

# OFFICERS'

# Pulse

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## Coverage.

The Hindu  
PIB  
Yojana  
Rajya Sabha TV  
All India Radio

## 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

### Ganga waterway project

#### About the project:

- The Government of India has an ambitious plan to make stretches of 2500km long Ganga suitable for transporting containers.
- Going beyond this, it also decided to make navigable a 1,390-km stretch of the river between Varanasi in Uttar Pradesh and Haldia in West Bengal.
- The project entails construction of 3 multimodal terminals (Varanasi, Sahibganj and Haldia); 2 intermodal terminals; 5 Roll On-Roll Off (Ro-Ro) terminal pairs; a new navigation lock at Farakka; assured depth dredging; an integrated vessel repair and maintenance facility; a Differential Global Positioning System (DGPS); a River Information System (RIS); and 'river training' and river conservancy works.
- The 5,369 crore the Ganga waterway project is partly funded by the World Bank.
- However, to enable container barges and ships to carry at least 2,000 tonnes, the project requires the river bed to be dredged to enable a minimum draft of three metres along the river, as well as to make the river channel at least 45 metres wide.

#### Why in news?

- One terminal of the Ganga waterway project at **Varansi** (other two are in under construction **Sahibganj** and **Haldia**) was inaugurated by PM Narendra Modi in November 2018.
- **India's longest waterway project** was made possible after a high-power committee of Ministers and senior officials from multiple Ministers overruled the recommendations of the experts appointed by the Environment Ministry.

#### Note:

- It is important to note that since early 2016, the Union Ministry of Environment and Forests and the **Inland Waterways**

**Authority of India (IWAI)**, which is attached to the **Union Shipping Ministry**, have been at odds over whether this dredging required environmental clearance (EC).

- This process involves a consultation with locals likely to be affected by the project and residing at locations along the river, where major constructions would be executed.

### Anti-Sikh riots

#### Why in news?

- A court here on 20-11-2018 sentenced one person to death and awarded life imprisonment to his co-convict for killing two during the 1984 anti-Sikh riots. The killings had taken place at Mahipalpur in south Delhi.
- The riots had broken out across the capital following the assassination of then Prime Minister Indira Gandhi.

#### About Anti Sikh riots: 1984

- Due to the orders of Indira Gandhi, Indian Army launched its offensive against Sikh militants at the Golden Temple in Amritsar under the code name "**Operation Blue Star**".
- The army was successful in driving out the militants from the Sikh's sacred place, but this event angered the Sikh People and their sentiments got hurt.
- To avenge this action, bodyguards of Mrs. Gandhi killed her at her own house.
- Later the angry Congress workers and supporters allegedly began their brutal actions of killing innocent Sikh People in the country; Delhi was the most affected area during anti Sikh riots.
- Union Government appointed so many commissions to enquire about the guilty people and to find out their masterminds, but nothing concrete came out of such commissions.

- The kith and kin of the victims of Anti-Sikh riots are still waiting to get the justice after 30 years of the incident

## #MeToo

### Reasons given by SC

- The SC said that action would be taken under the law if the aggrieved person moves to the courts.
- If the offence is cognisable then there was a procedure to be followed as per law.
- The plea was dismissed citing that the petitioner did not have locus standi. (The right or capacity to bring an action or to appear in a court)

### About #MeToo campaign:

- #MeToo movement was founded in 2006 by **Tarana Burke** to help survivors of sexual violence by creating a community of survivors who move forward together.
- The #Me Too spread virally as a hashtag used on a social media in an attempt to demonstrate the widespread prevalence of sexual harassment in the work place.
- It started gaining in national attention in October 2017 in the U.S, after allegations sexual assault by Hollywood producer Harvey Weinstein surfaced.

### Why in news?

- Public Interest Litigations (PIL) were filed in the Supreme Court by advocates under Article 32 seeking registration of FIRs and prosecution of those accused of sexual misconduct and assault by women during the #MeToo movement in the country

## Allied and Healthcare Professions Bill, 2018

### Objective

- It provides for regulation and standardisation of education and services by allied and healthcare professionals.
- The Bill provides for setting up of an Allied and Healthcare Council of India and corresponding State Allied and Healthcare Councils which will play the role of a standard-setter and facilitator for professions of Allied and Healthcare.

### Features of the bill

- Establishment of a Central and corresponding State Allied and Healthcare Councils

Officers IAS Academy, Chennai

- The Bill provides for Structure, Constitution, Composition and Functions of the Central Council and State Councils
- E.g. Framing policies and standards, Regulation of professional conduct, Creation and maintenance of live Registers, provisions for common entry and exit examinations, etc.
- The Central Council will comprise 47 members and the State Councils will be made of 28 members.
- Professional Advisory Bodies under Central and State Councils will examine issues independently and provide recommendations relating to specific recognised categories.
- The State Council will undertake recognition of allied and healthcare institutions.
- Offences and Penalties clause have been included in the Bill to check mal-practices.
- The Bill also empowers the Central and State Governments to make rules.
- Central Govt. also has the power to issue directions to the Council, to make regulations and to add or amend the schedule.

### Impact

- Bring all existing allied and healthcare professionals together
- Opportunity to create qualified, highly skilled and competent jobs in healthcare by enabling professionalism
- High quality, multi-disciplinary care in line with the vision of Ayushman Bharat, moving away from a 'doctor led' model to a 'care accessible and team based' model
- Opportunity to cater to the global demand (shortage) of healthcare workforce which is projected to be about 15 million by the year 2030, as per the WHO Global Workforce, 2030 report

### Why in news?

- The Union Cabinet has approved the Allied and Healthcare Professions Bill, 2018

## RTI Amendment Bill

### Proposed amendment

- The amendments proposed is to provide for enabling provision under the RTI Act to frame Rules regarding salaries, allowances and conditions of service for Chief Information Commissioners and Information Commissioners and State Information Commissioners.

corollary stents by upto 40% and knee implants by upto 69% in 2017.

- Presently, there are no such provisions available under the RTI Act.
- There was controversy surrounding the proposed amendments as it was seen as a move to weaken the RTI Act.

#### About RTI Act:

- Right to Information Act 2005 mandates timely response to citizen requests for government information
- The basic object of the Right to Information Act is to empower the citizens, promote transparency and accountability in the working of the Government, contain corruption, and make our democracy work for the people in real sense.
- Under this act, any citizen of India may request information from a public authority which is required to reply expeditiously or within thirty days.
- The Act also requires every public authority to computerize their records for wide dissemination and to proactively certain categories of information so that the citizens need minimum recourse to request for information formally.
- The act empowers citizens' access to almost all information under public sphere except sensitive information that relates to a country's security.

#### Exemptions under RTI

- Information related to following is exempted under RTI:
  1. National security or sovereignty
  2. National economic interests
  3. Relations with foreign states
  4. Law enforcement and the judicial process
  5. Cabinet and other decision making documents
  6. Trade secrets & commercial confidentiality
  7. Individual safety
  8. Personal privacy

#### Why in news?

- The central government has denied a Right to Information request for a copy of the Right to Information (Amendment) Bill, 2018

## Coronary stent and knee implants

#### Background

- The National Pharmaceutical Pricing Authority (NPPA) had capped the prices of

#### Outcomes

- It will check out-of-pocket expenditure on drugs and increase accessibility of sophisticated medical implants to all sections of the society.
- Move will curb exponential pricing markup by companies and will benefit common people.

#### What is a Stent?

- Stent is a tube-shaped device which is inserted into a blocked blood vessel.
- It helps clear the blockage in arteries, sometimes through physical means (Bare Metal stents) and often through the drugs it gives out at a slow rate (Drug eluting stents).

#### National List of Essential Medicines (NLEM)

- As per the WHO, Essential Medicines are those that satisfy the priority health care needs of the population.
- Criteria for inclusion into this list include public health emergency, cost effective medicine etc.

#### National Pharmaceutical Pricing Authority

- It is an independent body under Department of Pharmaceuticals under Ministry of Chemicals and Fertilizers.
- Its functions are:
  1. To fix/ revise the controlled bulk drugs prices and formulations.
  2. To enforce prices and availability of the medicines under the Drugs (Prices Control) Order, 1995/2013
  3. To recover amounts overcharged by manufacturers for the controlled drugs from the consumers.
  4. To monitor the prices of decontrolled drugs in order to keep them at reasonable levels.

#### Why in news?

- 10 lakh heart patients have saved Rs. 8000 crore and around 1.5 lakh knee patients have saved about Rs. 2000 crore since price fixation of coronary stents and knee implants in 2017

## Institution's Innovation Council (IIC)

#### Institution's Innovation Council (IIC)

- Institution's Innovation Council (IIC) has been envisioned by MHRD'S Innovation Council (MIC) across the Higher Education Institutions (HEIs)

- IICs will be established to promote innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in these campuses.

### **MHRD's Innovation Council (MIC)**

- The MIC has been established by MHRD to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs).
- The mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas while they are in formative years.

### **Focus of IIC**

- To create a vibrant local innovation ecosystem
- Start-up/ entrepreneurship supporting Mechanism in HEIs
- Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework (ARRIA) to systematically rank education institutions and universities primarily on innovation related indicators.
- Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas
- Develop better Cognitive Ability amongst Technology Students

### **Why in news?**

- The Ministry of Human Resource and Development (MHRD) has launched the 'Institution's Innovation Council (IIC) program under Innovation cell of MHRD

## **Freebies**

### **Court's view on Freebies**

- The court observed that free rice under the PDS scheme should be provided only to the economically backward and poor people.
- It felt that by distributing to all people irrespective of economic status would lead to unnecessary cost on the exchequer.
- Such a culture had made people lazy and increasingly migrant workers from northern states are hired to perform menial jobs

### **Public Distribution System (PDS)**

- Public Distribution System is a system of distribution of selected essential goods through the fair price shops which are operated by private dealers under the government's control and direction.

- Rice, wheat and sugar are main food grains throughout the period. The other important items are kerosene and edible oil which is distributed to disadvantaged group of society.
- The prices charged are usually lower than open market prices and also lower than the procurement and other costs incurred by the government.

### **Why in news?**

- The Madras High Court disapproved the practice of the state government providing freebies to people irrespective of their economic status.

## **Prison conditions**

### **SC's observation**

- The court complained that the government officials do not visit jails and homes which were in such shabby conditions.
- The court compared the conditions of under trials in jails and that of influential people who enjoy various facilities in jail like sofas, tv etc.
- The court said that 62% of India's prison population was under trial prisoners against world average of 18-20%

### **Stats**

- 240 jails in the country were having prisoners 150% above their capacity.
- 24,500 positions were vacant out of the 77,000 posts sanctioned in the prison department.
- In Uttar Pradesh, only 5000 prison staffers were monitoring over 92,000 inmates and in Tamilnadu 4000 prison staffers to monitor 13,000 prisoners.
- The committee observed that jails were not designed to house women inmates especially those with minor children staying with them.
- There are 18 jails for women and other jails had separate areas for women but still there was severe lack of space.

### **Justice Amitava Roy committee on prison reforms**

- The court had formed a committee led by Justice Amitava Roy to review the cases of under trial prisoners.

### **Why in news?**

- The Supreme Court has pulled up the government regarding the inhumane

conditions in the jails and observation homes.

## Death due to self-defence and Death Penalty

### SC observation

- Self-defence is one of the exceptions mentioned in section 300 of IPC which deals with the offence of murder.
- The court has observed right to self-defence as a “**very valuable right**” with a “social purpose”.
- In case of bodily injury leading to death of the aggressor, it is dealt appropriately by section 304.
- Section 304 deals with culpable homicide not amounting to murder
- The maximum prison term for culpable homicide is 10 years.

### Murder vs culpable homicide

- Culpable homicide is when a person causes death by doing an act with the intention of causing death, or with the intention of causing such bodily injury as is likely to cause death, or with the knowledge that he is likely by such act to cause death, commits the offence of culpable
- There is no clear definition of murder provided in section 300 of IPC.
- The main distinction between ‘Culpable Homicide’ and ‘Murder’ is that the knowledge of offender as to degree of probability of death.

### Why in news?

- The Supreme Court has observed that the use of fatal force or causing disproportionate harm to overpower an aggressor in self-defence amounts to culpable homicide and not murder.

### Dismissal of Death penalty

- The Supreme Court can dismiss appeals even at preliminary stage where death sentences were awarded by lower courts and have come through special leave petition.
- The bench referred to provisions of Code of Criminal Procedure and judgment in Mohammed Ajmal Mohammad Amir Kasab vs. State of Maharashtra to support its judgment.

- The court observed that death penalty is awarded for murder under section 302 of IPC on the basis of evidence which is impeccable, trustworthy, credible and proves the guilt of the accused beyond any shadow of doubt.

## Sexual harassment at workplace

### Sexual Harassment at Workplace Act, 2013

- To prevent any sexual harassment at the workplaces and ensure dignity of women besides their protection, Sexual Harassment at Workplace Act, 2013 was enacted.
- It was mandated by the government to corporate and other employment and educational places to establish a dedicated cell to deal with such cases.
- As per the Sexual Harassment at Workplace Act, it is mandatory for any organisation with 10 or more employees to constitute an Internal Complaint Committee (ICC). Failure results in a fine of up to Rs. 50,000.
- An ICC should consist of a presiding officer, who is a woman employee at a senior level in the same organisation, at least two employees committed to the cause of women, and a member from an NGO or a person familiar with issues relating to sexual harassment.
- Such a committee would have powers similar to those of a civil court and would have to complete its inquiry within 90 days.

### SHe-Box

- The Sexual Harassment electronic Box (SHe-Box) is an effort of GoI to provide a single window access to every woman, irrespective of her work status, whether working in organised or unorganised, private or public sector, to facilitate the registration of complaint related to sexual harassment.
- Any woman facing sexual harassment at workplace can register their complaint through this portal.
- Once a complaint is submitted to the ‘SHe-Box’, it will be directly sent to the concerned authority having jurisdiction to take action into the matter.

### Why in news?

- The Women and Child Development Ministry has empanelled 223 institutes to



conduct awareness programmes on Sexual Harassment at Workplace Act.

- The 'SHe-Box', online portal to report complaints of sexual harassment at workplace has been linked to all central/state ministries and districts for speedy disposal of cases.

## **Statute in Braille**

### **What's the news?**

- The constitution of India will be made available for the first time in Braille.
- It is being developed by The Buddhist Association for the Blind along with Saavi Foundation and Swagat Thorat.

## Economy

### Industrial Park Rating System (IPRS)

#### About:

- Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP) has done an exercise which studied infrastructure across 3354 industrial clusters of different states in order to assess quality of infrastructure in industrial parks. This study was released as a report called Industrial Park Rating System.
- Around 3000 industrial parks are on the database and the industrial parks have been rated on 4 points:
  1. Internal infrastructure
  2. External infrastructure
  3. Business services and facilities and environment
  4. Safety management
- IPRS will be translated into an annual exercise covering all the industrial parks across India. Coverage will give a deep qualitative assessment and also aim to bring in technological intervention. It will develop as a tool that helps effectively for demand driven and need based interventions both by policy makers and investors.

#### Industrial Information System (IIS) Portal

- DIPP launched the Industrial Information System (IIS) in May 2017. It is a GIS-enabled database of industrial areas and clusters across the country to optimize resource utilization and enhance the efficiency of the manufacturing sector.
- The portal gives info regarding industrial information, which includes availability of raw material – agriculture, horticulture, minerals, natural resources, distance from key logistic nodes, layers of terrain and urban infrastructure.

#### Why in News?

- Union Minister for Commerce & Industry and Civil Aviation, Suresh Prabhu, released the report Industrial Park Rating System. He said that both IPRS and IIS initiatives will be factors which push India's ranking in Ease of Doing Business.

### Farmers were hit by demonetisation

#### Demonetisation and Agriculture sector

- Demonetisation is an act of cancelling the legal tender status of a currency unit in circulation. The current form or forms of money is pulled from circulation and retired, often to be replaced with new notes or coins.
- India underwent an action of demonetisation on 8th of November, 2016. The decision had both positive and negative repercussions.
- Agriculture was one of the sectors to get hit hugely by the process of Demonetisation.

#### Why in News?

- Agriculture ministry has admitted in its recent report to Parliamentary Standing Committee that farmers during post-demonetisation were badly hit and their condition was so pathetic that they didn't even have money to purchase seeds. They couldn't sell their products during that period which was just the time of post-harvest. Even Big farmers didn't have money to give wages.
- National Seeds Corporation (NSC) failed to sell nearly 1.38 lakh quintals of wheat seeds because of the cash crunch.

### Gas-based power plants

#### E-RLNG:

- The e-auction for allocation of imported re-gasified liquefied natural gas (RLNG) under the Ministry of Power's scheme was brought up in 2015.
- The scheme made available imported RLNG at a reduced price, and there was also a tariff subsidy that determined through reverse auction.
- The scheme provided for a per-unit tariff subsidy from the Power System Development Fund.
- Power System Development Fund (PSDF), 2014 established, was created for creating necessary transmission systems of strategic importance based on operational feedback by Load Dispatch Centres for relieving congestion in Inter-State Transmission Systems

#### Why in News?

- Union of Ministries of Power and Finance unveiled in a presentation during a meeting of the Standing Committee on

Energy that more than half of India's 25 Gigawatt (GW) of gas-based power plant capacity is 'stranded' or unutilised and 10.6 GW of this requires immediate attention.

- The report found that the reason for the shortage of gas supply to these power plants is due to the **government's inability to ensure an adequate supply**. But these plants were started, only when government assured of continuous supply of gas.

## Falling crude oil

### Why in news?

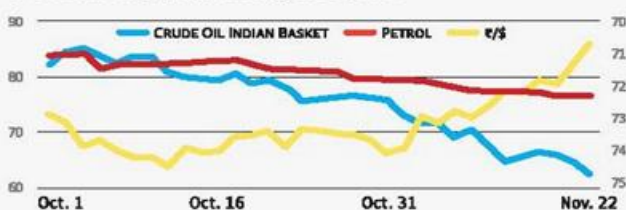
- The government said it would cut the excise duty on petrol and diesel by 1.5 per litre each, and that oil marketing companies would administer a further 1 per litre cut in the price.

### About the news:

- The Indian basket of crude oil has seen prices fall almost 24% as of November 21, whereas the price of petrol has fallen only 8.8% during that period.
- While this disparity in price levels can be explained to some point by the manner in which petrol prices are set in India, analysts say that this does not explain the large and growing gap between oil and petrol price.

### Over the barrel

The price of the Indian basket of crude oil has dropped by 21% between Oct.1 and Nov. 21, whereas the price of petrol has fallen only 8.8% during that period



Crude oil - \$/bbl Petrol - ₹/litre ₹ - on right axis

- The international products, whose basket for pricing petroleum products, do not move immediately and in tandem with the crude oil prices. There can be a lag. Arbitrages also change.
- The price stack up also includes in-land costs, over and above international products prices.
- The various components in pricing add to the opacity behind how the final retail price is determined.

## What is happening to oil markets internationally?

- Oil supply, led by US suppliers is producing more crude than the demand. Oil prices are getting down by more than 6%.
- OPEC countries are thinking to reduce the output that would recover prices.
- International Energy Agency has expected that non-OPEC countries are producing about 2.3 million barrels per day.

## What is happening to Rupee?

- The rupee gained for the seventh straight session and appreciated by 1.07%, or 77 paise, against the dollar to close the day at 70.70 — its highest level in 12 weeks.

## Apparel Sector

- It was seen that during the rupee fall around Sep-Oct month, exports increased. The Apparel Sector exports grew 38% in rupee terms and 22% in dollar terms for the same period.

## AirSewa 2.0

### About:

- AirSewa is a web portal and mobile app introduced in November 2016 to resolve issues like flight delays, problem in refunds, long queues, inadequate facilities at airports and complaints of lost baggage.

### Why in News?

- Ministry of Civil Aviation unveiled an upgraded version of AirSewa, called AirSewa 2.0, which has the following features:
  1. Secure signup and login with social media
  2. Chatbot for travellers support
  3. Improved grievance management, including social media grievances
  4. Real-time flight status and details of flight schedule.
- It ministry said that it will help to capture air travellers' feedback for policy interventions.
- The app will be further upgraded would include Digi Yatra registration, airport maps, BHIM payment integration and grievance escalation and transfer,

## India - The alternative to China

### Why in News?

- China is now seen as not as cost competitive as it was in the past.

