## 1. SOCIAL ISSUES

### 1.1. National Nutrition Week

**In News**

- From 1st to 7th September, the country observed National Nutrition Week. It is an annual nutrition event, initiated by Food and Nutrition Board under Ministry of Women and Child Development.

- The main objective to celebrate nutrition week is to raise awareness on the importance of nutrition for health which has an impact on development, productivity, economic growth and ultimately National development.

- The theme of the National Nutrition Week for 2017 is "**Optimal Infant & Young Child Feeding Practices: Better Child Health".**

**Need For Such Programmes**

- Nutrition is related to survival, health, and development for current and succeeding generations. Child born underweight have impaired immune function and increased risk of diseases such as diabetes and heart diseases in their later life.

- Malnourished children tend to have lower IQ and impaired cognitive ability, thus affecting their school performance and then productivity in their later life.

- Improving the nutritional status of the population is imperative for National Development.

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**Hunger & Nutrition in India**

*Data*

- According to global nutrition report, India is home to 194.6 million undernourished people i.e. three times the entire population of France. The country is home to over one third of the world's stunted (chronically malnourished) children.

- The NFHS-4 has not shown an encouraging improvement in the nutritional status, especially among women and children. Over the past decade, the proportion of underweight children fell nearly 7 percentage points to 36%, while the proportion of stunted children (those with low height-for-age, a measure of chronic undernourishment) declined nearly 10 percentage points to 38%.

- Despite the progress, these rates are still higher than those of many poorer countries in sub-Saharan Africa. If progress continues at this rate, India will achieve the current stunting rate of Ghana only by 2030 and that of China by 2055.

- The Global Hunger Index report has placed India at 97th rank out of 118 developing nation.

*Why India's Performance On This Front Is Poor?*

Despite steady economic growth and self-sufficiency in food grains production, the country is home to one-quarter of all undernourished people worldwide. The reasons being:

- **Poverty trap** – poverty ridden do not have enough money to buy or produce enough food. In turn, they tend to be weaker and get trapped into poverty hunger nexus.

- **Dietary ignorance** – Many people do not know about the nutritional component about their diets. They often do not complement their children's diet with sufficient nutritional components. As a result we see the incidents of child stunting, child wasting etc.

- **Socio Cultural Factors** - Hunger in India also has **age, gender and caste** dimensions. Compared to men, women more often forgo meals to feed their children. This is evident from the World Bank's report which says that 60% of those who are hungry are female. Caste and tribe are structural factors which predispose certain groups to long term poverty and deprivation which

ultimately gets translated into hunger and malnutrition.

- **Politics of Distribution -** According to Amartya Sen, hunger usually arises from food distribution problems, or from governmental policies in the developing world, and not from the insufficiency of food production. This is true for India as well. Corruption, leakages, exclusion-inclusion error etc. makes the public distribution system inefficient in addressing the issue of hunger and malnutrition.

- **Food wastage –** Be it the cold storage of Food Corporation of India or the extravaganza shown in marriages and rituals, food/food grains    wastages are the common thing in India. These wastages distort the food availability making difficult for poor and vulnerable to buy food from market.

- **Natural Disaster –** Erratic monsoon, incidence of draughts, unseasonal rainfall, cyclones etc. affects the food grain production and hence affects the food security in India.

### *India's Effort*

- First five year plan focused mainly on agriculture to increase the food production. However India still had to depend on food aid like PL480 of USA. It was only after **green revolution** India attained self reliance and also surplus in food grain production.

- The **Targeted public Distribution system** of India along with **Antodayaanna Yojana** aims to provide access to food grains to the most vulnerable sections of our society.

- There are a number of food-for-work programmes and employment guarantee schemes, the largest of which is the **Mahatma Gandhi National Rural Employment Generation Scheme (MNREGA)** which aims to increase income levels to provide access to food and nutrition.

- **Rashtriya Krishi Vikas Yojna and National Food Security Mission** to increase the agricultural productivity to feed the hungry millions of our country.

- **National Food Security Act**, **2013** aims to provide subsidized food grains to approximately two thirds of India's 1.2 billion people.

- **Midday Meal Scheme** and the **Integrated Child Development Services (ICDS)**, which is the largest supplementation program of its kind in the world, plays a huge role in reducing hunger and malnutrition among children.

- **Food fortification programs** and schemes like **Nutri Farms** and Livestock development programs are striving towards reducing malnutrition among the people.

- **National Nutrition Strategy** by NITI Aayog ( Discussed seperately below)

### *Conclusion*

- Malnutrition should not be viewed merely as an offshoot of poverty having adverse effects on health and development of individuals but as a national problem that results in loss of productivity and economic backwardness.

- Time has come to create a moment so as to improve nutrition at the individual level.

- Thus, series of convergent and well coordinated actions in different sectors are required to be undertaken in the mission mode approach to address this big network problem of malnutrition

## National Nutrition Strategy

- NITI Ayog has launched the National Nutrition Strategy to renew the focus on nutrition.

- With a benefit to cost ratio of 16:1 for 40 low and middle-income countries, there is a well recognized rationale, globally, for investing in Nutrition.

- To address this aspect and to bring nutrition to the centre-stage of the National Development Agenda, NITI Aayog has drafted the National Nutrition Strategy.
- The Strategy lays down a roadmap for effective action, among both implementers and practitioners, in achieving our nutrition objectives.

## *Key Highlights*

- It aims at ensuring every child, adolescent girl and woman attains optimal nutritional status by 2022.
- The strategy envisages a framework where in the **four proximate determinants** of nutrition – *uptake of health services, food, drinking water & sanitation, and income & livelihoods* – work together to accelerate decline of under nutrition in India.
- We remain obsessed with the supply side challenges while ignoring the need for behavioural change efforts. There is an urgent need for **behavioural change efforts** as the absence of it creates obstacles to the demand generation for nutritional services.
- This strategy, therefore, gives prominence to demand and community mobilisation as a key determinant to address India's nutritional needs.
- The Nutrition Strategy framework envisages a **Kuposhan Mukt Bharat** - *linked to Swachh Bharat and Swasth Bharat.*
- The aim is to ensure that States create customized State/ District Action Plans to address local needs and challenges. The strategy enables states to make strategic choices, through decentralized planning and local innovation, with accountability for nutrition outcomes.
- This is especially relevant in view of enhanced resources available with the States, to prioritise focused interventions with a greater role for panchayats and urban local bodies.
- As per the strategy document, the Integrated Child Development Services Mission would be expanded to form a National Nutrition Mission along the lines of National Health Mission under the Ministry of Women and Child Development (WCD).
- The document has suggested setting up a steering group for monitoring the progress of mission that will report directly to Prime Minister.

## 1.2. Swachhta Hi Seva Campaign

**In News**

- The government on September 15 launched fortnight-long 'Swachhta Hi Seva' (Cleanliness is Service) campaign. It will run from September 15 to October 2, 2017.
- The campaign is aimed at highlighting the government's flagship cleanliness initiative 'Swachh Bharat Mission'.
- The campaign includes urging national teams of various sports including cricket, hockey, football and badminton to adopt and clean up a slum.
- The Ministry of Drinking Water and Sanitation is coordinating the initiative.
- It will include 'sharamdaan' or voluntary work and will focus on mass mobilisation and reinforce 'janandolan' for sanitation to contribute to Mahatma Gandhi's dream of a clean India.
- The campaign has made elaborate plans to reach out to poor and marginalised and provide them with sustainable sanitation services.
- The government has identified special dates during the campaign period, with 17 September being reserved for voluntary work and cleanliness and construction of toilets.

**About Swachh Bharat Abhiyan (SBA)**

- It is a national campaign by the Government of India, covering 4,041 statutory cities and towns, to clean the streets, roads and infrastructure of the country.

- It was launched on 2nd October, 2014, the150th birth anniversary of Gandhi ji and seeks to create Clean India by 2019.

*Objectives*

- Elimination of open defecation.

- Conversion of unsanitary toilets to pour flush toilets (a type of pit latrine, usually connected to two pits).

- Eradication of manual scavenging.

- 100% collection and processing/disposal/ reuse/ recycling of municipal solid waste.

- A behavioral change in people regarding healthy sanitation practices.

- Generation of awareness among citizens about sanitation and its linkages with public health.

- Supporting urban local bodies in designing, executing and operating waste disposal systems.

- Facilitating private-sector participation in capital expenditure and operation and maintenance costs for sanitary facilities.

*Few Initiatives For Swachh Bharat*

1. "Swachh Survekshan": Cities to be rated for sanitation under a Survey

   - The Ministry of Urban Development has commissioned a survey of sanitation scenario to rate 75 major cities and state capitals, with more focus on solid waste management. It will cover all state capitals and 53 other cities.

   - The task of executing the mission has been entrusted with the Quality Council of India.

   - There will be three streams of data collection: Citizen feedback, Municipality self-evaluation, and Independent assessment.

   - The aim is to foster a spirit of competition among the major cities and state capitals to ensure sanitation in urban areas.

   - The parameters include

     o The solid waste management (60% weightage)

     o The availability and use of household individual toilets and public and community toilets

     o City level sanitation plans

     o Information, Education and Behaviour Change Communication (IEBC) activities.

2. New Tariff Policy to support the Mission

   - It will make it compulsory for the power plants located within the radius of 100 kms of the city to use processed waste water and release clean water for drinking purpose in the vicinity.

   - It will make compulsory for the local power distribution companies to buy electricity generated from the waste.

*Performance of SBA*

- The one-year target for urban areas was to finish constructing:
  - 25 lakh individual toilets,
  - 1 lakh community and public toilets,
  - Achieve 100 % collection and transportation of waste in 1,000 cities, and
  - 100 per cent processing and disposal of waste in 100 cities.
- Only 20-25 % of the target in terms of toilet construction has been achieved while on the garbage management front also, performance is abysmally low.
- The government claimed that it has constructed more than 80 lakh toilets in rural India in this period.
- However, the numbers are not exactly an indicator of the success of the Swachh Bharat Mission alone as it includes toilets constructed under several ongoing schemes such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and the Indira Awaas Yojana.

## 1.3. Diksha Portal For Teachers

**In News**

- The government has launched Diksha Portal "diksha.gov.in" – National Digital Infrastructure for Teachers.
- The portal aims to equip all teachers across the nation with advanced digital technology. It will enable, accelerate and amplify solutions in the realm of teacher education.

**Key Highlights**

- Diksha portal is built considering the whole life cycle of teacher beginning from the time when they enroll in Teacher Education Institutes(TEIs) to the time they retire as teachers.
- It is an initiative of **HRD ministry** for providing a digital platform to teacher to make their lifestyle more digital. The HRD ministry has also set up a slogan "**National Digital Infrastructure for Our Teachers Our Heroes"** for DIKSHA national teachers portal.
- Teacher can learn and train themselves for which assessment resources will be available. The complete work and accomplishment of teachers in Teacher's educational institutes will be recorded from start to end point till their retirement.
- Through this portal the teachers can take quality content and the content can be shared in multiple people and the infrastructure is multi channel, which means it can accessed on various formats like PCs, mobile phones, tablets etc.

## 1.4. Two New Contraceptives Launched

**In News**

- The Ministry of Health and Family Welfare has launched two new contraceptives. These are - an injectable contraceptive MPA under the 'Antara' programme and a contraceptive pill, 'Chhaya'.
- The introduction of new contraceptives will expand the basket of choices for the country's population to meet their family planning needs.

**Key Highlights**

- The contraceptives are being launched under the government's **Mission Parivar Vikas**, a central family planning initiative.

- The contraceptives are available for free in medical colleges and district hospitals.

- The contraceptives are safe and highly effective, the 'Antara' injectable being effective for three months and the 'Chayya' pill for one week, and will help meet the changing needs of couples and help women plan and space their pregnancies.

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**Mission Parivar Vikas**

- The Ministry of Health and Family Welfare has launched "Mission Parivar Vikas" in 146 high focus districts having the highest total fertility rates in the country.

- These 146 districts are in the seven high focus, high TFR states of Uttar Pradesh, Bihar, Jharkhand, Rajasthan, Madhya Pradesh, Chhattisgarh, and Assam that constitute 44% of the country's population.

- The main objective of 'Mission Parivas Vikas' will be to accelerate access to high quality family planning choices based on information, reliable services and supplies within a rights-based framework.

- These 146 districts have been identified based on total fertility rate and service delivery for immediate, special and accelerated efforts to reach the replacement level fertility goals of 2.1 by 2025.

- Recent data suggests that these 146 districts have TFR of more than/equal to 3.0 and are home to 28% of India's population (about 33 Crores).

- These districts also have a substantial impact on maternal and child health indicators as about 25-30% of maternal deaths and 50% of infant deaths occur in these districts.

- The key strategic focus of this initiative will be on improving access to contraceptives through delivering assured services, dovetailing with new promotional schemes, ensuring commodity security, building capacity (service providers), creating an enabling environment along with close monitoring and implementation.

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## 1.5. Eminence Status For Universities

**In News**

- UGC has started a 90 days application process for universities — ***public and private*** — to seek the *status of institutions of eminence*.

- The status will provide them freedom from the regular regulatory mechanisms to choose their path to become institutions of global repute with emphasis on multi-disciplinary initiatives, high quality research, global best practices, and international collaborations.

- The aim of the scheme is to help institutions break into the top 500 global rankings in 10 years, and then break into the top 100 over time.

**Key Highlights**

- Twenty institutions — 10 public and 10 private — will be given this status. The 10 state-run institutions will have an additional benefit — provision of Rs. 10,000 crore over a period of 10 years, over and above the regular grants.

- By March-April 2018, the chosen institutions will be accorded the status of "Institutions of Eminence" with a mandate to achieve world-class status over 10 years.

- Only those institutions are eligible to apply which are in the top 50 of the National Institute Ranking Framework or those who have secured ranking among top 500 of the Times Higher Education

World University Rankings, QS University Rankings or Shanghai's Academic Ranking of World Universities.

- New institutions need to submit a 15-year vision plan to be among the top 500 globally ranked institutions, while existing institutions among the top 500 would have to offer a plan to improve their ranking to be among the top 100 in the next 10 years.

- The institutions declared as institutions of eminence will be free from the usual regulatory mechanism to choose their path to become institutions of global repute with emphasis on multi-disciplinary initiatives, high quality research, global best practices and international collaborations.

- These institutions will have the liberty to enroll up to 30% foreign students. Moreover, selected public institutions will be able to recruit up to 25% foreign faculty, while there will be no such limit for selected private institutions.

*For State of Higher Education In India, refer Section 1.6 in Part 2 ( June 2017) of CA Magazine.*

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**About UGC**

- The UGC was set up in 1953 and became a statutory body through an Act of Parliament in 1956.

- The UGC seeks to promote responsible understanding between the institutions, the Government, and the community at large.

- It mediates interests between institutions and administration. On the one hand, the UGC safeguards the academic freedom and institutional autonomy of the institutions, while on the other it ensures value for money for the taxpayers.

- The three primary functions of UGC are

(i) Overseeing distribution of grants to universities and colleges in India.

(ii) Providing scholarships/fellow to beneficiaries, and

(iii) Monitoring conformity by universities and colleges to its regulations.

**Criticism of UGC**

- Among the many criticisms of its functions is the failure of the UGC to ***attract world-class faculty*** to Indian universities – something that even Pakistan has managed to do

- The UGC is the apex regulatory body for higher education but has often often become mired in turf wars with technical education watchdog AICTE, autonomous institutes like the IITs and diploma-awarding ones like the IIMs.

- The name "University Grants Commission" is something of a misnomer. The UGC's primary function is to coordinate the functioning, determine and maintain standards across India's universities. Distributing grants is a secondary function. By giving it a misleading name the focus got shifted, which resulted in the bedeviling of the functioning of the UGC all these years.

- The falling standards of higher education are a reality that India has been contending with even as the number of students enrolling in colleges and universities has grown exponentially.

- The commission has also instituted a flawed system of rewarding research, the **Academic Performance Index**, which is based on the number of citations an article gets and the journal in which it is published. This has replaced a system of peer-review and expert appraisal that many believe is better.

- At a time when many experts are calling for decentralization of the higher education, the UGC is

representative of centralized structure.

- **Recent controversies:**
  - The commission forced Delhi University to roll back its newly introduced four-year undergraduate programme. It took a U-turn as previously it had allowed the same. It was a direct encroachment of university's autonomy as under the Delhi University Act 1922, DU has freedom to decide its own course structure, content etc.
  - Shortly after the Delhi University episode, the UGC shot off a notification to all IITs asking them to make sure the degrees they confer are in line with UGC specifications. The IITs retorted that they are autonomous institutes that don't have to follow UGC diktats.
  - Forcing universities to introduce Choice Based Credit System (CBCS), without taking other necessary steps to harmonize the universities, had created a controversy.
  - In 2013, the UGC locked horns with the AICTE over regulation of business schools when it issued guidelines to institutions such as the IIMs that award post-graduate diplomas in management. The government intervened to resolve the issue by allowing the UGC to regulate B-schools awarding degrees and the AICTE to look after those awarding diplomas.
- Various committees have recommended abolishing the commission.
  - The Yashpal Committee recommendations to abolish the UGC.
  - The committee headed by former UGC chairman Hari Gautam proposed setting up a National Higher Education Authority while abolishing UGC.

**Conclusion**

- Despite several criticism, it needs to be acknowledged that higher education sector has witnessed a tremendous growth since the UGC came into existence. Some credit for the stupendous overall success must go to the commission.
- However, we must take necessary steps to reform the institution so as to promote decentralization in higher education as well as to address the existing issues.

## 1.6. Significant Decline In Infant Mortality Rate (IMR)

**In News**

- According to a recently released SRS bulletin, IMR of India declined by three points from 37 per 1000 live births in 2015 to 34 per 1000 live births in 2016.
- IMR is the number of deaths per 1,000 live births of children under one year of age.
- The gender gap in India for child survival is also "reducing steadily". The gender difference between female and male IMR has now reduced to less than 10%.
- Among the EAG (Empowered Action Group) States and Assam, all States except Uttarakhand, have reported decline in IMR in comparison to 2015.
- There has been a decline of four points in Bihar; three points in Assam, Madhya Pradesh, Uttar Pradesh & Jharkhand; and two points decline in Chhattisgarh, Odisha & Rajasthan.

**Why This Result Is Significant**

- These remarkable achievements in merely one year is reflection of a countrywide efforts to increase the health service coverage through various initiatives of the Government that includes

strengthening of service delivery; quality assurance; RMNCH+A; human resources, community processes; information and knowledge; drugs and diagnostics, and supply chain management, etc.

- The decline in gender gap in IMR is further giving a major boost to the 'Beti Bachao Beti Padhao' scheme of the government.

**Reasons For High IMR In India**

- Although India is doing well in reducing the IMR, it is yet to achieve the target set by Millennium Development Goal. Under MDG-4, one of the targets is to reduce IMR by two-thirds between 1990 and 2015. At the national level, it translates into a goal of reducing IMR from 88 per thousand live births in 1990 to 29 in 2015.

- It is important to note that the IMR is highest among rural areas and among those people who fall in the poverty or below poverty bracket .

- There are a number of reasons leading to such an alarmingly high mortality in infants. Some of these include the fact that education still remains low on priority in rural areas. Thus, new mothers and pregnant women lack the basic fundamentals of pregnancy as well as post baby care.

- Another major reason is that many women do not have sufficient access to clean water, nutritious food and regular medical assistance.

- Early marriage and no gap between two pregnancies are also responsible for the high mortality rate among children.

**Intervention Strategy Followed By The Government**

- Three domains are used for delivery of health services:

  o Facility based care – Consists of clinically based services delivered at the individual level such as treatment of diseases, delivery of emergency care etc.

  o Outreach – Services delivered on periodic basis through visits within community (e.g. – Immunization programme)

  o Home and community: Consists of community and family oriented services that support self-care and includes activities for health promotion and behaviourial change. E.g. – breastfeeding

- Following table reflects the maternal and child health service delivery at different levels of care and service delivery platforms:

| Domain | Programme Component | Interventions | |
|---|---|---|---|
| | | Mothers | Children |
| Family and Community | Home based newborn care | -Postpartum home visits to identify complications<br>-Birth Spacing<br>-Prophylactic Iron Folic Acid | -Home visits identify<br>-Community based management of key childhood illnesses (pneumonia, dairrhoea and malaria) |
| Outreach centres | Village health and Nutrition Days | -Antenatal check-up<br>-Birth spacing | -Immunization<br>-Vitamin A<br>-Promotion of -appropriate child feeding practices |

| Health Facility (Sub-centre, PHC, CHC, DH) | -Skilled Birth Attendance (SBA) <br> -Emergency Obstetric Care <br> -Facility based newborn care (SNCUs and NBSUs) <br> -Facility based IMNCI <br> -Nutrition Rehabilitation Centres <br> -Indian Public Health standards | -Clean delivery <br> -Labour Monitoring <br> -Addressing complications during labour and postpartum/referral Lactation support | -Essential care during birth and immediately after birth <br> -Addressing complications during birth and postpartum/referral <br> -Care of low birth weight/premature babies <br> -initiation of breast feeding <br> -Management of children with severe illness and severe malnutrition | |

## Programmes and Initiatives

- Government has launched India ***Newborn Action Plan (2014)*** with an aim to achieve Single digit Neonatal Mortality Rate by 2030 and single digit still birth rate by 2030.

- It also talks of creating special new born care units at district level and new born stabilization units at first referral unit level as well as ensuring provision for new born care unit ate delivery point

- Other programmes launched by the government are mentioned below in the following table:

| | |
|---|---|
| Natioanl Rural Health Mission (NRHM) | -Focusses on availability of health care services <br> - Community health workers (ASHAs) are expanding coverage of community based intervention |
| Janani Suraksha Yojana (JSY) | -Under NRHM, to give financial assistance to women who avail delivery services at the public health facility <br> -JSY payments helped in reduction of 3.7 prenatal deaths/1000 pregnencies |
| Janani Shishu Surksha Karyakram (JSSK) | -All expanses for the delivery would be borne by the Govt. and no user fee charged. <br> -Pregnant mothers are entitled to free transport, free drugs and consumables, free diagnostics, free blood etc. |
| Pradhan Mantri Surakshit Matritva Abhiyan | -It gives fixed day Antenatal care services every month across the country, in addition to the routine ANC at the health facility |
| Village Health and Nutrition Days | -Platform for providing first contact primary health care <br> -Organized once every month at the Angawadi Centre (AWC) in the villages. <br> Various services such as registration of pregnant women, Antenatal care, distribution of IFA, etc. |
| Maternity Benefit Scheme – Conditional cash transfer | -Envisages providing cash incentives up 5000/ directly to the account of beneficiaries during pregnancy and lactation on fulfilling specific conditions |

## 1.7.    Jan Sampark Program

**In News**

- The Central Adoption Resource Authority (CARA) of the Ministry of Women & Child Development has started a monthly "Jan Sampark" program to enable the public to have interaction with its officials and staff for seeking information related to Adoption as well as flagging their concerns.

- Details pertaining to Immediate Placement and Special Needs Adoption Module of Child Adoption Resource Information & Guidance System (CARINGS) as well as the newly launched Grievance/Query portal will be shared with all the stakeholders.

- Also many of the Prospective Adoptive Parents (PAPs) will be counselled and motivated to go for adopting older children.

- The event will now be a regular feature every month apart from the quarterly Facebook live chat by CEO CARA.

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**Central Adoption Resource Authority (CARA)**

- CARA is a statutory body of Ministry of Women & Child Development, Government of India.

- The purpose of CARA is to ensure that every orphan, destitute and surrendered child has a loving and caring family.

- It functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.

- CARA is designated as the Central Authority to deal with inter-country adoptions in accordance with the provisions of the ***Hague Convention on Inter-country Adoption, 1993***, ratified by Government of India in 2003.

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## 1.8.    Portal 'PENCIL' on Child Labour Elimination

**In News**

- In an endeavour to combat, the menace of child labour, trafficking and sexual abuse the Government has launched a portal namely 'PENCIL' (Platform for Effective Enforcement for No Child Labour).

- PENCIL is launched to foster the creation of a child labour free India, which will seamlessly integrate implementing and monitoring mechanisms for both, enforcement of the legislative provisions and effective implementation of the National Child Labour Project (NCLP).

- This platform is going to pave the way for effective enforcement of the new child labour law and also ensure accountability of enforcement agencies.

**Need For Such Portal**

- According to 2015 National Crime Records Bureau report, the number of cases filed for child trafficking was 3490, and the number of victims of the cases amounted to 3905. The total number of human trafficking cases amounted to 6877 and the victims for these cases totalled to 9127.

- Child labour is also widely prevalent in India as India is home to the largest number of child labourers in the world. According to a data, one in every 11 children in India is working.

- In this background, need was felt to create an online portal which connects the Centre to the state government, district and to all project societies and would provide a mechanism for implementation.

- PENCIL portal has five components -- Child Tracking System, Complaint Corner, State Government, National Child Labour Project and Convergence.

## Why Child Labour Is Still Persistent

- **Poverty and lack of social security** are the main causes of child labour.

- **Entry of multi-national corporations** into industry <u>without proper mechanisms to hold them accountable</u> has lead to the use of child labour.

- **Lack of quality universal education** has also contributed to children dropping out of school and entering the labour force.

- Laws that are meant to protect children from hazardous labour are ineffective and not implemented correctly.

- A growing phenomenon is using **children as domestic workers** in urban areas.

- **Rigid caste structure** an associated socio-economic condition is also one of the reasons for this. According to many survey child labour is highest among schedule tribes, Muslims, schedule castes and OBC children.

## Legal And Constitutional Safeguards Available For Child In India

- *Article 21 (A):* The State shall provide free and compulsory education to all children of the age six to 14 years.

- *Article 24:* No child below the age of 14 years shall be employed to work in any factory or in any hazardous employment.

- *Article 39(f):* Childhood and youth are to be protected against exploitation and against moral and material abandonment.

- *Article 45*: The state shall endeavour to provide within a period of 10 years from the commencement of the Constitution free and compulsory education for all children until they complete the age of 14 years

- ***Child Labour (Prohibition & Regulation) Act of 1986 and its subsequent amendment in 2016.***

- ***National Policy on Child Labour 1987***

- ***Launch of National Child Labour Project (NCLP) Scheme 1988***

- India is signatory to:
  - ILO Forced Labour Convention
  - ILO Abolition of Forced Labour Convention
  - UN Convention on the Rights of the Child (CRC)

- Also many NGOs are actively working on this aspect. ***Bachpan Bachao Andolan( Kailash Satyarthi)*** is one of them.

## Way Forward

- There should be exclusive courts for issues related to children.

- POCSO is a good law, but the implementation and subsequent conviction are very poor. We must have a holistic outlook towards the protection of children. In this context, passing of Trafficking Bill at the earliest will further ensure the safety and security of our children.

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The National Child Labour Project (NCLP) Scheme

- The National Child Labour Project (NCLP) Scheme initiated in the in 1988 to rehabilitate working

children by eliminating all forms of child labour through

- o identification and withdrawal of all children in the Project Area from child labour,
- o preparing children withdrawn from work for mainstream education along with vocational training.

- Under the Scheme, a survey is conducted to identify target group (child worker and adolescent working in hazardous occupations and processes in a district or a specified area).

- Then children in the age group of 9-14 years are withdrawn from work, and put into NCLP Special Training Centres where they are provided bridge education, vocational training, mid-day meal, stipend, health care and recreation etc. with the ultimate objective of preparing them to be mainstreamed into the formal system of education.

- Adolescents are withdrawn from hazardous occupations / processes to have benefited from skills training wherever required and are linked to legally permissible occupations.

## 1.9. Divyang Sarathi Mobile App For Disabled

**In News**

- Ministry for Social, Justice and Empowerment has launched the beta version of Divyang Sarathi mobile application, aiming to provide all relevant information pertaining to persons with disabilities.

- The app is integral part of ICT component of **Accessible India Campaign** (Sugamya Bharat Abhiyan) launched in December 2015.

**Key Features**

- The app would have every information on acts, rules, regulations and guidelines, schemes, information about the various outreach institutions, employment opportunities, and the disability market. This will help in empowering the 'Divyangjans' by providing easier and convenient access of information to them.

- The app has inbuilt unique feature of audio notes (text-to-voice conversion software) which converts written information into audio file as well as the adjustable font size which can be altered as per user's requirement.

- The app would have a wide outreach as it has been developed bilingually and the information is available in Hindi as well as English.

- The mobile application 'DivyangSarathi' is compliant with the principles of UNCRPD for Universal Access and the provisions of the Rights of Persons with Disabilities Act, 2016.

**Disability In India: An Overview**

*Initiatives By Government*

- *Statutory provisions* like Mental Health Act 1987, Rehabilitation Council of India Act 1992, Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation) Act 1995, and National Trust Act 1999.

- *National Policy for Person with Disabilities 2006*.

- India signed the **UN Convention on Rights of Persons with Disability** in 2007.

- Term "*divyang*" is being considered in place of "viklang" to change mindset. The term would help in raising self-confidence and subsequent empowerment.

- India is a signatory to **Marrakesh Treaty** to facilitate Access to Published works by Visually Impaired Persons and Persons with Print Disabilities.
    o The treaty allows for copyright exceptions to help for the creation, export and import, sharing, translation of the books in any format for accessible versions of copyrighted books and other works for the people with impaired visibility.
    o Under this treaty, India launched **Accessible India Campaign (Sugam Bharat Abhiyan)** and has set up Sugamya Pustakalaya, an online library for Persons with print disabilities. The aim of the Campaign is to make a barrier free and conducive environment for Divyangjans all over the country.
- Centre recently announced **universal ID** for person with disabilities. The ID cards will have a unique number through which all their details such as personal, bank, education, employment, income status, disability certificate, which can be assessed and eliminate the hassle of carrying certificates for different purposes. It will be valid throughout the country and will allow the persons with disability to avail benefits of schemes and reservations.

