# OFFICERS

# Pulse

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## Coverage.

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# At a Glance &

Polity and Social Issues

**Economy** 

**International Relations** 

**Environment** 

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# CURRENT AFFAIRS WEEKLY

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



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## News @ a glance

### **Polity & Social Issues**

#### Media Regulators in the spot

#### **SC Judgement**

- It is a crime under the Protection of Children from Sexual Offences (POCSO) Act and the Indian Penal Code to disclose the identity of victims of sexual abuse, especially if they are children.
- The Supreme Court has said that media regulators such as Press Council of India (PCI), Editors Guild of India, National Broadcasting Standards Authority (NBSA), and the Indian Broadcasting Federation (IBF), need to deal with journalists and media organisations whose actions, like revealing the identity of a rape survivor, make them criminally liable.

#### Why in News?

 A Petitioner has flagged the repeated violations by journalists and media organisations in sensitive cases.

#### **Press Council of India (PCI)**

The Press Council of India is a statutory & quasi-judicial body in India that governs the conduct of the print media. The PCI consists of a chairman and 28 other members. The Chairman is selected by the Speaker of the Lok Sabha, the Chairman of the Rajya Sabha and a member elected by the PCI.

#### **Editors Guild of India**

 The Editors Guild was founded in 1978 with the twin objectives of protecting press freedom and for raising the standards of the editorial leadership of newspapers and magazines.

## National Broadcasting Standards Authority (NBSA)

News Broadcasting Standards Authority is an independent body set up by the News Broadcasters Association. Its task is to consider and adjudicate upon complaints about broadcasts. The News Broadcasters Association (NBA) represents the private television news & current affairs broadcasters.

#### **Indian Broadcasting Federation (IBF)**

- Indian Broadcasting Foundation also known as is a unified representative body of the television broadcasters in India.
- The organisation was founded in the year 1999. Over 250 Indian television channels are associated with it. The organisation is credited as the spokesman of India Broadcasting Industry.

## **Aspirational District Programme Aspirational District**

- 'Transformation of Aspirational The Districts' Programme aims to expeditiously improve the socio-economic status of 117 districts from across all states. The three core principles of the programme are -Convergence (of Central & State Schemes), Collaboration (among citizens and functionaries Central State of & Governments including district teams), and Competition among districts.
- This programme is a policy priority of Government of India. NITI Aayog anchors the programme with support from Central Ministries and the State Governments.
- The 117 districts were identified from 28 states, at least one from each state, in a transparent manner by a committee of Senior Officers to the Government of India, in consultation with State Officials using a composite index of key data sets that included deprivation enumerated under the Socio-Economic Caste Census, key health and education sector performance and state of basic infrastructure.

#### Why in News?

The Ministry of Health and Family Welfare, in collaboration with Ministry of Women and Child Development, organized a oneday National Workshop for Orientation of District Officials of Aspirational Districts on Health and Nutrition.

#### The rationale behind the initiative

 India is on a high growth trajectory that is expected to lift millions out of poverty. However, presently the quality of life of

- many of its citizens is not consistent with this growth story, a fact reflected in UNDP's 2017 Human Development Index wherein we are ranked 131 (130 in 2018) out of 188 countries.
- A closer look at the data reveals high heterogeneity in the living standards in India. There are significant inter-state and inter-district variations. Launched in January 2018, the 'Transformation of Aspirational Districts' initiative aims to remove this heterogeneity through a mass movement to quickly and effectively transform these districts.

#### Steps taken to improve Health indicators

- 117 districts have been identified for rapid transformation and inclusive growth. The Reproductive Maternal New-born Child and Adolescent Health (RMNCH+A) program is an important pillar which will be strengthened under Aspirational Districts Programme.
- The e-Mitra (Mobile Integrated Toolkit RMNCH+A) app has been designed to complement the Aspirational District Programme and offers one stop solution to access RMNCH+A related statistics from different sources through a combination of approaches.
- The operational guidelines on Aspirational Districts will provide a framework for implementing action to be undertaken for various health initiatives to guide all the stakeholders.

## GoM to tackle sexual harassment at workplace

#### What's in the News?

 The Government has constituted a Group of Ministers (GoM) to examine the existing legal and institutional frameworks for dealing with matters of sexual harassment of women at the workplace.

#### **Terms of Reference**

• The GoM will recommend action required for effective implementation of the existing provisions, as well as for strengthening the existing legal and institutional frameworks for addressing issues related to sexual harassment at workplace. The Group of Ministers will be chaired by the Union Home Minister.

#### **Steps taken by the Government**

 The Sexual Harassment of Women at Workplace (Prevention, Prohibition and

- Redressal) Act is the key legislation for preventing and protecting women against sexual harassment in the workplace and to ensure effective redressal of complaints of sexual harassment.
- The Ministry of Women & Child Development has also launched an Electronic Complaints Box that enables women, irrespective of their work status, to raise their voice against sexual harassment at workplace. Once a complaint is submitted to the 'SHE-Box', it is directly sent to the concerned authority having jurisdiction to take action into the matter.

#### **ED Vs. Amnesty International**

#### Why in News?

• The Enforcement Directorate (ED) carried out searches at the head office of Amnesty International India in Bengaluru as part of an investigation into foreign funding for the human rights organisation.

#### What is the issue?

- Amnesty International India was among 21 NGOs that were served questionnaires by the Home Ministry as part of a probe under the Foreign Contribution Regulation Act 2010.
- The FCRA unit of the Home Ministry subsequently referred Amnesty International India to the Finance Ministry for further investigation.
- International India Foundation Trust of trying to circumvent norms under the Foreign Contribution (Regulation) Act (FCRA) after they were denied permission under FCRA by the Ministry of Home Affairs by creating a commercial entity called Amnesty International India Pvt Ltd (AIIPL) to receive foreign funding.

#### **Enforcement Directorate**

- Directorate of Enforcement is a specialized financial investigation agency under the Department of Revenue, Ministry of Finance, Government of India, which enforces the following laws: -
- Foreign Exchange Management Act,1999 (FEMA) A Civil Law, with officers empowered to conduct investigations into suspected breach of the Foreign Exchange Laws and Regulations, adjudicate contraventions and impose penalties on those adjudged to have breached the law.

 Prevention of Money Laundering Act, 2002 (PMLA) - A Criminal Law, with the officers empowered to conduct investigations to trace assets derived out of the proceeds of crime, to provisionally attach/ confiscate the same, and to arrest and prosecute the offenders found to be involved in Money Laundering.

#### **Amnesty International**

 Amnesty International is a London-based non-governmental organization focused on human rights. The organization claims to have more than seven million members and supporters around the world.

#### **Operation Digital boards**

#### 'Operation Digital Board'

- The Central Advisory Board of Education (CABE) has passed a resolution to take steps towards Operation Digital Board on the lines of Operation Blackboard of 1987, which was started with the purpose of providing minimum basic facilities to all primary schools.
- The idea of Operation Digital Board is aimed at providing better digital education in all schools. It will offer new opportunities and new ways of teaching and learning to schools.
- Operation Digital Board will be launched with the involvement of the Central and State governments, CSIR and community support.

#### Why in News?

• The Government is set to launch 'Operation Digital Board' across 15 lakh classrooms in the country in the next four years.

#### **Central Advisory Board of Education (CABE)**

CABE is the policy-making advisory body of the HRB Ministry. The committee has representatives of central organisations, universities, state, NGOs and civil society. The CABE committee headed by HRD Minister is generally made for three years.

#### **Granting citizenship**

#### Why in News?

The government has authorised 16 collectors across seven states to register members of minority communities from Pakistan, Afghanistan and Bangladesh as Indian citizens, under the Citizenship Act-1955.

#### **Background**

- The central government moves to amend the six-decade-old Citizenship Act, so that members of minority communities from the three neighbouring countries can be granted citizenship after six years of residence in India instead of 12, even if they do not possess proper documents.
- The bill has been opposed by people in Assam and other north-eastern states, and a joint parliamentary committee is examining the draft bill.

#### **Highlights**

- The notification said that the home secretary of the state or union territory concerned has also been given the same power in case the applicant is not a resident of the mentioned districts, subjects to certain conditions. The condition are -
  - 1. The application for registration as a citizen of India or grant of certificate of naturalisation as citizen of India under the rules should be made by the applicant online
  - 2. The verification of the application would be done simultaneously by the collector or the secretary at the district or state levels, and the application and the reports thereon will be made accessible simultaneously to the central government through an online portal.
- In addition, the collector or secretary is allowed to conduct probes for ascertaining the applicant's suitability.

#### **NRC for Tripura**

#### Why in News?

 Petitions have been made to the Supreme Court demanding a National Register of Citizens on the lines of the NRC in Assam.

#### **About the PIL**

The petition asked the Supreme Court to direct the authorities to update the NRC with respect to Tripura in terms of Rules 3 and 4 of The Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003 by taking July 19, 1948 as the cut-off date as provided for in Article 6 of the Constitution.

#### Who are Tripura's indigenous people?

• There are 19 notified Scheduled Tribes in Tripura, among whom the Tripuris are the largest group. The Tripuris are also

- considered the aboriginals as they migrated first.
- The 2011 Census puts the number of Tripuris, who belong to the Indo-Mongoloid family, at 5.92 lakh, followed by Reangs (1.88 lakh) and Jamatias (83,000).

## What is the extent of migration by non-tribal groups?

• In the 1881 Census, tribals constituted 63.77% of Tripura's population; in 2011, this was down to 31.80%. This followed the migration of 6.10 lakh Bengalis between 1947 and 1971, displaced from then East Pakistan.

#### **Ethnic Strife in Tripura**

According to the South Asia Terrorism Portal, 2509 civilians, 455 security personnel and 519 insurgents were killed between 1992 and 2012. "Land alienation" has been identified as the root cause behind ethnic strife. According to experts, Tripura requires land reforms and also a revisit of political representation.

#### **Disqualification of MLAs**

#### **Constitutional Provision**

- The 52nd amendment to the Constitution added the Tenth Schedule which laid down the process by which legislators may be disqualified on grounds of defection. A member incurs disqualification under the defection law-
- If he voluntarily gives up the membership of the Political party on whose ticket he is elected to the House.
- If he votes or abstains from voting in the House contrary to any direction given by his political party.
- If any independently elected member joins any political party.
- If any nominated member joins any political party after the expiry of six months.

#### Why in News?

Madras High Court has upheld the disqualification of 18 AIADMK MLAs, whose membership were cancelled by Tamil Nadu Assembly Speaker in September last year under the antidefection law.

#### **Exceptions**

 If a member goes out of his party as a result of a merger of the party with another party.
 A merger takes place when two-thirds of

- the members of a party have agreed to such a merger.
- If a member after being elected as the Presiding officer voluntarily gives up the membership of his party or re-joins it after he ceases to hold office.

#### **Deciding Authority**

- The question of disqualification under the Tenth schedule is decided by the Chairman in case of Rajya Sabha and Speaker in case of Lok Sabha.
- In the Kihoto Hollohan Case, the Supreme Court declared that the Presiding officer while deciding a question under the Tenth Schedule functions as a Tribunal. Hence his decision like that of any other tribunal is subject to judicial review on the grounds of mala fide.

#### Measures to curb fake news

#### Why in New?

 Home Secretary held a meeting with representatives of various social media platforms to review the steps taken by them to prevent misuse of their sites.

#### **Highlights**

- Social media platforms were asked to check the spread of rumours and messages inciting unrest, cybercrimes and other activities that could be detrimental to national security.
- Social media platforms were asked to nominate India-based grievance redressal officers and to develop a monitoring mechanism for time-bound preventive and other actions for the removal of objectionable contents
- The social media platforms were also asked to put in place a system for prompt sharing of information sought by the law enforcement agencies for investigation purposes.

#### What is Fake News?

 Fake news refers to the fictitious articles/media that are deliberately circulated on the internet with the aim of deceiving the readers.

#### **Steps Taken by the government**

The social media platforms like Facebook, YouTube, Instagram, Twitter which are widely used for online information dissemination comes under the purview of Department of Telecom, Ministry of Communications and IT and don't fall in the

- domain of I&B ministry, which looks at news, entertainment, infotainment, etc.
- The Ministry of Information and Broadcasting (I&B) has constituted a 10member committee to regulate online portals, including news websites, entertainment sites and media aggregators.
- The committee will look to bring online information dissemination under regulation. It will look at international best practices on such existing regulatory mechanism. It will cover print and electronic media as well as entertainment sites.

#### **IMPRESS Scheme**

#### **About the Scheme**

- Under the Scheme, 1500 research projects will be awarded for 2 years to support the social science research in the higher educational institutions and to enable research to guide policymaking.
- Indian Council of Social Science and Research (ICSSR) will be the project implementing agency.

#### Why in News?

 The Union Minister for Human Resource Development launched the web portal of the Scheme "Impactful Policy Research in Social Sciences (IMPRESS)"

#### **Significance**

 Research in social science is essential for the progress of the society and the research carried out under the IMPRESS scheme will be used to understand and solve problems facing society.

#### **Objectives**

- To identify and fund research proposals in social sciences with maximum impact on the governance and society.
- To focus research on (11) broad thematic areas such as -State and Democracy, Urban transformation, Media, Culture and Society, Employment, Skills and Rural Transformation, Governance, etc
- To ensure selection of projects through a transparent, competitive process on online mode.
- To provide opportunity for social science researchers in any institution in the country

## National Monitoring Framework on SDG

Why in News?

 The Union Cabinet has approved the constitution of a High-Level Steering Committee for periodically reviewing and refining the National Indicator Framework (NIF) for monitoring of Sustainable Development Goals (SDGs) with associated targets.

#### **About the Committee**

- The High-Level Steering Committee will be chaired by Chief Statistician of India and Secretary, Ministry of Statistics and Programme Implementation (MoSPI).
- Statistical indicators of NIF will be the backbone of monitoring of SDGs at the national and state level and will scientifically measure the outcomes of the policies to achieve the targets under different SDGs.
- Based on the statistical indicator, the MoSPI will bring out national reports on the implementation of SDGs. The Report will facilitate the assessment of progress, identify challenges and give recommendations for follow up at the national level.

#### Sustainable Development Goals (SDGs)

- As per the resolution of UN General Assembly in September 2015 the Sustainable Development Goals (SDGs) have been adopted by 193 member nations.
- The Ministry of Statistics and Programme Implementation is responsible for developing indicators for the SDGs which are applicable to India.
- The Government of India has been implementing several Central Sector/Centrally Sponsored Schemes including the Flagships Programs for sustainable development of the country and its people in three dimensions viz. economic, social and environmental.
- These developmental schemes are mostly addressing the Sustainable Development Goals (SDGs) which are targeted to be achieved by 2030.
- The Development Monitoring and Evaluation Office (DMEO), an attached office under NITI Aayog has been nominated as the nodal organization for the implementation of the SDGs.

#### **SDG Index**

 India is ranked 116 out of 157 nations on a global index that assesses the performance of countries towards achieving the

- ambitious sustainable development goals (SDGs).
- The SDG Index and Dashboards Report is produced by the Sustainable Development Solutions Network (SDSN).
- It ranks countries based on their performance across the 17 Sustainable Development Goals.

#### **SPARC Scheme**

#### Why in News?

 The Minister of Human Resource Development launched the web portal of the Scheme "Scheme for Promotion of Academic and Research Collaboration (SPARC)"

#### **About the Scheme**

- SPARC scheme aims at improving the research ecosystem of India's higher educational institutions by facilitating academic and research collaborations between Indian Institutions and the best institutions in the world.
- Under this Scheme, 600 joint research proposals will be awarded for 2 years to facilitate strong research collaboration between Indian research groups with the best in class faculty and renowned research groups in the leading universities of the world.
- Indian Institute of Technology Kharagpur is the National Coordinating Institute to implement the SPARC programme.

#### **Cutting schoolbag weight**

#### **Background**

The MHRD had issued an order on October
 5 to formulate a policy on schoolbags on the

lines of Children School Bags (Limitation on Weight) Bill of 2006, which never turned into a law.

#### Why in News?

Union Ministry of Human Resource Development (MHRD) informed the Madras High Court that an Expert Group has been constituted to formulate a draft policy on reducing the weight of school bags in proportion to the age and average weight of children.

#### Rationale behind the move

- A recent survey conducted by Associated Chambers of Commerce and Industry of India (ASSOCHAM) under its Healthcare Committee has found that 68 per cent of school children under the age of 13 years across India may suffer from mild back pain, which can develop into chronic pain and later into hunchback.
- The survey noted that over 88 per cent of children in the age group of 7-13 years carry more than 45 per cent of their weight on their back

## Children School Bags (Limitation on Weight) Bill of 2006,

- It states that the weight of a school bag must not exceed more than 10% of the child's bodyweight. It also directs respective State Governments to ensure that schools provide lockers for students, ensure that schools adhere to the standards of measurements for bags, and students use both straps for carrying bags.
- In addition, it states terms that require teachers to inform students of the books required a day prior, and the students should be taught how to pack bags so heavy loads can be kept close to the body.

#### **Economy**

#### Direct tax base widens

#### What's in the news?

 The Central Board of Direct Taxes (CBDT) has released key statistics relating to direct tax collections.

#### Highlights of the data

- The tax-GDP ratio rose to reach a 10-year high mark of 5.98 percent.
- The direct tax base has significantly widened in the last few years. The number of returns filed has raised from 3.79 crore in FY 2013-14 to 6.85 crore in FY 2017-18, a growth of more than 80%. It implies increasing tax compliance in India.
- The number of salaried taxpayers has increased from 1.70 crore to 2.33 crore, a rise of 37 percent.
- There has been continuous increase in the amount of income declared in the returns filed by all categories of taxpayers over the last three assessment years (2014-15 to 2017-18).
- The average income declared by the salaried taxpayers rose to Rs 6.84 lakh from Rs 5.76 lakh, up 19 percent.
- Experts say there may be four reasons for increase in the number of tax returns.

#### The effect of demonetisation

- The increase in the use of information being collected digitally and being used by the tax department
- The movement towards digital assessment and decrease in the number of cases being picked up for scrutiny
- The ease of getting refund, majorly by small and medium taxpayers
- The last two have reduced fear of the tax department among these sections of taxpayers.

#### **UNCITRAL**

#### **About UNCITRAL model law**

- The UNCITRAL Model Law has been adopted in 44 countries and is one of the best international practices in dealing with cross border insolvency issues.
- The advantages of the model law include the precedence given to domestic proceedings and protection of public interest, greater confidence generation among foreign investors, adequate flexibility for seamless integration with the

- domestic insolvency law and a robust mechanism for international cooperation.
- The necessity of having cross-border insolvency framework under the IBC arises because many Indian companies have global presence and many foreign companies have presence in multiple countries, including India.

#### What's in the news?

The Insolvency Law Committee (ILC), established to suggest amendments to the Insolvency and Bankruptcy Code of India, has recommended adopting United Nations Commission on International Trade Law (UNCITRAL) Model Law of Cross Border Insolvency, 1997, to handle cross-border insolvency cases.

#### **Insolvency and Bankruptcy Code (IBC) 2016:**

- It was framed with the intention to expedite & simplify the process of Insolvency and Bankruptcy proceedings in India. The Code proposes two independent stages for resolution process:
  - 1. Insolvency Resolution Process
  - 2. Liquidation
- The entire process should complete within a period of **180 days** (subject to a one-time extension by 90 days).
- The National Company Law Tribunal (NCLT) is the adjudicating authority for companies. For individuals the Debt Recovery Tribunal (DRT) adjudicates the insolvency resolution.

#### **ADB report on Migrating Indians**

#### What's in the news?

 Asian Development Bank (ADB) has released its 'Asian Economic Integration Report 2018' report.

#### Highlights of the report

- India had the most outward migrants in 2017 (17 million), followed by China (10 million) and Bangladesh (7.5 million).
- Asia continued as the largest source of international migrants globally which rose 3.9 per cent from 83.6 million in 2015 to 86.9 million in 2017. As many as one-third of international migrants were from Asia in 2017.
- Intraregional migrants to India largely come from neighbouring countries such as

- Bangladesh (3.1 million), Pakistan (1.1 million) and Nepal (0.5 million).
- Global foreign direct investment (FDI) into the region remains stable at USD 517.5 billion in 2017 from USD 519.9 billion in 2016
- Greenfield or new investments generated 6,67,000 jobs in 2017—mainly in India, China, Viet Nam, the Philippines, and Singapore—in real estate, software and information technology (IT) services, and electronic components, among others.
- Asia's outward FDI moderated by 1.4 per cent in 2017—to USD 487.9 billion from USD 494.9 billion in 2016.

#### Who are International migrants?

- The United Nations (UN) defines international migrants as 'the set of persons who have ever changed their country of usual residence i.e. persons who have spent at least one year of their lives in a country other than the one in which they live at the time the data are gathered.'
- They cross borders for various reasons for employment, family reunification, study, and fleeing from conflicts and violence.

#### **About ADB**

- The Asian Development Bank was founded in 1966, with its headquarters in Manila, Philippines.
- ADB's primary mission is to foster growth and cooperation among countries in the Asia-Pacific Region. It has been responsible for a number of major projects in the region.
- ADB is composed of 67 members (including India), 48 of which are from the Asia and Pacific region.

#### **Duty Drawback Scheme**

#### **Duty Drawback Scheme**

 The Duty Drawback scheme compensates exporters for the duties paid on inputs used to manufacture exported products.

#### What's in the news?

- Recently, Government made it clear that it would not be refunding IGST duties that exporters paid on exports since it has already compensated them through the duty drawback scheme.
- However, exporters say that the drawback amount paid back is only a fraction of the total amount they have paid and most of it is locked in IGST.

They also argue that the current system creates an unfair advantage for exporters operating in a single state, as opposed to those who have operations that cross State lines. An exporter who operates in, say, Delhi and has all her suppliers in Delhi, pays CGST and SGST and gets a refund for that and also gets the drawback. But an exporter operating across State lines does not get the IGST refund and only gets the drawback.