- U.S. and Europe are looking at long-term options to build supply chain capabilities in India as an alternative to China.
- These are the two ways that foreign trade could potentially benefit India.
- Geo-politics, as much as economics, is playing a role in global trade.
- Create a manufacturing hub in India, Infrastructure development,
- Quality is less of an issue for India.
- There are enough segments which are supply chain-based to create some kind of manufacturing hub.
- Trade-related competition from other countries should be looked at from the point of view of creating enough employment in India.
- Manufacturing jobs are not low-paying jobs anymore. There is some element of technology, [including a] shift towards electronics, programming and automation.
- Fuel is a big inflationary factor for India because it creates a discontinuity in pricing due to rupee depreciation
- Fuel prices affect the rupee in relation to the dollar. That affects landed costs of all other commodities entering the country and thereby creates a spiral of inflation. The good news is, the world economy is probably doing well after many years.

## Corruption in India – Ease of doing business

### Why in News?

- According to recent report of U.K. India Business Council's Ease of Doing Business, the perception of Indian business being corrupt has been halved compared to last report on 2015.
- There has been a considerable year-on-year fall in the number of companies which viewed 'corruption' as a major barrier to do business in India – from 34% in 2016 to 25% in 2017, in 2015, it stood at 51%.
- It indicates the government's efforts to mitigate corruption that is appearing in results.
- Factors behind this major change may be initiatives such as Aadhaar, electronic submission of government documents, acceptance of electronic signatures, and the push to file taxes online. These have

Officers IAS Academy, Chennai reduced face-to-face interactions where corruption is most likely to take place.

- 'Taxation issues' and 'price points' are the most concerned barriers before 'corruption' now, which was identified by 36% and 29% of respondents.
- It is also seen that there remain significant complaints about lack of transparency around business approvals, particularly in the case of approvals for investments done by statutory bodies.

## Blue Revolution

### Blue Revolution in India:

- Blue Revolution, the Neel Kranti Mission has the vision to achieve economic prosperity of the country and **the fishers and fish farmers** as well as contribute towards food and nutritional security through full potential utilization of water resources for fisheries development in a sustainable manner, keeping in view the biosecurity and environmental concerns.
- Fisheries in India make up to 5.3 percent to agriculture and allied activities.
- The restructured Plan Scheme on Blue Revolution - Integrated Development and Management of Fisheries has been approved at a total central outlay of Rs 3000 crore for implementation during a period of five years (2015-16 to 2019-20).
- The Blue Revolution scheme has the following components:
  1. National Fisheries Development Board (NFDB) and its activities
  2. Development of Inland Fisheries and Aquaculture
  3. Development of Marine Fisheries, Infrastructure and Post-Harvest Operations
  4. Strengthening of Database & Geographical Information System of the Fisheries Sector
  5. Institutional Arrangement for Fisheries Sector
  6. Monitoring, Control and Surveillance (MCS) and other need-based Interventions
  7. National Scheme of Welfare of Fishermen

### Why in News?

- Fifth World Fisheries Day was celebrated at Patna in which Union Minister of Agriculture and Farmers' Welfare Shri Radha Mohan Singh has said that the Blue

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

- The government has approved Rs 7522 crore Fisheries and Aquaculture Infrastructure Development Fund (FIDF). This fund will create employment opportunities (both inland and marine) to over 9.40 lakhs fishers/ fishermen/ fisher folks and other entrepreneurs in fishing and allied activities and which will attract private investment in creation and management of fisheries infrastructure facilities.

## Closing down of ATMs?

### ATMs in India

- An automated teller machine (ATM) is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. The first ATM in India was set up in 1987 by HSBC in Mumbai. The following are types of ATMs:
  1. White Label ATM: ATM Provided by NBFC (Non-Banking Financial Company)
  2. Green Label ATM: ATM Provided for Agricultural Transaction
  3. Orange Label ATM: ATM Provided for Share Transactions
  4. Yellow Label ATM: ATM provided for E-commerce
  5. Pink Label ATM: ATM for women banking
  6. Brown Label ATM: ATM are those Automated Teller Machines where hardware and the lease of the ATM machine is owned by a service provider but cash management and connectivity to banking networks is provided by a sponsor bank.
- **National Payments Corporation of India (NPCI)** is an umbrella organisation for operating retail payments and settlement systems in India.
- **National Financial Switch (NFS)** is the network of shared ATMs in India which with the goal of inter-connecting the ATMs in the country and facilitating convenience banking was designed, developed and deployed by the Institute for Development

Officers IAS Academy, Chennai and Research in Banking Technology (IDRBT) in 2004; It is run by the National Payments Corporation of India (NPCI).

- **The Confederation of ATM industry (CATMi)**, headquartered at Mumbai, is a registered **non-profit trade association** representing ATM Manufacturing & Outsourcing Companies, White Label ATM Operators, Payment Services Companies, Cash Replenishment & Cash in Transit Agencies, ATM Security Services & Solutions Companies etc. in India.
- There are about 2.40 lakh ATMs in the country.

### Why in News?

- Confederation of ATM Industry (CATMi) said changes in the regulatory landscape are making it un-viable to operate ATMs, and may lead to the closure of half of the 2.38 lakh machines in the country by March 2019.

### What is the problem?

- Recent regulatory guidelines for ATMs hardware and software upgrade on cash management standards, and ask '**Cassette Swap**' method of loading cash. It is a type of upgradation in which a box of money which has chip which accounts the data is directly uploaded in ATM machines.
- ATM operation with Cassette swap method is very difficult. CATMi said that the forced closure was on account of unviability of operations in all places.

### What is the effect?

- If a large number of ATMs had to stop operations, then the financial inclusion programme would be severely impacted as millions of beneficiaries under the government's Pradhan Mantri Jan Dhan Yojana scheme, who withdrew subsidies through ATMs, may find their neighbourhood ATM shut.
- CATMi said that its members were already reeling under the financial impact caused by huge losses during and post-demonetization as cash supply was impacted and remained inconsistent for months.
- Unless banks stepped in to bear the additional cost of compliance, ATMs would have to shut down.
- A large number of ATMs in non-urban locations may be shut down due to unviability of operations.

- PNB has retaliated by saying that it doesn't have any plan to reduce no. of ATMs by March 2019. PNB is one of the largest ATM service providers with 9,428 ATMs on pan-India basis.

## EU on data localisation

### What is Data Localisation?

- Data localization is the act of storing data on any device that is physically present within the borders of a specific country where the data was generated.

### Personal Data Protection Bill

- It makes individual consent central to data sharing. Unless you have given your explicit consent, your personal data cannot be shared or processed.
- The draft bill also states that any person processing your personal data is obligated to do so in a fair and reasonable manner.
- The Bill provides for the establishment of a Data Protection Authority But, the draft bill creates a regulatory structure that is not sufficiently independent
- The bill requires data fiduciaries to store "at least one serving copy" of personal data on a server or data centre located in India.
- it allows the processing of personal data in the interests of the security of the state if authorized and according to procedure established by law

### Why in News?

- The European Union has expressed concerns over data localisation stipulations and certain other provisions of India's draft Personal Data Protection Bill.

## PSBs and LOCs

### What are LOCs?

- Look-Out-Circular is issued to check a person travelling out of the country who is needed by the police.

### Why in News?

- Ministry of Home Affairs has added PSBs' CEOs in the list of officials who can request for the issuance of LOCs. This step was taken to curb the absconding nature of defaulters who run away to other countries.

## Ease of Doing Business Grand Challenge

### Why in News?

- PM Modi has launched this challenge with an objective to attract latest innovative ideas based on Artificial Intelligence, Internet of Things, Big Data Analytics, Blockchain and other cutting edge technology to reform Government processes.
- In the World Bank's Doing Business Report (DBR, 2019) released on October 31, 2018, India secured a 77 position in 2018, among a total of 190 countries.

### Key Highlights

- The EODB grand challenge is open to all young Indians, start-ups and private enterprises. The main purpose is to provide solutions to complex problems using current technology.
- The platform for the grand challenge will be the Start-up India portal. The date for closing of applications is January 1, 2019 and the final results will be declared on February 1, 2019.
- The top 3 teams for each problem statement would be awarded cash prizes worth Rs 1 lakh, Rs 2 lakh and Rs 3 lakh respectively.
- The government would be working with all the winners for solution development and implementation.

## Reforms needed in WTO

### What is WTO?

- WTO deals with:
  1. Regulation of trade between participating countries.
  2. Providing a framework for negotiating and formalizing trade agreements.
  3. Dispute resolution process aimed at enforcing participants' adherence to WTO agreements which are signed by representatives of member governments and ratified by their parliaments.

### Why in News?

- The Union Minister of Commerce & Industry and Civil Aviation, Suresh Prabhu, during a conference on Strategic Alliance for WTO and Trade Remedies said that at least 150 countries have to work out the way forward for reforming the World Trade Organisation (WTO).
- After the China-US trade wars which are emphasising on their own needs will be major setback to the global trade.

interest and investment aimed at expanding public participation in ownership of CPSEs.

## Credit rating agencies and credibility

### What are credit rating agencies?

- Credit ratings agencies are the independent institutions which “grades” after analyses and assessments which help retail and institutional investors (like banks, financial institutions) with information that assists them in determining whether issuers of bonds and other debt instruments and fixed-income securities will be able to meet their obligations.

### What are the problems of CRAs in India?

- Independence of the ratings committee without a standard regulator
- No standard fee structure for bond rating
- No standard procedure for quality of the analysis. Every CRA has its own procedure.
- Only 4 CRAs are given license by SEBI for credit rating but these companies employ other smaller companies.
- Many clients put pressure to complete rating on these agencies.

### Way-forward

- A central authority should be assigned to maintain the procedures and standards.
- Standard credentials to analysis the quality.
- Standardising the fee structure at least in the case of bond ratings.

## DIPAM data on disinvestment

### Department of Investment and Public Asset Management (DIPAM)

#### Vision

- Promote people’s ownership of Central Public Sector Enterprises to share in their prosperity through disinvestment.
- Efficient management of public investment in CPSEs for accelerating economic development and augmenting Government’s resources for higher expenditure

#### Mission

- List CPSEs on stock exchanges to promote people’s ownership through public participation and improving efficiencies of CPSEs through accountability to its shareholders.
- To bring in operational efficiencies in CPSEs through strategic investment, ensuring their greater contribution to economy.
- Adopt a professional approach for financial management of CPSEs in the national

### What is Disinvestment?

- Disinvestment is aimed at reducing the financial burden on the government due to inefficient PSUs and to improve public finances. It introduces competition and market discipline and helps to depoliticise non-essential services.

### Why in News?

- According to DIPAM, whopping 58% of all the disinvestment that has taken place since 1991 is done by NDA government. About Rs. 2.1 lakh crore came in the last four years alone.

## List of Wilful Defaulters

### Who is Wilful Defaulter?

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

### Background

- The Central Information Commission (CIC) issued a notice to RBI Governor Urjit Patel for denial of information under the Right to Information Act.
- RBI has denied disclosing names of wilful defaulters who have taken bank loans of Rs. 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.
- The PMO too refused to comply with CIC’s direction to explain what action has been taken on former RBI Governor Raghuram Rajan’s 2015 letter alerting the PMO to high-profile cases of wilful default.

### Why in News?

- The CIC slammed the PMO and the RBI for not complying with its directive to disclose the list of wilful defaulters and action taken for recovery of loans in response to Rajan’s letter.
- Calling the response of the RBI and PMO as against the RTI Act, an affront to democracy, reflecting disrespect to the Supreme Court’s directions, the commission has again directed the PMO and the RBI to disclose those details.
- The commission also urged parliamentary committees such as Public Accounts Committee, Committee on Finance and Committee on Estimates to deliberate the issues raised in this case.

# International Relations

## Agro-diplomacy with China

### Trade with China:

- India's \$63-billion trade imbalance with China is alarming.
- The pharmaceuticals, information technology services and tourism, in which India has a significant global footprint, had a "minuscule presence" in China.
- The main focus is on Indian soya, Assam tea, sugar and rice.
- Over the past two months, Indian food and beverage producers have been conducting seminars and road shows in the Chinese capital.
- These are some positive developments, but it has to be reflected in concrete trade figures.

### Why in news?

- As the trade war with the United States continues to bite China appears to be opening up to non-U.S. imports.
- China is looking first at its food security by diversifying imports in view of the trade war.
- India is now looking into this opportunity to push its agricultural products into China.

## President visit to Vietnam

### Highlights of President's speech:

- Mr. Kovind, who is the only foreign leader besides Chinese President Xi Jinping to address the Assembly.
- India and Vietnam "share a vision for the Indo-Pacific" and will launch their first "Bilateral Maritime Security Dialogue" in early January.
- With respect to China's Belt and Road Initiative (BRI), the President said that India offers a cooperation model that does not require its friends to make choices but rather expands choices and expands opportunities for all; that opens not one but many roads.
- During the first leg of his two-nation tour to Vietnam and Australia, and the two sides signed four agreements in areas of communications, education, trade and investment.
- 11 high-speed patrol vessels were bought by Vietnam under a \$100 million Line of Credit that was extended by India in 2014.

### Why in news?

- President Ram Nath Kovind visited Vietnam on Nov 19 during which he addressed the Business Forum and Vietnam Parliament.

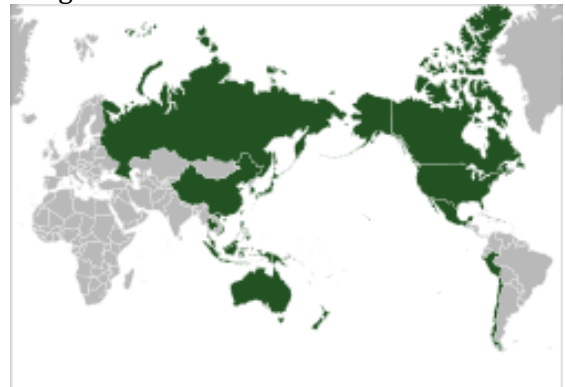
## APEC

### About APEC:

- APEC stands for Asia-Pacific Economic Cooperation established in 1989 with headquartered in Singapore.
- It is a regional economic forum of 21 Pacific Rim member economies which aims to promote free trade throughout the Asia-Pacific region.
- India is not a member. India has applied but membership was denied because it does not border Pacific Ocean.
- India is an observer member in APEC.

### Why in news?

- Breaking the 25 year convention, the APEC summit ended with no joint statement from the countries.
- The increased trade war between US and China, led to the situation where the countries were not able to find a common ground on the economic issues.



## Preferential Voting System

### Why in news?

- The recently concluded mid-term elections in the U.S. received a lot of attention as the opposition Democrats won a decisive victory. One of the wins during the mid-terms, in a tiny district in Maine was particularly significant.
- This election followed the preferential voting system.

### What is preferential voting system?



- A voter can choose just one candidate, but also rank candidates in an order of preference.
- If a candidate wins 50% of the mandate plus one vote, she is declared the winner. But if the candidate falls short of this threshold, the candidates are ranked again based on their second choices.
- And if this still falls below the threshold, the contest moves on to the third round, and so on.

#### **Advantages of preferential system:**

- Nobel laureate Amartya Sen had lauded the preferential voting system before it was implemented in Maine, voting allows for a true majority choice to emerge, both in the form of the candidate chosen as well as the reflection of the views of the majority, unlike the simple first-past-the-post (FPTP) system.
- In the FPTP system, the leading candidate can win an election despite winning a minority of the votes.
- This happened in the U.S. in 2016, when Donald Trump won the presidency despite winning less than 50% of the vote.
- India too follows an FPTP system. Even if the preferential voting system is more complicated than the FPTP system, it is worth considering as a just alternative in the longer term.

#### **What is the First past the post system (FPTP):**

- A first-past-the-post (FPTP) electoral system is one in which voters indicate on a ballot the candidate of their choice, and the candidate who receives the most votes wins.
- This is sometimes described as winner takes all. First-past-the-post voting is a plurality voting method.

### **Atal Innovation Mission of India and Fund "Talent and Success" of Russia**

#### **About Atal Innovation mission:**

- Ministry/ Department: NITI Aayog
- Atal Innovation Mission (AIM) including Self-Employment and Talent Utilization (SETU) is Government of India's endeavour to promote a culture of innovation and entrepreneurship. Its objective is to serve as a platform for promotion of world-class Innovation Hubs, Grand Challenges, Start-up businesses and other self-employment

Officers IAS Academy, Chennai activities, particularly in technology driven areas.

- The Atal Innovation Mission shall have two core functions:
- Entrepreneurship promotion through Self-Employment and Talent Utilization, wherein innovators would be supported and mentored to become successful entrepreneurs.
- Innovation promotion: to provide a platform where innovative ideas are generated.

#### **Benefits of the MoU:**

- It is for promotion of science & technology, strong foundation to the collaborative work through exchange of students, teachers, researchers and scientists between both countries.
- The activities are expected to promote creation of new scientific knowledge, generation of intellectual property, innovations and products development in both countries.

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

- The Union Cabinet chaired by the Prime Minister has been apprised of the Memorandum of Understanding (MoU) between Atal Innovation Mission of India and Fund "Talent and Success" of Russia.

### **Post-Brexit relationship**

#### **About Brexit:**

- Brexit, acronym of "British exit", is the impending withdrawal of the United Kingdom (UK) from the European Union (EU).
- It follows the referendum of 23 June 2016 when 52 percent of those who voted supported withdrawal.
- The UK joined the European Communities (EC) in 1973, with membership confirmed by a referendum in 1975.
- On 29 March 2017, the UK government invoked Article 50 of the Treaty on European Union.
- The UK is due to leave the EU on 29 March 2019 when the period for negotiating a withdrawal agreement will end unless an extension is agreed.
- In July 2018, the British Cabinet agreed to the Chequers plan, an outline of proposals by the UK Government.

#### **About Chequers plan:**

- The Chequers plan, also known as the Chequers deal or Chequers agreement, is a

key white paper concerning Brexit, published 12 July 2018 by the UK Government under Prime Minister, Theresa May.

- It lays out the type of relationship the UK seeks to have with the European Union after Brexit.

#### **About the draft deal:**

- The 26-page document has not been officially published.
- It appeared to suggest that Brexit would deliver the frictionless trade with Europe.
- The declaration established the parameters of an “ambitious, broad, deep and flexible partnership”.

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- The deal has in its best possible way has tried to bring up the checks and balances, respecting every country’s market.
- In the summit EU leaders are set to finalise and formalise details of both the exit process and outline of future relations.

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

- The British government’s Brexit process reached another milestone as the European Commission said that the U.K. and the EU had agreed at a negotiator level and in principle the draft political declaration on the future relationship between the two sides.

## Environment

### Destruction by Cyclone Gaja

#### Why in news?

- Despite Tamil Nadu being more prepared than before to deal with Cyclone Gaja when it made landfall between Nagapattinam and Vedaranyam, it still took a toll of at least 45 lives.

#### Disaster management

- The National Cyclone Risk Mitigation Project started by the Ministry of Home Affairs has been working to reduce the impact of such catastrophic events.
- Andhra Pradesh, Odisha, West Bengal, Tamil Nadu and Gujarat have been classified as States with higher vulnerability along with the western coastal States.
- The steps taken by the State Disaster Management Authority in issuing a stream of alerts ahead of Gaja helped the residents adopt safety measures.
- The active measures taken by the State after the cyclone, notably to clear roads, remove fallen trees and repair power infrastructure and communications, helped restore some stability.
- Tamil Nadu's political parties have acted in a mature manner in the way of relief and rehabilitation after Gaja by keeping away the relief from becoming politicised such as what happened in the Chennai flood of 2015.

#### Way forward

- Coastal districts must continue to strengthen resilience against extreme weather events in terms of upgrading infrastructure and housing in coastal districts basically through policies and create financial mechanisms for insurance and compensation.

#### The larger question

- Whether the coastal States have equipped themselves for an even bigger event, such as the super cyclone that hit Odisha in 1999 that killed about 10,000 people and Cyclone Phailin in 2013 required reconstruction estimated at \$1.5 billion.

#### What are cyclones?

- Tropical cyclones develop in the region of low atmospheric pressure over the warm tropical oceans where the temperature of the water is greater than 26.5C.

- As the pressure in the centre decreases, wind speeds around the system increase.
- When the average wind speed around the centre reaches a constant 63km/h, the system is called a tropical cyclone and given a name.
- Winds can increase further and may exceed 300km/h.
- Tropical cyclones are rated on a scale from one to five where 1 is the weakest and five the strongest.
- Category 1: cyclone has wind gusts near the centre of less than 125km/h.
- Category 2: cyclone starts to lift objects off the ground and use them as battering rams, causing damage to buildings.
- Category 5: cyclone has wind gusts in excess of 280km/h.
- Category 3, 4 and 5 cyclones are known as Severe Tropical Cyclones and can be devastatingly destructive.