## Issues Around Disability In India

- *Social Segregation and Stigma* attached to disability is a big issue, considering their integration into society.
- *Non-availability of evidence-based facts.*
- *Inconsistency in Disability definition across censuses*: Different definitions in different censuses have led to inclusion of someone in one census and exclusion of the same person in another census.
- *Narrow perspective*: India looks at disability from medical or pathological angle only. Most developing countries look from social angle, highlighting institutional and social arrangements preventing those with impairments from leading normal lives.
- *Lack of standard reporting*: Census depends on self-reporting of disability; this may leave out mental disability and even physical disability.
- *Lack of Institutional and Infrastructural Support* for the disabled in India.
- *Lack of coordination-* inter-sectoral, inter-ministerial coordination as well as between govt bodies and NGOs.
- *Limited competence and capacity* of decentralizing services*.*

## Way Forward

- Kerala became first state to conduct a census of its own called **Kerala Disability Census** for 2014-15. Other states must follow example.
- Recently, **Supreme Court proposed to provide 3% reservation to Persons with Disabilities in all posts and services under the Government of India.** Currently, govt. has confined such reservation to Group C and Group D posts. This should be implemented to empower and enable them.
- *Accessibility and support services* for persons with disability must be increased manifolds.
- Multi-stakeholder approach should be adopted. It should include collaboration among key players such as government ministries, local champions like the DAISY Forum of India, and the private sector.
- *End Institutional Exclusion*: Today all Ministries like Ministry of Women and Child, Ministry of Education, and bodies like NCPCR etc shed their responsibilities to Ministry of Social Justice and

Empowerment. This should be stopped and everyone has to take blame for poor disability environment in India.

- *Capacity building* of health care providers and program managers.

- *Increase public awareness and understanding of disability* through social marketing and campaigns.

- Strengthen and support *research on disability.*

### *Conclusion*

It is not just the defect in their biological body that makes them disabled but the psychological trauma they go through due to unfriendly attitude of the society towards them that renders them disable. By providing them aids to overcome their disability and enabling them to earn a dignified livelihood, we can actually transform them from being disabled to being differently-abled.

## 1.10. Zero Hunger Programme To Be Launched

**In News**

- Three districts - Gorakhpur in Uttar Pradesh, Koraput in Odisha and Thane in Maharashtra - will initiate India's ambitious 'Zero Hunger' programme.

- This will be launched through interventions in farm sector on October 16 (World Food Day).

- The Zero Hunger program planned in these three district will focus on agriculture, nutrition, and health in a symbolic manner.

- Though many more districts will eventually be covered under this dedicated farm-based programme in sync with India's Sustainable Development Goals (SDGs) to end hunger by 2030, these three would act as a model of an integrated approach to deal with hunger and malnutrition by adopting suitable agricultural\horticultural practices.
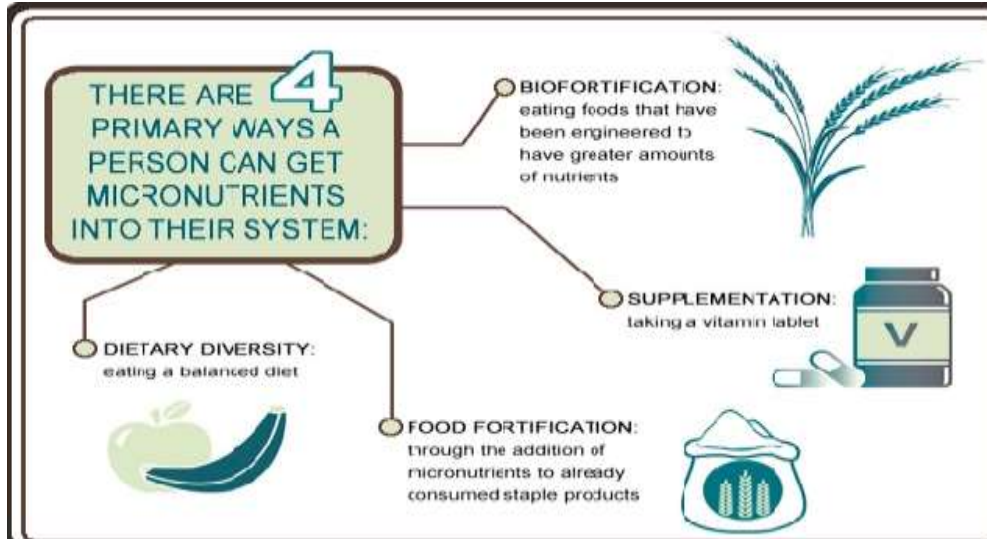
**Key Highlights**

- The Programme will be initiated by the Indian Council of Agricultural Research (ICAR) in association with the Indian Council of Medical Research (ICMR), the M S Swaminathan Research Foundation, and the Biotechnology Industry Research Assistance Council (BIRAC).

- The programme will ensure suitable methods of measuring the impact of intervention. There will be intensive training programme in order to identify the nutritional maladies in each district and the appropriate agricultural/horticultural and animal husbandry remedies.

- The concerned state governments will also be involved in the programme which consists of organisations of farming system for nutrition, setting up genetic gardens for biofortified plants/crops and initiation of a 'Zero Hunger' training.

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**Food Fortification**

- Food fortification is the **addition of key vitamin and minerals** (e.g. iron, folic acid, iodine, vitamin A, and zinc) to staple foods to improve their nutritional content and address a nutritional gap in a population.

- A safe and effective *means of improving public health* that has been used around the world since the 1920s, it provides a **nutritional benefit** without requiring consumers to change eating habits or purchase patterns.

- In the developing world, commonly fortified foods include staple products such as salt, maize flour, wheat flour, sugar, vegetable oil, and rice.

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- Since most populations in resource-poor settings do not have access to adequate quantities of fruits, vegetables, and meats where micronutrients are abundant, and because providing vitamin tablets poses logistical and economic constraints, food fortification is a practical and inexpensive alternative.



### Status Of Food Fortification In India

- In 2000, the Darjeeling district of West Bengal became the first place in India to fortify wheat flour. Now it is estimated that 7.6% of the industrially milled wheat flour in India is fortified.

- Momentum for wheat flour fortification is building in Haryana State as multiple international partners work with state leaders to consider options.

- A significant milestone in India took place in October 2016 when the *Food Safety Standards Authority of India published draft standards for food fortification.*

### Genetic Garden For Biofortified Plants/Crops

It contains the germplasm of naturally biofortified crops or such crops through plant breeding. It has plants and crops that help supplement micro-nutrient deficiencies, including iron, iodine, vitamin A and zinc among others.

## 2. POLITY AND GOVERNANCE

### 2.1. FSSAI Launches Online Platform For Food Inspection

**In News**

- Food regulator, Food Safety and Standards Authority of India (FSSAI), has launched FoSCoRIS - an online platform- to bring in transparency in food safety inspection and sampling.

- The web-based 'FoSCoRIS' system will help verify compliance of food safety and hygiene standards by food businesses as per the government norms.

**Key Highlights**

- The new system will bring together all key stakeholders — food businesses, food safety officers (FSOs), designated officers, state food safety commissioners — on a nation-wide IT platform and data related to inspection, sampling and test result will be shared seamlessly by all the officials.

- FSSAI will get information on the real-time basis which will eventually help in eliminating any discrepancy thereby making inspection more accountable.

- The new system requires a hand-held device with internet connectivity with FSOs.

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**About FSSAI**

- FSSAI was set up in August 2011 under the Food Safety and Standard Act, 2006.

- It has powers to lay down standards for food articles and to regulate their manufacturing, storage, distribution, sale and import.

- Some of its activities include licensing and surveillance of food and beverages outlets, enforcement of safety regulations across registered food vendors, and ensuring safety of imported food items, their standards and labelling.

**Food Regulator Under CAG Lens**

- In a first, the Comptroller and Auditor General of India (CAG) is doing a comprehensive performance audit of the country's food regulator.

- CAG's audit is looking at issues such as how FSSAI fixes standards, finalizes regulations, approves products, ensures compliance and conducts surveillance.

- The audit of FSSAI comes against the backdrop of the food regulator's controversial decision to ban manufacturing and sales of Maggi noodles—a popular snack sold by Swiss company Nestle in India—in 2015.

- After the crackdown on Maggi, questions were raised on FSSAI's capabilities and operations including things like product approval process, one of the primary things the regulator used to do. The Bombay high court in July 2015 asked FSSAI to justify its actions against the noodle brand.

- Performance auditing is focused on improving good performance in public administration by examining whether public programmes and services achieve the principles of economy, efficiency, and effectiveness and identifying conditions or practices that hamper performanceand enable the auditor to make suitable recommendations.

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### 2.2. National Hindi Diwas

**In News**

- September 14 is celebrated as Hindi day. Hindi, which is the official (not national) language of India, was given this status on September 14, 1949.

- This resolution was adopted under the Constitution of India in 1950.
- The Constituent Assembly thus decided that Hindi written in Devanagri script along with English to be the working language of the Indian language.
- The first Hindi Diwas was celebrated in 1953.

**Some Facts About Hindi**

- Hindi is the fourth most spoken language in the world. Hindi is the first language of around 430 million people around the world. In India, Hindi is mother tongue of around 258 million people.
- Apart from India, the language is also spoken in Nepal, Guyana, Trinidad and Tobago, Suriname, Fiji and Mauritius. Hindi and Nepalese share the same script –Devnagari.
- The first book believed to be published in Hindi was *Prem Sagar*. The book was published by Lalloo Lal and depicted tales of Krishna.
- Hindi is one of the seven Indian languages that can be used to make web URLs.

  Official Language Policy of the Union has been explained in detail under Article 120 (Part – V), Article 210 (Part – VI) and especially in Part XVII, Article 343, 344, and from 348 to 351.

**Recent Controversy**

- The Department of Official Language of the Home Ministry pulled out a 2011 report of a Committee of Parliament on Official Language and sent it to the President for approval.
- This Committee reviews the "progressive" use of Hindi in the Central government offices every 10 years under the Official Languages Act, 1963 and the Rules framed under it.
- The President accepted as many as 110 out of the 117 recommendations in this report. The Home Ministry has issued an advisory to all States and government departments to implement the recommendations.
- In February 2015, it had constituted a Hindi Advisory Committee in various ministries and departments to "ensure the progressive use of Hindi".
- Also, In May 2015, the government had issued an order that as per the Official Languages Act, 1963, all government files would have to be issued bilingually, in Hindi and English.
- As a result many experts has criticized the Central Government for unfairly imposing Hindi on non-Hindi-speaking States.

**Few recommendations made by the committee**:

- Giving students the option of writing their exams in Hindi.
- Making minimum knowledge of Hindi compulsory for government jobs.
- Ensuring that the government spends more on Hindi advertisements than English ones.
- The railway ministry should buy equipment with lettering in Devnagri script.
- Railway tickets should be bilingual, with Hindi being one of the two languages.
- Hindi should be an option for UPSC aspirants.
- Cabinet ministers should deliver their speeches in Hindi as much as possible.
- Making it mandatory at railway stations in 'C' category (non-Hindi speaking) states such as Tamil Nadu, Karnataka, Andhra Pradesh, Telengana and Kerala to have announcements in Hindi.

**2.3.** **Centre To Grant Citizenship To Chakma, Hajong Refugees**

**In News**

- The Centre has decided to grant citizenship to around 1 lakh Chakma and Hajong refugees living in the north-eastern states.
- It is in line with the directives of the Supreme Court which in 2015 ordered to grant citizenship to Chakma-Hajong refugees

**Key Highlights**

- Centre is trying to adopt a middle ground so that the 2015 Supreme Court order to grant citizenship to Chakma-Hajong refugees could be honoured without diluting the rights of the local population.
- While Centre is ready to grant citizenship to these communities, it is not willing to provide same rights as possessed by people of Arunachal Pradesh.
- For this, the government has proposed that the refugees will not be given rights, including land ownership, enjoyed by Scheduled Tribes in Arunachal Pradesh.
- However, they may be given Inner Line permits required for non-locals in Arunachal to travel and work.
- Centre is also planning to appeal to the apex court to modify its order as Chakmas and Hajongs can not have the same rights as Arunachalis.

**Criticism**

- Several organisations and civil society in Arunachal Pradesh have been opposing citizenship to the refugees saying it would change the demography of the state. The move would reduce tribal communities into a minority and deprive them of opportunities.
- Many critics saw this move as infringement of the constitutional protection given to the tribals of the state.
- Arunachal Pradesh, with its unique history, is governed by a special act--The Bengal Eastern Frontier Regulation, 1873. Section 2 of the act prohibits all citizens of India or any class of such citizens from going beyond such line without a pass issued under the hand and seal of an officer authorised with such function.

**Background**

- Buddhist Chakma and Hindu Hajong people came from East Pakistan (now Bangladesh) in the 1960s after their land was submerged by Kaptai dam project. Some of them also came to India escaping persecution, as they were non-Muslims and did not speak Bengali.
- The refugees were then accommodated in the religious camps of North-East Frontier Agency (NEFA). It became the Union Territory of Arunachal Pradesh in 1972 and eventually became a state.
- In the 1980s, there were attempts to give them citizenship which was opposed by locals and regional parties.
- Not having citizenship meant Hajong and Chakma could not get a job or own land and their basic needs were provided for by the government. Then 5,000 in strength, now the population is estimated to be about 1,00,000. This makes it impossible for the government to take care of their needs properly.
- In this context, in the year 2015, Supreme Court issued an order directing the central government to grant citizenship to the Hajong and Chakma refugees residing in Arunachal Pradesh.

## 2.4. <u>Supreme Court For Open Air Jails, Better Treatment For Prisoners</u>

**In News**

- The Supreme Court has directed the Centre and states to carry out a series of radical jail reforms, in the wake of the large number of unnatural deaths of inmates.

- It has pushed for more open-air jails and more humane treatment of prisoners, mostly under-trials languishing for long due to delay in justice dispensation and compensation for kin of those who die unnatural deaths inside jails.

- The bench passed the judgment while taking suo motu cognisance of a letter written to the court last year by former Chief Justice of India R.C. Lahoti on the increasing number of jail deaths across the country, including murder, suicides and fatalities blamed on torture by prison officials.

- The bench referred to the ***Mandela rules*** adopted by the UN General Assembly on minimum treatment of prisoners.

**Why Do We Need Such Reforms**

- NHRC figures show that prisoners cut off from family and friends had a 50% more chance of committing suicide than those outside. The average suicide rate among the general public for this period is 11 (per 100,000) whereas the average suicide rate in prison is 16.9 (per 100,000).

- Prisons in India are overcrowded and there is no separation of offenders of serious offences and minor offences. In this sense, Indian jails are being dubbed as a university for grooming criminals.

- It also suffers from understaffing and underfunding. The inevitable outcome is sub-human living conditions, poor hygiene, and violent clashes between the inmates and jail authorities.

- The size of the pre-trial prisoners is higher than that of the convicted prisoner. Pre-trial detention period is the most open period for the abuse of criminal justice process. Although pre-trial detainees should be presumed innocent until found guilty by a court of law, and treated as such, conditions in pre-trial detention are often much worse than those of prisons for convicted prisoners

- The Supreme Court in its landmark judgement in **Ramamurthy v. State of Karnataka 1996**, has identified nine major problems which need immediate attention for implementing prison reforms. These are: Overcrowding; Delay in trial; Torture and ill treatment; Neglect of health and hygiene; Insufficient food and inadequate clothing; Prison vices; Deficiency in communication; Streamlining of jail visits and; Management of open air prisons.

- Statistics reveal that most of the Indian prisoners are illiterate and belong to weakest section of the society. They do not know their rights which necessitates to reform the process so as to ensure their rights.

- Lack of inspections and sketchy implementation of oversight mechanisms turn prisons into frightening wrecks with shoddy living conditions.

**Efforts By The Government**

- Prisons' is a **State subject** under State List of the Seventh Schedule to the Constitution of India. The management and administration of Prisons falls exclusively in the domain of the State Governments, and is governed by the **Prisons Act, 1894** and the **Prison Manuals** of the respective State Governments.

- The government has set up working groups, committees and commissions to investigate the issue and offer solutions. The more important among them were the **Justice Mulla Committee Report on Prison Reforms** (1982-83) and the **Justice Krishna Iyer Committee on Women Prisoners (1986-87)**.

- Following the Supreme Court direction (1996) in *Ramamurthy vs State of Karnataka* to bring about the uniformity of prison laws and prepare a draft model prison manual, a committee was set up in the Bureau of Police Research and Development (BPR&D).

- In 1999, a draft Model Prisons Management Bill (The Prison Administration and Treatment of Prisoners Bill- 1998) was circulated to replace the Prison Act 1894 by the Government of India to the respective states but this bill is yet to be finalized.

- National Prison Policy is being implemented by the Centre, which redefines prisons as correctional homes.

## Key Directions Given By the SC

- High court chief justices should register a suo motu PIL to identify the next of kin of the prisoners who died unnatural deaths, according to the NCRB, between 2012 and 2015 and even later. The families should be awarded suitable compensation.

- Union Home Ministry should ensure circulation by October 31, 2017, of a "Model Prison Manual" that should include recommendations of the National Human Rights Commission and the Red Cross.

- The Centre should direct the NCRB to clarify the distinction between unnatural and natural jail deaths as these are not clearly explained at present.

- States should conduct for senior prison officials training and sensitization programmes on their duties and responsibilities, as well as those of prisoners.

- States should appoint counsellors for prisoners, particularly first-time offenders.

- Visits by prisoners' families should be encouraged. Extending the time or frequency of such meetings may be considered, besides exploring the possibility of allowing prisoners phone contact and video-conferencing with their families and lawyers.

- Studies should be conducted to assess prison conditions and facilities.

- States should examine the availability of medical assistance to prisoners and take steps wherever necessary.

- A board of visitors, including non-official visitors, should be constituted so that eminent members of society can participate in initiating prison reforms.

- The concept of "open jails" and "semi-open jails", in vogue in a few states, should be explored further.

## Conclusion

- In the absence of a robust Whistleblower Protection Act and structural changes to address the issues of overcrowding and understaffing, India's prisons will continue to be heaven for politically connected criminals and hell for socio-economically disadvantaged undertrials.

- Fundamental rights of prisoners cannot be placed in the back-burner and the Centre and the states need to be more pro-active in sensitising staff about the need to treat prisoners as humanely as possible.

- If the Fundamental Right to life and liberty postulated by Article 21 of the Constitution (guaranteeing right to life and liberty) is to be given its true meaning, the central government and state governments must accept reality and not proceed on the basis that prisoners can be treated as chattel.

## 2.5. <u>Recommendations to Curb Online Hate Speech</u>

**In News**

- The high-level committee, formed to propose new laws or amendments to deal with hate speech on the Internet, has submitted its report to the Ministry of Home Affairs.

- The committee was formed after the Supreme Court struck down Section 66A of the Information Technology Act, 2000. It was headed by TK Viswanathan.

**Background**

- Supreme Court struck down the section 66A of IT act, 2000 in **Shreya Singhal vs. Union of India case,** as it did not establish any proximate relationship between the restriction and the act.

- In the absence of 66A, women are being targeted with a lot of abuse and other humiliations and hate speech is very rampant.

- Also, presently we do not have any system in place to crackdown on menaces like the 'Blue Whale Challenge.

- Throughout the world, now hate speech is being handled by suitable amendments to the law. Germany has come out with a Network protection Act, New Zealand has the Harmful Publication Act, and hence we also need to incorporate such changes.

- In this background, the committee was formed to assist government in establishing effective legal framework to deal with cybercrimes related to hate speech on internet.

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**Section 66A**

- "Any person who sends, by means of a computer resource or a communication device

a. any information that is grossly offensive or has menacing character; or

b. any information which he knows to be false, but for the purpose of causing annoyance, inconvenience, danger, obstruction, insult, injury, criminal intimidation, enmity, hatred or ill will, persistently by making use of such computer resource or a communication device,

c. any electronic mail or electronic mail message for the purpose of causing annoyance or inconvenience or to deceive or to mislead the addressee or recipient about the origin of such messages, shall be punishable with imprisonment for a term which may extend to three years and with fine."

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**Key Recommendations**

- It has recommended appointing cyber crime coordinators in all states as well as setting up of anti-cyber crime cells at the district level.

- These cells will remain prepared to deal with those fomenting trouble or spreading hate against anybody on the grounds of religion, race, caste or community , sex, gender identity , sexual orientation, place of birth or residence, language, disability , or tribe through any means of communication.

- It also suggested amendments to the IT Act and some sections of IPC including **Section 153** (wantonly giving provocation with intent to cause riot) and **Section 505A** (false and mischievous reports intended to upset public tranquility) to cover hate speech through electronic means.

- It also said that Section 78 of IT act, which primarily dealt with capacity building, needs to be relooked at with a view to sensitize the officers of law enforcement agencies. Under it, a police officer of the rank of inspector or above was empowered to investigate offences.

- The punishment under the amended clause dealing with prohibiting incitement to hatred has been recommended to be two years imprisonment or a fine of Rs 5,000 or both.

**Criticism**

- Although the report has covered many important aspect to curb hate speeches, many analysts believe that it ignored the election laws and its relation with hate speech.

- According to them, hate speeches are rampant online during the election campaigns. The amendment to **Section 123 of Representation of Peoples Act** should have been amended too.

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**Legal Provisions of Hate Speech in India**

Hate speech has not been defined in any law in India. However, legal provisions in certain legislations prohibit select forms of speech as an exception to freedom of speech.

- Responsible speech is the essence of the liberty granted under **article 21** of the Constitution. One of the greatest challenges before the principle of autonomy and free speech principle is to ensure that this liberty is not exercised to the detriment of any individual or the disadvantaged section of the society.

- **Article 19** of the Constitution guarantees freedom of speech and expression to all citizens of India.

- This article is subjected to certain restrictions, namely, sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence.

**Legislations Around Hate speech**:

- *The Indian Penal Code, 1860*

  o Section 124A IPC penalises sedition

  o Section 153A IPC penalises 'promotion of enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and doing acts prejudicial to maintenance of harmony'.

  o Section 153B IPC penalises 'imputations, assertions prejudicial to national-integration'.

  o Section 295A IPC penalises 'deliberate and malicious acts, intended to outrage religious feelings of any class by insulting its religion or religious beliefs'.

  o Section 298 IPC penalises 'uttering, words, etc., with deliberate intent to wound the religious feelings of any person'.

  o Section 505(1) and (2) IPC penalises publication or circulation of any statement, rumour or report causing public mischief and enmity, hatred or ill-will between classes.

- *The Representation of The People Act, 1951*

  o Section 8 disqualifies a person from contesting election if he is convicted for indulging in acts amounting to illegitimate use of freedom of speech and expression.

  o Section 123(3A) and section 125 prohibits promotion of enmity on grounds of religion, race, caste, community or language in connection with election as a corrupt electoral practice and prohibits it.

- *The Protection of Civil Rights Act, 1955*

- *The Religious Institutions (Prevention of Misuse) Act, 1988*

- *The Cable Television Network Regulation Act, 1995*

- *The Cinematograph Act, 1952*
- *The Code of Criminal Procedure, 1973*

## 2.6. Saubhagya Scheme

**In News**

- The Government has launched **Pradhan Mantri Sahaj Bijli Har Ghar Yojana**, *or Saubhagya*, to provide electricity connections to over 40 million families in rural and urban areas by Dec' 2018.

- **Saubhagya** aims to improve the environment, public health, education and connectivity with the help of last mile power connections to all remaining un-electrified households in rural as well as urban areas to achieve universal household electrification in the country.

- Currently, **4.1 crore or 20%** of the country's household are without electricity even after 70 years of Independence.

**Key Highlights**

- Poor households would be provided electricity connections free of cost. The beneficiaries for free electricity connections will be identified using Socio Economic and Caste Census (SECC) 2011 data.

- Other households would also be provided electricity connections under the scheme on payment of Rs.500 only which shall be recovered by the DISCOMs/Power Departments in ten installments along with electricity bills.

- There is no provision in the scheme to provide free power to any category of consumers. The cost of electricity consumption shall have to be paid by the respective consumers as per prevailing tariff of the DISCOM/Power Dept.

- In order to hasten the process of release of connections to households, camps would be organised in villages / cluster of villages for identification of beneficiaries using modern IT technology with a Mobile App / Web Portal. Wide multi-media campaign would be undertaken to make people aware of all aspects the Scheme.

- Application for electricity connections shall also be registered electronically and requisite documentation including photograph of applicant, copy of identity card and / or details such as mobile number/Aadhar number/bank account number etc. shall be completed on spot in the camps, so that connections are released at the earliest.

- For households located in remote and inaccessible areas where it is not feasible to extend grid lines, solar power packs of 200 to 300 Watt and battery back with 5 LED light, 1 DC Fan, 1 DC power plug along with repair and maintenance for 5 years would be provided.

- The scheme is being funded to the extent of **60% by central grants, 30% by bank loans and 10% by states.** States that complete the scheme by December 2018 would be given an **additional 15% grant** by the Centre as incentive.

- The **Rural Electrification Corp** will be the nodal agency for the scheme throughout the country while public institutions and panchayats will be authorised to collect applications forms, distribute bills and collect payments in consultation with panchayati raj institutions and urban local bodies.

**Need For Such Scheme**

- Despite the government's aggressive village electrification programme, the Deen Dayal Upadhyay Gram Jyoti Yojana launched in July 2015, under which 78% of 18,000 villages have been electrified, it was realised that the problem of electricity 'access' wasn't resolved. (*A village is*

*declared to be electrified if 10% of the households are given electricity along with public places such as schools, panchayat office, health centres, dispensaries and community centres.)*

- Some of the really poor households do not have BPL cards but these households are not capable of paying applicable initial connection charges.

- There is also lack of awareness as to how to get connection or taking connection is not an easy task for illiterate people. There may not be electricity pole nearby and the cost of erection of additional pole, conductor is also chargeable from the households for obtaining a connection.

- Similarly in urban areas, *Integrated Power Development Scheme (IPDS)* provides for creation of necessary infrastructure to provide electricity access but some households are not yet connected mainly on account of their economic condition as they are not capable of paying the initial connection charges.

- Therefore, such scheme was needed to plug such gaps and comprehensively address the issues of entry barrier, last mile connectivity and release of electricity connections to all un-electrified households in rural and urban areas.

- Also, the earlier programme of Government of India '24x7 Power For All' has similar objective. Providing connectivity to all households is a prerequisite to ensure 24x7 power supply. Saubhagya is a schematic support to address the issue of energy access.

## Challenges

- ***Affordability issue:*** The Saubhagya scheme does very little to address the real problem of affordability as the households have to pay recurring cost in form of monthly electricity bills.

- ***The poor financial health of Discoms:*** The plant load factor (PLF) of coal based plants, an indicator of capacity utilization of power generation units, has dropped consistently over the decade from 77.5% in 2009-10 to 59.88% in 2016-17. This is due to demand for electricity from State discoms dropping in tandem with their deteriorating financial status.

- ***Failure of UDAY scheme:*** The Ujjwal discom Assurance Yojana (UDAY) introduced two years ago to restructure the debt of State distribution agencies has failed to make enough of a difference to this state of affairs. As UDAY has failed to address the root problem of populism in the pricing of electricity.

- ***Lack any mechanism for revenue collection:*** The scheme does not have any proper mechanism to realize and collect revenue for electricity consumed by newly added household as non payment of dues by such new users may only add to the woes of ailing discoms and power generators.

- ***Other lacunas:*** The scheme does not address the issue of reducing AT&C losses, separation of content and carriage, use of smart metering etc.

## Way Forward

- Success will require more than just budgetary fund allocation; it will depend largely on addressing structural issues that plague the broken power sector.

- The success of the scheme also depends on the success of the UDAY scheme which aims to make discoms viable because if Discoms are not viable they will not be able to buy power. And as a result the vision of 24*7 power will remain a pipe dream.

## 2.7. Pradhan Mantri LPG Panchayat

**In News**

- The Ministry of Petroleum and Natural Gas has launched the 'Pradhan Mantri LPG Panchayat' to boost Pradhan Mantri Ujjawala Yojana (PMUY).
- The new scheme is a backup to the Pradhan Mantri Ujjwala Yojana to distribute LPG connections among the rural areas where conventional fuel is used for domestic purposes.

**Key Highlights**

- LPG panchayat will serve as an interactive platform for the inheritors of LPG cylinders under the Pradhan Mantri Ujjwala Yojana (PMUY). It will also help officials, NGOs and other stakeholders, to identify the issues faced by the rural population for using LPG.
- In one LPG panchayat, around 100 LPG customers of nearby areas will share their experiences with each other. They can also share their problems and suggestions.
- The panchayats will also include safe practices, quality of service provided by distributors and availability of refill cylinders.
- The center plans to conduct one lakh LPG panchayats across the country in the next year-and-a-half. These one lakh LPG Panchayat will deal with the issue of safe use of LPG as well as its various benefits, like environment, health, and how it empowers women.