#### **About GST**

- The Goods and Services Tax (GST), which was implemented in 2017, subsumed all the indirect taxes that businesses used to pay the central authorities and state authorities separately.
- GST has three components: (i) central GST,
   (ii) state GST, and (iii) Integrated GST
   (IGST)- on inter-state supplies of good and services.

#### Refund mechanism under GST

 Under GST all exports are deemed as interstate transactions and only IGST is applicable. Exporters are eligible to claim refund of IGST paid on exports and such refund should be paid within 60 days.

## Fisheries & Aquaculture Infrastructure Development Fund What's in the news?

- The Cabinet Committee on Economic Affairs has given its approval for creation of special Fisheries and Aquaculture Infrastructure Development Fund (FIDF) which would provide concessional loans to state governments, entrepreneurs, fishermen, cooperatives etc., for taking up of the investment activities of fisheries development.
- National Bank for Agriculture and Rural Development (Nabard), National Cooperatives Development Corporation (NCDC) and all scheduled banks are the designated Nodal Loaning Entities in disbursal of the fund.

#### Benefits of the fund

- Under FIDF, loan lending will be over a period of five years from 2018-19 to 2022-23 and maximum repayment will be over a period of 12 years inclusive of moratorium of two years on repayment of principal.
- The credit facilities will help in creation of fisheries infrastructure facilities both in marine and inland fisheries sectors to help

- boost annual fish production to 20 million tonnes by 2022-23 and generate over 9.40 lakh employment opportunities in fishing and allied activities.
- To augment fish production to achieve its target of 15 million tonne by 2020 set under the **Blue Revolution**.

#### **National Steel Policy**

#### **About National Steel Policy 2017**

- The NSP 2017 seeks to enhance domestic steel consumption and ensure high quality steel production and make India selfsufficient in steel production.
- It envisages creation of 300 million tonnes (MT) of steel capacity in the country by 2030-31 as against existing 130 MT.
- It seeks an increase in the domestic availability of washed coking coal so as to reduce import dependence on coking coal from about 85% to around 65% by 2030-31.
- It also seeks to increase per capita steel consumption to the level of 160 Kgs by 2030 from existing level of around 60 Kg.
- Facilitation of R&D in the sector through the establishment of Steel Research and Technology Mission of India (SRTMI).

#### What is in News?

- During the recent conclave organized by Ministry of Steel, Government of India in association with Confederation of Indian Industry (CII) in Bhubaneswar, leading capital goods producers from the across the globe signed 38 MoUs with domestic steel companies envisaging reduction in imports of such goods worth Rs. 39,400 crores by promoting local manufacturing.
- The conclave was organized to give a push to India's efforts towards achieving selfsufficiency in steel production as envisaged by the National Steel Policy 2017.

#### Gogha-Dahej Ro-Pax Ferry service

#### What's in the news?

- A trial run was successfully conducted for the much awaited Gogha- Dahej Ro-Pax Ferry service across the Gulf of Cambay.
- The fully operational Ro Pax service with a carrying capacity of 100 vehicles and 500 passengers will be opened on 27 October 2018.

#### Gogha- Dahej Ro-Pax Ferry service project

 The project aims to connect Saurashtra and South Gujarat via sea route under the

- government's Sagarmala programme, which will reduce the distance between these two places to 31 km compared to the present 294 km land route
- The initiative would not only reduce the travel time but also result in savings in fuel, reduction in CO2 emission and reduction in road congestion.
- The project is first of its kinds in India as it is being executed in the area of world's 2nd highest tidal range.



#### Draft agri export policy

#### What's in the news?

- The government will soon come out with a new agri export policy which would have provisions for setting up agro specific zones to boost outbound shipments.
- The government will soon finalise the National Agriculture Export Policy in line with the vision to double the farmer's income and increase the share of agricultural exports from \$30 billion to \$60 billion by 2022.

#### Key features of the Draft agri-export policy

- Identification of commodities which are essential from food security perspective through consultation among ministries and stakeholders. Barring those the effort would be to ensure that no other produce is brought under any kind of export restrictions.
- It suggests creation of an institutional mechanism under the aegis of Department of Commerce to address India's market access request, calibrate it with the trading partner's market access request for accessing the Indian market and quickly respond to trade barriers.
- It highlights the need to bring about reforms in APMC Act.

It also talks about development of exportcentric clusters, promoting value added exports through incentives, marketing and promotion of 'produce in India' through Geographical Indication (GI) registration and putting in place post-harvest infrastructure support for smooth logistical movement of agri produce.

## Paramparagat Krishi Vikas Yojana

#### What's in the news?

- Union Agriculture & Farmers Welfare Minister Radha Mohan Singh has said that with an aim to double farmers' income, the budget outlay of the agriculture sector has been enhanced by 74.5% to Rs 2,11,694 crore during 2014-2019 as compared to Rs 1,21,082 crore during 2009-2014.
- He said that Paramparagat Krishi Vikas Yojana is being implemented with a view to promote organic farming in the country.

#### Paramparagat Krishi Vikas Yojana

- Under the scheme, farmers will be encouraged to form groups or clusters and take to organic farming methods over large areas in the country.
- The Scheme envisages
- Promotion of commercial organic production through certified organic farming
- Improving soil health and organic matter content which will consequently contribute to improve the health of consumer
- To raise farmer's income and to create potential market for traders
- Motivating farmers for natural resource mobilization for input production

#### Policy Note on 'Making Markets Work for Affordable Healthcare'

#### What's in the news?

 The Competition Commission of India (CCI) has released a policy note titled 'Making Markets Work for Affordable Healthcare'.

#### **Highlights**

- One major factor that contributes to high drug prices in India is the unreasonably high trade margins. Electronic trading of drugs could be an option for bringing in transparency and spurring competitive pricing.
- In-house pharmacies of super specialty hospitals are completely insulated from competition as in-patients are not allowed to buy any product from outside

- pharmacies. This calls for regulation that mandates hospitals to allow consumers to buy standardised consumables from the open market.
- The Indian pharmaceutical market is dominated by 'branded generics' limiting generic-induced price competition, when globally generic drugs are perceived as key competitive force against the patentexpired brand name drugs marketed at monopoly prices.
- The policy note recommends "onecompany-one drug-one brand name-one price policy" to achieve uniformity in pricing of medicines in India.
- Regulatory framework should be established for portability of patient data, treatment record and diagnostic reports between hospitals.
- Approval of new drugs should be made time-bound along with publication of detailed guidelines governing each stage of new drug approval process.
- The policy note also flagged about multiplicity of regulators governing the pharmaceutical sector at the centre and state levels.

#### **About CCI**

- CCI is a statutory body established under the Competition Act, 2002.
- The CCI consists of a Chairperson and six members appointed by the Central Government.
- It is responsible to prevent activities that have an adverse effect on the competition in India.

#### **CAG questions RBI's**

#### What is NPA?

 A non-performing asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.

#### **Recent stats**

- Indian banks' gross NPAs stood at Rs 10.25 lakh crore which accounts for 11.8 percent of the total loans given by the banking industry.
- India's 21 public sector banks contribute about 87% of the gross NPAs.

#### Why in News?

 Comptroller and Auditor General of India Rajiv Mehrishi have questioned the role of the RBI during the time when the banks were lending without proper credit

- appraisal, leading to the high levels of NPAs
- He added that there was no public discourse on the role of the central bank during this period.

#### Input tax credit

#### What is Input tax credit?

- Under GST, Input tax credit means when a manufacturer pays the tax on his output, he can deduct the tax he previously paid on the input he purchased.
- If the tax paid on inputs is higher than the tax on the output, the excess can be claimed as a refund.
- ITC is a major benefit under the GST regime which eliminates double taxation on inputs used to make other items (also known as Cascading effect of taxes).

#### Why in News?

The government has extended the deadline for the filing of GST form 3B returns for September from October 20 to October 25. With this extension, businesses which wish to claim Input Tax Credit benefit for July 2017-March 2018 period can do so till October 25.

#### Oil slumps 5% on Wall St. tumble

#### What's in news?

• Oil prices fell about five per cent on Oct 23rd to two-month lows.

#### Reasons for price fall

- Due to trade tensions, high oil prices and currency weakness in some emerging markets, the forecasters have been expecting less growth in global oil consumption.
- The rising output from the Organization of the Petroleum Exporting Countries (OPEC) and Russia has also increased concerns on potential oversupply.
- Saudi Arabia announced that it could supply more crude if needed, this has eased

- concerns of any shortage in oil supply amid US sanctions on Iranian oil.
- Globally, investors have started selling their oil shares with an expectation of reducing demand of crude.

#### Bear phase

#### What is a Bear market?

- Bear market is an economic condition which exists when the financial market faces a rapid decline in value.
- The bear market alarms a danger signal which causes a pessimistic attitude among the investors. When a bear market is suspected, investors start selling their stocks. They start making investments with ultimate care. When bear market continues in the economy, there is a high chance of economic depression.

#### What's in the news?

- Joseph Bernhard Mark Mobius, a financial market expert, said that Indian markets are performing well compared to other emerging markets and are not in a bear phase.
- He flagged the recent liquidity crunch in NBFC system triggered by the default of IL&FC. The default made banks to be extra cautious in lending which is affecting the whole NBFC system.
- He noted that in addition to liquidity, restrictions on capital from abroad are very severe. Usually, investors have to wait for six months to get approval to enter the Indian market.
- The government should streamline the regulatory process to attract capital from abroad. For example, China's one-stop policy which helps investors to get all the regulatory licences in one stop.
- He warned that Rupee is likely to further depreciate by 10% from its current level which underscores the urgent need to increase India's exports to meet the increasing oil import bill.

#### **International Relations**

#### **ADDM Plus**

#### What's in the News?

 Defence Minister attended the 5<sup>th</sup> ASEAN Defence Ministers Meeting (ADMM) plus meet in Singapore today, which is a forum for Defence Ministers from ten ASEAN and eight ASEAN Plus countries.

#### **Theme**

The theme of this year's dialogue was 'Strengthening Cooperation, Building Resilience'. The dialogue adopted two resolutions on 'Countering the Threat of Terrorism' and 'Practical Confidence Building Measures'.

#### **ADMM Plus Meeting**

The Inaugural ADMM-Plus was convened in Ha Noi, Viet Nam, in 2010. The Defence Ministers then agreed on five areas of practical cooperation to pursue under this new mechanism, namely maritime security, counter-terrorism, humanitarian assistance and disaster relief, peacekeeping operations and military medicine. To facilitate cooperation on these areas, Experts' Working Groups (EWGs) are established.

#### **Objectives**

- To benefit ASEAN member countries in building capacity to address shared security challenges, while cognizant of the differing capacities of various ASEAN countries;
- To promote mutual trust and confidence between defence establishments through greater dialogue and transparency;
- To enhance regional peace and stability through cooperation in defence and security, in view of the transnational security challenges the region faces;
- To contribute to the realisation of an ASEAN Security Community as stipulated in the Bali Concord II.
- To facilitate the implementation of the Vientiane Action Programme, this calls for ASEAN to build a peaceful, secure and prosperous ASEAN.

#### **Member Countries**

The ADMM-Plus countries include ten ASEAN Member States, and eight Plus countries, namely Australia, China, India, Japan, New Zealand, Republic Of Korea, the Russian Federation and the United States.

## **Intermediate-range Nuclear Forces** (INF) Treaty

#### Why in News?

 U.S. President Donald Trump confirmed that the U.S. would pull out of the Intermediate-range Nuclear Forces (INF) Treaty with Russia.

## Intermediate-range Nuclear Forces (INF) Treaty

- The 1987 Intermediate-Range Nuclear Forces (INF) Treaty required the United States and the Soviet Union to eliminate and permanently give up all of their nuclear and conventional ground-launched ballistic and cruise missiles with ranges of 500 to 5,500 kilometres.
- The treaty marked the first time the superpowers had agreed to reduce their nuclear arsenals, eliminate an entire category of nuclear weapons, and utilize extensive on-site inspections for verification.
- As a result of the INF Treaty, the United States and the Soviet Union destroyed a total of 2,692 short-, medium-, and intermediate-range missiles by the treaty's implementation deadline of June 1, 1991.
- The United States first alleged in its July 2014 Compliance Report that Russia is in violation of its INF Treaty obligations. Subsequent State Department assessments repeated these allegations. On December 8, 2017, the Trump administration released a strategy to counter alleged Russian violations of the Treaty.

#### **Extradition Treaty**

#### Why in News?

 The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the signing and ratification of the Extradition Treaty between India and Malawi.

#### **Significance**

 The Treaty would provide a legal framework for seeking extradition of terrorists, economic offenders and other criminals from and to Malawi.

#### What is an Extradition Treaty?

- Extradition is the removal of a person from a requested state to a requesting state for criminal prosecution or punishment.
- The Extradition Act 1962 provides India's legislative basis for extradition. It defines 'Extradition Treaty' as a Treaty, Agreement or Arrangement made by India with a Foreign State, relating to the Extradition of fugitive criminals. Extradition treaties are traditionally bilateral in character.
- Consular, Passport and Visa Division (CPV Division), Ministry of External Affairs, is the Central/Nodal Authority that administers the Extradition Act and it processes incoming and outgoing Extradition Requests

#### Post-U.S. era in Kabul

#### **Background**

 The US is far away and Afghanistan is landlocked, so in spite of the US leadership policy eventually the U.S. will leave. Hence there is a need to prepare for a post-American era in Afghanistan.

#### **USA's South Asia Policy**

The new strategy is a reversal from the earlier "Af-Pak" policy, since it is not just concerned about Afghanistan, but is a full "South Asia strategy". encompassing countries like Afghanistan, Pakistan, and

- India. It also covers the Central Asian nations and extends into Southeast Asia.
- Along with an expansion in American military footprint, the second aspect of the new strategy is a strong focus on Pakistan to make sure it abides by its commitments.
- The South Asian policy highlighted India's important contributions to stability in Afghanistan and stressed that India is a "critical part" of the USA's South Asia policy and will serve to further develop the US's strategic partnership with India.

#### **India-China Co-operation in Afghanistan**

- Afghanistan, India and China have been on opposite sides with China relying on its old ally Pakistan as it seeks to stabilise Afghanistan by various means, including brokering talks to end the Taliban insurgency.
- India, on the other hand, has invested billions of dollars in economic projects and training of military officers to strengthen the Afghan government in its fight against the Taliban.
- However, the scenario is changing India and China have launched a programme to train Afghan diplomats this is likely to be followed by joint programmes in other fields to help war-torn Afghanistan. India and China need a stable region to help their big plans for growth.

### Science & Technology

## Native shade trees better for carbon storage

#### Why in News?

A scientist team from Bengaluru's Environmental Management and Policy Research Institute studied the agroforestry systems of Kodagu where Robusta (which needs more sunlight) or Arabica coffee varieties are grown under the shade of silver oak. The shade thereby affects the carbon sequestration and tree diversity.

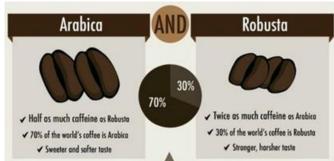
#### How is it disastrous?

- The silver oak shade tree is replacing the native shade trees
- It affects the carbon sequestration and tree diversity in the agro forest systems.
- As old forest trees make up a huge portion of carbon stocks here, so higher the carbon contained in vegetation, the more it helps with mitigating climate change.

#### **About Kodagu's coffee farms**

- Kodagu's coffee farms were created by clearing the forest undergrowth and growing coffee under the shade of giant evergreen trees.
- It is Located near the Cauvery river.

How is robusta coffee different from the Arabica coffee?



## How the tree shade affects the carbon sequestration?

Trees are unique in their ability to lock up large amounts of carbon in their wood, and continue to add carbon as they grow. A healthy forest typically stores carbon at a greater rate than it releases carbon.

#### What is carbon sequestration?

 Carbon sequestration is both a natural and artificial process by which carbon dioxide is removed from the Earth's atmosphere and then stored in liquid or solid form. This helps delay global warming and avoid extreme climate change.

Coffee producing regions in India



## Climatic Condition suitable for coffee production

- Climate: semi-tropical climate.
- Temperature: An average temperature between 20°-27°C. Although it grows in day temperature over 32°C in the Arabian Peninsula. Growth is most rapid during hot rainy season.
- Rainfall: Coffee needs abundant rainfall, i.e., 100 to 200 cm annually.

#### Bacteria to degrade toluene

#### Why in News?

- IIT(BHU) researchers have succeeded in degrading toluene into immediate lesstoxic by-products
- Using bacteria Acinetobacter junii isolated from soil and effluents near an oil refinery.

#### Why is there a need to degrade toluene?

- Toluene is a type of petro-chemical wastes that get released by the refineries, paint, textile, paper and rubber industries without prior treatment.
- It has the potential causing serious health problems to aquatic life, and genotoxic and carcinogenic effects on human beings.

#### **About A.junii**

- *Acinetobacter junii* is a species of bacteria.
- A consortium of A. junii bacteria was found to be more effective than using a single strain.
- When exposed to toluene, these bacteria use up this toluene as their carbon source in the presence of oxygen.
- The researchers also tested the bacterial strain for the degradation of benzene, phenol, and petrochemical wastes in both soil and water samples.
- About 80% of toluene (50 ppm) in a liquid medium was degraded within 72 hours.

Where does toluene finds its daily use?

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Spray paints, primers, multipurpose cleaners (liquid or aerosol),Contact cement, Floor polish, Paint thinners, Bath Mats, Wood sealers, colouring pens and markers. It is also found in vehicle exhaust and cigarette smoke.

#### Cancer: An overview

#### Why in News?

With the advances made by the Nobelists, it does appear that the reign of cancer may come to an end. Treating and winning over cancer that has been a great challenge has been named cancer as "The Emperor of all Maladies." by the oncologist-writer Siddhartha Mukherjee.

#### What is cancer?

- Cancer is an uncontrolled growth and multiplication of cells in a given organ of the body which are damaged due to genetic or external triggers like smoking or high doses of radiation.
- While normal cells multiply and grow to a certain size, cancer cells, whose DNA is mutated go on a rampant growth spreading tumours and weakening the body to death.

## What are the drawbacks with the present method of cancer cell removal?

- Surgical removal of the tumour does not guarantee total removal.
- Radiation therapy using high power gamma rays has limited success.
- Several anti-cancer drugs, such as cis-platin or carboplatin, 5-fluorouracil, Doxyrubicin needs to be used for sustained periods.

#### **Advantages with Immunological approach**

- It uses the in-built defense mechanism in the body.
- The white blood cells play a main role here. The B-Cells recognize the shape of the surface protrusion on the invading cancer cell and synthesises proteins called immunoglobulins which fit into the surface of the invading cells and remove them. This too is the basis of childhood vaccines.
- The surface geographic "tag" is termed the antigen and the proteins made by B-cells are called antibodies. Cancer cells have biometric IDs termed as neo-antigens.

#### The present advancement by The Nobelists

 Apart from concentrating on the Blymphocytes the partner T-cells are taken into consideration.

- T-cells release chemicals that push the invading cells to commit suicide (apoptosis).
- There are also other proteins that help check the T-cell from causing more damage known as 'brakes' or "check point proteins".
- Dr James Allison of the MD Anderson Cancer Centre at the University of Texas, USA, has been working on one such "brake" or "checkpoint "protein called CTLA-4, which down-regulates the immune response of T-cells.
- The "anti-CTLA4", which, when injected on mice with cancer, unlocked the antitumour activity and cured the mouse of cancer.
- Tasuku Honjo, Kyoto University, Japan has discovered a protein called PD-1 when expressed on the surface of T-cells can exhibit anti-tumour activity.
- More than 1100 PD-1 related trials are under way so that many cancers are treated.
- With the advances made by the Allison's and Honjo's groups, it does appear that the Emperor's reign may indeed come to an end sooner than later.

#### Ryugu

#### **About Ryugu**

- Ryugu is a C-type or carbonaceous asteroid which can yield clues about the origins of life than the S-type or silicaceous asteroids that are more commonly explored.
- C-type asteroids exist furthest from the Sun and are least altered by heat and are, therefore, most likely to contain water.

#### Why in News?

Japanese robots are collecting data on the surface of a primitive asteroid called Ryugu, some 280 million km away which might unlock some of the most fundamental mysteries of our solar system.

#### About The asteroid-exploring spacecraft

- Hayabusa 2, was launched by the Japan Aerospace Exploration Agency (JAXA) in December 2014 and took three and a half years to reach its destination.
- This September it released two moving rovers onto the asteroid's surface.
- The rovers are designed to bounce as the lack of gravity on Ryugu makes it impossible for them to roll.

 The probes are not only providing images, but measuring temperatures and magnetic fields, as well as investigating mineral composition with microscopes.

#### Way forward

- The plan is for the spacecraft to head back by late 2020 to Earth, carrying soil and other material samples for further studies.
- Subsurface exploration might reveal hydrated minerals (containing water in its crystalline structure)
- As asteroids are thought to have formed from the same material as that of the planets, they are a kind of fast-moving time capsule that can take us back 4.6 billion years ago, to the infancy of our solar system and the origin of life.
- If successful, Hayabusa 2 will become the world's first asteroid sample-collecting mission to return to Earth from a C-type asteroid.

#### Bepi Colombo spacecraft

#### Why in News?

- Bepi Colombo is a joint mission of the European Space Agency and the Japan Aerospace Exploration
- Agency to the planet Mercury. The Ariane
   5 successfully lifted the spacecraft carrying
   two probes into
- Orbit from French Guiana to begin a sevenyear journey to Mercury.

#### **About the Bepi Colombo spacecraft**

- It has been named after Italian scientist Giuseppe "Bepi" Colombo.
- The BepiColombo spacecraft will have to follow an elliptical path that involves a flyby of Earth, two of Venus and six of Mercury itself before arriving at its destination in December 2025.
- two probes Bepi will operate in Mercury's inner orbit, and Mio will be in the outer orbit. The two probes will independently investigate the surface and magnetic field of Mercury
- The probes are designed to cope with temperatures varying from 430 degrees Celsius (806 F) on the side facing the sun, and -180 degrees Celsius (-292 F) in Mercury's shadow.

#### Additional

■ The only other spacecraft to visit Mercury was NASA's Mariner 10 in the mid-1970s.

