industry make informed decisions.
- Forecast will also help the government prepare in advance for market intervention if there was an indication of price crash.

### About Karnataka's agri price forecast model

- "Krusha Maarukatte Dhaarane Vishleshana Phalaka" (KRIPA or Farm Produce Price Analysis Dashboard), is the agency that look after forecasting.
- KAPC has adopted an innovative method of getting information on arrivals as well as prices of various agriculture and horticultural crops on a daily basis from all the 162 prominent APMC yards in the State.
- This method that works on a software developed through a Bengaluru based startup, Anvita, provides forecasting of prices and market trends for the next three months.
- Karnataka Government has signed a Memorandum of Understanding (MoU) with software giant Microsoft India to develop a unique "farm price forecasting model".

## Water ATMs

### Context

- The government is increasingly starting to accept small water enterprises such as water ATMs and community purification plants as an alternative solution to the safe drinking water challenge.
- For thousands of communities across India, the process of getting **drinking water** is now the same as the process of getting cash as they head to an ATM.

### Important facts

- A recent report by the Comptroller and Auditor General of India (CAG) pointed out that only 18% of the rural population has access to potable piped water, failing to meet the 2017 target of 50%.
- India is ranked at 120 out of 122 countries on the Water Quality Index, said Niti Aayog, adding that 70% of the country's water supply is contaminated.
- Community water purification plants have grown from less than 12,000 in 2014 to almost 50,000 in 2018, according to the SWN, as they have been incorporated into government planning.

### About water ATM:

- The water ATM is a dispensation system, which can be automatic with a coin or smart card, or manual.
- Can be seen as a community RO.
- It can be powered by solar energy, integrated with reverse osmosis (RO) and ultrafiltration units with reduced operational costs.
- Community water purification plants have grown from less than 12,000 in 2014 to almost 50,000 in 2018, according to the SWN, as they have been incorporated into government planning.
- To reach the government's Har Ghar Jal target of 100% piped water by 2030, almost ₹5 lakh crore of infrastructure investment will be required, says government data.

## Article 254 (2)

### Why in news

- Opposition party has recently wrote to president objecting to the "indiscriminate use" of Article 254 (2) of the Constitution state government to bypass Parliament-enacted laws.

- For example, laws passed by state legislatures allow for the acquisition of land without having to satisfy any of the Central safeguards built into the 2013 Central law, such as right to consent, social impact assessment.

### Constitutional merit regarding Article 254 (2)

- If a law made by the Legislature of a state with respect to matters enumerated in the concurrent List contains any provision not adhering to the provisions of an earlier law made by Parliament then,
  1. It will be reserved for the consideration of the President if received his assent, would prevail in that State.
- Therefore center has in an attempt to bypass Parliament, encouraged state governments to pass their own laws for land acquisition and get them approved by the Centre ie president's assent.
- Also, "acquisition and requisitioning of property" is in the concurrent list hence the laws made by states will satisfy the conditions in Article 254 (2).

## CBI & CVC

### Why in news

- Recently in October 2018, two of the top officials of the agency have been reported to be involved in a major feud. This has led the Government of India to intervene in order to restore the institutional integrity and credibility of CBI.

### About CBI

- The CBI started working under the Delhi Special Police Establishment in 1941 to enquire into cases of corruption in the procurement during the Second World War.
- Later, based on the recommendations of the Santhanam Committee on Prevention of corruption, CBI was established by a resolution of the Ministry of Home Affairs.
- Later, it was transferred to the Ministry of Personnel and now it enjoys the status of an attached office.
- The CBI is not a statutory body. It derives its powers from the Delhi Special Police Establishment Act, 1946. The CBI is the main investigating agency of the Central Government.
- It works under the overall superintendence of Central Vigilance Commission in matters related to the Prevention of Corruption Act, 1988.

### Appointment procedure of CBI Director

- The appointment procedure of CBI Director has undergone several changes over time.
- Initially, appointments were made as per Delhi Special Police Establishment Act, 1946.
- In 2003 DSPE Act revised based on Supreme Court's recommendation. A committee that had members from Central Vigilance Commission, secretaries from Home Ministry, Ministry of Personnel and Public Grievances would send recommendations to Central Government for appointment of CBI Director.
- In 2014 The Lokpal Act provided a committee headed by Prime Minister as a chairperson, Leader of opposition, Chief Justice of India for appointment of CBI Director was formed.
- Also, director of CBI has been provided security of two-year tenure in office by the CVC Act, 2003 (Vineet Narain Case).

### About CVC

- The Central Vigilance Commission (CVC) was set up by the Government of India in 1964 on the recommendations Santhanam committee, to advise and guide central government agencies in the field of vigilance.
- CVC is conceived to be the apex vigilance institution, The Central Vigilance Commission Act, 2003 gave it a constitutional status.
- The commission shall consist of a Central Vigilance Commissioner – Chairperson and not more than 2 vigilance commissioners – Members.
- They are appointed by the president by warrant under his hand and seal on the recommendation of a three-member committee consisting of the prime minister as its head, the union minister of home affairs and the Leader of the Opposition in the Lok Sabha.
- They hold office for a term of four years or until they attain the age of sixty five years, whichever is earlier.
- After their tenure, they are not eligible for further employment under the central or a state government.

### Greater Nagaland idea

#### Why in news

- There was protest in Imphal capital city of Manipur against the idea of realising Greater Nagaland allegedly part of Naga peace accord.
- There was sense of anger and fear among the protesters that Greater Nagaland would compromise the territorial integrity of Manipur.

#### About Naga peace accord

- It is a peace deal between Government of India and National Socialist Council of Nagaland (IM). It laid down a framework for recognizing the needs of NSCN- IM & other groups and resolve issues of the Naga issue amicably.
- NSCN - IM has been derecognised as a militant organisation and talks have been initiated with the government.
- Government is open to discuss the Naga territorial issue within the existing boundaries of the neighboring states of Manipur, Assam and Arunachal Pradesh, which are being claimed as part of Greater Nagaland.
- Key issues that have been put under consideration includes AFSPA, demographic changes due to cross border migrations and other tribes like Meitei who are diluting the local populations in the Naga areas.

### Sale of enemy shares

#### Why in news

- The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the mechanism and procedure for sale of the enemy shares.
- Approval has made for sale of enemy shares under the Custody of Ministry of Home Affairs/ Custodian of Enemy Property of India (CEPI).
- Department of Investment and Public Asset Management (DIPAM) have been authorized under the provisions of Enemy Property Act, 1968, to sell.

#### Definition of enemy

- Enemy property Act of 1968, defines enemy as follows: "enemy" or "enemy subject" or "enemy firm" means a person or country who or which was an enemy, an enemy subject or an enemy firm, as the case may be, but does not include a citizen of India.
- In the amendment of 2017, this was substituted by "including his legal heir or



successor, whether or not citizen of India or the citizen of a country which is not an enemy or the enemy, who has changed his nationality”.

### Impact of the decision

- The decision will lead to monetization of enemy shares that had been lying dormant for decades since coming into force and the Enemy Property Act in 1968.
- Sale proceeds from this may be used for development and social welfare programmes.

## Long cohabitation is marriage

### Why in news?

- Supreme Court recently upheld the right of women to seek alimony from her partner even though couple are not legally married.
- It also observed that couple who live together as husband and wife are legally married.
- Hence, woman can claim maintenance under Section 125 of the Code of Criminal Procedure.

### Implications

- Man, who lived with a woman for a long time and even though they may not have undergone legal necessities of a valid marriage, should be made liable to pay the woman maintenance if he deserts her.
- Women will receive significant monetary benefit that would help them to lead a better life.

## Jharkhand to be ODF

### Why in news?

- Jharkhand will become open defecation free state on its upcoming foundation day - 15th November.
- Ministry for Drinking Water and Sanitation under SBM - Gramin is monitoring the program across India.

### About ODF villages

- Open defecation refers to the practice whereby people go out in fields, bushes, forests, open bodies of water, or other open spaces rather than using the toilet to defecate.
- The practice is the main reason India reports the highest number of diarrhoeal deaths among children under-five in the world.

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- ODF is the termination of faecal-oral transmission, defined by
  1. No visible faeces found in the environment/village
  2. Every household as well as public/community institutions using safe technology option for disposal of faeces.

### About Ganga gram

- Ganga Gram is a concept to transform banks on the village of River Ganga into ideal villages
- Special focus will be on ODF, Solid and Liquid Waste Management, Water Conservation, Ground Water Recharge, modern crematorium, tree plantation, organic and medicinal plant agriculture being the main components.
- Ganga Gram Project falls under the Namami Gange Programme with aim to making all 4465 Ganga Bank villages ODF.

## India for Humanity

### Why in news?

- Recently vice president of India launched 'India For Humanity' a worldwide program on the occasion of 150th birth anniversary Mahatma Gandhi in Lilongwe, Malawi.
- 'India For Humanity' launched in Malawi opens an opportunity to take the message of Mahatma Gandhi to all parts of the world as it seeks to celebrate the great values of humanism

### About the initiative

- Ministry of External Affairs (MEA) has launched India for Humanity initiative to commemorate the 150th birth anniversary of Mahatma Gandhi and honour of his service to humanity.
- It will feature year-long series of artificial limb fitment camps in a number of countries across world.
- The larger aim of this initiative is to provide physical, economic and social rehabilitation of differently-abled around world.
- MEA has collaborated with renowned charitable organisation Bhagwan Mahaveer Viklang Sahayata Samiti (BMVSS).

## POWERGRID

### Why in news?

- Recently POWERGRID has brought back the valley's power to normalcy which was affected by the heavy snowfall.
- Heavy snowfall in areas of Jammu and Kashmir threw the normal life out of gear in the state as people suffered immensely due to power breakdown in the valley.

#### About POWERGRID

- POWERGRID helps transfer power from the surplus regions to the deficit ones. In this way, power grid manages the peak deficit problems.
- POWERGRID is Navaratna Central Public Sector Enterprise (CPSE). It is central transmission utility (CTU) of India.
- POWERGRID transmits about 50% of the total power generated in India on its transmission network.
- It is headquartered in Gurugram, Haryana. Government owns 56.91% of POWERGRID and balance 43.09% is owned by public.

### Model construction workers' welfare scheme

#### Why in news?

- Centre's model construction workers' welfare scheme released recently asks States to decide on the provision of pension.
- There are no mandatory pension benefits in the final version of the Centre's model construction workers' welfare scheme.
- But government had suggestions that 20% of the construction cess fund be set aside for retired workers.

#### Background

- The Supreme Court of India on March 19, 2018 directed the Union Government to frame a model scheme to address issues concerning the welfare of construction workers.
- The model scheme is expected to include the issues and concerns of education, health, social security, old age and disability pension and other benefits.
- Building and Other Construction Workers Act, 1996 (BOCW Act) formally regulates the profession of construction workers.

### Ban on Exit Poll

#### Why in news?

- Election Commission of India (ECI) notified the period during which conducting any exit poll is prohibited in

Officers IAS Academy, Chennai the ongoing general elections to the Legislative Assemblies of Chhattisgarh, Madhya Pradesh, Rajasthan, and Mizoram & Telangana.

- Representation of the People Act, 1951, provides such authority to ECI.

#### About ban on exit poll

- Opinion polls are conducted by polling agencies and disseminated widely by the electronic and print media
- Currently, opinion polls are barred from being published in electronic media for 48 hours prior to an election in that polling area under RPA section 126.
- Justification for the regulation of opinion polls is the preservation of the sanctity and integrity of the electoral process.
- Concerns on this count arise on the grounds that opinion polls are able to influence electoral behaviour and distort electoral outcomes.

### Double jeopardy

#### Why in news

- Supreme Court recently held that double jeopardy does not arise if an accused was discharged of a criminal offence, even before the commencement of trial, on the basis of an invalid sanction for prosecution.
- It was hearing a case under the Prevention of Corruption Act.

#### About double jeopardy in Indian constitution

- Doctrine of double jeopardy - meaning that a man must not be punished two times for the same offence.
- When a person has been convicted for an offence by a competent court, the conviction serves as a bar to any further criminal proceedings against him for the same offence.
- Article 20 (2) of the Constitution mandates that a person cannot be prosecuted or punished twice for the same offence.

### Varanasi Multi Modal Terminal on River Ganga

#### Why in news?

- PM will dedicate to the nation the newly constructed Multi Modal Terminal on River Ganga at Varanasi.

#### About Varanasi Multi-modal terminal:

- Varanasi port or Varanasi Multi-Modal Terminal is a river port in the Varanasi

city of Uttar Pradesh. The port is being built on the Ganges river.

- This port is being built under the government's Jal Marg Vikas project.
- When the construction of the port is completed, the direct connection of the Port of Kolkata and Haldia Port along with Varanasi city will be created.
- There are two ships to anchor at the port simultaneously. In the port, there will be other facilities including deposit area, commodity transit shade, parking area.

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- There will also be a floating jetty with terminal for passenger transport.

**About Jal Marg Vikas Project:**

- It aims to build National Waterways 1 with World Bank funding.
- The project aims to bring down the logistics cost in the country.

The project will cover states including Uttar Pradesh, Bihar, Jharkhand and West Bengal and major districts such as Varanasi, Ghazipur, Ballia, Buxar, Chhapra, Vaishali, Patna, Begusarai, Khagaria, Munger, Bhagalpur, Sahibganj, Musrhidabad, Pakur, Hoogly and Kolkata.

## Economy

### Operation Greens

#### Operation Greens

- It is an initiative announced in the Budget speech of 2018-19 to stabilise the supply of tomato, onion and potato crops (TOP) and to ensure their availability through the year without price volatility.
- The programme also aims to promote Farmer Producer Organizations (FPO), agri-logistics, processing facilities and professional management.

#### Why in News?

- The Ministry of Food Processing Industries has issued operational guidelines for the programme.
- National Agricultural Cooperative Marketing Federation of India (NAFED) will be the Nodal Agency to implement price stabilisation measures.
- **Short term price stabilisation measures**
  1. MoFPI will provide 50% of the subsidy on transportation costs of TOP Crops from production to storage
  2. 50% subsidy for hiring of appropriate storage facilities for these crops
- **Long-term integrated value chain development projects** which aim at
  1. Capacity building of FPOs and their consortia
  2. Ensuring quality production
  3. Post-harvest processing facilities
  4. Developing agri-logistics
  5. Creation of marketing and consumption points
  6. Creation of an e-platform for demand and supply management of TOP crops
- The government has also identified various tomato, onion and potato clusters in the country for the initiative.

### Public Credit Registry

#### Why in News?

- The Reserve Bank has initiated steps to set up a digital Public Credit Registry (PCR).

#### What is a PCR?

- It will be an information repository that collates all loan information of individuals and corporate borrowers to help banks to get 360 degree profile of existing and prospective borrowers on a real-time basis.

- The digital registry will contain data from entities like Sebi, the corporate affairs ministry, and the Insolvency and Bankruptcy Board of India (IBBI) which will increase the efficiency of lending institutions by reducing information asymmetry.
- The PCR would be the single point of mandatory reporting for all material events for each loan. Currently, there are multiple credit information repositories in India like CRILC, Equifax, Experian, etc.
- It can address the bad loan problem, as borrowers will be unable to lend from multiple banks without disclosing their existing debt.
- Borrowers would also be able to access their own credit information and seek corrections to the credit information reported on them.

### RCEP concession for India

#### Why in news?

- Several ASEAN member countries of the proposed RCEP have offered India a significant concession, in a bid to encourage it to join the membership as quickly as possible.

#### About RCEP:

- The Regional Comprehensive Economic Partnership (RCEP) is a proposed trade agreement between the 10 Association of Southeast Asian Nations (ASEAN) countries and their six free trade agreement partners, namely Australia, China, India, Japan, Korea, and New Zealand.
- The grouping would comprise 25% of global GDP, 30% of global trade, 26% of FDI flows, and 45% of the population.

#### About ASEAN:

- The Association of Southeast Asian Nations (ASEAN) is a regional intergovernmental organization comprising ten Southeast Asian countries, which promotes intergovernmental cooperation and facilitates economic, political, security, military, educational, and sociocultural integration among its members and other Asian states.

#### Concessions for India

- The ASEAN countries are keen to have India as part of the partnership and have made India a concessional offer of opening up only about 83% of its market, as compared to the original 92% that the RCEP agreement stipulated.
- And regarding India's concerns about further opening its market to China and skewing the trade deficit between them further, the RCEP allows for bilateral agreements also to be made so India can perhaps open up to China gradually and not in one go.
- India has achieved some success regarding some of its other concerns, such as getting the other RCEP countries to liberalise their services markets and allow for a more free movement of service sector professionals.
- Ahead of the November 14 RCEP summit; some of the countries led by Singapore, which holds the presidency of the ASEAN this year, have been keen to at least announce an agreement on "substantial outcomes" by December 31.

## Loan Defaulters List

### Why in News?

- The Central Information Commission (CIC) has issued a notice to RBI Governor Urjit Patel for denial of information under the Right to Information Act.
- RBI has denied to disclose names of wilful defaulters who have taken bank loans of ₹50 crore and above in spite of a Supreme Court order.
- In the RBI vs Jayantilal N Mistry case (2015), SC had directed the RBI to comply with the provisions of the RTI Act.

### Who is a wilful defaulter?

- A wilful defaulter is an entity or a person that has not paid the loan back despite the ability to repay it.

## Exim Bank Study

### Why in News?

- A recent Export-Import Bank of India (Exim Bank) bank study has showed that in the last ten years, India's total trade with the Latin America and Caribbean (LAC) region had more than doubled from \$ 17.5 billion in 2008 to \$ 36 billion in 2017.
- While Indian exports to LAC region have grown by about 70% to reach \$ 11.9

Officers IAS Academy, Chennai billion in 2017 from \$ 7 billion in 2008, Indian imports have more than doubled to reach \$ 23.6 billion in 2017 from \$ 10.5 billion in 2008.

- The study has stressed on the need to grow trade and investment between India and LAC region which will be mutually beneficial as it provides huge opportunity for both the regions.
- It also advocated that India should grab the opportunity by setting ambitious targets of increasing bilateral trade to \$100 billion by 2025 [including targeted exports of \$50 billion]

### About EXIM Bank

- EXIM Bank is a specialized financial institution established in 1982 under Export-Import Bank of India Act 1981. It is wholly owned by Government of India.
- Its main function is to finance, facilitate and promote foreign trade of India.

## Leasing out airports

### Why in news?

- The Union Cabinet has approved for leasing out six airports of AAI viz. Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangaluru.
- Leasing includes operation, management and development under Public Private Partnership (PPP) through Public Private Partnership Appraisal Committee (PPPAC).

### Benefits of the approval

- PPP in infrastructure projects brings efficiency in service delivery, expertise, enterprise and professionalism apart from harnessing the needed investments in the public sector.
- The PPP in airport infrastructure projects has brought World class infrastructure at airports, delivery of efficient and timely services to the airport passengers, augmenting revenue stream to the Airports Authority of India without making any investment.
- Presently, the airports being under the PPP model include Delhi, Mumbai, Bangalore, Hyderabad and Cochin.
- This is expected to enhance the revenue to AAI and increased economic development in these areas in terms of job creation and related infrastructure.

## Strategic Petroleum Reserves

### What are Strategic Petroleum Reserves (SPR)?

- They are huge stockpiles of crude oil established to tackle emergency situations. SPRs significantly help India's energy security and will insulate the country from external price and supply shocks.

### Status in India

- Currently, India has constructed three strategic petroleum reserves in huge underground rock caverns at Visakhapatnam (1.33 Million Metric Tonnes) on the East Coast, and at Mangaluru (1.5 MMT) and Padur (2.5 MMT) on the West Coast.
- In June, the union cabinet approved Phase-II of SPR programme, which involves creation of additional 6.5 MMT of storage at Chandikhol, Odisha (4.0 MMT) and Padur-II, Karnataka (2.5 MMT).
- Combined with an existing storage capacity of 5.3mt, the new strategic petroleum reserve facilities will help support 22 days of India's crude oil requirements. The global practice is to maintain strategic reserves of at least 90 days of oil imports.

### Why in News?

- The Union Cabinet has approved the filling of SPR at Padur (Karnataka) by foreign National Oil Companies.
- The filling of the SPR is being undertaken under PPP model to reduce budgetary support of the government.

## Competitive procurement

### Why in News?

- Competition Commission of India (CCI) in partnership with the Indian Institute of Corporate Affairs (IICA), a think tank under the aegis of Ministry of Corporate Affairs has organised a National Conference on Public Procurement & Competition Law.