**Pradhan Mantri Ujjwala Yojana**

- The Pradhan Mantri UjjwalaYojana (PMUY) is a welfare program launched in 2016.
- This scheme provides LPG connections to BPL households in the country.
- The scheme is aimed at replacing the unclean cooking fuels mostly used in the rural India with the clean and more efficient LPG (Liquefied Petroleum Gas).
- The government has set a target of 5 Crore LPG connections to be distributed to the BPL households across the country under the scheme.
- Some of the objectives of the scheme are:
    o Empowering women and protecting their health.
    o Reducing the serious health hazards associated with cooking based on fossil fuel.
    o Reducing the number of deaths in India due to unclean cooking fuel.
    o Preventing young children from significant number of acute respiratory illnesses caused due to indoor air pollution by burning the fossil fuel.

## 2.8. Deendayal Hastkala Sankul

**In News**

- The Prime Minister inaugurated Deendayal Hastkala Sankul – a trade facilitation centre for handicrafts – at Varanasi.
- The Sankul will facilitate the weavers/artisans/exporters in promotion of handlooms/handicrafts in both domestic and international markets.
- The Crafts Museum in the Sankul will preserve the traditional handloom/handicrafts products of Varanasi and showcase the handloom & handicraft products, which will be an inspiration for the new generation, scholars, designers and tourists.

**Perceived Benefits**

- Promotion of rich traditional craft of ancient Varanasi.

- It will provide enabling platform and environment to showcase Indian handloom and handicrafts. There is a need for trade facilitation and advisory services to provide support for compliance with trade procedures, formalities and legal and regulatory requirements; this is needed to make entrepreneurs aware of new rules, regulations, thereby facilitating their import/export activities and enhancing their competitiveness.

- It will help in establishing supply chain linkages to domestic and foreign buyers.

- This Sankul will provide thrust to domestic and international tourism.

- It will boost trade and economic development of Varanasi as well as eastern parts of the country.

- The location of the site also allows its connectivity to all prominent locations within Varanasi and Sarnath. The location is expected to be the new growth corridor of development.

## 2.9. Revamped 'Khelo India' Programme

**In News**

- In a move to identify and groom young sporting talent, the Union cabinet has approved a revamped Khelo India (Play India) scheme.

- The Programme aims at mainstreaming sport as a tool for *individual development, community development, economic development, and national development*.

- The revamped Khelo India Programme would impact the entire sports ecosystem, including infrastructure, community sports, talent identification, coaching for excellence, competition structure and sports economy.

**Key Highlights**

- This is the first time ever that a long-term athlete development pathway would be made available to gifted and talented youngsters to excel in competitive sports and will create a pool of highly competitive athletes who can compete to win at the world stage.

- Pan Indian Sports Scholarship scheme, which would cover 1,000 most talented young athletes each year across select sports disciplines. Each athlete selected under the scheme shall receive an annual scholarship worth Rs. 5.00 lakh for 8 consecutive years.

- The Programme aims to promote 20 universities across the country as hubs of sporting excellence, which would enable talented sports persons to pursue the dual pathway of education and competitive sports.

- It also aims at creating an active population with healthy life-style.

- The Programme would cover about 200 million children in the age group of 10-18 under a massive national physical fitness drive, which will not only measure the physical fitness of all children in the age group, but also support their fitness related activities.

## 2.10. Women's Reservation Bill

**Key Highlights**

The Centre is planning to introduce the Women's Reservation Bill in the upcoming session of the parliament. Key Highlights of the bill include:

- The Constitution (One Hundred and Eighth Amendment) Bill seeks to reserve one-third of all seats for women in the Lok Sabha and the state legislative assemblies.

- The allocation of reserved seats shall be determined by such authority as prescribed by Parliament.
- One third of the total number of seats reserved for Scheduled Castes and Scheduled Tribes shall be reserved for women of those groups in the Lok Sabha and the legislative assemblies.
- Reserved seats may be allotted by rotation to different constituencies in the state or union territory.
- Reservation of seats for women shall cease to exist 15 years after the commencement of this Amendment Act.

> **Background**
> - The Women's Reservation Bill was first conceived more than 20 years back in 1996. This bill pushed for a 33% reservation of all Lok Sabha and state legislative assemblies for women.
> - The Rajya Sabha passed the bill in March 2010. However, the Lok Sabha never voted on the bill. The bill lapsed after the dissolution of the 15th Lok Sabha in 2014.

### Key Issues

- Those who support the bill stress the necessity of affirmative action to improve the condition of women.
- Some recent studies on panchayats have shown the positive effect of reservation on empowerment of women and on allocation of resources.
- However, the opponents argue that it would perpetuate the unequal status of women since they would not be perceived to be competing on merit.
- They also contend that this policy diverts attention from the larger issues of electoral reform such as criminalisation of politics and inner party democracy.
- Reservation of seats in Parliament restricts choice of voters to women candidates. Therefore, some experts have suggested alternate methods such as reservation in political parties and dual member constituencies.
- Rotation of reserved constituencies in every election may reduce the incentive for an MP to work for his constituency as he may be ineligible to seek re-election from that constituency.
- The report examining the 1996 women's reservation Bill recommended that reservation be provided for women of Other Backward Classes (OBCs) once the Constitution was amended to allow for reservation for OBCs. It also recommended that reservation be extended to the Rajya Sabha and the Legislative Councils. Neither of these recommendations has been incorporated in the Bill.

### 2.11. Electoral Bonds

The Union Finance Ministry has finalized the broad contours of the electoral bonds scheme that was announced this Budget, and is expected to forward it to the Reserve Bank of India, Election Commission and political parties to initiate wider consultations.

### Key Highlights

- According to the draft norms, each political party would have to open designated accounts for this purpose, with one or two banks being mandated by the RBI for issuing the bonds.
- The issued bond would have to be redeemed within a month or so.
- The bond's norms have been drafted keeping in view the concerns pertaining to transparency and money laundering.

### What Is Electoral Bond

- Electoral bonds will be issued by a notified bank for specified denominations. If one is keen to donate to a political party, one can buy these bonds by making payments digitally or through cheque.

- The party can convert these bonds back into money via their bank accounts. The bank account used must be the one notified to the Election Commission and the bonds may have to be redeemed within a prescribed time period.

- The bonds will likely be bearer bonds and the identity of the donor will not be known to the receiver.

- Electoral bonds are essentially like bearer cheques. The issuing bank will remain the custodian of the donor's funds until the political party redeems the bond. So, only the RBI will most likely be allowed to issue these bonds, to be sold through notified banks.

## Why Is It An Important Step

- Today, most political parties use the lax regime on donations to accept cash donations from anonymous sources. Nearly 70 per cent of RS 11,300 crore in party funding over an 11-year period came from unknown sources, according to the Association for Democratic Reforms (ADR).

- Currently, political parties are required to report any donation of over Rs 20,000 to IT department. But there has been a trend of more donations flowing by way of hard cash in smaller amounts.

- To fix this, the Budget has reduced the disclosure limit to Rs 2,000 and insists that any amount over this must be paid through cheque or the digital mode.

- The idea is that electoral bonds will prompt donors to take the banking route to donate, with their identity captured by the issuing authority.

## Criticism Of Electoral Bonds

- There are loopholes to electoral bonds too. While the identity of the donor is captured, it is not revealed to the party or public. So transparency is not enhanced for the voter.

- Income tax breaks may not be available for donations through electoral bonds. So if one is keen to support a political party, he/she will have to choose between remaining anonymous and saving on taxes.

- Certain amendments to different acts make the proposal for electoral bonds problematic. There are specific concerns about amendments that have been proposed to the Representation of People's Act (RPA) and the Income Tax Act (ITA).

  o Section 29C of RPA enjoins political parties to report on all contributions above Rs 20,000 (by individuals or companies) to the EC for scrutiny. As per the finance bill, an amendment was moved to *keep electoral bonds out of the purview of this section*.

  o Therefore, parties will not have to submit records of electoral bonds received to the EC for scrutiny. And if commission will never get to know of that contribution — and EC regularly displays such information on its website — the people will also not get to know.

  o Similarly, the finance bill also sought to exempt electoral bonds from Section 13T of the I-T Act. As per this section, parties need to maintain records of names, addresses of all donors who contribute more than Rs 20,000. This further reduces transparency of the proposed system of electoral bonds.

- Also, there do not seem to be many precedents to such a bond in other countries, even where political funding is well evolved.

## Way Forward

- It may have been worthwhile to study alternate methods and ensure the process leads to more accountability for voters, before shaking things up.

- The ideal solution would be to set up a *National Electoral Fund* to which all donors can openly contribute without expressing any preference for any political party. The funds could then be allocated to all registered political parties in proportion to the votes obtained. This will also address the donors' concern for secrecy.

- Once public funding of political parties is ensured, private donations must be totally banned.

- Since public funds will be involved, there must be an annual audit by the Comptroller and auditor General of India or an auditor approved by it. This will be the most decisive action electoral reform that the country needs.

Background:

- Union Finance Minister, in the budget speech, had made two announcements. These were:

o Reduction in limit for cash donation to political parties from Rs 20,000 to Rs 2,000

o A proposal to issue electoral bonds through which a donor could buy bonds from authorised banks against cheques and digital payments that would be redeemable only in the designated account of a registered political party.

## 3. ECONOMY AND INFRASTRUCTURE

### 3.1. The Lessons Of Demonetization

**In News**

- Reserve Bank of India's (RBI's) annual report stated that 99 % of high value demonetized notes have come back into the system.
- The RBI further disclosed that only 1 % of the Rs 15.44 lakh crore worth of currency notes, that had been scrapped in Nov' 2016, had not come back to the central bank.

**Positive Impact of Demonetisation**

- *Use of Big Data analytics:* The government can use the Big Data analytics (generated through data collection about currency deposits) to identify who deposited black money.
- *End of anonymity of Black money:* A large amount of previously unaccounted wealth has come back into the banking system thus the anonymity of those who owned black money had now ended.
- *Tax collection:* Demonetization will help in increase the growth in direct tax base.
- *Financial saving:* Demonetization has incentivised the switch in the financial holdings of households from cash to bank deposits and has led to increased use of digital payment.
- *Digital Payments:* The increased use of digital payment will create an audit trail thus will help in fixing the liability of tax evaders.
- *Real estate sector and inflation:* It has helped in bringing down both inflation & real estate rates.
- *Security threats curbed:* Experts have claimed that demonetization has curbed the menace of fake currency thus effectively tackled the security challenge which India is facing.

**Challenges/Failures of Demonetization**

- *Preventing generation of black money:* There is still a lack of clarity that how demonetization will ensure prevention or minimization of generation of new black money.
- *Slow economic growth:* The experts have also blamed the demonetization for the recent slow growth of Indian economy.
- *Burden on RBI:* RBI has had to bear a big burden because it had to absorb the surge in deposit through the reverse repo and Liquidity adjustment facility (LAF) and compensate banks. This in turn resulted in halving the RBI's dividend to the government.
- *Other cost:* The printing of new currency notes has also been a cost factor.
- *Leakages:* Most of the illegal wealth held in cash was converted through the cash exchange process, thus the aim of curbing the black money was not fully achieved.
- *Opportunity of converting black into white:* Opposition also criticizes the move on the ground that demonetization helped tax evaders in converting their black money into white.
- *Minimal impact on terrorism:* Moreover it has also been claimed that number of counterfeit note is too small to affect terrorist funding.
- *Other negative impacts:* Demonetization disrupted the normal economic activity such as daily wage earners losing their income and people having to stand in queues for days.

**Way forward**

- There is no magic wand to solve what is a deep problem in India, but a committed government plus tax reforms such as the new GST, which creates incentives for producers to seek bills from their input providers will be part of the solution.

- Moreover the government should also take lessons from some of the failures in execution of the demonetization operation.

> **Question:** The outcome of demonetization is a debatable question, it depends on which yardstick one uses. In this light discuss the success and failures of recent demonetization operation. And also suggest some measures to improve the tax collection and tax base in India.

## 3.2. Tax Dept Plans Three Pronged Strategy To Boost Tax Collection

### In News

- The Tax department is working on a **three-pronged strategy** to improve tax collection and widen the tax base, which now stands at 55 million.
- Functional specialization, jurisdiction free assessment, and taxpayer segmentation are the three focus areas.
- As a part of sweeping change, IT department says if a person defaults in payment of tax then he has to deal with at least three separate tax officers for verification of returns, assessment and finally recovery of dues.
- The **new annual action plan** of the income tax department includes litigation management, disposal of high value cases, scaling up of searches and seizures and strengthening of systems and investigation teams.
- It is also mulling taxpayer segmentation for differential treatment for small and large taxpayers.

### Shortcomings In Current Practice And Expected Benefits Of The New Strategy

- ***Efficiency gains:*** Currently a single officer handles the entire process for a taxpayer like assessment, verification, raising demand, initiating recovery and pass orders. The functional specialization will lead to enhancement of efficiency in the functioning of the department.
- ***Check on corruption and harassment:*** Jurisdiction free assessment will mean that any officer can send a notice to any taxpayer across the country. The move will check harassment of taxpayers and reduce corruption, as assessment will be done through email. Moreover confining to the jurisdiction based approach has led to uneven distribution of work resulting in overburdening of some departments. Thus, jurisdiction free assessment will also lead to equal diffusion of work as officer based anywhere can be assigned the assessment or any other function.
- ***Focus on revenue generating segment:*** Taxpayer segmentation will channelize the focus of the department to the high tax (revenue) generating areas.

### Way Forward

The above strategy is a step in right direction for improving the tax base (currently only 1% of Indians pay tax) while at the same time maintaining the accountability of the tax administrators. The above steps need to be supplemented by use of modern technology such as big data analytics to fix the liability of tax evaders. Thus such steps will reduce the effect of black money on the economy in long run and improve the tax collection.

## 3.3. Bharat Petroleum Set To Get Maharatna Status

### In News

- State run **Bharat Petroleum Corporation (BPCL)** is set to become a Maharatna company. Currently BPCL is a Navratna firm.

- Maharatna and Navratna state owned units operate in strategic fields such as coal, petroleum, steel, heavy engineering, power supply, telecommunications and transportation services.

- At present there are 7 Maharatna companies. These are Bharat Heavy Electricals, Coal India, GAIL (India), Indian Oil Corporation, NTPC, ONGC, and Steel Authority of India.

- A firm is eligible for Maharatna status if it is already a **listed Navratna firm**; has an average **turnover, net worth and annual net profit after tax** of at least **Rs 25,000 crore, Rs 15,000 crore and Rs 5,000 crore** respectively in **the last three years**. Moreover the company should have **significant global operations**.

**Benefits**

- *Enhanced power to the board:* After becoming a Maharatna firm the board of BPCL will get enhanced powers, which will help in expansion of operations both in India and abroad.

- *Able to compete effectively:* The firm will also be able to use its enhanced power to take on private sector companies such as Essar, Reliance who have recently entered the retail sector.

- *Reduced government interference:* It will enhance the independence of BPCL and reduce the government interference in its functioning.

- *Speed up decision making:* It will speed up the decision making process in BPCL as now it will not require the approval of oil ministry for every commercial decision.

### 3.4. RBI Includes HDFC Bank In 'Too Big To Fail' List

**In News**

- RBI included HDFC Bank in the list of **'too big to fail'** lenders referred to as *Domestic Systemically Important Bank (D-SIB)*.

- RBI had issued the framework for dealing with D-SIBs in July 2014. As per the framework, RBI has to disclose the names of banks designated as D-SIBs every year in August starting from 2015 and place these banks in appropriate buckets depending upon their **Systemic Importance Scores (SISs).**

- The additional capital requirement for D-SIBs have kicked in phase wise since April 2016 and will be fully effective from April 2019 as per RBI framework.

- Previously State Bank of India (SBI) and ICICI Bank were classified as D-SIBs in 2015.

**Basis of Categorization as D-SIB:**

- *Definition:* D-SIB are big banks of the country as the national economy is dependent on these banks so they are seen as banks that are **too Big to fail.** Moreover the classification means the collapse of these lenders could have a cascading impact on the entire financial system and the economy.

- *Basis of GDP:* Banks with assets that exceed **2% of annual GDP of India** will be considered part of this class of lenders.

- *Four systemic importance buckets:* The selected lenders are then assessed on the **four systemic importance buckets**—size, interconnectedness, substitutability and complexity.

**Background:** Following the global financial crisis of 2008, it was observed that problems faced by certain large and highly interconnected financial institutions hampered the orderly functioning of the financial system which in turn negatively impacted the real economy. Thus it was decided to identify such institutions and prescribe them higher capital requirements.

- Out of the four systemic importance buckets SBI falls in bucket three while ICICI Bank and HDFC Bank are in bucket one.
- **Classification at International level:** At the Global level, the identification of Systemically important banks is done by **Basel committee on banking supervision** while D-SIB are chosen by Central bank of a country.

## Benefits Of Categorization Of Banks As D-SIB

- **Prevent financial disruption:** D-SIBs are subjected to higher levels of supervision so as to prevent disruption in financial services in the event of any failure.
- **Benefit for D-SIB:** SIBs are seen as too big to fail creating expectation of government support for them in times of financial distress.
- **Lower borrowing cost:** There is also advantage in the form of lower borrowing costs for D-SIB as considering their importance there is a large probability that they will get support of government at time of distress.
- **Saving taxpayer money:** By requirement of maintaining additional capital against financial emergency it is ensured that taxpayer money is not wasted in rescuing them during crisis.
- **Other advantage:** These banks also enjoy certain advantages in funding mark.

## Negative Effect Of Categorization Of Banks As D-SIB

- **Moral hazards:** On the downside expectations of government support amplifies risk-taking, reduces market discipline and increases probability of distress in future.
- **Create chances for Anti competitive practice:** The classification creates competitive distortions in the market as these institutions may be seen as a monopolist in the market.
- **Ineffective use of scarce capital:** D-SIBs have a separate **Common Equity Tier 1 (CET1)** requirement. i.e. the additional CET1 or core capital requirement will be in addition to the capital conservation buffer. These leads to lack of productive use of scarce capital.

## Way forward

To prevent the practices of reckless risk taking, effecting market discipline the SIB should be subjected to additional policy measures thereby avoiding moral hazards.

## 3.5. Centre's Food Subsidy Bill Set To Be Slashed

### In News

- The new systems for monitoring transactions at fair price shops (FPSs) are helping to slash the Centre's food subsidy bill.
- Around a quarter of ration card holders in Haryana haven't turned up for collecting the provisions since June 2017 when all 9,500 FPSs in the state started using electronic point of sale (ePoS) machines and Aadhar seeding of ration cards was made mandatory.
- Earlier, Rajasthan had reported a similar weeding out of fictitious beneficiaries under the National Food Security Act (NFSA), after the State's 25,000 odd FPSs were ePoS enabled in Sept' 2016. Thereby the beneficiary list got pruned by about 20%.
- Haryana is one of six states to have installed e-PoS machines in all FPSs, the other five being Madhya Pradesh, Tamil Nadu, Andhra Pradesh, Chhattisgarh and Rajasthan.

### Benefits

- *Transparency:* The sudden drop in the number of buyers is due to ePoS-induced transparency.
- *Prevent diversion:* It curtailed the scope for manipulation of purchase records and diversion of grains meant for the public distribution system (PDS) to the open market.
- *Better targeting:* The use of Aadhar will help in resolving the problem of bogus ration card.
- *Reduced subsidy burden:* It will reduce the subsidy burden, which is currently Rs 1.45 lakh crore and is expected to rise to Rs 2 lakh crore in 2020.
- *Reduced buffer cost subsidy:* The buffer cost subsidy for maintaining the food stock will reduce considerably.
- *Better management of food stock:* Further, it will also help FCI in managing its food stock (as the requirement of maintaining huge food grain stock will be reduced by removal of bogus ration cards) in a more prudent manner and reduce the wastage and spoiling of the food grains.

## Challenges

- *Data may not be truly reflective:* The data may not reflect the true ground reality as the events such as death, migrant laborers going back to their respective states, persons shifting out of the state after marriage etc. also prune the PDS list.
- *Slow implementation:* The project of installing e-PoS is moving at a slow pace as till now only five states have implemented the project.
- *Implication of SC judgment:* The Supreme Court recent judgment on right to privacy has raised question over making Aadhar compulsory.
- *The problem of connectivity:* The rural areas are yet to be connected to the Internet fully thus will create hindrance in the implementation of the project.

## Way Forward

The implementation of the ePoS project is a step in right direction for better targeting of subsidy and ensuring efficiency in the implementation of the government project. At the same time the project need to be fast paced so that the benefits can be quickly realized. Moreover the government should also enact a law on right to privacy to address privacy issues of Aadhar project.

> **Question**
>
> From providing minute digital records to seeding out fake claims, the Targeted Public Distribution System is visibly reforming. Discuss the recent initiative of the government for PDS reform in the context of the possible positive gains and challenges facing these initiatives.

## 3.6. Highway Monetization To Get A Big Boost With TOT

### In News

- The National Highways Authority of India (NHAI) is expected to invite bids for 11 toll-operate-transfer (TOT) Model roads projects which would cover 700 km and would generate an upfront value of Rs 6,500 crore. The NHAI plans to transfer 75 projects on TOT basis and expects to raise Rs 75,000 crore.
- The TOT model, which monetizes publicly funded highways that have been completed, is expected to attract roads companies and strategic private equity investors.

- Under TOT, for an upfront payment, the government will transfer projects (mainly national highways) to private players or investors for a specific time period which can extend up to 30 years for tolling and maintenance

## Expected Advantages

- ***Asset creation:*** The model is asset since the highway is already constructed.

- ***Preempt the need for approval:*** It also means the acquirer will not face the hassle of obtaining land parcels and regulatory permissions necessary while undertaking a road project. Earlier such hurdles were highlighted as major factors for a weak trend in awarding road projects.

- ***Revive the road construction:*** TOT is expected to revive interest among road companies who intend to expand their roads portfolio.

- ***Improve the revenue generation:*** TOT model projects will also generate an annual toll revenue growth of 7-8 percent and return on equity of 14-16 per cent.

## Way Forward

The initiative will help in reviving the interest of the private players and speed up the infrastructure creation. There is a further need to improve center state coordination to ensure early approval of the projects. Moreover the issues of funding, dispute resolution should also be addressed.

### 3.7. Making Farming Remunerative: MP Price Deficiency Mechanism Deserve A Chance

The Madhya Pradesh government's new scheme named **Bhavantar Bhugtan Yojana (Price Deficit Financing Scheme)** of compensating farmers in cash for their failure to get the minimum support prices (MSP) is a welcome measure.

## Features Of This Mechanism

- Under it, State will work out a "model price" by looking at past market rates in MP and other states.

- The farmers will be paid either the MSP or the "model price" whichever is higher.

- Initially the scheme will cover pulses and oilseed. In course of time, the scope will be extended to other crops.

> A *deficiency price payment safety net* to counter frequent price risks in agriculture was first proposed in 2015 by a government panel headed by **Ramesh Chand.**

- Under the scheme, farmers will also have to register their crops at village level cooperative societies along with their Aadhar and bank account numbers.

## Expected Benefits

- ***Remunerative prices:*** The scheme will ensure the farmers are not paid prices, which are not remunerative. Thus saving the farmers from inadequate post harvest price realization.

- ***Address post harvest price crash:*** It will address the issue of price crash after the bumper harvest.

- ***Resolve the MSP issues:*** It will also resolve the issues involved with MSP mechanism such as lack of awareness, procurement confined to selected crops that too from selected states, distortion of the agricultural market and cropping pattern.

- ***NITI Aayog backing:*** NITI Aayog Task force also mooted price deficiency payment mechanism.

- ***Resolve the problem of excess food stocking:*** It will also resolve the issue of needless accumulation of the food stock by Food Corporation of India (FCI) involving maintenance cost and storage losses.

- *Consider the Local factors:* Moreover a single all India MSP may not do justice to the farmers of one region. As the production cost vary from region to region and from farmer to farmer.
- *Risk managements:* Such a mechanism is also needed as other risk management instrument such as crop insurance and future trading have not made much headway.
- *Other benefits:* It will also address the recent issue of farmer unrest in various states.

**Way Forward**

The proposed new system has the potential to avoid physical handling and warehousing of commodities. And also at the same time it has potential to ensure price support for major crops in all parts of the country, benefiting all farmers.

### 3.8. Coal India Set To Finalise Shakti Contracts Soon

**In News**

- Coal India will initiate long term coal supply contracts to supply 40 million tonnes under the **Shakti (Scheme to Harness and Allocate Koyla) scheme.**
- Coal India has asked its coal producing subsidiaries to make sure that a total of 40 million tonnes of coal is kept aside for auction to *independent power producers* under Shakti.
- Shakti scheme will give long term contracts to the power companies.
- **MSTC** will conduct the auction where consumers would be given the source of coal and they would make their initial price offer. The price offer would be discounts on their existing power generation tariffs based on the source and the quality of coal on offer.
- The ones that offer highest discounts on each source of coal will be eligible to sign long term supply contracts.

**Expected Benefits**

- *Certainty in supply:* It will bring certainty in fuel supply that was one of the major grievance of the power companies.
- *Improve the Plant load factor:* Further, It is expected to revive 13,000 MW of power plants in the country that are yet to secure steady fuel supply. Thus improving the Plant load factor.
- *Reduce coal import:* The certainty in supply will also reduce the coal import thus saving the crucial foreign exchange.
- *Transparency:* Use of auction process will also bring the transparency in the coal allocation to the power companies.

**Way Forward**

The Shakti scheme is a step in the direction to reform the coal sector, which is currently plagued by many lacunas. The long term aim of the government should be to open up the coal sector fully for the private companies which will help in bringing the latest technologies and improving the efficiency of the this sector.

### 3.9. e-Choupal to Offer More to Farmers

- ITC plans to turn e-Choupal into an online aggregator of agricultural services to provide services for farm mechanisation, credit facilities and weather services to farmers.
- At present the e-Choupal concept reaches 4 million farmers.

- e-Choupal is a concept linking the company directly with farmers via internet for procurement of agricultural products.

## 3.10. Efforts To Revive Gold Scheme

**In News**

- All out efforts are being made to revive the **Gold Monetization scheme (GMS)** which has failed to take off since its launch two years ago.
- The aim of this scheme is to mobilize idle gold with households estimated to be about 25,000 tonnes or almost half the value of this country's gross domestic product.
- However, the scheme has not even attracted 10 tonnes since its launch and even this has mostly been from temples not homes.

**Challenges**

- *Viability for the banks:* Banks are not finding it viable to accept gold deposits from investors for less than 500g.
- *Lack of adequate collection and hallmarking centres:* There is lack of adequate collection and certification centers under the scheme.
- *Fear of Tax reprisal:* There is also a fear of tax reprisal if the gold is deposited with the banks.
- *Lack of operative guidelines under the scheme:* The government is yet to prepare the operative guidelines on the Gold monetization scheme.
- *Collection form the rural areas:* The scheme has failed to address the issue of collection of gold from the rural areas where the bulk of the gold deposits lies.
- *Gold in form of jewellery:* Most of the household gold lies in the form of jewellery and people are not ready to deposit it as sentiments attached to such jewellery.

**Suggestion Made By The Panel Formed By The NITI Aayog**

- It has suggested to involve jewellers as collection centres. The inclusion of Jewellers will be positive as they enjoy customers' confidence.
- Another suggestion is to allow jewellers to accept gold as deposits and pay interest to the depositors for using that gold for jewellery and then return this to depositors on agreed terms.
- Moreover banks would be motivated to push GMS if they are allowed to lend gold to domestic jewellers for more than one year against collateral.

**Way Forward**

Thus, the above challenges must be resolved to make the scheme successful. Moreover, the government should also provide alternative investment opportunities to the people to wean away the people away from the gold.

## 3.11. Assam Allows Cos to Sack Up to 300 Workers

**In News**

- Assam has enacted the **Industrial Disputes (Assam Amendment) Bill, 2017** which authorizes employers to retrench up to 300 employees without seeking approval of the government.

- Thus it seeks to amend the **Industrial Disputes Act, 1947** by raising the threshold on number of employees from **100 to 300** to allow retrenchment of employees without seeking prior approval of the government.

- The act also provides the safeguard by laying down compensation to the laborers from the current 15 days salary to up to 60 days.

- Similarly the Maharashtra government has formed a panel to decide on an amendment to the Industrial Disputes Act that would allow companies to lay off up to 300 employees without seeking government approval.

## Benefits

- *Ease of doing business:* The amendment will help in achieving the objective of ease of doing business and thereby encouraging positive business environment.

- *Resolve unemployment problem:* It will resolve the issue of unemployment as currently the industries are not hiring more than 100 workers as they fear that hiring more than 100 might lead to problems if they were to be laid off.

- *Resolve unemployment due to rising automation:* It will also address the issue of rising automation and it leading to unemployment as companies in order to avoid the crossing the threshold limit prefer to use machines rather than employing new labour.

- *Increase Foreign investment:* The Act will also lead to more foreign investment and is a step towards Make in India.

- *Second-generation reform:* The step is in the direction of second-generation reform (it includes skill development, labour reforms etc.) in the economy.

- *Cooperative federalism:* The act passed by state of Assam can also be a role model for the other state (Best practices) to pursue same strategy thus will also promote cooperative federalism.

## Challenges

- *Dilution of Labour laws:* Opposition claims it as an attempt to dilute labour law thereby making labors vulnerable to hire and fire policy.

- *Favouring rich industrialist:* The some of the section also calls it as an attempt to favour rich industrialist at the cost of the laborers.

- *No correlation:* There is a no established correlation between increasing the limit for application of Industrial Disputes act for retrenchment and generation of employment.

- *Issue of automation unaddressed:* The Assam act fails to resolve the issue of rising automation leading to unemployment.

## Way Forward

The said amendment act is a step in the direction of ease of doing business and increasing employment but it must be supplemented by the initiative of incentivizing industries to employ more labors by using the tool of fiscal incentives such as Tax rebates. This will address the concerns about the negative impact of the amendment act.