#### **Advantages attached to the mission:**

- Mercury, which is only slightly larger than Earth's moon, has a massive iron core that is little known.
- Detailed observations of Mercury will help us better understand the environment of the planet and
- The origin of the Solar System including that of Earth.

#### AI & NITI

#### What's in the news?

- Niti Aayog is organizing the 4th Edition of NITI Lecture Series with the Theme: "AI for ALL:
- Leveraging Artificial Intelligence for Inclusive Growth" along with the NVIDIA Corporation.

#### **Artificial intelligence and NITI**

- Artificial intelligence is the use of computers to simulate human intelligence letting us solve problems where the complexity is too great or the information is incomplete.
- Union Budget-2018 mandated NITI Aayog to come up with a national programme on employing Artificial Intelligence towards national development.
- NITI has, since, published a National Strategy for Artificial Intelligence in line with the Government policy of Sabka Saath, Sabka Vikas.
- NITI Aayog has signed Statements of Intent (SoI) with industry leaders such as Google, Microsoft and IBM to take India into the global arena of future technologies and artificial intelligence in healthcare, agriculture, smart mobility, education, infrastructure and agriculture.
- To bridge India's diversity of languages it has created a digital "Ek Bharat, Shrestha Bharat" platform using Natural Language Processing (NLP)that allows machines or computers to understand and interact with human speech and symbols.

#### The 'NITI Lectures

 The aim of the series is to enable learning, both at the Centre & States, from successful development practice over the world attended by the Government's top decision makers.

#### Way forward to Research and development

Recognising the importance of research and its commercial adoption in success of AI, NITI has also proposed setting up of Centre of Research Excellence (CORE).  Besides this, the Aayog recommends setting up of International Centres of Transformational AI in collaboration with private players.

#### **Barriers for AI in India**

• NITI has identified barriers like lack of expertise, absence of enabling data ecosystem, high resource cost and low awareness, privacy and security issues and absence of collaborative platform for the adoption and application of AI.

#### Godzilla & Hulk as constellations

#### Why in news?

 NASA scientists have devised a new set of 21 modern gamma-ray constellations and named them after fictional characters such as the Hulk and Godzilla.

#### About the constellation

- The constellations were constructed with sources visible through the gamma-ray telescope to celebrate the completion of 10 years of operations of the Fermi Gammaray Space Telescope.
- The new constellations include a few characters from modern myths like the Godzilla and his heat ray, the Hulk etc.

#### What is Fermi LAT?

- Since July 2008, Fermi's Large Area Telescope (LAT) has been scanning the entire sky each day, mapping and measuring sources of gamma rays, the highest-energy light in the universe.
- Fermi observes light in the photon energy range of 8,000 electron volts (8 keV) to greater than 300 billion electron volts (300 GeV). An electron volt is a unit of energy close to that of visible light.
- Fermi bore the name Gamma-ray Large Area Space Telescope, or GLAST during 2008. NASA renamed it in honour of Professor Enrico Fermi, a pioneer in highenergy physics.
- Fermi is an astrophysics and particle physics partnership, developed in collaboration with the U.S. Department of Energy, along with important contributions from academic institutions and partners in France, Germany, Italy, Japan, Sweden and the U.S.

#### What are constellations?

It refers to the pattern of stars in the sky which appears to be distinctive that is easily identifiable. It was previously known as 'asterism' and were known in terms of mythological characters and creatures which were associated with the star pattern. Subsequently maps of these stars began to be made called as constellations.

## Earth's core solid and softer than thought

#### Why in news?

 A study has found that the inner core of the earth is solid, and softer than previously thought, which could improve our understanding of how the planet was formed.

#### The discovery

- Researchers at The Australian National University have detected shear waves, or "J waves" in the inner core.
- J waves are the type of waves which can only travel through solid objects.
- Detecting them has been considered the "Holy Grail" of global seismology since scientists first predicted the inner core was solid in the 1930s and 40s.
- It has been carried out using the correlation wave-field method looking at the similarities between the signals at two receivers after a major earthquake, rather than the direct wave arrivals. This technique has been used by the team to measure the thickness of the ice in Antarctica also.

#### About the inner core

- The inner core shares some similar elastic properties with gold and platinum.
- Inner core shear waves are so tiny and feeble they can't be observed directly.

#### Way forward to the discovery

- We are slowly getting to know the exact temperature of the inner core is, what the age of the inner core is, or how quickly it solidifies.
- The understanding of the Earth's inner core will help us in the maintenance of the geomagnetic field, without which there would be no life on the Earth's surface.

#### **Probiotics**

#### Why in news?

Harvard Medical School, urges us to consider the harms as well as the benefits of the Probiotics as probiotics have a series of advantages but among the immunocompromised individuals' probiotics can lead to infections.

#### What are probiotics?

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- Probiotics are live bacteria and yeasts that are good for humans, especially the digestive system.
- Probiotics are often called "good" or "helpful" bacteria because they help keep your gut healthy.
- It is referred to dietary supplements available in tablets, capsules, powders, lozenges and gums and foods such as yogurt and other fermented products.
- There are many general types of bacteria used as probiotics (two common ones are Lactobacillus and Bifidobacterium). Some yeast, such as Saccharomyces, can also act as probiotics.
- certain strains were found useful in preventing diarrhoea among children being prescribed antibiotics
- There is also evidence that they may help prevent necrotizing enterocolitis (a serious gastrointestinal condition) and death in preterm infants.
- Treatment or prevention of vulvovaginal candidiasis in women, pneumonia in patients and colds show some positive results.

#### The issue with Probiotics

- Probiotics are regulated less tightly than drugs.
- Probiotics did not show a significant benefit for chronic disease treatment.
- there is insufficient evidence to recommend their use to treat or prevent eczema, preterm labour, gestational diabetes, bacterial vaginosis, allergic diseases or urinary tract infections
- Even though the research on probiotics involves a specific organism, defined by genus, species and even they are pure and carefully dosed But we often have no idea what we are getting from the market.

#### **Full-body scanner**

#### Why in news?

The Bureau of Civil Aviation Security (BCAS) is about to come up with the technical norms for operating full-body scanners to screen passengers at airports.

#### Millimetre wave technology Machines

- The millimetre wave scanners produce a silhouette of the passenger being screened instead of a naked image, thereby safeguarding the privacy of the individual.
- These machines don't generate beeps, ensuring that there are no false alarms

every time a woman wearing jewellery such as a manga-sutra is scanned by it.

#### Millimetre waves

- The MM waves emit a frequency to the human body and get reflected back after striking the body or the hidden objects.
- The system then uses this wave information to generate a MMW holographic image.
- the image thus enables the determination of suspicious item hidden on the surface of the human body
- As compared to the visible lights and infrared rays MM has the ability to penetrate the non-metallic materials and have a resolution that the microwaves even do not have.
- MM wave radiation is non-ionizing and harmless to the human body and the radiation is 1/1000 of the cell phone radiation.

#### **Kaiga Nuclear Power Plant**

#### Why in News?

■ The Kaiga Nuclear power Generating Station's unit -1, has created a world record by completing 895 days of continuous operation as the longest uninterrupted operation having pressurised heavy water reactors (PHWRs).

#### Earlier records

- Unit-7 of Pickering Nuclear Generating Station at Ontario, Canada, operated continuously for 894 days and a few hours in 1994.
- The Advanced Gas Cooled Reactor (AGR), Heysham II-8 of the United Kingdom, holds record of 940 days of continuous operation.

#### **About the KGS-1**

- Kaiga now stands first in the world for continuous operation with regard to PHWRs and second among all nuclear power reactors.
- KGS-1 in Kaiga is located 56 km from Karwar, near river Kali (Its main tributaries Kaneri and Tatihalla) in Karnataka.
- It is an indigenously built pressurised heavy water reactor run by domestic fuel (uranium) that began its commercial operation on November 16, 2000.

#### The science behind Nuclear power:

 Nuclear power is the use of nuclear reactions that release nuclear energy to generate heat, which is then used in steam

- turbines to produce electricity in a nuclear power plant.
- Nuclear power can be obtained from nuclear fission, nuclear decay and nuclear fusion.

|  | Nuclear Fission  | Nuclear Fusion   |
|--|--|--|
| Definition:                              | Fission is the<br>splitting of a large<br>atom into two or<br>more smaller ones. | Fusion is the fusing<br>of two or more<br>lighter atoms into a<br>larger one.  |
| Natural<br>occurrence of<br>the process: | Fission reaction<br>does not normally<br>occur in nature.                        | Fusion occurs in<br>stars, such as the<br>sun.   |
| Byproducts<br>of the<br>reaction:        | Fission produces<br>many highly<br>radioactive particles.                        | Few radioactive<br>particles are<br>produced by fusion<br>reaction, but if a<br>fission "trigger" is<br>used, radioactive<br>particles will result<br>from that. |
| Conditions:                              | Critical mass of the<br>substance and high-<br>speed neutrons are<br>required.   | High density, high<br>temperature<br>environment is<br>required.   |

- The notion of splitting the atom arose from New Zealand-born British physicist Ernest Rutherford's work, which also led to the discovery of the proton.
- Uranium is the fuel most widely used by nuclear plants for nuclear fission.
- Uranium is considered a non-renewable energy source, even though it is a common metal found in rocks worldwide.
- The energy content of nuclear power is about 3 million times greater than that of fossil fuel. Consequently 1 gram of Uranium is equivalent to approximately 3 tonnes of coal.
- There are 3 nuclear isotopes of importance to nuclear power that exhibit this behavior.235U (Uranium-235), 239Pu (Plutonium-239) and 233U (Uranium-233). Of the 3, only 235U is found naturally on Earth. The two other isotopes, 239Pu and 233U can be created from the far more abundant 238U and Thorium nuclei via advanced nuclear techniques.
- Fusion reactions release 3-4 times more energy than fission. Hydrogen isotopes (Deuterium and Tritium) are the primary fuel used in experimental fusion power plants.

#### 10th Nuclear Energy Conclave

#### Why in News?

 The Union Minister of State (Independent Charge) for Development of North Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances & Pensions, Atomic Energy and Space, Dr Jitendra Singh inaugurated the 10th Nuclear Energy Conclave on the Theme: 'Nuclear Power-Towards a Clean & Base Load Energy'

#### Key points delivered at the event

- It laid emphasis on Dr. Homi J. Bhabha (founding father of country's Nuclear Energy Programme), who said that India's nuclear programme will be used for peaceful purposes.
- Cabinet has given its approval for construction of 10 units of India's indigenous Pressurized Heavy Water Reactors (PHWR).
- Government has amended sections of the Atomic Energy Act, 1962 through the Atomic Energy (Amendment) Bill, 2015, to form joint venture companies with other Indian PSUs to meet the additional funding requirements for further expansion of our nuclear power programme.
- Previously the atomic energy programme was confined mostly in Southern India, but now an atomic plant is in the process of being set up in Gorakhpur, Haryana near Delhi.
- There are non-power applications of nuclear energy like, nuclear agriculture, nuclear medicine, low cost solution for water purification, urban waste management and food preservation programme, etc.
- Earth temperature has to be brought down as per Intergovernmental Panel on Climate Change (IPCC), and this is possible essentially by decarbonising the energy resources.
- Energy resources are very important as GDP is directly related to them.
- It elaborated the use of nuclear energy for 'Clean India Mission' and other areas like food irradiation.

#### Pressurized Heavy Water Reactors (PHWR)

- It is a nuclear power reactor, commonly using unenriched natural uranium as its fuel, and heavy water (deuterium oxide D2O) as its coolant and moderator.
- The heavy water coolant is kept under pressure, allowing it to be heated to higher temperatures without boiling, much as in a typical pressurized water reactor.
- While heavy water is significantly more expensive than ordinary light water, it yields greatly enhanced neutron economy,

allowing the reactor to operate without fuel enrichment facilities.

#### Food irradiation

- Food irradiation (the application of ionizing radiation to food) is a technology that improves the safety and extends the shelf life of foods by reducing or eliminating microorganisms and insects.
- The Food and Drug Administration (FDA) approves and is responsible for regulating the sources of radiation that are used to irradiate food.
- Gamma rays are emitted from radioactive forms of the element cobalt (Cobalt 60) or of the element caesium (Caesium 137) is used routinely to sterilize medical, dental, and household products.
- X-rays are also widely used in medicine and industry to produce images of internal structures.

#### **Irradiation purposes**

- Prevention of Foodborne Illness by eliminating insects organisms that cause foodborne illness, such as Salmonella and Escherichia coli (E. coli).
- Destroying organisms that cause spoilage and decomposition and extend the shelf life of foods.
- To inhibit sprouting (e.g., potatoes) and delay ripening of fruit to increase longevity.
- Irradiation can be used to sterilize foods, which can then be stored for years without refrigeration. Sterilized foods are useful in hospitals for patients with AIDS or undergoing chemotherapy.
- National Aeronautics and Space Administration (NASA) astronauts eat meat that has been sterilized by irradiation to avoid getting foodborne illnesses when they fly in space.

## The downside of medical crowd funding

#### Why in News?

 Study covering the clinics in 8 countries, including India showed a red flag towards various 'dangerous treatments' carried via crowd funding.

## What is the issue with respect to the treatments?

 Online appeals are being carried out to raise money in dollars for unfounded and sometimes dangerous treatments and purported cures to help sick people.

- Researchers focused on homoeopathic or naturopathic cancer treatments, hyperbaric oxygen therapy (HBOT) for brain injury, stem cell therapies for brain and spinal cord injury and long-term antibiotic therapy for chronic Lyme disease which highly involved crowd funding.
- Study from the national cancer institute says that Patients taking in naturopathic or homoeopathic treatments for cancer are five times more likely to die than those who get chemotherapy and other standard treatments.
- Whereas Stem cell injections for brain and spinal cord injury are free-of-charge to the patients and constrained by strict laws.

#### What is crowd funding?

It is a method of raising capital through the collective effort of friends, family, customers, and individual investors primarily online via social media and crowdfunding platforms to leverages their networks for greater reach and exposure.

#### What is stem-cell therapy?

Stem-cell therapy is the use of stem cells to treat or prevent a disease or condition. Stem cells are the body's master cells from which all other cells with specialized functions such as blood cells, brain cells, heart muscle cells or bone cells are generated. Under the right conditions in the body or a laboratory, stem cells divide to form more cells called daughter cells. No other cell in the body has the natural ability to generate new cell types.

#### Homoeopathy

Homeopathy is a pseudoscience developed as a system of alternative medicine created in 1796 by Samuel Hahnemann with a claim that a substance that causes the symptoms of a disease in healthy people would cure similar symptoms in sick people. It is based on the principle of 'like cures like'.

#### **HBOT**

Hyperbaric oxygen therapy involves breathing pure oxygen in a pressurized room or tube. It is a well-established treatment for decompression sickness, a hazard of scuba diving. It also involves therapies for serious infections, bubbles of air in your blood vessels, and wounds that won't heal as a result of diabetes or radiation injury.

#### **Chronic Lyme disease**

 Chronic Lyme disease occurs when a person who's treated with antibiotic therapy for the disease continues to experience symptoms.

#### The need for disclosure

#### Why in News?

There are reports of Tuberculosis patients diagnosed with the drug-resistant tuberculosis (DRTB)in India who are frequently ignorant of the bedaquilines' toxic effects suggesting that the drug might be killing patients. Along with this there was no Phase 3 data for establishing a drug's safety.

#### Link between the deaths and bedaquiline

- World Health Organisation has suggested that all patients must be made aware of bedaquiline's mortality risk.
- A DRTB drug Kanamycin, which belongs to the aminoglycoside class of antibiotics, can cause permanent hearing loss and is toxic to the kidneys.
- Another DRTB drug, cycloserine, can trigger suicidal thoughts, while the drug isoniazid has been linked with peripheral neuropathy (nerve damage).

#### What is the Challenge?

The biggest barrier is the patient literacy. Some poorly educated patients think of TB as a death sentence and do not see the point of taking medicines.

#### What measures can be taken?

- Providing patient literacy on the sideeffects as the patient has a right to know.
- Advance knowledge of risks will help the patient mitigate them.
- Prior knowledge helps patients plan for painful side-effects ensuring they complete the treatment.

#### **About Tuberculosis**

- Tuberculosis (TB) is caused by bacteria (*Mycobacterium tuberculosis*) that most often affect the lungs.
- TB is spread from person to person through the air when people with lung TB cough, sneeze or spit, propelling the germs into the air. A person needs to inhale only a few of these germs to become infected.
- Tuberculosis is curable and preventable.
- When a person develops active TB, the symptoms include cough, fever, night sweats, weight loss etc.

#### What are the various Phases to Clinical trial?

- The development of investigational new drugs (INDs) involves performing clinical trials (or studies) to assess its safety and efficacy in humans. These trials are usually classified into 4 phases of development (Phase 1 to 4). Successful completion of each phase and approval by the authorities namely the European Medicines Agency (EMA), Food and drug Administration (FDA), Health Canada or the Ministry of Health, Labour and Welfare is required for progression to the next phase.
- Phase 0: referred to as 'human micro dosing studies' were introduced to both speed up the drug development process and to quickly identify safety issues,
- Phases 1 to 3: It is used to get approval for marketing.
- Phase 4: this study is conducted after a compound has been approved, for the primary purpose of post marketing surveillance.

#### Weaponization of data

#### Why in News?

- Apple chief executive Tim Cook said that customer data was being weaponised against us by the companies to increase profit.
- He congratulated Europe, Singapore, Japan, Brazil and New Zealand for moving to protect the privacy of their citizens
- Facebook CEO Mark Zuckerberg defended his company's ad-based business model and said that users were aware of a tradeoff for free services..
- Apple, which designs many of its products so that it cannot see users' data, has largely avoided the data privacy scandals has snared its rivals Google and Facebook this year.
- Google Chief Executive Sundar Pichai welcomed the global focus on privacy.

#### What is the issue?

- The data use and how consumers can protect their personal information are under the spotlight after big breaches of data privacy involving millions of internet and social media users.
- Governments are abusing users' data and their trust by deepening divisions, incite violence, and even undermine our shared sense of what is true and what is false.

#### Way forward

- Users should always know what data is being collected and what it is being collected for.
- This is the only way to empower users to decide what collection is legitimate and what isn't.

#### What is data piracy?

 Piracy is the unauthorized distribution, theft, reproduction, copying, performance, storage, sale or other use of intellectual property (IP) protected under copyright law

#### What is Weaponization of data?

Weaponization of the data means the information contained in a message or content piece is designed to affect the recipient's perception about something or someone in a way that is not warranted. The goal of weaponized information is bringing about a change in beliefs and attitudes which serves the attacker's purpose.

#### **SAGAR Discourse 2.0**

#### Why in News?

The Maritime Conference SAGAR Discourse 2.0 was organized by Forum for Integrated National Security, in Goa which was addressed by The Vice President of India, Shri M. Venkaiah Naidu on national and international space and outer space security.

#### **SAGAR Discourse 2.0**

- SAGAR Discourse 2.0 focuses on space domain
- The term SAGAR means Security and Growth for All in the Region which has some of the fastest growing economies, abundant natural resources, young and vibrant population and some of the brightest scientists and technologists.
- SAGAR Discourse is a flagship conference on National Security Governance by Forum for Integrated National Security (FINS), a Mumbai based think tank working in the field of integrated national security.

#### What are the key points stressed upon?

- An united response to ensure national security and said that security threats like cross border terrorism, apart from population explosion, ecological vulnerability and environmental deterioration.
- It stressed upon mitigation of space debris, development of capacity in space

situational awareness and advancement of International space laws for activities such as space mining and tourism need multipronged efforts at various levels.

## Background to India's participation into space technology

- In fifth-sixth century, Aryabhata represented the pinnacle of space knowledge at that time.
- In 1975, India launched the first satellite by the same name. Later, we had a successful Mars mission and our space scientists are now poised to launch a mission to send man to space.

#### **Way forward**

- India believes in the philosophy of share and care based on the idea of "Vasudhaiva Kutumbakam".
- Various such forums such as the Sentinel Asia program, disaster management agencies and Web-GIS technologies are there to support disaster management in Asia-Pacific region.
- Indian Space Research Organization (ISRO) is involved in space co-operation with the space agencies of over 40 nations and four multi-national bodies.
- As part of the neighbourhood first policy, the idea of SAARC Satellite will provide Communication and Meteorology support from geosynchronous orbit to serve the needs of SAARC member nations.
- Last year ISRO had facilitated data request for 16 disasters in nine nations in the Indo-Pacific region and has been at the forefront of search and rescue operations and is active in ASEAN Space Co-operation projects.
- India would be looking at the space cooperation at three levels—governmental, scientific-technological and private sector commercial level.

## Art created by Artificial Intelligence What is it?

- The Artificial intelligence generated the portrait of Edmond Belamy depicts a chubby man, which is looked as exactly painted by the man.
- This artwork is seen as the interface between the art and artificial intelligence.

#### Why in news?

 The art created by the Artificial Intelligence was set to auction for first time by auction house Christie.

#### **How AI created the Art?**

- The AI method of Creating the Art is called 'Generative Adversarial Network or GAN', which involves the two-part algorithm.
- The AI generated the new image based on the portraits that was fed into the computer, which follows by the difference spotting between a human-made image and one created by the AI.

## What is Generative Adversarial Network (GAN)?

- Generative adversarial networks (GANs) are a class of\_Artificial Intelligence algorithms used in unsupervised machine learning, implemented by a system of two neural networks contesting with each other in a zero-sum game framework.
- This technique can generate photographs that look at least superficially authentic to human observers, having many realistic characteristics.

#### What is Artificial Intelligence (AI)?

 Artificial Intelligence is intelligence demonstrated by machines, in contrast to

- the natural intelligence displayed by humans and other animals. In computer science AI research is defined as the study of intelligent agent.
- AI is developed to perform the specific task such as medical diagnosis, electronic trading, robot control, and remote sensing.
   AI has been used to develop and advance numerous fields and industries, including finance, healthcare, education, transportation, and more.