### Highlights of the conference

- Injeti Srinivas, Secretary, Ministry of Corporate Affairs stated that public procurement accounts for more than 26% of GDP. (Public procurement refers to the purchase by governments and state-owned enterprises of goods, services and works.)

- Competitive Procurement could result in cost saving to the extent of around 20-30% that could have long term impact on the economy.
- Finance Minister Arun Jaitley cautioned that excessive competition in any sector could result in the pricing of a nature leading to stress in that sector.

### About GeM

- The Government e-Marketplace (GeM) was launched in 2016 to streamline public procurement process.
- It is a one-stop portal to facilitate online procurement of common use goods and services required by various government departments, organisations and public sector undertakings.
- In 2017, the government made it **mandatory** for all the departments and ministries to source goods and services from the GeM.

## Balancing India-China Trade

### Why in News?

- India's Commerce Secretary had a bilateral meeting with Vice Minister of China's Commerce Ministry, in Shanghai.

### Highlights of the meeting

- India expressed concern regarding the large trade deficit with China which now stands at \$63 Billion.
- India acknowledged Chinese Government's efforts in clearing some of the market access issues during the past few months.
- Earlier this year, the two sides signed a protocol on phytosanitary requirements that would allow India to export non-Basmati rice to China. China has also initiated steps to liberalise its market for raw sugar exports from India.
- The Commerce Secretary informed that areas like pharmaceuticals, information technology services and tourism in which India has proven strengths and significant global presence but minuscule presence in China, need to be encouraged in bilateral trade.
- China assured all support for increasing exports from India.

## Strategic disinvestment

### What is Disinvestment?

- It is the action of an organization or government, of selling their asset(s).
- It is aimed at reducing the financial burden on the government due to inefficient Public Sector Undertakings (PSUs) and to improve public finances.

### What is Strategic Disinvestment?

- In strategic disinvestment, significant proportion of a PSU's share and the management control is given to a private sector company.
- This private sector company is, a strategic partner to the government.
- It is different from the ordinary disinvestment in which management of the PSU is retained by the Government.

### Why in news?

- The Cabinet Committee on Economic Affairs has approved strategic disinvestment of 100% Government of India's shares in Dredging Corporation of India Limited (DCIL) to consortium of four ports namely, Visakhapatnam Port Trust, Paradip Port Trust, Jawaharlal Nehru Port Trust and Kandla Port Trust.
- Presently the Government of India holds 73.44% shares in DCIL.

### About DCIL

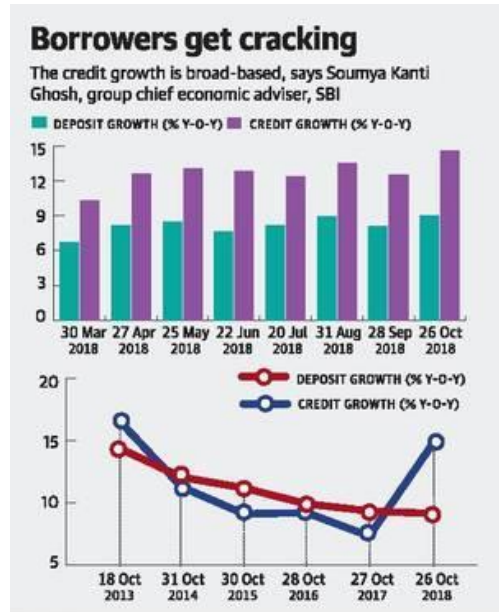
- DCIL is a public sector unit engaged in the business of dredging.
- It is headquartered at Visakhapatnam and reports to the Ministry of Shipping.
- Almost all the maintenance dredging in Indian seaports is carried out by DCIL.
- It is also involved in capital dredging, beach nourishment, and land reclamation.

## Growth of Credit

### Why in News?

- According to the latest RBI data, loan growth of commercial banks is at a five-year high.

- The year-on-year credit growth was 14.6% as on October, the highest in five years. In October 2013, credit growth was 16.6%.



### Reasons for the pickup

- Strong loan demand from large corporates, for road projects, and also non-banking finance companies.
- Credit to major sectors like infrastructure, textiles, chemical and chemical products and engineering has accelerated. Retail credit is also growing at a healthy pace, particularly housing loans.
- The rise in credit growth is usually seen as an indication of a pick-up in private investment.

### Lagging deposit growth

- However, Deposit growth was still lagging credit growth, with the gap between deposit and credit growth widening.
- According to the RBI data, deposit growth was 9% as on October.

## *International Relations*

### **Queen Heo**

#### **Why in news?**

- Ms. Kim has been invited to attend the ground-breaking ceremony of a park in Ayodhya dedicated to Indian-born Korean Queen Heo Hwang-ok.

#### **About the park:**

- Queen Heo, originally named Princess Suriratna, is believed to have travelled to the Korean city of Gimhae from Ayodhya in AD 42 as a 16-year-old.
- The park with a monument was first built in 2000, but is being enlarged with the help of a grant of land from the Uttar Pradesh government.
- The most important thing is the political symbolism that Korea and India agree that we have this special connect from 2,000 years ago. This kind of symbolism is very important.
- The visit is termed as extraordinary, as it is the first time a South Korean First Lady has travelled alone for an official visit in 16 years.
- The fact that [President Moon Jae-in] is sending the First Lady in her own capacity, which is a first for any foreign country, means that the President puts a lot of emphasis on strengthening relations with India.
- The link with Ayodhya is considered important in South Korea as more than 10% of its population belongs to the influential Kim-Heo clan that Queen Heo and King Kim founded, and many Koreans come as tourists to India each year to visit the park.

### **Pakistan-China Relations**

#### **Why in news?**

- Pakistan PM visited Beijing during which 16 new agreements were signed.

#### **Outcomes of the visit:**

- Without specifically referring to the Kashmir issue, China backed Pakistan for trying to resolve “outstanding issues” with India through dialogue, and appeared to support Islamabad on two other key topics the expansion of the Nuclear Suppliers Group (NSG) and counterterrorism.
- The two countries also said they were not yet ready to join a global counter-terror

treaty, pointing out that a “consensus” should be forged on the text of the Comprehensive Convention on International Terrorism (CCIT) first.

- CCIT is a proposed treaty by UN to criminalise all forms of terrorism, it is still under negotiation.
- China also supported Pakistan on nuclear non-proliferation in the statement.
- Pakistan supported active participation of China at the platform of the South Asian Association for Regional Cooperation (SAARC).
- They have also promised a bus service between China and Pakistan through CPEC.

#### **Rebrand CPEC:**

- During the visit the two sides have made it clear in principle that the Chinese government will provide necessary support and assistance to Pakistan in tiding over the current economic difficulties.
- The two countries promised to set up an institutional mechanism and to extend CPEC to other parts of Pakistan.

#### **India’s reaction to the visit:**

- India lodged a strong protest against the proposed China-Pakistan bus service that will pass through PoK. It is not happy with Pakistan invitation to join SAARC.
- This entire move by China shows that it has violated the Wuhan Spirit.

#### **What is Wuhan Spirit?**

- Recently Chinese President Xi and Indian President Modi had an informal meeting in Wuhan on the side-lines of the BRICS summit during which our relationship with China improved.

### **Indian & Chinese Soldiers Celebrate Diwali**

#### **Why in news?**

- Indian and Chinese soldiers celebrated Deepavali at the Bum La border post in Arunachal Pradesh.

#### **More on the news:**

- A ceremonial Border Personnel Meeting (BPM), the last of 2018, was held on the occasion.
- Delegations led by Colonels of both countries exchanged greetings in a cordial



atmosphere, a sign of improving military-to-military ties at the ground level.

- The meeting began with the hoisting of national flags and included lighting of traditional lamps and the ceremonial address.
- Both sides highlighted the importance of maintaining peace and tranquillity along border areas, besides ensuring the sanctity of the Line of Actual Control.
- The delegation leaders emphasised upon the need to maintain and continuously improve relations at the ground level which would act as a 'catalyst' at the strategic and diplomatic levels to foster cordial ties.
- There were colourful performances by cultural troupes showcasing the spirit of India.

#### About Bum-la pass:

- The **Bum La Pass** is located about 37 km away from Tawang in Arunachal Pradesh, at the Indo-China border above 15,200 ft above sea level.

#### Other passes nearby:

- **Nathu La-Sikkim with Tibet**
- **Jelep la-Sikkim with Bhutan**

## India's ties with Botswana, Zimbabwe and Malawi

#### Why in news?

- The Vice President of India, Shri M. Venkaiah Naidu embarked on his first Africa visit from 31st October to November 6.
- In his weeklong visit, he will visit Botswana, Zimbabwe and Malawi where he is scheduled to interact with heads of state of the three nations, business fora and address Indian Community.

#### More on the visit:

- India shares close, warm and friendly relations with all African countries which are cemented by robust development partnership and a large presence of the Indian Diaspora.
- The engagement has intensified and there have been 26 outgoing visits to Africa at the level of President, Vice President and Prime Minister in the last four years. Africa has been accorded the top priority in India's Foreign Policy.
- The visit of Vice President to Botswana, Zimbabwe and Malawi will further

Officers IAS Academy, Chennai strengthen relations with these African countries.

- The visit underlines the high priority, the government of India accords to Africa and is in line with India's efforts to have a sustained and regular engagement.

#### About the countries:

##### Zimbabwe:

- Zimbabwe officially the Republic of Zimbabwe, is a landlocked country located in southern Africa, between the Zambezi and Limpopo Rivers, bordered by South Africa, Botswana, Zambia and Mozambique.
- Capital-Harare

##### Botswana:

- Botswana, officially the Republic of Botswana, is a landlocked country located in Southern Africa.
- Botswana is topographically flat, with up to 70 percent of its territory being the Kalahari Desert.
- It is bordered by South Africa to the south and southeast, Namibia to the west and north, and Zimbabwe to the northeast. Its border with Zambia.
- Capital-Gaborone.

##### Malawi:

- Malawi is a landlocked country in southeast Africa. It is bordered by Zambia to the northwest, Tanzania to the northeast, and Mozambique on the east, south and west.
- Capital-Lilongwe.

## Afghan peace talks

#### Why in news?

- In a significant departure from India's stand on engaging Taliban, the government announced that it would participate at "non-official" level.

#### More on the peace talks:

- The talks, known as the "Moscow format" will include a "high-level" delegation from the Taliban as well as a delegation of Afghanistan's "High Peace Council" (from the Afghan government representatives).
- Along with twelve countries, the first time an Indian delegation has been present at the table in talks with the Taliban representatives based in Doha.
- United States said it would send representatives from its embassy in Moscow to the talks; Pakistan is also expected to send a representative.

- India said it supports all efforts that would preserve unity and peace in Afghanistan.

#### India's official clarification regarding the talks:

- Facing a lot of questions on its sudden shift in policy on attending talks with the Taliban.
- Centre clarified that its delegation at the second on 'Moscow format meeting of consultations on Afghanistan' would not hold direct talks with the insurgent group there.
- India said that it is consistent with its policy, and we will be taking part in a meeting on Afghanistan which is hosted by Russia; and the talks are at the non-official level.
- India had refused to recognise the Taliban government in Afghanistan (1996-2001) and had opposed talks with the Taliban.

### India as digital economy partner

#### Why in news?

- Recently a conference was held on 2D bar code for creating a common international gateway connecting the genuine buyers and sellers by scanning QR code.
- Chinese officials said that India with a huge demographic potential is already on board and can be an effective partner to connect Eurasia in digital economy.

#### More on the news:

- QR code: QR code (abbreviated from Quick Response Code) is the trademark for a type of matrix barcode (or two-dimensional barcode). Applications include product tracking, item identification, time tracking, document management, and general marketing.
- Why China ropes India as a partner: In China, there has been a growing awareness of India's strengths in the pharmaceutical sector and other areas. But the challenge is how to find genuine buyers and sellers. That is where 2D codes become important to solve the problem by eliminating fraudulent buyers and sellers online.
- Exports of Indian pharmaceuticals and cotton are being sent through the 2D coding route, though other items are likely to be added in the future.
- Analysts say that China appears more inclined to source pharmaceuticals and agro-products from India, following the trade war with the United States.

- India's favourable demography is also helping in building a growing digital-connect with China.

- India has a good foundation for digital economics. With the use of 2D coding, trade volumes can expand greatly, as the new technology will go a long way in building commercial trust.

### 15<sup>th</sup> Finance Commission & MEA

#### Why in news?

- As part of Finance Commission of India's interactive process with major central ministries, discussions were held with Minister of External Affairs.

#### Highlights of the meeting:

- MEA's budget was observed that it has remained less than 1 % of the total budget of the GOI's budget.
- Out of total budget, Establishment expenditures ie., building offices have been consistently below 30%.
- Development partnership of about 27.7 billion dollars is spent on various countries under India's Neighborhood First and Act East policies.
- To increase the outreach and efforts towards such partnerships, 18 new missions are to be opened by 2022 in various countries which need additional resources.
- The Finance Commission said that it is cautious of the increasing challenges and opportunities that India is facing on the dynamic world.
- The fund allocation has to be such that India is able to implement the projects that India has promised at an early pace.

#### More on the news:

- Finance Commission is appointed by the President once in 5 years and it is the duty of the Commission to make recommendation on allocation of funds.
- This meeting between Finance Commission and MEA was held to understand the funds needed for the ministry.

### Agro Buyer Seller Meet

#### Why in news?

- Indian exporters of four key commodities of **rice, tea, spices and dry fruits** will be meeting the major importers in Saudi

## Motor Fuels Technology Collaboration Programme

### Why in news?

- India has joined as Member of Advanced Motor Fuels Technology Collaboration Programme (AMF TCP) under International Energy Agency (IEA) on May, 2018.

### Details:

- The primary goal of joining AMF TCP by Ministry of Petroleum & Natural Gas (MoP&NG) is to facilitate the market introduction of Advanced motor fuels/ Alternate fuels with an aim to bring down emissions and achieve higher fuel efficiency in transport sector.
- 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
- Association with AMF TCP will help MoP&NG in furthering its efforts in identification & deployment of suitable fuels for transport sector in respect of higher efficiency and lesser emissions.

### About IEA (International Energy Agency):

- IEA is a Paris-based autonomous intergovernmental organization established in the framework of the Organisation for Economic Co-operation and Development (OECD) in 1974 in the wake of the 1973 oil crisis.
- The IEA was initially dedicated to responding to physical disruptions in the supply of oil, as well as serving as an information source on statistics about the international oil market and other energy sectors.
- The IEA acts as a policy adviser to its member states, but also works with non-member countries, especially China, India, and Russia.
- The Agency's mandate has broadened to focus on the "3Es" of effectual energy policy: energy security, economic development, and environmental protection.

### About AMF TCP:

- AMF TCP is an international platform for cooperation among countries to promote cleaner and more energy efficient fuels & vehicle technologies.

Arabia during a Food and Agro Buyer-Seller Meet (BSM).

- The meeting is organised by Consulate General of India in Jeddah in association with Jeddah Chamber and Trade Promotion Council of India (TPCI).

### Highlight of the meeting:

- The four commodities being focused on have great prospects for furthering Indian exports to Saudi Arabia.
- The Kingdom of Saudi Arabia has been a major food and beverages (F&B) market for India.
- The BSM will be an ideal platform for Indian participants to explore the business opportunities for trade, acquaint with new consumer trends and initiate marketing tie-ups and joint ventures.

### India's edge over these products:

- Basmati rice export continuously dominates India's rice export basket. **India accounts for around 72% of the total Basmati rice produced.**
- India is the 2nd largest producer and 4th largest exporter of tea in the world** with a 23% share in global production and a 7.5% share in world tea exports.
- India exports tea to more than 60 countries globally with Iran, Russia, UK, USA and the Gulf countries being major markets.
- Indian spices too are much in demand in the Gulf countries**, given their exquisite aroma, texture and taste.

### India-Saudi trade relation:

- Saudi Arabia is India's one of the most important trade partners and is a major FDI partner of India after the UAE in Gulf region.
- India's export to Saudi Arabia was worth USD 5 billion in 2017.
- The major products exported by India to Saudi Arabia were rice, chemicals, refined petroleum oil and motor vehicles and its parts.
- India's import from Saudi Arabia was worth USD 21 billion in 2017, amounting to a huge trade deficit of USD 16 billion.
- The major products imported by India from Saudi Arabia were petroleum products.
- India is seeking to reduce the trade deficit by enhancing exports in areas where Saudi Arabia is importing from the world which is food and beverages mainly.

- The activities of AMF TCP relate to R&D, deployment and dissemination of Advanced Motor Fuels and looks upon the transport fuel issues in a systemic way taking into account the production, distribution and end-use related aspects.
- Ministry of Petroleum & Natural Gas, Government of India has joined AMF TCP as its 16th member on 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 of joining AMF TCP:**

- 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

Officers IAS Academy, Chennai 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.

## **SIMBEX 18**

### **Why in news?**

- 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.
- The first edition was held at 1994.

### **About SIMBEX 2018:**

- The 25th edition will witness a diverse range of exercises at sea.
- The initial harbour phase will be held at Port Blair, the capital of Andaman and Nicobar Islands.
- The second harbour phase will be held at Visakhapatnam – ‘the City of Destiny’.

## Science & Technology

### Solar Energy Corporation of India

#### About:

- It was founded in 2011 and registered under Section 25 of Companies Act, 1956, as a Company not for profit. It comes under the aegis of Ministry of New & Renewable Energy.
- It is the only Central Public Sector Undertaking dedicated to the solar energy sector.
- The company is responsible for implementation of a number of schemes of MNRE, major ones being the VGF (viability gap funding) schemes for large-scale grid-connected projects under JNNSM, solar park scheme and grid-connected solar rooftop scheme, along with a host of other specialised schemes such as defence scheme, canal-top scheme, Indo-Pak border scheme etc.
- The company also has a power trading license and is active in this domain through trading of solar power from projects set up under the schemes being implemented by it.

#### Why in News?

- There is a delay in executing the solar projects due to slow policy decisions.
- As govt. has planned to make 60 GW utility scales in solar energy by 2022 in India, the present pace doesn't allow chasing the target.
- Rooftop projects are running even slower with a speed of 1- 1.5 GW per year.

### Lymphatic filariasis

#### About

- Lymphatic filariasis, commonly known as **elephantiasis**, is a neglected tropical disease.
- The infection occurs when filarial parasites are transmitted to humans through mosquitoes. There are 3 types of these thread-like Parasites (filarial worms)
  1. Wuchereria bancrofti, which is responsible for 90% of the cases
  2. Brugia malayi, which causes most of the remainder of the cases
  3. Brugia timori, which also causes the disease.
- Infection is usually acquired in childhood causing hidden damage to the lymphatic system.

- The lymphatic system helps to protect us from infection and disease. It's part of the body's immune system. Lymph fluid passes through lymph nodes which are connected by a network of lymph vessels. The nodes are found throughout the whole body.
- The most common symptom is swelling of body parts like legs, genitals, arms, breasts etc. called lymphoedema and swelling of scrotum called hydrocele. The patient not only gets permanently disabled as well faces economic, mental, & social losses contributing to stigma and poverty.
- According to the Indian Council of Medical Research (ICMR), over 31 million people in India, may have the disease and 630 million are at its risk.

#### Treatment

- Elimination of lymphatic filariasis is possible by stopping the spread of the infection through preventive chemotherapy. Govt is approaching the elimination of the disease under mass drug administration (MDA) by giving tablets to the people free of cost. But due to lack of awareness, people don't take tablets with a fear of side-effects.
- Community awareness and research in treatment can make India filarial-free.

### GSAT-11

- The GSAT-11 with its lift-off mass of about 5600 Kg is the heaviest communication spacecraft to be launched soon using Ariane-5 (European Heavy lift launch vehicle).
- It will provide higher capacity for interactive applications using VSAT terminals compared to older generation three tonne INSAT/GSAT spacecraft.
- GSAT-11 will provide much faster uplinks for a host of communications and broadcasting services, including direct-to-home (DTH television). GSAT-11 is built to provide the Indian region excellent communication and 12 GBPS connectivity with its multiple spot beams in Ka and Ku bands.

#### Why in News?

- GSAT-11 is back once again at the Guiana Space Centre for an early December launch.
- It was brought back to Bengaluru after GSAT 6A failure from South America port before 6 months.