## 3.12. Government To Hold Talks On New Electronics Policy

## In News

- In order to strengthen the ongoing momentum in domestic production of electronic goods, the government is drafting a new **Electronics manufacturing policy.**

- The government aims to reduce the dependence on import of electronics where the demand for electronic product is expected to rise to **$400 billion by 2020** in the home market.
- One of the big focus areas of the current government has been to develop India not only as a domestic manufacturing hub but also as a large-scale export destination.
- The new policy will also relook at the incentives, which are offered by the government under the **Modified Special Incentive Package Scheme (M-SIPS)** which expires in 2018.
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**National Electronics Policy 2012**

- An institute for semiconductor chip design has been proposed.
- To satisfy the demand for skilled workers in the sector, the policy aims to put 'special focus' on increasing postgraduate education.
- It is set to incubate a $400 billion in Electronic System Design and Manufacturing (ESDM) sector which will employ over 28 million or 2.8 crore people over the next 8 years
- To build a strong supply chain of raw materials, parts and electronic components to raise the indigenous availability of these inputs from the present 20-25 per cent to over 60 per cent by 2020.
- The strategies include setting up of a National Electronics Mission with industry participation and renaming the Department of Information Technology as Department of Electronics and Information Technology (Deity)
- To build on the emerging chip design and embedded software industry to achieve global leadership in Very Large Scale Integration (VLSI), chip design and other frontier technical areas and to achieve a turnover of USD 55 billion by 2020.
- To create long-term partnerships between ESDM and strategic and core infrastructure sectors – Defence, Atomic Energy, Space, Railways, Power, Telecommunications, etc.

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**Expected Positive Impact Of The Proposed Policy**

- *Make in India:* The policy is in consonance with the India's aim to be manufacturing hub under the Make in India scheme.
- *Reduce CAD:* The policy will also address the issue of current account deficit, for which the large electronic import is one of the major reason.
- *Creation of a roadmap:* The policy will provide a road map for the future growth of the sector and creation of employment opportunities.
- *Address the security issues:* It will also address the issue of security concerns arising out of the electronic equipment import from China.

**Challenges**

- *Tax uncertainty:* Lack of tax certainty in the electronic sector, thus affecting the business plans of the corporate entities.
- *Inverted duty structure:* The issue of inverted duty structure where high duty has been imposed on the raw material than the finished product.
- *Lack of R&D:* Lack of adequate ecosystem for research and development in India.
- *Lack of standardization:* Lack of adequate testing and certification system which has sometime led to high importation of spurious equipment.

**Way Forward**

- The preference should be provided to the domestic electronics firms in government procurement.

- Focus should be on improving quality of education and skill development in the electronic sector.

- An ecosystem for innovation and R&D should be created by involving the domestic industries and for this a dedicated **Electronic development fund** should be established.

> **Steps Taken By Government To Promote Organic Farming:**
> - Subsidies to farmers under the **Paramparagat Krishi Vikas Yojana (PKVY)** in partnership with the state governments.
> - Launch of Mission Organic Value Chain Development for North Eastern Region.
> - Development of an organic regulation for exports by APEDA.

### 3.13. Gold May Be Kept Out Of Future Trade Pacts

**In News**

- A big spike in gold imports from countries with which India has trade agreements has caused alarm in the government.

- Most recently, the surge came via South Korea as the gold is allowed to be imported duty free under the 2010 trade agreement between the two countries.

- Thus, the provisions of trade agreements have been abused to import gold at zero or lower duty.

- The government now plans to exclude the yellow metal from such trade agreements in future.

**Impact Of Such Abuse Of Trade Agreement For Gold Import**

- *Current Account deficit:* The surge in gold imports has worsened the country's CAD.

- *Saving in the physical securities:* It has further channelized the saving away from the financial sector to the physical securities such as gold.

- *Negative impact on Gold Monetization Scheme:* The surge in gold has also impacted the government scheme to mobilize the gold form the household sector (expected to be around 20000 tonne) via Gold Monetization Scheme.

- *Loss of revenue:* It has meant the loss of crucial revenue (in form of tax on import) for the government due to misuse of treaty agreements.

**Way Forward**

Government should take steps to check such misuse but the long term aim should to increase financial literacy, providing more investment opportunities to channelize the saving into the financial sector.

### 3.14. Organic Farming: Real Challenge That India Is Facing

**In News**

- The Indian government has been undertaking measures to promote organic farming with the aim to improve soil fertility and help to double the farmer's incomes by the year 2022.

- The organic farming accounts for 1% of total agricultural production and is expected to grow to 20% in the next five years.

- Sikkim has become the India's first organic state and encouraged other states to replicate the **"Sikkim model".**

**Benefits Of Organic Farming**

- *Doubling the farmer's income:* The organic farming is the next big thing to increase the farmer's income as they get a premium price for such produce.

- *Reduction of subsidy:* This will also reduce the government subsidy on chemical fertilizers which is currently pegged at Rs 1 lakh crore.

- *Long-term investment:* The resultant financial saving from reduction of subsidies can be directed towards agricultural investment.

- *Health impact:* Organic farming reduces the use of chemical fertilizers thereby reducing the negative impact on health.

- *Other Benefits:* The organic farming can also address the issue of soil contamination, improving soil biological diversity, reduce ground water contamination and eliminate the problem of aquatic weeds in water bodies.

### Challenges

- *Yield issue:* Shift from conventional chemical based farming to organic farming raises the risk of loss in yield. Countries such as the **United Kingdom** have provided subsidies to compensate for the yield loss during the conversion period. However in India there is no such subsidy.

- *Shortage of input:* There is a serious shortage of good quality organic input such as organic seeds, organic fertilizers etc., which further increases the risk of loss of yield.

- *Lack of Organic policy:* The biggest challenge faced by organic farmers is the lack of an organic policy for the domestic market and imports. This has led to fraudulent practices and genuine players are not getting the premium.

- *Lack of Government support:* The government budget and subsidies are targeted towards chemical based inputs as a result very less budget is allocated to organic farming.

- *Supply chain bottlenecks:* The supply chain is underdeveloped and small and mid-sized farmers located in hilly regions and tribal belts find it extremely difficult to access the market.

- *Lack of storage facility:* There is also shortage of pack houses and refrigerated vehicles which leads to spoilage. Organic products have to be stored separately from conventional products to avoid cross contamination and the existing supply chain does not often provide such facility.

- *Problem of Middleman:* In a number of cases the middlemen take away most of the profits and farmers are not able to earn a premium price.

- *Third party certification issue:* For export, Agricultural and Processed Food Products Export Development Authority (APEDA) has made it mandatory to have third party certification while most of the countries follow **Participatory guarantee scheme (PGS)** which is a self certification process supported through the Paramparagat Krishi Vikas Yojana (PKVY) scheme. Thus increases the cost of the export and Indian organic farmers are not able to compete in International market.

### Way Forward

- Government should introduce *National Policy On Organic Food*.

- There is a need to increase the consumer awareness through labeling and certification of organic food.

- Moreover the existing problems in agricultural supply chain, storage need to be resolved in a time bound manner.

### 3.15. <u>Challenges Of Automation & Digitization: After HDFC, Yes Bank Retrenches 2,500 Jobs</u>

### In News

- Yes Bank has eliminated about 2500 jobs i.e. more than 10% of its workforce citing increased redundancy and the impact of digitization. Similarly HDFC Bank has trimmed its workforce by about 11,000.

- Recently former CITI bank CEO Vikram pandit said that 30% of banking jobs will be wiped out in five years.

- This trend shows the negative impact of automation on the employment and consequent unemployment. Many have described this phenomenon as **Neo Luddism**. The **Luddites** were a group of English textile workers and weavers in the 19th century who destroyed weaving machinery as a form of protest, fearing loss of their job at the hands of machine.

### Negative Impact Of Automation

- *Unemployment:* This may lead to loss of employment as many new technologies such as artificial intelligence can perform the manual task with much more efficiency.

- *Demographic Disaster:* India's demographic dividend is at the risk of turning into a demographic disaster.

- *Threat to Social Security:* The social security of the people at the bottom of the pyramid may be compromised.

- *Poverty and Misery:* The automation has risk of increasing poverty and human miseries, thereby spoiling the recent steps towards poverty alleviation.

- *Unrest Against Government:* The unrest against the government may increase and the movement such as by **Patidars, Marathas** for reservation in government jobs may gain ground.

### Solutions/Way forward

- *Reskilling:* There is a need of re-skilling the workers so that they can find the appropriate employment.

- *Specialization need to be promoted:* The specialization needs to be increased among the high skilled workers.

- *Specific jobs creation:* The jobs need to be increased in sectors that require management, decision making as in such areas machine cannot replace human beings.

- *Livelihood support:* The guaranteed basic minimum may be provided to such retrenched workers till long-term solutions are arrived at.

- *Labour reforms:* The government should also take quick steps towards labour reforms so that problem of using capital and technology to avoid application of labour laws can be prevented.

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**Question**

The rise of automation is likely to extend job destruction deep into the middle classes with only the most caring, creative or supervisory roles remaining. In this light discuss the negative impact of automation on employment and also suggest remedies to resolve this current conflict between automation and unemployment.

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## 3.16. Graded Surveillance Measure In The Security Market

### In News

- The BSE website mentions a list of more than 900 companies that are monitored under the **Graded Surveillance Measure (GSM)** designed by **Securities and Exchange Board of India (SEBI).**

- SEBI introduced the measure to keep a tab on securities that witness an abnormal price rise that is not commensurate with financial health and fundamentals of the company such as earnings, book value and price to earnings ratio among others.

## Purpose Of Introduction Of GSM

- ***Ensuring diligence and caution on part of the investor:*** The measure would provide a heads up to market participants that they need to be extra cautious and diligent while dealing in such securities put under surveillance.

- ***Protecting investors:*** The underlying purpose behind the GSM is to alert and protect investors trading in a security, which is seeing abnormal price movements. SEBI may put shares of companies under the measure for suspected price rigging or under the ambit of shell companies.

## Working of Graded Surveillance Measure

- ***Six stages:*** Once a firm is identified for surveillance it goes through **six stages** with corresponding surveillance actions and the restrictions on trading in those securities gets higher progressively.

- ***Review mechanism:*** There is a quarterly review of securities. Based on criteria the securities would be moved from a higher stage to a lower stage in a sequential manner.

- ***Public announcement:*** As and when a security is shifted to various levels of surveillance, it is publicly announced on a daily basis on BSE and NSE websites as well as through circulars to the stock brokers.

- ***Independent auditor:*** Moreover, the exchanges can also appoint independent auditors to audit the books of accounts of these companies and do forensic audit.

## Way Forward

- The step is in the direction of increasing protection of investors by SEBI. It will boost up the investors confidence in the capital market and channelize the financial saving towards stock market rather than physical commodities such as gold, real estate etc.

- The announcements of GSM are often made at very short notice and implemented from the next day itself, thus giving those who have already invested a very less time to exit. These kind of challenges need to be addressed.

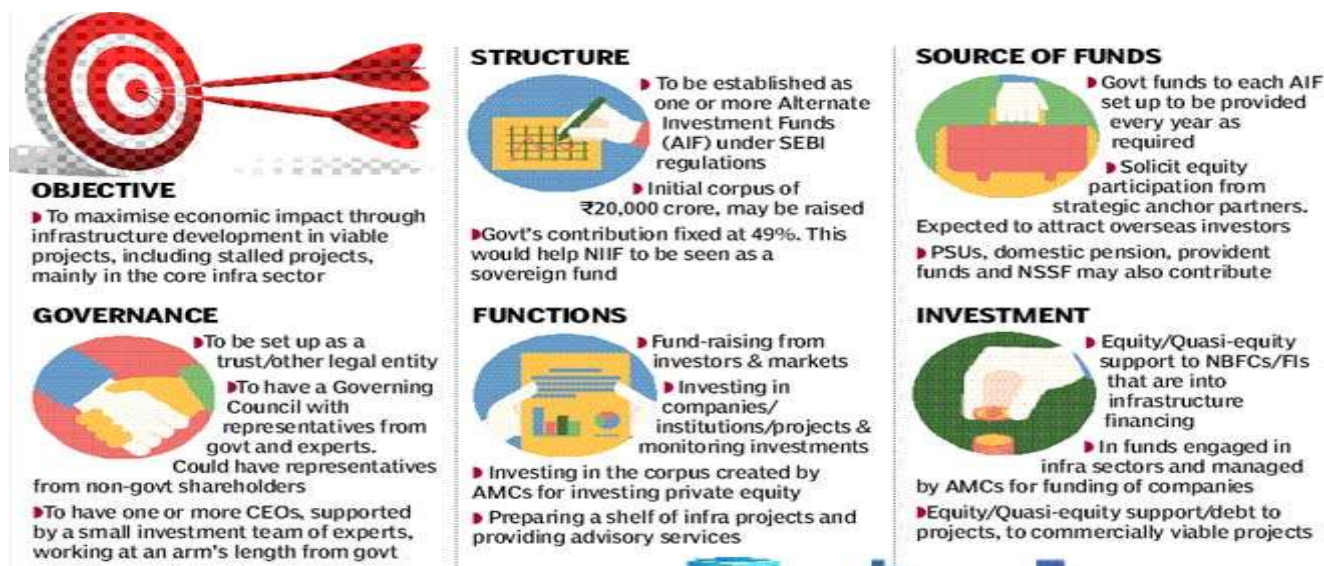## 3.17. Infrastructure Fund NIIF To Get Its First Investment Of $5 To 10 Billion

### In News

- **National Investment and Infrastructure Fund (NIIF)** is close to its first major deal. **Abu Dhabi Investment Authority (ADIA**) have agreed to invest in specific sectors especially in transport. These investments to be staggered over a few years could be to the tune of **$5-10 billion.**

- Similarly a deal of **$1 billion** with Singapore's sovereign wealth fund **Temasek Holdings** could also be announced soon.

- In February 2016, the government had also signed a MoU with the United Arab Emirates to explore opportunities for mobilization of up to $75 billion long-term investment in the NIIF. Other potential investors in the fund include SWFs such as **Qatar Investment Authority (QIA).**

### About NIIF

- The NIIF was set up in December 2015 in a tax efficient manner as a **category-II Alternate Investment Fund** which was eligible for a **pass through status** under the **Income Tax Act** to attract investors.

- The aim of NIIF is to bring in long term investment for the development of infrastructure project, which have a long gestation period. The NIIF and its sub funds are supposed to invest in infrastructure projects such as greenfield, brownfield and stalled.

- The NIIF will have an initial corpus of **Rs 40,000 crore** of which 49% will be contributed by the government. The government has already approved its contribution of Rs 20,000 crore towards the NIIF. The remaining 51% is to be raised from sovereign wealth funds, other global long-term investors and public sector units.



## Potential Benefits Of NIIF

- *Infra funding:* India requires investments worth **Rs 43 lakh crore (about $646 billion)** in the infrastructure sector over the next five years. As much as 70% of this requirement will be in power, roads and urban infrastructure. And NIIF can fill this gap to a large extent.

- *Banking sector facing issue of large toxic assets:* Most of the public sector banks are struggling to cope with toxic assets; their ability to fund large infrastructure projects is very limited. So funds for infrastructure from other sources, including NIIF, assume importance.

- *Competitive interest rate:* NIIF will help in bringing down the cost of funding as the most of the sovereign wealth fund have agree to provide capital at competitive rate of interest.

- *Dedicated institution for infra sector:* NIIF will help in bringing a dedicated institution for the infrastructure investment, which could also advise the government on policy formulation for the infrastructure sector.

- *Bring down CAD:* The large-scale investment in NIIF will also bring down the current account deficit and also bring stability in foreign investment.

## Reason For Delay

The delay in taking-off of the ambitious NIIF, even two years after its announcement in the 2015-16 Budget, was due to various issues.

- *Planning requirement:* The building of a new institution requires meticulous designing, hiring manpower and various other aspects, which takes time.

- *Negotiation with investors:* The negotiations with potential investors on hurdle rate (minimum rate that a company expects to earn when investing) and clauses to exit investments in projects prematurely in exceptional circumstances have also consumed a lot of time.

- *West Asia economic woes:* Moreover, the sovereign wealth funds from Western Asia, which has seen an erosion of oil revenues, are now more cautious in making fresh investments than before.

- *Structure of investment:* Working out the structure of investment partnerships to the satisfaction of both the sides was also another issue without which investments won't flow in.

### 3.18. States Will Have To Compete For Central Projects- Challenge Method

**In News**

- The Centre has decided to approve NITI Aayog's proposal for adopting the **challenge method** for awarding all projects to states so as to bring in speed, efficiency and transparency.

- The challenge method for selecting the state as well as the site for the projects (which can be both brownfield and greenfield projects) will now be applicable across sectors such as aviation, roads, railways, health, education, IT, power and textiles.

- It will also be used for awarding all national events such as national games and youth festivals to States.

**Challenge Method**

- Challenge method will lay down objective criterion for selection of sites for various projects.

- Under this method, prospective states will be rated on more than **half dozen parameters** prescribed in the guidelines issued and the project will go to the state with the highest score on a **scale of zero to 100**.



**Benefits Of Challenge Method**

- *Competition among states:* The method is expected to spur competition among states and union territories both in terms of offering the best sites and committing resources in terms of land, utilities, infrastructure support and financial contribution.

- *Optimum utilization of scarce resources:* This in turn would encourage optimum utilization of scarce resources.

- *Competitive federalism:* Many of touted this method as a step towards competitive federalism, where states compete among themselves to attract investment.

- *Bring down the gestation period of the project:* Challenge method will ensure that the gestation period for all these projects will come down significantly and there will be no major delays and this will give enough push to efficiency.

- *Ensure due diligence:* Awarding projects based on the challenge method will ensure that due diligence is being done by all departments and states.

- *Bring in transparency:* This is also expected to end allocation of the big projects on political consideration thus bringing in more transparency.

### 3.19. <u>World Gold Council To Form Panel For Establishing Spot Gold Bourse In India</u>

**In News**

- The World Gold Council (WGC) plans to form a committee soon to help set up India's first spot gold exchange.

- In 2015, Indian government had floated the idea of setting up a **National gold exchange**. India's push for an exchange follows the **gold monetization** and **sovereign bond schemes** introduced last year, designed to mobilize the country's gold hoard and reduce imports of the gold that weighs on the country's trade deficit.

- Apart from the WGC, the NITI Aayog has also formed a panel to discuss a **National gold policy.**

- Currently, the Multi Commodity Exchange (MCX) and National Commodity and Derivatives Exchange (NCDEX) currently offer gold futures contracts in India, but do not have a platform for physical trade.

> **Background:**
> India buys 800-900 tonnes of gold every year, which is a third of the global mined production annually. But India is still a price taker and it doesn't have a say in setting the price of gold.

**Benefits**

- ***Standard gold price & Transparency:*** A dedicated exchange for physical gold is expected to pave the way for standard gold pricing practices in India, apart from bringing in transparency into a market, which sees large cash transactions.

- ***Consolidation of gold market:*** A spot exchange can serve as a catalyst to organize the fragmented gold market in India, as it would bring together a number of key players across the gold value chain on the same platform.

- ***Remove intermediaries:*** The spot exchange will enable players across the value chain to source physical gold without going through several layers of intermediaries.

- ***Monetization of Household gold:*** The exchange will enable financial institutions to launch gold-backed products more effectively, thereby providing a strong impetus to government initiatives for monetization of household gold.

- ***Strengthen India's say:*** The traded price on the exchange can be used to establish an India reference price, which will strengthen India's position in setting world gold prices.

**Challenges**

- ***Overall difficulties:*** There are several challenges such as delivery standards, quality assurance to buyers, creating trust to increase Indian jewellery demand globally, transparency in pricing and distribution across country.

- ***Commodity transaction tax (CTT):*** The CTT applicable to commodity derivatives exchange, if it is also imposed upon gold it could act as deterrence for gold trading on the proposed exchange.

- ***Tax uncertainty:*** The uncertainty over the tax treatment of gold (including imported gold) under GST regime has further added to the confusion.

**Way Forward**

There is a need to catalyze the domestic gold recycling industry in a systematic and sustainable manner to mobilize idle gold lying in the country. This requires consolidated efforts on part of Indian government and replicating global best practices in gold management.

## 4. INTERNATIONAL AFFAIRS

### 4.1. U.N. Sanctions Against North Korea

**In News**

- The United Nations Security Council voted unanimously to impose a new set of sanctions against North Korea.

- A Sanctions Committee, which acts as a subsidiary of the Security Council, is tasked with implementing, monitoring and providing recommendations to the council on particular sanctions regimes.

**About The Sanctions**

- The latest UNSC resolution against North Korea represents the international community's renewed commitment towards world peace and disarmament.

- The new sanctions introduce a full ban on the supply, sale or transfer of all condensates and natural gas liquids to the North Korea.It sets a cap on crude and refined oil exports to North Korea at 8.5 million barrels per year which represents a 30 percent reduction.

- The sanctions prohibit nations from authorizing new work permits to North Korean citizens around the world.

- The resolution asks countries around the world to inspect ships going in and out of North Korea's ports.

- The Security Council introduces a ban on the export of textiles by the North Korea including fabrics and apparel products.

- Expands financial sanctions by prohibiting all joint ventures or cooperative entities or expanding existing joint ventures with North Korea.

- Introduces further clarifications with regard to the call on Member States to inspect vessels with the consent of the flag State on the high seas.

- Directs the Committee to designate additional Weapons of Mass Destruction related and conventional armsrelated items.

**Implications**

- The resolution will affect the ability of North Korea to fuel and fund its weapons program.

- North Korea is import dependent on petroleum for energy. It imported some 4.5 million barrels of refined petroleum products annually and 4 million barrels of crude oil. Hence these sanctions will surely hit its economy.

- The North Korea is now banned from exporting textiles which is its second-biggest export after coal and other minerals in 2016totaling $US752 million ($938 million).This again is a blow to the employment and economy ofNorth Korea.

- This resolution also puts an end to the regime's remittances from the 93,000 North Korean citizens living abroad.

- According to the rough estimates this ban will eventually starve the regime of an additional $US500 million ($623 million) or more in annual revenues.

**Russia And China Against Stronger Sanctions**

- Russia had condemned the idea of tightening sanctions on North Korea without any political push to resolve the crisis.

- Though Moscow supported the resolution because leaving nuclear tests without a firm reaction would be wrong.

- Chinese officials have expressed fears that an oil embargo could **risk causing massive instability in its neighbourhood**.

- Russia and China have also expressed concern about the **humanitarian impact** of strengthening sanctions on North Korea.

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**North Korea Tests Hydrogen Bomb**

- Recently North Korea announced that it had conducted its first successful test of a hydrogen bomb.

- H-bombs are also known as thermonuclear warheads. They are massively more powerful than atomic bombs because of using nuclear fusion (the merging of atoms) rather than fission to unleash enormous amounts of energy.

- The technology of the hydrogen bomb is more sophisticated compared to an atomic bomb and could wipe out an entire city.

- North Korea claimed it has again tested a hydrogen bomb underground and that it successfully loaded it onto the tip of an intercontinental ballistic missile.

- Though it has never been confirmed but the claim alarmed the international community.

- All members of the United Nations unanimously agreed on the threat North Korea poses and they passed sanctions against it unanimously for the denuclearization of the Korean peninsula.

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**Conclusion**

- The United Nations passed the harshest sanctions it has ever adopted against North Korea after the country conducted its sixth and largest nuclear test. Both China and Russia are concerned about North Korea's nuclear program but they are also worried that if the world leans too hard on the country it could act rashly or become unstable, potentially creating a security crisis on their borders.

- Since both countries have veto power over UN Security Council resolutions, their consensus is essential. So the sanctions that were passed unanimously through the Security Council represented a compromise between the US position and China and Russia's stand. They were undeniably tough but not severe for Pyongyang. However, there is no denying the fact that it was a high time that the world got united and acted against the overtly dangerous regime in the North Korea. The UN sanctions represent's this global consensus.


## 4.2. Elections In Germany

**In News**

- Recently elections were held in Germany to elect members of the 19th parliamentary members.

- German Chancellor Angela Merkel has won a fourth term in office after the general election but with her authority diminished .Though her conservative bloc secured the lead position in parliamentary elections but failed to halt the march of rightwing populists.

- This is the conservative's worst election result under the leadership of Angela Merkel. Her centre-right Christian Democratic Union party secured 33 percent of the vote down about nine percent compared to the last election in 2013.

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**About Election Method**

- The German Bundestag (Parliament of Germany) is the representation of the people of the Federal Republic of Germany and being vested with decisive legislative authority.

- It is composed of representatives of the German people who are elected for four years in general, direct, free, equal and secret elections.

- The elections for the German parliament, the Bundestag or lower house (the legislative branch of government) combine a mixture of first past the post and proportional representation voting systems.

- In elections voters are asked to cast two votes in which one is for a candidate in their regional constituency and other is for a political party that will fill the Bundestag's 598 seats.

- This means that voters can split their votes between parties when voting for the constituency candidate they want to see in parliament and the party they support.

- Voters do not directly elect the next chancellor. The chancellor must be elected with an absolute majority of the Bundestag's members. The candidate for chancellor is from the party that wins the most votes.

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**Protest After Election**

- After the results were announced there were protests outside AfD's(Alternative for Germany party) election party office in Berlin.

- Similar protests broke out in Cologne, Hamburg and Frankfurt.

- The AfD, co-led by Alexander Gauland and Alice Weidel fought a campaign that centred on criticism of Angela Merkel and her decision in 2015 to allow large numbers of migrants into Germany.

- Merkel's party gained the largest share of the votes but she was left considerably weakened after a surge in support for the anti-immigration Alternative for Germany.

- It is the first time a far-right party has gained seats in the German parliament since World War Two.

**What Does The German Elections Mean For The EU**

- The German election is unlikely to spark a crisis for the EUrather the parties in the next ruling coalition could help to shape Europe's future.

- Some of Macron's (President of France) reform ideas for the Eurozone would probably be implemented if the SPD (Social Democrats)is part of the government.

- But in any other grand coalition the focus of German euro policies would remain on fiscal rules and structural reforms.

**What Does The German Elections Mean For Brexit**

- With Angela Merkel in a strong position, the German election is likely to have little impact on the EU's Brexit talks with Britain.

- Angela Merkel's Christian Democrats (CDU/CSU) could either form another grand coalition with the Social Democrats (SPD) or a three-way coalition with the Greens and the pro-business Free Democrats (FDP).

- All parties more or less agree on the Brexit stance so the elections mean very little for Brexit.
- All major German parties want to maintain close economic and political ties to Britain post-Brexit and limit the economic fallout.

> Q. The recent elections in Germany though has weakened the Angela Merkel but not the European Union. Discuss.

## 4.3.  UNGA 72nd Session

### In News

- The 72nd Session of the United Nations General Assembly (UNGA) was convened at the UN Headquarters in New York City.
- The General Debate theme was**'Focusing on People: Striving for Peace and Decent Life for All on a Sustainable Planet'**.

### Key Highlights Of The Session

- During the session, discussions were held on specific themes such as the setting of the sustainable development goals, the run-up to the Paris climate agreementand refugees.
- The President of the 72nd session of the UNGA, Miroslav Lajcak, has identified the following six overarching priorities for his tenure following his electionmaking a difference in the lives of ordinary people; prevention and mediation for sustaining peace; migration; political momentum for the SDGs and climate; human rights and equality including equal opportunities for genders and quality of events organized by the Presidency.
- The  UNGA president in his opening remark raised the issue of ongoing UN reform, streamlining UNGA's agenda to make it manageable for all Member States including the delegations that have small representations and communicating with youth, media, civil society and the private sector.
- UN Secretary-General Antonio Guterresalso reiterated the significance of U.N. reform and said that the UN reform proposals which the Assembly will consider will help the UN to adapt and deliver better in the newer challenging environment.
- At the 72nd session it is for the first time in 11 years that all UN Member States and observers addressed the UN General Assembly during the General Debate with a total of 196 statements in the UNGA hall.
- During the week-long Debate, Heads of State and Government highlighted concerns ranging from nuclear conflict between the US and North Korea to climate change, terrorism and mass displacement. Challenges resulting from recent hurricanes in the Caribbean were also stressed.

### India's Participation

- India was represented by Minister of External Affairs SushmaSwarajat UNGA.
- This session of the UN General Assembly is important for India as it offers an opportunity for India to push for the much needed reforms in the international organization especially the UN Security Council. Additionally it provides with the platform to push for certain agendas that are important for the country at the international level.
- India spoke about the challenges to the World peace and said that the terrorism and the ideas that engineer this evil are spreading at a rapid pace.
- The minister in the UN assembly meeting informed about the programmes of welfare running in India. She said all our economic programmes have a principal purpose i.e empowerment of the

poor. Schemes such as Jan Dhan, Mudra, Ujjwala, Skill India, Digital India, Clean India, Start-Up India, Stand-Up India all are for the empowerment of poor.

- She remarked that India has risen despite being the principal destination of Pakistan's nefarious export of terrorism. Therehave been many governments under many parties during 70 years of Indian freedom and we have a sustained democracy. Every government has done its bit for India's development.

- The minister highlighted the country's culture and thought which has been shaped by a history and philosophy that believes in peace as humankind's only rational and practical objective.

**U.N. General Assembly**

- The General Assembly is one of the six main organs of the United Nations. It is the only organ of the U.N. in which all Member States have equal representation: one nation, one vote.

- All 193 Member States of the United Nations are represented in this unique forum to discuss and work together on a wide array of international issues covered by the UN Charter such as development, peace and security, international law, etc.

-  All the Members meet in the General Assembly Hall for the annual General Assembly session.