#### **Environment**

#### **Arunachal's Siang**

#### **About Siang**

- Brahmaputra River, locally known as Siang in Arunachal Pradesh, India. It is one of the major rivers of Asia, a trans-boundary river which flows through China, India and Bangladesh.
- With its origin in the Manasarovar Lake region, located on the northern side of the Himalayas in Tibet as the Yarlung Tsangpo River, it flows across southern Tibet to break through the Himalayas in great gorges.
- It flows southwest through the Assam Valley as Brahmaputra and south through Bangladesh as the Jamuna.
- In the vast Ganges Delta, it merges with the Padma, the popular name of the river Ganges in Bangladesh, and finally the Meghna and from here it is known as Meghna before emptying into the Bay of Bengal.

#### Why in news?

- People residing on the banks of the Siang river in Arunachal Pradesh expressed a sigh of relief, as water overflowing from a landslip-induced barrier across the river upstream in China eased within 14 hours.
- With the water level rising waning was issued to take precautionary steps, but later the water subsidised to normal level.

#### Tiger reintroduction programme

#### Why in news?

 Tension gripped around the villages located in Odisha's Satkosia Tiger Reserve (STR), after a man was allegedly killed by Sundari, a tigress brought from Madhya Pradesh as part of a tiger reintroduction programme.

#### What is Tiger reintroduction programme?

- The tiger, like many other large carnivores, has experienced serious declines in its global distribution and abundance.
- Reintroduction is one of the best conservation tools developed to reverse such declines in a range of species across the globe.
- Once the factors responsible for the original extirpation of a large carnivore have been removed, reintroduction has

proved a viable conservation option given the backdrop of low human densities, extensive land availability and the commitment of adequate financial and socio-political support for the reintroduction project.

#### Why varied behaviour of the tiger?

- However, the tiger is sometimes not able to adapt to the new environment. Different reasons are being attributed to Sundari's repeated straying into human habitations.
- According to State Forest Department sources in Bandhavgarh, the tigress used to roam around in the eco-tourism area where human movement was significant. The tigress is yet to adapt to conditions in deep forest areas.
- The three-year-old tigress is in search of a male partner for mating.

#### **C-FLOWS**

#### Why in news?

National Centre for Coastal Research (NCCR), Chennai, and IITs, got together to build a flood warning system customised for use in Chennai. Carrying the acronym C-FLOWS, which stands for Chennai FLOod Warning System, the six-module ensemble can predict flooding due to heavy rainfall, sea-level rise and increase in water levels of the three rivers — Cooum, Adyar and Kosasthalaiyar — that traverse the city.

#### Ward-level data:

- The State government shared data such as ward boundaries, population details, infrastructure available across Tamil Nadu, which have been used in the warning system.
- Knowing the elevation at different spots, the system can predict the way the area would flood based on different scenarios that have been simulated.
- Inputs were taken from the India Meteorological Department (IMD) on forecast and National Centre for Medium Range Weather Forecasting (NCMRWF), which gives the prediction for rain 10 days in advance.
- The system can predict what would happen at the level of individual wards.

- The flood itself cannot be avoided, but it can be managed and the disaster mitigated.
- Next plan is to develop such a system for Mumbai city and Cochin area.

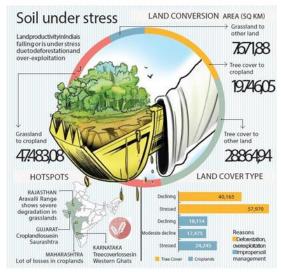
#### **Report on Land Degradation**

#### Why in news?

- Recently a report on land degradation in India was given by the Indian government to the UNCCD.
- The report was submitted as a part of Indian government "National Action Plan to Combat Desertification" committed to UNCCD.

#### **About the report**

- Rajasthan, Maharashtra and Karnataka are among the states that are witnessing high levels of land degradation.
- The report emphasised that land productivity of nearly 100,000 square kilometres of area under tree cover had either declined or was under stress due to reasons such as deforestation and overexploitation.
- The total land area under water bodies across the country had decreased from 118,960,32 square kilometres in 2005 to 118,469,61 square kilometres in 2015.



#### **About the UNCCD:**

- It is the first and only internationally legally binding framework set up to address the problem of desertification
- Objective: To combat desertification and mitigate the effects of drought and desertification.
- Secretariat location: Bonn, Germany.
- India became a signatory to UNCCD on October 14, 1994 and ratified it on December 17, 1996.

 Ministry of Environment, Forest and Climate Change is the nodal Ministry for the Convention.

Members: 196 (195 states + the European Union)

#### National action programmes

- Member countries should constitute a National Action Programmes.
- Under this member countries will identify the factors contributing to desertification and the practical measures necessary to combat desertification and mitigate the effects of drought.

## "Harit Diwali-Swasth Diwali" campaign

#### Why in news?

- This campaign was initiated this week wherein large number of school children especially from eco-clubs participated and took pledge to minimize bursting of crackers.
- During this intensive campaign, the children were advised to celebrate Diwali in an environment-friendly manner by gifting plant sapling to their relatives and friends.

#### Rationale behind the campaign

- Air pollution is a serious health issue in the country especially in the northern parts during winter seasons. The air pollution in the northern region is attributed to dust, burning of crops in certain states, burning of garbage construction and prevailing climatic conditions.
- This air pollution has serious impacts on the health of children aged people and people suffering from respiratory ailments.
- Crackers contains combustible chemicals that include potassium chlorate powdered aluminium, magnesium, salts of barium, copper, sodium, lithium, strontium etc. and emits smoke on combustion of these chemicals along with sound.

## **3rd Decadal International year of Reefs**

#### Why in news?

The International Conference on Status and Protection of Coral Reefs (STAPCOR - 2018) with the theme "Reef for Life" was inaugurated by the Union Minister of Environment, Forest and Climate Change (MoEFCC) on 22nd October at Bangaram

## coral Island of Union Territory of Lakshadweep.

 About 150 delegates both International and National, are participating in this mega event at Bangaram Island from 22nd to 24th October, 2018.

#### **About the Conference**

■ The Ministry of Environment and Forest organised this mega conference with the technical support of Zoological Survey of India, IUCN and ENVIS (Environment Information System) in consonance with declaration of the year 2018 as 3<sup>rd</sup> decadal International year of Reefs.

#### **About International Coral Reef Initiative (ICRI)**

- International Coral Reef Initiative (ICRI)
  has declared year 2018 as International
  Year of the Reef (IYOR 2018). It is
  designed to raise awareness about the
  threats to coral reef.
- The International Coral Reef Initiative (ICRI) is an informal partnership among nations, international organisations and non-government organisations to help protect coral reefs globally.

#### **About Coral Reefs**

 Corals are a kind of calcareous rock, chiefly made of the skeletons of minute sea organisms called 'polyps'. Coral reefs and atolls are formed due to the accumulation and compaction of the skeletons of these lime secreting organisms.

#### **Conditions for Growth of Coral Reefs**

- Mostly confined to the tropical belt. The most favourable temperature is 23°C to 25°C.
- Corals can live only in saline water.
- For the growth of coral the depth of the water should not exceed 200m.
- Corals also require sediment-free, clean water.

#### **Coral bleaching**

- When water is too warm, corals will expel the algae (zooxanthellae) living in their tissues causing the coral to turn completely white. This is called coral bleaching.
- When a coral bleaches, it is not dead.
   Corals can survive a bleaching event, but they are under more stress and are subject to mortality.
- Coral bleaching is caused due to global warming and increased pollution.

#### **Cracking down on the Crackers**

#### Why in news?

 Recently Supreme Court issued a verdict by fixing time slots for bursting crackers on Diwali and came up with ban on loud and toxic firecrackers.

#### **SC** guidelines

In order to tackle the noise and the pollution during the festivals, the Supreme court has mandated a series of steps to regulate the use of firecrackers:

- 1. To overcome the problem of huge garbage created due to unburnt/half burnt crackers SC asked PESO to ensure the quality.
- 2. Use of reduced emission firecrackers to cut down Particulate Matter(PM) and use charcoal as an alternative.
- 3. PESO should ensure that crackers are within the permissible decibel limits.
- 4. PESO has to ensure that no banned chemicals like lithium/arsenic/lead are not used.
- 5. Barium salts emits poisonous gas. As an immediate measure banning of Barium salts may be considered.

#### **About PESO**

- Petroleum And Explosives Safety
   Organisation (PESO) is the department
   formed by Government of India to control
   and administer the usage of explosives,
   petrol stations in India.
- It functions under Department Of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry.

#### No BS-IV from 2020

#### What's in the news?

The Supreme Court recently banned the sale and registration of motor vehicles conforming to the emission standard Bharat Stage-IV in the entire country from April 1, 2020.

#### What are Bharat Stage Emission Standards?

- Bharat Stage emission standards, introduced in 2000, are emission standards that have been set up by the Central government to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles.
- The different norms are brought into force in accordance with the timeline and standards set up by the Central Pollution Control Board which comes under the Ministry of Environment and Forests and Climate Change.

## What is the mechanism that is followed under BS?

- BS is based on Euro norms.
- Euro norms define the maximum limit of pollutant that a vehicle can emit. (CO2, nitrogen oxide, sulphur and suspended particulate matter).
- If vehicle emits more than this limit, it cannot be sold in Europe.
- In India, we follow Euro norms under the label "Bharat stage" norms. We are gradually implementing them in more and more cities.
- India has been following European emission norms, usually with a time lag of five years.

#### What is the benefit of these norms?

 Bharat stage emission standard regulates the output of air pollutants from internal combustion engine equipment, including motor vehicles.

#### **Ganga Sagar Mela**

#### **About Ganga Sagar Mela:**

- Ganga Sagar mela is one of such festival of India celebrated during 14th – 15th January every year attracts thousands of pilgrimage from all around the world.
- Ganga sagar mela happens every year during Makar Sankranti,
- It finds thousands of devotees coming over to seek righteousness at Sagar Island's southern tip in West Bengal.
- Ganga is regarded as the holiest river in Hindu religion. It is said that by taking a holy dip in her lap, it cleanses your sin.

#### Why in news?

 There has been an exponential increase in the number of pilgrims coming to the Ganga Sagar Mela, which takes place at

## the **Sagar Island** every year during **Makar Sankranti**.

- It has been responsible for the worsening water pollution, prompting scientists to raise serious concerns about the likely outbreak of several diseases.
- The number of pilgrims descending on the Sagar Island to take a dip at the place where the Ganga meets the Bay of Bengal, has risen from 2 lakh in 1990 to 20 lakh in 2018.

#### **About Sagar Island**

- Sagar is the biggest island of the Sundarbans archipelago, with a population of about 2.12 lakh people.
- Several studies have shown that the island is at the frontline of climate change, facing serious erosion on its east and west sides due to rising sea level and tidal surges.

#### About the pollution during the event

- A health survey was conducted with the local people and it was found that diseases like cholera, dysentery, and skin disease were predominant in the post-Ganga Sagar Mela period due to mass bathing.
- The study noted a sharp deterioration in water quality parameters between the premela and post-mela period.
- For instance, the concentration of faecal coliform bacteria, which was 22 MPN (most probable number) in 100 ml of water two weeks before the mela, was found to be 9,963 MPN two weeks after the mela.

#### Steps to reduce pollution

- Make this event a part of Clean Ganga Mission, so that strategy to clean Ganga is developed at the earliest.
- Establish sewage treatment plants nearby.
- We need to make the mela plastic-free to prevent plastics from clogging the ocean.

#### **Culture**

#### Saffron marigold

#### Why in news?

 Saffron Marigold will be chosen as the symbol of Indian soldier's sacrifices in the First World War, as the world marks the centenary of the end of the First World War.

#### **Significance of the move:**

- It would acknowledge the valour and sacrifice of the Indian armed forces including those who fell in the two world wars.
- In line with this 'India remember project' proposed that the marigold flower will join the poppy as a uniquely Indian symbol of remembrance.

#### Why it was chosen?

- The marigold was chosen because it is easily and widely available and also because saffron is often seen as a colour of sacrifice.
- Since 2016, the marigold has been widely promoted in all India commemorative events around the world such as it used in United Kingdom along the poppy.

#### **India remember project:**

- It is a joint endeavour of the 'India and the Great War' Centenary Commemoration project initiated by United service institution of India (USI) in 2014 and the Commonwealth War Graves Commission (CWGC)
- This Project derives his support from the Ministry of External Affairs and the British High Commission.

#### **About First World War:**

- World War-I is known as the Great War which lasted from 28 July 1914 to 11 November 1918.
- The conflict between European nations is seen as causes for First World War.
- The Treaty of Versailles (11/11/1918) ended the First World War and brought in the formation of League of Nations and emergence of USA and Japan as powerful country in the World.

#### Vishwa Shanti Ahimsa Sammelan

#### Why in news?

 President Ram Nath Kovind inaugurates a three-day 'Vishwa Shanti Ahimsa Sammelan'(World peace and Non-violence conference) in Nashik district of Maharashtra which was organized by the Bhagwan Rishabhdev 108 Feet Vishalkai Digambar Jain Murti Nirmaan Samiti.

#### Key events at the conference

- The first international 'Bhagwan Rishabhdev Award' was given to the Teerthanker Mahaveer University in Moradabad, Uttar Pradesh.
- A book named 'Sarvoccha Digambar Jain Pratima' was released.
- The jain tradition of 'Apirigraha' (not taking what is more than essential to live) was given as the essential solution to the emerging challenges of climate.

#### Who is Bhagwan Rishabhdev?

- He is the first of 24 Tirthankara in Jainism that flourished prior to the Indus Valley civilization. He is also known as Adinatha.
- He is one of the four Tirthankaras who attracts the most devotional worship among the Jains.
- He is symbolized as bull & Hindu text Vedas mentioned the name Rishabha.

#### **About Iainism:**

- Jainism lays heavy emphasis on nonviolence (Ahimsa) and the believers of this religion, whether a monk or a householder, follow a very strict, well-disciplined life.
- Lord Mahavira is considered is last tirthankara, who is contemporary to lord
   Buddha
- Around 300 century B.C Jainism was divided into 2 parts: Shwetambara (white clad) and Digambaras (sky clad).
- Jaina text uses Prakrit language instead of Sanskrit containing simple and homely morals
- The patronage of Kings like Chandragupta Maurya to Jainism is seen as the success of Jainism.

## **Schedule Languages & National Unity Why in news?**

The National Unity Day or Rashtriya Ekta Divas will be commemorating Patel's birth anniversary on October 31 in all Central schools in the country promoting the 22 scheduled regional languages for 22 consecutive days, on advice of Government.

#### **Background**

 It aims at strengthening the cultural relations between the people of different parts of country under the Prime Minister's 'Ek Bharat- Shreshtha Bharat Yojana'.

## Constitutional Provisions of the Scheduled Language:

- 22 languages are listed in the Eighth Schedule of Indian Constitution.
- As per the Article 344(1) and 351 of the constitution, the Eighth Schedule of the Indian Constitution contains a list of 22 scheduled languages viz. Assamese. Gujarati, Bengali. Hindi, Kannada. Kashmiri, Malayalam, Marathi, Odia. Punjabi, Sanskrit, Tamil, Telugu, Urdu, Sindhi (added by 21st Amendment Act, 1967), Konkani, Manipuri, Nepali (added by 71st Amendment Act, 1992), Bodo, Dogri, Maithili, Santal (added by 92nd Amendment 2003).

#### About Ek Bharat - Shreshtha Bharat Yojana:

- It was launched by the PM Modi on Ekta diwas, which aims to celebrate the unity in diversity culture of different states.
- It establishes long term engagements and creates an environment which promotes learning between states by sharing the best practices and experiences.

#### **Women of India Organic Festival**

#### What is it?

- The woman of India organic festival is a platform to empower women farmers and entrepreneurs in a festive and fruitful manner thereby boosting the country's organic culture.
- It's the country largest organic festival, with the participants from approximately all the states of India.

#### Why in news?

• Union Ministry of Women and Child Development organized the 5<sup>th</sup> edition of Women of India organic festival from 26<sup>th</sup> October to 4<sup>th</sup> November 2018 at Indira Gandhi National Centre for the Arts.

#### **Significance of this festival**

- All the participants from the remotest parts of the country will travel and stay in capital free of cost for the entire duration of the festival and they will have opportunities to sell their products.
- It will enhance sale of organic products, by which consumer can adopt healthier lifestyle and protect the plants.

 This festival is the perfect example of creating a revolution and making women self-reliant.

## About Indira Gandhi National Centre for the Arts (IGNCA):

- It's the autonomous institution functioning under the Ministry of Culture.
- It serves as a major resource centre for the Arts, especially through written, oral and visual source materials.
- The five trees such as Asvattha, Nyagrodha, Asoka, Arjuna, Kadamba which were planted by the then PM Rajiv Gandhi in IGNCA are considered as most significant in the Indian civilization.

#### Rashtriya Ekta Diwas

#### What is it?

- With a view to foster and reinforce dedication to preserve and strengthen' unity, integrity and security of nation, Rashtriya Ekta Diwas (National Unity Day) was observed all over the country on 31st October from 2015 onwards to commemorate the birth anniversary of Sardar Vallabhbhai Patel.
- The celebration would provide the opportunities to youth and others to maintain the integral strength of the Nation.

#### Why in news?

 Various Ministries, PSUs and organizations across the country scheduled several events to celebrate Rashtriya Ekta Diwas on 31st October, 2018

## S.V. Patel (The Iron Man of India) birthday as unity Day

The reason behind marking his birthday as National Unity Day dates back to his term as Home Minister of India, credited for the integration of over 550 independent princely states into India from 1947-49 with the Independence of India.

#### **Contribution of S.V. Patel:**

- He initiated the village-to-village tour to involve maximum people in the statewide revolt to refuse the payment of taxes.
- He led the Sathyagraha in Nagpur in the absence of Gandhi in 1923 against the Law that restricted the hoisting of the Indian flag.
- He played a significant role in integration of several princely states into the India.
- He was the chairman of the committee that was responsible for fundamental rights,

tribal and executed areas, minorities and provincial constitution.

#### Ramnagar's Ramlila

#### Why in News?

 Once again the Ramlila at Ramnagar, Varanasi during Dussehra attracted attention bearing the name of intangible cultural heritage under UNESCO in 2005.

#### **About Ramlila**

- It is a 188-year-old Lila held during the 'Lila month'
- Ramlila, literally means "Rama's play", is a performance of the Ramayana epic in a series of scenes that include song, narration, recital and dialogue recalling the battle between Rama and Ravana.
- The prominent Ramlilas are held in and around 5 sq. km of Ayodhya, Ramnagar and Benares, Vrindavan, Almora, Sattna and Madhubani.
- This staging of the Ramayana is based on the Ramacharitmanas, one of the most popular storytelling forms in the north of the country composed by **Tulsidas** in the sixteenth century in a form of Hindi in order to make the Sanskrit epic available to
- The Ramlila brings the whole population together, without distinction of caste, religion or age with all the villagers participate spontaneously, playing roles or taking part in a variety of related activities.
- The Lila culminates 40 days later on Ashwin Purnima.

### Antiquities and Art Treasures Act

#### Why in News?

The article brings into discussion the outdated Antiquities and Art Treasures Act, 1972 along with its holistic regulation in order to conserve the history.

#### **About the Antiquities and Art Treasures Act**

- It was enacted in 1972 with an objective to control the export business in the treasures of antiquities and sculptures, to conserve and help avoid the smuggling and fraudulent commercial activities of the antiques
- 'Antiquity' refers to any sculpture, coin, epigraphs of images, other crafts and art separated from caves or structures or the articles which represents science, expertise, literature, tradition, religion and political affairs from the olden ages

 The Central Government or the authorized person can only export the objects that are historic or art treasure guided by The Customs Act of 1962 which prohibits such export.

#### **Issues with the existing system**

- The whole task of conserving civilisational history contained in antiques and artefacts has been given to single archaeological agency.
- It does not include other important components of conservation groups as litterateurs, historians, anthropologists and curators etc. which add value into our material culture.
- Registering antiquities with the Archaeological Survey of India (ASI) has long been a difficult procedure for most collectors
- The rule is a 100 year old and to ascribe importance by virtue of religious sentiment, age to every significant and insignificant work of art will result in a myopic view towards our history.
- Cultural vigilantism, public shaming and the resultant media trial have led to casting a long shadow on the production of knowledge of our past.

#### Way forward

- A new law should be framed with the conjunction of all disciplines like historians, anthropologists and curators along with the archaeological agency.
- The private connoisseurship, individual collectors, trusts and foundations should be bought within the legal process of buying and governing the acquisition of artefacts etc.
- An urgent amendment to existing laws is thus a need of the hour to save our material culture and to foster the creation of secular spaces where everyone can enjoy and appreciate our past.

#### Arya Mahasammelan

#### What is Arya Mahasammelan?

The Arya Mahasammelan is touted as being a platform for the Arya Samaj to project its views on major caste-related issues and problems concerning backward sections of society. The convention also aims to spread a message of human welfare originating from the Vedas, promote universal brotherhood and ensure safeguarding of social morals.

#### Why in news?

 The President of India, Shri Ram Nath Kovind, inaugurated the International Arya Mahasammelan – 2018 in Delhi.

#### What is Arya Samaj?

- Dayanand Saraswati founded the Arya Samaj in Bombay in 1875, with its headquarters established in Lahore.
- He founded the Arya Samaj with the belief that Aryans were the chosen people, the Vedas the chosen gospel and India the chosen land.
- Arya Samaj believes in infallibility of Vedas, opposes the idol- worship and believes in one God, it rejects the Brahmanical dominance of spiritual and social life of Hindus, it advocated for equal status for women in the society.
- Arya Samaj Programme like Shuddhi Movement (reconversion of other religious person to Hinduism) and protection of the cow are seen as controversial.
- Arya Samaj was very successful in the Punjab and also to a certain degree in U.P, Gujarat and Rajasthan.

#### **About Dayanand Saraswati**

- He was the social and religious reformers in 19th century British India.
- He extolled spiritualism and nationalism, and appealed to the people to fight for Swarajya.
- He wrote many books. His major contributions are Satyartha Prakash, Sanskarvidhi, Rigved Bhashyam, and Veda Bhasva.