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- The new data may be a platform of discrimination by employers and insurance companies.
- It may hurt ethical, socio-cultural and religious perspectives of people across world.
- May threaten the privacy of an individual.

## Earth Bio-genome project (EBP)

### What is it?

- It is a decade long project started on 1st Nov 2018 to sequence, catalogue and characterise genomes all known eukaryotic biodiversity including all animals, plants and fungi.
- Almost 17 organisations across the world are involved in the project which can cost around \$5 billion.
- It is said to sequence the genome of all known 1.5 million species, which will probably be the next 'moon shot' for biology.

### What is a genome?

- A genome is an organism's complete set of DNA, including all of its genes. Each genome contains all of the information needed to build and maintain that organism. In humans, a copy of the entire genome is more than 3 billion DNA base pairs which are present in all cells that have a nucleus.

### What are the objectives of EBP?

- Fundamental Science: The Sequencing will help to create an inventory of knowledge which will be used for researches.
- Conservation: It is predicted that by the end of the century we may lose half of the biodiversity, hence the project may help us to tackle the climate change and conserve biodiversity. It will also help in understanding ecosystems.
- Human Welfare: The projects may provide insights in tackling humankind's major problems and provide medicinal marvels like drugs for anti-aging, which can be used for human welfare.

### What can EBP bring out?

- New treatment options for infectious and inherited diseases
- New biological synthetic fuels
- New technologies to maintain food security for the world.
- Drugs to slow or reverse aging.
- New Biomaterials

### What are the possible threats?

### Way forward

- Laws must be formed to deter the stigmatization and discrimination which may occur.
- Institutions must be determined to protect the identification of the research participant which should not be compromised to utility of data for welfare.
- Ethical standards should be formalised.

## China's Space Station

### Why in news

- China revealed a model of its first permanently crewed space station, which symbolises the country's major ambitions beyond the earth.
- It is appreciated as a major step towards China's ambition of establishing a permanently manned space station by 2022.
- Once the International Space Station (ISS) completes its lifetime in 2024, China will be the only country to have manned space station.

### About China's space station.

- It is a 17-metre core cylindrical module representing the living and working quarters and also have two other modules for experiments and which will be equipped with solar panels.
- The construction of the station will manifest the third phase of the Tiangong programme.
- 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.

### International Space Station

- The International Space Station (ISS) is a space station, in low Earth orbit. Its first component launched into orbit in 1998, and the last pressurised module was fitted in 2011.
- The International Space Station — a collaboration between the U.S., Russia,

Canada, Europe and Japan — is due to be retired in 2024.

- The ISS is the largest human-made body in low Earth orbit and can often be seen with the naked eye from Earth.

## International Telecommunications Union Council

### Why in news

- India has been elected as a Member of the International Telecommunications Union (ITU) Council for another 4-year term (2019-2022).
- 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.

### India and ITU

- 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.
- ITU has decided to set up the ITU South Asia Area Office and Technology Innovation Centre in New Delhi.

### About International Telecommunications Union (ITU)

- ITU is the United Nations specialized agency for information and communication technologies.
- ITU allocates global radio spectrum and satellite orbits, develops the technical standards that ensure networks and technologies seamlessly interconnect, and strives to improve access to ICTs to underserved communities worldwide.
- ITU, based in **Geneva, Switzerland**, is a member of the United Nations Development Group, and has 12 regional and area offices in the world. ITU has been an intergovernmental public-private partnership organization since its inception.

## AI to improve tea quality & World's first AI TV anchor

### About Artificial Intelligence

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- Artificial intelligence is the intelligence of the machines. Using the intelligence machines perceive the environment and takes necessary action to attain the predetermined objectives.
- Artificial Intelligence together with Internet of things is the driver of fourth industrial revolution. The applications of artificial intelligence include banking, public health, governance, education, traffic management.

### Why in news

- Tea Research Association (TRA) is planning to harness front line technologies based on artificial intelligence (AI), chatbots and sensor-based machinery to boost tea quality.
- AI is seen as step to equipping the age-old industry to face the ravages of climate change

### How AI can be utilised?

- TRA has tied up with two start-ups that will show the way forward in these initiatives.
- Fine leaf count of a batch of tea will be detected through AI, and a good quality fine leaf count is 60% or above.
- It includes an idea to develop a chat-bot which would be programmed to answer tea-cultivators queries on various issues.

### Why in News?

- Xinhua News agency of China has inducted world's first AI news anchors to broadcast their news. The new AI anchors promise to work tirelessly and keep the audience updated.
- Two AI synthetic anchors, one for English and another for Chinese have been built by Sogou Inc. The agency said that the robots will be utilised to give news 24x7 and quickly disseminate breaking news.

## Oumuamua

### What is Oumuamua ?

- A paper published at Harvard University in which the researchers have noted that "Oumuamua may be a fully operational probe sent intentionally to Earth vicinity by an alien civilisation"
- It is an alien rock is about 1,300 feet long (400 meters) long, and only about 130 feet wide.
- Oumuamua, the first interstellar object known to enter our solar system, which has accelerated faster away from the Sun

than what is expected. Hence there is notion that it is some kind of artificial sail that runs on sunlight -- known as a light sail -- may have helped push it through space.

- Oumuamua, Hawaiian for "messenger" or "scout," was first viewed by telescopes in October 2017.

#### What do others say?

- Many scientists are not agreeing to the concept of alien spacecraft. Some are saying it to be a comet-like object released from the far star system.
- It is the time and evidences which can tell what exactly the Oumuamua is.

## World Resources Institute (WRI) Report

### Why in News?

- World Resources Institute (WRI) in its report *Shifting Diets for a Sustainable Food Future* has said that people should reduce eating beef with an angle of worrying about the methods and techniques to achieve a sustained future to feed the growing population in the upcoming years.

### 3 Arguments:

- People eat more protein than the required quantity for the day, which is wastage. For e.g. an average American or Canadian eats up to 90gm of proteins against the requirement of 50 gm. There are 1.3 billion cattle across the world today (and India rears 300 million of them). This implies that we will need over 2.6 billion cattle 30 years from now.
- The pastoral rearing needs land and other resources. Due to bleaching they also contribute to global warming. The estimate says that cattle population would need 1/3rd of global water.
- People of emerging economies like Brazil or China are moving to western food habits from their vegan diets. This adds lot of pressure to resources.

### Suggestions

- Reduce caloric intake which should not exceed 2000 calories/ day.
- Reduce protein intake which should not exceed 50-55 gm/day. Shift to other protein sources.
- Reduce beef intake specifically, have once a while than regularly.

### Way forward:

- Man has been eating meat since millennium; drastic change cannot be imbibed into societies suddenly.
- The above changes demand social and cultural change, which can be brought by awareness of the situation.

## Nipah Virus

### What is Nipah Virus infection?

- Nipah virus is a zoonotic virus (it is transmitted from animals (bats or pigs) to humans) and can also be transmitted through contaminated food or directly between people.
- Fruit bats of the Pteropodidae family are the natural host of Nipah virus. The virus can also cause severe disease in animals such as pigs, resulting in significant economic losses for farmers.
- The case fatality rate is estimated at 40% to 75%. This rate can vary by outbreak depending on local capabilities for epidemiological surveillance and clinical management.
- There is no treatment or vaccine available for either people or animals. The primary treatment for humans is supportive care.
- Human infections range from asymptomatic infection (no symptoms) to acute respiratory infection (mild, severe), and fatal encephalitis (brain inflammation).
- Recently in may-June 2018, Kerala was under Nipah infection outbreak.

### Why in News?

- A paper published in *the Journal of Infectious Diseases* acknowledged that out of 23 lives claimed by the disease, 18 were due to spread of virus in hospitals. This also signifies that the spread was due to not following basic protocols like wearing masks and gloves by nurses.
- This breach of simpler procedures by hospital authorities has often lead to become patients as super-spreaders (a patient spreading disease to more no of people) even in diseases like tuberculosis and influenza.

## small RNA & Rice domestication

### Types of Rice:



- IN world most of the rice can be categorised into 2 types Japonica and Indica Rice.
- Japonica rice is grown in temperate climates, such as Portugal, Spain, Japan, California, and Italy. Its grains are round and not easily broken. The rice made is rather sticky and moist.
- Indica rice is usually grown in hot climates. The grains are long and tend to break easily. When cooked, the rice is fluffy and does not stick together. Most of the rice produced in Southern Asia, including Sri Lanka, India, Thailand, Vietnam and Southern China is Indica rice

#### National Centre of biological sciences (NCBS)

- Situated in Bengaluru, is a part of Tata Institute of Fundamental Research uses experimental and computational approaches in the study of molecules, cells and organisms.

#### Why in News?

- NCBS has discovered that the domestication of rice can be tracked to the loss of a small RNA molecule (miR397).
- Indica rice that most of us eat almost every day, was domesticated from two wild plants namely, *Oryza nivara* and *O. rufipogon*,
- It was widely speculated that regulatory molecules named small (s)RNAs might contribute towards domestication-associated changes by altering ability to control production of specific proteins. sRNAs are tiny messengers that dictate which genes can make proteins, often at specific times and specific locations within the organism.
- Laboratory at NCBS has identified one specific sRNA that regulates multiple aspects of rice growth and development. While this sRNA is

Officers IAS Academy, Chennai expressed at high levels in wild species of rice, **it was shut-off gradually to improve mechanical strength** of rice stems through altered lignification. Lignin is essential for stronger stem.

- The plants with stronger stems can hold more grains. The study finds that to make any plant more efficient in crop production, we can alter the sRNA0 miR397.

## Tamarind seed protein for chikungunya

### Why in News?

- IIT Roorkee, as per study published in *Virology*, has found a protein (tamarind chitinase-like lectin or TCLL) in tamarind seeds which binds with the sugar moiety (N-acetylglucosamine or NAG) of Chikungunya virus and thus prevents it to bind with host cell. The study found that it reduces the infectivity of the virus by 64%. The virus RNA in the infected cell was also reduced by 45%
- But it couldn't completely stop the disease virus to bind with the host. The paper says that it is yet to know the presence of other sugar moiety and protein bindings and calls for further research.
- As of now the disease has no medicine to treat, this is a major discovery. TCLL can bind with nearly 30 members of alphavirus family to which chikungunya belongs. Hence the discovery may help to device drugs for several diseases.

### What is Chikungunya?

- Chikungunya is a viral disease which is transmitted to humans by infected mosquitoes – including *Aedes aegypti* and *Aedes albopictus*.

## Defence and Security

### IEDs from Myanmar

#### Why in news?

- As much as 30 Intensive Explosive devices (IED) has been recovered in Manipur, which is alleged to have been brought in by the insurgents from Myanmar.

#### More on the issue:

- While the intensity of Manipur's decades-old insurgency has been contained, with security forces ensuring there are no insurgent camps left in the State, militants continue to take advantage of the hilly terrain and porous border with Myanmar to carry out attacks with IEDs and sophisticated weapons, army officials said.
- Manipur has become a key centre as the Asian Highway 1 will link India to the Association of South East Asian Nations (ASEAN) through Moreh.
- In addition, Manipur and Myanmar have a 16-km Free Movement Regime along the border which allows local residents to move freely.
- Since India and Myanmar has a porous border, the army officials stressed the need to be vigilant of this border to avoid increased insurgency.

### INS Arihant

#### Why in news?

- Prime Minister felicitates crew of INS Arihant on completion of Nuclear Triad.



#### About INS Arihant:

- INS Arihant is nuclear submarine capable of carrying nuclear ballistic missiles.
- It belongs to class referred to as **Ship Submersible Ballistic Nuclear (SSBN)**
- It was built with Russia's help under Advanced Technology Vessel (ATV) project started in the 1980s.
- It weighs 6000 tonnes and is 112 metre long.

- It is powered by 83 MW pressurised light water nuclear reactor with enriched uranium fuel.
- It will be armed with the K-15 Sagarika missiles with a range of 750 km.
- Later it will be armed with much longer range K-4 missiles (3,500 km range) being developed by DRDO.
- With its induction, India has completed its nuclear triad.
- The Arihant is harder to detect than India's nuclear weapons platforms on land and in the air, giving it a "second-strike" capability.
- This would allow India to retaliate against an enemy who managed to destroy the rest of its nuclear arsenal in a first-strike

#### What is Nuclear Triad?

- A nuclear triad is a three-pronged military force structure that consists of land-launched nuclear missiles, nuclear-missile-armed submarines and strategic aircraft with nuclear bombs and missiles.
- Specifically, these components are land-based intercontinental ballistic missiles (ICBMs), strategic bombers, and submarine-launched ballistic missiles (SLBMs).
- The purpose of having this three-branched nuclear capability is to significantly reduce the possibility that an enemy could destroy all of a nation's nuclear forces in a first-strike attack.
- This, in turn, ensures a credible threat of a second strike, and thus increases a nation's nuclear deterrence.

### Rafale fighter's maiden flight

#### Why in news?

- The first Rafale aircraft made by Dassault aviation for IAF made its maiden flight on Oct 30th on France.

#### About Rafale flight:

- The Dassault Rafale is a French twin-engine, multirole fighter aircraft designed and built by Dassault Aviation.
- Equipped with a wide range of weapons, the Rafale is intended to perform air supremacy, aerial reconnaissance, ground support, in-depth strike, anti-ship strike and nuclear deterrence missions.

- **Dassault** claims **Rafale** has 'Omnirole' capability to perform several actions at the same time, such as firing air-to-air missiles at a very low altitude, air-to-ground, and interceptions during the same attack.
- The aircraft is fitted with an on-board oxygen generation system (OBOGS).
- It suppresses the need for liquid oxygen re-filling or ground support for oxygen production.

## Army fire power gets booster

### Why in news?

- India added another marking milestone towards capacity building and capability enhancement of the Indian Army. The Defence Minister dedicated the globally combat proven M777 A2 Ultra-Light Howitzers, K-9 Vajra-Tracked Self Propelled Guns and 6x6 Field Artillery Tractors to the service of the Nation.

### More on the news:

- Emerging from the shadow of the Bofors scandal, the Army inducted its first artillery gun systems in three decades.
- The M777 Ultra-Light Howitzers from the U.S. and K9 Vajra-T self-propelled artillery gun from South Korea were inducted in Maharashtra.
- The common gun tower, a 6x6 vehicle with cross-country capability. Required to tow the medium guns. These are made by the Indian company Ashok Leyland.
- The M777 brings a new level of capability to the artillery unit by offering rapid deployment and extreme accuracy.

- The M777 is a 155-mm, 39-calibre towed artillery gun. It weighs just four tonnes, making it transportable underslung from helicopters.
- The K9 Vajra-T is a 155-mm, 52-calibre self-propelled gun with a maximum range of 40 km. It has been customised from the original K9 Thunder. Its fire control system has been customised for desert conditions.



## Environment

### Tigress Avni

#### Man-Animal Conflict

- The human-animal conflict takes variety of forms in different parts of the nation, such as monkey threat in urban areas, crop damage by wild pigs, elephant etc.
- Killing of livestock and human beings had emerged as the major outcomes of human-animal conflict.
- Animals like elephant, tiger, leopard, wild dog, monkey etc. are major animals involved in human-animal conflict in India.
- Shrinking and degradation of habitats of the respective animals had made them to move into the region of other species which creates conflict.

#### Why in news?

- A tigress named Avni has been shot dead by Private hunter along with the forest officials.
- This incident happened after the tigress is said to have killed 13 people and the state government had ordered to shoot the tigress, in further appeal to supreme court also confirmed the government's order to kill the tiger.
- During the process, the hunter had shot the tigress in self-defence, which led to death of avni.
- Various protests had been held all over the state against this act of government.
- The National Tiger Conservation Authority has asked report from Maharashtra forest department about this incident.

### Tiger Protection in India

#### Tiger Habitats in India

Habitats	Estimated population
Shivalik-Gangetic plains	485
Central India-Eastern ghats	688
Western ghats	776
North eastern hills-Brahmaputra flood plains	201

Sunderbans	76
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#### NTCA

- The National Tiger Conservation Authority is a statutory body under the Ministry of Environment, Forests and Climate Change constituted under provisions of the Wildlife (Protection) Act, 1972.
- It has been created to strengthen the tiger conservation in the country.
- Project Tiger' is a Centrally Sponsored Scheme of the Environment, Forests and Climate Change.
- It was started in the year 1973.
- It helps in providing funds, in situ conservation of tigers in states etc.
- Currently this project is implemented in 17 states across India.

#### Methods of Tiger Census

- Pug mark census technique.
- Camera trapping (based on strips).
- DNA fingerprinting.

#### Other actions taken

- Tigers are said to be kept in the Schedule 1 of wildlife protection act, 1972.
- Special tiger protection force is created in Mudumalai tiger reserve on recommendations of NTCA.
- An agreement is signed between India-Nepal to ban illegal trade of wildlife.
- India-Bangladesh has signed agreement to protect royal Bengal tiger.
- There is said to be 5.8% of annual increase in tiger population in India.
- Global tiger initiative has been created in 2008. It is a global alliance of governments, International organisations, civil societies etc.
- An ambitious species conservation goal was set by the governments of the 13 tiger range countries: to double the number of wild tigers by 2022. This is the **Tx2 goal**.
- International Tiger Day is said to celebrate on July 29 from 2010.
- According to 2015 tiger census, there are almost 2226 tigers in India.
- India has the largest number of tiger population in the world.

### Great Flamingos

#### Overview of Great Flamingos

- This bird species is usually found from West Africa eastward throughout the Mediterranean to South West and South Asia.
- Mostly seen in regions of marine, wetlands and freshwater areas.
- In IUCN status the bird is said to be at “Least concern” category.
- By various actions by governments, the number of Great Flamingos is constantly increasing.

#### Why in news?

- After a long time, a group of five greater flamingos has been spotted on the Coast of Hope Island, a part of the Coringa Wildlife Sanctuary in Andhra Pradesh.
- It has been 25 years since a group of flamingos are arriving to India, while a lone one was found in 2016.
- The officials found these birds when they were conducting survey about mangrove plantations in that region.

### Wind Farms affecting food chain

#### Why in news?

- A recent study stated that wind farms are responsible for large part of changes in food chain in Chalkewadi plateau, Maharashtra.
- With wind farms introduced in this region 20 years ago, the activity of birds such as eagles, kites had been continuously low.
- Because of the absence of these predators, the number of lizards started to increase rapidly in this region.
- Not only increase in population, the lizards also showed physical changes such as change in body colour, poor body conditions, less stress levels etc.
- The study had found that due to high population, increased competition of resources among the lizards had led to these physical changes.

#### Steps to overcome

- The wind power projects which are currently exempt from Environment Impact Assessments, must be brought into EIA.
- It could help to find the harmful consequences of the project to the ecosystem.
- There should be an equilibrium created between clean energy and environmental protection.

### Ganga bill

#### Why in news?

- The government has banned the construction of jetties, ports or “permanent hydraulic structures” in the Ganga, unless permitted by the National Ganga Rejuvenation Authority, according to a proposed ‘Ganga Act’.

#### Highlights of Bill:

- **Ganga Protection Corps:** The draft Bill envisages the Ganga Protection Corps as an armed force “constituted and maintained” by the Central government. “If any member of GPC has reason to believe that any person has committed an offence punishable under this Act, he may take such person in custody to the nearest police station.” GPC will follow Code of Criminal Procedure.
- **Aquaculture:** The draft Bill says that commercial fishing or aquaculture activities in the Ganga and any of its tributaries shall be punishable with imprisonment for two years or a fine of Rs 2 lakh or both.
- **Construction:** the proposed legislation specifies that “unauthorised” activities that cause obstruction or discontinuity of water in the River Ganga, due to engineered diversion of water or stoppage of water, could be liable to a prison term of 3 years or fines upto Rs. 50 crore, or both.
- **Obstruction:** No person or municipal authority will establish or take any steps to set up any industrial or residential or commercial premises or structure which may result in discharge of any sewage or trade effluent into the Ganga, otherwise he may face a five-year prison term or a fine of Rs 50,000 per day or both.
- The Bill lays down a host of restrictions to ensure the “uninterrupted, ecological flow” of the river.

### Ganga grams

#### What is Ganga gram?

- Ganga Gram is a concept to transform the villages on the bank of river Ganga into ideal villages with various basic features.
- Those features include Open Defecation Free, Solid and Liquid Waste Management, Water Conservation, Groundwater Recharge, modern crematorium, tree plantation etc.