#### Naming of cyclones in Northern Indian Ocean

- The naming of the cyclones is done under the aegis of the World Meteorological Organization.
- Its members comprise of the countries affected by tropical cyclones in the Bay of Bengal and the Arabian Sea.
- Originally, its member countries were Bangladesh, India, Myanmar, Pakistan, Sri Lanka and Thailand. Later joined by Maldives in 1982 followed by Sultanate of Oman in 1997.
- Total Eight countries in the region contribute a set of names that are assigned sequentially whenever a cyclonic storm develops.
- The Regional Specialized Meteorological Centre (RSMC), New Delhi gives a tropical cyclone an identification name from the list of eight.
- Eight lists are used in cycles that mean 2017 list will be used again in 2025.
- Names of some storms that cause widespread damage and deaths usually retires and are not brought back or reused later, at least for 10 years.

#### Classification based on vulnerability

'unique', and are largely irreplaceable if destroyed.

- The physio-climatic features (geo-climatic features), biological features and social relevance are main characters of an area to be declared as an eco-sensitive zone.

### What are elephant corridors?

- Elephant corridors are narrow strips of land that eases the movement of elephants from one habitat patch to another.
- There are 88 identified elephant corridors in India.
- It is made with a view that elephants and humans can co-exist, without any conflict.
- Human Animal conflict is a serious issue, killing humans and animals in encounters and damaging crops and properties is rare phenomenon in these corridors.



The blue shaded region shows the very high damage cyclonic risk zone

## Elephant corridors & eco-sensitive zones

### Why in News?

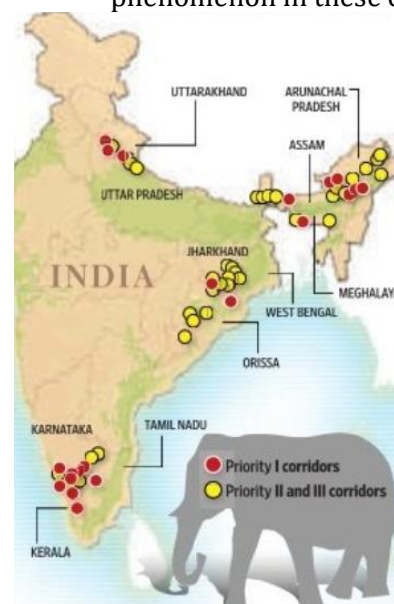
- The National Green Tribunal (NGT) has asked the Ministry of Environment, Forests and Climate Change (MoEF&CC) to consider declaring all elephant corridors in the country as eco-sensitive zones.

### What is NGT?

- The National Green Tribunal is a statutory body under the National Green Tribunal Act 2010 for
  1. Effective and expeditious disposal of cases relating to environmental protection
  2. Conservation of forests and other natural resources
  3. Enforcement of any legal right relating to environment
  4. Giving relief and compensation for damages to persons and property for matters of incidents
- The Principal Bench of the NGT has been established in the National Capital – New Delhi

### What are eco-sensitive zones?

- ESAs are areas 'that are ecologically and economically important, but vulnerable even to mild disturbances, that demands careful management'.
- These 'ecologically and economically important' areas are biologically and ecologically 'rich', 'valuable' and or



Map showing the elephants corridors in India

## COP-24

### Why in news?

- The 27th BASIC Ministerial Meeting on Climate Change was held in New Delhi.

### Ahead of COP-24

- Ahead of The United Nations 24th Conference of Parties (COP), the Environment Ministers and top climate change negotiators from Brazil, South Africa, China and India (BASIC) negotiated on continuing to push the developed countries on their earlier commitment to providing \$100 billion annually from 2020.
- COP-24 will see representatives from at least 190 countries, think-tanks, and

activists converge in Katowice, Poland from December 2 to 14

- The meeting will agree to take forward commitments taken at the 21st COP in Paris in 2015 when the countries had agreed to take steps to limit global warming to 2C below pre-industrial levels and “as far as possible” limit it to 1.5C before the end of the century.

### Way forward

- Boosting climate finance
- green technology count made by private companies in developed countries
- improving efficiency in a thermal plant count
- Improve upon the NDCs (nationally determined contributions) which are the commitments made by countries to adapt to climate change and reduce emissions.

### About the BASIC countries

- The BASIC countries are a bloc of four large newly industrialized countries – Brazil, South Africa, India and China – formed by an agreement on 28 November 2009.
- Together they work to define a common position on emission reductions and climate aid money, in accordance to the Copenhagen Accord.

## World Toilet Day

### Why in news?

- The Swachh Bharat Mission (Grameen) celebrated the World Toilet Day on 19<sup>th</sup> November with mass awareness and mobilization activities across States and districts
- SBM (G) focuses on usage of toilets, which is closely linked to the Prime Minister’s call for a Swachh Bharat by October 2019.

### The celebrations

- Swachh Bharat World Toilet Day Contest 2018 among all districts reaffirming the national resolve towards the sustenance of the Sanitation achievement.
- Grassroots activities involved district, block and panchayat level teams, swachhagrahis and swachhata champions.
- In recognition to the work done by the Swachh Bharat Mission (Grameen), the Ministry of Drinking Water and Sanitation, received a Lifetime Achievement Award at the World Toilet Summit.

### The results so far

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- Since the inception of the Swachh Bharat Mission, the rural sanitation coverage of India has increased significantly, from 39% in 2014 to over 96% today.
- Over 8.8 crore household toilets have been built by rural Indians.
- 25 States/Union Territories, 530 districts, and over 5.2 lakh villages have declared themselves free from open defecation.
- The number of people practicing open defecation in rural India has gone down from 550 million in 2014, to less than 100 million today

### About World toilet day

- In 2013, the United Nations General Assembly officially designated November 19 as World Toilet Day is all about taking action to ensure that everyone has a safe toilet by 2030.
- This is part of Sustainable Development Goal (SDG) 6: sanitation and water.
- World Toilet Day is coordinated by UN-Water in collaboration with governments and partners.
- World Toilet Day 2017, focused on the theme, ‘Toilets and Wastewater,’ highlighting the need for safe treatment and disposal of faecal waste.
- The theme for events marking World Toilet Day in 2018 is: ‘When nature calls’.

### The global sanitation crisis is reflected in the following facts:

- Around 60% of the global population – 4.5 billion people – either have no toilet at home or one that doesn't safely manage excreta.
- 862 million people worldwide still practise open defecation
- 1.8 billion People use an unimproved source of drinking water with no protection against contamination from faeces.
- One third of schools worldwide do not provide any toilet facilities

## Reducing pollution in Yamuna

### Why in news?

- One terminal of the Ganga water way project was inaugurated by PM Narendra Modi earlier this November 2018.
- India’s longest water way project was made possible after a high-power committee of Ministers and senior officials from multiple Ministers overruled the

recommendations of the experts appointed by the Environment Ministry.

- The later had recommended public consultations and a full-fledged environment clearance, documents made available through the Right to Information (RTI) Act show.

#### About the project:

- The current Government has an ambitious plan to make stretches of 2500km long ganga suitable for transporting containers.
- Going beyond this, it also decided to make navigable a 1,390-km stretch of the river between Varanasi in Uttar Pradesh and Haldia in West Bengal.
- The project entails construction of 3 multimodal terminals (Varanasi, Sahibganj and Haldia); 2 intermodal terminals; 5 Roll On–Roll Off (Ro-Ro) terminal pairs; a new navigation lock at Farakka; assured depth dredging; an integrated vessel repair and maintenance facility; a Differential Global Positioning System (DGPS); a River Information System (RIS); and ‘river training’ and river conservancy works.
- The 5,369 crore the Ganga waterway project is partly funded by the World Bank.
- However, to enable container barges and ships to carry at least 2,000 tonnes, the project requires the river bed to be dredged to enable a minimum draft of three metres along the river, as well as to make the river channel at least 45 metres wide.

#### Note:

- It is important to note that since early 2016, the Union Ministry of Environment and Forests and the **Inland Waterways Authority of India (IWAI)**, which is attached to the **Union Shipping Ministry**, have been at odds over whether this dredging required environmental clearance (EC).
- This process involves a consultation with locals likely to be affected by the project and residing at locations along the river, where major constructions would be executed.

#### Why in news?

- The Executive Committee (EC) of the National Mission for Clean Ganga (NMCG) approved ten projects worth Rs.1573.28 crore.

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- In a meeting, it was decided that a comprehensive solution needed to be worked out to address Yamuna’s pollution issues in Agra.
- The project for Rehabilitation/Renovation of Agra Sewerage Scheme (Interception & Diversion Works) has been conceived at a total cost of Rs. 857.26 crore including O&M cost for 15 years.

#### Background:

- Presently, there is no sewerage system in Kasganj, the wastewater is discharged into open drains that finally meet **River Kali** and contribute to pollution of the river. Under this project, all drains meeting Kali River will be tapped and the wastewater shall be carried out through pumping flow to the proposed **sewage Treatment Plan (STP)**.
- No centralized sewerage system in the town and is currently facing serious sanitation problems. The total wastewater from the upper and lower part of the municipal town flows into **Banka River** through surface drains.
- There are 38 main outfalls identified. Hence, all the outfalls to Banka River must be Intercepted and Diverted to proposed lift stations (LS), MPS and the proposed Sewage Treatment Plant (STP).

#### Outcomes:

- Interception & Diversion works (I&D) and Sewerage Treatment Plant at Kasganj, **River kali**.
- Interception & Diversion works (I&D) and Sewerage Treatment Plant at Sultanpur, Uttar Pradesh- **Gomti River**.
- I&D and STP in Chhapra, Fatuha, Bakhtiyarpur and Khagaria in Bihar- **Ghaghra and Ganga**.
- I&D and STP under Burdwan Municipality, in West-Bengal- **Banka River**.

#### About 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.

## UN Environment award

### Why in news?

- **United Nation Environment** has awarded **Wildlife Crime Control Bureau (WCCB)**, Ministry of Environment, Forest and Climate Change, Government of India with Asia Environment Enforcement Awards, 2018 for excellent work done by the Bureau in combating transboundary environmental crime.

### About the award:

- The Asia Environment Enforcement Awards publicly recognize and celebrate excellence in enforcement by government officials and institutions/teams combating transboundary environmental crime in Asia.
- The awards are given to outstanding individuals and/or government organizations/teams that demonstrate excellence and leadership in enforcement of national laws to combat transboundary environmental crime
- The award was decided upon by a selection panel set up by the UN Environment and this is the second time in a row the awards are being given by UN Environment to India.
- **Eligibility criteria areas: collaboration, impact, innovation, integrity and gender leadership.**
- Illegal trade in wildlife is the fourth largest illegal trade globally (after drugs, counterfeiting and human trafficking). It undermines food security, harms economies, devastates livelihoods, fuels terrorism, and comprises ecosystems on which humans depend.

### Wildlife crime database management system:

- **WCCB** has adopted innovative enforcement techniques that have dramatically increased enforcement of

Officers IAS Academy, Chennai transboundary environmental crimes in India.

- It has developed an online Wildlife Crime Database Management System to get real time data in order to help analyse trends in crime and devise effective measures to prevent and detect wildlife crimes across India.
- This system has been successfully used to analyse trends, helping put in preventive measures as well as for successfully carrying out operations such as **Operation SAVE KURMA, THUNDERBIRD, WILDNET, LESKNOW, BIRBIL, THUNDERSTORM, and LESKNOW-II.**
- It has also helped enforcement agencies in the arrest of 350 wildlife criminals and huge seizures of animal body parts and skins.
- **In order to involve the public in the fight against wildlife crime, WCCB has also developed a scheme to enroll willing persons as WCCB Volunteers.**

### Wildlife Crime Control Bureau(WCCB)

- **Statutory** multi-disciplinary body established **by the Government of India** under the **Ministry of Environment and Forests (MoEFCC)**, to combat organized wildlife crime in the country.
- The Bureau has its **headquarter in New Delhi** and **five regional offices at Delhi, Kolkata, Mumbai, Chennai and Jabalpur**; three sub-regional offices at Guwahati, Amritsar and Cochin; and five border units at Ramanathapuram, Gorakhpur, Motihari, Nathula and Moreh.

## Pt. Calimere

### Why in news?

- Point Calimere, the renowned wildlife and bird sanctuary on the seashore in district of Tamil Nadu, resembles a forest in Vietnam laid waste by Agent Orange.
- In the **devastation caused by Cyclone Gaja**, hundreds of birds that once made the sanctuary their home have died, trees have been uprooted or their branches broken or defoliated. Carcasses of birds are found in some places.
- There is widespread damage and 90% of the birds have deserted the sanctuaries. They could have migrated locally and will hopefully return.

- The trees have lost their crown and it will take six months for them to revive themselves,” said C. Ramasubramaniam, Conservator of Forest, Nagapattinam district, under whose jurisdiction the sanctuary in Point Calimere falls.

#### About Point Calimere Wildlife sanctuary:

- It is located in **Nagapattinam district of Tamil Nadu** spreads across an area of 30 sq.km and comprises sandy coastal, saline swamps and thorn scrub forests around the backwater.
- **It is a protected area and a Ramsar site (2002).**
- It harbours the single-largest stretch of the unique **dry-evergreen forest** in the country besides open grasslands and tidal mudflats are of interest to tourists.
- Around 100 species of birds including the Greater Flamingo, Painted Stork, Little Sting, Sea Gull and Brown-headed gull have been making their presence felt since September.
- **Blackbuck (Antelope Cervicapra) is the flagship species of the sanctuary.**
- Other important animals are the spotted deer, black-napped hare, wild boar, Indian jackal, feral horses, palm civet, short-nosed fruit bat, jungle cat and monitor lizard.

#### Blackbuck:

- Also known as Indian antelope also find in Nepal, Pakistan.
- IUCN status: **Least concerned.**

## A virtual climate summit

#### Why in news?

- World leaders will participate in an innovative climate change summit that will take place entirely online so it is carbon neutral.

#### Background:

- The eco-friendly event stands in stark contrast to many other international political summits, which involve thousands of delegates jetting across the world to a venue where they stay in air-conditioned comfort.
- The organisers of the **UN’s COP21** talks in **Paris in 2015** estimated it generated 43,000 tonnes of carbon dioxide, although much of this was later offset through carbon-credit schemes.

- A UN report warned recently that the threshold could be reached as early as 2030 unless there was unprecedented global action to rein in emissions.
- 17 of the 18 hottest years on record had occurred since 2001 and that the cost of climate-related disasters in 2017 topped \$500 billion.

#### About the summit:

- The event will be the first global political meeting to be held online.
- It will consist of a rolling, 24-hour livestream that will begin in the Marshalls’ capital Majuro, and then include addresses from leaders and panel discussions before delivering a declaration.
- The Virtual Climate Summit is the brainchild of Marshall Islands President Hilda Heine, whose low-lying Pacific island nation will drown beneath rising seas if global warming continues unabated.
- Its main aim is to encourage the international community to keep global warming to 1.5 degrees Celsius above pre-industrial levels.

#### Importance:

- The cutting-edge setup was designed to show that even small nations such as the Marshalls could make a big difference on the world stage using creative, climate-friendly solutions.
- The online summit as an example of the innovative thinking needed to combat climate change.

#### Climate Vulnerable Forum (CVF):

- CVF is an international partnership of countries highly vulnerable to a warming planet.
- The Forum serves as a South-South cooperation platform for participating governments to act together to deal with global climate change.
- CVF was **founded by the Maldives government before the 2009 United Nations Climate Change Conference in Copenhagen**, which sought to increase awareness of countries considered vulnerable.
- CVF was formed to increase the accountability of industrialized nations for the consequences of global climate change.
- **Ethiopia became the first African Chair of the Climate Vulnerable Forum during the CVF High-Level Climate Policy**



## Forum held in the Senate of the Philippines on 15 August 2016.

### Kerala Floods

#### Why in news?

- The devastation wrought by the Kerala floods of August could not be attributed to the release of water from dams, says a computer-simulation of flood storage and flow patterns by a team of researchers.
- Scientists from the Indian Institute of Technology-Madras and the Purdue University, United States, say that the odds of such floods were “0.06%” and no reservoir management could have considered such scenarios.

#### Background:

- Kerala faced the brunt of an unprecedented flood which has almost brought the state to a standstill in August 2018.
- Having killed at least 370 people, displaced 780,000 and caused ₹ 50,000 crore worth of damage, this is the worst flood Kerala has witnessed in nearly a century.

#### Actual reasons behind Kerala flooding:

- Rainfall of high intensity with long duration this season and its frequency caused flooding.
- **Deforestation** of hill areas causes sudden rising of water as cutting of trees reduces the water carrying/storing capacity of the ground.
- Loosening of soils due to mining, quarrying.

#### What experts say?

- All 39 dams in the State had reached their full reservoir level by July-end, and were incapable of absorbing the torrential volumes in August leaving dam-managers with no choice but to release them.
- The scientists analysed different scenarios with combinations of reservoir storage (85%, 75%, 150% and 25%) at different time periods (end of June and end of July), along with different soil moisture conditions, which has a bearing on river flows.
- What they found was that in the hypothetical scenario that there were no dams in the Pampa River Basin (PRB) — there are 17 dams and barrages — the “peak discharge” at locations downstream

Officers IAS Academy, Chennai of the Idukki reservoir would have been “reduced by 31%.” This, however, wasn’t a reduction enough to have prevented the inundation, according to the researchers.

### ACROSS – umbrella scheme

#### Why in news?

- Cabinet Committee has approved continuation of the nine sub-schemes of the umbrella scheme “**Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS)**” during 2017-2020.
- The CCEA also approved establishment of **National Facility for Airborne Research (NFAR)** with a financial commitment of Rs 130 crore during 2020-21 and beyond.

#### Background:

- The **Ministry of Earth Sciences** has a mandate to carry out research and development activities to develop and improve capability to forecast weather, climate and natural hazard related phenomena.
- Towards this direction, MoES has taken several initiatives to formulate specific schemes like weather and climate modelling, monsoon-research, climate change science & climate services etc.
- These schemes involve multi-institutes wherein each unit has a designated role for accomplishing the aforesaid tasks.
- As a result, all these schemes with specific objectives and budget are implemented in an integrated manner and are put together under the umbrella scheme “ACROSS”.

#### ACROSS scheme:

- ACROSS scheme pertains to the atmospheric science programs of the Ministry of Earth Sciences (MoES).
- **It addresses different aspects of weather and climate services, which includes warnings for cyclone, storm surges, heat waves, thunderstorms etc.**
- Each of these aspects is incorporated as nine sub-schemes under the umbrella scheme “ACROSS” and is implemented in an integrated.
- The ACROSS scheme **consists of nine sub-programmes** which are multi-disciplinary and multi institutional in nature and will be implemented in an integrated manner.
- As the objective of the ACROSS scheme is **to provide a reliable weather and climate forecast for betterment of**

**society, the scheme will aim at improving skill of weather and climate forecast through sustained observations, intensive R & D.**

**Impact:**

- The scheme will provide improved weather, climate and ocean forecast and services, thereby ensuring transfer of commensurate benefits to the various services.

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- A sizable number of scientific and technical staff along with requisite administrative support, thereby generating employment.
- To ensure last-mile connectivity of the weather based services to the end -user, a large number of agencies like the Krishi Vigyan Kendras of ICAR, Universities and local municipalities are roped in thus generating employment opportunities to many people.

# Defence and Security

## India-Russia stealth frigate

### Why in news?

- India signed \$500 million deal with Russia to locally manufacture two stealth frigates with technology transfer.

### About the deal:

- Stealth-designed in accordance with technology which makes detection by radar or sonar difficult.
- Frigate-It is a type of warship.
- Russia is going to provide material, design and specialist design. The rest of the work will be done by Indian companies.
- The project is expected to be completed by 2026-2027.

## Exercise INDRA

### Why in news?

- Opening ceremony for the Tenth Indo-Russian Joint Exercise, INDRA 18 has been scheduled from 18 November to 28 November 2018.

### About exercise INDRA:

- INDRA is a joint, bi-annual military exercise conducted by India and Russia starting in 2003.
- The exercise is tasked with boosting cooperation and interoperability between the Russian and Indian navies.
- The exercise involves live firing drills, as well as air defence and anti-submarine operations.
- Additionally counter piracy, terrorism and drug smuggling operations are carried out.

### Other Exercises:

- AVIAINDRA-India Russia Air Force Exercise.
- Malabar exercise-Naval exercise-India, Russia and USA.

## Igla-S

### Why in news?

- After a series of delays, Russia has been declared the lowest bidder in the Army's multi-billion dollar deal for man portable air defence systems.

- However there are concerns over the selection as well as the threat of US sanctions for arms purchases from Russia.