## Tagore Award for Cultural Harmony What is it?

- The Tagore award was instituted in 2011 by the Government of India during the commemoration of 150th Birth Anniversary of Rabindranath Tagore.
- The award is given for outstanding achievement in fostering harmony, universalism and values of cultural harmony especially in conflict or extreme situations
- The Jury committee of this award is under the Chairmanship of Prime Minister, which comprises of Chief Justice of India and other two members.

#### Why in news?

 The Tagore Award for Cultural Harmony for the years 2014, 2015 & 2016 is being conferred on the Rajkumar Singhajit Singh, doyen of Manipuri dance; Chhayanaut (a cultural organization of Bangladesh) and Ram Vanji Sutar, India's greatest sculptors, , respectively.

#### **About Manipuri Dance:**

- Manipuri dance is one among the classical dance of India which originates in the North Eastern state of Manipur.
- Manipuri dance is associated with the dance of Shiva and Parvati and other gods and goddesses who created the universe.
- The most popular forms of Manipuri dance are the Ras, the Sankirtana and the Thang-Ta.

#### **About Chhayanaut**

- Chhayanaut is a cultural organization of Bengal which played a leading role in promoting Tagore's works and Bengali culture, music and literature not only within Bangladesh, but across the world.
- When the Rabindra Sangeet was banned in East Pakistan during the Bangladeshi Independent movement, Chhayanaut continued to promote liberal expression through secret renditions of Tagore songs and discussions on Tagore.
- It has built a close bridge of understanding and cultural exchange between Bangladesh and India, especially West Bengal.

## Lal Bahadur Shastri National Award What is it?

- This award was instituted in 1999 by Lal Bahadur Shastri Institute of Management in memory of India's second Prime Minister Lal Bahadur Shastri.
- It's awarded annually to an Indian who is exceptionally outstanding and a distinguished business leader, management practitioner, public administrator, educator or institution builder for his/her sustained individual contributions and achievement.

#### Why in news?

■ Vice President Venkaiah Naidu presented the 19th Lal Bahadur Shastri National Award for Excellence in Public Administration to Eminent jurist Fali S. Nariman.

#### **About Lal Bahadur Shastri:**

 He became the member of INC and actively participated in freedom struggle like salt sathyagraha and Quit India movement, after he became the second Prime Minister.

- He voluntarily resigned from the Post of Union Railway Minister for taking moral responsibilities to the Ariyalur train accidents in Tamil Nadu.
- His achievements ranging from promoting Green and White Revolution to steering India successfully during the turbulent times of the India-Pak war of 1965.
- He signed the\_Tashkent Declaration with Ayub Khan under Soviet moderation on 10<sup>th</sup> January 1966 which formally ended hostilities with Pakistan.

#### **Tradition of Crowd Funding**

#### What is crowd funding?

- Crowdfunding is the practice of funding a project or venture by raising small amount of money from a large number of people, typically via the Internet. Crowd funding is a form of crowd sourcing and alternative finance.
- Crowd funding as a new concept got invoked mostly in the context of innovate creative project or social enterprise.

#### Why in news?

 Villages in the Andhra Pradesh's Srikakulam district recently deployed their own version of crowdfunding to finance the weddings of girls in their own community.

#### **Crowd funding in Andhra Pradesh Village:**

- It's an age-old tradition in a remote tribal settlement in Eastern Ghats where the entire community shared the wedding expenditure and sponsored the setting up of the new couple's household when the alliance is fixed.
- It's mandatory for every family to share in the responsibility of performing the wedding for every one of the girls in the hamlet.

#### Other instance of crowd funding in India:

- A crowd funding campaign was launched for preserving the theatre art form Koodiyattam, to fund the training of new generation artists.
- Paralympics badminton star Mark Dharma is crowd funded to compete at the Thailand Para badminton International 2017.

#### **Pros and Cons of Crowd funding:**

- There is no formal banking system and hence no tedious procedure required in crowd funding.
- It enhances the productivity of innovation and entrepreneurship and consume less time.
- Reputation is damaged if there is a failure to meet goals and targets or to generate interest which results in a public failure.
- Since it is without a regulatory framework there is a fear of public misuse, problem of creditworthiness and enforceability.

#### Maharani Jindan Kaur:

#### Who is Maharani Jindan Kaur?

- Maharani Jindan Kaur was regent of the Sikh Empire from 1843-1846, she was the wife of Maharaja Ranjit Singh and mother of Maharaja Duleep Singh the last Sikh ruler of Punjab.
- She was described as "The Messalina of the Punjab", a seductress too rebellious to be controlled.
- After the Sikhs lost the First Anglo-Sikh War she replaced from Regent in 1846 by a council of regency, under the control of British
- The award winning movie directed by the American writer Michael Singh 'Rebel Queen' narrated the life story of Rani Jindan Kaur, was shown in New York International Sikh Film Festival 2010 which was

#### Why in news?

 An emerald and seed-pearl necklace owned by Maharani Jindan Kaur, has sold for £187,000 at a London auction as part of the "Bonhams Islamic and Indian Art Sale", after triggering a fierce bidding war.

#### **Significance of this jewellery:**

- These gold earrings are a powerful reminder of a courageous woman who endured the loss of her kingdom, and persecution and privation, with great dignity and fortitude.
- The earrings were part of a collection plundered by the British army when she was deposed in 1846. The items then confiscated and brought to London included the Kohinoor diamond and the Timur Ruby.

#### **Miscellaneous**

#### **National Police Memorial**

#### What is National police memorial?

- The memorial has been built in recognition of the supreme sacrifices made by nearly 35000 police personnel since independence.
- To honour the police men 30-foot 'granite pillar' weighing around 238 tonnes has been installed in national police memorial Delhi along with the 'wall of Valour' and the names of police personnel who were killed in the 1965 Indo-Pak war, 26/11 attacks, 2001 parliament attack.

#### Why in news?

PM Modi, dedicated the National Police Memorial to the Nation by unveiling the country's first National Police Museum and announcing the award in the name of Netaji Subash Chandra Bose on Police Commemoration Day (October 21st).

#### About Netaji Subhash Chandra Bose Award

- This award recognizes the bravery and courage of National and State Disaster Response force (NDRF & SDRF) in saving lives of people, in the wake of a disaster.
- The award would be announced every year.

#### **About Police Commemoration Day**

- Police Commemoration Day is observed on October 21<sup>\*\*</sup> every year to remember the supreme sacrifices of ten Central Reserved Police Force (CRPF) men who died in Chinese firing in 1959 at Hot Springs.
- Since 2012, the Police Commemoration Day parade is being held at the National level at the police memorial, Chanakyapuri.

#### **Modernization of police force:**

To modernize the police force in country, the following should be considered

- The police force should adopt the technology and innovation in their daily discharge of duties.
- Implementation of modernization of police forces scheme (MPF), which is modernizing the police forces through technology, modern communication and weapons.

#### African trouble Island



#### What is it?

- Migingo Island in Lake Victoria is the densely populated island, consists of fishing communities around the Lake Victoria.
- Island is being shown on the Kenyan side since the 1920's, but the boundary delineation in 1926 created some contradiction between the Uganda and Kenya.
- Recently the water levels in the lake have declined to nearly one meter and the island reaches 10-15 meter above the lake level.

#### Why in news?

 Migingo Island in Lake Victoria is set to be the source of tension between the Kenya and Uganda, which is being claimed by both the countries, unable to decide to whom it really belongs.

#### **About Uganda- Kenya dispute on Island:**

- Tension got created when the Ugandan authorities sent officials to tax the Migingo fishermen and offer protection against pirates in 2000's, which insisted the Kenyan government to deploy the force in Mignigo.
- The two countries have decided to create a joint commission to determine where the water border is relying on maps dating from 1920's.



**About Lake Victoria:** 

- Lake Victoria is the second largest fresh water lake in the world by area. It is the largest tropical lake in the world.
- River Nile originates in Lake Victoria
- The lakes Stretches into Kenya, Tanzania and Uganda, its catchment area also touches the Burundi, Rwanda. The lake known for its high level of unique biodiversity.
- Three quarters of freshwater species endemic to Lake Victoria basin face the threat of extinction, conservationists warned the biodiversity is lake is being decimated.

## World Longest Sea Bridge

#### Why in news?

 Chinese president Xi has opened the world's longest sea-crossing bridge and tunnel, linking the financial centre of Hong Kong, the gambling hub of Macau and western reaches of the Pearl River Delta at the heart of southern China's economic boom.

#### Significance of the bridge:

- It's on the heart of the integrated Great Bay Area (GBA) covering 11 major cities and comprising 68 million people.
- The bridge has been built to withstand super-typhoons and high magnitude earthquake.
- It cuts the travel time between the three cities from three hours to just 30 minutes.
- As a safety measure authorities will use the facial recognition to detect yawning drivers on bridge.



- The bridge is a symbol of validating the 'One country, two systems' formula under which Hong Kong and Macao have substantial political autonomy in China.
- The Bridge has been opened at the time, when China faces a pressure from trade war with USA, Volatile financial market and a slowing economy and the bridge is expected to bring the economic liberalization in China.

#### Other major Sea Bridge in world:

- Bandra-Worli Sea Link in India.
- Tokyo Bay Aqua-Line in Japan.
- Donghai Bridge in China
- San Francisco Bay area in USA

## Main Nahin Hum Portal & App

#### What is it?

The portal, works on the theme "Self4Society", which enables IT professionals and organizations to bring together their efforts towards social causes and service to society on one platform.

#### Why in news?

 PM Modi Launched the Main Nahin Hum Portal and App during the last week of the October.

### **Advantages of the Main Nahin Hum:**

- The portal is expected to help catalyse greater collaboration towards the service of the weaker sections of society, especially by leveraging the benefits of technology.
- It is expected to generate wider participation of interested people who are motivated to work for the benefit of society.

#### **Seoul Peace Prize**

#### What is Seoul Peace Prize?

- The Seoul Peace Prize was established in 1990 to crystallize Korean people's yearning for peace with the rest of the world and to commemorate the success of the 24th Olympic Games held in Seoul, Republic of Korea.
- It has been awarded biennially to those individuals who have made their contributions to the harmony of mankind, reconciliation between nations and to world peace.

#### Why in news?

 The Seoul Peace Prize Committee has been conferred to PM Modi towards the deepening of the India's partnership with republic of South Korea.

#### What were PM's contributions?

- Crediting 'Modinomics' for reducing social and economic disparity between the rich and the poor.
- Initiatives to make the government cleaner through anti-corruption measures and demonetization.
- Contribution towards regional and global peace through a proactive foreign policy like 'Modi Doctrine' and the 'Act East Policy'.

#### **Past laureates of Seoul peace Prize:**

The distinguished global personalities like former UN Secretary General Kofi Annan and Ban Ki-Moon, German Chancellor Angela Merkel and renowned international relief organizations like Doctors Without Borders and Oxfam etc are the past laureates.

#### **About India- South Korea relation:**

- India South Korea relation dating back to the 2000 years ago, where India played an interesting role in Korean War, India among the few countries maintained diplomatic relations with North and South Korea during the Cold War.
- South Korea became an important participant in India's economic rejuvenation after LPG reforms.
- Both countries signed the Comprehensive Economic Partnership Agreement (CEPA), Regional Comprehensive Economic Partnership (RCEP) and civil nuclear cooperation agreement.
- India and South Korea established a Indian Cultural Centre (ICC) to boost people to people relation, India extended the Visaon-arrival (VoA) facility to South Korea.

#### **CAPAM Award**

#### What is a CAPAM award?

- CAPAM is a non-profit association representing an international network of over 1100 senior public servants, Heads of Government, leading academics and researchers located in over 50 different countries across the Commonwealth.
- The association is guided by international leaders who believe in the value of networking, knowledge exchange and the promotion of good governance for the betterment of citizens in the Commonwealth countries.
- CAPAM has been announcing its International Innovations Awards (IIA) Programme bi-annually, since 1998.
- The CAPAM Awards celebrate the spirit of innovation in the public service by recognizing organizations that have made significant contributions to improve governance and services in the public sector.

#### Why in news?

 India's Unnayan Banka and Unified Agriculture Markets initiatives have won the Commonwealth Association for Public Administration and Management (CAPAM) award

#### Why India win this Award?

- The initiative 'Unnayan Banka' has been selected under the Category "Innovation Incubation". "Unnayan Banka- Reinventing Education Using Technology' of Banka District, Bihar. Which envisages the "Quality education for all especially for those at the bottom of the Pyramid, using latest technologies". It's a holistic model of overall development of youths from Education to Employability.
- Another initiative entitled "Unified Agriculture Markets" of Co-operation Department of Government of Karnataka has also been selected under the Category 'Innovation in Public Service Management'.
- This initiative has also been awarded the overall Gold Award for CAPAM Awards, 2018.

#### **India-CAPAM relation:**

- The Department of Administrative Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances and Pensions is an institutional member of CAPAM.
- K. V. Eapen, Secretary Department of Administrative Reforms & Public Grievances (DARPG) has been elected to the Board of CAPAM, recently.

## **Experiencing North East festival**What is it?

- The festival will showcase the vibrant strengths of North East India and display its art, handicraft, handlooms, tourism, food, culture etc such as conducting the daily special performance by eminent cultural troops and artistries from North East.
- This event is the part of the 'Destination North East' series, this year the focusing theme are Adventure Tourism in North Eastern Region (NER), Science & Technology Interventions in North East Region (STINER), Act East & NER will provide opportunities for discussions and brainstorming sessions.

#### Why in news?

 Northern eastern council (NEC), Ministry of Development of North Eastern Region (DoNER) in collaboration with IIC organizing the "Experiencing North East" festival depicting the uniqueness of North Eastern culture at the India International centre (IIC, New Delhi).

#### Why this festival?

- India's North East, comprising 8 states of Assam, Arunachal, Meghalaya, Manipur, Mizoram, Nagaland, Tripura and Sikkim have enormous potential and tourism propositions.
- Various issues like connectivity issue are threat to regions desired level progress.
   For this late plenty of importance is given from the Government and other agencies to promote the region.

### **Significance of the festival:**

- The weavers across the North Eastern Region display their skill and wonderful creations.
- The rich heritage of North Eastern Region will be showcased through its art and literature, films and the rich musical talent from the region.
- The literary event called "These hills we come from. Voices from North East India", will focus on the linguistic and literary world of North East India.

#### **About Destination North East:**

 It's the event organized to showcase the best features of North East to attract investment in tourism, skill, start-up, handlooms & handicrafts, horticulture, medicinal and aromatic plants.  Destination North East event is one of the steps taken by DoNER to bring North East closer and help assimilate the diverse cultural heritage of India.

#### Train 18

#### **About Train 18**

- Made-in-India, estimated cost of the engineless train is Rs 100 crore.
- Driven by a self-propulsion module sans a separate locomotive, Train 18 or T18 is capable of running at a speed of up to 160 kmph.
- T18 without a locomotive (engine) will cut travel time by 15 per cent compared to the Shatabdi Express.
- Shatabdi Express is a passenger train connecting major metro cities with other cities; T18 is expected to reduce the travel time drastically.
- This is a significant leap by the Indian Railways in terms of technology innovation.

#### Why in news?

 Indian Railways will soon usher in a new era with its first made-in-India engine-less train - named Train 18. Also known as T18, this train is set to hit the tracks for trials on October 29.

# News in-depth

## **General Studies-1**

### Did Jinnah want Pakistan?

#### **Introduction:**

The Pakistan historian Ayesha Jalal's 'The Sole Spokesman (1985)' narrate that INC was insisted on Partition and M.A. Jinnah was against the partition. In challenging this view Indian historian Venkat Dhulipala's 'New Medina (2015)' quotes that M.A. Jinnah Crafted the policy to create an independent state called New Medina.

#### **Mohammed Ali Jinnah Opinion:**

- The Muslim Majority province like Punjab, Bengal and North West Frontier provinces are averse to Jinnah that the Jinnah doesn't have a base in Muslim majority provinces, so he used religious imagery of the 'New Medina' to garner popular support in Muslim-minority province especially in UP.
- Jinnah was not interested in completely independent Pakistan, he envisaged to creation of loose federation consisting of two autonomous entities Hindustan and Pakistan (groups of provinces on the basis of religious majority) that would have parity with each other at the federal level.

#### **British Government response:**

#### Lip service to labour rights

#### Why in News?

 The present situation of migrant labour from Gujarat highlights the indifference of States to their wellbeing and rights.

#### **Background**

- According to the State of World Population report, more than half of the world's population lives in urban areas, and the number is steadily growing every year.
- India, where the majority of the population is still dependent on agriculture, is no exception to this trend. As per the census, the level of urbanization in India has

- The British Government set up the Cabinet Mission in 1946, which recommended the undivided India. Thus it envisaged the groups of provinces on the basis of religious majorities and a weak centre.
- Congress rejected the idea of a weak centre and division of India in small states.
   Congress was against decentralization.

#### **Indian Leaders opinion:**

- J. Nehru and S.V. Patel consider that the partition was lesser evil when compared to the weak centre which paid to the Jinnah plan of Loose Indian federation.
- Mahatma Gandhi on the eve of partition suggested that Jinnah be made Prime Minister of a United India with the power to choose his Cabinet.

#### **Conclusion**

- There is true in both these assertions. Jinnah divided the country by rejecting the Gandhi suggestion which was not rejected by the congress leaders, this assess the Jinnah's real intentions.
- Jinnah was driven above all by the pursuit of personal power which he could not achieve in a centralized Indian state
  - increased from 27.81% in 2001 to 31.16% in 2011.
- According to the WEF, Urbanization in India is a consequence of demographic explosion and poverty-induced ruralurban migration.

#### **Data Point**

The Economic Survey of India 2017 estimates that the magnitude of inter-state migration in India was close to 9 million annually between 2011 and 2016, while Census 2011 pegs the total number of internal migrants in the country (accounting for inter- and intra-state movement) at a staggering 139 million. Uttar Pradesh and Bihar are the biggest source states.

#### Vulnerabilities of the migrant workforce

- According to WEF, the common issues faced by the migrant workforce are nonpayment of wages, physical abuse, accidents and even death.
- The existing legal machinery is not sensitive to the nature of legal disputes in the unorganized sector. Many informal sector disputes never make their way to labour courts or keep languishing in courts for lack of proof.

#### **Situation in Gujrat**

Ahmedabad, which is the seventh-largest metropolitan area in India with a population of over 6 million, is an important economic and industrial hub. There are approximately 1.3 to 1.7 million labour migrants in the city.

#### **Legal Rights**

- Under the Inter-State Migrant Workmen Act and other labour laws (for unorganised workers), migrant workers in Gujarat are legally entitled to all their basic labour rights.
- These include minimum wages, regular wage payment, regular working hours and

## Who will speak truth to unfreedom? Why in News?

 The UGC has ruled that faculties of Central universities will be subject to Central Civil Services (Conduct) Rules.

#### UGC

The University Grants Commission of India is a statutory body set up by the Indian Union government in accordance to the UGC Act 1956 under Ministry of Human Resource Development and is charged with coordination, determination and maintenance of standards of higher education.

#### **Civil Service Conduct Rules**

 The Central Civil Services (Conduct) Rules, 1964 impose various restrictions on the Government servants.

#### What is the issue?

 The UGC, in a recent circular, directed central universities to adopt ordinances to enforce compliance with Central Civil Services (Conduct) Rules 1964 by professors.

- overtime payment, and decent working and living conditions which include taking care of the health and education of their children.
- Under the same Act, the governments of the States from where migrant workforce originate are expected to issue licences to contractors who take workers away, register such workers and also monitor their working and living conditions in other States.

#### **Challenges**

- Tracking internal migrants remains the primary hurdle to successful transitions.
- Lack of Political will.
- Lack of Law enforcement as most State governments remains indifferent to these laws.

#### **Way Forward**

- Enforce all relevant labour laws for migrant workers so that segmentation of the labour market becomes weak and workers (local and migrant) get a fair and equal deal in the labour market.
- State and Central governments should genuinely take interest in improving the conditions of workers in the economy.
- This means that university teachers won't be able to express their views freely. They can't get involved in any political activity, strike work or even publish without the permission of the government. The Rules will prohibit university teachers from speaking to the media, even anonymously or pseudonymously.

#### **Criticism**

- The Allahabad High Court, in 2015, ruled that university professors "are neither members of a service nor do they hold a civil post under the Union nor they are in the service of local or other authority".
- The civil services and academia at the universities vary greatly in essence, function and their respective role in the nation.
- The various central universities are guided by their respective Acts of Parliament and their own statutes and ordinances.
- The imposition of the civil Service conduct rules goes against the vision of autonomy for higher educational institutions which is

crucial for the holistic betterment of the education sector in India.

### The Pilgrimage's Progress

#### Why in News?

• A five-judge Constitution bench of the SC ruled that the provision in the Kerala Hindu Places of Public Worship (Authorisation of Entry) Rules, 1965, which authorised the restriction, violated the right of Hindu women to practice religion. This has resulted in wide spread protests.

#### **Tradition**

- According to Puranic and oral traditions, Lord Ayyappa was born out of the union of Lord Shiva and Lord Vishnu, when the latter was in Mohini form. The shrine at Sabarimala is an ancient temple of Ayyappan also known as Sasta and Dharmasasta. Lord Ayyappan is worshipped as a 'Naishtika Bramhachari' or a celibate for life.
- A devotee aspiring for a darshan of Lord Ayyappan has to be pure both mentally and physically and for this, he is expected to observe a mandatory fast (vratham) of 41 days that usually begins on the first day of the Malayalam month of Vrischikam in mid-November. A pilgrim who is on his maiden trip to Sabarimala is called a Kanni Ayyapppan.
- The 41-days fast highlight the significance of austerity and abstinence in the lives of those seeking a complete merger with the Ultimate. A devotee has to abide by several regulations and dictates if he is to mount the pathinettu padikal and enter the temple on Sabarimala.

#### **Changes in Tradition**

 Over the years the years the traditions associated with the 41 days Vratham and the pilgrimage to the Sabarimala temple

- have undergone changes and adapted to modern life.
- For example, a corporate employee may observe the restrictions on meat, alcohol and sex, but has given up the compulsion of wearing black or being barefoot. Other changes that can be observed include -the pilgrims taking a bus route instead of the longer traditional bus route.
- Also during the pilgrimage, the pilgrims are supposed to carry their own consumption basket nothing should be available for purchase. However multiple commercial enterprises have sprung up, which have diluted this tradition.