- This project has been taken up by Ministry of Drinking Water and Sanitation.
- This project is an integrated approach for holistic development of villages situated on the banks of River Ganga with active participation of the villagers.
- Ganga Swachhata Manch, a forum of individuals, academicians, civil society organizations are available for awareness creation, knowledge sharing, learning for Ganga Gram Project.

## Solar Powered ships

### Solar power in India

- India being a tropical country receives adequate solar radiation for 300 days, amounting to 3,000 hours of sunshine equivalent to over 5,000 trillion kWh.
- The country's current cumulative solar capacity is said to be 24.4GW.
- The target of the national solar mission capacity has been set at 100 GW generation by the year 2022.

### Solar transport

- The Cochin International Airport in Kerala is the first and only airport in the world to be run completely by solar power. It has been chosen by the United Nations for the Champions of the Earth Prize, 2018.
- Various initiatives had been taken by the Indian railways to utilize solar power through solar roof panels to run electrical appliances on trains.
- These types of technologies help in reducing fuel costs and creating a cleaner environment.

### Solar ships

- India's first solar passenger ferry, Aditya has been operated in Kerala.
- The IWAI (Inland Waterways Authority of India) has launched pilot e-solar passenger boats along the Ganga at Varanasi.
- Conventional ferries release huge amount of CO<sub>2</sub> into the atmosphere, creates oil spill which are harmful to the environment.
- Solar power can be extended to sea-going ferries in inter-island transport in the Andamans and in Lakshadweep.
- By using solar powered boats, subsidies for purchase of the boat, petrol motor and annual fuel subsidy that are given by the government can be minimized.

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- With tremendous improvement in battery storage capacities, solar power boats are need of the hour for a sustainable development.
- Appropriate Research and government involvement is required to achieve this target.

## BS VI norms

### What are Bharat Stage emission norms?

- They are the emission standards laid by the central government to regulate air pollution from internal combustion engines and spark-ignition engines equipment, including motor vehicles.
- The standards and the timeline for implementation are set by **Central Pollution Control Board (CPCB)** under the Ministry of Environment & Forests and climate change.
- These standards are **based on European regulations** were first introduced in 2000.
- Instead of implementing, BS V norms by 2020-21, due to the higher rate of air pollution around the country, the country decided to implement the standards of BS VI.
- By switching to BS-VI, India will join the league of US, Japan and European Union, which follow Euro Stage VI emission norms.

### Why in news?

- With the Supreme Court ban of sale and registration of BS VI vehicles from April 2020, the automobile manufactures should get ready with the sale of BS VI vehicles.
- The industry is said to be in need of advancing their process of production of BS VI vehicles for appropriate vehicle testing and validation of vehicles.
- The fuel of the desired specification of BS VI norms must be made available across the country before the deadline.
- While it will be possible for BS-IV cars to run smoothly on BS-VI fuel, BS-VI vehicles will not be able to operate well on lower-grade fuels.
- From the consumer's point of view, it is estimated that BS VI vehicles will be more expensive than the earlier ones.

## Bal Ganga Mela

### Why in news?

- The Bal Ganga mela was inaugurated by NMCG and the Ministry of Water Resources, River Development & Ganga Rejuvenation.

#### About the Bal Ganga Mela:

- 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.

#### About the National Mission of Clean Ganga (NMCG):

- NMCG is the implementation wing of National Council for Rejuvenation, Protection and Management of River Ganga (referred as National Ganga Council).
- It was established in 2011 as a registered society under Societies Registration Act, 1860.
- It has a two tier management structure and comprises of Governing Council and Executive Committee.
- Both of them are headed by Director General (DG), NMCG.
- Executive Committee is authorized to approve projects under mission up to Rs.1000 crore.
- Similar to structure at national level, State Programme Management Groups (SPMGs) acts as implementing arm of State Ganga Committees.
- This structure attempts to bring all stakeholders on one platform to take a holistic approach towards the task of Ganga cleaning and rejuvenation.

### Crop-eating elephants

#### Why in news?

- A team of researchers from Bengaluru's Indian Institute of Science (IISc) compared stress levels of crop-raiding elephants in human-dominated areas in Hassan with that of non-crop raiding elephants in the protected areas of Bandipur and Nagarhole national parks.

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- The rich diets could be lowering stress levels when compared with elephants in protected areas that don't raid crops.

#### More on the news:

- Crop-raiding by elephants is common in agricultural areas near wild spaces that support elephant populations.
- Though it may look easy, crop-raiding is an enormous gamble for the elephants.
- They face various forms of human hostility like the loud sounds of bursting crackers to chases, as farmers try to defend their crops.
- The protected areas underwent the natural, seasonal differences in availability of forage while the agricultural landscape of Hassan was green throughout the year due to cultivation.
- Interestingly, crop-raiders had higher nitrogen in their poop (a sign of higher protein in their diet) thanks to the high-quality agricultural crops that they ate.

#### About IISc (Indian Institute of Science):

- Indian Institute of Science (IISc) is a public institute for research and higher education in science, engineering, design, and management.
- It is located in Bangalore, India, was established in 1909 with active support from Jamshedji Tata and H.H. Sir Krishnaraja Wodeyar IV, the Maharaja of Mysore.

### Animal birth control measures

#### Why in news?

- Union Minister Maneka Gandhi, who is also an animal rights' advocate, has criticised the Bangalore Corporation for the implementation of its Animal Birth Control (ABC) programme that had left "hundreds of dogs dying in the city".

#### More on news:

- ABC operations were leading to the death of dogs and were a "serious public safety" matter.
- Claiming that the corporation had allotted implementation of the birth control programme to NGOs that do not have technical expertise.
- Ms. Gandhi directed the Commissioner to handover the ABC programme entirely to CUPA (Compassion Unlimited plus Action), an animal welfare organisation that runs a private ABC centre.

- She also said zonal committees should be constituted, which will have animal rights activists as members, to monitor the programme and individual cases.

## Ozone layer Recovering

### Why in news?

- The ozone layer that shields life from cancer-causing solar rays is recovering at a rate of one to three percent per decade, reversing years of dangerous depletion caused by the release of harmful chemicals, a U.N. study said.

### Complete healing:

- The Antarctic ozone hole is recovering, while continuing to occur every year.
- As a result of the Montreal Protocol much more severe ozone depletion in the polar regions has been avoided.
- Evidence presented by the authors shows that the ozone layer in parts of the stratosphere has recovered at a rate of 1-3 percent per decade since 2000.
- In the Arctic, annual variations were much larger, making it hard to confirm whether there had been a definite recovery in the layer since 2000.
- However, while most of the banned gases have been phased out, the report found at least one violation of the protocol: an unexpected increase in production and emissions of CFC-11 from eastern Asia since 2012.
- If CFC-11 emissions continued at the same rate, return of mid-latitude and polar ozone-depleting chemicals to their 1980 values would be delayed by about 7 and 20 years, respectively, the report said.

### About Montreal Protocol:

- It seeks to cut the production and consumption of ozone depleting substances (ODS) in order to protect the earth's fragile ozone layer.
- It also aims at phase out HCFCs by 2030. It came into force in 1989 and has been ratified by 197 parties making it universally ratified protocol in UN history.
- It is also highly successful international arrangement, as it has phased-out more than 95% of the ODS so far as per its main mandate in less than 30 years of its existence.

### About CFC 11:

- CFC-11 is a chlorofluorocarbon.

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- The chemical was used in aerosol cans, in foam and even in novelty drinking birds, until scientists realized it was seeping into the atmosphere and eating the ozone layer.
- Ultraviolet rays break down CFCs—which can survive in the atmosphere for some 50 years.

## Fine slapped on polluters

### Why in news?

- A penalty of over Rs. 83 lakhs were imposed on violators by the teams deployed to monitor implementation of measures to combat pollution in Delhi - NCR under the 'Clean Air Campaign', the Central Pollution Control Board said.

### More on the news:

- An aggressive ten-day-long 'Clean Air Campaign' from November 1 to 10 has been launched by Union Environment Minister to monitor and report polluting activities as well as to ensure quick action.
- The highest number of complaints was related to illegal construction and demolition activities.
- These teams are visiting different parts of Delhi and adjacent towns of Faridabad, Gurugram, Ghaziabad and Noida.
- A total of 52 complaints were received through social media and e-mail while 316 complaints were received through the 'Sameer app' that has been developed by the CPCB.

### About Sameer App:

- Sameer, an APP provides hourly updates on the National Air Quality Index (AQI) published by CPCB.
- Air Quality Index is a tool for effective communication of air quality in single number, nomenclature and colour.
- Public can post complaints with pictures and provide valuable suggestions through the APP.
- The pollutants monitored are Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>2</sub>), Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>), Carbon Monoxide (CO), Ozone(O<sub>3</sub>) etc.

### About CPCB:

- The Central Pollution Control Board (CPCB) of India is a statutory organisation under the Ministry of Environment, Forest and Climate Change (MoEFCC).



- It was established in 1974 under the Water (Prevention and Control of Pollution) Act, 1974.
- The CPCB is also entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.
- It is the apex organisation in country in the field of pollution control, acts as a technical wing of MoEFCC.

## Global Cooling Innovation Summit

### Why in news?

- Two-day Global Cooling Innovation Summit will be inaugurated by Union Science & Technology Minister.

### About the 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.
- 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.
- Panellists at the Summit will share their perspective on solving the cooling challenge, with discussions on the currently available public policy tools and how those may be informed or enhanced as a result of new innovations in the space.

## Bhungroo

### Why in news?

- A Geneva based perfume company along with a local farmer in Coimbatore have set up "Bhungroo" a water harvesting system.

### About Bhungroo:

- Bhungroo (meaning "straw" in Gujarati) is an innovative water harvesting technique for irrigation introduced by Indian women farmers.
- It frees excess water from flood prone and waterlogged farmland by drawing all the excess water underground and making land accessible for farming.

### Advantages of Bhungroo:

- The water stored during rainy season in unsaturated layers of soils can be pumped for farming in dry season; hence farmers can have dual season farming.
- Farmers can recover 70% of the water harvested in this system.
- Its main benefit is farmers can use the water collected in times of need and avoid crop loss.
- If a group of farmers, who have adjacent lands, come together and implement it, they will have collective benefit and the cost will work out lower.

## Comparing air pollution to smoking

### Why in news?

- Anti-Tobacco activists have expressed concern about comparing air pollution to smoking which will trivialise the catastrophic effect of smoking.

### Difference between the two:

- Though both have equal health hazards there are differences as well.
- The common ingredients of air pollution are mainly carbon monoxide, carbon dioxide, nitrogen oxide, volatile organic compounds and suspended particulate matter.
- Cigarette smoke, in addition to all the above, is made of nearly 7,000 toxic chemicals and at least 69 of them are highly carcinogenic.
- Adding that the dose or concentration of the suspended particulate matter in the air per day and per lifetime is nearly 200 times lesser than that from cigarettes.
- Cigarette smoking is **much more harmful than the air pollution.**

## Culture

### War memorial

#### First World War

- First World War originated in Europe 1914 and lasted 1918.
- The war was between the two groups: Allies and Central Powers.
- The Allies included Triple Entente: Britain, France and Russia whereas the Central Power included Germany and Austria-Hungary.
- The war came to an end with Germany signing treaty with allies at Paris.
- More than 1.5 million Indian soldiers fought for British Indian army in the First World War.

#### Why in news?

- A war memorial in honour of Indian soldiers who fought during the First World War for British Indian army was unveiled in England.
- The memorial has been named as “Lions of the Great War monument.
- It was done to commemorate the 100th anniversary of the end of the First World War in November 1918.

#### Recognitions around the world

- A war memorial has been placed in Belgium in 2002, to recognise the 1,30,000 Indian soldiers who fought in Belgium in WW1.
- Various European countries had started to recognise the role of Indian soldiers during the world war 1.
- A new national war memorial for Indian soldiers is going to be unveiled in France.
- British Prime minister had noted that 11 of the Indian soldiers fought during World War 1 had won the “Victoria Cross” for their outstanding bravery.
- The United Services Institution, backed by the Ministry of External Affairs has launched a commemoration project.
- These projects might further tighten the relationships between India and other european countries.

### Geographical Indication tag

#### Overview of GI

- GI tag is sign used on certain products which correspond to specific geographical location or origin.

- It is used for agricultural, natural and manufactured goods having special quality and reputation of the locality.
- It helps in giving a positive edge to the goods in global market.
- The registration of GI is valid for 10 years after which it needs to be renewed.
- GI is covered in intellectual property rights (IPRs) under Paris Convention for Protection of Industrial Property.
- GI is governed by WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).
- In India, GI tag Geographical Indications of Goods (Registration and Protection Act), 1999 governs it.

#### Why in news?

- The West Bengal government has decided to observe ‘Rosogolla Day’ on November 14.
- This has been done to commemorate the first anniversary of the State's famous sweet getting Geographical Indication (GI) tag as ‘Bengal's Rosogolla’.
- Different varieties of rosogolla would be kept in an arranged exhibition.

### Dhanteras

#### Why in News?

- The Prime Minister, Shri Narendra Modi has greeted the Nation on the occasion of Dhanteras.

#### What is Dhanteras?

- Dhanteras is the **first day** of the five day celebration that marks the festival of Diwali in India and the festival of Tihar in Nepal.
- It is the puja of Goddess Lakshmi of wealth at 13th day of the month of Ashvin according to the Hindu lunar calendar followed with the custom of purchasing precious things with the belief that Lakshmi coming home bringing in a lot of destiny and prosperity.
- At this great occasion people repair their home thorough cleaning and decorating the house interiorly and exteriorly, make Rangolis, light clay diyas along with many more traditions.

#### The legend

- Dhanteras is the story of 16 years old son of the King Hima whose death was

forecasted on 4th day of his marriage with the bite of a snake. His wife collected lots of ornaments and coins of gold and silver and made a heap at the doorway of his bed room and lit lamps everywhere in the room and kept reciting stories in order to keep her husband awoken. The god of Death, Yama could not enter the room and he went away without taking her husband. In this way she had saved the life of her husband, from then the day was started celebrating as Dhanteras.

- Another legend behind celebrating Dhanteras is that the ocean was churned by Gods and demons to get Amrita or nectar. Dhanvantari (known as physician of Gods and an embodiment of Lord Vishnu) had emerged out (having jar of elixir) from the ocean churning.
- The Indian ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy made to observe Dhanteras, as the "**National Ayurveda Day**" which was first observed on 28 October 2016.

## Bhai Dooj



### Why in news?

- Prime Minister, Shri Narendra Modi has greeted the nation on the auspicious occasion of Bhai Dooj a festival that celebrates the strong brother-sister bond.

### About Bhai Dooj

- The fifth or the last day of Diwali is celebrated as Bhaiya Dooj or Bhai Dooj by praying for the long life of one's brother, accompanied by placing auspicious Tilak or a vermilion mark on the foreheads of brothers. In return, brothers give gifts to their sisters.
- The celebrations of this day are similar to the festival of Raksha Bandhan.
- In the southern part of the country, the day is celebrated as **Yama Dwitiya**.

### The Origin

- According to a popular legend in Hindu mythology, after slaying the evil demon Narakasura, Lord Krishna visited his sister

Officers IAS Academy, Chennai Subhadra who gave him a warm welcome with sweets and flowers. She also affectionately applied tilaka on Krishna's forehead.

- Bhai Duj is celebrated also because on this day Bhagawaan Mahavir found nirvana, his brother Raja Nandivardhan was distressed because he missed him and was comforted by his sister Sudarshana. Since then, women have been revered during this festival.
- Another legend involves the Lord of Death- Yamraj had visited his sister Yamuna on this day. She was overjoyed and welcomed him with aarti and a garland. She also offered him lots of sweets. Lord Yamraj returned his love by presenting her a gift.

## When GST breaks the mould



### Why in News?

- In the poll season of Chattisgarh, **Dhokra artisans** who make Ganesha head — Dhaneshvari Netam using an age-old wax-casting technique have complained about the GST that has cut down the sales by half.

### The Issue

- **Beeswax**, which was one of the primary inputs, is not used any more as it is expensive and hard to procure.
- The traditional animal figurines like the horses, elephants, camels are getting replaced by functional things such as paperweights, pen holders, candle holders, bottle openers.

### The lost wax technique

- Lost-wax process is also called **cire-perdue**. It has got other names as "investment casting", "precision casting".
- In this method of metal casting a molten metal is poured into a mould created by means of a wax model. Once the mould is made, the wax model is melted and drained away.

- The lost-wax method dates from the 3rd millennium BC and has sustained few changes since then.
- Lost wax technique is used for making objects of metal, especially in Himachal Pradesh, Odisha, Bihar, Madhya Pradesh and West Bengal.
- It is known to Indians in the Indus Valley Culture. The Dancing Girl in tribhanga posture from Mohenjodaro is the earliest bronze sculpture that dates back to 2500 BCE.

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- The sketch depicts four-legged cattle and is more than 40,000 years old making it the oldest figurative art in the world.
- Until now, the oldest known human-made figures were ivory sculptures found in Germany.

#### Previous findings

- The switch to figurative art represented an important shift in how people thought about the world around them and themselves.
- In the 1950s, radiocarbon dating on paintings in the Lascaux Cave in southern France showed that the images of horses and other animals which were 18,000 years old made them the oldest artwork known at the time.
- In 2014, Mr. Aubert and his colleagues dated the age of a flowstone that covered a picture of a piglike animal called a babirusa in a cave in Sulawesi which was 35,400 years old.
- The earliest art in the caves, the researchers found, were reddish-orange hand outlines and drawings of animals. That drawing depicts a four-legged animal that Mr. Aubert suspected was a species of wild cattle called a banteng.
- It's hard to say when people first began to make these cave drawings, but one clue comes from a hand stencil.

### Oldest known animal drawing found in remote Indonesian cave



#### Why in News?

- A thick-bodied, spindly-legged animal, drawn in reddish ochre image has been found at the cave wall in the jungles of Borneo, Indonesia.

#### About the image

## Miscellaneous

### Me Too, Brexit, environment inspire dictionary entries

#### Why in News?

- Glasgow-based Collins Dictionary chooses 'single-use' as word of the year 2018. The adjective is applied to disposable plastic products whose use has risen fourfold since 2013, as pollution climbs the political agenda.
- It has beaten out the abbreviation VAR, floss, gammon, plogging, whitewash, vegan, MeToo, and backstop.
- "MeToo" and "whitewash" top the list of 10 new and notable words
- The list will join the online version of the dictionary and be considered for inclusion in future print editions.
- The 2017 word of the year was "fake news."

#### In detail

- "Plogging", a Scandinavian fitness craze that combines jogging with picking up litter.
- "Vegan" is a person who refrains from using any animal products
- "Backstop" is defined as a system that may be used if no other arrangement is made.
- "Gammon" is a type of cured pork which is popular as a term of abuse directed at the most reactionary pro-Brexit supporters.
- "MeToo" is the movement seeking to expose and eradicate sexual harassment
- "Whitewash" casts a white actor as an ethnic minority character
- From the World Cup, "VAR", an abbreviation of video assistant referee also makes the list.
- The final word on the list is the "floss" dance craze.

#### Word of the year

- The word(s) of the year, abbreviated as "WOTY" refers to various assessments made on the most important word(s) or expression(s) in the public sphere during a specific year.
- It is a German tradition, known as Wort des Jahres that was started in 1971.
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#### Collins English Dictionary

- The Collins English Dictionary has been announcing a Word of the Year every year since 2013. Published in Glasgow, UK, Collins English Dictionary has been publishing English dictionaries since 1819.

### 1971 war hero M.P. Awati passes away

#### Why in news?

- Vice-Admiral M.P. Awati (retd.), who commanded a naval unit of the Eastern Fleet in the 1971 India-Pakistan war and whose actions led to the destruction of an enemy submarine, passed away at his hometown near Satara in Maharashtra.

#### About 1971 India-Pakistan War:

- After partition the East Wing of Bengal had joined Pakistan as East Pakistan.
- And Pakistan's military government did not pay much attention to East Pakistan and Urdu was imposed upon it.
- The immediate source of conflict was denial of the office of Premier to Sheikh Mujibur Rehman of East Bengal whose party had won 160 out of 300 seats in the 1970 elections.
- Pakistani leader Z.A Bhutto and President Yahya Khan denied rights to East Bengal.
- When Pakistan attacked Indian airfields in Kashmir, India attacked both East and West Pakistan.
- India occupied the eastern half, which declared its Independence as Bangladesh on 6 December, 1971.
- Both countries agreed to cease-fire and Z.A Bhutto emerged as a leader of Pakistan and Mujibur Rehman as first President of Bangladesh in 1972.
- Negotiations broke out between Indian Premier Indira Gandhi and Pakistani President Z.A Bhutto which led to the signing of Shimla Agreement in June 1972 for restoration of peace and order between the two states.