### About Igla-s:

- IGLA-S (SA-24) It is latest model of Russian MANPADS (Man-portable air-defense system) technology. It offers superior performance over earlier supplied SA-18 missiles to India.
- It is designed for use against visible aerial targets at short range such as tactical aircraft, helicopters, unmanned aerial vehicle (UAVs), cruise missiles.
- As per requirements of Indian Army, it will have maximum range of 6 km, altitude of 3km along with all-weather capability.
- Igla-S missile system will replace the existing Igla in service which is in urgent need of replacement.

## Multi-role U.S. copters

### Why in news?

- The Government issued the Letter of Request (LoR) on November 15 for procurement of 24 MRH from the U.S. government under the Foreign Military Sales (FMS) route.

### More about news:

- The Navy is presently facing a critical shortage of helicopters and several frontline warships are plying with empty helicopter decks.
- These helicopters are being procured as replacement for 15 Sea King ASW helicopters de-inducted from service in 1991 and one Sea King 42B MRH lost in accident.
- The current MRHs in service, Sea King 42Bs, were inducted in the 1980s.
- The LoR was signed and sent after the Navy received the pricing and availability details from the U.S. Now the U.S. will get back with the price quote, following which contract negotiations would begin to conclude the final deal.
- As the deal is through the FMS route, the process is expected to be completed in a short time-frame.

## Science and Technology

### Genome study on teas

#### Why in news?

- A genome study project initiated by the Tea Board of India, to establish the origins and speciality of Indian teas, has now reached an advanced stage.

#### Fund allocated:

- Tea board chairman said that 5 crore has been earmarked for this project.

#### More on news:

- There are six partner institutes in this project. The list includes the New Delhi-based National Tea Research Foundation and ICAR-National Research Centre for Plant Biotechnology, CSIR-Institute of Himalayan Bio Resource Technology Palampur Himachal Pradesh, Tea Research Institute, Jorhat (under TRA), UPASI, Coimbatore, and Darjeeling Tea Development Centre in Kurseong, Darjeeling.
- The study, which will establish *Camellia assamica* as an indigenous Indian variety, comes amid reports of a neighbouring country's efforts to establish Darjeeling tea as a variety that is their own.
- It may be mentioned that there are three different botanical types of tea cultivars used by the Indian tea industry — Assam type, Cambodia type and China type.
- Other than tea cultivars, there are wild types/species of tea plants used for research and breeding purposes, which are maintained by the various tea research institutes in their germplasm plots.
- Darjeeling tea is protected through G.I tag

#### What is G.I tag?

- A geographical indication (GI) is a name or sign used on certain products which corresponds to a specific geographical location or origin. Darjeeling tea became the first GI tagged product in India.

### Global fight on malaria

#### Why in news?

- The World Health Organisation recently said that global efforts to fight malaria have increased.
- It reported that there were more cases of the killer disease in 2017 than the previous year.

#### How it is spread?

- Malaria, which is spread to people through the bites of infected female mosquitoes, occurs in 91 countries but about 90% of the cases and deaths are in sub-Saharan Africa.
- Malaria is a vector borne disease caused by parasitic protozoans belonging to the Plasmodium type.
- It is most commonly transmitted by an infected female *Anopheles* mosquito.

#### Who are at risk?

- The disease killed 435,000 people last year, the majority of them children under five in Africa.
- Most malaria cases reported last year were in Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ghana, India, Mali, Mozambique, Niger, Nigeria, Tanzania and Uganda
- Five countries accounted for nearly half of the cases: Nigeria (25 percent), DR Congo (11 percent), Mozambique (five percent), and India and Uganda with four percent each.
- Mozambique is one of the target countries.

### 11 million years fossil in Gujarat

#### Why in news?

- Researchers from Birbal Sahni Institute of Palaeosciences in Lucknow, UP, examined an ape jaw fragment excavated from the Kutch basin, in the Gujarat state of western India, about 1,000 km south of the Siwaliks deposits.

#### What are ape fossils?

- Apes are a branch of old world tailless anthropoid primates native to Africa and south east asia. they are the sister group of the old world monkeys.
- A fossil is any preserved remains, impression or trace of any living organism from a past geological age.

#### More about news:

- It is the oldest and the only known ape fossil discovered in peninsular India.
- The researchers concluded that the upper jaw belonged to an adult ape (hominoid family), belonging to the genus *Sivapithecus* and lived about 11-10.8 million years ago (Miocene).
- The oldest found remains of these apes are dated at about 12.7 million years in Indo-

Pakistan and the youngest at about 8.6 million years.

- By comparing the fossil with other available data on Sivapithecus genus, the authors speculate that the identified jaw could belong to a large-sized ape, attributed to one of the two species of Sivapithecus, hysudricus or sivalensis.
- More, better preserved and unfragmented specimens are required to identify the exact species.
- The new discovery will help us understand in detail the evolution of great apes.

## 'Neighbourly', in India

### Why in news?

- Google has announced the national roll-out of a new app from its 'Next Billion Users' team called 'Neighbourly,' which helps people source local information from their neighbours.

### More about news:

- Google built "Neighbourly", a neighbourhood app that helps you ask your neighbours questions, share local expertise, and keep up with your neighbourhood.
- With Neighbourly, your questions get routed to the relevant neighbours instantly, and then they can write back with the most up-to-date and accurate info.
- Google's mission to organise the world's information and make it universally accessible and useful.
- With more than 1.5 million downloads and half-a-million people on the waitlist, Google are rolling out 'Neighbourly' starting with Bengaluru and Delhi, which topped the waitlist.
- Over the next few weeks, more cities will be added every day, including Chennai, Hyderabad and Pune. Some other cities include Kolkata, Chandigarh, Lucknow and Indore.
- The 'Neighbourly' app has already made inroads in popular neighbourhoods in Mumbai first, followed by cities like Jaipur, Mysore, Vizag, Kochi and Coimbatore.

## Aluminium and water as fuel

### Why in news?

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- Akshay Singhal, the 25-year-old co-founder and CEO of nanotechnology start-up Log 9 Materials, conducting trials for his car to run on water.
- This is made possible by the metal-air battery, developed by Log 9, fitted in the vehicle.

### What is log9?

- Log 9, an IIT Roorkee spin-off, is using the wonder material 'graphene' to make the metal-air batteries commercially viable and affordable for e-vehicles and stationary applications like power backup products.

### Log9-A wonder material:

- Log 9's secret sauce is its experience and expertise in 'graphene' which is one million times thinner than paper and forms graphite or pencil lead when stacked together.
- The material, which is 200 times stronger than steel, holds promise for the next generation batteries due to its properties.
- The battery enables the car to run on a simple fuel cell technology that uses electrochemical reaction to produce electricity.
- But there is a 'graphene rod' along the metal plate that generates electricity with water as its base for the chemical reaction.
- The electricity thus generated is sent to an electric motor that drives the car.
- Mr. Singhal of Log 9 said the company was now in the process of raising \$10 million from venture capital firms, which would help it to commercialise the product in India, U.S. and Europe.

## New International System of Units

### Why in news?

- The 26th meeting of the General Conference on Weights and Measures (CGPM) was held during November (13-16) 2018 at Palais des Congrès, Versailles, France.

### Features:

- The International Bureau of Weights and Measures (BIPM), the main executive body of CGPM has the responsibility of defining the International System of Units (SI). This revision of the SI is the culmination of many years of intensive scientific cooperation between the National Metrology Institutes (The national

Physical Laboratory for India) and the BIPM.

- The dissemination of SI units for the welfare of society and industries in the country is the responsibility of Legal Metrology, Department of Consumer Affairs, Government of India.
- Out of five draft resolutions the revision of the International System of Units and the definition of timescales are the important. The most important is the resolution on the revision of International System of Units.
- The definition of the seven base units namely, second, metre, kilogram, ampere, Kelvin, mole and candela has been changed from being linked to artefacts to being based on the fundamental constants on nature. Notably, the definition of kilogram has been changed from being the mass of prototype sanctioned by the 1st CGPM held in Paris in 1889 and deposited at the BIPM to the Planck constant which is a physical constant.
- Likewise, the definition of metre has been changed to link it to the speed of light. There is a change in definition of time also. The change in the definition will result in uniform and worldwide accessible SI system for international trade, high-technology manufacturing, human health and safety, protection of environment, global climate studies and the basic science underpinning these.
- The units are expected to be stable in the long term, internally self-consistent and practically realisable being based on the present theoretical description of nature at the highest level.
- Kibble balance is a self-calibrating electromechanical balance and provides the measurements of mass, traceable in terms of electrical parameters and provides linkage of macroscopic mass to the Planck constant (h).

## **Cancer induction by cell phone radiation**

### **Why in news?**

- The US National Technology Program (NTP) and the Ramazzini Institute published their animal studies on the cancer-inducing potential of cell phone radiation.

### **About the research:**

- The researchers did not find any 'clear' evidence in their studies; the strongest evidence of carcinogenicity reported was ('some evidence') for male Hsd: Sprague Dawley SD rats exposed at different specific absorption rates of (electromagnetic radiation) energy.

### **Limitations:**

- The ICNIRP noted the studies followed good laboratory practice (GLP); which uses much larger numbers of animals than previous research, and both exposed animals over the whole of their lives.
- However, the Commission noted that in determining the relevance of the results for human exposure guidelines, potential limitations need to be carefully considered, and whether any of the evidence regarding health effects in rodents is sufficiently strong and relevant to humans to serve as a basis for exposure guidelines.
- The NTP study found approximately equal numbers of Hyperplasias and malignant schwannomas, which is a large departure from the expected ratio of many Hyperplasias to very few malignancies.
- These results suggest that for radiofrequency fields to be carcinogenic, they would need to affect the conversion rate from Hyperplasias to malignancies in addition to potentially inducing hyperplasias.
- However, with very few cases with cardiac Schwann cell hyperplasia and schwannomas (for example, none in the control group), it is difficult to interpret and accept this finding without further clarification, ICNIRP argued.

### **Hyperplasia:**

- The enlargement of an organ or tissue caused by an increase in the reproduction rate of its cells, often as an initial stage in the development of cancer.

### **Schwannomas:**

- A schwannoma is a usually benign nerve sheath tumor composed of Schwann cells, which normally produce the insulating myelin sheath covering peripheral nerves.

## **Marijuana-derived drugs**

### **Why in news?**

- Three major science administrators in India — The Council of Scientific and

Industrial Research, the Indian Council for Medical Research and the Department of Biotechnology — are getting together to promote research in herbal drugs, some of which involve deriving new drugs from marijuana.

#### More about news:

- Marijuana comes from the Indian hemp plant, and the part that contains the “drug” is found primarily in the flowers and much less in the seeds, leaves, and stems of the plant.
- Marijuana is illegal for commercial cultivation though it grows as weed in several parts of the country. Uttarakhand, Jammu and — as of this month Uttar Pradesh — have allowed restricted cultivation of the plant for medical research.
- The effects of bhaang (marijuana consumed orally) have been known to induce a state of bliss.
- The therapeutic potential of marijuana is part of a larger governmental thrust to making new drugs derived from herbs and plants that find mention in Ayurvedic and other traditional-medicine knowledge systems.
- There is an unmet need for terminal cancer patients and because of restrictions we have lost 50-60 years of valuable research into the properties of these plants.

## Chandrayaan 2 Lunar Lander

#### Why in news?

- The Chandrayaan-2 lunar lander’s sensors are set to undergo a crucial test in the next

Officers IAS Academy, Chennai few days as the mission races towards a planned take-off in around two months.

#### How does it work?

- The Indian Space Research Organisation (ISRO) plans to fly the sensors on an aircraft over its artificial lunar site at Challakere to see how they will function and guide the Chandrayaan-2 landing craft when it starts descending on the lunar terrain.
- The orbiter carrying the Lander and a rover is scheduled to be sent to the Moon from Sriharikota on January 31 2019 and expected to reach there sometime in February 2019.
- The test on ground, called the Lander Sensor Performance Test or LSPT, will be conducted at ISRO's new R&D campus in Chitradurga district, about 200 km from here.
- The highly autonomous or pre-programmed mission uses a large number of sensors. Among them are those that help the lander to precisely assess its height from the landing spot; decide its speed and help it to steer clear of any boulders or uneven surface.
- The lander is being developed and tested by the U.R. Rao Satellite Centre in Bengaluru. For the test, a prototype module carrying the sensors will be flown on one of ISRO's two small aircraft.
- As the plane descends from around 7 km to about 1 km over the artificial terrain, the sensors must show how they will guide the soft landing of the lunar craft at the right spot, speed and position.

## Culture

### Rani Lakshmi Bai and Indira Gandhi

#### Why in News?

- PM paid tribute to both of the personalities who were born on 19th November.

#### Rani Lakshmi Bai

- Rani Lakshmi Bai (1835- 1858) was a great warrior of the First War of Indian Independence of 1857. Her childhood name was Manikarnika. She was married to Raja Gangadhar Rao of Jhansi.
- When her only son and her husband died, Jhansi came under the '**Doctrine of Lapse**'. In 1853, Jhansi was annexed by the East India Company.
- But, Lakshmi Bai decided not to surrender Jhansi to the British. The British force under the leadership of **Sir Hugh Rose** captured Jhansi. Like a true heroine, she fought against the British force. She created a battalion exclusively of women. She died on 17th June, 1858 fighting bravely.

#### Indira Gandhi

- Indira Gandhi was born on 19th November, 1917 at Allahabad. She joined the National Congress party in 1938.
- After the death of Nehru in 1964, she joined his Cabinet as the Minister of Information and Broadcasting. She became the first woman prime minister of India in 1966.
- Indira Gandhi was known for her leadership skills. She had firm determination and strong will power. She was the woman behind defeating Pakistan in 1971.
- Her bold decisions during the prime minister term were greatly admired. She was called **Iron Lady of India**. In 1971 she took a drastic step to help East Pakistan and so promulgated war against then Pakistan. She imposed national emergency in 1975 because of her conviction.
- She made a move to suppress Sikh insurgents, which elicited hatred among Sikhs towards her. She was then assassinated by one of her Sikh bodyguards on 31st October, 1984.

### National Integration Week/Qaumi Ekta Week

#### Why in News?

- National integration indicates the feeling of common identity amongst the people of country even after being from different races, cultures, religions or regions in order to build a strong and developed nation.
- It is important to make people realise the concept of 'Unity in Diversity'.
- The National week is celebrated from 19th (Indira Gandhi's Birthday) to 25th November with a view to foster and reinforces the spirit of Communal Harmony.
- The occasion provides an opportunity to reaffirm age old traditions and faith in the values of tolerance, co-existence and brotherhood in a multi-cultural and multi-religious society.
- The **National Foundation for Communal Harmony** (NFCH), an autonomous organisation with the Ministry of Home Affairs, which organises Communal Harmony Campaign coinciding with the Qaumi Ekta Week and observes the Communal Harmony Flag Day on 25<sup>th</sup> November.

### Milad-Un-Nabi

#### About:

- It is the birthday of Prophet Muhammad, the pioneer of Islamic Religion.
- According to legend, Prophet Muhammad was born on the twelfth day of Rabe-ul-Awwal, which is the third month of the Islamic lunar calendar.
- This time it was celebrated on 20-21st November. The day is celebrated by commemorating prayers, remembering Prophet's teachings, public gatherings and processions.

#### Why in news?

- President greeted Indian's on the occasion of Milan-Un-Nabi.

### International Tourism Mart

#### About:

- International Tourism Mart is an annual event conducted by Ministry of Tourism



- It is organised in the North Eastern States on rotation basis.
- It is organised with an objective of highlighting the tourism potential of Northeast region in the domestic and international markets with further brings business fraternity and entrepreneurs.
- The event is planned and scheduled to facilitate interaction between buyers, sellers, media, Government agencies and other stakeholders.

#### Why in News?

- 7th IMT was organised in Agartala, Tripura. A total of 53 foreign delegates from 18 countries participated in the event.

## Amas of Japan

#### About:

- Traditionally 'Ama' mean sea women, who are Japanese divers, famous for collecting pearls.
- For 3000 years, Japanese tradition holds that the practice of ama. Till 1960s, ama dived wearing only a loincloth. Even in modern times, ama dive without scuba gear or air tanks, making them a traditional sort of free-diver.
- In Japan, women were considered to be superior divers due to the distribution of their fat and their ability to hold their breath.

#### Why in News?

- Many women of age 60 to 80 years are diving in Japan as Ama. They can hold their breath more than a minute. They have very rudimentary equipment: a buoyant ring to signal her presence at the surface while she dives, and a net to hold her haul.

## Rabab soothes Kashmir

#### About

- It is a string musical instrument originating from central Afghanistan. It is known as "the lion of instruments" and is one of the two national instruments of Afghanistan. The word 'rabab' comes from rooh(soul) and bab (expression).
- The rubab holds as the first instrument used by Sikhism. It was used by **Bhai Mardana** the companion of Guru Nanak.
- Rabab came to Kashmir many centuries ago. Compared to the seven strings of the

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Afghan rabab, the Kashmiri version has 22 strings, with two strings crafted out of goat gut through an elaborate process.

- The makers and listeners of the rabab are vanishing fast in Kashmir. In north Kashmir, only two families continue with the trade of crafting the rabab, from the dozens of just a few decades ago.



#### Why in News?

- Sufyan Malik', a 19-year-old Srinagar boy, shot 45-second video on a mobile phone against the backdrop of the heavy snowfall witnessed on November 3, has stormed the internet, with over 4 lakh views and counting.
- The youth of Kashmir are acknowledging the spirit of this instrument and are trying to experiment with the mainstream music.

## American Died in Andaman

#### Why in News?

- John Allen Chau, an American national, was killed by people belonging to the protected Sentinelese tribe, when he tried to enter North Sentinel Island of Andamans.
- He was missionary trying to meet and convert one of the most isolated hunter-and-gatherer tribes in the world offered them fish and other small gifts before the tribesmen killed him and buried his body on the beach.
- This is not the first time the tribes have reported to kill the outsiders. In 2007 two fishermen were killed when they were fishing very near to the island.

#### Why didn't authorities stop?

- The North Sentinel Island is one of the 29 islands in Andamans where travel rules were relaxed by Centre in June this year.
- Earlier tourists had to take special permission — the Restricted Area Permit (RAP) — before being allowed to visit them.
- Still, any tourists have to take permission from authorities under Protection of Aboriginal Tribe (Regulation), 1956 and

Regulations under Indian Forest Act, 1927. But Chau took the help of local fishermen and tried to intrude the island.

#### Who is Sentinelese?

- The Sentinelese are hunter-gatherers, habituating in North Sentinel Island, likely using bows and arrows to hunt terrestrial wildlife and more rudimentary methods to catch local seafood, such as mud crabs
- Their population is estimated to be around 15 to 140 individuals. . Metalworking, agriculture, and even the ability to make fire are unknown to them
- They are believed to travel from Africa long back.
- They are particularly vulnerable tribes. They are not immune to even small diseases like common fever, flu and measles. If they are exposed to outer world, their population can be extinct.

#### Guru Tez Bahadur

##### About:

- Guru Tez Bahadur was the ninth of the Ten Gurus of Sikhism revered by the Sikhs as Srisht-di-Chadar (Protector of humanity),
- His spiritual writings, detailing varied themes such as, the nature of God, human attachments, body, mind, sorrow, dignity, service, death, and deliverance, are registered in the form of 116 poetic hymns in the sacred scripture, the Sri Guru Granth Sahib Ji.
- He was approached by Hindu Pundits from the Kashmir region, seeking the Guru's intercession against the forced

Officers IAS Academy, Chennai conversions of Hindus to Islam by the Mughal rulers of India.

- For the reason that he supported Kashmiri pundits, he was executed publicly in Delhi by Aurangzeb.

##### Why in News?

- The President of India, paid respectful homage on the eve of the martyrdom day of Guru Tez Bahadur.

#### Jallianwala Bagh Massacre

##### About:

- The Jallianwala Bagh Massacre happened in Amritsar, on April 13 1919.
- It is named after the Jallianwala Bagh (Garden) in the northern Indian city of Amritsar. On this day, under Brigadier-General Reginald Dyer, Indian Army soldiers started shooting at an unarmed gathering of men, women and children. The person in charge was, the military commander of Amritsar.
- The shooting lasted about ten minutes. According to official British Raj sources, 379 people were killed. According to other sources, there were over 1,000 deaths, with more than 2,000 wounded, and Civil Surgeon Dr. Smith said that there were 1,526 casualties.

##### Why in News?

- The Government of India has decided to mark the remembrance of 100 years of the historical Jallianwala Bagh Massacre next year.
- A number of commemorative as well as constructive activities will be taken up during the remembrance period.