#### **Invention of Tradition**

- A bench of the Kerala High Court in 1991 gave out a ruling which banned the entry of women in the age group of 10-50 claiming that such a practice of not allowing women of that age group was prevalent in the past and that it was according to the traditional practices.
- The Kerala High Court directed the Government of Kerala to use all the measures required. Following this the Kerala Hindu Places of Public Worship (Authorisation of Entry) Act, 1965. was enacted.

#### **Recent developments**

• The Supreme Court has struck down a rule that disallowed girls and women in the 10-50 age group from entering the Sabarimala temple in Kerala. However, this judgement has been met with protests and multiple review petitions have been filed in the Supreme Court.

## **General Studies-2**

## Assam to block rally for Citizenship Bill

#### Why in News?

 The Citizens' Rights Protection Forum-Assam, an umbrella organisation of Bengali groups, had proposed the pro-Citizenship Bill rally in Guwahati on November 17.

#### The Citizenship (Amendment) Bill, 2016

- The Bill amends the Citizenship Act, 1955 to make illegal migrants who are Hindus, Sikhs, Buddhists, Jains, Parsis and Christians from Afghanistan, Bangladesh and Pakistan, eligible for citizenship.
- Under the Act, one of the requirements for citizenship by naturalisation is that the applicant must have resided in India during the last 12 months, and for 11 of the previous 14 years.
- The Bill relaxes this 11 year requirement to six years for persons belonging to the same six religions and three countries.
- The Bill provides that the registration of Overseas Citizen of India (OCI) cardholders may be cancelled if they violate any law.

#### **Key Issues**

- The Bill makes illegal migrants eligible for citizenship on the basis of religion. This may violate Article 14 of the Constitution which guarantees right to equality.
- The Bill allows cancellation of OCI registration for violation of any law. This is a wide ground that may cover a range of violations, including minor offences (eg. parking in a no parking zone).

#### Who are illegal immigrants?

 According to the Citizenship Act, 1955, an illegal immigrant is one who enters India without a valid passport or with forged documents. Or, a person who stays beyond the visa permit.

#### The value of a health scheme

#### Why in News?

 The Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY) has been recently by the government.

#### **Background**

 In-patient hospitalization expenditure in India has increased nearly 300% during last ten years. (NSSO 2015).Out of pocket (OOP) expenditure in India is over 60% which leads to nearly 6 million families

#### Why are people opposing the Bill in Assam?

- The Bill is considered to work against the cultural and linguistic identity of the indigenous people of the State.
- It is also argued that the Bill, if made into an Act, will nullify the updated National Registration of Citizenship (NRC). The process of updating the NRC is currently underway in Assam.

#### What is NRC?

The National Register of Citizens (NRC) is meant to identify a bona fide citizen. In other words, by the order of the Supreme Court of India, NRC is being currently updated in Assam to detect Bangladeshi nationals who might have entered the State illegally after the midnight of March 24, 1971. The date was decided in the 1985 Assam Accord.

#### How will the Bill affect the updated NRC list?

- While Bill is designed to grant citizenship to non-Muslim refugees persecuted in neighbouring countries, NRC does not distinguish migrants on the basis of religion. It will consider deporting anyone who has entered the State illegally post-March 24, 1971, irrespective of their religion.
- The process of deportation or duration of detention is not clear as it has not been stated by the government. But if the Bill becomes an Act, the non-Muslims need not go through any such process, meaning this will be clearly discriminating against Muslims identified as undocumented immigrants.

getting into poverty due to catastrophic health expenditures.

#### Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY)

It is a new Centrally Sponsored Scheme having central sector component under Ayushman Bharat Mission anchored in the Ministry of Health and Family Welfare (MoHFW). It is an umbrella of two major health initiatives, namely Health and wellness Centres and National Health Protection Scheme.

#### **Health and Wellness Centres**

• Under this 1.5 lakh existing sub centres will bring health care system closer to the homes of people in the form of Health and wellness centres. These centres will provide comprehensive health care, including for non-communicable diseases and maternal and child health services.

#### **National Health Protection Mission (AB-PMJAY)**

AB-PMJAY will have a defined benefit cover of Rs. 5 lakh per family per year. This cover will take care of almost all secondary care and most of tertiary care procedures. It will be an entitlement based scheme with entitlement decided on the basis of deprivation criteria in the SECC database.

#### **Significance**

- If implemented effectively, will help the nation move closer to the Sustainable Development Goal of 'Universal Health Coverage'.
- All these measures taken together will help in regulating the unregulated hospital and healthcare sector and in making the health insurance sector a sustainable one.
- The scheme will help in generating large volumes of data which may be used later for designing better and targeted health programmes. This will assist in effective medical management; in studying the impact of including or excluding specific diseases, populations or coverages; and in optimising cost and improving efficiencies.

### Ripe for prison reform

#### Why in News?

 Supreme Court has formed a committee on prison reforms. Headed by former Supreme Court judge, Justice Amitava Roy.

#### **Background**

To examine the conditions of prisons and prisoners in the country, the government had constituted several panels. The courts are have also passed several landmark judgments towards this including the historic judgement in Hussainara Khatoon vs State of Bihar case. Two important committees on prison reforms are Justice Mulla Committee Report (1983) and Justice Krishna Iyer Committee on Women Prisoners Report (1987).

- The scheme will also help in enriching the database of hospitals registered with the Registry of Hospitals in Network of Insurance (ROHINI) System and the human capital captured under the National Health Resource Repository (NHRR) project.
- This can later be used innovatively for improvement of access to and quality of health care services in the country.
- The scheme will have a multiplier impact on the healthcare and allied sectors like pharmaceutical, diagnostics and medical devices and the overall Indian economy by way of employment generation.

#### **Challenges**

- The scheme envisages the adoption of standard treatment guidelines and defined package rates for surgical procedures and the widespread use of IT and data analytics to monitor scheme implementation and manage fraudulent claims. The execution of the scheme will be a big challenge since it would involve identifying and focusing on the right critical success factors, allocating budgetary optimum support. incentivising stakeholders all appropriately (e.g. insurance companies, third-party administrators, and health care providers) and acting speedily to cover all the beneficiaries.
- The biggest challenges for the success of the PMJAY scheme are not just financial and infrastructural at the local level, but how its value is perceived by the community.

# Draft National Policy on Prison Reforms and Correctional Administration, 2007 recommended

- Introduction of a provision for aftercare and rehabilitation services and the appointment of officers to provide legal aid for prisoners.
- It further envisaged the establishment of a Research and Development wing, and financial assistance to non- governmental organizations working for the rehabilitation of prisoners.
- Community-based alternatives to imprisonment for offenders convicted for relatively minor offences.

#### **Need For Prison Reforms**

 According to the Prison Statistics India 2015 report by the National Crime Records

- Bureau (NCRB), India's prisons are overcrowded with an occupancy ratio of 14% more than the capacity.
- According to government data, 149 jails in the country are overcrowded by more than 100 per cent and that eight are overcrowded by margins of a staggering 500 per cent.67% of the people in Indian jails are under trials which are extremely high by international standards like it is 11% in the UK, 20% in the US and 29% in France
- Due to 3.1 crore cases (2016) pending in various courts of the country, jails across the country will remain overcrowded in the absence of any effective systemic intervention.

## Justice Amitava Roy Committee-Terms of Reference

 To examine the extent of overcrowding in prisons and correctional homes and

## The judiciary's #MeToo moment

#### Why in News?

 The defamation law is being increasingly used as a response against accusations of sexual harassment.

#### **Defamation in India**

- Defamation in India is both a civil and a criminal offence. In Civil Law, defamation falls under the Law of Torts, which imposes punishment in the form of damages awarded to the claimant (person filing the claim).
- Defamation as a criminal offence is listed under section 499 of the Indian Penal Code. The punishment, mentioned under section 500, can extend up to simple imprisonment for a term of two years, or with fine, or both.

#### **Critical Analysis**

- India's criminal defamation law is a colonial relic that was introduced by the British regime to suffocate political criticism.
- Unlike many other countries, defamation in India is a criminal offence (and not just a civil wrong), and a conviction entails both social stigma and potential jail time.
- A person must only show that an "imputation" or blame has been made that could reasonably be interpreted as harming his reputation.

## Worsening Situation in our village

Why in News?

- recommend remedial measures, including an examination of the functioning of Under Trial Review Committees, availability of legal aid and advice, grant of remission, etc
- To examine violence in prisons and correctional homes and recommend measures to prevent unnatural deaths and assess the availability of medical facilities in prisons.
- To assess the availability and inadequacy of staff in prisons and correctional homes and also suggest training and educational modules for the staff.
- To assess the feasibility of establishing Open Prisons in different parts of the country.
- To recommend steps for the psycho-social well-being of minor children of women prisoners, including their education and health.
- Given that a civil remedy to defamation already exists, no purpose is served by retaining the criminal remedy except to coerce, harass and threaten.
- Under Criminal Law, Defamation is bailable, non-cognizable and compoundable offence. Therefore, the police cannot start investigation of defamation without a warrant from a magistrate (an FIR cannot be filed). The accused also has a right to seek bail.

#### **SC Judgement**

• In 2016 the apex court had upheld the validity of the criminal defamation law. It held that Reputation of an individual, constituent in Article 21 is an equally important right as free speech and that criminalization of defamation to protect individual dignity and reputation is a "reasonable restriction".

#### **Global trends**

Many countries, including neighbouring Sri Lanka, have decriminalized defamation. In 2011, the Human Rights Committee of the International Covenant on Civil and Political Rights called upon states to abolish criminal defamation, noting that it intimidates citizens and makes them shy away from exposing wrongdoing.  In August, the National Bank for Agriculture and Rural Development (NABARD) released the All India Rural Financial Inclusion Survey, 2016-17.

#### **Background**

- In the recent past, the interventions under Financial Inclusion have been intensified by the Government of India, Reserve Bank of India & NABARD through the banks, RSETIS & NGOs. A need emerged to assess the impact of these interventions on the institutional credit/insurance accessibility and livelihoods of the rural populace. Against this backdrop "NABARD All India Rural Financial Inclusion Survey" (NAFIS) was initiated in 2016-17.
- The coverage of NAFIS spans across various financial inclusion aspects ranging from loans, savings, investments, pension, remittances and insurance.
- The survey also involved assessing the financial knowledge, attitude & behaviour of individuals and captured their experience with the financial products & services that they utilized.

#### **Highlights of the Survey**

- Agriculture (farming) generates only 23% of rural income i.e. not even a quarter of rural household incomes in India. Even for so-called agricultural households, just over 43% of their average income comes from the cultivation of crops and rearing of animals.
- Non-agricultural households get much of their income from wages and salaries from government and non-government jobs. They get hardly 11.7 per cent of their income from enterprises.
- 67.1 per cent of their income coming from wages and salaries from government and non-government jobs and hardly 8.4 per cent from other enterprises.
- Per capita income in urban areas is over
   12.2 times that in rural areas; it was nine

- times that in rural areas just a few years ago.
- The rising rural-urban gap is not only a cause of concern for policymakers, but also presents a challenge for the nation. The rising disparity is becoming a major cause of increasing poverty and unemployment in rural areas, resulting in large-scale migration to urban areas.
- The extent of rising agriculture distress is further indicated by the fact that the portion of GDP coming from agriculture, which used to be 55 per cent in 1951, came down to 25 per cent in 1991 and to hardly 17.3 per cent in 2016-17.

#### **Way Forward**

- The government has decided to provide a minimum support price for agriculture produce by adding at least 50 per cent to the cost of production to raise the incomes of farmers improve irrigation and reduce cost by cheapening of input cost for farming.
- However, the target of doubling farmers' incomes would apply to only 43 crore people, which is 48 per cent of rural population. For improving the condition of all rural inhabitants, we need to make efforts to help non-agricultural rural households as well, whose condition is much worse as seen earlier from the average monthly incomes.
- There is a need to generate employment opportunities in villages in food processing industry, animal husbandry, poultry, fishing, mushroom production, bamboo products development and other nonagricultural activities.
- The government has extended Kisan Credit Card (KCC) facility to those engaged in animal husbandry and fishing; the same has to be extended to other rural non-farm activities.

## **Coordinated Efforts for the Welfare of Divyangjans**

#### Why in News?

 Union Minister for Social Justice and Empowerment in his inaugural speech at the "National Workshop on Physical and Mental Disabilities " Called for Coordinated Efforts for the Empowerment of Person with Disabilities (Divyangjan).

#### **Accessible India Campaign**

The Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice & Empowerment has conceptualised the "Accessible India Campaign (Sugamya Bharat Abhiyan)" as a nation-wide flagship campaign for achieving universal accessibility that will enable persons with disabilities to gain access for equal opportunity and live

- independently and participate fully in all aspects of life in an inclusive society.
- The campaign targets at enhancing the accessibility of the built environment, transport system and Information & communication eco-System.

#### **Incheon Strategy**

Governments at the High-Level Inter-Governmental Meeting organized by the Govt. of the Republic of Korea adopted the ministerial declaration and Incheon Strategy to "Make the Right Real" for PwDs in Asia and Pacific. The Incheon Strategy provides the Asian and Pacific Region, and the world the first set of regionally agreed distinct – inclusive development goals.

## The Rights of Persons with Disabilities Bill Act, 2016

- In April 2017, the Rights of Persons with Disabilities Act, 2016 came into force. It provides for various rights and entitlements for People with Disabilities and casts responsibility on the State/UTs to take various measures to ensure that the PwDs enjoy their rights equally with others.
- The Act is in line with the United National Convention on the Rights of Persons with Disabilities (UNCRPD), to which India is a signatory.

#### **Salient Features-**

- Disability has been defined based on an evolving and dynamic concept.
- The types of disabilities have been increased from existing 7 to 21 and the Central Government will have the power to add more types of disabilities.
- Speech and Language Disability and Specific Learning Disability have been added for the first time. Acid Attack Victims have been included. Dwarfism, muscular

## **Outcomes versus promises**

#### Why in News?

 2+2 Ministerial Dialogue between India and US was followed by Russian President's visit.

#### 19th India-Russia Bilateral summit

 Cooperation between India and Russia spans across the whole gamut of sectors and rests on the fundamental pillars of political and strategic cooperation, military and security cooperation, cooperation in the spheres of economy, energy, industry,

- dystrophy have has been indicated as a separate class of specified disability. The New categories of disabilities also included three blood disorders, Thalassemia, Haemophilia and Sickle Cell disease.
- Responsibility has been cast upon the appropriate governments to take effective measures to ensure that the persons with disabilities enjoy their rights equally with others
- Additional benefits such as reservation in higher education, government jobs, reservation in the allocation of land, poverty alleviation schemes etc. have been provided for persons with benchmark disabilities and those with high support needs.
- For strengthening the Prime Minister's Accessible India Campaign, stress has been given to ensure accessibility in public buildings (both Government and private) in a prescribed time-frame.
- The Chief Commissioner for Persons with Disabilities and the State Commissioners will act as regulatory bodies and Grievance Redressal agencies and also monitor implementation of the Act.
- Creation of National and State Fund will be created to provide financial support to the persons with disabilities. The existing National Fund for Persons with Disabilities and the Trust Fund for Empowerment of Persons with Disabilities will be subsumed with the National Fund.
- The Bill provides for penalties for offences committed against persons with disabilities and also a violation of the provisions of the new law. Special Courts will be designated in each district to handle cases concerning violation of rights of PwDs.
  - science and technology, and cultural and humanitarian cooperation.
- The summit between the Indian Prime Minister and the Russian President is an annual event, the protocol was agreed to in 2005.

#### **Highlights**

- Contract for the supply of the S-400 Long Range Surface to Air Missile System to India was concluded.
- India and Russia signed on to a document to expand civil nuclear energy cooperation

- and agreed on a second site for Russian nuclear reactors.
- They signed a memorandum of understanding on a joint programme in the field of human space-flight, enabling Indian astronauts to be trained in Russia.
- They also agreed on the virtues of regional security architecture to provide security to all countries in Asia and in the regions of the Pacific and Indian Oceans.

#### 2+2 Dialogue-India and USA

- 2+2 dialogue between foreign and defence secretaries and ministers of the two countries. It is aimed at enhancing strategic coordination between both countries and maintaining peace and stability in the Indo-Pacific region.
- It puts strategic, defence, and security relationship between the two countries at the forefront and centre stage. It replaced earlier India-US Strategic and Commercial Dialogue.

### **Implications**

- The 2+2 Dialogue which is a format the U.S. employs with some of its closest allies including Japan and Australia has given the impression that India has come within the U.S. orbit of influence, detaching itself further from Russia.
- This impression is further heightened by India signing on to the Communications Compatibility and Security Agreement (COMCASA) recently.

#### **Growing India-US Ties**

- The U.S. had renamed the Asia-Pacific as the Indo-Pacific. It had blocked more than \$1.5 billion in U.S. security aid to Pakistan, allotting a mere \$150 million in 2019.
- U.S.-India economic cooperation was stated to have grown exponentially within two decades, with the total goods and services trade between India and U.S. increasing from \$11.2 billion in 1995 to \$126.2 billion in 2017. U.S. foreign direct investment into India substantially increased during this period.
- Most Significantly India being accorded the status of a 'major defence partner'.

#### **Containment of China**

 The growing India-USA ties are aimed at forging a possible containment of China strategy, with India partnering the U.S. in this effort, as the U.S., at present, perceives China as posing a major challenge to its supremacy.

#### **India's balancing act**

- The rise of China's economic power and its growing military might, and the reemergence of Russia are means that the U.S. no longer holds all the cards. Going Forward India can hardly alienate Russia as it re-emerges as a key presence in Asia and Eurasia
- On the other hand appearing to reject U.S. overtures, while the latter is seen making every effort to provide India with state-ofthe art defence equipment, and acting in tandem with it in groupings such as the Quadrilateral, could prove short-sighted.

## **Agreements for Enhancing Inland and Coastal Waterways Connectivity**

#### Why in News?

 India and Bangladesh signed several milestone agreements today, for enhancing inland and coastal waterways connectivity between the two countries for trade and cruise movements.

#### **Highlights**

- Agreement to use Chattogram and Mongla Ports in Bangladesh for movement of goods to and from India was signed.
- A Standard Operating Procedure (SOP) has also been signed for movement of passenger and cruise services.
- In addition to this, an addendum to 'Protocol on Inland Water Transit and Trade' (PIWTT) between India and Bangladesh has been signed for the

- inclusion of Dhubri in India and Pangaonin Bangladesh as new Ports of Call.
- To bring about significant reduction in logistics cost and faster delivery of Bangladesh export cargo, Indian side raised the point regarding permitting 'Third country' EXIM Trade under Coastal Shipping Agreement and PIWTT by allowing transhipment through ports on the East Cost of India.

#### **India-Bangladesh**

 After the 1971 India-Pakistan War leading to the creation of Bangladesh, India and Bangladesh signed a Treaty of Peace and Friendship, in 1972. Since then, more than 50 bilateral institutional mechanisms were forged between the two countries.

- Evidently, issues concerning the sharing of river waters, illegal migration, and border security are still outstanding.
- At present, India is a part of two economic initiatives that create economic corridors for the landlocked countries of South Asia to the sea, viz. the Bangladesh- Bhutan-India-Nepal (BBIN) Initiative, and the Protocol on Inland Water Transit and Trade (PIWTT).
- BBIN is a quadrilateral initiative, focusing on issues such as water resources management, connectivity of power, transport, and infrastructure; PIWTT is a bilateral protocol connecting the inland waterways of India and Bangladesh.
- These economic initiatives showcase India's interest to connect with northeast India, and further on with the South East Asian countries.

## 'Protocol on Inland Water Transit and Trade' (PIWTT)

- In 1972, India and Bangladesh signed the Protocol on Inland Water Transit and Trade (PIWTT).
- The protocol is an agreement between the two governments for the transportation of goods and keeping their respective

## **An Anti-National Regulation**

#### Why in News?

 Employees of publicly-funded universities are to be subjected to the Central Civil Service (conduct) rules governing Central government employees.

#### What is the issue?

- The UGC had directive sent in May to all 47 central universities called on them to follow the Central Civil Service (conduct) rules on the conduct of faculty.
- However, the Human Resource Development Ministry responsible for higher education pulled back on its policy and clarified that enforcement of Central Civil Services (CCS) rules was not mandatory but optional for academic institutions, despite a directive issued by the regulatory body the University Grants Commission (UGC).

#### **Implications**

 CCS conduct rules say no government servant shall, except with the previous sanction of the government, conduct or participate in the editing or management of

- waterways navigable while providing infrastructure facilities.
- The India-Bangladesh Protocol Routes include parts of rivers Ganga, Hooghly, Brahmaputra, and Barak, and the Sundarbans delta.

#### **Significance**

- These agreements will facilitate easier movement of goods and passengers between the two countries, giving an impetus to trade and tourism.
- The protocol routes will open doors for India to trade with the South East Asian countries through Bangladesh.
- The development of waterways in this landlocked region will be a boon for their economy, simultaneously also satisfying the individual interests of each country.
- The effective development of these routes might also benefit the BBIN agreement if Bhutan opts for waterways to supplement roadways.
- The above developments in the region support the Indian Prime Minister's initiative: 'Sabka Sath, Sabka Vikas'. The collaboration will further benefit every country in the region because of mutual interests.
  - any newspaper or other periodical publication or electronic media.
- Government servants are also barred from issuing any statement to the press or making any public utterance that adversely criticises any current or recent policy or action of the government.

#### **Criticism of CCS conduct rules**

 If central universities were mandated to follow the CCS conduct rules, it would amount to a ban on professors saying or publishing anything deemed inappropriate by the government.

#### **Another controversial policy**

- HRD ministry proposal to impose the Essential Services Maintenance Act (ESMA) on the staff of Delhi University was also widely criticised.
- The UGC had announced the formation of a seven-member working group to study the Delhi University act to bring exam, teaching, learning and evaluation under the ESMA.