# News in-depth

## General Studies-1

### Minorities in India

#### Introduction

- Officially, there are 6 minorities in India viz. Muslims, Christians, Sikhs, Buddhists, Parsis and Jains.
- The Union Government set up the National Commission for Minorities (NCM) under the National Commission for Minorities Act, 1992. Its mandate is to evaluate progress of development of Minorities.

#### Constitutional provisions

- The term "Minority" has not been properly defined anywhere in the Indian Constitution. But minority status has been conferred on many groups.
- According to the Article 29 and 30 of the Constitution, any group living within the jurisdiction of India is entitled to preserve and promote its own language, script or literature, and culture and administer educational institution.

#### Issues affecting the conditions of minorities in India

- Because of the differences in socio-cultural practices, history and backgrounds, minorities have to grapple with the issue of identity with majority section.
- Different identity and their small number relative to the rest of the society develop feeling of insecurity about their life, assets and well-being.
- The minority community in a society may remain deprived of the benefit of opportunities of development as a result of discrimination.
- Communal tensions and riots have been increasing since independence hence minority interests get threatened.
- Lack of Representation in Civil Service and Politics The total Muslim representation in Parliament is 4%, the lowest since 1957 against 13% of total population.
- Muslim community is performing very poor in economic and educational indicators among various minorities and

Muslims are facing a vicious circle of poverty.

#### Education and employment opportunities among Muslims

- The NSSO's 68th round (2011-12) provides estimates of education levels and job market indicators across major religious communities in India. According to it:
  1. Around half the Muslim population over 15 years is either illiterate or has only primary or middle school education. The number of illiterate people is highest among Muslims (190 per 1,000).
  2. The current attendance rate among Muslims is least across all age groups.
  3. In urban areas, the number of male Muslim postgraduates is as low as 15 per 1,000. This number is about four times lower than that of other communities, including Hindus, Christians and Sikhs.
  4. The average per capita consumption expenditure (used as an indicator of income) among Muslims is just ₹32.66 per day, which is the least among all religious groups.
- The high level of illiteracy among Muslims and the low levels of general education ensure that they are trapped in a vicious circle of poverty. The lack of higher education is adversely affecting their job indicators.

#### Government initiatives

- PM 15 points programme for welfare of the minorities, which is an overarching programme covering various schemes/initiatives of different ministries.
- USTAAD aims at upgrading Skills and Training in preservation of traditional Ancestral Arts/Crafts of minorities.
- Hamari Dharohar aims to preserve rich heritage of minority communities in context of Indian culture.

- Khwaja Garib Nawaz Senior Secondary School Will be established at Ajmer by Maulana Azad Education Foundation (MAEF) to give a fillip to minority education.
- Nai Manzil provide a bridge course to bridge the academic and skill development gaps of the deeni Madrasa pass outs with their mainstream counterparts.
- Nai Roshni scheme is envisaged to reach out to women through nongovernmental organizations who will be provided with financial support and to conduct leadership development trainings so that

## 'MeToo' movement

### Introduction

- The 'MeToo' movement was founded in 2006 by Tarana Burke. It was to help survivors of sexual violence, by creating a community of survivors who move forward together.
- The #MeToo spread virally as a hashtag used on social media in an attempt to demonstrate the widespread prevalence of sexual harassment in the workplace.
- Over the last few weeks women from entertainment and journalism using social media platform to name and shame alleged men who sexually harassed them in the past.

### Significance of the movement

- Huge support of public from both male and female has been gathered which is a move for gender equality and cooperation.
- Women are no longer ashamed to name the accuser. Campaign has built courage among the victims to publicly name the perpetrator.
- Voluntary participation of lawyers and fund for legal activity raised for justice to sexual victims.
- Perhaps, it can act as a deterrent.

### Concerns about the movement

- Not a inclusive- women working in unorganised sector unable to take part in the movement.
- Difficult for women working in the corporate world where organisation is mostly hierarchical in nature.
- Most critical aspect of the movement "what should constitute sexual

Officers IAS Academy, Chennai women are empowered and emboldened to move out of the confines of home and community.

### Way ahead

- There is urgent need to provide enough opportunities and platform to the minorities so that they can become a part of mainstream society.
- Initiatives on the education front would largely benefit in the long run. Self empowerment and inclusive development should be agenda of the government.
- To realise Sabka Saath Sabka Vikas holistic model of development is the key.

harassment?" is yet to comprehensively defined.

- Questions regarding when and how the state and other institutional mechanisms come into play if an allegation is made.
- Difficult to prove it legally, also it damages a person's reputation and even if they are proved innocent later.
- Social media and Media house make a person a convict even if the person even before a person is given a chance to speak. They can be politically motivated.

### Steps taken to curb sexual harassment in the working places

- Supreme Court gave Vishaka guidelines to eliminate all forms of discrimination and to ensure safety and security to women.
- Parliament passed Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal).
- There should be an internal grievances complaints committee if it is a work place of more than 10 employees.
- Establishment of SHE-box recently to register online complaints of harassment.
- Coordinating with international initiatives like CEDAW of UN and HeForShe campaigns.

### Way forward

- Need for policymakers to closely examine the how the existing working system are not supportive to women's issues.
- Attitudinal change and gender sensitive training should take importance in all working institutions.
- Even for making false allegations and charges women should be punished.

## General Studies-2

### Poor enforcement of judicial declarations of unconstitutionality

#### Introduction

- Past SC judgements have found rarely followed at the lower administrative offices.
- UP police arrested 18-year-old Zakir Ali Tyagi in October 2017, for allegedly committing a crime under Section 66A — for posting some comments on Facebook. This clearly goes against the SC judgement in *Shreya Singhal v. Union of India*, where it struck down Section 66A of the Information Technology (IT) Act, 2000, as unconstitutional.

#### Few examples

- Supreme Court in 1983, by strike down Section 303 of the IPC in *Mithu v. State of Punjab*. In 2012, years after Section 303 had been struck down, the Rajasthan High Court intervened to save a person from being hanged for being convicted under that offence.
- Poor compliance on SC order in cases like mob lynching and recent landmark judgement in *Sabarimala* case.

#### Reasons for poor enforcement

- Primary reason for poor enforcement because of poor coordination between different branches of government.
- Poor monitoring capacity of SC over judgements as there are more than 70000 cases pending at apex court.
- Serious lacunae in communication system in administration and within judiciary itself.
- Legislature and executive organs fail to complete their part of the job. For instance, it is parliament's duty to amend a statute to remove the provision declared unconstitutional. However both Sections 66A and 303 are still a part of both the official version of statutes published on India Code and commercially published copies.

#### Way forward

- Bureaucratic structure needs working communication channels for sharing information. Notifications and circulars issued by relevant Ministries. These notifications are another official method to share information about judgments declaring a provision unconstitutional.

This system needs a revamping and up-gradation.

- There should be a formal system on information sharing in the hierarchical set-up of the Indian judiciary.
- Judicial pronouncements are key to enjoy individual right to life and personal liberty. They also bring change in our archaic legal system according to changing times of the time. Hence steps should take to ensure proper compliance of SC judgement.

### Unrest in Assam

#### Why in news

- Recently in an isolated act of violence five Bengali men in Bisonimukh-Kherbari, near Tinsukia in Upper Assam, were killed. This highlights the periodic eruptions against non-Assamese people in the State.
- Assam shown sign of polarisation of various groups over the issue of NRC.

#### What is NRC?

- The National Register of Citizens (NRC), is the list of Indian citizens in Assam. It was prepared in 1951, following the census of 1951.
- It is being updated to weed out illegal immigration from Bangladesh and neighbouring regions. Recently Assam released the final draft of the National Register of Citizens (NRC), which included 1.9 crore names out of a total applicant pool of 3.29 crore.

#### Background

- The NRC was last updated in Assam way back in 1951. Then, it had recorded 80 lakh citizens in the State. Since then, the process of identification of illegal immigrants in Assam has been debated and become a contentious issue in the State's politics.
- A PIL was filed in the Supreme Court seeking the removal of "illegal voters" from the electoral rolls of Assam and the preparation of the NRC as required under the Citizenship Act, 1955 and its rules.
- A six-year agitation demanding identification and deportation of illegal immigrants was launched by the All Assam Students' Union (AASU) in 1979. It



culminated with the signing of the Assam Accord on August 15, 1985.

### Why do we need NRC

- Demographic composition is sensitive issue in any region. Any minor change in this would threaten the local people's identity thus creating disturbances. Major reason here being migration.
- During British rule, Assam was merged with Bengal Presidency for administrative purpose. From 1826 to 1947, the British continuously brought migrant workers to Assam for cheap labour in tea plantations.
- Two major waves of migration came after British rule.
  1. First after Partition, from East Pakistan (now Bangladesh).
  2. Then in the aftermath of the liberation of Bangladesh in 1971.
- This eventually led to an agitation during 1979-85, led by the All Assam Students' Union. It culminated in the 1985 Assam Accord, under which illegal migrants were to be identified and deported.

### Is Assam the only affected state?

- There are demands for the NRC to be implemented in Meghalaya, Nagaland and Tripura.
- In Arunachal Pradesh, a demand for citizenship to Chakmas has been pending for decades. While the Centre is keen to grant them citizenship, it is being opposed by the state government. Arunachal state government fears that the state's political demography will suffer a change.

### Unsettles issues and concerns regarding the NRC

- The exercise on updating the "National Register of Citizens" (NRC) in Assam has created a political storm.
- Society has divided politically and geographically.

## Preserving the taboo

### Introduction:

- Last month, U.S. President Donald Trump declared that the U.S. is quitting the Intermediate-Range Nuclear Forces (INF) Treaty, a bilateral agreement with Russia signed in 1987.

### US pull out from INF:

- The decision was not unexpected since the U.S. has long maintained that Russia has been violating the treaty.

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- For instance civil society from Barak valley has demanded a separate State.
- Many had to spend their life's earning in legal fees, in the long process of submitting documents, and challenging declarations of their non-citizenship with the courts.
- The biggest fallout of the NRC updating could be India's relations with Bangladesh, as it could create flushing out of illegal migrants to Bangladesh.

### Problems surrounding NRC process

- It was hoped that the Supreme Court's monitoring of the process would have ensured fairness and transparency.
- From the non-transparent "family tree verification" process, to the somewhat arbitrary rejection of the gram panchayat certificates (affecting mostly women), the process has been riddled with legal inconsistencies and errors.
- The family tree verification process has resulted in numerous instances of parents being on the draft list but children being left out.
- The fate of lakhs of people relying on these documents remains uncertain as each person will now have to prove his or her linkages afresh. Preparing the NRC within a deadline seemed more important than ensuring legal clarity over the claims of citizenship.

### Way forward

- Need for a robust mechanism of legal support for the four million who have to prove their citizenship to India with their limited means.
- The spirit of accommodation, towards long-time residents, of whatever religion or ethnicity, needs to percolate down the political leadership and civil society in Assam now.

- Mr. Trump has been critical of arms control agreements because, according to him, other countries cheat putting the U.S. at a disadvantage.
- Mr. Trump's decision has generated dismay and concern that this will trigger a new nuclear arms race in Europe and elsewhere.
- What it ignores is that the INF Treaty reflected the political reality of the Cold War of a bi-polar world with two nuclear

superpowers no longer consistent with today's multi-polar nuclear world.

- The greater challenge today is to understand that existing nuclear arms control instruments can only be preserved if these evolve to take new realities into account.

#### What is INF treaty?

- The Intermediate-Range Nuclear Forces Treaty (INF Treaty) is a 1987 arms control agreement between the United States and the Soviet Union.
- Signed in Washington, D.C. by President Ronald Reagan and General Secretary Mikhail Gorbachev on 8 December 1987, the treaty came into force on 1 June 1988.
- The INF Treaty eliminated all nuclear and conventional missiles, as well as their launchers, with ranges of 500–1,000 kilometres (310–620 mi) (short-range) and 1,000–5,500 km (620–3,420 mi) (intermediate-range).
- The treaty did not cover sea-launched missiles.
- By May 1991, 2,692 missiles were eliminated, followed by 10 years of on-site verification inspections.

### Iran Oil: India-China gets waiver

#### Introduction:

- The Trump administration has brought "the toughest ever" sanctions against Iran.
- 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.
- The U.S. will be granting waiver to China, India, Italy, Greece, Japan, South Korea, Taiwan and Turkey.
- As these countries have substantially reduced the amount of oil imports and the waiver period is to enable them to reduce it to zero.

#### Why the sanctions?

- US have recently pulled out of JCPOA agreement as it has alleged that Iran has not complied the agreement. Though political reasons points out pressure from Israel.

#### What is JCPOA?

- The Joint Comprehensive Plan of Action (JCPOA) known commonly as the Iran nuclear deal or Iran deal, is an agreement on the nuclear program of Iran reached in

#### Changing political backdrop:

- The INF Treaty was widely welcomed, especially in Europe because these missiles were deployed in Europe.
- But the INF treaty did not address the dynamic changes from Cold War like the arms race between US and USSR on conventional weapons and nuclear missile though not deployed they have been developed continuously.
- And the world power has changed from being bipolar (US and USSR) to a multipolar (US, China, India and many other countries) have become a dominant player and they also possess nuclear weapon.
- So what is needed is a nuclear treaty which is all encompassing reflecting the ground realities.

#### Way forward:

- Preserving the taboo (social constraint) is critical but this needs realisation that existing nuclear arms control has to be brought into line with today's political realities.

Vienna on July 2015 between Iran, the P5+1 (the five permanent members of the United Nations Security Council—China, France, Russia, United Kingdom, United States—plus Germany), and the European Union.

- Under the agreement, Iran agreed to eliminate its stockpile of medium-enriched uranium, cut its stockpile of low-enriched uranium by 98%, and reduce by about two-thirds the number of its gas centrifuges for 13 years.
- To monitor and verify Iran's compliance with the agreement, the International Atomic Energy Agency (IAEA) will have regular access to all Iranian nuclear facilities.
- The agreement provides that in return for verifiably abiding by its commitments, Iran will receive relief from U.S., European Union, and United Nations Security Council nuclear-related economic sanctions.

#### Positive aspects of the waiver:

- US has saved itself from embarrassment by giving waiver to large importers of Iran

oil which otherwise would have not complied with the sanctions.

- Scope of negotiation is open because of the waiver.
- If Iran oil import is completely stopped, Global oil prices would shoot up which would affect US as well.
- US has also given waiver for India's investment in Chabahar Port, it has come as a relief to India.
- India has expressed appreciation over US waiver, which shows US sensitivity towards India's energy security and sovereignty.

## India-China Trade Deficit

### Introduction:

- Recently Indian foreign Secretary met Chinese counterpart in China to discuss about the 51 billion dollar trade deficit.

### Cause of concern:

- India has almost 100 billion dollars trade deficit with the world countries, out of which 50% is China's trade deficit.
- China has imposed a huge number of non-tariff barriers which has made the export to China difficult.
- Not only India many world countries including US faces this kind of trade deficit

## Embers of hope: on India-Pakistan relations

### Introduction:

- Ember-A small piece of burning or glowing coal or wood in a dying fire.
- With tension penetrating the India-Pakistan military and diplomatic relationship for the larger part of seven decades, people-to-people and economic links has been worst affected due to this mutual aggression.
- In September, bilateral tensions further soured after the killing of a Border Security Force soldier and the cancellation of a meeting between the two Foreign Ministers.
- Yet the following two other developments have rekindled the hopes of creative collaborations.

### Ray of hope:

- **The first is Pakistan's willingness to open the Kartarpur corridor.**
- **Kartarpur Corridor:** Kartarpur Corridor is a proposed border-corridor (border gate)

### Challenges due to sanctions:

- JCPOA was considered as the most successful treaty, the treaty was able to stop nuclear expansion through diplomacy itself, this sanction is a black mark in diplomacy.
- Countries like North Korea, Afghanistan may not trust US fully in its diplomacy.

### Way Forward:

- US before taking up unilateral decision needs to consider the implications of its move. Negotiation is the only way forward in this issue.

from China, the recent trade war is evidence to it.

- The China is also known for defying rules, almost all big enterprises in China are state owned enterprises and hence the subsidy it gives are not covered under the WTO rules.

### Way forward:

- Pressurising China to follow rules is the only way to ensure level playing field.
- China on its part has to realise that it needs market to trade, the unilateral policy is likely to backfire on China sooner or later.

between India and Pakistan connecting the Sikh Holy shrine of Dera Baba Nanak Sahib to the holy shrine of Kartarpur Sahib States of Punjab in India and Pakistan.

- The main goal of this proposed corridor is to facilitate the crossing of religious devotees to visit the Gurdwara Darbar Sahib Kartarpur, located in Narowal District, Pakistan, 120 km from Lahore but only three kilometres from the Indian side of the border.
- The historical Kartarpur Gurudwara also known as Darbar Sahib Kartarpur is situated on the banks of river Ravi and is considered to be the first gurdwara ever built.
- Pakistan is willing to provide visa-free access to the Kartarpur Sahib Gurdwara. Official confirmations are yet to be taken.
- **The second event relates to India-Pakistan trade.** Pakistan's willingness to allow India-Afghanistan trade via Pakistan.

With this move, Pakistan could change the narrative in South Asia.

### Conclusion:

- It is unfortunate that steps such as opening up the Kartarpur corridor, which can help in building better ties, get pushed to the background once political tensions rise.

## India and the U.S. oceans apart

### Introduction:

- The U.S. has sold nearly \$15 billion worth of arms to India over the last 10 years. So it has displeasure over India procuring S400 from Russia.
- Apart from these there are many differences in conceptual interpretation of the Indo-Pacific region.

### Interpreting a label:

- Some in New Delhi have interpreted Washington's use of the label "Indo-Pacific" to mean that the U.S. has made India the central point of the Indo-Pacific.
- But neither Mr. Trump nor the National Security Strategy (NSS) document of 2017, (which outlined America's top security concerns) have confirmed the Indian interpretation.
- The Indo-Pacific, as described in the NSS, represents the most populous and economically dynamic part of the world and "stretches from the west coast of India to the western shores of the United States".
- That strategic vision does not cater to India's interests.
- The NSS 2017 has omitted some of India's most vital interests, including the Bay of Bengal and the Arabian Sea.
- Also left out is the Strait of Malacca, which links the Indian and Pacific Oceans and is India's gateway to trade with Southeast Asia, Japan and South Korea.

### Countering China:

- Mr. Trump's concept of the Indo-Pacific seeks to counter China's assertiveness in Asia. China is the main security threat to U.S. primacy in Asia.
- China also has a long-standing border dispute with India. That gives India and the U.S. a shared interest in countering China's growing military power and territorial revisionist tendencies. But do they agree on how it could be done?

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- Perhaps the India-Pakistan relationship could use the India-China relationship as a template, where, despite tensions such as the Doklam standoff, bilateral trade rose in 2017-18, and people-to-people linkages (for example, in terms of pilgrimages to Kailash Mansarovar through Nathu La) have not been affected.

- For US economic security is national security, US wants to open up Indo Pacific region for private investments and business engagement, this might not be on India's interests because India needs ASEAN market.
- US want India to do more investments like China, whereas India can afford only bilateral trade.

### Maritime influence:

- At another level, maritime power is the key to international power in the 21st century. About 90% of India's trade passes through the Indian Ocean. India has less than 20 submarines in service; China has 78.
- That is one reason why India needs the intelligence-sharing and drones promised by the U.S. at the 2+2 Dialogue in September to detect Chinese submarines in the Indian Ocean.
- Significantly, of India's three services, its Navy gets around 15% of the defence budget. The U.S. Navy and Marines get the lion's share of the U.S. military budget.
- Moreover, in April 2017, China successfully launched its second aircraft carrier, which was domestically built. But it will be many years before India's second home-built aircraft carrier becomes operational.
- Unsurprisingly, the U.S. is sceptical about India's capacity to counter the growing influence of China in the Indian and Pacific Oceans.

### Conclusion:

- Dependent on the U.S. and Russia for most of its arms and on the U.S. and China for much of its trade India's simultaneous efforts to cultivate good relations with the U.S., Russia and China highlight the conceptual differences between New Delhi and Washington on the Indo-Pacific and on how best to counter China in Asia.