## Miscellaneous

### International Film Festival of India



#### Why in News?

- The 49th edition of the International Film Festival of India (IFFI) 2018 kick-started on 20<sup>th</sup> November 2018 at the Shyama Prasad Mukherjee Indoor Stadium

#### Details of the ceremony

- The ceremony showcased the theme of New India through a variety of genres of cinema like history, action and romance.
- Also 212 films from over 68 countries and as many as 26 feature and 21 non-feature Indian films were screened in the Indian Panorama section.
- The festival opened with director Julien Landais' debut movie The Aspern Papers. The historical drama, based in late 19th century Venice.

#### Country of Focus

- Every year IFFI features a "Country of Focus" that brings out the cinematic excellence and contributions of that particular Country.
- This edition will have Israel as the Country of Focus and Ten films from Israel have been selected in the category.

#### State focus

- Introduced for the first time, focused on films from Jharkhand.
- It includes Death in the Gunj, Ranchi Diaries, Begum Jaan, among others.

#### Sketch on Screen section

- Screened three International Feature Length Films done in collaboration with Indian studios.

#### The 'Homages' section

- Payed tribute to veteran actors Shashi Kapoor, Sridevi, M. Karunanidhi and Kalpana Lajmi.
- In the global section, homages will be paid to Terence Marsh, Milos Forman, and Anne V. Coates.

#### About IFFI

- The International Film Festival of India (IFFI) was founded in 1952
- It is one of the most significant film festivals in Asia and is held annually currently in the state of Goa
- the festival aims at providing a common platform for the cinemas of the world:
  1. to project the excellence of the film art
  2. understanding and appreciation of different social and cultural ethos of film cultures of different nations
  3. Promoting friendship and cooperation among people of the world.
- The festival is conducted jointly by the
  1. Ministry of Information and broadcasting
  2. Directorate of Film festivals
  3. Government of Goa

### Delhi running out of burial space

#### Why In news?

- The Space available for burial in Muslim graveyards in the Capital of India is running out
- Facts say that there could be no space left in a year, according to the Delhi Minorities Commission (DMC).

#### Major challenge

- the increase in population as a result of natural growth
- immigration from other parts of the country

#### Way forward

- Temporary graves where re-burial can happen after a few years should be set up, apart from establishment of new graveyards.

#### Delhi Minority commission (DMC)

- The Delhi Minorities Commission was set up under the Delhi Minorities Commission Act, 1999.
- The Minority Communities, as per the Act, are Muslims, Christians, Sikhs, Buddhists and Parsis.
- The community was formed to safeguard the rights and interests, as provided in the Constitution of India for the religious minorities in the National Capital Territories of Delhi.
- In 2008 "Jain" Community is also treated as Minority Community in the NCT of Delhi.

## Anzac War Memorial

### The ANZAC War Memorial

- The Memorial was originally built as a tribute to Australian soldiers who did service in World War I and the Indian soldiers who fought alongside their Australian comrades in World War I, including on the beaches of Gallipoli.
- Twelve Indian-origin soldiers volunteered for the Australian Imperial Force (AIF) during WWI, according to the records in the National Archives of Australia.

### Who are ANZACs?

- ANZAC is the acronym formed from the initial letters of the Australian and New Zealand Army Corps in which Australian and New Zealand soldiers in Egypt were grouped before the landing on Gallipoli in April 1915.

### Why is Gallipoli famous?

- During the Crimean War in 1854, the Ottoman Empire allied with France and Britain against Russia, with Gallipoli used as a base by the British Army.
- Soldiers from Britain, France, Australia, New Zealand, Newfoundland and India (including the Gurkhas from Nepal) were operational on the Gallipoli Peninsula.
- The Gallipoli Campaign, also known as the Dardanelles Campaign was a campaign of the First World War that took place on the Gallipoli peninsula (Gelibolu in modern Turkey) in the Ottoman Empire between 19 February 1915 and 9 January 1916.

### From the Map:



- **Country:** Turkey
- **Seas surrounding Gallipoli:** Aegean Sea to the west and the Dardanelles strait to the east.
- **Neighbouring Gulfs:** The peninsula runs in a south-westerly direction into the Aegean Sea, between the Dardanelles and the Gulf of Saros (formally the bay of Melas).

### Why in News?

- President of India during his visit to Australia addressed the Indian Community in Sydney and paid Respect at the Anzac War Memorial
- This is the first state visit to Australia by a President of India.
- The centenary of the conclusion of World War I was commemorated earlier this month

### Points addressed:

- Today, Indian professionals are much sought after, whether in Australia or elsewhere in the world. As entrepreneurs, doctors, teachers, bankers and technology specialists, student's members of the Indian community are adding value to Australia and is a symbol of the Australia-India Knowledge Partnership.

# News in-depth

## General Studies-1

### 550th Birth Anniversary of Shri Guru Nanak Dev Ji

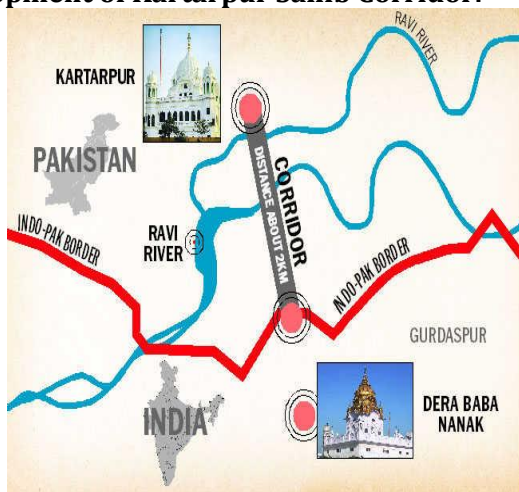
#### About:

- Guru Nanak Dev Ji was the first Sikh Guru. He founded the Sikh Religion.
- Guru Nanak was exponent of Bhakti Cult. Born in the village named Talwandi near Lahore on 15th day of April, 1469.
- Three principles of Guru Nanak: One God, Guru and muttering of prayers. In his opinion God is deathless, viewer of truth, fearless, enemy-less, unborn, express-in-himself.
- Nanak called upon people to have devotion in God. In his opinion Guru was ocean and disciple was a river. The disciple should end in the Guru. His direction was a middle path between sanyasi and earthly life. He did not believe in discrimination of caste and dogma of untouchability.
- He preached the moral of tolerant religion and tried to unite Hindus and Muslims. His disciples are known as Sikhs. He died on September 22, 1539.

#### Why in News?

- April 15, 2019, will be Guru Nanak Dev Ji's 550th birthday. To celebrate in wide way Govt of India has promised to undertake the following initiatives.

#### Development of Kartarpur Sahib Corridor:



- Union Cabinet approved the building and development of the Kartarpur corridor from Dera Baba Nanak in Gurdaspur district to the international border to facilitate pilgrims from India to visit Gurdwara Darbar Sahib Kartarpur on the banks of the Ravi River, in Pakistan,
- Shri Guru Nanak Dev Ji spent eighteen years in Kartarpur.
- The Kartarpur corridor will be implemented as an integrated development project with Government of India funding, to provide smooth and easy passage, with all the modern amenities. Government of India will put in place suitable facilities for smooth passage of pilgrims.
- Government of Pakistan has also agreed to develop a corridor with suitable facilities in their territory which would be visa-free travel for Sikh pilgrims.

#### Development of Sultanpur Lodhi:

- Sultanpur Lodhi, associated with the life of Shri Guru Nanak Dev Ji, shall be **developed as a heritage town** and on the Smart City principles. A heritage complex at Sultanpur Lodhi, "**Pind Babe Nanak da**" will be established to depict life in the times of Shri Guru Nanak Dev Ji.

#### Centre for interfaith studies and Chairs in foreign Universities:

- A centre for interfaith studies will be set up at Guru Nanak Dev University, Amritsar. Chairs on Shri Guru Nanak Dev Ji will be set up in one University each in UK and Canada.
- An International seminar on the life and teachings of Shri Guru Nanak Dev Ji will be organised in New Delhi.

#### Celebrations throughout the country and globally:

- States/Union Territories will also be requested to celebrate 550th Birth Anniversary of Shri Guru Nanak Dev Ji in a

befitting manner. Indian missions overseas will organize special events on the occasion.

#### **Commemorative coin and stamps:**

- Commemorative coin and postage stamps will be released by the Government of India to mark this momentous occasion.

#### **Religious activities and publications:**

- Religious activities will be organised throughout the country. Doordarshan will telecast programmes on Shri Guru Nanak Devji and the Gurbani. National Book Trust will publish Gurbani in different Indian languages. UNESCO will be

### **#MeToo: A gender curriculum**

- Recently there have been a large number of revelations of sexual harassment made through the #MeToo campaign. Charges have been made against politicians, actors, bureaucrats etc.
- It has been exposed in various professions and across different walks of life.
- The response to allegations has been in two broad ways. One in which the accused rendered unconditional apologies, resignations, stepping away from duties until further investigations etc and on the other side the accused have reacted with denials, intimidation and even further harassment.
- Education which is an important part of the socialisation process is also to blame.

#### **What our education lacks**

- The purpose of education is not to only ensure that people secure employment or rise to coveted positions of power alone, it is also to ensure that they learn and practice equality and mutual respect.
- Many of the accused are well educated and the education system has failed to prevent these men from behaving in an inappropriate manner.
- The depth and the vastness of the problem are reflected by the way sexual harassment is justified as "casual flirting" and "glad eye" (looking at someone seductively) is inappropriate.
- Men in power enjoy the impunity which combined with attitudes and acts which reflect patriarchy make feel uncomfortable with their inappropriate behaviour such as passing comments, praising her beauty etc.

Officers IAS Academy, Chennai requested to publish Shri Guru Nanak Dev Ji's writings in world languages.

#### **Special train for pilgrims:**

- A special train passing through the various holy places associated with Shri Guru Nanak Dev Ji, for pilgrims and tourists.

#### **A telescope to view Kartarpur Sahib**

- The Ministry of Electronics and IT has installed a high-powered telescope in India along Indo-Pak border for the devotees to view Kartarpur Sahib in Pakistan, which is resting place of Guru Nanak Ji.

- Sexism is systemic and our education system has failed to teach the boys and men to recognise, challenge and refrain from sexist and even unlawful behaviour.

#### **The way forward**

- We cannot conclude that sexual misconduct or gender inequality is a by-product of lack in our education system.
- Education has the responsibility to ensure that it trains the people to be socially aware and sensitive humans.
- It should also teach us how to interact and engage with people from different genders, castes, classes and communities.
- The concept of consent is an essential component of any interaction and decisions even of refusal must be respected. These must be taught to the students.
- The #MeToo movement demands a continuous and systemic process of learning that leads to equity.
- Efforts must be made to incorporate a gender curriculum in all schools and colleges
- Measures must be formulated to address incidents of sexual harassment
- Anti-sexual harassment cells must be established
- Police should conduct community engagement drives so that students know how to report sexual harassment.
- **Operation Nirbheek**, initiated to improve safety and security of girls in schools, have proven to be successful to a large extent. It is an initiative of the Delhi Police to facilitate school girls to register complaints of sexual harassment.

- The fight against sexual harassment can be effectively started at educational

## The notion of purity

- The Sabarimala judgment by the Supreme Court saw protests erupting which can be seen as a clash between nature and culture.
- There has never been such critical focus on female bodily functions than it is now.

### Similar judgment

- In 2016, the Bombay Court lifted the ban on entry of women into the Shani Shingnapur temple's sanctum sanctorum, in Maharashtra.

### Nature vs culture

- Menstrual period is part of the female reproductive cycle when the body sheds the uterine lining if an egg is not fertilised. It is a natural process and nothing to be considered a taboo.
- Women during menstruation feel uncomfortable and painful. It also involves tasks of cleaning and waste disposal.
- Women is given secondary status to men as they are considered to be closer to nature as they give birth to new offspring.
- The patriarchal mind-set gives more value to culture than nature as culture is

## Not by ordinance

- Recently there have been large scale calls by right wing groups such as Rashtriya Swayamsevak Sangh (RSS) and Sangh Parivar asking the government to pass an ordinance and later an act to build Ram temple at the site of Babri Masjid (now demolished) in Ayodhya immediately.
- The government can construct a temple by passing an ordinance or by passing an act however each process has its own drawbacks.

### Passing an ordinance/act

- An Ordinance could be passed if the President is satisfied that circumstances exist which render it necessary to take immediate action.
- In case the ordinance lapses or is negated, re-promulgation of ordinances can be done but it was held as not healthy for a democracy to circumvent the legislative

institutions

associated with creation of ideas and technology.

### The Taboo

- A woman in her menstruation is considered impure and subject to various restrictions.
- Women are not allowed to enter temples and kitchens.
- In many cultures, it affects her routine and there are restrictions on activities and social contacts.
- Even people who touch menstruating women are considered as impure until evening.
- Women are considered pure once they take bath after their menstruation.

### What's next?

- The legal system in India has been trying to address the imbalance but law alone cannot break the myth which has been elevated with every generation.
- Menstruation is a biological function that predates the evolution of culture. Equality will be difficult to achieve as long as it is considered taboo and linked to the idea of impurity.

process by the court in the D.C Wadhwa Case, 1986.

- The central government can also use all its power to frame a law ordering the construction of law which will see wide spread protests throughout the country.

### Hurdles for the ordinance/act

#### Places of Worship (Special Provisions) Act of 1991

- The cut-off date for freezing the religious character of a place of worship is August 15, 1947 and all suits regarding their status would subside.
- The violation of this act calls for three years imprisonment or fine or both.
- However, section 5 of the act, says, "nothing contained in this act shall apply to the place or place of worship commonly known as Ram Janma Bhumi-Babri Masjid situated in Ayodhya in the State of Uttar

Pradesh and to any suit, appeal or other proceeding relating to the said place or place of worship.”

### **Acquisition of Certain Area at Ayodhya Act, 1993**

- This act acquired the property and put it under the central government.

### **Ismail Faruqui v. Union of India (1994)**

- The 1993 act was interpreted by the court in this case.
- In 1994, a five-judge Supreme Court bench had held that a mosque was not an “essential part of the practice of the religion of Islam” and that namaz could be offered anywhere and hence, “its acquisition (by the state) is not prohibited by the provisions in the Constitution of India”.
- It invented the concept of “statutory receiver” by which the property would remain with the central government.
- The Supreme Court unfairly allowed Hindu worship while setting aside the case.
- Status quo was to be maintained as on 7<sup>th</sup> January 1993.

### **Separation of powers**

- The legislature cannot assume the powers of judiciary over judicial decision making especially when the case is pending as a suit or in appeal.
- An ordinance/act has to be passed taking away the first appeal to the Supreme Court, invalidate the judgment of
- 

### **Retweeting Brahminical patriarchy**

- Twitter CEO Jack Dorsey has created a social media storm in India after a picture of him with a placard saying “smash Brahminical patriarchy”, went viral.
- The social media giant was conducting a closed door discussion with a group of women to know more about their experience using twitter.
- The poster was handed over by a Dalit activist in an effort to drive home the importance of addressing caste-based discrimination on the social media platform.

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Allahabad High Court in 2010 and Ismail Faruqui (1994) and subsequent orders.

- Such a new law would be challenged in the Supreme Court as it of national importance and affects the jurisdiction of the Supreme Court. The court would mandate that no steep steps be taken and it would take some to decide the constitutionality of the new ordinance/act. Thus the decision in Ayodhya case will be further delayed.

### **Allahabad High Court (2010)**

- Plaintiffs representing Lord Ram, the Nirmohi Akhara and the Waqf Board were declared joint title-holders of the property.
- The disputed Babri Masjid site shall be divided into three parts. A two-thirds portion is to be shared by two Hindu plaintiffs and one-third will be given to the Sunni Muslim Waqf Board.

### **Secular state?**

- India is currently facing extreme populist demands against minorities and the rule of law. The constitution provides for secularism however they are certain sections of society which are communal. India is based on concept of multi-religions and cultural ethos which needs to be protected. Throughout the world the destruction of the Babri Masjid has provoked doubts on the capacity of India to be neutral. India has one of the largest Muslim populations in the world. India needs to demonstrate secular values in its action by accommodating people of all faith and culture.

- He was accused of propagating hatred towards “people who constitute 5% or less” of India’s population.

### **What is Brahmanism?**

- Brahmanism refers to the oppressive social order of caste and not to the members of the brahmin community.
- B.R. Ambedkar defined the term thus: “By Brahmanism I do not mean the power, privileges and interests of the Brahmins as a community. By Brahmanism I mean the negation of the spirit of Liberty, Equality and Fraternity. In that sense it is



rampant in all classes and is not confined to the Brahmans alone, though they have been the originators of it”.

- Although untouchability has been eradicated as per the statute book, caste discrimination is still widely prevalent. There have been several instances of honour killing, hate crime etc. People from the lower castes are exploited in all aspects.

#### What is patriarchy?

- Patriarchy is a social system in which males hold primary power and predominate in roles of political leadership, moral authority, social privilege and control of property.
- India has traditionally been a patriarchal society and therefore women, irrespective of their class, caste or religion, they have

## Gandhi opposed Partition

#### Introduction:

- The glorification of Godse’s justification for killing Gandhi is coming up. Godse killed Gandhi because he believed that Gandhi favoured partition for his love for Muslims and the Hindus lost their land to Muslims.
- This perception is seen as a negative trend. It is very disturbing to hear of this revisionist version of Gandhi’s assassination that by implication justifies Godse’s action.
- It not only tarnishes Gandhi’s reputation, but also flies in the face of recorded facts.

#### Situation at the time of Partition:

- Gandhi largely opposed partition because of the communal tone it had taken.
- However, the Congress leadership had increasingly side-lined him by the end of 1946.
- By that time, Jawaharlal Nehru and Sardar Patel had come to accept the idea of Partition without even the courtesy of consulting Gandhi.
- Eventually, the Congress Working Committee (CWC) accepted the Mountbatten plan to divide the country.
- On the morning of June 3, 1947, the day the Partition plan was announced, Gandhi
- 

Officers IAS Academy, Chennai always suffered from social handicaps and disabilities.

#### What’s the issue?

- The social order is based on two hierarchies that are inter-connected: gender hierarchy and caste hierarchy. The former accords women a lower status and the latter gives Brahmins a superior social status. The concept of caste purity has been carried over generations.
- In India, the fight against patriarchy isn’t complete without taking into account caste roots of patriarchy. The term Brahmanism has been in use for a long time used to describe social order marked by graded inequality of caste. It is sad that caste still remains a powerful determinant of status and life chances in Indian society.

told Rajendra Prasad, “I can see only evil in the plan.” Reacting to a question by a reporter whether he would undertake a fast to prevent Partition, Gandhi, uncharacteristically dejected, replied: “If the Congress commits to an act of madness, does it mean I should die?”.

- It is a matter of record that Patel, on the advice of States Secretary V.P. Menon, had accepted the inevitability of Partition by December 1946 and had signalled this to Nehru.
- Patel was convinced, as he later stated, that “if India is to remain united it must be divided”. Nehru was also eventually convinced that Partition was a necessary evil in order to neutralise Jinnah’s nuisance value and to establish a strong and centralised Indian state which would not have been possible with Muslim League ministries in office in undivided Punjab and Bengal.

#### Conclusion:

- Blaming Gandhi for Partition and by implication lionising his assassin is the worst form of historical revisionism. In fact, it is a crime, which all thoughtful Indians must condemn unequivocally.

## General Studies-2

### Maldives new President swears-in

#### Introduction:

- After five years of rule by a government that strong-armed political dissent domestically, the Maldives has put a pro-people administration in power, swearing in Ibrahim Solih, representing the Maldivian Democratic Party, as President on November 17.
- Prime Minister Modi attended the inaugural event.

#### Promises made by the new government:

- The new coalition government has promised a pro people administration.
- Promising a host of people-focussed policies and a foreign policy formulated on the basis of human rights, democracy and climate diplomacy.
- On climate change issues, the President promised introduction of Green tax and Halt fishing permit to Foreigners.

#### Future of India-Maldives relation:

- PM of India was invited for the inaugural ceremony shows the respect that the new government has for India.
- Immediately after the swearing-in ceremony, Mr. Solih held a meeting with Mr. Modi, which sources said was a special gesture toward India.
- India was the only country that the President has mentioned in his speech.
- At their meeting, the two leaders agreed on the importance of maintaining peace and security in the Indian Ocean and being “mindful of each other’s concerns and aspirations for the stability of the region”.
- The need to boost economic cooperation was highlighted in their conversation.
- Their joint statement recognised that easing the visa regime mutually in both countries would be the quickest way to expand opportunities for Indian companies to invest in the Maldives, and for Maldivians to travel to India for a variety of purposes.