#### Rationale

 It was necessary because frequent strikes by DU teachers and other staff hampered studies and the conduct of exams.

#### **Implications**

### **Touching base**

#### Why in News?

 Prime Minister of India recently met his Japanese counterpart e in Yamanashi for the 13th India-Japan annual summit.

## **India-Japan Relations Political Relations**

- A test of the reliability of Japan as a friend was first witnessed in 1991 when Japan was among the few countries that unconditionally bailed India out of the balance of payment crisis.
- In 2006 India-japan relationship was upgraded to a Global and Strategic Partnership with the provision of annual Prime Ministerial Summits.
- A Comprehensive Economic Partnership Agreement (CEPA) between Japan and India was concluded in 2011.
- In 2014 during the 9th Annual Summit meet the two sides upgraded the relationship to a 'Special Strategic and Global Partnership'
- The two countries have several institutional dialogue mechanisms, There is Foreign Office Consultation at the level of Foreign Secretary / Vice Foreign Minister as well as a 2+2 Dialogue at the level of Foreign and Defence Secretaries.

#### **Economic Relations**

- Japan's interest in India is increasing due to a variety of reasons including India's large and growing market and its resources, especially the human resources.
- The India-Japan Comprehensive Economic Partnership Agreement (CEPA) that came into force in August 2011 is the most comprehensive of all such agreements concluded by India and covers not only trade in goods but also Services, Movement of Natural Persons, Investments, Intellectual Property Rights, Custom Procedures and other trade-related issues.
- The CEPA envisages abolition of tariffs over 94% of items traded between India and Japan over a period of 10 years.

- If Delhi University is brought under the Essential Services Maintenance Act (ESMA), it will restrict the right of university staff to strike or hold protests on campus.
- Japan has been extending bilateral loan and grant assistance to India since 1958 and is the largest bilateral donor for India.
- The Ahmedabad-Mumbai High-Speed Rail, the Western Dedicated Freight Corridor (DFC), the Delhi-Mumbai Industrial Corridor with twelve new industrial townships, the Chennai-Bengaluru Industrial Corridor (CBIC) are all mega projects on the anvil which will transform India in the next decade. Delhi Metro Project has also been realized with Japanese assistance.

#### 13th India-Japan annual summit: Highlights

- Strengthening of ties in key areas of defence, trade and infrastructure will top the agenda when Prime Minister of India meets his Japanese counterpart Shinzo Abe in Japan.
- Talks are on between the two sides on strengthening maritime cooperation, including the signing of the Mutual Logistical Support Agreement.
- India and Japan are collaborating on various fronts including high-speed railway, which has been planned between Mumbai and Ahmedabad.
- The project has been facing resistance over the acquisition of land. Japan is also funding the project and the first tranche of loan has been transferred.

#### **US Factor**

 The recent actions on trade tariffs, sanctions against Iran and Russia, as well as the U.S.'s exit from several multilateral and security regimes are impacting both India and Japan in different ways.

#### **Impact on India**

- The impact is more direct, as the economy has been hurt by new American tariffs, review of its GSP (trading) status, and restrictions on visas for professionals.
- Moreover, possible U.S. sanctions over Indian engagement with Iran as well as defence purchases from Russia pose a looming challenge.

#### **Impact on Japan**

U.S. trade tariffs are a concern and Its exit from the Trans-Pacific Partnership is confining Southeast Asian countries into a free trade regime under Chinese domination. In addition, the U.S.'s onagain, off-again nuclear negotiations with North Korea are making Japan uneasy.

#### China

 A common concern for both Japan and India is managing an increasingly influential China. building and financing alternatives to China's Belt and Road projects for countries along the "Asia-Africa growth corridor".

#### **Asia-Africa Growth Corridor**

- The Asia-Africa Growth Corridor is an India-Japan economic cooperation agreement aimed at the socio-economic development of Asia and Africa. The vision document for AAGC was released by India in the 2017 African Development Bank meeting.
- The aim of the Asia-Africa Growth Corridor is to develop infrastructure and digital connectivity in Africa through Indo-Japan collaboration.

## General Studies 3

### Why Punjab's cotton farmers prefer grants

#### Introduction

- At the beginning of October, the Central government announced minimum support price (MSP) for cotton farmers in Punjab. The Cotton Corporation of India (CCI) was tasked with the direct procurement of cotton from the farmers thereby eliminating middlemen.
- However, not even one of the state's 2 lakh farmers has sold their cotton to CCI. They have instead chosen to continue to sell to their traditional buyers, the *arhatiyas* or commission agents, at prices well below the MSP.
- At mandis where officials tried to persuade farmers to sell their crop to CCI directly, both farmers and Arhatiyas protested. The Arhatiyas has organised protests at all mandis.

#### Who are Arhatiyas?

- Arhatiyas earn interest on the credit they offer to farmers in need of cash, and a commission of 2.5% per quintal on the crop they supply to buyers.
- There are about 26,500 licensed Arhatiyas in Punjab, who control the crop of over 11 lakh farmers who mainly cultivate paddy, wheat, and cotton. Each Arhatiya deals with between 20 and 200 farmers.

## Liquidity squeeze hurts NBFCs

#### Introduction

- The Infrastructure Leasing & Financial Services (IL&FS) was set up in 1987 to finance and promote infrastructure projects in the country. It has been associated with landmark projects such as the tunnel under the Zoji La Pass, Delhi-Noida toll bridge, Gujarat International Finance Tec-City (GIFT), etc.
- The crisis in IL&FS started with a series of loan defaults in August and September by the company and some of its subsidiaries. The IL&FS Group is facing tremendous debt pressure and struggling to service around ₹91,000 crore- the outcome of its mismanaged borrowings in the past.

#### What's wrong with our NBFC business model?

 The crisis has exposed the underlying weaknesses in the non-banking financial company (NBFC) sector as a whole which

#### Why farmers opt for Arhatiyas?

- The reason for farmers' lack of enthusiasm about CCI lies in the social structures of rural Punjab, in which the Arhatiyas and farmers share a close transactional relationship. Farmers afraid that dealing with CCI may upset the Arhatiyas, who might not be willing to help them in the future.
- Farmers depend on Arhatiyas for small loans for cropping operations and personal needs, which they find more convenient than approaching a bank for a loan.
- Selling to CCI requires registration and submission of documents such as Aadhaar and bank account details. Also, the MSP amount usually takes a week or longer to come into the farmer's hands, whereas the Arhatiyas pays immediately.

#### What needs to be done?

- The Centre and the state governments should take measures to streamline the procurement process of CCI by reducing the amount of paperwork that the farmers are forced to undergo.
- Proper implementation of Govt. initiatives like Kisan credit cards to reduce farmers' dependency on Arhatiyas for their credit requirements.

# has **depended heavily on low-cost, short-term borrowings** to finance long-term loans to their customers.

- This leads to a mismatch in the duration of their assets and liabilities and exposes NBFCs to the substantial risk of being unable to pay back their lenders on time.
- In addition to this, the IL&FS default panicked investors of NBFCs raising fears about their capacity to repay their shortterm debt.
- Also as both international and domestic interest rates continue to rise, investors are moving away from the stocks of NBFCs as they expect the profit margins of these companies to come under pressure as their borrowing costs rise.
- These conditions have resulted in a severe liquidity crunch in the whole NBFC system.

#### Response to the crisis

- The Reserve Bank of India, the National Housing Bank and the State Bank of India has decided to increase the supply of liquidity in the market to keep interest rates under control.
- RBI has also decided to conduct purchase of government securities under open market operations (OMOs) to improve the liquidity conditions.
- The government has decided to replace IL&FS's management and assured lenders to the company that their money would be paid back safely without any default. Experts believe that the current situation may not lead to a widespread financial panic as the government will act as a lender of last resort.

#### Is our response to the crisis sustainable?

 While offering easy money can help in tackling the ongoing liquidity crisis, the prolonged supply of low-cost funds to the

#### Our time begins now

#### **Introduction:**

- Recent researches shows that India stands to suffer the most from the climate change.
   A road map to transit quickly to a near-zero carbon economy is the need of the hour for India.
- Even at the time of signing the Paris Agreement in 2015, it was clear that the target of 1.5° C would not be enough for India and it needs to be around 3-5° C to save us from the chaos of climate change.
- More than any other country India needs to be worried about the climate change.

#### A socio-economic challenge:

- Why should India be more concerned? The first reason is that we have a vast population living in poverty.
- While India is often mentioned along with China in climate-related discussions as a large emerging economy, the two are very different. India ranks 130 among nations in the Human Development Index, and China ranks 86.
- In spite of remarkable recent improvements, India still has 364 million living in multidimensional poverty. Nearly a third (27.5%) is multidimensional poor and about a fifth (19.1%) is vulnerable to becoming poor. Almost half the country is therefore at high risk from events such as loss of a job or ill health of a family member.

- NBFC sector also creates the risk of defaults which will eventually affect the lenders with piling up of NPAs.
- State bailouts create the risk of moral hazard in the wider financial system. NBFCs, for instance, may continue to borrow short-term to extend long-term loans to their customers because they expect the government to bail them out if they get into trouble.

#### What needs to be done?

- Policymakers should try to focus on taking steps to address structural problems that contributed to the crisis.
- It includes steps necessary to widen the borrower base of NBFCs which have been banned from accepting demand deposits. This would allow NBFCs to tap into more reliable sources of funding and avoid similar liquidity crises in the future.
- Combined with damage from a severe cyclone, flood or drought, each subsequent shock will have a multiplier effect on hundreds of millions, potentially pushing them deeper into poverty.

#### SDGs are crucial:

- The most sensible way to deal with these complex challenges is to deepen and expand India's commitment to the Sustainable Development Goals (SDGs).
- Further instead of focussing on scaling up the INDC target we should focus on the replication of context-relevant modifications through local and institutional innovation.
- India should focus on attaining economic growth in sustainable ways to save itself climate change problems.

#### Actions taken so far:

- India, nevertheless, has a large number of successful examples of transformative innovation around energy production and access, land, livelihoods and climate resilience.
- For example, The Bureau of Energy Efficiency has showed how the government has made effective changes through appliance labelling and large-scale procurement of efficient devices.
- In the building and cement industry, innovation around housing and new materials, including natural fibre

- composites, could make far-reaching changes in infrastructure through low-carbon modular technologies.
- India expects to reach its ambitious solar target of 100 GW capacity by 2022 primarily through large centralised solar power plants.
- Some States have shown, renewable-based microgrids can become an important feature of electricity policy. Jharkhand, which has 249 remote villages powered by solar microgrids, is now considering their use even in villages that are already grid connected.
- Some research groups have recognised that agro-ecology methods are best suited for increasing crop yield, raising profits, trapping soil carbon, reducing dependence on fertilisers and pesticides.
- Andhra Pradesh is attempting to replicate widely one such approach, Zero Budget Natural Farming, to all its farmers by 2024 with an expected savings of 2 million tonnes of carbon dioxide per year.
- Energy and livelihood gains from these alternative visions could be far more significant than conventional ways of

replacing fossil-fuelled infrastructure with renewables.

#### Way forward:

- The next round of state action plans on climate change is to identify the successful development approaches overlaid with expected climate impacts in each ecological zone.
- Policymakers, with inputs from academia, community workers and the public, could then work on how these would be repeated in other contexts keeping climate impacts in mind.
- Large investments are needed to make the transitions in each sector that would take the country to a near zero-carbon economy.
- But given the shortage of external support and the need for rapid deployment, India will not be able to rely entirely on external funds.
- Some of this could instead be financed through a 'luxury' carbon tax that curbs non-essential consumption. Savings can also be expected from the economic and social transformation itself.
- With regard to climate change, we cannot be pressured from outside, but need to change from within.

## 'In urban U.P., 87% of waste from toilets goes to rivers, agri land'

#### Why in news?

 Recently the Centre for Science and Environment, UP released a report on the sewage system in UP.

#### **Findings of the report:**

- While urban Uttar Pradesh has 80% coverage of toilets, inefficient sanitation systems causes the 87% of the excreta bring generated by these toilets to be dumped in water bodies or agricultural lands
- The report argues that building more toilets will only worsen the environmental, sanitation and manual scavenging situation, unless sewerage connections increase from the current 28% of households.
- Onsite sanitation systems such as septic tanks or pit latrines are prevalent in large scale, but are used only by 47% of households.
- Without a sewerage system, the effluent from the septic tank, along with greywater from the kitchen and bathroom flows out

into storm water drains and open drains and reaches Ganga.

- The faecal sludge, on the other hand, has to be periodically emptied from the septic tank, either manually or mechanically using vacuum trucks or tankers.
- CSE's analysis found that half of all emptying work in these cities is done manually, despite the legal prohibition of the employment of manual scavengers.

#### What needs to be done?

- There needs to be large sewage treatment plants for riverside cities and towns.
- Immediate investments in decentralised sludge management systems would bring twin benefits: of improving the environment and reducing the disease burden imposed by insanitary conditions.
- One immediate intervention needed is the creation of an inter-departmental task force to identify land to build small treatment systems for sludge, and to provide easily accessible solutions to houses that are currently discharging waste into open drains.

- The business of emptying faecal material using tanker trucks needs to be professionalised and de-stigmatised.
- All aspects of the business of sanitation need reform if India is to meet Goal Number

### **Punjab's Burning problem**

#### Introduction:

- Farmers in Punjab continue to burn paddy stubble every winter despite a ban on the practice.
- A Harvard University study published in March 2018 said that "7-78%" of PM2.5 pollution in Delhi is due to "agricultural fires".

#### Why farmers go for Stubble burning?

- Punjab alone generates about 20 million tonnes of straw, to switch over to the next season crop the best possible and the cheapest way is to burn the residue.
- The Centre and State Government has time and again emphasised the zero tolerance policy towards the stubble burning.
- And has issued loans and subsidy for the "Happy Seeder Machine" which will cut the straw till the bottom and sow new seeds.
- But the cost of the machine and the servicing cost has prevented the farmers from getting those machines.
- Even when fines are levied farmers are ready to pay the fine instead of getting the machine and 20% of farmers do not have any money to pay the fine as well.

### **Avoidable Tragedy**

#### Introduction:

The recent Dasara disaster at Amritsar that has left 59 people dead is a harsh reminder, that the government departments have not yet taken official protocols for safety at mass gatherings seriously.

#### **Causes that led to the tragedy:**

- A group of people got into the tracks to watch the burning of Ravana, the event happened very close to the track. This tragedy shows the lack of responsibility of the stakeholders involved.
- The first responsibility is that of Indian Railways. It is a rule that Indian Railways has to "penalise" anyone who gets onto the tracks. But usually it is not done because the railway department excuses them at "humanitarian ground". Disaster as this

- 6 of the Sustainable Development Goals with egalitarian policies.
- A large State such as Uttar Pradesh provides the opportunity to demonstrate commitment to policy. Success here can transform lives.

#### Biofuel to fight stubble burning:

- One of the stated benefits of biofuels was the impact this would have on the practice of burning crop waste in preparation for the next planting season.
- By reducing crop burning and conversion of agricultural residues/wastes to biofuels, there will be further reduction in greenhouse gas emissions.
- But for the private players it may not be economically viable to collect the crops and take them to bio-fuel plant. So the government has to give subsidy and incentivise the private players.
- The Ministry of Power has a regulation where it is mandatory for all coal-fired thermal plants to use a minimum percentage of crop-residue pellets. But they have not been implemented on the ground.

#### **Conclusion:**

- With India's ethanol consumption is set to rise in the coming years; crop residue can serve as a ready and environmentallyfriendly source of raw material to bolster this trend.
  - could have been avoided had the rule been followed in normal time as well.
- Second responsibility is that of local police.
   Why did they give permission to conduct event so close to the tracks when they do not have adequate manpower.
- Third is local administration, there has been no evidence of the event conducting people obtained any sort of permission from the local authorities.
- Next, the organisers who did not follow any safety protocol.
- Finally people themselves have to be held responsible for not taking their own safety into consideration.

#### **Preventive measures:**

• Events such as this can be avoided if rules are followed at normal times. Government

- should not hesitate to be strict in enforcing safety rules in normal times.
- The National Disaster Management Authority has created a guide for State governments and local bodies, laying down a clear protocol to be followed for mass gatherings and festivals. It has to be strictly followed.
- There should be a transformation of the way such events are organised, appoint a lead agency in each State and district empowered to issue instructions, and in turn be accountable for public safety.
- More broadly, there is a serious deficit of common spaces in cities, towns and villages to conduct spectacular events safely.
- The Railways must identify hazard spots for train movement in heavily built-up

- areas and prevent trespass by barricading them
- Frequent campaign to educate people on event basis has to be taken up by local government with the help of NGOs.

#### Conclusion:

- Major religious festivals in India are often accompanied by deadly incidents such as stampedes and fires, ranging from the terrible toll of 249 deaths at the Chamunda Devi temple stampede in Jodhpur in 2008, to the railway station stampede during the Kumbh Mela at Allahabad five years later in which 36 people died.
- A culture of safety can take root if governments imbibe it first.

### Turf battle: on independent payments regulator

#### **Background**

- In August, an inter-ministerial panel set up to finalize amendments to the Payment & Settlement Systems Act, 2007 had recommended an independent Payments Regulatory Board (PRB) to oversee all payment systems in the country.
- It proposed that the PRB should have a chairman appointed by the government in consultation with the RBI.

#### **Dissent note by RBI**

- The RBI has recently submitted a dissent note opposing the proposal to set up an independent regulator for payment systems outside the purview of the central bank.
- The RBI argued that the PRB must remain with the central bank and headed by the RBI governor. It proposed that the RBI and the government may nominate three members each to the board, with a casting vote for the governor.
- It cited the report of the Ratan Watal Committee on digital payments as recommending the establishment of the PRB within the overall structure of the RBI.
- The central bank submitted that payment systems are technology based substitutes for currency and regulation of such systems can be best done within the ambit of the monetary authority.

#### Is RBI the appropriate authority?

- As there is a definite overlapping between the current regulatory powers of the RBI and the proposed regulations for the payments industry, a unified regulator can help in lowering the compliance costs and enabling the seamless implementation of rules.
- Further, a brand new regulator may be unable to match the expertise of the RBI in carrying out necessary regulatory duties.
- So it makes better sense to have the RBI take charge of the rapidly growing payments industry which can ill-afford regulatory errors at this point.

#### **Turf Battle**

- The dissent note has once again brought up the debate over the legitimate extent of powers of the RBI and the Union government. It indicates that the central bank has serious problems with the dilution of its current powers over the financial sector.
- However, the RBI's demand for the centralisation of regulatory powers also brings with it the need for exercising a greater degree of responsibility.

#### **Conclusion**

 At a time when there are increasing risks to the stability of the domestic financial system, both the government and the RBI must look to work together to tackle these risks instead of battling over regulatory powers

## YOJANA- October Part II Women Empowerment

#### Helping women gain control of their lives

Women's entrepreneurship can make a particularly strong contribution to the economic well-being of the family and the community with poverty reduction and empowerment, thus contributing to the Sustainable development Goals.

#### Core elements of entrepreneurships are:

- Agency(ability to define one's goals and act upon them)
- Awareness(of gendered power structure) and
- Self confidence

## Few of the contribution towards women entrepreneurship are enlisted as follows

## 1. The Schemes, incentives and promotional measures:

- Studies reveal that SHGs such as Abhinav Farmers' cooperative society, grassroots, grammen bank, Assam tea corporation, Kudumbashree, Indira kranthi padham are effectively participating in empowering women by providing support through credit and self-supporting business activities .Let us see what are these initiatives in detail:
- i. Abhinav Farmers' cooperative society:
  The goal of the club is to supply organic produce directly to the consumers by eliminating the middleman. The local women's self help groups take care of the harvesting, sorting, grading and packing of the farm produce made ready for the consumers.
- ii. **Grassroots:** Grassroots through Umang app has encouraged women to form Self-Help Groups. In general a group of 15-20 neighbours and friends meetup regularly to support each other on a financial and personal basis.
- iii. **Grammen bank:** It was formed in 1983 to provide collateral free micro credit to the poor especially women.
- iv. Assam tea corporation: It hires deserving local women as trainee for the green tea factory, runs the administrative office and has been instrumental in helping workers create bank accounts ensuring financial independence in the state.

- v. **Kudumbashree:** The 'Kudumbashree' SHG was started in 1998 in Kerala .It has training courses that offers knowledge of legal provisions, training in banking and setting up micro-enterprises. Kudumbashree has launched it own ecommerce site to sell products manufactured by various women's selfhelp groups thereby making a huge contribution in socially empowering the women of Kerala.
- vi. Indira kranthi padham: Society for Elimination of Rural Poverty (SERP), an autonomous society of the Department of Rural Development, Government of Andhra Pradesh has implemented Indira Kranthi Patham (IKP)which is a statewide community driven rural poverty reduction project that enables the poor to improve their livelihoods and quality of life through their own organizations.

#### 2. Promotional undertakings

- NABARD also launched a pilot project for women on SHGs in collaboration with commercial banks and regional rural banks.
- Refinancing facilities are also available in addition through national banks for financing under the ministry farm sector.
- The RBI also understands the role and importance of SHGs in financing and has extended medium sized loans to women entrepreneurs with the support of NABARD thus ensuring financial inclusion.

#### 3. Government initiatives:

- The MSME-DO (development organisation), State Small Industries Corporation (SSIDCs), nationalized banks and NGOs are conducting various programmes including entrepreneurship development programmes (EDPs) to cater to the needs of potential women entrepreneurs.
- MSME -DO has introduced processproduct oriented EDPs in areas like TV repairing, printed circuit boards, leather goods, screen printing etc.
- There is a special prize for "outstanding women entrepreneur".