- India-U.S. ties could also be encumbered by India's need for greater economic strength, its red tape and its trading methods.
- Sovereignty is, above all, sovereignty in foreign policy, said Jawaharlal Nehru. The

## Delhi air pollution

### Introduction

- Thick smog has enveloped New Delhi since the Diwali festival. The air quality has been "severe" as pollution levels touched a new high. Levels of particulate matter finer than 2.5 micrometres (PM2.5) crossed the 900 mark in some areas, recording almost 15 times the safety limit.
- One study of degradation of Delhi's air over a 10-year period beginning 2000 estimated premature mortality to have risen by as much as 60%.

### Reasons for smog surrounding Delhi

- Delhi's air pollution is attributed to the mix of anthropogenic and natural resources and failure of respective agencies in fixing these resources.
- Natural factors
  1. Low temperature in winter leads to low wind velocity, which reduces the dust dispersal process
  2. Landlocked cities, no moderate sea effect
- Anthropogenic factors
  1. Road dust – Dust emanating from unpaved roads and peak construction activities causes silicosis.
  2. Vehicular emissions – Increased number of diesel vehicles, huge commuters, absence of integrated transport public infrastructure adds the problem.
  3. Industrial vehicles – Dirty power plants, coal usage in hotels, diesel generators contributes SO<sub>2</sub> and NO<sub>x</sub> which can cause major respiratory ailments.
  4. Waste-burning – Crop residue burning in neighbouring states – Punjab, Haryana, Uttar Pradesh transfers pollutants to Delhi.
  5. Improper waste management - Burning of waste at landfills and lack of waste segregation at source adds particulate matter into the atmosphere

### Agencies for fixing the sources

- State government – Should regulate crop burning, sync it with green fodder demand, green corridors planning through its concerned department. Shall introduce

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 extent to which India's purchase of the S-400 will widen the gap between it and the U.S. on the Indo-Pacific will soon become apparent.

dust dispersal methods, air purifier methods. Construction sector should be monitored for emission, No Pollution certificate should be mandatory.

- Municipal corporations – Should repair unpaved roads and ensure timely sweeping and should proper waste management by enforcing Municipal Solid waste rules stringently.
- Union Government – Ministry of Road Transport and Highways should comprehensively plan for integrated transport system; Ministry for Petroleum and Natural Gas should incentivise CNG and electric vehicles.
- General Public- Public should take own responsibility on waste segregation at source, public cleanliness.

### Steps taken by government so far

- Notification of National Ambient Air Quality Standards envisaging 12 pollutants – PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO, O<sub>3</sub>, NH<sub>3</sub>, Pb, Ni, As, Benzo(a)pyrene, and Benzene.
- System of Air Quality and Weather Forecasting (SAFAR) state-of-the-art Air Quality and Weather Forecast System It helps to increase awareness among general public regarding the air quality in their city well in advance so that appropriate mitigation measures and systematic action can be taken up for betterment of air quality and related health issues.
- Decision taken to leapfrog directly from Bharat Stage -IV to Bharat Stage-VI fuel standards by 1st April, 2020
- Increase in percentage of ethanol blended in gasoline to 10%
- Review of Waste Management Rules including Municipal Solid Waste, Plastic Waste, Hazardous Waste, Bio-medical Waste and Electronic Waste.
- Central Pollution Control Board (CPCB) has set up 'Environmental Surveillance Squad' (ESS) programme for carrying out surprise inspections of industrial units.

- CPCB along with State Pollution Control Boards has been operating National Air Monitoring Program (NAMP) covering 240 cities of the country.
- Clean environment Cess on coal production increased from 200 to rupee 400 per tonne.
- The National Clean Energy Fund (NCEF) created in 2010-11 using the carbon tax – clean energy cess – for funding research and innovative projects in clean energy.
- Banning of cracker during Diwali celebration and promoting the use of green Diwali.

#### Way forward

- Municipal corporations and PWD should create effective dust dispersion systems by using mechanical sweepers, repairing the surface of the roads using construction waste debris and green barriers should be placed.
- Ministry of petroleum and natural gas should place norms to maintain the quality of fuel and road transport ministry should switch BS 4 to BS 6 norms without delay. It

## Sabarimala temple issue

#### Context

- Recently the Supreme Court delivered a 4:1 verdict, in Indian Young Lawyers Association v. State of Kerala, opening the doors of the Sabarimala temple to women of all ages.
- However, State government has been facing difficulties to execute the Supreme Court order due to massive protests.

#### Issues surrounding the Sabarimala temple entry

- Article 14 everyone is equal in the eyes of God and the Constitution, Hence banning women of certain age group(10-50) from entering certain temples rises gender discrimination.
- Our Constitution guarantees an individual the freedom to choose his/her religion. Therefore, praying in a temple/mosque/church or at home must be the choice of the individual.
- The Constitution has provisions to protect the customs and religious practices of the people. At the same time, it guarantees liberty and religious freedom to the individual.
- Temple, managed by trusts, are public places. The representatives of the

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should incentivise CNG and Electric vehicles and disincentive pollution fuels and complete ban on BS1 BS2 engine vehicles completely.

- State agriculture department for short term should incentivise Agri-implements to curb the burning of crops, increase the fertility of land and develop cattle grazing on paddy stalks .For long term use Agriculture- biomass waste in bio -mass fuel plants. And central government can provide financial incentives form environment cess to promote clean environment initiatives.
- Municipalities should sincerely implement the waste management and segregation laws and should be accountable for their actions. Usage of biodegradable materials in bristle packing's is the need of the hour.
- State pollution control board and the central pollution control board should undertake stringent enforcement of existing laws and norms for industrial pollution . A regional approach is required to reduce the pollution in Delhi region.

Sabarimala trust say that it has its own customs and traditions which have to be respected. Just like there are rules for other public places.

#### Supreme Court judgment

- The temple's rules are inconsistent with the Art 14 and 15 of the Indian Constitution which allows equal access to women in all public places such as temples.
- On the question of 'morality' as used in articles 25 and 26 of constitution, the court observes that morality means constitutional morality.
- Court also observed that any essential religious practice must be read in conjunction with the fundamental rights of women
- On the question of religious denomination, SC observed that temple board has to prove them as religious denomination.
- "Right to pray" in the temple for women between 10 and 50 years of age won over the 'right to wait' campaign as the Supreme Court condemned the prohibition as "hegemonic patriarchy". Patriarchy cannot trump freedom to practice religion.

- Justice Malhotra was the lone woman on the bench who had a dissenting view. She noted that what constitutes essential religious practice is for the religious community to decide and not the court.

#### Opinion from the other side

- The restriction imposed on entry of women in Sabarimala is because of the nature of the deity worshipped there as a 'naishtika brahmachari' (celibate).
- Denial of entry for women of childbearing age to the temple has been a centuries-old practice strictly adhering to the tantric concept of purity and pollution.

## The Big Picture - Bringing CBI, IB, NIA under RTI

### Introduction

- Recently a Information commissioner of central information commissioner has suggested that investigative, intelligence and security agencies like NIA, CBI, IB and paramilitary forces should come under the purview of the law.
- This argument finds its merit because there are adequate safeguards in the Act to keep sensitive information outside the public domain.

### Present statistics

- Currently, 22 investigative agencies are outside the ambit of the RTI Act, subject to exceptions like allegations of corruption and human rights violations.

### Exemptions provided under the RTI act

- Sections 8 and 9 of the Act enumerate the categories of information which are exempt from disclosure.
- Some critical information, disclosure of which would affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State, relation with foreign State or lead to incitement of an offence.
- Section 24 of the RTI Act says that this law is not applicable to the intelligence and security organisations specified in the Second Schedule.
- However, the only exception these organisations have is for information on allegations of corruption and human rights violation matters.

### Why there is need to exempt these institutions

- These agencies collect, possess and utilize extremely sensitive information, which is

- Also argument is that present practice is not because of any discriminatory attitude towards women based on biological factors such as menstruation rather differentiation between men and women.

### Way forward

- When a religious practice goes so far as to deny women equal status in society and when notions of purity and pollution are employed to perpetuate discrimination, the Constitutional mandate must prevail.
- State government should consider making all arrangements to enforce the SC judgement taking into confidence of various stakeholders.

paramount for national safety and security.

- Intelligence agencies by their nature of work want to maintain secrecy to succeed in their mission.
- Fearless opinion that usually given by the officers conducting the investigation might be targeted once they released into public domain.
- The exemption of intelligence agencies from most of the requirement of RTI is done considering the protection from whistle-blower who might leak the critical information.

### However transparency is critical for good governance

- Blanket exemption gives these agencies a lot of discretionary powers.
- This power is often used to hide information under RTI in cases of abuse of powers, human rights including sexual abuse.
- RTI act 2005 overrides Official secrecy act of 1923, but if any information the public authority finds it sensitive or it concerns the national security by any means or it falls under the purview of the OSA,1923 then it is exempted.
- Intelligence agencies are not covered in any of scrutinising agencies from public or parliamentary committee not even from independent oversight committees.

### The balance between secrecy and transparency

- In the past decade, intelligence agencies such have been charged with human rights abuses, heinous crimes such sexual abuses as well as corruption & negligence.

- This shows that our intelligence agencies may have not been able to conduct themselves in highest standards.
- Need for making these powerful agencies to be accountable and they have to observe the rules. But this should also be

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complimented with greater autonomy granted to these institutions.

- Administrative works could be brought under the RTI exempting investigating works based on merit from case to case.

## **Analysis of Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY)**

### **Introduction**

- Ayushman Bharat is an initiative to address health holistically in primary, secondary and tertiary care Systems covering both Prevention and Health Promotion.
- The scheme has two objectives
  1. Creating a network of health and wellness infrastructure across the nation (for primary health care services).
  2. Provide insurance cover to minimum 40% of India's total population (for secondary and tertiary healthcare services).

### **Strategy followed by PMJAY**

- It follows the principles of cooperative federalism hence states have enough flexibility in implementation of the scheme.
- The States and UTs can implement scheme through an insurance company or Directly through Trust/Society. This would increase the Ambit of the Scheme at Ground levels.
- Establishment of Ayushman Bharat National Health Protection Mission Agency at National Level and State Health Agency to ensure proper implementation of Scheme at National, State and UT levels.

### **Merits of the PMJAY**

- A Strong Network of 1.5 Lakhs Health and Wellness Centers across the Country would constitute Foundation of India's new Healthcare Systems.
- It will Cover more than 10 Crore Poor and Vulnerable Families of the Society.
- The Support from Trained Nurses and Health Workers increase the availability near home in rural Areas.

## **Issues surrounding building statues**

### **Introduction**

- The Statue of Unity – representing the symbolic unification of India post-Independence was a tribute to Sardar

- Vulnerable Sections of the Society would have access to Healthcare to almost all medical and Surgical Conditions that can occur in Lifetime.
- Package rates decided by government for private hospitals would help in keeping the cost low.
- Healthcare research - PMJAY will provide access to health data of 50 crore people. It can be effectively used for providing better and accurate medicines.

### **Criticisms faced by PMJAY**

- PM-JAY focuses on secondary and tertiary care, taking away the attention from primary health care (PHC) and public health-related investments.
- There is acute supply-deficit environment, raising demand will further make the system complex.
- Current package prices are too low to encourage private-sector hospitals to fully participate in the scheme.
- Hospital insurance addresses only a small amount of out-of-pocket expenditures.
- Ayushman Bharat in its present state is problematic to implement as it would increase the gap between good and poor performing states in terms of provisioning of healthcare.

### **Way forward**

- The health and wellness centres component of Ayushman Bharat should focus on improving PHC in rural areas.
- The government should increase its budget allocation to scheme in phased manner. Also, present health expenditure of 1.2 per cent of the GDP should reach 2.5 per cent in the next seven years.

Vallabhbhai Patel on his 143rd birth anniversary.



- The statue is now the world's tallest at 182 metres (597 feet) and built at an estimated cost of Rs 2,989 crore.
- Even Maharashtra government has undertaken a project at the cost of Rs 3,000cr to build a Chhatrapati Shivaji Maharaj Memorial is a monument under-construction dedicated to Shivaji.
- These enormous spending on statues and monuments questions government spending priorities in a country where millions still in extreme poverty.

#### **Issues and criticism surrounding the project**

- Statue of unity -Resentment among farmers and locals because of lack of adequate rehabilitation efforts and water shortages in the catchment area where the statue is located.
- The statue's construction has affected 75,000 tribals across 72 villages in Gujarat's Narmada district.
- This Shivaji memorial would cause harm to the marine ecosystem and ecology of the Arabian Sea, according to environmentalists.The local Koli fishing community also fear that they will lose their livelihood.
- Building statues has become a political tool to garner votes for this case Shivaji complex was aimed at to secure the votes of conservative maratha votes in Maharashtra.

- There are other pressing needs in India – like education, health, safety, employment. The money could have been utilized in these sectors

#### **However, it is justified due to**

- Statue of Unity, the world's highest statue is not only a tribute to the Iron Man of India, but also is the first such tourist attraction located in India and is termed 'Pride of Nation'.
- Since such statue/projects have been built on PPP model, the public money spent on it is less than the private money spent on it.
- Such projects will help in increasing tourism income and a large area with Hotels, transport and other services will develop fast.
- These projects will exhibit ideals, values, and stories of great leaders to inspire the younger generations to come.

#### **Way forward**

- Part of potential revenue generated from the tourism around statues should be spent on the welfare of local community.
- Structure, design and location of future projects should be sustainable and long term oriented.
- Apart from building statues and humongous projects the messages of great leaders could be spread using school curriculum, digital media more effectively.

## General Studies 3

### Complexity around Polio vaccine

#### What is Polio?

- Poliomyelitis (polio) is a highly infectious viral disease, which mainly affects young children below age of 5. The virus is transmitted from person-to-person.
- It mainly spreads through the faecal-oral route (e.g. contaminated water or food). After entering body, it multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.
- There is no cure for polio, however it can only be prevented by immunization. Polio vaccine is given multiple times, almost always protects a child for life.

#### Polio vaccination

- Polio vaccines are vaccines used to prevent poliomyelitis (polio). Two types are used: an inactivated poliovirus given by injection inactivated polio vaccine (IPV) and a weakened poliovirus given by mouth Oral Polio Vaccine (OPV).
- The World Health Organization recommends all children be fully vaccinated against polio.

#### What is the difference between OPV and IPV?

- The Inactivated polio vaccine (IPV) produces antibodies in the blood to all three types of polio virus. In the event of infection, these antibodies prevent the spread of the virus to the central nervous system and protect against paralysis. Mostly preferred by developed countries.
1. As IPV is not a 'live' vaccine, it carries no risk of vaccine-associated polio paralysis.
  2. IPV triggers an excellent protective immune response in most people.
  3. As IPV is not a 'live' vaccine, it carries no risk of vaccine-associated polio paralysis.
- OPV also produces a local, mucosal immune response in the mucous membrane of the intestines. In the event of infection, these mucosal antibodies limit the replication of the wild poliovirus inside the intestine. This intestinal immune response to OPV is thought to be the main reason why mass campaigns with OPV can rapidly stop person-to-person transmission of wild poliovirus.
1. OPV is administered orally. It can be given by volunteers and does not require trained

health workers or sterile injection equipment.

2. OPV is safe, effective, and induces long-lasting immunity to all three types of poliovirus.
3. For several weeks after vaccination, the vaccine virus replicates in the intestine, is excreted in the faeces, and can be spread to others in close contact. This means that in areas where hygiene and sanitation are poor, immunization with OPV can result in the "passive" immunization of people who have not been directly vaccinated.

#### Polio eradication programs

- Global Polio Eradication Initiative (GPEI) GPEI launched in 1988 has played pivotal role in eradication of wild poliovirus. When it was launched wild poliovirus existed in 125 countries.
- Pulse Polio Immunization (PPI) PPI Programme is massive immunization programme of Government of India to sustain polio eradication from the country.
- PPI Programme was initiated with objective of achieving 100% coverage under OPV. It aims to reach unreached children through improved social mobilization, plan mop-up operations in areas where poliovirus has almost disappeared.

#### Why did government choose OPV instead IPV?

- It is easier to administer the OPV than the IPV since there is acute shortage of medical professional in India, OPV was a convenient option.
- Global production was too low to meet India's demand. India needs 48 million doses per year to immunise all children and absence of indigenous production of IPV vaccines pushed towards OPV.

#### Problems associated with OPV

- Weakened virus contained in the oral polio vaccine (OPV) that is meant to protect them. The weakened virus in the vaccine can circulate in the environment, occasionally turn neurovirulent and cause vaccine-derived poliovirus (VDPV) in unprotected children.
- Just to illustrate, while the wild-type virus has caused 22 and 25 polio cases in 2017 and 2018 (as on October 30, 2018),

respectively, in just two countries (Pakistan and Afghanistan), VDPV was responsible for 96 and 75 polio cases in more countries during the same periods.

- Vaccine-Associated Paralytic Poliomyelitis (VAPP) occurs when the virus turns virulent within the body of a recently vaccinated child and causes polio.
- VAPP and VDPV are mostly associated OPV mode of vaccination which is preferred among low income countries.

### Where does India Stand?

- WHO officially declared India as polio-free in 2014. Its last case of polio was detected

## Delhi's Air pollution

### Major causes of pollution

- The major cause of rapidly increasing levels of pollution in Delhi is stubble burning, pollution from transportation, factories, mining, road dust, construction activities etc.
- Stubble burning is a practice of burning of remaining crop residue on the agricultural fields, to get ready the field to sow the next crop.
- Pollution from brick kilns, thermal power plants also plays a vital role in spike of pollution levels.
- Improper waste management and Garbage disposal system and lack of appropriate political will to solve this problem at early stages.

### Effects on health

- The PM2.5 enters the human body and decreases the capacity of lungs.
- The pollutants enter into the blood streams and cause various health hazards to the people.
- The WHO report on air pollution and health says that almost 93% of the world's children under the age of 15 breathe polluted air that seriously affects their health.
- These children are subjected to various diseases such as asthma, childhood cancer, cardiovascular diseases etc.

### Steps taken by government

#### AQI

- Air Quality Index is a tool for effective communication of air quality status to people in terms, which are easy to understand.

Officers IAS Academy, Chennai in a 2 year old girl in West Bengal on Jan 13th, 2011.

- However, India still suffers from VAPP and VADV which are polio related disease.
- We do not have monitor system as suggested by WHO to have continuous and effective system of surveillance to monitor the frequency of VAPP in OPV model countries.

### Way forward

- Incentives should be given for indigenous manufacturing of IPV to support universal coverage under IPV.
- Effective monitoring system should be kept in place to track and report the VAPP in OPV administered areas.

1. It transforms complex air quality data of various pollutants into a single number (index value), nomenclature and colour.
  2. There are six AQI categories, namely Good + Satisfactory, Moderately polluted, Poor, Very Poor and Severe.
- The 8 pollutants based on which they are calculated are PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb.

### EPCA

- Environment Pollution Control Authority is Supreme Court mandated body tasked with taking various measures to tackle air pollution in the National Capital Region.
- It was notified in 1998.
- It helps in Protecting and improving the quality of the environment and controlling the environmental pollution in the National Capital Region.
- It takes all necessary steps to for controlling vehicular pollution, ensuring compliance of fuel quality standards, monitoring and coordinating action for traffic planning and management.

### Graded Response action Plan

- Graded Response Action Plan defines the measures to taken based on-air quality on the basis of PM 2.5 and PM 10 in the atmosphere.
- Based on the air quality the grades have been classified as Emergency, Severe, Very Poor and Moderate poor.
- It will be enforced by Environment Pollution control authority.
- Under this plan emergency measures will be automatically enforced in NCR if level of PM2.5 breaches 300 micrograms per cubic

meter ( $\mu\text{g}/\text{m}^3$ ) and PM10 levels stay above 500 ( $\mu\text{g}/\text{m}^3$ ) for two consecutive days.

Pollution level	Steps to overcome
Moderate, poor	stop garbage burning in landfills, Strict imposition of pollution control regulations in brick kilns, thermal plants, sprinkling of water in unpaved roads.
Very Poor	Stop use of diesel generator sets, Stop use of coal/firewood, Increase the frequency of Public Transport Service.
Severe	Close brick kilns, Stone Crushers Increase frequency of mechanized cleaning of road and sprinkling of water on roads.