- The General Assembly (GA) is the main deliberative, policymaking and representative organ of the UN.

- Decisions on important questions such as those on peace and security, admission of new members and budgetary matters require a two-thirds majority. Decisions on other questions are by simple majority.Each country has one vote.

Q.  In the UNGA session India successfully countered Pakistan's false propaganda. In the light of importance of UNGA session critically analyse India's stand on state sponsored terrorism and the support it garnered in the recent UNGA session.

## 4.4.    EU Withdrawl Bill

One of the most important bills related to Britain's exit from the European Union cleared a crucial test in the UK parliament which allowed it to proceed on its journey to final passage.

**About The Bill**

- The EU (Withdrawal) Bill will repeal the 1972 European Comminutes Act which brought the U.K. into the EU and end the jurisdiction of the European Court of Justice.

- There are three principal elements included in this Bill:
  - o  The first is repealing the European Communities Act 1972, the historic law that took Britain into the EU.
  - o  Second, the Bill will convert all EU law into United Kingdom law to prevent a legal conundrum after Brexit. Thousands of European laws dictats and directives will be turned into UK law before Brexit is completed in mid-2019.
  - o  Thirdly, the Bill will create the necessary powers for Member of Parliament to change these laws once Britain has left the EU.

- However there are concerns that under so-called Henry VIII clauses, the Government will have sweeping powers to repeal legislation without parliamentary approval.

- All EU existing laws will be applied to domestic U.K. law in order to ensure a smooth Brexit immediately after the country leaves the bloc on March 29, 2019.
- The U.K. Parliament could then amend, repeal and improve its own laws as and when it deems necessary.
- Ministers argue this process would protect the U.K. from a cliff-edge of uncertainty. However, critics of the bill claim that government officials would then possess the power to modify legislation without the appropriate scrutiny from Parliament.
- Britain's main opposition party Labour as well as politicians from other parties, warned that the withdrawal bill is a power grab for Prime Minister Theresa May and her government and that the bill had not yet been properly scrutinized.

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**About Henry VIII Clause:**

- King Henry VIII published a 'Statute of Proclamations' in 1539 which gave him the power to legislate by proclamation.
- The Henry VIII clauses give the Government powers to change old laws that have already been passed by Parliament.
- They allow the Prime Minister to change existing laws without Parliament's full approval.

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## 4.5. Breakthrough Listen Project

Breakthrough Listen, an initiative to find signs of intelligent life in the universe, has detected 15 brief but powerful radio pulses emanating from a mysterious and repeating source far across the universe.

### About The Project

- The Breakthrough Listen project was publicly announced in 2015 and has been backed by Stephen Hawking and Yuri Milner, a Russian billionaire who along with other backers, has put $100 million toward the 10-year project.
- It is the largest ever scientific research program aimed at finding evidence of civilizations beyond Earth.
- The program includes a survey of the 1,000,000 closest stars to Earth. It scans the center of our galaxy and the entire galactic plane. Beyond the Milky Way, it listens for messages from the 100 closest galaxies to ours.
- The instruments used are among the worlds most powerful. They are 50 times more sensitive than existing telescopes dedicated to the search for intelligence.The radio surveys cover 10 times more of the sky than previous programs.
- The project members until now have identified 11 signals as worthy of detailed research.

### Significance

- Breakthrough Listen is helping to push the frontiers of a new and rapidly growing area of our understanding of the universe around us.
- It will help figure out whether life exist in the Universe elsewhere or not.
- If life exists in universe other than on Earth then it will give us a focused approach towards a Galaxy or Solar System in the vast Universe.

- It will help us in Predicting Space related uncertainties and may help us in avoiding a danger on Earth.

- It may help us finding an Earth like planet where Human Civilization can find its second home.

- The 'Search for Extra Terrestrial Life' may prove to be one, opening the lock of thousand doors and therefore should be actively supported.

## 4.6. Second Anniversary Of SDGs

- The adoption of Sustainable Development Goals has completed two years. SDG was adopted on 25th September , 2015.

- For details on SDG, refer Part-3 (July 2017) of CA magazine.

### MDG Vs SDG

- MDGs were not properly communicated to the masses. While SDGs have seen much more effective consultation and thus were launched with far better public outreach.

- SDGs are wider in nature and included for the first time specific goals on economic indicators.

- They offer a paradigm shift in tune with a world in flux where new groupings of nations seem set to render the old world order of western dominance obsolete.

- The SDGs are universal as they are for all nations not just for the developing world. While this ensures unprecedented accountability, the universality principle has also become contentious as the G77 and China or the developing nations expect the principle of Common But Differentiated Responsibilities (CBDR) to apply to the SDGs.

- CBDR means that while the responsibility towards the Earth is commonly shared, it is the developed countries, in view of their historical and greater contribution to environmental degradation that must do the heavy-lifting of responsibility.

- The resource mobilisation for implementing the SDGs will focus on nations capacities instead of the traditional categorisation of developed or developing.

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- **Wada Na Todo Abhiyan**, a network consisting of over 4000 civil society organisations across the country in 22 states is actively engaged in the SDG process from 2012.

- WNTA is organizing state level civil society consultations on Agenda 2030 to popularize the SDGs and to build an Inclusive multi-stakeholders platform to engage and monitor the SDGs.

- Concerned about the growing economic inequalities, WNTA members have been active in popularizing and building awareness on various SDG goals and targets.

- WNTA is concerned that the SDG does not refer to caste based discrimination as a basis for promoting poverty, violence and other development disadvantages.

## 5. INDIA AND WORLD

### 5.1. India-Japan

The Prime Minister of Japan Mr. Shinzo Abe paid an official visit to India from 13 September to 14 September, 2017 for 12th Indo-Japan Annual Summit in Gujarat for multifaceted cooperation under **'Special Strategic and Global Partnership'** framework.

**Key Highlights Of The Visit**

- Japan's "Free, Open and Prosperous Indo-Pacific Strategy" was aligned with India's "Act East Policy" through enhancing maritime security cooperation, improving connectivity in the wider Indo-Pacific region, strengthening cooperation with ASEAN and promoting discussions.

- The commencement of work on the Ahmedabad–Mumbai HighSpeedRailproject (bullet train) is a major infrastructural upgradation project for Indian Railways. The Shinkansen technology of Japan is needed both for high speed and rail accident prevention. This is supported by construction of HSR training institute in Vadodara, technical cooperation for capacity development of the National High Speed Rail Corporation, transfer of technology to advance "Make in India" initiative.

- Japan's funding for bullet train project is also a part of geopolitical strategy of capturing vast markets for technological supplies. This is a competition based strategy against China which recently grabbed bullet train project in Indonesia against Japan.

- Japanis providing soft loans for bullet train project and for new infrastructure and connectivity projects within India and in the Indo-Pacific region.

- The cooperation in defense and security was also noted. It included defense dialogue mechanisms, partnership development between the two Coast Guardsand their joint exercises and transfer of Japanese amphibious aircraft ShinMaywa US-2 to India. Indo-Japan US$1.3 billion defence equipment deal is a major technology transfer in defence sector.

- India has **vast oceanic regions** and territories of Andaman, Lakshadweep, South China Sea, etc. In order to improve its regional security and to assert itself as a major power in Asia, India needs to upgrade itself with more advanced and efficient Japanese technology in defense area.

- An agreement was made to establish an India–Japan Act East Forum to advance infrastructure projects for the development of India's northeast which is the **gateway to ASEAN countries.** Japan has extended approximately US$350 million loans. AlsoJapan has a historicalconnection to the Northeast.

- These projects would not only bring improvement to underdeveloped northeast but also would contain China's advancement near Indian borders, as recently seen in the Doklam area.

- The summit also discussed about **terrorism and the bilateral cooperation to containit.** This was recently highlighted in the BRICS summit also and the issue is being highlighted by various nations in favour of India.

- India and Japan announced cooperation at trilateral and regional levels in areas of defence, security and infrastructure.The trilateral **Malabar** naval exercise is held between **US, Japan and India**. USA has deployed its seventh fleet in Yokosuka, Japan. The Quadrilateral Dialogue for regional cooperation and counterbalancing China's growing assertiveness includes **Australia as a crucial partner.**

- India and Japan signed **15agreements** to strengthen cooperation in the **AsiaPacificregion** in fields of Disaster Risk Management, Skills Development, Connectivity, Investments, Civil Aviation, Science& Technology and focused on improving **people to people relation**s.

## India-Japan Relations

- India and Japan enjoy mutual economic advantage through their bilateral partnership. India is a growing market and Japan's technology and capital including its Office Developmental Assistance as a part of Japan's 'aid diplomacy' are of much value to India.

- The India-Japan Comprehensive Economic Partnership Agreement (CEPA) in August 2011 is the most comprehensive agreement concluded by India. Japan is the fourth largest foreign investor in India with nearly 8 per cent of India's overall FDI. India has now become Japan's largest aid recipient which China enjoyed in 1980-90.

- Japan has extended partnership with India for its 'Make in India', 'Skill India' and 'Smart City' projects as declared in the 2016 Japan–India Joint Statement. Japan is also providing development assistance for a number of infrastructure projects.

- The economic partnership is also driven by the geopolitical considerations against the China's military assertiveness. Japan and India are associated as valuable partners because both face disputes with China through their maritime and territorial issues.

- Japan has ongoing security tensions in the East China Sea where Beijing claims sovereignty over the Senkaku/ Diaoyu islands, which are currently administered by Japan. India's long-standing territorial disputes with China recently escalated with military standoff on the Doklam --- the three-way junction of India, Bhutan and China. In a rare diplomatic statement the Japanese Ambassador to India lent support to India's action which China condemned.

- China's continued support for North Korea and Pakistan is a matter of concern to Japan and India respectively. Japan regards India as a great balancer against China and India finds in Japan a great supporter on its road to 'great power' status.

- Tokyo has supported India's membership in the Nuclear Suppliers Group while Beijing opposes it vehemently.

- India's non-participation in China's One Belt, One Road (OBOR) initiative has put the onus on New Delhi to offer alternate models of infrastructure development. In this direction India has initiated projects like the India-Myanmar-Thailand (IMT) trilateral highway and has partnered with Japan for the Asia-Africa Growth Corridor (AAGC) which pools together Indian and Japanese expertise and funding in building infrastructure in Africa.

- Japan also has the "Partnership for Quality Infrastructure" initiative which aims to build quality infrastructure in Asia.

- Japan maintains a base in Djibouti and the Indian Ocean is an important conduit for the energy imports. This signifies the importance of India for Japan which has strengthened its maritime ties with India. The two countries also hold a bilateral naval exercise JIMEX since 2012.

- Another big area of cooperation is civil nuclear energy where the Japan-India civilian nuclear deal recently came into force especially when India is not a signatory to the Nuclear Non-Proliferation Treaty (NPT).

## Analysis

India and Japan share strong civilizational and ancient relations. This is further necessitated by the developing geopolitical global trends which concern both India and Japan. Both the countries have supported each other in areas of peaceful nuclear energy, territorial sovereignty and international forums. Moreover, the technology and financial assistance from Japan is equally reciprocated by strategic and security advantage to Japan from India. The reiteration of Strategic and Global

Partnership framework between the two countries is going to witness more closer relationship in times to come.

| **Q.** How is Indo-Japan bonhomie imperative for peaceful Asia Pacific? Discuss. |
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### 5.2. Visit Of President Of Belarus To India

The President of the Republic of Belarus Mr. A.G. Lukashenko visited the Republic of India as a mark of 25th anniversary of the establishment of diplomatic relations of Belarus and India.



**About The Visit**

- The visit tried to strengthen bilateral engagement and cooperation in defense and security, regional and global developments.

- The two sides extended bilateral cooperation in defence, trade & investment, science & technology and people to people exchanges.

- India and Belarus committed to strengthen cooperation against terrorism and globally designated terrorists irrespective of their origin.

- The two countries shared commitment to prevent the proliferation of weapons of mass destruction. Belarus appreciated India's application for membership in the Nuclear Suppliers Group to strengthen global non-proliferation objectives

- Belarus welcomed India's project of regional connectivity through International North South Transport Corridor. It also looked forward to the trilateral agreement among India, Iran and Afghanistan on establishing Chahbahar Transport and Transit which would further enhance connectivity.

- India and Belarus signed *10 agreements in fields of Agricultural Research, Youth Affairs and Sports, Skill Development and Entrepreneurship, Oil and Gas Scientific and Technical Cooperation, Education and Culture.*

**India-Belarus Bilateral Relations**

- India shares great historical and traditional ties with Russia and Central Asia. India was one of the first countries to recognize Belarus as independent country in 1991. Belarus recognizes India as an emerging global power and seeks to develop a "strategic relationship" with India.

- Belarus has supported India's candidature for permanent seat at the UNSC. Belarus also supported India at the NSG meeting in Seoul in April 2016.

- India also supported Belarus for its membership in the NAM and international forum like IPU. India took supportive stand on various Resolutions in Geneva and New York targeting Belarus for violation of human rights and restrictions on freedom of expression.

- Bilateral trade and investment relations have potential for two-way growth. Belarus in recent years has emerged as a good source of potash fertilizers for Indian agriculture sector and Pharmaceuticals are key exports from India to Belarus.

- India is linked with Belarus under multilateral economic initiatives such as the Eurasian Economic Union (EEU) and the International North South Transport Corridor. India is negotiating a Free Trade Agreement with the EEU.

**Eurasian Economic Union**

- The Eurasian Economic Union is an international organization for regional economic integration. It is established by the Treaty on the Eurasian Economic Union.

- It came into force in January 2015. The Member-States of the Eurasian Economic Union are - Armenia, Belarus, Kazakhstan, Kyrgyztan and the Russian Federation.

- It is a brainchild of the Kazakh President NursultanNazarbayev who in 1994 suggested the creation of Eurasian Union.

- The EAEU provides for free movement of goods, services, capital and labor. In addition, it will co-ordinate the financial systems and regulates industrial and agricultural policies, labour markets and transportation networks of member nations.

**Why Ukraine in dilemma?**

After Crimean crisis of February 2014, when Russia annexed Ukraine's Crimean Peninsula, the Ukraine decided to stay away from EEU and moved closer towards NATO and EU.

**Why EAEU is important to India?**

- Eurasia have one of the largest natural reserves in the world comprising 15% of global oil resouces, one-fifth of world's natural gas reserves, coal, mineral fertilizers. India needs to achieve energy security crucial for a rising economic power taking into consideration energy resources of China.

- The FTA with EAEU will lead to growth of infrastructure, defense and technology intense sectors in India. This is also crucial to "Make in India" initiative.

- India has strong military and economic ties with Russia.This is crucial because China has significantly expanded their strategic and economic influence in the region.

- This will boost the considerably low bilateral trade between India and Eurasia. It will benefit Indian pharma industry and also enhance India's connectivity and influence in region.

- It is significant from strategic viewpoint to counter growing influence of China in central Asian region. China has made massive investments and loans in region,especially through its Silk Road Economic Belt initiative.

**Analysis**

Indo- Belarus relations are significant for development and diversification of trade and economic ties. The bilateral relation attaches greater significance especially for the much needed "Make in India" and "Skill India" initiatives. The stronger bilateral relationship are significant for India to assume power in new global order.

Q. Discuss the significance of India's relationship with Belarus. How is Central Asian region significant for Indian economy?

Q. Eurasian Union has assumed greater importance to India's "Connect Central Asia" Policy. Critically examine in light of recent geopolitical developments.

## 5.3. Operation Insaniyat

- India extended humanitarian assistance for Rohingya refugees in Bangladesh under operation insaniyat by supplying assistance to deal with the huge influx of Rohingyas who have fled from Myanmar**.**

- India has extended assistance to Bangladesh because of strong Indo- Bangladesh strategic ties. Bangladesh is facing humanitarian crisis due to large influx of Rohingya refugees there.

- Bangladesh is currently hosting over 400,000 Myanmar nationals from the Rakhine state who left their country in the past due to communal violence and repeated military operations.

- For details on Rohigya issue, refer Part 4 ( August 2017) of CA Magazine.

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**Rohingyas in India**

- Rohingyas entered into northeast India through various routes. They avoided staying near the Myanmar's borders. Rohingyas spread over a large area across various states. They have their camps in Assam, West Bengal, Uttar Pradesh, Delhi, Jammu and Kashmir, Andhra Pradesh and Kerala.

- There are about 40,000 Rohingya Muslims living illegally in India. According to Centre's estimates, Rohingya's population has increased four times in India over the last two years. The maximum concentration of Rohingya Muslims is reported to be in Jammu. The central government maintains that there could be around 10,000-11,000 Rohingyas in Jammu.

**Why India Wants To Deport Rohingys?**

- Most of the Rohingya Muslims living in India are registered with the Office of the United Nations High Commissioner for Refugees (UNHCR). But the government has stated its decision to deport Rohingyas because –

1) There are security concerns for India due to influx of large number of illegal RohingyaMuslims in Jammu. This has potential to convert Hindu majority Jammu region to a Muslim majority area which can lead to tensions

2) Myanmar does not recognize them as its citizens.

3) India is not a signatory to the 1951 Refugee Convention of the UN or the 1967 Protocol Relating to the Status of Refugees. In total, 148 countries have signed either of the two protocols that clarify the rights of refugees and help protect them.

4) There have been intelligence reports regarding involvement of Rohingyas in terrorist attacks in past (BODHGAYA Terrorist Attack).

- India does not have a refugee specific law and the matter falls under the Foreigners Act of 1946. The Foreigners Act makes undocumented physical presence of a foreigner in India a crime.

- It also empowers the government to detain a foreigner living illegally in the country till that person is deported. India has also not ratified the United Nations Convention against Torture despite being a signatory to the convention in October 1997.

- The Article 3 of the Convention against Torture states that "no party shall expel, return or extradite a person to another State where there are substantial grounds for believing that he would be in danger of being subjected to torture".

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**Analysis**

- Rohingya Muslim issue should not lead to bilateral difficulties with neighbouring states. However India should firmly extend humanitarian aid to the community on grounds of compassion as well as the increasing international appeals to Myanmar.

- India should play a constructive role in stabilizing the situation with its resources. Also India should take the strategic move to solve Rohingya conundrum by prodding Myanmar government for good Indo-Mynmar relations and positive intervention from international community. Moreover, India should draft a national policy on refugees to handle any such future crisis.

## 5.4.    Meeting Of Foreign  Ministers Of The G-4 Countries

Foreign Ministers of Japan, Brazil, Germany and India gathered to consider ways to accelerate **reform of the United Nations Security Council**. They met on the occasion of 72nd session of the United Nations General Assembly in New York.

### Key Highlights

- G4 Ministers reaffirmed support for each other's candidatures as permanent members of reformed Security Council. The agenda of reforms included expansion of both permanent and non-permanent membership, the improvement of working methods and the Council's representativeness.

- They deliberated upon the enhanced role of developing countries to the United Nations. The number of the United Nations Members has increased from 51 in 1945 to 193 today but the current composition does not reflect changed global realities.

- The Ministers welcomed the commitment of Secretary-General Antonio Guterres to launch reforms to initiate text-based negotiations and to garner support from other Member states.

### What Reforms Are Required?

- **Institutional Strengthening-** The reforms required are strengthening the role of the Assembly's president, setting up a more efficient committee system and involving NGOs directly in consultation to its work.

- **Financial Strengthening**- The reforms in funding procedure are also needed because UN is in a permanent financial crisis due to the unwillingness of many members to pay their contributions on time.

- **The Economic and Social Council reform**-  ECOSOC has  become overshadowed by institutions such as the IMF and World Bank which are lacking democratic processes, transparency, and accountability .Thus, there have been suggestions to replace ECOSOC with a smaller and more effective **Social and Economic Security Council.**

- **Permanent Members of UNSC**- The Council currently includes ten non-permanent members and five permanent members (P5) who hold veto power consisting of the post-World War II powers of the United Kingdom, United States, China, USSR (now Russian Federation) and China. There is thus a need to enlarge and reformulate the structure of the Security Council as per the current geopolitical realities.

- **Regional representation**- The council must be enlarged to give more weight to regions such as Africa, the Asia-Pacific and Latin America/Caribbean states especially when most agenda issues center on these regions.

- The Western Europe and Other Group (WEOG) accounts for three of the five permanent members (France, the United Kingdom and the US). There is only one permanent position for the Eastern European Group (Russia) one for the Asia-Pacific Group (China) and none for Africa or Latin America.

- The rotating seats on the Security Council do not adequately restore regional balance. The Asia-Pacific region is still massively under-represented.

## Why G-4 In INSC

- According to the IMF, G4 rank among the **10 economies with the highest GDP** in the world.

- They also account for 9 of the **world's ten largest defense budgets,** with Saudi Arabia being the only non P5 or G4 member among them.

- P5 and G4 countries combined account for over **60% of the world's GDP** and around half of the world's total population.

- The Asia-Pacific region accounts for roughly 55% of the world's population and 44% of its annual income but has just 20% (three out of 15) of the seats on the Security Council.

- Asia's inadequate representation poses a serious threat to the UN's legitimacy, which will only increase as the world's most dynamic and populous region assumes an increasingly important global role.

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### About G-4

- The G4 nations comprise **Brazil, Germany, India, and Japan**. The four countries support each other's bids for permanent seats on the United Nations Security Council.

- The G4's primary aim is the permanent member seats on the Security Council unlike the G7 where the common denominator is the economy and long-term political motives.

- Each of these four countries have figured among the elected non-permanent members of the council since the UN's establishment.

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Q. There have been persistent efforts by few developing nations for reforms in United Nations Security Council. What are the reasons for demand of reforms? Also critically examine the need for a reformed Security Council.

Q. Analyze the importance of G4 countries for India towards UN Security Council reforms.

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## 5.5. India-Switzerland

### In News

- The President of the Swiss Confederation Mrs. Doris Leuthard paid state visit to India from 30 August-02 September 2017 commemorating the 70th year of diplomatic relations between the two countries.

- Swiss-Indian Treaty of Friendship was signed on 14th August 1948.This was the first of such treaties signed by independent India and an important milestone in the Indo-Swiss relations.

### Significance of Visit

- This visit assumes much significance as India is seeking its entry into the 48-member Nuclear Suppliers Group (NSG) of which Switzerland is the chair. The NSG looks after critical issues relating to the nuclear sector and its membership will help India expand its atomic energy sector.

- It is also important in the context of 'dirty money'(black or illicit/illegal money) allegedly held in banks in Switzerland.

- The two countries share commitment to reform international institutions in line with current global realities.

**Key Highlights Of The Visit**

- Switzerland expressed strong support for India's economic reforms and highlighted its interest in contributing to India's Flagship Programmes like Make in India, Smart Cities, Digital India, Swachh Bharat, Startup India, Skill India and other initiatives.

- Both countries emphasized on negotiations towards new Bilateral Investment Treaty and the Trade and Economic Partnership Agreement (TEPA) between India and the European Free Trade Association(EFTA) countries.

- Both Leaders emphasized enhancement of cooperation against tax fraud and tax evasion. There were discussions to expedite the first transmission of financial account information between the two countries.

- The countries supported cooperation in the domain of Internet Governance and the importance of a multi-stakeholder approach in this regard. 12th UN Internet Governance Forum is to be held in Geneva in December 2017 and the Global Conference on Cyber Space will take place in New Delhi in November 2017.

- Switzerland welcomed India's initiative of fast-tracking visa for Swiss nationals through e-Visa facility.

- Switzerland welcomed India's accession to the Missile Technology Control Regime (MTCR) and welcomed India's intensified engagement with the Nuclear Supplier Group (NSG), Australia Group and the Wassenaar Arrangement, expressing its support for India's Accession to these regimes.

- **MoU signed :**
  - o Memorandum of Understanding on technical cooperation in the rail sector.
  - o Memorandum of Understanding between Konkan Railway Cooperation Limited (KRCL) and the Swiss Federal Institute of Technology Zürich (ETH Zürich).

**Why Switzerland Is Important To India**

- Switzerland established diplomatic relations with India soon after Independence. India's policy of non-alignment and Switzerland's traditional policy of neutrality led to a close understanding between the two countries.

- India and Switzerland enjoy robust economic ties with Switzerland being seventh largest trading partner and eleventh largest foreign investor for India.

- Numerous agreements in areas of trade, investment, development cooperation, education, visas, migration, air transport and science and technology are significant for India.

- India and Switzerland share common agenda of increasing renewable energy share. India is undertaking joint projects with Switzerland for energy efficiency. CapaCITIES, is a programme of reducing greenhouse gas emissions in municipal corporations in India with the assistance of Switzerland. This assumes greater significance for energy security concerns of India in scenarios of climate change and need to boost manufacturing in India.

- The mutual alignment of cooperation gains importance in global scenario of economic slowdown and policy of protectionism adopted by nations in recent times.

**Analysis**

- India's relations with Switzerland and other European countries is a step ahead to address important aspects of geopolitical dynamics. The redressal of problems of black money and tax evasion are crucial to improve Indian and global economy.

- Moreover, the energy security concerns for boosting manufacturing in India can be met with stronger ties and strengthened cooperation. India needs cooperation with major global powers in order to be associated with significant international platforms to balance the current global politico-economic order.

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- Discuss in detail the significance of renewable energy surplus for stronger India economy highlighting the global partnerships developed by India in this regard.
- Critically examine the role of European countries in recent development of expansion of nuclear groups and increased focus on UN reforms.

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### 5.6. 2nd Strategic Partnership Council Meeting Between India And Afghanistan

**In News**

- The 2nd meeting of the Strategic Partnership Council between India and Afghanistan took place in New Delhi.
- The Indo-Afghan Strategic relationship was formally established in October 2011 with the signing of the "Strategic Partnership Agreement".
- External Affairs Minister of India, Smt. SushmaSwaraj and Foreign Minister of the Islamic Republic of Afghanistan H.E. Salahuddin Rabbani co-chaired the meeting.

**Significance Of Meeting**

- The meeting is significant because it was the second time India and Afghanistan met for SPC since first meeting in 2012.
- US as part of its Afghanistan Policy had recently urged Indian government to expand socio economic footprints in Afghanistan and assume a bigger role.
- The Asian continent is suffering from threats of violent extremism and state sponsorship of terrorism.

**Key Highlights Of The Meeting**

- It was agreed to strengthen security cooperation between the two countries. India agreed to extend further assistance for the Afghan National Defence and Security Forces in fighting terrorism, organized crime, trafficking of narcotics and money laundering.
- The Strategic Partnership Council extended cooperation in the areas of security, trade, commerce and investment, development cooperation, human resource development, education and culture.
- Both sides agreed towards expeditious operationalisation of Chahbahar Port in Iran under trilateral Agreement for Establishment of International Transport and Transit Corridor signed in May 2016.
- The leaders stressed to make the regional Transit and Trade Agreement more inclusive and comprehensive by expanding it both northwards and southwards to connect South Asia with Central Asia.
- They highlighted the importance of joint efforts towards expeditious implementation of the TAPI Gas Pipeline Project for connectivity between Central Asia and South Asia.
- The liberalization of visa measures by India for Afghan nationals and upto 5 year multiple entry business visa grant was welcomed to promote bilateral trade and commerce.
- The following new projects under New Development Partnership were launched :

- o Shahtoot dam and drinking water project for Kabul.
- o Low cost housing for returning Afghan refugees in Nangarhar Province to promote resettlement.
- o Road connectivity to Band-e-Amir in Bamyan Province that would promote tourism to the National Park and economic development.
- o Water supply network for Charikar city in Parwan Province.
- o Establishment of a Gypsum board manufacturing plant in Kabul to promote value added industry.
- o Construction of a polyclinic in Mazar-e-Sharif.
- The following bilateral documents were signed and exchanged:
(a) Motor Vehicles Agreement for the Regulation of Passenger, Personal and Cargo Vehicular Traffic.
(b) Memorandum of Understanding for mutual cooperation in the field of pharmaceutical products regulation.
(c) The Orbit Frequency Coordination Agreement between India and Afghanistan on South Asia Satellite (SAS).
(d) Letters establishing the New Development Partnership and launching 116 High Impact Community Development Projects.

## Strategic Partnership Between India And Afghanistan

- India is the biggest regional donor to Afghanistan and fifth largest donor globally with over $3 billion in assistance.
- India has provided assistance in the construction of critical infrastructure in Afghanistan. This includes the Zaranj-Dilaramhighway, the Salma dam and electricity transmission lines and the Afghan Parliament building.Afghan officers have been trained in Indian military institutions. India has also enhanced defense cooperation and supply of defense equipment to Afghanistan.
- Being the first strategic partnership agreement that India has signed with a South Asian country, it has implications for India's neighbourhood policy. India appears to be taking a cooperative security approach to deal with security issues, combining hard and soft power options.
- The strategic partnership agreement with Afghanistan showcases India's considerable soft power. It signals to the other neighbours that there are benefits to be had from partnering with India and shedding negative attitudes.
- The immediate challenge will be to provide resources for the expanded Indo-Afghan strategic partnership. India will require far greater resources to conduct an effective and sustainable foreign policy in the neighborhood.

## Why Afghanistan for India?

- Afghanistan is a rich source of energy and mineral reserves needed for increasing energy demands of Indian economy.
- Geopolitical location of Afghanistan is significant for India's relationship with Central Asia. Also, it is essential to assume greater role and influence in region for India to balance regional order.
- Unstable political environment, terrorism, hostile relations with Pakistan and territorial barriers makes it imperative for India to be actively involved with the affairs of Afghanistan to bring peace and regional security.

Q) Unstable political environment, terrorism, hostile relations with Pakistan and territorial barriers makes it imperative for India to be actively involved with the affairs of Afghanistan to bring peace and regional security. Critically analyse.