### Looking beyond the optics

#### Introduction:

- President Ram Nath Kovind’s choice of Vietnam as the first Southeast Asian

- India was also invited to step up again as an economic partner which could help the Maldives meet its most pressing economic needs, including for increased housing and infrastructure development and for water and sewerage systems on the outlying islands.

#### Future of Maldives-China Relation:

- The Maldives’ new government will pull out of a free trade agreement (FTA) with China because it was a mistake for the tiny nation to strike such a pact with the world’s second biggest economy, the head of the largest party in the ruling alliance said.
- It is the latest sign of a backlash against China in the Maldives.
- The trade imbalance between China and the Maldives is so huge that nobody would think of an FTA between such parties.
- China is accused for not buying anything from the Maldives, it is a one-way treaty.
- Though the deal was signed during the Yameen period during December 2017, there are laws that need to be passed to implement it.
- And hence the new government said that it is not passing the laws.
- The new government has promised that it will pay for the debts that it already got. It also said that Chinese can continue investing in Highways and Housing.
- China has not commented on this issue. Yet, there is little doubt that China is there to stay in the Maldives.

#### Conclusion:

- Innumerable Indians work across the hospitality, education, and health-care sectors of the Maldives economy, and India contributes everything from helicopters to medical visas to Maldivians.
- Maldives at its best needs to balance its relationship with India and China, for which it needs a stable government.

country to visit in his capacity as the President is not surprising.

- A close ‘ally’ of India for over 70 years, and not limited to official diplomatic ties,

Vietnam is critical for India's foreign policy at the regional and systemic levels.

- While Mr. Kovind's visit highlights the 'normal' trajectory of a presidential visit, there is a need to understand how Vietnam has calibrated its domestic and foreign policy shifts and where India's relevance can fit into these policy changes.

#### Cooperation in Agriculture:

- Domestically, since 1986, Vietnam political and economic renewal campaign has made dramatic strides.
- Today it is a rapidly growing, regional economic giant, showing both dynamism and pragmatism in its calculations.
- While earlier it imported agricultural products, today it is a major exporter. Agricultural competence has furthered Vietnam's entry into the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).
- The Vietnam National Assembly ratified the CPTPP on November 12, asserting its growing economic impact globally, with exports increasing to approximately \$240 billion for the year 2018.
- Membership to the CPTPP, which accounts for nearly 14% of the global GDP, will boost Vietnam's economic growth, from 6.8 % in 2017-18, by a further 1.1% to 3.5% by 2030.
- One of the core areas of Mr. Kovind's visit focussed on furthering cooperation in agriculture and innovation-based sectors, pushing the potential for increasing bilateral trade to \$15 billion by 2020.

#### Common ground of health:

- An area of potential convergence for both Vietnam and India is health care.
- Vietnam, in 2016, highlighted the importance of linking economic growth to universal health care, whereby 80% population would be covered by health insurance.
- India too, since 2011, has been focussing on the need to deliver accessible and affordable health insurance to weaker sections of society.
- With India trying to become a part of RCEP, India and Vietnam can work together in PPP in health care sector.

## Corridor of hope

### Introduction:

#### Focus on sub-regionalism:

- With ASEAN countries feeling the rise of China, the ASEAN countries feels that there should be a balance between regionalism and sub-regionalism, which is done by Vietnam very well.
- India too looks at both sub-regionalism and regionalism as priority avenues to pursue its foreign policy.
- The India-Vietnam Joint Statement of March 2018 reiterates the focus given to sub-regionalism and the Mekong Ganga Cooperation framework.
- However, another area is emerging in the CLV, or Cambodia-Laos-Vietnam growth triangle sub-regional cooperation, bringing these three countries together.
- India and Vietnam can jointly explore the potential for enhancing capacity building and providing technical assistance and training within this sub-regional grouping.

#### Security concern:

- Today there is increasing commonality of security concerns between Vietnam and its ASEAN partners as well as with Australia, India, Japan and the U.S., particularly in the areas of maritime security and adherence to the United Nations Convention on the Law of the Sea.
- Both India and Vietnam have endorsed the US notion of "Indo-Pacific" by which it has recognised centrality of India in the region security concern.
- In pursuance of this, the two countries have planned a bilateral level maritime security dialogue in early 2019.

#### Way forward:

- The major takeaway from Mr. Kovind's visit is the 'cooperation model' India offers, providing choices and opportunities for its friends.
- India and Vietnam has much common ground to cooperate on many issues like regional aspiration, defence and security.
- India has been doing well in its Look East and the Act East policy; it needs to be more pragmatic as the relations move forward.

- The announcement by India and Pakistan of plans to operationalise a visa-free corridor between Dera Baba Nanak in Indian Punjab and Kartarpur Sahib in Pakistan's Punjab is a longstanding plea of Sikh pilgrims.
- The announcement now is particularly timely, with the 550th birth anniversary of Guru Nanak falling in November 2019.

#### History of the demand:

- The demand had gathered pace in 1995, when Pakistan renovated the Kartarpur gurdwara, situated on the site on the bank of the Ravi where the founder of Sikhism, Guru Nanak, spent his last 18 years.
- Leaders from both sides, including Prime Ministers Atal Bihari Vajpayee and Benazir Bhutto, had pushed for it.
- In their effort to facilitate travel by Sikhs to important shrines on both sides of the border, they were also alert to the potential of such a move to heal ties amongst their people, and promote dialogue between the two governments.

#### Significance of opening up of the corridor:

- Given its easy logistics, the 4-km-long Kartarpur corridor is a low-hanging fruit as a meaningful confidence-building measure.

## Quota for Marathas approved

#### Why in news?

- The Maratha community has secured yet another promise of reservation in government jobs and educational institutions.
- The proposal has been cleared by the Maharashtra Cabinet, but is yet to be passed in the State Assembly.
- Chief Minister Devendra Fadnavis defended this saying it is in line with the recommendations of a State Backward Class Commission (SBCC) report, yet to be made public, mandating reservations for Marathas under a new, separate Socially and Educationally Backward Class category.

#### Background:

- Maratha community is socially and economically backward and they constitute 32-35% of the state population.
- Growing socio-economic insecurity within the state's dominant caste group was led to agitate for reservation in the state.

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- The initiative can also become a **template for cross-border exchanges based on faith**, which could provide a balm for many communities such as Kashmiri Pandits, who have long asked for access to visit the Sharda Peeth in the Neelum Valley in Pakistan-occupied Kashmir; Sufis in Pakistan who wish to visit the dargah of Khwaja Moinuddin Chishti in Ajmer, Rajasthan; and Sikhs in India and Pakistan wanting to visit important shrines on both sides of the border.

#### Way forward:

- Much will depend on how quickly India and Pakistan act on their commitment.
- Even more will depend on how the two governments manage their relationship in a way that avoids making pilgrims a pawn in bilateral tensions.
- Going forward, it is important that issues related to the corridor are managed in a non-political manner and details left to diplomats and officials to sort out.
- Given the bilateral freeze, the Kartarpur project will compel India and Pakistan to engage in a positive and purposeful manner, at a time when few other avenues for engagement exist.

- Marathas have a large share in the state's population, they own large tracts of land and have enjoyed dominance in the realm of politics. But this traditional dominance is being threatened in the new economic order where educations and jobs matter more than farm incomes.

#### Maratha quota is betrayal: OBC groups

- **As per Section 340 of the Constitution, the term socially and Educationally Backward Class (SEBC) is being used for the OBCs.** How can Marathas be termed so and get the same reservation? Questioned OBC organisations and also said that this was an attempt to give share of their reservation to that community.
- The Cabinet's nod is in any case born of political exigency, not socio-economic reasons. The **SBCC's reported findings that a significant proportion of Marathas constitute a socially and educationally backward class do not square with available data.**

- As with **Jats in Rajasthan** and **Patels in Gujarat**, they enjoy a socio-economic status closer to that of the forward classes (and castes) in Maharashtra.
- Three previous SBCC assessments have indicated as much. Besides, there is no reason to argue that Marathas face any social stigma that calls for affirmative action.
- The demand for reservations in this case is therefore less an acknowledgement of social backwardness from a politically powerful community and more a call for the accrual of welfare benefits to less well-off sections among the community.

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- The assertions of backwardness by sections of dominant communities such as Marathas, Patels and Jats have largely been due to perceptions about the relative inability to move up the economic ladder, and the lack of adequate employment opportunities amid a sluggish agrarian economy.
- Faced with violent protests, the Fadnavis government had to accept this demand, especially after the SBCC gave its stamp of approval, but there is little to suggest any substantial change since 2014 to justify it.

## General Studies 3

### Roadmap to affordable medicines

#### Introduction:

- It goes without saying that no government can allow market forces a free hand in the pricing of medicines. Affordability of medicines has to be ensured so that no person in need of it has to suffer.
- This is especially true in India where a large number of people are still poor.

#### Challenges faced by Indians:

- Accessibility to medicines is the fundamental right of every person. Medicines are integral parts of the health care and the modern health care is unthinkable without the availability of necessary medicines.
- **Inequitable access** to medicines is a major weakness in the Indian health care system. The challenge to affordable drugs becomes a prime concern while discussing about the chronic illness such as Diabetes and Hypertension.
- The need for other mandatory expenditure like food, housing, and other family members living on the salary changes the affordability estimate.
- The majority of poor and even middle-class people in India do not have health insurance and are forced to pay for medicines as they need them.
- It is an irony that, though India is classified as “**the diabetes capital of the world**”, only a limited number of insurers specifically address the insurance needs of diabetics and hypertensive individuals.
- Most Indians pay for medicines – a key factor that contributes to the impoverishing effect of **out-of-pocket (OOP) payments for healthcare**.

#### Initiative taken by the government:

- **Generic drugs** tend to cost less than branded ones. These drugs form the largest segment of the Indian Pharmaceutical sector. The increasing prevalence of chronic diseases and ever-rising costs of hospitalisation and medicines are responsible for the growth of the generic drugs market.
- In this context, the National Health Protection Scheme (NHPS), also known as ‘**Ayushman Bharat**’, **launched in 2018**

— which seeks to insure 10 crore families for Rs. 5,00,000 — is expected to exponentially increase the demand for medicines.

- An initiative to ensure affordable medicines through dedicated outlets was launched in the form of the **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) in 2008**. The mission was to create awareness among the public about generic medicines and provide commonly used generic medicines and health-care products.
- There are over 4,000 **Jan Aushadhi Kendras** in the country. These centres are gradually becoming ubiquitous and **government-procured generic medicines are sold at prices that are between 50% and 90% cheaper than the branded medicines in the open market.**

#### Directives on prescription:

- Due to sustained efforts by the government to put in place a legal framework to promote generic medicines, the Medical Council of India issued a directive in September 2016, making it mandatory by amending the **Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002 to prominently mention the generic names of drugs along with brand names in prescriptions.**
- There is an **advisory to State drug controllers** that all branded drugs, imported or domestically manufactured, should mandatorily have generic names mentioned in bold letters while packaging.
- The instrument of price control is also being used to restraint companies from pricing their medicines exorbitantly.
- **National List of Essential Medicines (NLEM)**. These medicines, deemed essential for the treatment of common conditions, automatically come under price control.

#### Way forward:

- The foremost solution to the above mentioned problems is the sensitization of both, the medical practitioners and the patients about the generic medicines. The

**doctors need to be encouraged to prescribe generic medicines and the patient needs to be made aware about the generic medicines so that they can ask for them.**

- Accelerating only awareness is not going to reduce the burden of diseases. We need to encourage the community to involve into health promotion activities such as exercise, diet modification and strong social/peer support to halt the progression of disease and prevention of complications.
- A serious threat to affordability of medicines comes from big global firms.

## **Pollution is now a political issue**

### **Introduction:**

- COP24 summit is going to be held on Katowice, Poland. The climate summit tries to bring a rulebook for the implementation of Paris agreement.
- This summit the participating countries are trying to draw a rulebook for transparent implementation and proper funding of Paris agreement.
- This move shows how the world countries have politicised climate issue and politicisation of climate issue shows the importance of it.

### **About Paris agreement:**

- The Paris Agreement was adopted by 185 nations in December 2015.
- India had signed the agreement in New York in April 2016.
- So far, 191 countries have signed the agreement.
- It officially entered into force after 55 parties to the convention accounting for at least 55% of total GHG (greenhouse gas) emissions ratified it.
- India was 62nd country to ratify it.
- Paris Agreement gives thrust to the global actions to address climate change and pertains to post-2020 climate actions.
- In the pre-2020 period, developed countries are to act as per Kyoto Protocol and some developing countries have taken voluntary pledges.

### **Outcomes of Paris Climate talks:**

- Commitment to reduce emissions to limit rise of temperature well beyond 2 degree and trying for 1.5 degree.

Officers IAS Academy, Chennai

These pharmaceutical companies and their governments have been trying to lobby with the Indian government to make patent protection more stringent despite the fact that both compulsory licensing and prohibition of ever greening, provided under the Indian Patents Act, 1970, are valid under the TRIPS agreement of the World Trade Organisation.

- **India has resisted any change in its intellectual property laws that can have the effect of making medicines unaffordable.**

- Five year review mechanism to check progress on nationally declared goals (INDCs).
- Funding to the tunes of additional 1 million USD per year in GCF up till 2020, further establishing a mechanism.
- The agreement also includes a provision requiring developed countries to send \$100 billion annually to their developing counterparts beginning in 2020. This figure is expected to increase with time.
- The agreement gives countries considerable leeway in determining how to cut their emissions but mandates that they report transparently on those efforts.

### **Are these targets enough?**

- Various studies show that even if all INDC targets were achieved, the world would still be heading towards eventual warming of some 2.7-3.4°C above pre-industrial levels.
- Positive things: Since, countries came out with their own national plan, more accountability could be fixed.
- Negative aspects: No binding targets as of Kyoto protocol.
- There are doubts regarding the funding and technology support by developed countries.

### **Challenges before this agreement:**

- There is a risk that U.S. Congress may reject agreement that the U.S. administration has signed, like it did with Kyoto Protocol. Other countries may withhold ratification since the U.S. is the second largest emitter of GHGs after China will not happen.

- Several major concepts and provisions were deliberately left ambiguous and open to differing interpretations in order to reach consensus. Further negotiations are necessary to reach a common understanding to enable implementation.
- The Paris Agreement provides for a five-yearly “stocktake” which would enable an estimation of how much progress is being made in the implementation of the various contributions pledged by Parties in respect not only of mitigation but also adaptation, finance, technology transfer and capacity building. How each of these contributions will be measured and evaluated still needs to be worked out.

This will be both a political and technical challenge.

- On technology transfer, there is already an offensive by the U.S. corporate sector to ensure that in the post-Paris negotiations there is no concession on intellectual property (IP) issues.

#### Way forward:

- The politicisation of climate and pollution on the current era shows the seriousness of the impact of climate change.
- In the upcoming COP 24 conference the countries need to sit together and form a rule book and transparent mechanism on funding of Paris Agreement.

## Experts divided on rehabilitation of tigress Avni’s cubs

### Why in News?

- Maharashtra is faced with the question of how to rehabilitate the two year-old cubs of Avni (alleged man-eating tigress of Pandharkwada) who was killed last month.
- The experts state the option of either sending them to a safari, put in a cage, give to a sanctuary or a national park as they are wary of the orphaned cubs of the man eater.
- The National Tiger Conservation Authority (NTCA) has commissioned a report from the Maharashtra Forest Department on how tigress Avni (T1) was killed.

### The human-Tiger conflict

- The Standard Operating Procedure (SOP) for active management of rehabilitation under the National Tiger Conservation Authority (NTCA) says that the increase in tiger numbers in India and their dispersal through human dominated landscapes at times results in human-tiger conflict.

### Challenges

- Capturing tigers and releasing them to the source of their origin would not always resolve the problem
- Relocations are done and possible within population clusters that share a recent common gene pool,
- Cubs won't be able to fend for themselves because they might have some limited hunting skills and hence a difficulty in training them survive in the wild

### Way forward

- To relocate such tigers to areas of low tiger density which have good habitat and prey populations
- Conservation in such areas will now be dependent on quick, timely and appropriate mitigation of these conflict situations.
- Reducing interferences like human pressure, even of staff police, police officials, camera checking teams.
- The cubs are less than a year and also are believed to be on semi solid food therefore chemical immobilisation, which is tranquilisation will be difficult as they are dehydrated and starved. So priority has to be given to physical restraint too.
- The cubs' must be trained to capture the wild prey and then be relocated as the tigress trains the cubs till 15-18 months to survive in the wild.

### About 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, as amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it under the said Act.

### The functions of NTCA

- Ensuring normative standards in tiger reserve management and conservation plan
- Laying down annual/ audit report before Parliament



- Creation of State level Steering Committees and establishment of Tiger Conservation Foundation.

## Make it in Indian way

### Introduction:

- If “Make in India” is to succeed it needs to become “Make in Indian Way”.
- This make in Indian way, need not achieve this mass production like Detroit (a place in US) which succeeded by massive capital investment or in Beijing by cheap labour.
- India is fortunate to be in a historic moment when the manufacturing sector is about to go through a transformation supported by disruptive technologies, we have to find a way of making it work in India’s favour rather than against it.

### 3D printing vs traditional manufacturing:

- Industrial 3D printing has begun to transform manufacturing in Western countries. The 3D printing has not yet entered our everyday life. 3D technology using additive technology is transforming the developed countries to a new level.
- 3D printing is any of various processes in which material is joined or solidified under computer control to create a three-dimensional object, with material being added together (such as liquid molecules or powder grains being fused together).
- The manufacturing and storage cost involved in traditional manufacturing is high.
- All the parts have to be moulded separately, bound together and then stored and transported.
- Mass production using 3D technology will drastically reduce the cost.
- In additive manufacturing, the physical object to be built is first designed in software. This design is fed to computerised machines, which build that object layer by layer.
- The technology is suitable for building the entire system in one goes, with hollow interiors without assembly or interlocked parts.
- By eliminating the need to hold a large inventory of parts, set up an assembly line and purchase costly machines, adaptive manufacturing reduces capital and space requirements as well as the carbon footprint.

### Opportunities in India:

- Drawing approvals for declaring new Tiger Reserves.

- Fortunately, this manufacturing paradigm has several features that play to the strengths of the Indian ecosystem.
- First, it **eliminates large capital outlays**. Machines are cheaper, inventories can be small and space requirements are not large. Thus, jump-starting manufacturing does not face the massive hurdle of large capital requirement and the traditional small and medium enterprises can easily be adapted and retooled towards high technology manufacturing.
- Second, the **Indian software industry** is well-established, and plans to increase connectivity are well under way as part of ‘Digital India’. This would allow for the creation of manufacturing facilities in small towns and foster industrial development outside of major cities.
- Third, it is possible to build products that are better suited for use in harsh environmental conditions. Products that required assembly of fewer parts also implies that they may be better able to withstand dust and moisture prevalent in our tropical environment and be more durable.
- Fourth, in a country where use-and-throw is normal, maintaining old products is far easier because parts can be manufactured as needed and product life-cycles can be expanded.
- Finally, maintaining uniform product quality is far easier because the entire system is built at the same time and assembly is not required.

### Way forward:

- The “Make it the Indian Way” approach we advocate will need public-private partnership and multi-pronged efforts.
- On the one hand, we need to accelerate research at our premier engineering schools on manufacturing machines and methods and encourage formation of product design centres so that the products built suit the Indian environment and consumers.
- We also would need government support to provide incentives for distributed manufacturing in smaller towns and for

the IT industry to work on creating platforms and marketplaces that connect consumer demands, product designers and manufacturers in a seamless way.

## Vision document for digital north east

- The digital north east vision 2022 was released in Guwahati Assam. This will be a cloud hub for north east. This covers all the villages, leveraging digital economy for overall development of north east region.

### Objectives and highlights:

1. Integrate all the components
2. Infrastructure development for cloud computing
3. Infrastructure development for connectivity
4. Skilling people
5. Building rural enterprises
6. The number of seats for BPO will be doubled to 10000 from 5000

### How it empowers people of north-east:

- North-east needs 3c's-communication, connectivity, commerce.
- North east needs HIRA-highways, internet ways, railways, airways.

### Important 8 head points:

1. Digital infrastructure for north east
2. Promotion of IT's and BPO's
3. Digital services
4. Digital employment

## Advent for tourism

### Guidelines for advent tourism:

- India is endowed with diverse for its 7500 km of coastline, Himalayas, deserts. India is not only about culture, history. But even adventure tourism is also important. Adventure tourism has grown rapidly. Tourism plays vital role in economic growth.