Severe + Emergency	Stop entry of truck, construction and introduce odd or even scheme.
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#### Way forward

- Pollution measuring mechanism should be changed, as we take only levels from only PM 2.5.
- Environmentalists report that pollutants from PM 0.1 to 2.4 also have great effect on the pollution levels which are left out in the measuring mechanism.
- Proper Data monitoring system must be evolved with greater integration among all government departments.
- Public policy for pollution control must be framed for better implementation.
- Regulation and monitoring of small-scale industries around the national capital region must be done.
- Separate budget allocation for pollution must be done.
- Role of state governments is important as the pollution levels can be controlled effectively using local governance policies because the source of pollution varies according to the locality.

## Cause to remain alert: on Zika virus

### Introduction:

- The Indian Council of Medical Research (ICMR) recently announced that the Zika virus strains causing the outbreak in Jaipur, Rajasthan, cannot cause microcephaly.
- This conclusion was based on a genetic sequencing of viruses isolated from the outbreak.
- In these sequences, the ICMR did not find a Zika virus linked to microcephaly.

### Causes of concern:

- Zika virus outbreak in India was mainly confined to two major areas namely Gujarat and Rajasthan.
- Rajasthan Zika virus strain was considered to be different from Gujarat Zika strain.
- Earlier it was speculated that Rajasthan strain was close to Brazilian strain that causes microcephaly unlike Gujarat virus which was close to Asian Zika virus strain that did not usually cause microcephaly.
- Though the recent ICMR report says that Rajasthan strain cannot cause

microcephaly, there are many reasons to worry.

- The problem with this conclusion is that the **research was based on infection in mouse brains not humans and contains no clinical support**. Numerous Much more research is needed to determine if some strains are associated with a higher risk.
- The long-term effects of children who were infected with the Zika virus in the womb is not known.
- The reason to why some lead to stillbirths and miscarriages, some lead to neurological complications, and others seem perfectly healthy is not known.
- The cause of microcephaly in few and why not in others is not known.
- It is also difficult to determine how Zika outbreak will be in India, because Zika had different effects on different countries.

### Zika virus:

- Zika virus infection is caused by the bite of an infected Aedes mosquito.

- Spread of the virus through blood transfusion and sexual contact has also been reported.
- The most common symptoms of Zika are fever, rash, joint pain, or conjunctivitis (red eyes). Other common symptoms include muscle pain and headache.
- There are concerns that pregnant women who become infected with Zika virus can transmit the disease to their unborn babies, with potentially serious consequences.
- **Microcephaly**-It is a rare condition where a baby has an abnormally small head. This is due to abnormal brain development of the baby in the womb or during infancy. Babies and children with microcephaly

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often have challenges with their brain development as they grow older.

- No vaccine exists to prevent or cure Zika virus disease (Zika).

#### Way forward:

- Prevention is the only possible solution for now.
- Pregnant women and their families should take great caution to avoid mosquitoes, wear long sleeves and trousers, stay indoors when possible, use insect repellent, and remove standing water that mosquitoes use for breeding.
- Zika associated birth defects could be a serious public health crisis in India, and, without a vaccine, all possible measures to control transmission and monitor pregnancies should be taken.

## Demonetisation after two years

### Introduction

- On 8 November 2016, the Government of India announced the demonetisation of all Rs. 500 and Rs. 1,000 banknotes of the Mahatma Gandhi Series.
- Broader objectives of demonetisation were to become a formal economy and making the wealth holders to pay tax
- The sudden nature of the announcement—and the prolonged cash shortages in the weeks that followed—created significant disruption throughout the economy, threatening economic output.

### Impact of demonetisation on various sectors

#### On banking sector

- Deposits increased and larger deposits in banks improved lending capacity for the banks.
- Demand for Government Bonds: After sharp rise in deposits on post demonetization, banks started lending such surplus deposits to the RBI under the reverse repo options.
- Post-demonetisation, 23.3 million new accounts were opened under the Pradhan Mantri Jan Dhan Yojana (PMJDY), bulk of which (80 per cent) were with public sector banks.

#### On promoting cashless economy

- Its transactions have grown from Rs. 0.5 billion in October, 2016 to Rs. 598 billion in September, 2018.
- The Bharat Interface for Money (BHIM) is an App developed by NPCI for quick

payment transactions using UPI. It is currently used by 1.25 Crore people.

#### On microfinance sector

- On account of non-availability of cash post demonetization, the borrowers were not in a position to service their loans which led to delay and drop in collection rates
- Lending capacity of MFI was severely impacted.

#### On Domestic Remittance Market

- Before demonetisation, Rs.4,000 crore per month was remitted through this channel.
- After demonetization, a big drop in the business numbers has been recognized across the country. The current trend shows a downfall of 60% of total business.

#### On employment

- The Centre for Monitoring Indian Economy has estimated that 1.5 million jobs were lost after demonetization. Alongside this loss of jobs, there has been a decline in the labour force participation rate (LPR).

#### Criticism on demonetisation

- Demonetisation as a means of tackling the black economy, carried out on the incorrect premise that black money means cash.
- It was thought that if cash was squeezed out, the black economy would be eliminated. But cash is only one component of black wealth: about 1% of it.
- It crippled the informal sector where more than 80% of labour force has presence.

- Automobile and construction sector was in worst affected.
- Demonetisation created a short term problem to the economy at large as, businesses were disrupted, consumption did fall, and GDP growth fell.

#### Way forward

- Overall, demonetization was a done with good intention and it lead to partial attainment of goals .
- Management of crisis could have been better, but the long hours our bankers

## Challenge to the Reserve Bank of India's reserve(s)

### Introduction:

- There has been increased tension over the last few months between the RBI and the Central Government.

### Points of contention

- The RBI feels that it does not have adequate powers to regulate the public sector bank. It wants stricter rules in NPA definition and PCA (Prompt Corrective Action) norms.
- The RBI does not want the Centre to bring up an independent payment regulator, which may diminish its power.
- Another major issue is regarding the transfer of forex surplus, which RBI wants it to keep it with them but Centre wants to get the surplus to close the fiscal gap it is facing.

### Challenge to the Reserve Bank of India's reserves

- At present, the RBI has Rs.10.46 lakh crore in reserves, bulk of it under two heads — currency and gold revaluation reserve (Rs.6.91 lakh crore) and contingency reserve (Rs. 2.32 lakh crore). The currency and gold revaluation reserve (CGRA) accounts for 19.11% of total assets and the contingency reserve for another 6.41%.
- The reserves have been built from higher seigniorage income (the difference between the value of new notes printed by the RBI and the costs of printing and distribution) and interest paid by the Centre to the central bank on the latter's holdings of government securities. The RBI transfers part of the surpluses to the government, and the rest is kept as reserves to meet contingencies.

### Objective of these reserves

- The CGRA is meant to contain rupee volatility against one or more of the

Officers IAS Academy, Chennai gave in during that time, can't be neglected.

- Government should focus on ensuring growth, job creation and investment. The urgent need is to get the private sector to start investing.
- Government should take multi-pronged attack on corruption and black money.
- More the formalisation, more will be revenue, so will the resources for the poor, better Infrastructure, and a better quality of life for our citizens.

currencies in the basket (consists of several major currencies)

- The contingency reserve is meant to cover depreciation in the value of the RBI's holdings of government bonds (their prices fall whenever yields rise, as they both have an inverse relationship)
- They cover expenses from extraordinary events such as demonetisation, money market operations and currency printing expenses in a year of insufficient income.
- The reserve is also a cover for the deposit insurance fund (which protects deposits made by people in banks) given that the Deposit Insurance and the Credit Guarantee Corporation (DICGC) is a wholly-owned subsidiary of the RBI.
- Most important of all, the contingency reserve supports RBI's crucial role as the lender of the last resort.
- As per the recommendations of a committee (1997) headed by V. Subrahmanyam, RBI claim that it needs to maintain contingency reserves level of 12% of total assets. However, the Finance Ministry wants the RBI to reset the formulae so that larger surpluses become free for transfer to the government.

### RBI is a seat belt for govt., says Rajan

- Amid mounting tension between the Reserve Bank and the Govt, former RBI Governor Raghuram Rajan has said the central bank was like a seatbelt in a car, without which accidents could happen.
- He said that the government should respect the institutional autonomy of the RBI. As the central bank has responsibility for financial stability, it should have the liberty to say 'no' if the government pushes it to be lenient.

### Way Forward

- To resolve the issue of transferring surplus, a committee can be set up having representatives from the government, the central bank, academicians and the market. The committee should go into all aspects of the RBI's balance sheet, suggest

## Political economics

### Introduction

- Recently, the Centre has announced a slew of measures to boost the MSME sector.

### New initiatives

- To encourage faster credit flow to MSMEs a web portal ([www.psbloansin59minutes.com](http://www.psbloansin59minutes.com)) was launched to sanction business loans for MSMEs up to Rs. 1 crore within 59 minutes. There is no mandatory requirement for collateral as the online portal is directly connected to the Credit Guarantee Fund Trust for Micro and Small Enterprises scheme.
- These companies will also receive an interest subvention of 2% under the scheme and support from public sector units, which will now be mandated to make at least 25% of their overall purchases from MSMEs.
- Govt has also announced a Rs 6000 crore package for the technological upgradation in connection with MSME. 20, 000 hubs and 100 tool rooms will be developed around the country for this.

### Significance

- MSMEs, which account for 30% of India's gross domestic product (GDP), were hit hard by the twin shocks of demonetisation and the implementation of the Goods and Services Tax over the last couple of years.
- Non-banking financial companies (NBFCs) have increased their share of financing MSMEs in recent years. However, the

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a safe buffer in reserves and set out a fair method of sharing the reserves.

- As the coordination between the monetary and fiscal authorities is crucial for maintaining stability in the economy, the ongoing tussle should be solved by negotiations swiftly.

ongoing IL&FS crisis has severely affected the liquidity in NBFC system which threatens to cut off credit to a substantial number of MSMEs.

- Therefore, the government is hoping that the new scheme will improve credit flow and the pace of job creation in the economy.

### Is it a populist measure?

- The biggest risk of a credit stimulus is the misallocation of productive economic resources. Pumping extra credit into MSMEs now may well lead to a temporary boom, but it can lead to a painful bust when the stimulus ends someday.
- Another unintended consequence is the likely deterioration in credit standards as financial institutions are pushed to lend aggressively to MSMEs.
- Efforts to expedite business loan approvals may be welcome from the point of view of growth and job creation, but they rarely end well when motivated by political reasons.
- In September, former RBI Governor Raghuram Rajan had warned that the MUDRA loans extended to MSMEs could turn out to be the source of the next financial crisis.

### Way Forward

- As suggested by Mr. Rajan, the financial institutions need to ensure better credit assessment so that higher lending now doesn't translate into NPAs later.

## *Kurukshetra (October 2018)*

### Introduction

- Economy of our country on one hand has the village and rural industries including the khadi industry that provide an important ingredient in the local economy system and on the other hand are the MSMEs which are producing an extremely wide variety of goods which are exported and made to reach out to the domestic consumers.
- Ministry of Agro and Rural Industries and Ministry of Small Scale Industries were merged into a single Ministry, namely, "Ministry of Micro, Small and Medium Enterprises"(MSMEs) and it has been flourishing despite a challenging environment.
- The government is taking steps to strengthen the sector as it not only generates employment but also contributes to the overall nation's economy. The government has launched programmes to reorient the sector by public procurement policy, MUDRA Yojana, Make in India, Startup India and Skill India.
- Apart from these regular dialogue is facilitated between various stakeholders through the constitution of specific task forces and inters ministerial committees.
- Initiatives like Micro Small and Medium Enterprises Development (MSMED) Act, 2006, Pruning of reserved Small Scale Industries (551) list, Reservation of items for exclusive manufacture in MSME sector under the Industries (Development and Regulation) Act, 1951, amendment of the Government of India (Allocation of Business) Rules, 1961 and The MSME cluster development programme is being implemented for integrated and holistic development in clusters through soft interventions, hard interventions and infrastructure upgradation.
- To ensure better flow of credits to SMEs the ministry has introduced a policy package for stepping up credit to SMEs through schemes like the Credit guarantee fund scheme (CGS) and the Performance and credit rating scheme.
- The national manufacturing competitiveness programme (NMCP) is a flagship programme of the ministry of MSME which endeavors to equip these enterprises with tech based tools.
- Khadi's relevance and its role in reducing the mass exodus to cities in search of jobs was PM'S prime reason behind call for making this signature fabric a mode to attain economic transformation in the nation. This was what Mahatma Gandhi had thought of in pre independence era.
- National sample survey (NSS) 73rd round says that during 2015-16, MSME sector has created around 11.10 crore jobs. Provided with the right support, small enterprises in India can not only spearhead growth of the Indian industry, but also help cut its high dependence on costly exports.

### MSME: The engines of growth

- The government of India has enacted the Micro, small and medium enterprises development (MSMED) Act, 2006 in terms of which the definition of an enterprise is an industrial undertaking or a business concern engaged in the manufacture or production of goods, in any manner, pertaining to any industry specified in the first schedule of the industries (development and regulation) Act, 1951 or engaged in providing or rendering of any service or services.
2. A small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore;
  3. A medium enterprise is an enterprise where the investment in plant and machinery is more than Rs. 5 crore but does not exceed Rs. 10 crore.

#### Service sector:

- Enterprises engaged in providing or rendering of services and whose investment in equipment directly or indirectly related to the service rendered are specified below.

#### Manufacturing Sector:

- Enterprises engaged in the manufacture or production, processing or preservation of goods are specified below:
1. A micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh;
  2. A small enterprise is an enterprise where the investment in equipment is



more than Rs.10 lakh but does not exceed Rs. 2 crore;

3. A medium enterprise is an enterprise where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.
  - Under the new tax regime, Section 7 of the (MSMED) Act, 2006 includes amendment on following terms based upon the annual turnover as follows:
    1. A micro enterprise will be defined as a unit where the annual turnover does not exceed five crore rupees;
    2. A small enterprise will be defined as a unit where the annual turnover is more than five crore rupees but does not exceed Rs 75 crore;
    3. A medium enterprise will be defined as a unit where the annual turnover is more than seventy five crore rupees but does not exceed Rs 250 crore.
    4. Additionally, the Central Government may, by notification, vary turnover limits, which shall not exceed thrice the limits specified in Section 7 of the MSMED Act.

#### **The development of this segment is important to**

- Meet the national imperatives of financial inclusion
- Form the backbone for maintaining growth rates
- Generate employment and discourage rural urban migration.
- Make in India with a 'zero defect and zero effect'
- Continuously support businesses that are growing to deliver the right product ,the
- .

#### **Boosting Economy through MSMEs**

- MSMEs account for more than 80 per cent of the total industrial enterprises in India creating more than 8000 value added products. The trickle down effects of large enterprises is very limited as compared to small industries where benefits of percolation of economic growth are more visible.

#### **Contribution of MSMEs in Indian Economy:**

- It produces about 45 per cent of manufacturing output and 40 per cent of the total exports

right quality ,the right solution and the right service at a competitive price, both in domestic and international markets

- Promote MSME participation in the information and communication technology.
- Seize the opportunities created by domestic demand, infrastructure, defence and FDI.

#### **Dynamics of MSMEs**

- The sector has wide range of stakeholders which includes:
  1. MSME both existing and prospective
  2. large enterprises including multinationals
  3. states and UTs
  4. central ministries and departments
  5. banks and financial institutions
  6. entrepreneurship and skill development institutions
  7. research and development institutions
  8. educational institutions

#### **Efficiency of the MSME sector depends on three pillars:**

- Innovation
- Technology
- Finance

#### **Conclusion**

- Adam Smith, an 18th century economist and author, in his book **Wealth of Nations** has talked about the '**Invisible Hand**' that individuals pursuing their best self-interest would result in better overall good to the society. If India wants to mark its presence in the global arena, the invisible hand, the MSME sector would result in greater overall good to the society

- about 80 million persons are engaged in over 29 million units throughout the country
- Urban area accounts for 54.77 per cent of the total working enterprises in registered MSME sector whereas around 45.23 per cent of the working enterprises are located in rural India.
- The MSME sector in India has grown significantly since 1960 with an average annual growth rate of 4.4 per cent in the number of units and 4.62 per cent in employment.

- As part of the inclusive growth, in rural areas, almost 73.67 per cent of MSMEs were owned by socially backward groups. In urban areas, almost 58.68 per cent belonged to the socially backward groups.

#### Government schemes:

- National Scheduled Caste/Scheduled Tribe Hub:** It is targeted towards developing a supporting eco- system for SC and ST entrepreneurs. The scheme has resulted in registration of SC and ST enterprises on MSMEs Databank.
- Zero Defect Zero Effect (ZeD) Scheme:** In this model, goods that are manufactured for export have to adhere to a certain standard so that they are not rejected or sent back to India
- Udyog Aadhaar memorandum** is one of the best schemes of MSME development launched by GoI, In this, the Aadhaar card is a mandatory requirement. The benefit of registering in this scheme is ease in availing credit, loans, and subsidies from the government.
- Prime Minister's Employment Generation Programme (PMEGP),** which has been made on-line from 1st July 2016, has resulted into direct transfer of subsidy into the bank account of the beneficiaries. It also resulted into record utilization of margin money during the year 2017-18.
- About 98 **Vendor Development Programmes** have been conducted to support SC and ST entrepreneurs as suppliers to the various Central Public Sector Undertakings (CPSUs).
- Central public sector enterprises (CPSEs)** have been procuring 20 percent of goods and services from MSMEs. 4 percent out of the 20 per cent are reserved for SC and ST owned MSMEs.
- District level Incubation and Acceleration Programme** will help in generating new ideas and promote entrepreneurship.
- The office of the Development Commissioner (MSME)** assists the Ministry in formulating, Co-ordinating, implementing and monitoring

Officers IAS Academy, Chennai different initiatives. In addition it provides a comprehensive range of technology support, services, marketing assistance etc. Through its network of 30 MSME-DI's, MSME Testing centre and MSME -Technology Development Centres.

- For facilitating promotion and development of MSME's and enhancing their competitiveness, Ministry of MSME under the MSME Development Rules 2016 notified that MSMEs have to furnish information about themselves online . This data bank will enable the Ministry to streamline and monitor the schemes and, pass on the benefits directly to the MSMEs.
- Scheme of fund for Regeneration of Traditional Industries (SFURTI)** organizes traditional industries and artisans into clusters to make them competitive and provide support for their long term sustainability. On-Government organizations (NGOs), institutions of the Central ,State Governments and semi-Government institutions, Panchayati Raj institutions(PRLs), cluster specific SPVs, Corporates and corporate Responsibility (CSR) foundation are the intended beneficiaries.

#### Major Challenges to the sector:

- The sector is always fund starved. Banks are often unwilling to lend. Besides, whatever bank finance these sector gets, comes at far higher interest costs than what large enterprises can negotiate.
- Long receivables cycles make a mess of working capital management.
- Little access to trained labour, technical progress and management support limit their growth.
- Limitations posed by labour laws, taxation policy, market uncertainty and imperfect competition

#### Way Forward:

- There is need for tax provisions and laws that are not only labour-friendly but also entrepreneur-friendly.
- while the government has to strengthen the existing skilling efforts for labour, there is an urgent need for managerial skill development for entrepreneurs

- Further the government could consider dedicated television and radio programmes, similar to agriculture, to

help educate entrepreneurs running small businesses.

## MSME for inclusive development

- Micro, Small and Medium Enterprises (MSME) sector helps in industrialization of rural and backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth and supporting livelihood programmes for the poor, especially women.

### Sustainable Development Goals and MSMEs:

- The critical contribution of MSMEs to broader social economic objectives. Including job creation makes them a key priority area for achieving the Sustainable Development Goals (SDGs). MSME development has the potential for wide reaching impacts on the SDGs globally, including  
SDG 1: end poverty  
SDG 2: zero hunger  
SDG 3: good health and well-being  
SDG 5: gender equality  
SDG 8: promote inclusive and sustainable economic growth, employment and decent work  
SDG 9: improve sustainable industrialization and fostering innovation

### Women Entrepreneurs and MSMEs:

- According to International Finance Corporation's research report on opportunities, challenges and the way forward on MSME Finance: Around 3.01 million women-owned enterprises represent about 10 percent of all MSMEs in the country. Approximately 78 percent of women enterprises belong to the services sector, almost 98 per cent of women-owned businesses are micro-enterprises and approximately 90 per cent of women-owned enterprises are in the informal sector.