## 5.7.    3rd Eastern Economic Forum

The External Affairs Minister Mrs. SushmaSwaraj visited Vladivostok, Russia from September 5-7, 2017 to participate in the third Eastern Economic Forum.

**About The Session**

- The Eastern Economic Forum is considered as the biggest international communication platform for cooperation between businesses leaders and senior government representatives from Russia, the Pacific Region and the Association of Southeast Asian Nations (ASEAN).

- The External Affairs Minister's visit reflects the importance attached by India to emerging opportunities in the Russian Far East and to its strategic partnership with Russia.

- Delegates from at least 24 countries including the US, Japan, China, Australia, Canada, Britain and Germany attended the session.

**Objectives Of Session**

- To bridge the knowledge gap between our business communities and to create a network of partnerships and better understand the laws and regulations in each other's countries.

- Identifying areas of common interest and potential, keeping in mind mutual strengths and complementarities.

- To identify what actions the two governments should take to further facilitate investments and trade. The Russian government has eased visa policies for Indians in the Far East.

- To encourage more interactions between India and Eurasian regions. The Russian Far East Investment and Export Agency has been in touch with Invest India.

- India is one of the most dynamic economies of the world. Based on the vibrant and progressive policies of the government, the Indian economy is firmly embarked on a strong growth trajectory. Ambitious policy measures such as the introduction of the Goods and Services Tax have made doing business in India easier.

**About EEF**

Eastern Economic Forum is an international forum held each year in Vladivostok, Russia for the purpose of encouraging foreign investment in the Russian Far East.

**Objectives of EEF**

- To improve relations between the international investment community, Russian business, and Federal and local governments.

- A comprehensive expert assessment of the economic potential of East Russia as well as the improvement of the competitiveness and investment attractiveness of the region, both at the Russian and international level.

- The presentation of new conditions for investments and doing business by means of exclusive procedures created for East Russia – the Territory of Priority Development and the Free Port of Vladivostok.

## 5.8. India-Japan-U.S. Trilateral Foreign Ministerial Meeting

On the sidelines of the weeklong United Nations General Assembly meeting foreign ministers of India, United States and Japan discussed nuclear proliferation, maritime security and initiatives for cooperation among them.

**About The Meeting**

- Aiming to hedge China's aggressive foreign policy, foreign ministers of India, Japan and the US sought to expand their Indo-Pacific partnership by exchanging views on maritime security, connectivity and proliferation issues. The three sides have decided to explore practical measures to enhance partnership.

- During the meeting views on maritime security, connectivity and proliferation issues were exchanged.

- The Ministers emphasized the need for ensuring freedom of navigation, respect for international law and peaceful resolution of disputes.

- On connectivity initiatives, the importance of basing them on universally recognized international norms, prudent financing and respect for sovereignty and territorial integrity was underlined.

- The three Ministers directed their senior officials to explore practical steps to enhance cooperation in all the sectors.

- The three ministers opposed China's OBOR as it is violative of India's sovereignty and pushed nations towards a debt trap.

- With reference to North Korea's nuclear ambitions, External Affairs Minister of India deplored recent actions and stated that its proliferation linkages must be explored and concrete steps should be taken to stop the nuclear proliferation.

**Significance**

- The meeting assumes significance against the backdrop of Beijing's approach of aggressive expansion in the South China Sea, East China Sea and areas along the Line of Actual Control.

- Coming in the backdrop of India's Dokalam crisis with China, the three sides are keen to give momentum to Indo-Japan-US trilateral cooperation to send out a message to Beijing for its attempts to unilaterally change status quo along disputed boundaries.

- The meeting highlighted the support to India's reservations on One Belt One Road project since the China-Pakistan Economic Corridor passes through Pakistan-occupied Kashmir.

- Aimed at lending momentum to cooperation between the three countries, the meeting assumes greater significance amid China flexing its muscles in the region.

## 5.9. India-Myanmar

The Prime Minister of the Republic of India Shri Narendra Modi paid his first bilateral State visit to the Republic of the Union of Myanmar from 5th to 7th September 2017.

**Backdrop Events**

- Both Indian and Chinese troops withdrew from the standoff at Doklam.

- The issue of Rohingya Muslim came to centre stage with eruption of violence in Rakhine in Myanmar.

**Key Highlights Of The Visit**

- Both countries reiterated mutual respect for demarcated boundary between the two countries and emphasized the need to resolve outstanding boundary demarcation issues as fast as possible through existing bilateral mechanisms and consultations.

- The two neighbors exchanged various documents in the areas of health, culture, capacity building, maritime security and collaboration between key institutions.

- Both countries condemned terrorism referring to terrorist attack on Amarnthyatra in India and Rohingya violence in Myanmar.

- Myanmar welcomed India's offer of assistance under the Rakhine State Development Programme and the two sides agreed to finalize the implementation modalities within the next few months.

- Myanmar recognized India's support for various projects that enhanced regional connectivity like the Kaladan Multi Modal Transit Transport Project.

- Myanmar welcomed India's participation in its energy sector both in exploration and production and invited Indian companies to participate in petrochemicals and petroleum productsactivities, marketing infrastructure and setting up of LPG terminals.

- India is undertaking project to preserve stone inscriptions and temples of King Mindon and King Bagyidaw of Myanmar in Bodh Gaya by the Archaeological Survey of India. It would be completed by December 2017 and constitute an important aspect of India-Myanmar cultural heritage.

- Myanmar expressed deep appreciation to India for the decision taken by the Government of India to give Myanmar nationals visa in all categories except e-visa.

- India and Myanmar signed agreements in fields of Maritime Security, Cultural Exchange, Coastal Surveillance, health, sports and press.

## Significance of Myanmar for India

- Myanmar is the key pillar of India's Act East policy. Myanmar is important to India due to its naturally advantageous geographical positioning of belonging to South Asia, East Asia as well as South East Asia. Myanmar is also an ASEAN country.

- Its position on the Bay of Bengal makes it a country of significance that the world's powerful nations want to be friendly.

- Cordial relations with Myanmar have both, security and economic implications for India. India shares 1,600-km sensitive and porous land border apart from a maritime boundary with Myanmar.

- The Military supported democratic civilian government of President U Thein Sein has brought in many significant reforms. This action has been recognised as a step towards a democratic setup by the west that has as a gesture of support to effect change, lifted sanctions imposed on the Myanmar government. Thus Myanmar is on the road of stability and growth due to initialization of the democratic procedure.

- The new investment policies brought in by the Myanmar Government is bringing in a lot of new investment in sectors like oil and gas, thermal and Hydropower generation making it a good investment hub for Indian companies.

## China Factor in Indo-Myanmar Relations

- Myanmar is a bridge connecting South Asia, South East Asia and East Asia. It has two rising powers as neighbours, China to the northeast sharing 2171 kilometres long border while India to the northwest sharing 1643 kilometres long border.

- China is ahead of India in influencing Myanmar. In fact China's ties with Myanmar are much stronger and deeper in the aspects such as economic, strategic and military as compared to India.

- China provides aid and investment in various infrastructure projects, like the construction of the road from Kumning in southern China region to Mandalay in central Myanmar, exploration of natural gas and oil etc.

- China has been the most important supplier of military aid to Myanmar. China alone supplied about 90% of the military transportations to Myanmar.

- Myanmar provides China an easy access to the Bay of Bengal and the Andaman Sea which is a cause of concern for India's security.India feels that China's strategic move to Myanmar is a security threat to India.

- The nature of such relations between China-Myanmar is making difficult for India to create good relations with Myanmar.

- In fact, one of the major factors that led to shift in India's policy towards Myanmar was its security concern**.**

- India's indifference to Myanmar for many years created a vacuum for China to easily step in and exploit the situation for strategic reasons.

- The security threat posed by China will be minimised to certain extent if India can develop good relations with Myanmar. India needs to promote good co-operation at various levels with Myanmar.

There are several advantages that India has over China with regards to Myanmar. These are:

- India and Maynmar share a long historical and cultural past thus have far greater synergy as compared to China.

- The democratic process through free and fair elections is significant to Myanmar with increased demand for democratic set up within country and global pressure for same.

- The cooperation in different multilateral forums such as ASEAN and BIMSTEC strengthen the relationship between the two countries.

- Also, India has sent a clear signal that while economic ties are important, it is keen to build a holistic relationship and is prepared to assist in institution building in Myanmar.

**Analysis**

- India needs to work towards developing policies that would improve and strengthen it domestically, which will encourage more confidence in India's ability to lead the region and be an important global player.

- This is essential for India to become an assertive regional player in Asia.Competition with China in influencing regional politics should also be considered and taken seriously.

- China's growing influence in the region would lead to a more one-sided dynamics in the region.

- China has asserted itself through its soft power as well as through its trade and economic relations with Myanmar. India should adopt a more proactive approach to cement its place in the region and grow into a powerful global country.

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**Q)** To counterbalance china India must have good relation with Myanmar. Critically analyse.

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## 6. SUMMITS AND ORGANISATION

### 6.1. BRICS Summit

**In News**

- The ninth BRICS Summit was held at Xiamen International Conference Center, China. President of China Xi Jinping chaired the summit.

- The theme of the recent summit was **Stronger Partnership for a Brighter Future.**

**Xiamen Declaration**

- In the declaration, the leaders jointly agreed to energise their practical cooperation to boost development of BRICS countries by promoting exchanges of good practices and experiences on development and facilitating market inter-linkages as well as infrastructure and financial integration.

- The leaders agreed to enhance communication and coordination in improving global economic governance to foster a more just and equitable international economic order.

- They agreed to emphasize fairness and justice to safeguard international and regional peace andstability.

- The five nations focused upon embracing the cultural diversity and promote people-to-people exchanges to garner more popular support for BRICS cooperation through deepened traditional friendships.

- They welcomed the first report on the implementation of the Strategy for BRICS Economic Partnership and the broad package of outcomes delivered by the sectoral ministerial meetings.

- In the sector of Science and Technology they committed to promote cooperation on science, technology and innovation (STI) to forgesynergy in tapping new growth momentum.

**Highlights Of The 9th Summit**

- During the plenary session Chinese Premier Xi Jinping promised to provide $76 million for BRICS economic and technology cooperation plan and another $4 million to support the projects of the bloc's New Development Bank.

- It was decided that international cooperation to fight corruption will be strengthened on matters related to asset recovery and culprits sought for corruption.

- The New Development Bank will now work closely with the BRICS Business Council to facilitate business and trade prospects in the bloc. BRICS Business Council will suggest projects that need support from the New Development Bank.

- In an address at the plenary session of the BRICS Summit Prime Minister of India pitched for setting up of a BRICS credit rating agency to counter western rating institutions.

- Underlining the significance of clean energy it was agreed to adopt environment friendly energy resources and technologies.

- Leaders at BRICS Summit voiced their concern over threat to peace and stability in South-East Asia due to disturbances by Pakistan-based terror outfits like the Taliban, al-Qaeda and Pakistan-based LeT and JeM.

**Indian Perspective**

- In the 9th Summit India emphasized the significance of BRICS grouping. In this context it was stated by India that the five BRICS countries have complementary skills and strengths to promote the development of each nation as well as region.

- To mobilize funds for renewable energy India suggested that the New Development Bank can establish an effective link with International Solar Alliance to support such cooperation.

- A strong BRICS partnership on innovation and digital economy can help spur growth, promote transparency and support the Sustainable Development Goals. Indian side suggested for a collaborative pilot project under the BRICS framework, including private entrepreneurship.

- Indian governmentsuggested to work towards more focused capacity building engagement between BRICS and African countries in areas of skills, health, infrastructure, manufacturing and connectivity.

- Indian stand to terrorism was clear and strong the Indian deplored all terrorist attacks worldwide, including attacks in BRICS countries, and condemn terrorism in all its forms and manifestations wherever committed and by whomsoever and stressed that there can be no justification whatsoever for any act of terrorism.

## Assessment

- The BRICS summit at the China was significant in regards of many geopolitical issues such as Doklam issue between India and China. It started an era of negotiations and engagements for redressal of grievances between the member nations.

- China has changed the summit's formula by inviting friends from developing countries such as Egypt, Kenya,Tajikistan, Mexico and Thailand to be the guest countries of the summit.

- The BRICS chair invites some countries in the region to meet theBRICS leaders for discussion. Forging a more extensive partnership between BRICS and other developing countries will make both bilateral and multilateral trade more effective.

- Enhancing BRICS cooperation not only protects and expands the interests of BRICS countries but also helps explore ways to build a new type of international relations in the future.

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**About BRICS**

- The acronym "BRICs" was initially formulated in 2001 by economist Jim O'Neill, of Goldman Sachs, in a report on growth prospects for the economies of Brazil, Russia, India and China – which together represented a significant share of the world's production and population.

- BRICS is made up of China, Brazil, Russia, India and South Africa.

- The first BRIC Foreign Ministers' Meeting was held in 2006 among China, Brazil, Russia and India on the margins of the general debate of the 61st session of the United Nations General Assembly, which drew the prelude for BRIC cooperation.

- In 2009, the first BRIC Summit was held in Yekaterinburg, Russia. Since then, the Summit has become an annual event. In 2010, South Africa was formally included in the group.

- Together BRICS account for 26.46% of world land area, 42.58% of world population, 13.24% of World Bank voting power and 14.91% of IMF quota shares.

- According to IMF's estimates, BRICS countries generated 22.53% of the world GDP in 2015 and have contributed more than 50% of world economic growth during the last 10 years.

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Q. What is Xianmen Declaration? Explain the significance of recent BRICS summit held in China.

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## 6.2. 61ST IAEA General Conference

The 61st annual general conference of International Agency for Atomic Energy was organized from 18th September to 22nd September.

## Key Highlights Of The Conference

- During the conference the event Experience of the United Kingdom was highlighted. How the United Kingdom has enhanced its capacity and capability to implement major nuclear new-build and decommissioning programmes and how this can benefit other countries.

- India's Initiative for Safe, Secure and Sustainable Nuclear Energy through Global Partnership was highlighted which was set up to conduct research, design and development work on nuclear systems that are intrinsically safe and to develop a pool of trained professionals through collaborative research and training programmes.

- Discussions were held on the Nuclear Waste Management – Pioneering Solutions from Finland which presented Finland's approach in planning and implementing nuclear waste management.

- The event was organised to commemorate 20th Anniversary of the Adoption of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

## India's Participation

- Dr.SekharBasu, Chairman of Atomic Energy Commission and Secretary of Department of Atomic Energy represented India at the conference.

- India has always given primacy to IAEA's role in the promotion of peaceful uses of atomic energy both in the area of nuclear power and nuclear applications.

- India reiterated its commitment to global nuclear disarmament, non-proliferation and peaceful uses of nuclear energy.

## Genesis of Atomic Energy in India

- After India attained independence the Atomic Energy Commission was set up in 1948 for framing policies in respect of development of atomic energy in the country.

- The Department of Atomic Energy (DAE) was established in 1954 with Dr. Bhabha as Secretary to implement the policies framed by the Atomic Energy Commission.

- Sir J.R.D Tata was one of the longest serving members in the Atomic Energy Commission and played a significant role in shaping the policies related to atomic energy program in the country.

- The Atomic Energy Establishment was set up at Trombay, near Mumbai in 1957 and was renamed Bhabha Atomic Research Centre (BARC) ten years later.

- The atomic energy program has now grown as a wide spectrum, multi dimensional multidisciplinary with 63 organizations under DAE.

- The spectrum of these significant activities include R&D in Nuclear Sciences and Engineering, Exploration & Mining of Radioisotopes Nuclear energy development and implementation, application of Nuclear Energy, Bio-Agricultural Research, Medical Sciences etc.

- India's commercial Nuclear Power program started in 1969 with the commissioning of Tarapur Atomic Power Station (TAPS) in Maharashtra and currently has 20 operating reactors of various types. Country's progress could have been much better if the international ban (due to nonsigning of NPT) was not placed in 1974.

- As a result of the ban, India's nuclear power program has proceeded largely without fuel or technological assistance from other countries.

- Reflecting the technical difficulties of the country's isolation, the power reactors to the mid 1990s had some of the world's lowest capacity factors, but rose impressively from 60% in 1995 to 85% in 2001-02. Then in 2008-10 the load factors dropped due to shortage of uranium fuel.

- Atomic energy activities in the country are governed by the Atomic Energy Act. The commercial nuclear power program of the first stage (comprising of PHWRs and imported LWRs) is being implemented by Nuclear Power Corporation of India Limited (NPCIL), and the second stage (comprising of Fast Breeder Reactors) by BharatiyaNabhikiyaVidyut Nigam Limited (BHAVINI). Both companies are fully owned by the union government.

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**About IAEA**

- The International Atomic Energy Agency is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field. It was created in 1957 in response to the deep fears and expectations generated by the discoveries and diverse uses of nuclear technology.

- It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.

- Total Membership: 168 (As of February 2016)

- The Democratic People's Republic of Korea (DPRK), which joined the IAEA in 1974, withdrew its membership of the IAEA in 1994.

**The main functions of the IAEA are to:**

➢ Encourage and assist research, development and practical application of atomic energy for peaceful uses throughout the world.

➢ Establish and administer safeguards designed to ensure that such activity assisted by the Agency is not usedto further any military purpose.

➢ Apply safeguards to relevant activities at the request of Member States.

➢ Apply under the Nuclear Non-Proliferation Treaty (NPT) and other international treaties, mandatory comprehensive safeguards in non-nuclear weapon States (NNWS) Parties to such treaties.

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### 6.3. Global Competitiveness Index

**In News**

- The World Economic Forum has released Global competitiveness Index 2017-18.

- India was placed at 40th place among 137 countries in WEF's Global Competitiveness Index (GCI).

**Key Highlights**

- The GCI 2017 highlighted that the world economy is showing encouraging signs of recovery with GDP growth accelerating to 3.5 percent in 2017.

- This year the GCI points to three main challenges and lessons that are relevant for economic progress, public-private collaboration and policy action:

➢ Financial vulnerabilities pose a threat to competitiveness and to economies ability to finance innovation and technological adoption.

➢ Emerging economies are becoming better at innovation but more can be done to spread the benefits.

➢ Labour market flexibility and worker protection are needed for competitiveness and shared prosperity in the Fourth Industrial Revolution.

- In the ranking Switzerland is followed by the US and Singapore in second and third places, respectively.

- In the latest Global Competitiveness Report India has slipped from the 39th position to 40th while neighbouring China is ranked at 27th.

- Among the BRICS, China and Russia (38) are placed above India. South Africa and Brazil are placed at 61st and 80th spots, respectively.

- The index exhibited that the global economy finds itself on the cusp of a fourth industrial revolution.

- According to 2017 GCI, there are risks from uncertain global economic conditions. Since 2008 global financial crisis prospects for sustained economic recovery remain at risk due to widespread failure on part of leaders and policymakers to put in place necessary reforms.

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**Fourth Industrial Revolution**

- Fourth Industrial Revolution is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries and even challenging ideas about what it means to be human by artificial intelligence.

- It is the fourth major industrial era since the initial Industrial Revolution of the 18th century.

- As part of this revolution emerging technology breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3D printing, quantum computing and nanotechnology.

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**India's status**

- India ranked at 40th place among 137 nations in the GCI 2017.

- India is the top-ranked economy in South Asia and 3rd among BRICS countries.

- The score improved across most pillars of competitiveness particularly infrastructure (66th, up two), higher education and training (75th, up six) and technological readiness (107th, up three). It reflected the recent public investments in these areas.

- The performance of the country also improved in ICT indicators particularly Internet bandwidth per user, mobile phone and broadband subscriptions and Internet access in schools.

- The index highlighted that the quality of institutions has increased especially in terms of efficiency of public spending but the private sector still considers corruption to be the most problematic factor for doing business in India.

- Other bottlenecks areaccess to financing, followed by tax rates, inadequate supply of infrastructure, poor work ethics in national labour force and inadequately educated work force.

- Another noticeable concern for India is the disconnect between its innovative strength and its technological readiness.

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**About Global Competitiveness Index:**

- The Global Competitiveness Index (GCI) tracks the performance of close to 140 countries on 12

pillars of competitiveness.

- These 12 pillars are institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication and innovation.

- These pillars are in turn organized into three sub-indexes: basic requirements, efficiency enhancers and innovation and sophistication factors.

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Q. In the light of recently released World Economic Forum's Global Competiveness Index 2017 discuss the status of India in the index.

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### 6.4. Sustainable Development Impact Summit

The World Economic Forum organised the Sustainable Development Impact Summit. It was held in New York City.

**About The Summit**

- The Impact Summit is a platform designed to help business, government and civil society to deepen public-private cooperation and harness the potential of the Fourth Industrial Revolution to accelerate progress on meeting the Sustainable Development Goals (SDGs).

- The Sustainable Development Impact Summit seeks to advance the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change by providing a multistakeholder platform for concerted action.

- The Sustainable Development Impact Summit took place during Global Goals Week.

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**About Global Goals Week**

- Global Goals Week 2017 is a collective effort to maximize the value of events and activations held during the opening of the 72nd session of the UN General Assembly (UNGA) and focused on driving progress toward the Sustainable Development Goals (SDGs) also known as the Global Goals.

- Global Goals Week was originally piloted in 2016 by organizing partners: Project Everyone, the UN Development Programme (UNDP) and the UN Foundation.

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**About World Economic Forum:**
- Professor Klaus Schwab founded the European Management Forum, as a non-profit foundation based in Geneva, Switzerland, which later became the World Economic Forum.
- The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.
- The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.
- It was established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland.
- It is independent, impartial and not tied to any special interests. The Forum strives in all its efforts to demonstrate entrepreneurship in the global public interest while upholding the highest standards of governance.

**India's Status In Implementation Of Sdgs:**

- India has played an important role in shaping the Sustainable Development Goals (SDGs). The country's national development goals are mirrored in the SDGs. India has been effectively committed to achieving the SDGs even before they were fully crystallized.

- Reflecting the country's commitment to the SDG agenda at the highest levels of Government, the Indian Parliament organized several forums including the South Asian Speakers' Summit in February 2017. These forums have focused on the elimination of poverty, gender equality, climate change and resource mobilization for SDGs.

- Additionally, the Speaker's Research Initiative has been launched for providing SDG-related insights to Members of Parliament.

- For implementing the SDG agenda, the Government of India has launched several ambitious programmes, such as the Pradhan Mantri Jan DhanYojana (PMJDY) which is the world's largest financial inclusion programme.

- India's bold Nationally Determined Contributions (NDC), communicated to the Conference of the Parties (COP) of the UN Framework Convention on Climate Change, form a significant part of its SDG strategy. These include substantially reducing the emission intensity of GDP, tapping non-fossil fuel energy sources and creating additional carbon sink.

- The responsibility for overseeing SDG implementation has been assigned to the National Institution for Transforming India (NITI Aayog). NITI Aayog has mapped the goals and targets to various nodal ministries as well as flagship programmes.

- India has continued its programme of economic reforms to achieve sustained rapid growth. The reforms have included fiscal consolidation, inflation targeting, improved governance all around, accelerated infrastructure development (SDG 9), curbing of corruption (SDG 16), Aadhaar Act, Insolvency and Bankruptcy Act, Goods and Services Tax (GST), further liberalization of Foreign Direct Investment (FDI) and closure of sick Public Sector Units.

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which is sometimes described as the world's largest cash transfer programme, has generated over 2 billion person-days' of employment (SDG 8) during the last year. It has helped reduce extreme poverty as well as enhance the infrastructure and purchasing power in rural areas.

- The benefits have largely been reaped by women (SDG 5) and disadvantaged sections of society (SDG 10). Similarly, the DeenDayalAntyodayaYojana-National Livelihoods Mission provides skilled employment to marginalized communities.

- Further, two major programmes, the Pradhan MantriJeevanJyotiBimaYojana and Pradhan Mantri Suraksha BimaYojana provide access to life and accident insurance for 130 million subscribers for nominal annual premiums.

- Programmes under the National Food Security Act cover more than 800 million people in the country. Governance reforms are being undertaken for improving the effectiveness of food security programmes. These include digitization of ration cards, leveraging Aadhaar for authenticated delivery of benefits and an online grievance redressal mechanism.

- The National Health Policy, 2017, specifies targets for universalizing primary health care, reducing infant and under-5 mortality, preventing premature deaths due to non-communicable diseases as well as increasing Government expenditure on health.

- Organisations and networks have developed awareness materials and held consultations on

SDG from the perspective of Dalits, Women, Children, and thematic issues – water and sanitation, urban development, peace and conflict, poverty and inequalities, education, health, environmental issues to name a few.

Q. What is sustainable development and sustainable development impact summit?

Q. Explain the status of India in the implementation of Sustainable Development Goals?

## 6.5.    Social Good Summit

**In News**

- The United Nations Development Programmealong with UN Foundation,Mashable and 92Y (Private enterprises) organized a Social Good Summit on September 17th.

- The theme of the summit was **Innovate with Purpose: Leave No One Behind**.

- The Social Good Summit is a one-day conference focusing on the impact modern technology and media has on social good initiatives around the world.

- The summitis held annually during UNGA Week

**What Is Social Good?**

- Social good is defined as an action that provides benefit to the general public. Fresh water, education and healthcare are all good examples of social goods.

- New media innovations and the explosion of online communities have added new meaning to the term. Social good is about global citizens uniting to unlock the potential of individuals, technology and collaboration to create positive societal impact.

**About UNDP**

- The UNDP was founded on 22 November 1965 with the merger of the Expanded Programme of Technical Assistance (EPTA) and the Special Fund.

- United Nations Development Programme is a United Nations (UN) organization formed in 1965 to help countries eliminate poverty and achieve sustainable human development, an approach to economic growth that emphasizes improving the quality of life of all citizens while conserving the environment and natural resources for future generations.

- It is headquartered in New York City.

- UNDP's main goal is to help countries build their own local capacity to achieve sustainable human development - to improve people's lives on an enduring basis - their work, their education, their health, their surroundings and their use of natural resources.

- **Functions:** UNDP focuses on helping countries build and share solutions in three main areas:

➢ Sustainable development.

➢ Democratic governance and peacebuilding.

➢ Climate and disaster resilience.

- In about 170 countries and territories, UNDP works to eradicate poverty while protecting the planet. It helps countries develop strong policies, skills, partnerships and institutions so they can sustain their progress.

- UNDP also administers the UN Capital Development Fund which helps developing countries grow their economies by supplementing existing sources of capital assistance by means of grants and loans and UN Volunteers.

- The annual **Human Development Report** commissioned by UNDP focuses the global debate on key development issues, providing new measurement tools, innovative analysis and often controversial policy proposals.

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**About Mashable :**

It is a global, multi-platform media and entertainment company. Powered by its own proprietary technology, Mashable is known for tech, digital culture and entertainment content for its dedicated and influential audience around the globe

**About 92Y:**

- 92nd Street Y was founded 140 years ago to serve the Jewish people. It promotes individual and family development and participation in civic life within the context of Jewish values and American pluralism.

- As a nonprofit community and cultural center, 92nd Street Y seeks to create, provide and disseminate programs of distinction that foster the physical and mental health of human beings throughout their lives, their educational and spiritual growth and their enjoyment.

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Q. Social Goods Summit unites a community of global leaders and grassroots activists to discuss solutions for some of the greatest global challenges. Critically analyse.

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### 6.6. 22ⁿᵈ UNWTO Genreal Assembly

The representatives of World Tourism Organization (UNWTO) Member States convened at 22nd session of the General Assembly of UNWTO held in Chengdu, China on 13-16 September 2017.

**Chengdu Declaration**

- The declaration endorsed the outcome document of the UN Conference on Sustainable Development, **'The Future We Want'**, which emphasizes that well-designed and managed tourism can make a significant contribution to the sustainable development and can create decent jobs and generate trade opportunities.

- The declaration called for **promotion of sustainable tourism** including ecotourism for poverty eradication and environment protection emphasizing the need to optimize the economic, social, cultural and environmental benefits stemming from sustainable tourism particularly in developing countries.

- It supports the 2030 Agenda for Sustainable Development which adopts the 17 Sustainable Development Goals (SDGs).

- The declaration reiterated the goal of declaration of 2017 as the International Year of Sustainable Tourism.

- In the declaration, the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP) notably the 10-YFP Sustainable Tourism Programmewas supported.

- It is a collaborative platform to bring together and scale up initiatives and partnerships to accelerate the shift to sustainable consumption and production.

- Considering that tourism is one of the fastest growing socio-economic sectors, accounting currently for an estimated 10% of world GDP, 1 in 10 jobs and 7% of global trade of good and services the declaration asked the member nations to promote the sustainable tourism.

- The declaration welcomed the efforts of the ST-EP (Sustainable Tourism – Eliminating Poverty) Initiative of the World Tourism Organization to help reduce poverty levels through the development and promotion of sustainable forms of tourism.

## About UNWTO

- The **World Tourism Organization (UNWTO)** is the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism.

- UNWTO's membership includes **156 countries, 6 Associate Members and over500 Affiliate Members** representing the private sector, educational institutions, tourism associations and local tourism authorities.

### Functions:

- UNWTO works in six main areas - competitiveness, sustainability, poverty reduction, capacity building, partnerships and mainstreaming - to achieve responsible, sustainable and universally accessible tourism.

- As the leading international organization in the field of tourism, UNWTO promotes tourism as a driver of **economic growth, inclusive development** and **environmental sustainability** and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.

- UNWTO encourages the implementation of the **Global Code of Ethics for Tourism**, to maximize tourism's socio-economic contribution while minimizing its possible negative impacts.

- It is committed to promote tourism as an instrument in achieving the **Sustainable Development Goals (SDGs),** geared towards reducing poverty and fostering sustainable development worldwide.