### Risk mitigation in advent tourism:

- It creates employment in faraway remote areas.
- We need to accept and enforce the guidelines. Each adventure has separate guidelines which need to be strictly followed.
- Safety of environment and country is more important

### Insurance cover for private tour operators:

## GST, a game-changer reform for logistics sector

- India can catch over the manufacturing wave it had missed earlier, if some concrete action is taken

5. Digital innovation and Startup
6. Cyber security
7. Promotion of electronic manufacturing
8. Promotion of digital payment.

### E-PRAGATHI Project:

- It is a technology platform which enables state government better monitor and develop projects.
- The e-Pragati authority will achieve the goals of the project by supporting the seven development missions launched in the areas of e-Governance, Social Empowerment, Skill Development, Urban Development, Infrastructure, Industrial Development and the Services sector.

### Bharath net:

- Through this every panchayat to be connected through optical fibre net. Fibre is almost laid more than 2.3lakh panchayat. 1lakh become functional.
- BPO schemes will be a great game changer in north east. Government of India planned to extend BPO to remote location, where it promotes local employment opportunity for people.

- Long back there was no insurance for tourism but now some insurance companies has come forward and insurance is available.
- Insurance is extremely important and it is going to be a norm.
- The ministry of tourism is working on the level of coastal areas, developing islands in very responsible manner.
- All the soft adventure activities like scuba diving and other leisure activities like snowboarding.

### Advantages:

- It is easier, cheaper to adventure tourism in India.
- Variety of experience can be gained in limited time development, type of training and exposure are available that will raise the level of confidence.

## Logistics sector in India

- Logistics is the management of the flow of things between the point of origin and the point of consumption in order to meet requirements of customers or corporations.
- The logistics sector broadly comprises the road transport sector (consisting of unorganized small businesses, trucking, fleets and large transport companies), the storage and warehousing sector and finally third-party logistics (3PL).
- The 'infrastructure' status to the sector was conferred in November 2017. Logistics sector has been included in Harmonized Master list of sub-sectors (The harmonized Master List of sub-sectors, identified as infrastructure sub-sectors, is meant to guide all the agencies responsible for supporting infrastructure in various ways.) This inclusion is set to benefit the logistics industry as it will now have an access to cheaper and long term credit.
- As per the Economic Survey 2017-18, the Indian logistics sector provides livelihood to 22 million-plus people and improving the sector would facilitate a 10% decrease in indirect logistics cost, leading to a growth of 5-8% in exports.
- At about 13-14% of GDP, India's logistics cost is high, and compares with about 8% in advanced nations that have efficient systems. There is a target to reduce the logistics cost in India from the present 14% of GDP to less than 10% of it, by 2022.
- India has moved from the 54th position in 2014 to 44th in 2018 in the World Bank's Logistics Performance Index.

## What is 3PL provider?

## Aligning the triad

### Introduction:

- The inauguration of INS Arihant must spark a debate on the state of India's nuclear deterrence.
- The INS Arihant, India's first nuclear ballistic missile submarine that completed its sea patrol earlier this month, will contribute significantly to making India's deterrence capability more robust.
- But there are certain questions that need to be addressed on the India's nuclear triad, as well as major challenges for

- A 3PL (third-party logistics) provider offers outsourced logistics services, which encompass anything that involves management of one or more aspect of procurement and fulfilment activities.

## How was condition pre-GST?

- Indian firms were seen as labour contractors or mere transporters, which denied them the benefits of being a part of the supply chain.

## What changes has GST brought into the sector?

- GST has replaced at least 7 indirect tax heads and has eliminated the need for warehouse hubs across States.
- GST has eliminated check posts across the nation and thereby waiting time, leading to at least 12-15% reduction in the turnaround time of trucks.
- Outsourcing and the value addition in the logistics sector is set to take off post GST. Manufacturers are looking to optimise supply chains and are willing to outsource value-added planning to logistics players, who have invested in technology and operate with a focus on quality and compliance.
- Small transporters can also now work with third party logistics (3PL) providers and expand their fleet.
- There is a marked improvement in the use of technology and digitisation by logistics players.

## Way-forward

- The government, too, has realised that aspirations for economic growth, employment generation, manufacturing and exports are all inextricably linked to efficient management of logistics.
- Digitisation, asset utilisation and visibility enhancement are facilitating better value-added outsourcing to logistics firms.

strategic stability in the southern Asian region.

## Arihant's missing link:

- While it is true that India's nuclear deterrence is a work in progress, but we need to do objective assessment of INS Arihant.
- To begin with, there is **no clarity on whether the first deterrence patrol of INS Arihant had nuclear-tipped missiles on board.**

- If not, the deterrence patrol would have been intended for political purposes devoid of any real deterrent utility.
- Without nuclear-tipped ballistic missiles on board an SSBN (ship submersible ballistic nuclear) such as INS Arihant, it might not be any more useful than an ordinary nuclear-powered attack submarine (SSN).
- Second, even if INS Arihant had nuclear-tipped ballistic missiles on board, **it is not clear what ranges they would cover.**
- Reports suggest that it had the 750 km range K-15 missiles on board, which is insufficient to reach key targets in, say, China or Pakistan unless it gets close to their waters.
- Third, if indeed the objective of India's nuclear planners is to achieve seamless and continuous sea deterrence, one SSBN with limited range is far from sufficient.
- Given the adversaries' capabilities in tracking, monitoring and surveilling India's SSBNs, it would **need to invest in at least four times more.**
- Finally, the naval leg of the nuclear triad also poses **significant command and control challenges.**
- As a matter of fact, communicating with SSBNs **without being intercepted by the adversaries' tracking systems** while the submarines navigate deep and far-flung waters is among the most difficult challenges in maintaining an SSBN fleet.

## Stopping the virus

### Introduction:

- Following the Zika outbreak detection in Gujarat and Rajasthan, recently some cases has been detected in Madhya Pradesh as well.
- With observations it has been seen that Gujarat strain is different from Rajasthan strain. Now Madhya Pradesh virus is under scanner to observe its type.

### About Zika virus:

- Zika virus Disease is mosquito-borne virus transmitted by Aedes aegypti mosquitoes which also transmit three other vector-borne diseases Chikungunya, dengue and yellow fever.
- The virus belongs to family Flaviviridae and Genus Flavivirus.

- Until such sophisticated communication systems are eventually put in place, India will have to do with shallower waters or focus on bastion control, which in some ways reduces the deterrence effect of SSBNs, as bastions would be closer to.

### Impact on strategic stability:

- INS Arihant's induction will also have **implications for regional stability.**
- For one, it is bound to make the **maritime competition in the Indian Ocean region** sharper, especially China.
- Add to this mix China's mega infrastructure project, the Belt and Road Initiative, with its ambitious maritime objectives; and the revival of the Quadrilateral Security Dialogue, or Quad, with India, U.S., Japan, and Australia.
- This sharpening of the maritime competition further engenders several regional 'security dilemmas' wherein what a state does to secure itself could end up making it more insecure.
- The net result of this would be heightened instability for the foreseeable future.
- This would further complicate the relationship among these countries.

### Way Forward:

- It is therefore important for India and Pakistan (as also India and China) to have an 'incidents at sea' agreement like the one between the U.S. and USSR in 1972, so as to avoid incidents at sea and avoid their escalation if they took place.

- It was first identified in 1947 in Zika Forest, Uganda from where it derives its name.
- Now it is emerging disease currently being reported by 86 countries worldwide.
- **Transmission:** It is transmitted primarily by infected Aedes aegypti mosquitoes, which also transmits dengue. It can also spread through blood transfusion and sexual contact.
- **Symptoms:** They are similar to other viral infections such as dengue, and include fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache.

### Threats:

- Pregnant women infected with Zika virus may give birth to babies with severe brain damage or serious birth defects i.e. neurological disorders and foetal

deformation known as **Microcephaly** in which infants are born with abnormally small heads.

- Besides there is also possible link between virus and **Guillain-Barré syndrome** (a condition in which the body's immune system attacks part of the nervous system) is also suspected.

#### **Treatment and Prevention:**

- There is no specific treatment or vaccine currently available to treat Zika.
- The best form of prevention is protection against mosquito bites and clearing stagnant water where mosquitoes breed.

#### **Indian Zika strains:**

- Gujarat Zika strain was found close to the Zika strain spread in Asia particularly Malaysia, where there was no evidence of presence of Microcephaly in the strain.

## **A 21st century revolution**

#### **Introduction:**

- Mr. Bill Gates was in China to pursue the serious business of reinventing the toilet.
- Innovation, he reasoned, would expand sanitation quickly and save children in developing countries from the crippling consequences of stunting.
- In many places, children play amidst faeces in the open and contract disease, resulting in malnutrition and stunting.

#### **Decentralising sanitation:**

- The Bill and Melinda Gates Foundation (BMGF) has devoted \$200 million to introduce new technologies that will dramatically scale up sanitation.
- It has announced a further investment of \$200 million to achieve this, and trials of new toilets and processing technologies are going on in India, among other countries. According to UNICEF, 22.2% of children, or 151 million, under five years were stunted globally in 2017.
- The World Bank says annual healthcare costs from lack of sanitation in developing countries are a staggering \$260 billion.
- The challenge is to decentralise sanitation. Fast-expanding cities cannot have massive sewage treatment plants. What they need is stand-alone processors, which will help communities and individuals.

#### **Zero emission processor:**

Officers IAS Academy, Chennai

- Rajasthan Zika strain was found close to the Brazilian strain, which had microcephaly symptoms in it. But later observations by ICMR (Indian Council of Medical Research) found that Rajasthan Zika will not cause microcephaly.
- The kind of Madhya Pradesh strain is yet to be seen by observation.

#### **Way Forward:**

- Given the fact that there is no known medicine or vaccine for Zika virus, only way forward is prevention by awareness creation.
- People have to be made aware of stagnant water; the precautions that pregnant women and the family members need to adopt to fight the deadly disease.

- Innovation involves a shift away from the gold standard of flush toilets connected to sewers.
- In the new order, there will be stand-alone facilities that are aesthetically designed, finely engineered and equipped with reliable chemical processes that produce nothing more than ash from solids, while reusing the liquid as non-potable water after treatment.
- What makes these reinvented toilets special is that they expel nothing.
- They turn liquid waste into clear water for flushing, and solids into pellets or ash that is fertilizer.
- Success will depend on making large community deployments, and developing cost-effective models for individuals.

#### **Advantages of the zero emission processors:**

- These "zero emission" processors will end dumping of faecal sludge taken from septic tanks into rivers, lakes, farms and open spaces.
- They can also prevent the death of workers in septic tanks.
- Some models also attach a gasifier that can use municipal solid waste, providing a solution to handle that urban waste stream as well.
- India is highly malnourished because of the open faecal left outs, the problem of malnourishment, stunting etc. can be

drastically reduced with these technologies.

#### Way forward:

- India's record in treating urban sewage is poor at 30%.
- Now the situation of sanitation has changed in India, multiple stakeholders like the Prime Minister, political parties

### The RBI board meeting

#### What were the problems to resolve?

1. The excessive reserves of RBI should be given to the government
2. The PCA plan on 11 PSBs should be lifted.
3. MSME liquidity challenge
4. Greater liquidity should be given to NBFCs

#### What are solutions decided?

- The following are the decisions which took place in board meeting held on 19 Nov.
- RBI has agreed for setting up of an expert committee on the economic capital framework (ECF).
- On the PCA, Board for Financial Supervision (BFS) of RBI will review the norms and will take a call if some of the parameters like net non-performing asset (NPA) ratio could be relaxed so that some of the banks come out of the PCA. The BFS consists of governor, four deputy governors and few other board members.
- BFS that comprises the governor, four deputy governors and a few board members, will study the performance and earnings of banks of the first six months of the current fiscal that are under the prompt corrective action framework of RBI.
- RBI should consider a scheme for restructuring of stressed standard assets of MSME borrowers with aggregate credit facilities of up to ₹25 crore, subject to such conditions as are necessary for ensuring financial stability.
- Capital Adequacy Ratio was negotiated to 9%.
- The solutions to NBFCs and Governance of RBI will be decided in the next board meeting

Officers IAS Academy, Chennai and the celebrities are read to speak about sanitation post the Swachh Bharat Mission, the success lies in implementation.

- Now that technology is ready with a "zero effluent" toilet, national policy should make it accessible to everyone.

#### Section 7

- Section 7 of RBI Act empowers government to issue directions to the central bank. It is for the consultation but the Govt can use it for directing RBI.
- Section 7 has never been used in the 83-year history of the bank. Invoking it would be interpreted as interference and threat to autonomy of the central bank's autonomy.

#### Reforms in RBI:

- Like its international counterparts, RBI will have different board committees on various aspects like technology, risk management, banking regulation, supervision, among others, to assist the central bank in its operations. The aim is to move to a system of rule-based decision making from the present discretion-based one.
- The RBI board can have 21 directors - this includes governor, four deputy governors, and two government nominees, four from RBI's regional boards and ten appointed by the government.

#### Way forward

- The board so far has refrained from taking up specific policy-related issues and its main focus has been to provide a broader vision to the central bank.
- Government has probably received a relief of \$1.7 billion because of the delay in transition as they would have had to infuse this capital by FY2019
- Differences between the Centre and the central bank must be thrashed out in such a setting, rather than in the media or in public speeches.

## Yojana Nov-Part II

### Swachhata-from idea to reality

#### Sanitation: a purification process

**“Everyone must be his own scavenger. If you become your own sweeper, not only will you ensure perfect sanitation for yourself, but you will make your surroundings clean”. Mahatma Gandhi.**

#### Gandhi's idea of Swachh Hindustan

- Gandhi picked up the broomstick (Jhadoo) and involved one and all in cleaning up house, ashram, neighbourhood, street and toilets.
- When he gave the call to improve sanitation and hygiene, he also had a firm agenda of integrating the condemned communities with all as equals without bias, prejudice and contempt.
- Jhadoo was not just a symbol of physical cleanliness alone. He established Jhadoo as a symbol of Antyodaya (means uplifting of the weakest section of the society) and Sarvodaya, (means development of all). He clearly led and advised on the **journey of welfare from Antyodaya to Sarvodaya.**
- In this manner Gandhi visualized to make Hindustan a Swachh nation where every citizen is clean and pure physically, socially and from the heart.

#### Sanitation and Hygiene in South Africa and India

- Gandhi had gone to South Africa for a job with a trading and business firm of Dada Abdulla.
- He learned that the white community publicly maintained that Indians lived in insanitary conditions and did not practice hygiene.
- He then addressed the state governments and the office of secretaries of the colonies in Africa and in India to raise the issue of neglect on part of the civic authorities.
- Back from South Africa, Gandhi travelled the length and breadth of India where he witnessed insanitation, lack of cleanliness, unhygienic environment, dirt and filth throughout the country.
- Similar was the situation in temples he visited and noted that people dirtied the roads and the fair banks of the Ganges.
- In educational institutions and public events such as conferences, Gandhi for the

first time brought up the issue of sanitation and hygiene and the attending leaders had to volunteer in day to day cleaning activities.

- This then became a practice with the Congress sessions with or without Gandhi until after independence.
- Gandhi introduced personal hygiene, village and town sanitation as a constructive programme. Removal of untouchability was both a constructive programme and one of the eleven vows that each satyagrahi had to follow.

#### What are Gandhi's 11 vows?

- Ahimsa-Nonviolence
- Satya-Truth
- Asteya-Non-Stealing
- Brahmacharya-Self Discipline
- Aparigraha-Non-Possession
- Sharirshrama-Bread Labor
- Aswada-Control of the Palate
- Sarvatra Bhayavarjana-Fearlessness
- Sarva Dharma Samantva-Equality of All Religions
- Swadeshi-Use Locally Made Goods
- Sparshbhavana-Remove Untouchability

#### SWACHHATA HI SEWA (SHS)

- Swachhata Hi Sewa 2018 (SHS) is a Campaign which is rightly called a Jan-Andolan (people's movement) for Swachhata (sanitation).
- It is observed in the run up of the 4th anniversary of the Swachh Bharat Mission (SBM), on 2nd October 2018.
- It comes under the Ministry of Drinking water and sanitation
- The objectives of SHS 2018 are:
  1. Re-energize the Swachh Bharat Jan Andolan (mass movement)
  2. Accelerate SBM process in final stages
  3. Reinforce 'Sanitation as everyone's business'
- Reports indicate that a large number of NGOs, schools, colleges, social, cultural and political leaders, corporates, Government officials, collectors and sarpanches, undertook Shramdaan (voluntary

contribution of labour for a public cause) activities during this period to include-

1. Mass cleaning of public spaces
2. Segregation of solid waste and other waste management activities
3. Door to door swachhata awareness
4. IEC awareness through Nukkad Natak and folk songs
5. Swachhata rallies
6. Toilet construction and retrofitting activities
7. Twin pit emptying and building compost pits
8. It also included De-weeding of lakes in Manasbal in J&K was done.

#### What is IEC?

- The Information, Education & Communication (IEC) strategy aims to create awareness of information regarding the benefits available under various schemes/programmes of the Ministry and to guide the citizens on how to access them.
- The objective is also to encourage build-up of health seeking behaviour among the masses with focus on promotive and preventive health.

#### Process of Twin Pit emptying

- A septic tank is a chamber made of concrete, fiberglass, PVC or plastic, into which domestic wastewater (sewage) flows.
- After a few years, when the septic tank gets filled, it needs to be emptied by a special septic tank cleaning vehicle that can be safely disposed of at a sewage treatment plant (STP).
- However, this does not happen in many cases as vehicle operators dispose the waste into fields and water bodies thereby increasing the threat of disease in the vicinity areas.
- To avoid such practical issues, the government while discouraging the use of septic tank toilets is promoting the use of twin pit toilets, particularly in the rural areas.
- Twin pit toilets are scalable, implementable and cost-effective at some cost of Rs 12000; and therefore, can have a great impact in making rural India open defecation free (ODF).
- They comprise of two pits, each measuring 3.5 feet deep and one metre in diameter;

the distance between them being one metre.

- Here the faecal matter will be allowed to pass and settle in one pit only. When that pit is filled in about four to five years, the channel to the first pit is closed and the second is opened for the fecal matter to pass into.
- After a one-year rest period, the content of the first pit will be converted into manure and can be removed and used for plants. The same procedure is followed when the second pit gets filled.
- It fulfils all the seven conditions of a sanitary latrine laid down by the WHO.

#### Why is De-weeding of lakes required?

- Village ponds, tanks and reservoirs get infested with floating and submerged weeds which results in reducing the capacity of the water storage and it effects irrigation too.
- The plants cause tremendous loss of water from water bodies like lakes and dams through evapotranspiration.
- Dense mats of floating or deep rooted submerged weeds prevent the movement of boats and ships (e. g.; Water hyacinth, Alligator weed).
- The decomposition of huge amounts of biological mass creates condition where CO<sub>2</sub> and carbon monoxide are produced and released to the atmosphere.
- The plants can reduce fish production and complicate fish harvesting.

#### Success stories

- RAKSHA BANDHAN was celebrated as Swachh BANDHAN in a school named Rajkio Anushuchit Janjati Abhasio Utkramik uchh vidyalaya, Jharkhand where Rakhi with the symbol of “swachh bandhan” were exchanged among people along with the recitation of the sanitation oath, vowing to keep the campus clean, refraining from open defecation.
- Chhattisgarh is on its way to becoming a Zero Landfill state through the Zero Waste Model being replicated in its cities.

#### Zero waste Model

- It includes the minimized, recovered and avoided use in the following way:
  1. 100% recycling of waste
  2. 100% resource recovery from waste



3. Behavioural change and sustainable consumption
4. Extended producer and consumer responsibility
5. Legislate zero landfill and incineration
  - Kerala has been leading the way in decentralized waste management with most of its cities having installed pipe compost and bio gas plants at the household level. In fact, Alappuzha in Kerala is among the top five cities in the world recognized by the United Nations Environment Programme (UNEP) in its efforts to tackle the problem of solid waste.
  - Goa claims 100 per cent door to door collection of waste.
  - 100 per cent of waste in Gangtok and cities of MP like Indore, Bhopal and Jabalpur is being segregated at sources and being processed.
  - Navi Mumbai is already segregating 88 % of its MSW at source.
  - Bengaluru has an innovative online portal to support all Bulk Waste generators to comply with SWM rules.
  - Nagpur has introduced an innovative watch which helps the ULB to monitor attendance of sanitary workers through geo-tagging of their locations during their working hours.
  - Aligarh has introduced 'magic bricks' made out of dry waste which can be used in construction activities.
  - Sasvad in Maharashtra uses an innovative colour coding of households (red, yellow, and green) to denote households that do not segregate their waste, segregate occasionally, and regularly segregate respectively.
  - Jharkhand uses a similar approach of colour coding for (e.g. green colour for households that are ODF, yellow for households that have toilets but resort to OD sometimes, red for households that practice OD regularly)
  - Sitamarhi, the first district in Bihar to become open defecation free (ODF) is now heading towards a much-talked about plastic ban that will be carried out in a phased manner under Swachh Bharat Mission.
  - various Self Help Groups (SHG) of project JEEVIKA have been procured by the district which will boost the rural

Officers IAS Academy, Chennai  
woman entrepreneur in Sitamarhi District with regards to its contribution on reuse of plastics.