### Success stories of Women Entrepreneurs:

- **Shri Mahila Griha Udyog Lijjat Papad**, popularly known as Lijjat, headquartered in Mumbai is an Indian women's cooperative, primarily a cottage industry involved in manufacturing of various fast-moving consumer goods. Started in the year 1959.

It provides employment to around 43,000 (in 2015) women. It is urban by its origin, which has spread to the rural areas and considered as one of the most remarkable entrepreneurial initiatives by women.

- **The Mulukanoor Women's Co-operative Dairy** The women-oriented dairy was established by 72 co-operatives societies, comprising 3,600 women members, on the outskirts of Bheemadevarapalli mandal headquarters, on the borders of Karimnagar-Warangal, on August 17, 2002. Currently, the dairy has 127 societies also known as women dairy co-operatives (WOC) catering to customers from Karimnagar, Warangal, Adiaband and Medak districts.
- **The Self-Employed Women's Association (SEWA)** From small beginnings in 1972, as a group of poor, illiterate women working as casual labourers in the wholesale textile markets, SEWA's membership has grown to 535,000 in its home state of Gujarat, and around 700,000 throughout India.

### Handloom Sector in Kerala

- The handloom sector in Kerala employs about 1.75 lakh of people directly and indirectly and this stands second to the coir sector in providing employment among the traditional industries of the state. The Kerala Kasavu sarees are praised by women all over India for their fine count, natural colours, texture and golden borders.
- Kerala is also known for the manufacture of cotton handloom fabrics in Kannur, Vadamangalam and Kozhikode and has captured an export market.
- Saaramapuram in Thiruvananthapuram district is the historically important, oldest handloom centres in Kerala. The weavers belonging to Chaliyas community migrated from Nagarcoil and Thirunelveli in Tamil Nadu during the period of Balarama Varma, ruler of Travancore about 250 years back.

- Kuthampully in Thrissur District is also well known for hand loom fabrics. In Kuthampully, Devangas migrated from Karnataka are engaged in weaving. This community of traditional weavers were brought by the Kochi Royal family about 500 years.

#### **WE-HUB-Telangana**

- The objective of the WE-HUB is to enable women entrepreneurs to succeed in their

### **Sabki Yojana, Sabka vikas**

- In our country Panchayati Raj system has been in existence since Vedic times as a concept of Panch Parmeshwar, but contemporary Panchayati Raj institutions are different in the sense that they have been given enormous rights, resources and responsibilities. The 73rd Amendment bill gave constitutional status to panchayats and recognized them as self-governing bodies. Mahatma Gandhi had the vision that the origin and flow of the Ganga of democracy should be in the villages.

#### **Gram Panchayat Vikas Yojana (GPDP)**

- To attain this dream of Gandhiji, the central government has initiated the Gram Panchayat Vikas Yojana (GPDP) in every village panchayat to connect rural people to the mainstream while keeping in focus the principle of 'Sabka Saath Sabka Vikas'.
- To achieve the desired goals and benefits of the Gram Panchayat Development Plan (GPDP), it is essential that at the grassroots level Panchayat representatives, Panchayat-workers, Self-help groups, beneficiaries and even the common people have the right information about it.
- According to the 11th schedule of the Constitution, trained assistants in all the 29 fields attached with the Gram Panchayats including agriculture, rural housing, drinking water, poverty eradication programs, social welfare, cultural activities, markets and fairs etc. Will be involved providing details of the work done during last 4 years and inform about the plans for future.

#### **The seven major schemes related to the Gram Swaraj campaign are: -**

- Prime Minister Ujjwala Yojana of providing free LPG connections,

Officers IAS Academy, Chennai start-ups by overcoming structural challenges. It helps the aspiring women entrepreneurs to connect with corporates, interact with VCs for funding, avoid costly mistakes and get advice from the mentors and move forward in the path of renewed confidence.

- Saubhagya yojana related to providing domestic electricity connections,
- Ujala Yojana related to distribution of LED bulbs,
- Pradhan Mantri Jan Dhan Yojana, Prime Minister Jeevan Jyoti Yojana,
- Prime Minister's, Suraksha Bima Yojana and
- Mission Indradhanush, an ambitious program of vaccination.

#### **Rashtriya Gram Swaraj Abhiyan Yojana (RGSA)**

- On the occasion of National Panchayati Raj Day on April 24, 2018, Prime Minister Narendra Modi launched a reconstituted "Rashtriya Gram Swaraj Abhiyan Yojana (RGSA)" in Mandla, Madhya Pradesh to strengthen Panchayati Raj system.
- The main objective of this scheme is to make rural local bodies self-reliant, financially sound and more efficient.
- The implementation of this scheme will be done for four years from 2018-19 to 2021-22.
- Through RSGA Yojana, the administrative capability of Panchayati Raj Institutions will be developed to work effectively on sustainable development goals.

#### **Way forward**

- For promoting better service delivery and good governance, emphasis would be given on e-governance and technology based solutions in Panchayats.
- In order to make Panchayati Raj institutions strong and effective Prime Minister ambitious plan -Swachh Bharat Mission the contribution of gram panchayats in making the country Open Defecation Free (ODF) is really commendable.

## Coir Industry: Prospects and Challenges

### Introduction

- India is the largest coir producer in the world. They are in great demand in domestic and foreign markets for their special features like price, workmanship, quality and charm.
- The growth and development of coir industry in India has taken place in areas where there is concentration of coconut cultivation and availability of coconut husks.
- The industry is mainly concentrated in Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, Goa, Orissa, Assam, Andaman and Nicobar, Lakshadweep, Pondicherry. Kerala, the home of Indian coir industry tops in terms of production and cultivation area of coconut, accounting for 61 per cent of coconut production and over 85 per cent of coir products, particularly white fibre.
- Only about 50 per cent of the coconut husks is utilised in the coir industry, the remaining is being used as fuel in rural areas.

### The history behind the coirs

- According to early Greek chronicles, it was Megasthenes, Ambassador of the Seleucus Nicator, who told the Indian King, Chandra Gupta about the coconut palm which he found in Sri Lanka in 300 BC.
- Arab writers of 11th century AD referred to the use of coir as ships cables, fenders and rigging. Marco Polo's celebrated travelogue of the 12th century mentioned that coir fibre and mats were put in use in the sailing vessels of Arabs.

### Employment Potential:

- It is also eco-friendly, decomposable, non-pollutant natural resource providing employment to about 7 lakh people in the country out of which 80 percent are women.
- State-wise analysis indicates Kerala tops the list with 65.28 percent share, followed by Tamilnadu (18.05 percent), Andhra Pradesh (7.36 percent), Odisha (4.72 percent) and Karnataka (4.16 percent).

### The durability of coir.

- Coir is moth-proof; resistant to fungi and rot.
- It is resilient in nature i.e. springs back to original shape even after constant use.
- It is flame-retardant and unaffected by moisture and dampness
- Coir is tough and durable. It provides excellent insulation against temperature and sound.

### Exports of coir products:

- India was exporting coir products to 115 countries during the period April 2014-2015.
- China is the major importer of coir and coir products both in terms of quantity and value with a share of 39 per cent and 28.59 per cent respectively.
- USA which was the major importer of Coir Products for the past few years has now been in 2nd position.
- The other countries, which imported substantial quantities of coir are EU, South Korea, Australia, Russia, Canada, Brazil, and Japan.

### Role of Government in promoting coir industry:

- The Central and State governments and Government agencies like Coir Board, Coir Federation play a significant role in growth and development of coir industry in India.
- The coir products are marketed in the country through private channels, coir showrooms, sales depots of the apex co-operative societies in Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Orissa.

### Problems of coir Industry

- insufficient finance,
- inadequate market information,
- lack of storage facilities,
- No direct contact with industrial users, insufficient marketing mechanism for coir fibre.

### The way forward

- Government Financial Institution should come forward to assist the workers in their financial requirement, enforce various rules in the removal of transport bottlenecks,
- More over directions should be given to the State Public Works Department

to use cement flooring with coir mats instead of marbles and tiles.

- Central and State Governments should instruct the Railway Board and National Highway

Officers IAS Academy, Chennai Authority of India (NHAI) to use the Geotextiles in the construction of the slope of railway lines and national highways to prevent soil erosion.

## **Khadi and Village Industries Commission (KVIC): Strengthening Rural economy**

- KVIC's main concern was the welfare and socio-economic development of the artisans, who sustain the pyramid of Khadi and Village Industries.
- The hand-spun and hand-woven natural fabric (better known as Khadi) is associated with India from the time immemorial. During the pre-Independence time, the movement of Khadi manufacturing gained momentum under the leadership of Mahatma Gandhi as a weapon of the swadeshi, against the imported cloth.
- After independence, Khadi was reduced to a formal uniform of the political class, and along with its wearers, Khadi too lost its symbolic force.
- Now, Prime Minister himself has taken up the task of making Khadi popular again. He first appealed the masses to adopt Khadi with the catch-line 'Khadi for Fashion', which multiplied its craze among youths. And, then he talked about 'Khadi for Economic Transformation' - which paved the way to make rocketing growth for Khadi.

### **What is Khadi?**

- Khadi refers to not just a piece of cloth but the national dignity. Mahatma Gandhi revolutionized large-scale production of Khadi by common men. The idea of Khadi is based on the philosophy dedicated to Sarvodaya- the welfare of all having village-centred economy as the nucleus.

### **KVIC has scripted many success stories post 2015**

- The total average Khadi sale, which was Rs 914.07 crore during the year 2004 to 2014, jumped to Rs 1828.30 crore between 2015 to 2018. Similarly, as many as 391 new Khadi institutions were established after 2015 in some three-odd years,
- It was the fusion of Khadi's USP(unique selling proposition) with Yoga that so far 'Khadi Yoga Kits' had been sold .
- As Charkha represents the heart of Khadi, the KVIC has so far distributed

about 32,000 charkhas and over 6,000 looms between 2015 to June 2018.

- KVIC invited many Textile Majors like Raymonds, Aditya Birla Fashion Retail, Arvind Mills etc. to join hands with KVIC, to market the signature fabric of India with innovative and market-friendly design intervention.
  - KVIC derived a new concept of 'Khadi Korner', where space from large retail houses are used as outlets..KVIC signed agreements with Globus, Big Bazaar, Cotton Bazaar etc for establishing Khadi Korner within their showrooms in Mega-Malls .
  - KVIC also revived many closed and defunct Khadi institutions after 2015.
1. Ashram in Sewapuri was set up on November 5, 1946 by a group of Gandhians, to promote Khadi and provide employment to weavers. was closed in 1990 . The KVIC, on September 17 last year on Sewa Diwas, reopened it. Within three months, this Ashram had given direct employment to more than 800 people of this area.
  2. Similarly,for the artisans of 14 sleepy hamlets in the Mysuru region, KVIC re-dedicated the 91-year-old Khadi institution of Badanavalu again to the nation, which was closed following some caste violence in 1993.
- KVIC roped in Rural Electrification Corporation (REC) to use its Corporate social Responsibility(CSR) funds to kick off Khadi activities.Notably,it is the first ever utilization of CSR funds for Khadi activities.
  - After the implementation of Aadhar-seeded payment of subsidy directly to the bank accounts of genuine khadi artisans in 2016, KVIC was able to identify and weed out the ghost beneficiaries - pretending to be artisans.
  - KVIC launched a livelihood donation programme named Sahyog, in which KVIC appealed the individuals, P5Us and

Corporates, to contribute for providing Charkhas to the artisans - predominantly women.

### Khadi and the world

- The KVIC for the first time organized Khadi exhibitions in as many as 10 Indian High Commissions/Embassies abroad to showcase niche Khadi fabric, ready-mades and village industries.
- Khadi became the theme-line of the celebration of Montenegro's (South Eastern European Country) National Day this year.
- Khadi draped the train at St Pietermaritzburg on 7th June 2018 - commemorating Mahatma Gandhi's 125 years of being thrown out from the train there in South Africa.
- Khadi Fashion shows were held in New Delhi at Australian as well as Indonesian Embassies and later on in Johannesburg (South Africa).
- As a part of Centenary Year celebrations of Gandhiji's Swadeshi Movement alias BUBU, the High Commission of India in Uganda, unveiled the Gandhi Charkha - gifted by KVIC becoming the first testimony that a Charkha had gone to the foreign soil.

### KVIC rebuilding lives in India

- On 13th December 2016, the Prime Minister, in a Dairy function at Banaskantha, Gujarat, said that the country needs Sweet Kranti, after the Shwet Kranti.
- KVIC drafted a programme named mini 'Honey Mission' and launched it in July 2017 saw the distribution 2,300 bee-boxes at Kupwara in Jammu and Kashmir in association with Indian Army, creating a world record of highest bee-box distribution in a single day.
- KVIC derived a novel way to cut out illegal poaching and maintain flora and fauna in and around Kaziranga National Park in Assam by giving 25 charkhas, five looms and other accessories to the village artisans in Kaziranga forest area.
- KVIC distributed as many as 1,000 bee-boxes among 100 Mishing Asamese tribal people in Kaziranga - for

Officers IAS Academy, Chennai rebuilding their lives and secure their future.

- In the tiger-prone zone of Bali island in Sunderban, West Bengal, the KVIC decided to give 75 Charkhas to tiger-victim women (bagh-bidhoba in local parlance) and 500 bee-boxes to 50 such local families to stop villagers from collecting honey and fishing in deep waters of the Sundarban forest by risking their lives becoming prey to tigers, crocodiles and poisonous snakes.
- Apart from generating regular income to them, the Honey Mission would subsequently increase the crop production up to 40 per cent in and around their villages through cross-pollination.

### KHADI'S History : A Gandhian View

- "While Khadi is good for the poor as an honourable occupation for earning bread, it has an additional and far greater value as an instrument of winning Swarajya through non-violent means." - MK Gandhi.
  - Mahatma Gandhi's above-mentioned statement appearing in Harijan on September 29, 1946 depicts the importance of Indian fabric Khadi and his philosophy in the root of it.
- A resolution was passed by the Working Committee of Indian National Congress in 1921 to manufacture two million Charkhas-spinning wheels and their distribution throughout the country.
- the formation of the All India Khadi Mandal during the Kakinada Congress Session in 1923 and the All India Spinners Association on September 22, 1925 at Patna (Bihar) are of noteworthy significance in this very context whose significance cannot be underestimated or minimized.
- after 9 years of India's freedom the Khadi and Village Industries Commission (KVIC) was formed by the Government of India in the year 1956 as a statutory body with the purpose of promotion of Khadi and village-cottage industries all along the Gandhian lines.

- In January 1978, Ivan Illich, author of the concept 'Deschooling Society' came to Sevagram to inaugurate a conference. During the stay he spent a great deal of time sitting in 'Bapu Kuti' (Gandhiji's hut). He observed deeply that, "This hut of Gandhi demonstrates to the world how the dignity of the common man can be brought up. It is also a symbol of the happiness that we can derive from practicing the principles of simplicity, service and truthfulness".
- The slave mentality of the masses started vanishing as spinning and weaving gave Indians a confidence.
- Mr. Gandhi's efforts to replace the spinning frame by the handwheel and the mechanical loom by the handloom

## Fostering Technology and Innovation

- For India to sustain growth rate of 8-10 per cent for the next decades, it requires a strong SME sector. SMEs require cutting edge technology so that industry is able to take advantage of the opportunities of the Fourth Industrial Revolution.

### The evolution and the innovation of the wheel

- Mahatma Gandhi gave us the Charkha (spinning wheel) that was symbolic to freedom movement.
- Post freedom, charkha started representing home-spun micro-enterprise that demarcated job roles between agriculture and manufacturing.
- Gradually, the spinning wheel became the gear of manufacturing as industrialization peaked.
- In late 80s, the prime wheel became symbolic of MSMEs manufacturing units.
- The evolution of wooden wheel to metal wheel and then to technology power wheel has undergone metamorphosis to automation wheel that has galvanized the SME Sector.

### Technology Infusion in SME Sector:

- **Industry 4.0 also known as, Fourth Industrial Revolution** originated in Germany is taking the manufacturing sector by storm. It is the technical integration of cyber-physical systems (CPS) in production

Officers IAS Academy, Chennai were paralleled closely in the German cigar and glass industries.

### Can Khadi co-exist with Textile Mills

- It was a question in Gandhiji's time and even exists today. Gandhiji clarified very carefully and those can be taken as way forward to encourage Khadi which are as follows:
  1. Standardize the prices of Khadi
  2. The textile mills can refrain from manufacturing those varieties that can be easily and immediately produced by Khadi organizations,
  3. The profit can be devoted to the improvement of the condition of the labourers which would mean all-round honesty, perseverance, mutual trust, a voluntary and honourable triple alliance between labour, capital and the consumer.

with application of internet of things (IOT) thereby improving capacity utilization and target based performance. Smart factory, smart operations and smart products with data-driven services are the mainstay of globally competitive SMEs.

- **Artificial intelligence (AI) and machine learning (ML) for resource optimization.** AI based technologies can reduce operational inefficiencies and SMEs can optimally use these solutions for productivity enhancement. AI and ML can transform the sales mechanism, data mining and sales forecasts.
- **Virtual Reality (VR) and Augmented Reality (AR) :** VR is an artificial, computer-generated simulation of a real life environment or situation by stimulating user's vision and hearing manifested through wearable hardware. AR technology creates interactive layers and virtual enhancements on an existing reality. Many businesses are using AR technology in robot-assisted surge, virtual real estate tours, urban planning, map-assisted navigation, simulated training etc.
- **Blockchain Technology:** Blockchain or a distributed ledger technology is a network of computers that enable digital transactions. This is a peer-to-peer, anonymous network. It records



and stores every transaction occurring in the network, providing greater transparency along with quick and secure transactions. Access to smooth trade financing is critical for SME growth as delayed payments create huge cash flow problems.

- **Financial Technologies (Fintech):** Large banks and NBFCs have catered to SMEs loan requirements in the past, but there exists a huge gap in demand and supply. Introduction of GST is a game changer as it has brought many MSMEs in the formal business system by creating digital trails. Fintech is rewriting the rules for access to finance for SMEs.
- **3D Printing** also known as Additive Manufacturing is the process of creating 3 dimensional physical

## SWACHH BHARAT MISSION: Success Story

### In News:

- Swachh Bharat Summer Interns from the Manipur Institute of Management Studies (Manipur University) have been involved in various sanitation related works in Kyamgei Gram Panchayat, Imphal East, during the last three months.

### Activities taken by the youth

- They spoke to the community to raise awareness, segregated solid waste and cleaned drains.
- They also visited schools and created awareness on sanitation and hygiene, painted walls on the theme of cleanliness, organised a Swachhata Mela, and taught

Officers IAS Academy, Chennai objects from 3D CAD data. 3D printers build up layer upon layer of materials that is fused into a single mass simplifying the manufacturing process and reducing costs. It is of enormous use in prototype development in manufacturing by building customized and design driven components. Under Atal Innovation Mission as part of Atal Tinkering Labs, there is a mandate to various public schools to set up 3D Printers.

### Conclusion:

- Unless an enterprise evolves into a technology backed system, the firm will remain stunted. For becoming globally competitive manufacturing hub, Indian industry needs to adopt the best cost effective technologies in manufacturing sector and move up the maturity curve of productivity.

children the importance of hand washing and menstrual hygiene.

- The village youth joined the interns and school children to clean back alleys and engaged in proper segregation of biodegradable and non-biodegradable wastes.

### Initiative by the Government

- The Ministry of Drinking Water and Sanitation organized a Swachh Bharat Summer Internship (SBSI) programme, where every student had to devote 100 hours for swachhata related activities in rural areas in the run up to the 150th birth anniversary of Mahatma Gandhi.

## Prime Minister Shri Narendra Modi launches 'Swachhta Hi Seva' Movement

### 'Swachhta Hi Seva' Movement was launched on 15th September 2018, with an aim to

- Boost nationwide public participation in the Swachh Bharat Abhiyan
- Catalyse the fulfillment of Bapuji's dream of a clean India.

### On the occasion of

- Celebration of the 4th anniversary of the Swachh Bharat Mission, on October 2nd, 2018 and
- Commencement of the 150th year celebrations of Mahatma Gandhi.

### Major achievements so far

- 450 districts in India have become open defecation free within 4 years.
- 20 states and Union territories have declared themselves Open defecation free (ODF) in this period.

### Adding value to the Movement

- Youngsters are ambassadors of social change, who can carry and spread the message of cleanliness
- Private sector has a big role to play in the creation of a clean India as it is the entire nation's movement.