- MSME has also opened a women cell to provide coordination and assistance to women entrepreneurs facing specific problems.
- The income generating scheme, implemented by the department of women and child care assists the needy women to make them economically independent.
- the SIDBI has been implementing two special schemes for women namely, Mahila Udyan Nidhi which provides equity to women entrepreneurs and the Mahila Vikas Nidhi which offers developmental assistance for pursuit of income generating activities to women.
- STEP: Support to Training and Employment Programme for Women is a scheme under the ministry of Women and Child Development that aims at benefitting women in the age group of 16 years and above related to employability and entrepreneurship, Agriculture, Horticulture, Food Processing, Handlooms, Tailoring, Stitching, Embroidery, Zari, and spoken English etc.
- TREAD: Trade Related Entrepreneurship Development Assistance Scheme focuses on promotion of self-employment and

- income generation activities for women of SHG groups in non-farm sector with Loan sanctioned to the registered NGOs for undertaking capacity building activities.
- **SEED**: It aims to provide opportunity to scientists and field level workers focusing on the rural areas.
- NITI Aayog launched the women entrepreneurship platform (WEP). The platform aspires to substantially increase the number of women entrepreneurs who will create and empower a dynamic new India.

## The aspirations are manifested in the three pillars on which it is build

- Ichha Shakti: motivates aspiring entrepreneurs to start their enterprise
- Gyaan Shakti: provides knowledge and ecosystem to help them foster entrepreneurship
- Karma Shakti: provides hands in support to entrepreneurs in setting up and scaling up businesses.

#### **Conclusion:**

 All these added up together and implemented will become an important source of the growth of economy.

## Empowering the women through 'continuum of care'

■ The 'continuum of care' approach aims to ensure equal focus on various life stages of women, ranging from a spectrum of programmes for pregnant women, the neonates, infants, young children, adolescents and family planning programs for women in the reproductive age group.

## The Ministry of health and family welfare ensures the following:

- Preventing sex selection and stopping sex selective elimination
- The government has enacted the PC & PNDT ACT.
- Engaging women in positions ranging from village level accredited social health activists (ASHAs) to health care providers such as Auxiliary nurse midwife (ANM), healthcare administrator, and policy makers at state and national level.

## Various schemes and the provisions are listed below:

#### PC & PNDT Act

 The Pre-conception & Pre-natal Diagnostics Techniques (PC & PNDT) Act, 1994 was enacted in response to the decline in Sex ratio in India.

#### The Provisions:

- The Act provides for the prohibition of sex selection before or after conception.
- It regulates the use of pre-natal diagnostic techniques, like ultrasound and amniocentesis except only to detect few cases.
- No person, conducting the procedure as per the law, will communicate the sex of the foetus to the pregnant woman or her relatives by words, signs or any other method.
- Any person who puts an advertisement in the form of notice or through electronic and print media etc for pre-natal and preconception sex determination facilities can be imprisoned for up to three years and fined Rs. 10,000.
- The Act mandates compulsory registration of all diagnostic laboratories, all genetic counselling centres, laboratories and ultrasound clinics.

#### **Maternity care**

 The Pradhan mantri Suraksha Matritva Abhiyan (PMSMA) has been launched to provide quality antenatal care (ANC) to pregnant women on the 9th of every month.

#### The Provisions:

- ANC services are provided by the obstetrician gynaecologist (OBGY), radiologists and physicians at government health facilities under PMSMA.
- The services are provided at the village level through village health and nutrition days(VHNDs)
- Iron, folic acid, calcium etc. are provided to the pregnant women at the check-ups and investigations are conducted to identify any complications of pregnancy towards a safe delivery.
- Mother and children protection (MCP) cards and safe motherhood booklets are provided to pregnant women to provide information on the essential care that needs to be taken.
- There is a mother and child tracking system (MCTS), reproductive child health (RCH) portal, kilkari mobile services that tracks and facilitates timely delivery of antenatal, postnatal care services to women and immunization services to children.

#### Shishu Suraksha is provided under

- Janani Shishu Suraksha Karyakram (JSSK): This initiative entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery. It includes entitlements to free drugs and consumables, free diet up to 3 days during normal delivery and up to 7 days for C-section, free diagnostics, free blood, free transport from home to institution, in between facilities in case of a referral and drop back home. Similar entitlements are there for all sick newborns accessing public health institutions for treatment till 30 days after birth.
- LaQshaya program: under the Ministry of Health and Family Welfare it aims at improving quality of care in labour room and maternity Operation Theatre (OT). It is being implemented at all Medical College Hospitals, District Hospitals, First Referral Unit (FRU) and Community Health Centre (CHCs) to help reduce the maternal and new born morbidity and mortality.
- Janani Suraksha Yojana (JSY): under the National Rural Health Mission (NHM) it has

been implemented with the objective of reducing maternal and infant mortality by promoting institutional delivery among pregnant women.

#### **Healthy adolescence**

- Rashtriya Kishore Swasthya Karyakram (RKSK):.It introduces community-based interventions through peer educators and comprehensively addresses the health needs of the adolescents. It promotes menstrual hygiene among the adolescent girls in the age group of 10-19 years primarily in rural areas.
- 7516 adolescent friendly health clinics (AFHCs) have also been established at health care facilities to provide care and counselling to adolescent.

#### **Planned pregnancy**

- MoHFW has introduced new contraceptives viz injectable progesterone acetate (MPA)-Antara and a non-hormonal non-steroidal weekly centchroman pill, Chhaya to meet the changing needs of people.
- It also focused upon post party Intrauterine Contraceptive Device (IUCD), post party sterilization and post abortion IUCD to help women ensure adequate spacing between children.
- Home delivery of contraceptives by ASHAs aim to improve access to contraceptives for eligible couples and it has been trained to counsel newly married couples to ensure spacing of two years after marriage and have spacing of three years after the birth of the first child.

#### Caring for girl child

- There are provisions of new born care units and stabilization units at district and sub district level.
- Fact: India has the world's largest universal immunization program.
- to ensure full immunization for children up to two years of age and pregnant women, a special initiative ,Mission Indradhanush ,was started in 2014 to immunize the left out and pregnant women.
- India's Universal Immunisation Programme (UIP) provides free vaccines against 12 life threatening diseases to 26 million children annually free of cost to protect them against Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio, Hepatitis B, Pneumonia, Haemophilus Influenza type b (Hib), Measles, Rubella,

- Japanese Encephalitis (JE) and Rotavirus diarrhoea.
- Nutritional rehabilitation centres (NRCs) have been established to provide specialised care to children having severe acute malnutrition.
- Rashtriya Bal Swasthya Karyakram (RBSK) helps to improve the overall quality of life of children through early detection of birth defects, diseases, deficiencies and developmental delays.

#### **Drugs and diagnostics**

- There are free drugs and free diagnostics scheme for essential medicines at public health facilities and mobile medical units.
- Ayushman Bharat Covers
- a) **Health and wellness centres (HWCs):** The presence of 1.5 lakh centres will bring

#### In pursuit of inclusive growth in India

Caregiving and breadwinning are equally important for improved wellbeing of the individuals in a nation. When the policies and institutions favouring development improve, the economic citizenship for all the socially disadvantaged groups including women also improves.

#### What leads to economic inequality?

- Stereotyping or segregation of women's work
- Gender wage gaps
- Limited or no access to productive resources
- Inappropriate allocation of talent and human capital.
- The already low female labour force part rate (FLFPR) in India is declining further when compared to any other region in the world.
- Low and stagnant urban rates and declining rural rates
- Loss of women from labour market in all regions and sector
- Ludhiana has highest male participation rate (83%) and a mere 12% FLFPR.
- Aspirations and need for employment are still high among women with unemployment rates (UR) being higher than men.

### **FWPR**

• Female workforce participation rate is the Ratio of female to male of proportion of a country's working-age population (ages 15 and older) that engages in the labour market, either by working or actively

- health care system closer to the homes of people.
- b) **National Health Protection Scheme:** The scheme provides coverage of upto Rs. 5 lakh per family per year for secondary and tertiary care hospitalization.

#### **Conclusion**

Not only was India validated for maternal and neonatal tetanus elimination (MNTE) in April,2015,much ahead of the global target of December 2015 but also India has achieved another Laurel recently .We have accomplished the millennium development goals(MDG) for maternal mortality which has dropped from by a massive 37 points.

looking for work, expressed as a percentage of the working-age population.

 Labour Bureau data indicates that women's LFPR stood at just 27.4 per cent in 2015-16

#### The determinants of FWPR

- It declines with education and slightly increased at very high level
- Women in northern states have lower FWPR compared to southern states
- More women are in subsidiary status employment in both rural and urban areas and predominate in the agricultural sector.
- The next largest FWPR is in the public services where the state is the primary employer followed by one segment of manufacturing industries.
- Demand side or structural factors and supply side or the cultural factors like family roles and societal norms impact FWPR.
- The limited time spent by men in caregiving and household works depressed the FWPR.

#### What would help?

- Easier access to transportation would enable women to save time, empowering them to take on economic activities alongside care work.
- As part of corporate governance policies all over the world, India instituted quotas for women in the board since 2013.
- Chances of participation in workplace for women increases in region where there is a higher reported confidence in police, judiciary and lower reported crime.

 Female political representation promotes female employment due to access to public goods like paved roads, PHCS and banks.

#### Way forward

- The announcement in the union budget 2018,says that contribution by new women recruits to Employees' Provident Fund Organisation (EPFO) be reduced from 12 to 8 % to increase the take home pay.
- MGNREGA has increased FWPR, reduced gender gaps in wages in other markets with positive implications on poverty and improved the child and women nutritional status and empowerment.
- The crèche scheme should be strengthened further.
- The National Crèche Fund was set up by Govt. Of India in 1994 with the objective to meet the growing demand for crèches (a nursery where babies and young children are cared for during the working day) and to provide day care facilities to the children in the age group of 0-5 years.
- There must be some additional allocation for women in public transport

- Subsidized scooter for working women in Tamil Nadu is yet to see the benefits
- Hostel for working women scheme was brought in as an effort towards creating a safe working environment and providing affordability for working women from their home town.
- Maternity benefit act, 1961 was amended in 2017 as maternity benefit amendment Bill 2017 to primarily include increased paid maternity leave from 12 to 26 weeks and providing an option to work from home after 26 weeks.
- As a part of 'Make in India' and 'Digital India' the launch of online market platform for Indian women entrepreneurs with ecommerce market place known as Mahila e-haat will improve market access.
- Mudra Yojana that provides financial support to non-corporate small businesses must be educated to the masses, especially women.
- SEWA bank also has enhanced community network by holding an initial workshop while providing financial assistance and better impacts on self-employment.

### Breaking the shackles of financial deprivation

 The general consensus is that financial development acts as a stimulus in the overall growth and development of an individual.

#### **Financial inclusion helps:**

- Providing a linkage between people and financial mainstream of the economy
- It brings low income groups within the parameter of formal banking sector.
- It protects their financial wealth and other resources in exigent circumstances
- It mitigates the exploitation of vulnerable sections by the usurious money lenders by facilitating easy access to formal credit
- Women can become self-dependent and save for their old age
- Availability of credit at reasonable rates boosts the entrepreneurship quotient of women who can start businesses with assistance from the microfinance institutions or by being associated with the SHGs.

#### What facilitated the transformation?

 Insurance penetrations via point of sale machines (POS), banking correspondentswallets and e-banking.

- Policies like Surakhsa Bima Yojana and Swasthya Bima Yojana are providing much needed cushioning against health and disability contingencies.
- Complementing such schemes are the pension schemes launched recently like Atal pension Yojana which is one of the Social Security Schemes in the Insurance and Pension sector launched by the Government of India for all Indians to provide a defined pension between Rs. 1,000/- to Rs. 5,000/- depending on the contribution and its period.

#### **Background:**

- FI gained momentum in India since 2005-06 when the RBI in its annual policy stressed upon the banking practices which hampered the FI of masses.
- In 2006 RBI allowed banks to engage business correspondents (BCs) / business facilitators (BFs) as intermediaries for providing financial services at doorsteps.
- In 2007-08 two funds financial inclusion fund and financial inclusion technology fund were initiated and introduced for a period of 5 years with a corpus of Rs. 500 crore contributed by Government of India

(GOI), RBI and NABARD in the ratio of 40:40:20. Now after a thorough discussion, a new Fund (formed by merging FIF & FITF) came up with the priority of financial inclusion, expanding the scope of various financial literacy activities and coverage of capacity building initiatives through differentiated banks and institutions.

 Between the periods of 2011-17, 77% of females above 15 years are reported to have a bank account which is a 51% increase from 2011.

#### **Issues:**

- Some accounts are zero balance accounts which meant the lack of usage of services
- Despite the efforts of introduction of BCs, the strategy hasn't been fruitful because of low incentives.
- Acute shortage of manpower delivering services from the post offices to the rural population still depends on the informal sources of lending as the post office do not provide such services.
- India has failed to witness a revolution in the mobile banking.
- Financial literacy through audio and visual Doordarshan and established credit counselling centres haven't performed satisfactorily.

#### Way forward:

Anganwadi system: India has estimated 1,053 million Anganwadi centres. The Anganwadi workers can be given basic banking training which will give them the opportunity to act as banking correspondents that can help overcome the barriers of lack of physical presence of banks and ensure last mile delivery as promised by BCs. Setting up of kiosks or account opening desks will relieve women from the pain of physical mobility to banks

- and will also allow them to make informal decisions.
- Innovation in credit scoring models:
   Women are disadvantaged by traditional
   credit scoring models that rely on credit
   and collateral. Innovative ways to assess
   the risk quotient of a potential woman
   borrower should be used.
- Priority sector advances: qualitative and quantitative loans through banks are required to prevent the micro enterprise owners from falling in informal interest rates web.
- Financial literacy and demographic dividend: With more and more women joining the workforce, there is a need to educate them about financial independence and related services like provident funds, insurance cover, DBT. Thus by the time they enter jobs, they will know the importance of bank accounts and will be able to operate them without any external help.
- Mobile money: ease of doing transaction through mobile applications, enabling SMS banking for non-smart phone mobile users can go a long way in ensuring one click transactions and tapping this potential of mobile phones. With digital banking preinstalled in all handsets, customising the tariffs.

#### **Conclusion:**

The findings suggest a strong case for penetrating financial services for women via Anganwadi and priority sector lending. Proper awareness campaigns will help in changing behavioral attitudes toward a more cashless lifestyle.FI is still a germinating concept and needs to be fully understood by incorporating qualitative variables and cognitive models into the analysis.

## Meeting the challenges of gender empowerment

 Government and UN agencies have been working on programmes and policies to achieve women equality and empowerment, fighting against their oppression and subordination based on biological determinism.

#### The Indian situation:

 Since 1999 women's equality and empowerment has been at the forefront of government initiatives.

- World Bank has suggested that the empowerment of women should be a key aspect of all social development programs.
- This necessitates harnessing women's power, utilising their potential and encouraging them to work towards gold defined by them.

#### **Defining empowerment:**

 The World Bank identifies employment as being about increasing people's choice and freedom of action to participate in,

- negotiate with, influence, control and hold accountable institutions and affect their lives.
- **Kabeer's conceptualization**: the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them. This provides an opportunity to link theory and empirical research and to tease out underlying mechanisms that support empowerment.

#### **Challenges and critics:**

- Nowadays governmental and other empowerment policies focus on gender relations but less attention is paid to women as dynamic, spirited individuals.
- Thus conventional "one size fits all" fails to understand that women may have varying motives for challenging or not challenging the status quo.
- Women's multiple identities of class, caste, ethnicity, gender, include social locations in households as daughters, daughter in-law, mothers, mother in-law, wives and widows tend to push women to the margins and make them more vulnerable to discrimination in terms of access to basic human rights, opportunities and resources.

#### Microcredit and micro empowerment:

 SHGs work for group solidarity, self-help and awareness through democratic

## **Empowering women: legal provisions**

Treating women at par with men is imperative for the holistic progress of nation. The present article seeks to address the salient issues and the constitutional provisions where the supreme court has played extremely positive roles in examining the laws which has become archaic.

#### Section 376: On Rape The Criminal Law Amendment Ordinance, 2018 Provisions in the bill

- The minimum punishment for the rape of a girl under 12 will be 20 years of rigorous imprisonment, the maximum being the death sentence or life imprisonment.
- In the case of gang-rape of a girl below 16, the punishment will be life imprisonment.
- The Bill also provides for investigation of rape cases within two months from the registration of an FIR

- functioning where women have gradually managed to come together supporting each other through inter-lending.
- Similarly women in groups have raised their voice with the administration for providing facility of potable water in their village, use of forest products as fuel, which saves their time with regard to collection of file and water.
- They often transgress their household boundaries and engage in collective activities such as alcohol banning, India seed saving practice, organising campaigns for maternal health and safe immunization and marketing non timber forest (NTFs) products.

#### Way forward:

- Programmes that specifically target women and girls should include elements of social learning that can be achieved by decentralising responsibility and empowering women as frontline implementers.
- When women talk to other women about their personal experiences, they validate it and construct a new reality. As said by World bank, amplifying the voices of women and increasing their agency can yield broad development dividends for them, their families ,communities and societies.
- There is no longer any provision for anticipatory bail in the case of rape of a girl below 16
- The government would set up fast track, special courts for rape cases.

Section 377: On sodomy and sexual relationship LGBT Rights-Transgender Bill

#### Provisions in the bill

- The Supreme Court has decriminalised sex between consenting adults in private under Section 377.
- The sexual orientation of each individual in the society must be protected on an even platform.
- the right to privacy and the protection of sexual orientation lies at the core of the fundamental rights guaranteed by Articles 14, 15 and 21 of the Constitution.
- The LGBT community possess the same human, fundamental and constitutional rights as other citizens.

- Respect for individual choice is the very essence of liberty under law.
- It has freed the LGBTQI (Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, and Intersex) communities from the yoke of a colonial law and they can now walk with their heads proud and held high as equal citizens with dignity, liberty and fraternity.

#### Section 497: On adultery The Amendment of the Adultery law

#### Provisions in the bill

- Section 497 of IPC criminalises the offence of adultery.
- It punishes the "outsider" who breaks into the matrimonial home through illicit relationship with one of the spouses.
- The provisions gave only husbands the exclusive right as an aggrieved party to prosecute the adulterer in a case involving his wife.
- However, a similar right has not been conferred on a wife to prosecute the woman with whom her husband has committed adultery.
- Further, if the husband of the woman gives his consent for the sexual affair with another man, no offence lies.

#### Triple talaq

#### SC final verdict and the provisions

- It struck down the controversial Islamic practice of instant talaq which was used as arbitrary and whimsical mode of ending marriage violating a Muslim women's fundamental right to equality.
- Verdict compared triple talaq to social evils such as sati, infanticide and devadasi system, which were cast out by way of legislation and not by judicial orders.

## Women, health and development

This article reviews the problem of triple burden of malnutrition

- 1. Undernutrition
- 2. Over nutrition
- 3. Anaemia
- Early detection and effective management of the triple burden of malnutrition in women is feasible and effective interventions can enable women to fully recognize their potential in family and national development. It can be made possible by looking deeply into few of the factors like:

#### Dietary intake in women:

## Right to Property: The Hindu succession Act, 1956.

#### **Provisions**

- Supreme Court bench said the amended Hindu Succession Act of 2005 stipulated that a daughter would be a 'coparcener' since birth, and have the 'same rights and liabilities' as a son.
- A coparcener is the one who shares equally in the inheritance of an undivided property.
- The court said that her (a daughter's) share in ancestral property could not be denied on the ground that she was born before the law was passed, and the law was applicable in all property disputes filed before 2005.

## Rights to religious identity: Parsi laws on men and women

- When Parsi women who marry outside their community are said to have lost their religious identity.
- The children of a Parsi man married outside the community can become a Parsi.
- However the children of a Parsi woman married outside the community is not allowed to visit the tower of silence and attend her parent's funeral rituals.
- To which the Parsi trust went against the age old tradition challenging the Supreme Court.

#### Conclusion:

- Thus over the years the need for reform has been recognized in India and the supreme court of India has been playing a constructive role in reshaping laws . However we still have a long way to move towards achieving an equal status for women in the society.
- Surveys carried out by national nutrition monitoring bureau (NNMB) showed that there is a reduction in the pulse intake till 1997 and then the trend got reversed shifting towards intake of fats and oils.
- There is a need to increase the pulse and Vegetable intake so that the protein and micro nutrient requirements of women are met.

#### **Physical activity:**

 In the 1950's a moderate physical activity was needed for routine household chores.
 Women trekked long distances to access potable water and gather fuel and fodder

- for their cattle. Their energy intake was not adequate for this level of physical activity and this was responsible for high **under nutrition**.
- Over time there was a vast improvement in access to mechanized transport, and steep reduction in walking, improvement in access to water and fuel, mechanized appliances for grinding dough due to which there was a steep reduction in their physical activity which voluntarily reduced their energy intake, leading to **over nutrition** associated with increased risk of non-communicable diseases (ncds) such as hypertension and diabetes.

#### What does the data say?

- Under nutrition rates are higher in women in their twenties
- Under nutrition rates are higher in the northern and eastern states.
- Under nutrition is also associated with low birth weight in the offspring
- With increasing age there is a steady and substantial increase in over nutrition rates.
- Over nutrition rates are higher in women living in southern and western states of India.

#### About non communicable diseases (NCDs):

- They are asymptomatic in the early stage
- Require lifelong lifestyle modification which isn't easy
- Lifelong medication with cost and compliance implications
- If not detected and treated properly it leads to chronic heart, brain, kidney and eye ailments.

#### **Health education to women:**

- undue weight gain is harmful to health
- these diseases occur right from forties in Indian women
- health check up must be done once a year over 30 years of age.
- the best way to take care of health is to walk around for 30-45 minutes per day.

#### **Anaemia in women:**

- They had and continue to have the highest prevalence of anaemia in the world.
- Reason:
- 1. Low overall dietary intake
- 2. Poor iron and folic acid intake
- 3. Poor bioavailability of iron in phytate fibre.
- 4. Indian diet resulting in widespread iron and folic acid deficiencies
- 5. Chronic blood loss due to infections such as malaria and hook worm infestations.

#### **Conclusion:**

- Efforts to undertake screening for under nutrition, over nutrition, anaemia and NCDs in women as an essential component of preventive health care at all levels ,will go a long way in accelerating the pace of women becoming
- Healthy and well nourished. They will be able to bring about improvement in health and nutritional status of households .with this the country can benefit from women fulfilling their role as agents of national development.