## Global Code of Ethics for Tourism

- The **Global Code of Ethics for Tourism** (GCET) is a comprehensive set of principles designed to guide key-players in tourism development.

- Addressed to governments, the travel industry, communities and tourists alike, it aims to help maximise the sector's benefits while minimising its potentially negative impact on the environment, cultural heritage and societies across the globe.

- They were adopted in 1999 by the General Assembly of the World Tourism Organization.

- Although not legally binding the Code features a **voluntary implementation mechanism** through its recognition of the role of the **World Committee on Tourism Ethics (**WCTE) to which stakeholders may refer matters concerning the application and interpretation of the document.

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**What is Sustainable Tourism?**

- **Sustainable tourism** can be defined as *Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities*

- Sustainable tourism should:

1) Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural

heritage and biodiversity.

2)  Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values and contribute to inter-cultural understanding and tolerance.

3)  Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

**Sustainable Tourism Scenario In India:**

- Sustainable tourism practices in India are not new, bound together by the twin travel dicta of BharatDarshan and AtithiDevoBhavah now known the world over through the medium of the Incredible India campaign.

- In India, the travel and tourism sector is estimated to create 78 jobs per million rupees of investment, compared to 45 jobs in the manufacturing sector for similar investment. It is one of the largest sectors of the service industry in India.

- Apart from providing employment to a wide spectrum of job seekers from the unskilled to the specialized, a higher proportion of tourism benefits (jobs, MSME trade opportunities), accrue to women.

The following measures were taken for sustainable tourism by Indian Government:

- Major social awareness campaign under the 'AtithiDevoBhavah' initiative

- Involving schools, NGOs, industry associations, etc. in carrying out sustained cleanliness drives at important tourist destinations. Suitable incentives and awards will be provided to all organizations and individuals involved in this initiative

- Top most priority will be given for sanctioning Central Financial Assistance for setting up of way-side amenities, bio-degradable toilets, etc.

- Sustainable Tourism criteria for India (STCI) and indicators for hotels, tour operators have been finalized. Similarly, the criteria and indicators for rural tourism and home-stays are being evolved. Action will be initiated for Tourism industry constituents, not yet covered.

Q. What is sustainable tourism? With explaining sustainable tourism scenario in India discuss the steps taken by Indian government for sustainable tourism development.

## 7. DEFENCE AND SECURITY

### 7.1. INS TARASA

The Indian Navy has commissioned water jet fast attack craft (FAC), INS Tarasa at the Naval Dockyard Mumbai.

**About INS TARASA**

- INS Tarasa is the final of four follow on water jet Fast Attack Crafts developed by Garden Reach Shipbuilders and Engineers (GRSE) based in the Indian city of Kolkata.
- The vessels are an upgrade of the Indian Navy's Car Nicobar-class FACs, which were also designed and built locally by GRSE.
- The 50m-long indigenously built ship features improved endurance and low draftas well as increased speed and maneuverability.
- INS Tarasa is equipped with indigenously developed 30mm main gun and several light, medium and heavy machine guns that can be used during coastal defence operations.
- The craft would also have the latest communication equipment and radars, which would enable effective surveillance.

**Significance**

- INS Tarasa can be deployed to carry out a wide range of missions and is expected to be based in Mumbai under the operational control of Western Naval Command.
- The ship has capability to conduct coastal and offshore surveillance, exclusive economic zone (EEZ) patrolling and law enforcement missions along with non-military operations such as search and rescue, humanitarian assistance and disaster relief.
- INS Tarasa is of proven design with good endurance, low draught, high speed and manoeuvrability making her ideal for the primary role of extended coastal and offshore patrolling and surveillance.
- The ships are to meet critical requirement of crafts with improved stealth at networking capabilities.
- It is ideally suited for interception of fast moving surface craft and will perform anti-smuggling and fishery protection.

**Assessment**

- Maritime security is defined as measures for force-protection and defense against sabotage, actions to combat terrorism and illegal activities like piracy and trafficking.
- Adopting an inclusive approach in India maritime security is defined as a collection of all the issues that pertain to the seas and have a bearing on national security. These include seaborne trade and infrastructure for its pursuit, management of sea resources, environmental issues and employment of naval forces.
- Ships commissioned in navy are the foundation of Maritime Security of India. They are the bedrock of naval forces. This force not only enhance the Navy's combat capability but also act as a deterrent and provide necessary strategic power.

### 7.2. Military Exercises

**In News**

- The fifth edition of SLINEX-2017, a bi-lateral naval exercise between India and Sri Lanka was organizedin September at Vishakhapatnam, Andhra Pradesh.

- YudhAbhyas - 2017, a joint military exercise between Indian and US armies was organizedat Joint Base Lewis McChord, Washington USA.

## About SLINEX

- SLINEX series of bilateral maritime exercises were initiated in 2005 and since then four successful engagements have been conducted.

- SLINEX 2017 focuses on fleet work, seamanship, communication, replenishment at sea, Visit Board Search and Seize (VBSS) operations and helicopter operations.

- Joint naval operations enable both Navies to rehearse and improve own capabilities and enhance operational effectiveness required to maintain maritime security in the region.

## About Yudh Abhyas

- YudhAbhyas is an annual bilateral military exercise, alternately held by the two countries (India and USA).

- Exercise YudhAbhyas is an integration level training which is considered an ideal platform to learn from each other's experiences of planning and execution of operations.

- In this edition of exercise armies of both countries learned tactical skills in counter-insurgency and counter-terrorist operations (CICT ops) under UN charter.

- This was the 13th edition of the joint exercise hosted since 2004. Indian Army has termed the exercise a part of a joint preparation to meet any unforeseen contingency across the globe.

- Both sides jointly train, plan and execute a series of well-developed tactical drills for neutralization of likely threats that may be encountered in UN peacekeeping operations.

## Significance Of Such Joint Military Exercises

- Joint military exercises are a part of confidence building measures (CBMs) that contribute towards improving the understanding and engagement between the two militaries.

- Jointness and integration of the military is an inevitable requirement for the modern-day battlefield. The principles underlying these features are inter-service cooperation and economy of effort both of which are crucial to war fighting.

- In the domain of international relations, military diplomacy (Strengthening of foreign relation through military engagements) hasemerged as a major tool to further diplomatic interests of nations.

- On the operational side, military exercises enable militaries to understand each other's drills and procedures, overcome language barriers and facilitate familiarisation with equipment capabilities.

- It also facilitates understanding and familiarisation with new technologies that other countries may be utilising and enables on-the-job training of each other's crews.

- This is particularly useful in the event of joint operations whether in war or in operations other than war (OOTW) - humanitarian aid, disaster relief, anti-piracy, etc when nations come together for a common cause.

- The most important advantage of joint military exercises is strategic signallin'. A joint exercise with one or more nations serves the purpose of signalling to a third country of the influence we have in the region and a demonstration of our resolve to further our diplomatic objectives.

- On the intangible side, military exercises promote brotherhood between soldiers and militaries. Besides goodwill, it is a tool for projection of a nation's soft power such as culture, language, customs, beliefs, food habits and lifestyle.

> Q. In the light of recent military exercises SLINEX and YudhAbhyas describe the significance of joint military exercises.

## 7.3. New Intelligence Wing In SSB

The home minister of India Rajnath Singh has launched intelligence wing of SashastraSeemaBal (SSB) and Welfare and Rehabilitation Board software application, WARB app.

**About The Wing**

- The new Intelligence set-up will help effective guarding of India's open borders with Nepal and Bhutan. The Force has undertaken Modernization programme and intelligence wing is the part of mordernisation of Indian defence system.

- SSB has been declared as the Lead Intelligence Agency (LIA) for both the Indo-Nepal and Indo-Bhutan borders. Thus, it was felt that a well knit intelligence network of the highest capabilities that can function and deliver would be the prime requirement of comprehensive Border Management.

- This was quite essential as the operations of SSB have to be Intelligence based so as to prevent criminals and smugglers from taking advantage of the friendly borders with Nepal and Bhutan.

- The paramilitary force guards India's borders with Bhutan and Nepal, which are often, used by criminals and Kashmiri militants returning from Pakistan.

- Due to the visa-free regime India has with Nepal and Bhutan, there is a trans-border movement of criminals and anti-national elements which pose a major challenge.

**About WARB**

- The Welfare and Rehabilitation Board App is available on Google Play store and is user friendly.

- The app WARB contains features to facilitate retired CAPFs and Assam Riffles personnel to get their grievances redressed and seek skill development training through National Skill Development Corporation under Pradhan MantriKaushalVikasYojana, re-employment and other relevant and important information.

- This mobile App shall also help retired personnel to have better co-ordination with WARB and its field formation at states/UTs and district level.

## 7.4. Missile Test

India's Defense Research and Development Organization (DRDO) successfully conducted a flight test of the third-generation anti-tank guided missile (ATGM) Nag.

**About NAG**

- Nag is a third-generation, fire-and-forget, anti-tank guided missile developed by India's state-owned Defence Research and Development Organisation (DRDO) to support both mechanized infantry and airborne forces of the Indian Army.

- The missile incorporates an advanced guidance system and possesses high single-shot kill probability. It is designed to destroy modern main battle tanks and other heavily armoured targets.

- Nag can be launched from land and air-based platforms. The land version is currently available for integration on the Nag missile carrier (NAMICA) which is derived from an infantry combat vehicle.
- The Nag missile was indigenously developed under the Indian Ministry of Defence's integrated guided missile development programme (IGMDP) which also involved the development of four other missiles that are Agni, Akash, Trishul and Prithvi.
- Bharat Dynamics (BDL—Defence PSU) produced imaging infrared seekers for the weapon.
- The first test of Nag was conducted in November 1990. A test launch of the missile from a tube in programmed control mode was performed at the Interim Test Range, Balasore, Odisha in September 2001.

## Significance

- The missile can hit the targets under different ranges and conditions with very high accuracy as desired by the armed forces. It has been proved in various tests.
- The Nag missile is embedded with Anti armour missiles, like Ground launched and Air launched missile, the low weight low range Anti tank guided missile with advanced Technology, which is available to less number of countries and India is also in the list with the Nag missile.
- In a tactical battlefield the main battle tanks appear as impregnable weapon platform which is impossible to destroy with normal infantry weapons.Hence, the infantry soldiers face a daunting task to challenge the enemy forces and able to survive.
- As a result, a need was felt to equip them with new generation shoulder fired anti-tank guided missiles (ATGM).The main battle tanks are vulnerable to anti-tank missiles and hence the soldiers must carry the ATGMs along with them.
- The improvement in technological capabilities of the anti-tank missiles is on top priority of the ATGM developers.

## Need For Ballistic Missile System

- India's policy approach towards ballistic missile defenses has been undergoing some important shifts in recent years.
- India has never spelt out a policy per se for ballistic missile in statements in the United Nations and other multilateral bodies as well as in the Indian Parliament over the years.
- But with time due to the changing regional security scenario and the utility of missile defense to tackle the growing missile threats from China and Pakistan. India has decided to develop an integrated ballistic missile system
- India has ballistic missile armed countries on its Northern as well as Western borders. Further, territorial disputes exist with both of these neighbours. The steady spread of ballistic missile technology to ever more states continues unabated.
- There is also the possibility of ballistic missiles falling into the hands of terrorist groups especially in failing or failed states such as Pakistan whose military includes several sympathisers of terrorist groups.
- Changes in the broader strategic environment around India pushed India to see the utility of missile defenses and in January 2003, the Indian government took a decision to integrate missile defense into India's nuclear posture.
- India is preparing to deal with the nuclear ballistic missile threat from its potential adversaries through its nuclear doctrine and nuclear forces.

- The importance of anti-missile defence shield has grown in primacy and has witnessed a changing orientation to an amalgamation of an integrated Layered Defence System.

Q. India's policy approach towards ballistic missile defenses has been undergoing some important shifts in recent years. Explain the shift in India's ballistic missile defence policy.

**FIRST FULL TIME WOMEN DEFENSE MINISTER**

- Nirmala Sitharaman became the first woman to become a full-time defence minister of the country.
- Former Prime Minister Indira Gandhi held the portfolio of defence though as an additional charge.

## 7.5. New Laws For Regulation Of UAV

The Ministry of Home Affairs (MHA) has been working on a draft regulation Act to deal with Unmanned Air Vehicle since security agencies have flagged concerns in the recent past.

**Need Of A Separate Law**

- In the absence of any specific law, flying objects are covered under the Aircraft Act. However, the Act's limitation is that only those objects that can be detected by radars come under its purview.
- Since UAVs and drones can fly at a very low altitudethese tend to escape radars.
- Currently, the use of drones is being regulated only through an executive order, hence a separate law is required.
- Whenever anyone is caught violating the law a case is lodged under the Aircraft Act. But prosecution becomes very difficult as the UAVs doesn't have separate regulation.
- Security agencies particularly those stationed on border have flagged concerns about drones due to security issues.

**Regulations For Drones In India**

- As per the definition of given by DGCA (Director General of Civil Aviation) for Unmanned Aircrafts (UAs) the UAS consists of an Unmanned Aircraft (UA), a Remote Pilot Station (RPS), Command and Control (C2) Link, the maintenance system and the operating personnel.
- Unmanned aircraft are either pilotless or do not carry pilot(s) on board.
- Remotely Piloted Aircraft (RPA), Autonomous Aircraft and Model Aircraft are various types of unmanned aircraft which are colloquially known as drones.
- Purchasing a drone from abroad and bringing it to India as import of drones is prohibited in India.
- Flying of drones without prior approval from the governmental authorities is illegal in India. The DGCA has prohibited the launch of any UAV by any non-governmental agency or any individual.
- Further,the Department of Industry Policy & Promotion, Ministry of Commerce and Industry laid down a list of electronic aerospace and defenceequipment which required an industrial license for manufacturing/production. This includes UAVs or commonly referred to as drones.
- The Aircraft Act 1934, places UAs under the broad definition of Aircraft. As per the Aircraft Rules, the DGCA has the power to issue notices to Aircraft Owners, issue particular directions relating to the operation, use, possession, maintenance or navigation of aircraft flying in or over India or of aircraft registered in India.

- The draft policy for operations of drones was released in April 2016. It has framed a lot of guidelines, having in view the R&D and recreational scope of drones apart from being used for surveillance and commercial purposes.

## Drones Used By Defence Forces

- DRDO Lakshya:  A target drone used for discreet aerial reconnaissance and target acquisition. It is launched by solid propellant rocket motor and sustained by a turbojet engine in flight.

- DRDO Nishant:  It is primarily designed for intelligence-gathering over enemy territory and also for reconnaissance, training, surveillance, target designation, artillery fire correction and damage assessment. The Nishant has completed its developmental phase and user trials.

- DRDO Aura:It is similar to the Lockheed Martin RQ-170 Sentinel, a stealth drone that will be capable of releasing missiles, bombs and precision-guided munitions

- DRDO Rustom: Modeled after the American Predator UAV, the Rustom is a Medium-Altitude Long-Endurance (MALE) system. Like the Predator, the Rustomis designed to be used for both reconnaissance and combat missions. The Rustom is in a prototype stage and is expected to replace and supplement Israeli Heron model UAVs in the Indian Air Force.

> Q. In the light of recent draft act on the regulation of Unmanned Aerial Vehicle explain the need of such law and the present system of regulation of UAVs in India.

## 7.6.   BRICS Named JeM And LeT As Terror Groups

At the ninth BRICS summit, the grouping named Pakistan-based terrorist outfits like the Lashkar-e-Taiba (LeT) and the Jaish-e-Mohammed (JeM) among groups responsible for committing, organizing or supporting terrorist acts.

## About The Declaration

- In the joint declaration the BRICS voiced serious concern over violence perpetrated by terror groups like the Taliban, al-Qaeda and Pakistan-based LeT and JeM.

- In a declaration, the BRICS (Brazil-Russia-India-China- South Africa) called upon all nations to adopt a comprehensive approach in combating terrorism including countering radicalisation and blocking terror financing sources.

- The grouping expressed concern over the security situation in the region and violence caused by the Taliban, ISIS, Al-Qaida and its affiliates including Lashkar-e-Taiba, Jaish-e-Mohammad and the Haqqani network.

- It also mentioned terror groups like the Eastern Turkistan Islamic Movement and Islamic Movement of Uzbekistan, Tehrik-i-Taliban and Hizbut-Tahrir.

- It called for expeditious finalisation and adoption of the Comprehensive Convention on International Terrorism (CCIT) by the United Nations General Assembly.

## Diplomatic Victory For India

- Analysts in India welcomed the naming of the LeT and the JeM along with known terrorist groups like Al Qaeda and ISIS in the BRICS statement.

- As a major diplomatic victory for India, China has agreed to include Pakistan based terror outfits like JeM, LeT and Haqqani network. China has been an all weather ally for Pakistan and this move is certainly a shock for Pakistan and according to some Chinese scholars it may have an adverse effect on China-Pak relations.

- It will force China to rethink its strategy of protecting Pakistan in UN over terror outfits.

- Though the declaration has not named Pakistan directly it significantly affirmed that those responsible for committing, organising, or supporting terrorist acts must be held accountable and that there can be no justification whatsoever for any act of terrorism.

- This is in tune with India's long-held position that no distinction should be made between the terrorist organisations and there can be no good terrorists-bad terrorists narrative.

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**About LeT**

- It was formed in 1990 in the Kunar province of Afghanistan. The Lashkar-e-Taiba (also known as Jamat-ud-Dawa) is based in Muridke near Lahore in Pakistan and is headed by Hafiz Muhammad Saeed.

- Its first presence in Jammu and Kashmir (J&K) was recorded in 1993 when 12 Pakistani and Afghan mercenaries infiltrated across the Line of Control (LoC) in tandem with the IslamiInquilabiMahaz, a terrorist outfit then active in the Poonch district of J&K.

- The LeTis outlawed in India under the Unlawful Activities (Prevention) Act. It was included in the Terrorist Exclusion List by the US Government on December 5, 2001.

- The US administration designated the Lashkar-e-Taiba as a FTO (Foreign Terrorist Organization) on December 26, 2001. It is also a banned organization in Britain since March 30, 2001.

- The group was proscribed by the United Nations in May 2005.The military regime of Gen. Pervez Musharraf banned the Lashkar-e-Taiba in Pakistan on January 12, 2002.

- The LeT's professed ideology goes beyond merely challenging India's sovereignty over the State of Jammu and Kashmir.

- Besides many terrorist attacks in India, this group is responsible for the Mumbai attack on 26 November.

**About JeM**

- Jaish-e-Mohammad (JeM) is an extremist Islamist group based in Pakistan that aims to undermine Indian control on the Kashmir and unite the province with Pakistan under their own interpretation of Shariah Law.

- The group was founded by Masood Azhar in the early 2000s. Azhar is a citizen of Pakistan and a member of the terrorist group Harakat al-Mujahedeen (HuM). He was accused of working with Al Qaeda (AQ) and of fighting against U.S. troops in Somalia with anHuM group under Osama bin Laden's instructions.

- Indian authorities arrested him when he returned to Kashmir. After HuM attempted to free him several times the group finally succeeded in 1999 by hijacking an Indian Airlines plane carrying 155 passengers.

- They secured his release from the Indian government in exchange for the hostages. Shortly after his release, Azhar travelled to Afghanistan where he reportedly met with Osama bin Laden.

**Major Attacks**

- In December 2001, armed militants attacked the parliament of India which resulted into setting off a tense political standoff between Pakistan and India.

- In a pre-dawn attack at Pathankot airbase, a group of six heavily-armed terrorists struck an Air Force base. This attack was carried out by JeM.

## 8. SCIENCE AND TECHNOLOGY

## 8.1. XFEL: World's Biggest And Powerful X-Ray Laser Gun Unveilded

The world's largest and powerful X-ray laser- European X-ray Free Electron Laser (XFEL) was unveiled in Hamburg, Germany.
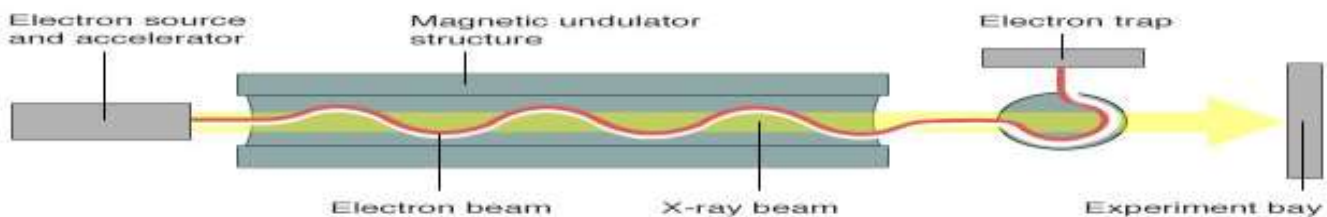
**European X-ray Free Electron Laser (XFEL)**

- The machine, called the **European X-ray Free Electron Laser (XFEL),** acts as a high-speed camera that can capture images of individual atoms in a few millionths of a billionth of a second. Unlike a conventional camera, though, everything imaged by the X-ray laser is obliterated – its beam is 100 times more intense than if all the sunlight hitting the Earth's surface were focused onto a single thumbnail.
- **XFEL is the world's third major X-ray laser facility** – projects in Japan and the US have already spawned major advances in structural biology and materials science. The European beam is more powerful, but most significantly has a far higher pulse rate than either of its predecessors.



- The machine is a superconducting linear accelerator that is housed in a 3.4km-long tunnel complex some 40m beneath Hamburg. It works by accelerating bunches of electrons to almost light-speed, before then throwing them down a slalom course controlled by a system of magnets, known as undulators.



The European X-ray free-electron laser (XFEL)

Source:DESY/Hamburg

- As the electrons bend and turn, they emit flashes of X-rays; and as the particles interact with this radiation, they also bunch even tighter.
- The 3.4 km long European XFEL is the largest and most powerful of the five X-ray lasers worldwide, with the ability to generate the short pulses of hard X-ray light. With more than 27 000 light flashes per second instead of the previous maximum of 120 per second.

**Applications**

- It will help to reveal and capture in images at the sub-atomic level, promising breakthroughs and revealing secrets in medicine, biology, energy, information technology and chemistry.

- It will help scientists to map the atomic details of viruses, take 3-D images of the molecular make-up of cells or film chemical reactions inside them. This will help to understand and treat illnesses.

- The light beams produced by the XFEL can also be bundled together to create extreme pressure and temp.

- It is also helpful in studying the process inside Earth's core.

## 8.2. Fresh Hope That Trappist-1 Planets Contain Water

- Three potentially habitable Earth-sized planets in another solar system are likely to contain substantial amounts of water, astronomers have discovered. The presence of water is one of the key things astronomers look for on exoplanets to indicate the possibility of life. So the discovery made via data collected from the Hubble Space Telescope increases the chances of life evolving on planets orbiting Trappist-1, a dwarf star about 39 light years from the sun.

- In February NASA announced seven Earth-sized worlds had been found orbiting the star, which a year prior was thought to have just three planets in its orbit. Each of the worlds orbits in the star's "habitable zone".

- **Red dwarfs stars which Trappist-1are the most common type of star in our galaxy**. Up to 50 per cent of the Milky Way is made up of red dwarfs. The fact that there is seven potentially habitable worlds around Trappist-1 has enormous implications for the odds of there being alien life.
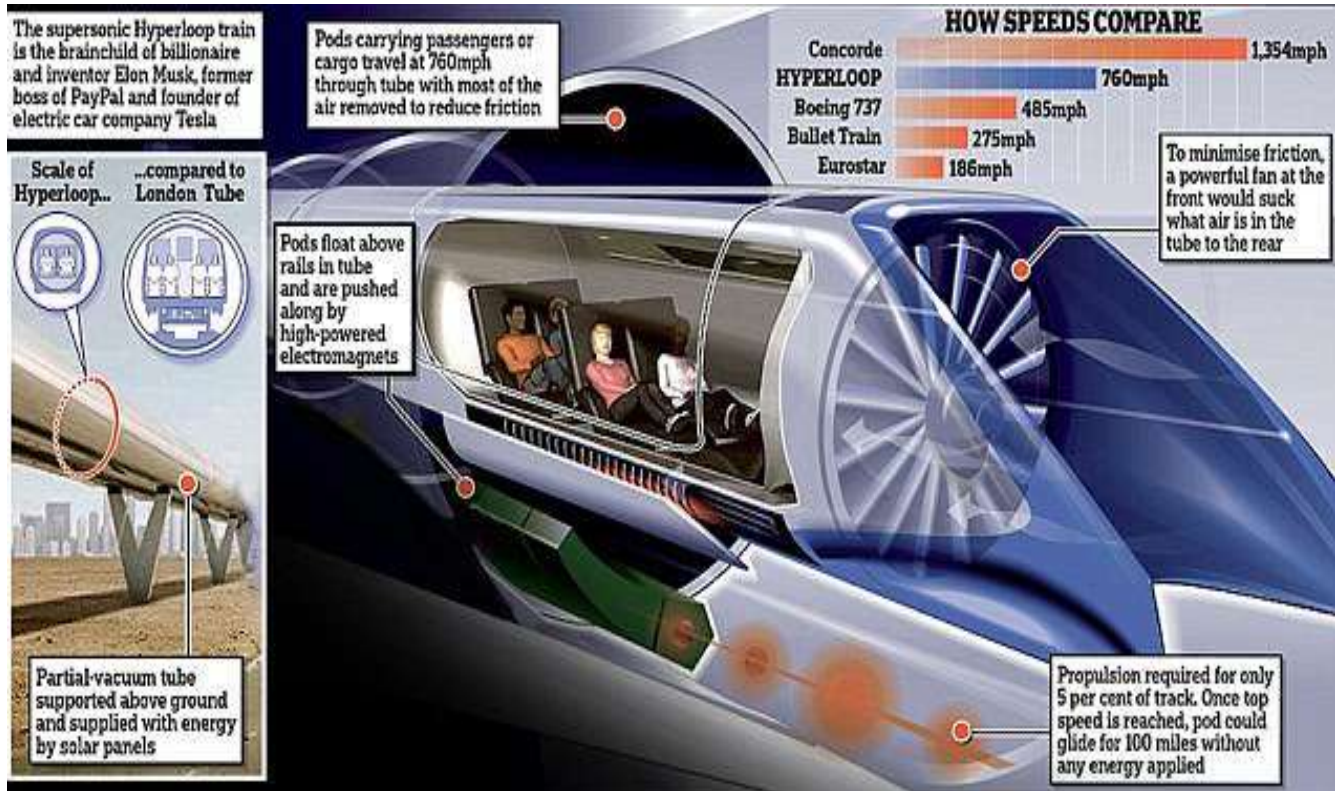


- The new research published in the journal *Astronomical* suggests that the outer planets in the system still harbour large quantities of water, despite powerful radiation from the star leading to enormous levels of water loss.

- The astronomers studied levels of UV radiation emitted by Trappist-1 which suggest its inner planets could have lost 20 times more water in the past eight billion years than all the Earth's oceans combined.But the system's outer planets including the three in the habitable zone may have lost less than three Earth-oceans worth of water. This means the planets could have retained "substantial" amounts of water on their surfaces.

## 8.3. CSIR Scientists Develop Artificial Leaf Create Hydrogen Fuel From Sunlight, Water

- Scientists have developed an artificial leaf that absorbs sunlight to generate hydrogen fuel from water, an advance that may provide clean energy for powering eco-friendly cars in the future. The ultra-thin wireless device mimics plant leaves to produce energy using water and sunlight.

- The device consists of semiconductors stacked in a manner to simulate the natural leaf system. When visible light strikes the semiconductors, electrons move in one direction, producing electric current. The current almost instantaneously splits water into hydrogen .

- The best advantage of this Hydrogen fuel is that ,it is eco-friendly and on burning it releases energy and water.

## 8.4.    Andhra Pradesh To Get India's First Hyperloop

- Andhra Pradesh is aiming to be India's first user of the Hyperloop in India after the Andhra Pradesh Economic Development Board (APEDB) signed a memorandum of understanding (MoU) with US-based Hyperloop Transportation Technologies (HTT**). Set to connect the cities of Vijayawada and Amaravati**, the Hyperloop is expected to reduce travel time from over 60 minutes to around 6 minutes.



- **Hyperloop Transportation Technologies (HTT**): In the concept, passengers and cargo are loaded into a pod, which accelerates using electric propulsion in a low-pressure tube. The pod quickly rises above the track using magnetic levitation and moves at airline speeds (over 1000kph) taking advantage of ultra-low aerodynamic drag**.**

- **Advantages:** Hyperloop is two-to-three times faster than fastest high-speed rail and claimed to have speeds even greater than commercial air travel. It has smaller civil engineering footprint, with no direct emissions or noise compared to railways. Hyperloop system's capital cost per mile is 60% that of high-speed rail, and is less expensive to operate. Furthermore, Hyperloop departures could happen with a low frequency of a pod every 20 seconds which is not possible in railways.

## 8.5.    Pluto Mountains Named After Tenzing Norgay, Edmund Hillary

- Two mountain ranges on Pluto have been named after Tenzing Norgay and Edmund Hillary respectively by the International Astronomical Union, which for the first time, has officially approved the naming of 14 features on the icy dwarf planet. These are the first geological features on the planet to be named following the close flyby by the New Horizons spacecraft in July 2015.

- This is the first set of official names of surface features on Pluto to be approved by the Working Group for Planetary System Nomenclature of the International Astronomical Union (IAU).