- Kerala launches the first biogas plant under GOBA –Dhan.
1. The Thuruthi waste treatment plant in Pappinissery Gram Panchayat of Kannur district will treat bio waste collected from public spaces,
  2. It has a capacity of treating 1000Kg of waste per day and as far as technology is concerned this biogas technology has been devised by BARC.
  3. It is expected to provide around 23 cubic meters of biogas as a by-product.
  4. The gas will be used as a boiler fuel in the adjoining chicken waste rendering plant.

## Sanitation Revolution: Cleansing Urban India

### Introduction

- The most significant achievement in sanitation has been a paradigmatic shift in the way SBM (Urban) is being implemented
- The focus is now on counting and sustaining Open Defecation Free (ODF) towns/ cities, rather than only counting toilets.
- When the mission was launched, no city or town in India was ODF. Today, urban areas of 19 States/UTs have become ODF.
- We have now introduced the SBM ODF+ and ODF++ protocols.
- Parallely, Ministry of Housing and Urban Affairs (MoHUA) has partnered with Google to upload and make available on Google maps all the public and community toilets in the cities so that citizens and visitors are able to easily locate these facilities in their vicinity.
- So far this has been completed for 550 cities/towns across the country.
- One important initiative to be launched under the SBM will be the **Swachh Manch**, a web-based platform which aims to bring together every stakeholder contributing to the Swachh Bharat Mission under a common platform.

### ODF, ODF+, ODF++

- **ODF:** It states that all community members use sanitation facilities (such as toilets) instead of going to the open for defecation.

- **ODF+:** The SBM ODF+ protocol focuses on sustaining community/ public toilet usage by ensuring their functionality, cleanliness and maintenance.
- **ODF++:** The SBM ODF++ will focus on achieving sanitation sustainability by addressing complete sanitation value chain, including safe containment, processing and disposal of fecal sludge and seepage.

#### Components and targets of SBM Urban

- Eradication of open defecation in all towns statutory towns
- 100% Scientific Solid Waste Management in all Statutory towns

#### Implementation components

- Individual household toilets
- Community toilets/Public toilets
- Solid waste management
- Information, Education and Communication (IEC)
- Capacity Building (CS)

#### Summary of Achievements under SBM urban

- 19 states have become ODF in their urban areas
- 3,906 cities have been declared as ODF
- 51.49 Lakh IHHL constructed and 7.92 lakh under construction
- 4.06 lakh CT/PT seats built and 0.35 lakh seats under construction.
- 36.69% waste processed
- 44.4% urban wards have 100% segregation

#### Swachh Surveysban-a Tool for Mission Monitoring and Governance

- Under the SBM Urban, MoHUA has been conducting the Swachh Survekshan which is an annual survey to rank cities on various sanitation and cleanliness parameters.

#### Star Rating for Garbage Cities

- The Ministry awards the "Garbage Free City Stars" to the clean cities.
- The Star Rating initiative, is a rating protocol based on 12 parameters, follows a SMART framework - Single metric, Measurable, Achievable, Rigorous verification mechanism and Targeted towards outcomes covering all aspects of Solid Waste Management viz. Public Cleanliness, Door to Door collection, source segregation, processing, cleanliness

Officers IAS Academy, Chennai of drains and water bodies, plastic waste management, managing construction and demolition waste, etc., which are critical drivers for achieving garbage free cities.

#### Moving towards a 'Jan Andolan' (Mass Movement) with:

- Engaging students and self-help groups to be agents of social behaviour change.
- Running multi-media communication campaigns with messages of 'swachhata'
- 'Swachhata selfie' series on radio captures best practices in sanitation and solid waste management form across the country.
- Nowhere has this feeling of 'jan andolan' been demonstrated more than in the overwhelming participation by nearly 40 lakh citizens, comprising school children. Students, home makers, resident welfare associations (RWAs), religious leaders, corporate houses and local business people and celebrities as ambassadors.
- 25,000 events in Urban India was witnessed during the 'swachhata hi seva' fortnight run across the country as a run-up to the 2nd October celebrations this year.

#### The Loo Review campaign

- The campaign will involve and engage Local Guides in India to rate and review public toilets on Google Maps, and use the hashtag #LooReview for the chance to be featured on Google Local Guides' social channels.
- Anyone can join the Local Guides community and review places on Google Maps.
- To find a place to visit and review, search "Public toilet near me" on Google Maps.

#### Way forward

- At MOHUA, missions such as Atal Mission for rejuvenation and urban transformation (AMRUT) addresses the issue of waste water and fecal sludge management along with the smart cities mission (SCM) which has solid waste management as one of its development parameters.
- The interventions from the National Green Tribunal (NGT) will combine to further consolidate and accelerate our progress.
- A Swachh environment will lead to a 'Swasth, Swastha, Samarth and Samridh Bharat and pave a way for new india-2022.

reduction in greenhouse gas emissions and FOREX savings of \$1520 million from fuel imports.

## Swachhata: Juggernaut of Change

- Minister of Petroleum & Natural Gas (MoP&NG) and Skill Development and Entrepreneurship (MoSD&E), are wholeheartedly committed towards fulfilling the objectives of Swachh Bharat Abhiyan.
- The MoP&NG allocated the 4th highest budget among all Government of India (GoI) ministries.
- The Oil & Gas Central Public Sector Enterprises (CPSEs) and their Joint-Ventures (JV), have not only undertaken core business offerings and Corporate Social Responsibility to build infrastructure that supports sanitation, but also participated in this social movement towards SBM.
- Petrol pumps of nationalized Oil Marketing Companies (OMC) form one of the densest retail networks in the country where countless Indians fuel their vehicles and so, a mission-mode plan to provide clean toilets, clean drinking water and waste disposal facilities across all OMC petrol pumps was launched under SBM.
- as of September 2018, separate toilets for men and women are available in nearly 90 % of the feasible petrol pumps on National Highways and State Highways.
- The Swachhata@ petrol pump app leverages technology putting consumers at the forefront to monitor report and ensure cleanliness of the toilets at outlets across India on real time basis.
- in line with India's climate change commitments at COP21 in Paris, the Central Government followed the pathway for fuel quality and vehicle emissions standards termed as Bharat Stage (BS) and successfully implemented BS IV norms at petrol pumps all across the country.
- Further the Government has taken a bold decision to leapfrog from BS IV to BS VI fuel norms directly. BS VI standard fuel is significantly less polluting than BS IV.
- the landmark National Policy on Biofuels in 2018 Plans to set up twelve 2nd generation bio-refineries which will be capable of generating bio-ethanol from agricultural residue.
- So far we have already achieved 4% ethanol blending in petrol leading to a

## Bharat Stage emission standards

- Bharat stage emission standards (BSES) are emission standards instituted by the Government of India to regulate the output of air pollutants from internal combustion engines and Spark-ignition engines equipment, including motor vehicles.
- It is implemented by the Central Pollution Control Board under the Ministry of Environment & Forests and climate change.
- These norms were introduced in India in 2000, based on the European emission norms.
- Each stage specifies a certain limit on the pollutants released.
- India introduced its first emission standards in 1991 equivalent to EURO I (called BS I) has been implemented in 2000.
- In 2003, BS II was adopted nationwide by 2005.
- First National Auto Fuel Policy was adopted in 2003 on recommendation of Mashelkar committee (2002). It was implemented in 2005 and BS III was introduced in entire nation by 2010.
- We have BS-III and BS-IV norms in India under the Euro 6 norms.
- In 2012 Saumitra Committee was formed to draft Auto Fuel Policy 2025 to cover the entire country with Euro IV or BS IV emission standards by 2014.
- At present Euro IV is applicable in 13 major cities only and Euro III in rest of the nation.
- Further Saumitra committee recommended implementing BS V and BS VI in entire nation by 2022 and 2024, respectively.
- Recently government decided to skip Euro V and jump to Euro VI (BS VI) standards by 1 April 2020.
- The BS-IV compliant fuels have sulphur concentration of 50 parts per million (ppm) which will come down to as low as 10 ppm in BS-VI compliant fuels and auto engines thereby ensuring a lower level of harmful emissions.

## Sanitation as everyone's business

### Introduction

- Sanitation without doubt is everyone's business. A political will, public policy, investments, partnerships-all must come together to create an enabling environment that would be powered by people's participation to improve upon the lack of sanitation and neglect of hygiene.
- Countries like Lesotho, Korea and Malaysia stand as brilliant examples of what could be achieved.

### Charge of every department

- Department of school education and literacy has achieved 100% gender segregated toilets in all schools.
- Ministry of civil aviation, power and rural development has successfully implemented water conservation, Bio-fuel, waste recycling and waste to energy initiatives.
- Ministry of railways is committed to set bio digester toilets by October 2019.
- Ministry of Health and family welfare has implemented 5S (Sort, set in order, shine, Standardize and sustain) in health facilities and is coordinating with MDWS in implementing Swachh Swasth Sarvatra.

### Swachhata Action Plan (SAP)

- SAP was launched on 1st April 2017.
- Under this ministries and departments mainstream sanitation in their mandates through budgeted and accountable action plans along with having committed funds for sanitation in each financial years .
- SAP performance is reviewed every quarter by a committee of secretaries.
- For the year 2018 the ministries who won the awards for best execution of Swachhata Action Plan were:
  1. Ministry of petroleum and natural gas
  2. Ministry of Road transport and Highways
  3. Ministry of new and renewable energy

### Swachhata Pakhwada (SP)

- It was launched in April 2016 as an initiative of the Prime Minister.
- Under this 4-5 ministries are given 15 days in a year following a pre decided calendar to carry out country wide initiatives within their jurisdiction to enhance sanitation.
- During this 15 day process, ministries report their sanitation activities daily on an online portal

- Ministry of drinking water and sanitation has constituted awards for each ministry to give away to its institutions/organizations/divisions based on internal competition and ranking.
- The Ministry has documented the efforts of Union Ministries and departments observing Swachhata Pakhwada over last two years in the form of yearbooks.
- For the year 2017, the awards for the best Swachhata Pakhwada went to
  1. Ministry of Railways
  2. Ministry of Water resources
  3. River development and Ganga Rejuvenation
  4. Ministry of Micro, small and medium enterprises.

### Swachh Iconic places (SIP)

- The Swachh iconic places (SIP) project as a component of SBM aims to achieve distinctly higher levels of cleanliness at places of heritage, with significance for history and culture and centres of pilgrimage.
- For execution, MDWS coordinates with partner ministries, trusts and managing committees that manage the iconic places, financially, technologically and with management skills.

### Ganga Grams

- Ganga Gram is another inter- ministry project between SBM and the national mission for Clean Ganga (NMCG).
- The Project is focused on better cleanliness and infrastructure facilities in Villages on the banks of river Ganga through convergence with other departments.
- Gram Panchayats have been empowered to play an active role in ownership and maintenance of Ganga Gram activities.

### Corporate partnerships

- The partnership between MDWS and Tata Trusts is an outstanding example of leveraging corporate strength to deliver a public mandate, and build a cadre of skilled young professionals to work as zila swachh Bharat Preraks (ZSBPs).
- Tata Trusts trained and deployed 475 motivated young professionals, to help districts design ,implement and monitor various interventions under the SBM-G.

### Swachhata Ambassadors and the social media

- A number of Audio -visual Campaigns featuring these icons with messages of toilet usage have caught the popular imagination.
- A range of feature films (like Toilet Ek Prem Katha, Pad man, Halka and Gutar Gu) have been produced in recent times that promote the message of sanitation.

### Business of Jan Jan

- In the run up to International Women's Day on 8th March, the Swachh Shakti was celebrated in both 2017 and 2018.
- Swachh Jeevika Swachh Bihar is again a special campaign launched in July this year, to provide safe sanitation facilities at households of all Didis (members of women's SHGs).

### Conclusion

- Everyone needs to put a brick for sustainable sanitation within their own spheres of influence. Yes, because sanitation is everyone's business.

## Ambassadors of Cleanliness

### Introduction

- The Bhagwat Gita in Chapter 13 talks about 'shaucham' cleanliness, where 'shaucha' gives rise to purity of mind, contentment, victory over senses and competency to attain self-realization.
- Besides occupational placement one of the main objectives of the Indian education system has always been to help the child evolve to his/her fullest potential with a balanced view of life, for harmonious co-existence with all.

### Kendriya Vidyalaya Sangathan as ambassadors

- KVS with more than 1190 schools across the country and abroad have taken up various community outreach programmes through rallies, competitions, Bharat Scouts and guides activities etc. in the Swachh Bharat Movement and developed the children as ambassadors of cleanliness in the society.
- KV FRI Dehradun has been awarded 'Rastriya Swachhata Award' under the cleanest government school category in 2016 by the Prime Minister.

### Efforts of the KVS to make the schools greener to foster environmental literacy are

- The green schools Programme (GSP) of the Centre for science and environment (CSE) is a learning programme for schools

to move beyond theories and text books and concentrate on "doing".

- The programme helps schools to audit the use of natural resources, to assess themselves as environmental managers, since its launch in 2015.
- KV Ottapalam and KV Pangode have made it to the change makers category and green award 2017-18 winner, by taking steps like
  1. sustainable modes of transport,
  2. walking and cycling mode and
  3. using waste from the school as fuel for its biogas plant
  4. banning plastic within its premises,
  5. rainwater channelized to flow down the adjoining forest and join the rivers,
  6. Participating in the Indian green building council (IGBC) contest.

### Comprehensive ground initiatives like:

- Biodegradation to convert waste into compost manure for using in the school gardens
- Students are advised not to waste food and left over food is disposed in the identified places only
- The senior students are encouraged to gift books to their juniors, in this process, on one hand they develop the habit of keeping their books neat and clean to be passed to their juniors and on the other hand it saves a lot of trees.
- In 2017-18 the seniors gifted around 504679 books to their juniors saving tonnes of paper by saving approx. 1716 trees.
- The children are encouraged to plant a tree on their birthday and visitors are provided green plants instead of bouquets.
- Observance of Swachhata Pakhwra in schools.
- 'Swachh vidyalaya award' and 'Harit vidyalaya award' for encouraging clean and green drive.

### Conclusion

- KVS is carrying forward the spirit of the cleanliness campaign by making it a movement for all its stakeholders in the system.
- It is an ongoing programme and not just an event to be launched and celebrated for a day or a week. The entire programme is internalized into the system and it has now become a part of the system for regular transaction.

## Improving Cleanliness of Health Care Facilities

### Introduction

- Every person desire to live and work in a clean and pleasing environment. Healing of sick and wounded happens faster in such surroundings
- In ancient times, surgical procedures were conducted near riverbanks during morning hours to benefit from clean water and air and clean surroundings.
- The Ministry of Health & Family Welfare of Government of India has adopted a multi-pronged strategy for improving hygiene and sanitation holistically.
- National Accreditation Board for Hospitals & Healthcare Providers (NABH) has decided to consider assessment of healthcare facilities in the private sector on the lines of parameters of Kayakalp.
- Additionally, The Ministry of Health and Family Welfare (MoHFW) has used the platforms of Village Health Sanitation and Nutrition Committees (VHSNCs) under the National Health Mission and Mahila Arogya Samitis (MAS) under the National Urban Health Mission (NUHM) to promote sanitation in the vulnerable urban communities.
- Accredited Social Health Activist (ASHAs) also works with VHSNCs to mobilize the community for construction and use of toilets.

### VISHWAS-A New Initiative

- In 2017, as a part of its efforts to expand and strengthen sanitation and hygiene interventions, NUHM has launched a new campaign, VISHWAS - Village based Initiative to Synergize Health, Water and Sanitation.
- It is a yearlong campaign to be carried out by VHSNCs to build community awareness and develop local champions for action on water, sanitation and health,

### Kayakalp Initiative for Health Facilities

- Under the scheme, health facilities undertake their own assessment, work on improving appearance of the facility, implementation of biomedical waste rules, strengthening of infection control practices and partnering with Local NGO/ civil society organizations.

- Outstanding efforts of the health facilities are recognized by Kayakalp Awards at each level of the facilities.
- Selection of District Hospitals (DHs), Sub District Hospitals (SDHs) and Community Health Centres(CHCs) is decentralised at the State level, while for Primary Health Centres (PHCs)it is at the district level.
- Assessment of facilities is undertaken on seven broad thematic areas and the set of specific criteria and checkpoints within each of them, which are; a) Hospital/Facility Upkeep b) Sanitation and Hygiene c) Waste Management d) Infection Control e) Support Services f) Hygiene Promotion g) Kayakalp outside boundary.

### Swachh Swasth Sarvatra

- It is a joint initiative of Ministry of Health & Family Welfare and Ministry of Drinking Water and Sanitation to achieve better health outcomes through improved sanitation and increase awareness on healthy lifestyles.
- Its objective is to have more synergy between two complementary programmes - Swachh Bharat Mission (SBM) and Kayakalp.
- Three broad objectives of this scheme are: -
- Enabling Gram Panchayat where Kayakalp awarded PHCs is located to become Open Defecation Free (ODF).
- Strengthening Community Health Centre (CHC) in ODF blocks to achieve a high level of cleanliness to meet Kayakalp standards through a support of Rs 10 lakhs under NHM
- Build capacity through training in water, sanitation and hygiene (WASH) to nominees from such CHCs and PHCs.

### Village Health Sanitation and Nutrition Committees (VHSNCs)

- National Rural Health Mission, since its inception in 2005, created Village Health Sanitation Committees (VHSNCs) across all states.
- VNHSNCs along with community health worker ASHA are a key component of Communications strategy under National Health Mission.
- As per the revised guidelines for VHSNC, released in 2013, the local Gram Panchayat Member is to be the

Chairperson of VHSNC (earlier it was the Gram Panchayat Sarpanch).

### **Mahila Arogya Samitis (MAS)**

- Similar to VHSNCs Mahila Arogya Samiti (MAS) has been established in urban areas under NUHM.

### **Conclusion**

- The Kayakalp, and Swachh Swasth Sarvatra, have not only improved the cleanliness status of facilities, they have also helped in facilities for community awareness on these issues. The community based institutions of VHSNC and MAS, is helping in building the Swachh Bharat and Swasth Bharat, that we are all working for.

## **A Hygienic Environment for Mother and Child**

### **Introduction**

- Sanitation has direct impact on the health of women and children, leading to infant and female mortality issues. Thus, a significant role has been undertaken by the ministry to sensitize on health and hygiene by providing Women and children with awareness on clean and safe environment.

### **Data:**

- Today, there are around 2.4 billion people who do not use improved sanitation, and 663 million who do not have access to improved water sources.
- For children under five, water and sanitation-related diseases are one of the leading causes of death.
- Around 564 million people, which are nearly half the population of India, defecate in the open.
- India accounts for 90% of the people in South Asia and 59% of the 1.1 billion people in the world who practice open defecation.

### **Steps taken by the ministry**

- The Ministry of Women and Child Development has been a pioneering Ministry in undertaking Swachhata to the next level not just household toilets but safe sanitation and hygiene facilities in Health Centres, Anganwadis, Panchayat buildings, Market places.
- The Ministry also reviewed Divyang (people with disabilities) access toilets,

Officers IAS Academy, Chennai and also a review of toilets constructed under SBM.

### **Challenges and way forward**

- Poverty and malnutrition increases the risk infection of infants and children
- to various diseases like diarrhoea and pneumonia, and heighten the probability of death.
- Demographic and epidemiological studies have documented that poor economic status of household, low female literacy, poor nutritional status of mother, child marriage, large family size, low autonomy of women, and inadequate access to health care services typically lead to disproportionately higher risk for the health status of mothers and their children.
- India displays a unique cultural pluralism wherein people of different culture and ideologies co-exist in harmony and peace.
- There are different myths and legends in culture, in every part of the Indian society.
- Women can be active agent bringing behavioural change in the society. They are considered to be the caretaker of culture, tradition and history and identified with shaping the behaviour of children. Therefore the Ministry has immensely contributed towards building a safe and hygienic environment to ensure good health for both mothers and children.