- NASA's New Horizons team proposed the names to the IAU following the first reconnaissance of Pluto and its moons by the New Horizons spacecraft. **Tenzing Montes andHillary Montes are mountain ranges** honouring Tenzing Norgay (1914-1986) and Sir Edmund Hillary (1919-2008), the Indian/Nepali Sherpa and New Zealand mountaineer who were the first to reach the summit of Mount Everest and return safely.

- **International Astronomical Union (IAU):** IAU is international association of professional astronomers, at the PhD level and beyond, active in professional education and research in astronomy. It was founded in 1919. It has 12625 members. Its mission is to promote and safeguard the science of astronomy in all its aspects through international cooperation. It also acts as internationally recognized authority for assigning designations (names) to celestial bodies (stars, planets, asteroids, etc) and any surface features on them**.**

## 8.6. Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator

- Recently **Bugworks** Research, a Bengaluru-based biotech start-up, **became India's and Asia's first to receive the international CARB-X (Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator) grant for its antibiotic research and development**.

- CARB X:Drug-resistant infections complicate the medical response in chemical, biological, radiological or nuclear emergencies. CARB-X was created to help address the threat of antibiotic resistance that will complicate any public health emergency. CARB-X is one of the world's largest public-private partnerships focused on preclinical discovery and development of new antibacterial products to help address the threat of antibiotic resistance.

## 8.7. First Ever Advanced Homoeopathy Virology Lab Arrives In India

India's first state-of-the-art virology laboratory is up and running now in **Kolkata.**The lab will immensely help further the virus research in India. New drugs and technologies in Homoeopathy will be used to fight viral diseases. **The lab is located at the Regional Research Institute for Homoeopathy in Kolkata, West Bengal.**

### About The Laboratory

- The laboratory is only one of its kind in India for conducting basic and fundamental research in Homoeopathy

- The research will be done on viral diseases like influenza, dengue, chikunguniya, Japanese encephalitis and swine flu (H1N1)

- It will develop new drugs and technologies to combat emerging challenges of viral diseases

- The laboratory is recognized by the Calcutta University to undertake research work of PhD students in field of homoeopathy.

### Virology And Its Importance

- Virology is a submicroscopic study of viruses and virus-like agents

- It is a sub-field of microbiology or of medicine

- It studies the structure, classification and evolution of viruses

- Researchers study the behaviour of virus and how it infects and exploit host cells for reproduction

- With the help of Virology, new procedures and medicines are made to help fight a plethora of viruses.

## 8.8. First Global Map Of Water On Moon Created

- Scientists have created the first map of water trapped in the uppermost layer of the Moon's soil which may prove useful to future lunar explorers using data from an instrument aboard India's Chandrayaan-1 spacecraft.

- The signature of water is present nearly everywhere on the lunar surface, not limited to the polar regions as previously reported. The water concentration reaches a maximum average of around 500 to 750 parts per million in the higher latitudes. The distribution is largely uniform rather than splotchy, with concentrations gradually decreasing toward the equator.

- The study also found that the concentration of water changes over the course of the lunar day at latitudes lower than 60 degrees, going from wetter in the early morning and evening to nearly bone dry around lunar noon.

## 8.9. IAF Successfully Conducts Development Trials Of Astra Missile

The Indian Air Force (IAF) successfully conducted developmental trials of indigenously developed Astra beyond visual range air-to-air missile (BVRAAM).The missile was tested in various missions and all sub-systems including the indigenous radio frequency seeker performed accurately, meeting all the mission parameters and objectives.

**Astra Missile**

- **Astra is air to air beyond visual range air-to-air indigenously developed by DRDO**. It is one of the smallest weapon system developed by DRDO, having length of 3.8-metre and weighing 154kg.
- It is single stage solid fuelled missile and has payload capacity of 15 kg conventional explosives. It can be launched from different altitudes and is capable of engaging targets at varying range and altitudes at both short-range targets (up to 20 km) in tail-chase mode and long-range targets (up to 80 km) in head-on mode.
- It is radar homing supersonic missile having maximum speed of Mach 4. It possesses high Single Shot Kill Probability (SSKP) making it highly reliable. It is all-weather missile with active radar terminal guidance, excellent electronic counter-counter measure (ECCM) features, smokeless propulsion and process improved effectiveness in multi-target scenario. **The missile can be integrated with all fighter aircraft of IAF including Sukhoi-30 MKI, Mirage-2000, MiG-29, Jaguar and the Tejas Light Combat Aircraft.**

## 8.10. Scientists For First Time Observe Optical Polarisation Phenomenon Of Fast Spinning Star

- Over 70 years after **Indian astrophysicist and Nobel laureate Subrahmanyan Chandrasekhar** predicted that rapidly rotating stars would emit polarized light, scientists in Australia have observed the phenomenon for the first time. In 1946, Chandrasekhar predicted the emission of polarised light from the edges of stars, prompting the development of sensitive instruments called stellar polarimeters to try to detect this effect.

- The phenomenon was observed using **High Precision Polarimetric Instrument (HIPPI),** world's most sensitive astronomical polarimeter to detect detect polarised light **from Regulus**, one of brightest stars in night sky about 79 light years away.

- **What is polarisation:** An electromagnetic wave such as light consists of a coupled oscillating electric field and magnetic field which are always perpendicular; by convention, the "polarization" of electromagnetic waves refers to the direction of the electric field. In linear polarization, the fields oscillate in a single direction. In circular or elliptical polarization, the fields rotate at a constant rate in a plane as the wave travels.

## 8.11. India Is Gearing Up To Join The Quantum Computing Race

Keen to tap into the next big advance in computing technology, the Department of Science and Technology (DST) is planning to fund a project to develop quantum computers.
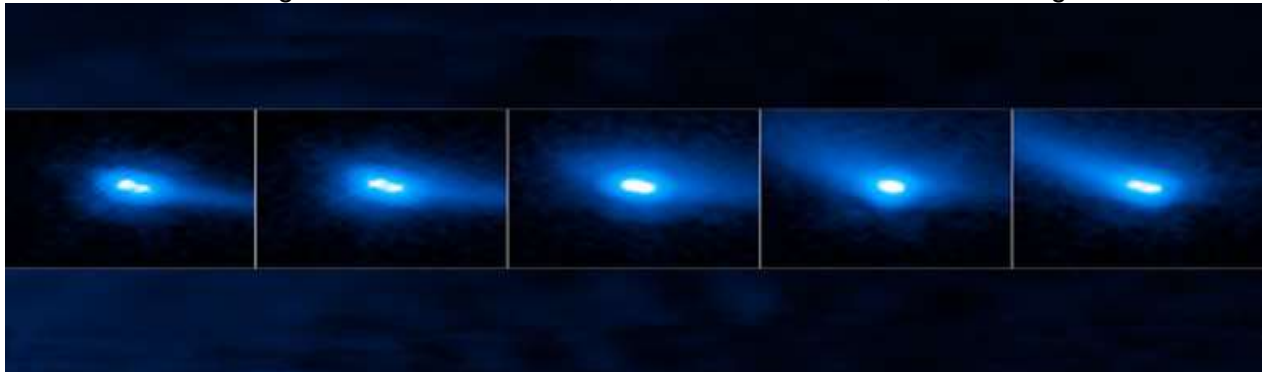
**What Is A Quantum Computer And How Does It Work**

- A quantum computer is a revolutionary design of computers using principles of quantum physics to increase the computational power way beyond the attainable limits of a traditional computer

- Complex principles of quantum mechanics are used to store information in a format known as 'quantum bit' (qubits). This is in contrast with the traditional binary 'bits' of 1 and 0.

- Qubit is two-state quantum-mechanical system, such as the polarization of a single photon (either vertical polarization or horizontal polarization) which allows for greater flexibility than the binary system.

- Quantum computing help in solving complex computing physics problems, which were earlier not possible on traditional computers.

## 8.12. Scientists Create World's First Molecular Robot

- The scientists have created the world's first molecular robot, which is millionth of a millimetre in size. It is made up of just 150 carbon, hydrogen, oxygen and nitrogen atoms and will be helpful in building molecules and discovering novel drugs.

- It can be programmed to move and build molecular cargo using a tiny robotic arm. The robots operate by carrying out chemical reactions in special solutions which can then be controlled and programmed by scientists to perform the basic tasks.

- The benefit of having machinery that is so small is it massively reduces demand for materials, can accelerate and improve drug discovery, dramatically reduce power requirements and rapidly increase the miniaturisation of other products.

## 8.13. Hubble Telescope Discovers a Binary Main-Belt Comet

- International team of astronomers using NASA's Hubble Space Telescope have spotted an unusual object called 2006 VW139/288P having two asteroids orbiting each other with comet-like features. These include bright halo of material, called a coma, and long tail of dust.



- The odd object is first known binary asteroid that is also classified as a main-belt comet.
- Asteroids and comets: Asteroids are known as inactive, rocky body orbiting the Sun. Comets are bodies of ice, rock and organic compounds that can be several miles in and they can be at times

active. Ice of comets can vaporise in sunlight forming an atmosphere (coma) of dust and gas and, sometimes, a tail of dust and/or gas.

### 8.14. Asteroid-Bound NASA Spacecraft Swings By Earth

- An unmanned **NASA** spacecraft travelling to a distant asteroid veered toward Earth for a gravitational slingshot manoeuvre that will better aim it toward the Sun-orbiting space rock.

- The gravity-boost took place about halfway through the journey of the spacecraft, known as **OSIRIS-REx (Origins, Spectral Interpretation, Resource Identification, and Security - Regolith Explorer).**The spacecraft zipped over Antarctica at a distance of 11,000 miles (17,000 kilometres), using Earth's gravity to shift its trajectory so it can eventually meet up with **Bennu.**

- **Bennu is a primitive, carbon-rich asteroid,** the kind of cosmic body that may have delivered life-giving materials to Earth billions of years ago. The asteroid's orbit around the Sun is tilted six degrees in comparison to that of Earth.

- **OSIRIS-REx will be the first U.S. mission to sample an asteroid**, retrieve at least two ounces of surface material and return it to Earth for study. The asteroid, Bennu, may hold clues to the origin of the solar system and the source of water and organic molecules found on Earth.

### 8.15. World's Largest Aircraft Passes First Engine Tests

- For the first time, the private spacecraft company Stratolaunch tested all the 6 engines on a colossal airplane with the largest wingspan of any aircraft in the world.

- Stratolaunchwas conceived as a low earth orbit transport aircraft for a variety of missions. It is the largest composite airplane ever built and is expected to have a max take-off weight of 1,300,000 pounds, a payload of 550,000 pounds, and a range of about 2,000 nm.

- Sitting on 28 wheels, it is 238 feet long, 50 feet high and has a wingspan of 385 feet. Unlike most aircraft capable of space flight, Stratolaunch will take off and land from a runway rather than a rocket launch platform.

### 8.16. ISRO's Mars Orbiter Mission Completes 3 Years in Orbit

- The country had on 24 September 2014 successfully placed the Mars Orbiter Mission spacecraft in the orbit around the red planet, in its very first attempt, thus breaking into an elite club.

- Mars Orbiter Mission (MOM)
  - o Mangalyaan spacecraft was launched on board of PSLV C25 rocket from Sriharikota in Andhra Pradesh on November 5, 2013 with aim of studying Martian surface and mineral composition as well as scan its atmosphere for methane (an indicator of life on Mars). It had entered Mar's orbit on September 24, 2014, in its first attempt.
  - o It was nine-month-long mission. The spacecraft was indigenously designed, built and launched by ISRO. The spacecraft has five instruments mounted on it for collecting scientific data of Mars morphology, atmospheric processes, surface temperature, surface geology and atmospheric escape process.

**8.17.** **Scientists Detect Fourth Gravitational Wave**



- Scientists have made the **fourth detection of gravitational waves –** ripples in the fabric of space and time – formed by the collision of two massive black holes located about 1.8 billion light-years away.

- The signal was recorded on August 14 by the Virgo detector located in Italy, and the two Laser Interferometer Gravitational-Wave Observatory (LIGO) detectors located in the US.**It is the first joint detection of gravitational waves with the Virgo and LIGO collaborations.**

- The newly produced spinning black hole has about 53 times the mass of our sun, which means that about 3 solar masses were converted into gravitational-wave energy during the merger.

- Advanced LIGO is a **second-generation gravitational-wave detector** consisting of the two identical interferometers in Louisiana and Washington, and uses precision laser interferometry to detect gravitational waves. It detected the first gravitational wave in February last year, almost 100 years after German scientist Albert Einstein predicted the phenomenon.

- **Advanced Virgo is the second-generation instrument** built and operated by the Virgo collaboration to search for gravitational waves. With the end of observations with the initial Virgo detector in October 2011, the integration of the Advanced Virgo detector began.

**8.18.** **ARPAN 3.0: Government Rolls Out New Automation Software For Defence Security Corps**

- Defence Ministry has rolled out ARPAN 3.0 (Army Record Office Process Automation 3.0), a new automation software for Defence Security Corps personnel to ease personal documentation and all issues related to their progression**.**

- ARPAN 3.0 will provide over 12 lakh soldiers of Indian Army easy access to their service records including pay and leave details and transfer and postings among others.

- As of now, all these records are maintained manually, which is a time-consuming exercise. The software provides valuable data for decision and policy making for the Defence Security Corps Directorate. It will enable Defence Security Corps to access their service profiles, statement of accounts and adjustment of allowances at par with troops of Indian Army**.**

## 9. ECOLOGY AND ENVIRONMENT

### 9.1. Farmer Zone: The Future Of Agriculture

- The Union Ministry of Science and Technology is planning to create Farmer Zone, **a collective open-source data platform**, for smart agriculture by using biological research and data to improve lives of small and marginal farmers.

- Farmer Zone envisioned by the **Department of Biotechnology** aligns with Prime Minister Narendra Modi's call for effective decision-making in agriculture by integrating science, technology, innovation and farm ecosystem.

- This platform aims to cater all needs of farmer from dealing with climate change, weather predictions and soil, water and seed requirements

- It will connect farmers and scientists, government officials, economists and representatives from global companies who work in the big-data and e-commerce space to bring about technology-based localised agri-solutions.

- This platform will work to collect relevant quality data related to agriculture into the cloud and also develop sites to help link with farmers and evolve PPP based enterprises for data delivery.

### 9.2. Volcanic Eruptions Drove Ancient Global Warming Event

- A **natural global warming** event that **took place 56 million years ago**was triggered almost entirely by volcanic eruptions that occurred as Greenland separated from Europe during the opening of the North Atlantic Ocean, according to an international team of researchers.

- The findings refute the more commonly favoured explanation that the event, called the **Palaeocene-Eocene Thermal Maximum (PETM)**, was **caused by the release of carbon from sedimentary reservoirs such as frozen methane.** Scientists are interested in studying ancient warming events **to understand how the Earth behaves when the climate system is dramatically perturbed**.

- During the PETM**, atmospheric carbon dioxide more than doubled and global temperatures rose by 5 degrees** Celsius, an increase that is comparable with the change that may occur by later next century on modern Earth. While there was significant ecological disruption during the PETM, most species were able to avoid extinction via adaptation or migration.

- To identify the source of carbon during the PETM, the researchers studied the remains of tiny marine creatures called **foraminifera,** the shells of which shed light on the environmental conditions when they lived millions of years ago.

- The amount of carbon released during this time was vast—more than 30 times larger than all the fossil fuels burned to date and equivalent to all the current conventional and unconventional fossil fuel reserves we could feasibly ever extract.

- **Studying the PETM helps us understand the mechanisms that aid recovery from global warming,** thereby helping researchers reduce the uncertainties surrounding the Earth's response to global climate change.

### 9.3. Lakshadweep Island Parali I Has Vanished

- One of the uninhabited islands that is a part of Lakshadweep **has vanisheddue to coastal erosion** and another four such territories in the sea are shrinking fast, claims a new study.

- **Parali I island, part of Bangaram atoll,** which had an area of 0.032 sq.km in 1968 has been completely eroded, resulting in its inundation.

- Ithas been noticed that all the five islets of Bangaram atoll had undergone coastal erosion. The results are indicative of the urgent measures to be implemented on each islet of the atoll to check further erosion.

- Itis also recommended to check the feasibility of a bio protection strategy using mangroves, in addition to the conventional physical protection measures.

### 9.4. National Electric Mobility Mission Plan 2020 (NEMMP)

- The NEMMP 2020 is a detailed plan based on an in-depth primary data study conducted jointly by government, automotive industry and academia/research institutes.

- The NEMMP is vital for reducing our dependence on fossil fuels, 80% of which is imported leading to massive foreign exchange deficit.

- **Target**
  - o To **put 6-7 million EVs on road by 2020**; 4-5 million are expected to be two-wheelers.
  - o Reduce dependence on fossil fuels.
  - o To promote cleaner technologies.

- **Why do it?**
  - o India's excessive appetite for fossil fuel has an adverse impact on the environment and even on our foreign exchange reserves.
  - o Successful implementation of NEMMP will **result in 2.2 – 2.5 million tones of fossil fuel savings by 2020,** that's a monetary saving of Rs 30,000 crore.
  - o It will also lower vehicular emissions and decrease carbon di-oxide emissions by 1.3% to 1.5% by 2020.
  - o The production of hybrid and electric vehicles in India is an investment that will deliver economic growth, quality jobs and a cleaner future.

- **How will we do it?**
  - o Both the government and the automotive industry will jointly invest Rs 23,000 crores to develop the EV eco-system in India.
  - o The government will invest close to Rs 14,000 crores over the next 5-6 years. The automakers will invest close to Rs 8,000 crores.
  - o India will deploy support measures that will quicken up the process of consumer acceptance of EVs.

- **Who is helping us:** Germany is going to help India achieve its target**.**The Germans are a strong supporters of electric mobility. Currently, Germany has about 1,500 EVs operating on German roads. By 2020, Germany aims to put at least one million electric vehicles on their roads. Thanks to these efforts, German cities are among the greenest in Europe. An Indo-German Joint Working Group (JWG) on Automotive Sector has been established to intensify cooperation in the development of efficient automotive technologies and alternate fuels and drives.

- The Challenge Ahead: India's **electric auto industry is really very small**. The only manufacturer in India that produces EV is Mahindra REVA. There are a few makers in the two wheeler segment such as YoBykes, Hero Electric, Ampere and Lohia Auto. The **biggest challenge to the manufacturers is to convince an Indian consumer to pay a premium to go electric**. On the other hand, the biggest challenge to the government will be to provide the necessary infrastructure to support EVs like charging stations that are spread across the country.

| Parameters | Electric Vehicles | Conventional Vehicles |
|---|---|---|
| Environment impact | It depends on their source of energy. If they draw energy from non-renewable sources, like wind, solar, etc.; they will have less impact on the environment. However, if these vehicles draw energy from coal, then they could have serious impact on the environment | As these vehicles draw energy only from renewable sources like coal and natural gas, they have serious impact on the environment |
| Cost | It is more expensive | It is less expensive as compared to electric vehicles |
| Recharge/refuel | Usually, it takes around 6-7 hours to recharge | It can be refueled in less than five minutes |
| Running cost | Low | High |

## 9.5. Cheap and Clean Fuel from Air

- Scientists from Cardiff University in the United Kingdom are trying to figure out new ways to procure clean and cheap fuel. They have **recently discovered a new way to produce methanol from methane using oxygen from the air.**

- **Methanol acquired the name 'wood alcohol' because it was once produced chiefly as a by-products of the destructive distillation of wood.** Today, it has become an important chemical often used as fuel in vehicles using that as fuel has major implications for cleaner, greener industrial processes worldwide, using the freely available air, inexpensive chemicals and an energy efficient methanol production process.

- Currently, methanol is made with the help of an inexpensive and energy-intensive processes known as **steam reforming and methanol syntheses. Natural gas is broken down at high temperatures into hydrogen gas (H2) and carbon monoxide (CO) before reassembling them to procure methanol.**

**More Details On Clean Fuel**

- The new method will help scientists produce methanol from methane through simple catalysis
- Catalysis is simply an addition of substance called catalyst which speeds up a chemical reaction
- It enables methanol production at low temperatures using oxygen and hydrogen peroxide
- The **relative abundance of methane on Earth makes it an attractive fuel**
- The new process can help to reduce dependence on fossil fuels but the commercialisation of methane may take longer.

- It **seeks to use waste gas flared into the atmosphere during natural gas production**, thus reducing carbon dioxide emissions and helping out nature.

### 9.6. Jordan Launches Sahara Forest Project

- **Jordan, a water-poor country that is 90% desert**, has launched a project **to turn its sand dunes into farming land to produce food using sun and sea water.**

- In the **first stage**, the **project aims to produce up to 130 tonnes of organic vegetables per year** from an area the size of four football pitches. It will use solar panels to provide power and include outdoor planting space, two saltwater-cooled greenhouses, a water desalination unit and salt ponds for salt production.

- The **project, whose funders include Norway and the European Union**, is to be expanded from three hectares to around 200 hectares of desert.

- It is impressive to see how technology can be used in such a sustainable way to produce agricultural goods in a quite tough climate like here.

- **The said scheme simply tapped into Jordan's existing resources.Jordan has a lot of sunlight, it has a lot of desert, it has sea water, it has carbon dioxide**. That is what is needed to produce food, water and renewable energy.

### 9.7. ZSI Produces First Compendium Of Animal Diversity In The Sunderland Islands

- Zoological Survey of India (ZSI) published a **first ever exhaustive compendium of animal species in the Indian Sundarban** and the threats it faces.

- The compendium is titled Fauna of Sundarban Biosphere Reserve.

- The compendium is the first consolidated and updated information of the faunal diversity of the Sundarbans.

**Sundarbans in India**

- Indian segment of Sundarbans is part of UNESCO World Heritage site.
- It forms part of Ganga-Brahmaputra delta across 9,630 sq. km, distributed among 104 islands.
- It has largest tidal halophytic mangrove forest in the world.

**Highlights Of The Compendium**

- The compendium catalogues entire faunal diversity of Sundarban Biosphere Reserve covering 9,630 sq. km spread over 19 blocks in North 24 Parganas and South 24 Parganas districts of West Bengal.
- According to it, fragile **Sundarbans ecosystem region hosts 2,626 animal species** that come **under zoological kingdom of Animalia, and 140 under more primitive Protista**. It also includes diverse 25 phyla.
- Famous Bengal tigers adapted to aquatic conditions have been documented. 50 mammalian species are also documented including the Asian small-clawed Otter, Gangetic Dolphin, Grey and Marsh Mongoose. **Wild Rhesus Monkey, only primate found in Sunderbans**is also documented.
- The **mammal numbers are declining in Sunderbans due to pressure on habitat** from people and natural threats that have shrunk mangrove swamp habitat.
- Two Rhinos, Swamp deer, Barking deer and Hog deer and Asiatic Wild Water Buffalo no more are not found in Sundarbans.

- There are 356 species of birds, including raptors (birds of prey). Other birds found here are Osprey, Brahminy Kite, White-Bellied Sea Eagle, Rose-ringed parakeets, flycatchers and warblers. **Kingfishers are found abound and Sundarbans has nine of them.**
- The mangrove ecosystem covers about 350 species of fish. Cartilaginous fish make up 10.3%. The IUCN conservation status shows 6.3% fish are near-threatened and 4.85% are threatened.
- Also, there are 173 molluscs. Moreover, Crustaceans — crabs, shrimp and prawns — constitute 334 species. Besides, ten species of frogs and toads are found.
- There are 11 turtles, including the famous Olive Ridley, Hawskbill sea turtles and most threatened freshwater River Terrapin.
- The region has 753 insect species. Of these, 210 are butterflies and moths. Crocodile, 13 lizards including three species of Monitor Lizards and five Geckos are also found.
- The rivers, creeks channels and islands together harbour about 30 snake species including monocled cobra, Russell's viper, common and banded kraits.

### About Zoological Survey Of India (ZSI

- Established on **1 July 1916,** the Zoological Survey of India (ZSI) is a **premier Indian organisation in zoological research and studies.**
- The activities of the ZSI are coordinated by the Conservation and Survey Division under the Ministry of Environment, Forest and Climate Change.
- It promotes the survey, exploration, research and documentation leading to the advancement in our knowledge on various aspects of animal taxonomy of the Indian subcontinent.

### 9.8. Mouse Deer Reintroduced For First Time In Telangana Forest



- There has been a **re-introduction of the 'mouse deer'** in the **forests Nallamalla in Amrabad Tiger Reserve (ATR) by the Telanagana Forest Department** which has been **bred in the Nehru Zoological Park, Hyderabad.**
- There had been a release of eight mouse deer out of which two male and six females from the captivity to semi wild conditions having a protected enclosure of 2.4 hectares. The mouse deer which is also known as **Spotted Chevrotain** has been one of the **endangered species**.
- **The animals look like a deer, mouse and pig, it will not be considered as a deer but because it shares its suborder with deer (Ruminantia) it has been called as a deer**. It is a **nocturnal animal** which has the family of its own Traguildae.
- They are **known as the smallest ungulates because of their small size in the whole world**. They are mostly found in the deciduous and evergreen forests throughout India. The species **have become endangered because of the destruction of their habitat and poaching**.

## 9.9.  Wood is Good" Campaign

- The Union Ministry of Environment and Forests and Climate Change (MoEFCC) has launched "**Wood is Good**" Campaign under Partnership for Land Use Science (Forest-Plus).

- **Purpose of the campaign:** The **purpose** of campaign is to **promote wood as climate-friendly resource and substitute to materials like steel and plastic** as it is carbon neutral unlike others materials which leave carbon footprint in their production.

- Need for Campaign: Forests are integral part of Indian culture and tradition. **Government is committed to increase forest cover from 24% to 33% of geographical area** and **creating an additional carbon sink of 2.5 to 3 billion tons of CO2 equivalent in forests, as reflected in Internationally Nationally Determined Contributions (INDCs)**

- About Forest-Plus:
  - o The Partnership for Land Use Science (Forest-Plus) is a joint programme by theUnited States Agency for International Development (USAID) and Ministry of Environment, Forest and Climate Change (MoEF&CC) to strengthen capacity for REDD (Reducing Emissions from Deforestation and Forest Degradation) implementation in India.
  - o The programme will bring together experts from both India and the United States to develop tools, technologies and methods of forest management in order to meet the technical challenges of managing forests for the health of the ecosystem, carbon stocks, biodiversity and livelihood.

## 9.10.  International Day for the Preservation of the Ozone Layer

- The **ozone layer**, a fragile shield of gas**, protects** the **Earth from the harmful portion of the UV rays of the sun, thus helping preserve life on the planet.** The phase out of controlled uses of ozone depleting substances and the related reductions have not only helped protect the ozone layer for this and future generations, but have also contributed significantly to global efforts to address climate change; furthermore, it has protected human health and ecosystems by limiting the harmful ultraviolet radiation from reaching the earth

- This year marks the **30th anniversary of the Montreal Protocol**. As part of the anniversary celebrations, the Ozone Secretariat launched a communication campaign ahead of World Ozone Day to be marked on 16 September 2017.

- **The #OzoneHeroes campaign** was launched on 14 September. It seeks to celebrate the major accomplishments of the Montreal Protocol in protecting the ozone layer and the climate, to increase public recognition of the success and impact of the Protocol, and to generate further support for the Protocol and its new mandate to phase down climate-warming hydrofluorocarbons under **the Kigali Amendment, adopted in 2016**.

## 9.11.  Snow Leopard Upgraded To 'Vulnerable' Status

- The elusive snow leopard long considered an "**endangered" species** has been **upgraded to "vulnerable" by the International Union for Conservation of** Nature. But experts warned that the **new classification does not mean they are safe.**

- The animals still face **serious challenges**, including **poaching and loss of prey in their high Himalayan habitat.**The species still faces a high risk of extinction in the wild and is likely still declining — just not at the rate previously thought.

- Snow leopards had been **listed as endangered since 1972**. The reclassification announced by the International Union for Conservation of Nature (IUCN) followed a three-year assessment that determined **there were not fewer than 2,500 mature snow leopards in the wild,** and that their numbers were not in steep decline — the two criteria for being considered "endangered".

- Using improved methods for assessing the cats' population, experts estimated there were at least about 4,000 in the wild, though there could be as many as 10,000. The animals are hunted for their thick fur and bones.

- The animals also face declining numbers of wild prey, as domestic livestock have degraded grasslands. Whether they might be affected by global warming remained uncertain. But scientists agreed the Himalayas were one of the world's most susceptible regions to climate change.

### 9.12. Floating 'B4' Boat Labs Will Study The Brahmaputra River

- The Centre plans to safeguard the fast-eroding Majuli island — Asia's largest riverine island — using research carried out on **floating 'B4' boat labs along the Brahmaputra river**. Majuli, the first island district of the country, was **once 1200 square kilometres** but due to excessive erosion has **since shrunk to under 500 square kilometres.** It is also known for being the **seat of Assam's Vaishnava monasteries**.

- **B4' – the 'Brahmaputra Biodiversity and Biology Boat'**, work on which will commence by December, will initially cover the region from Pasighat, Dibrigargh, Neemati, Tejpur and Guwahati in the state of Assam.

- The large barge (or boat) which will be set up on the **river will be a "well-equipped laboratory" with cold storage facilities for holding samples, along with multiple satellite boats or rafts that will venture into shallower and narrower parts of the river** to lift samples.

- The large boat with the permanent **lab will be spread over two floors** and will go up and down the river. One floor will be dedicated to scientists, while the other floor will be accessible to residents of the area to learn about the eco-system.

- The **idea is to study the changes caused by dams, climate change, human interventions and the eventual effects it has on the river eco-system**. Despite supporting considerable biodiversity, the **Brahmaputra has not been studied as extensively as the Amazon**

- The project will "constantly monitor" the impact of various environmental and anthropological factors that affect the river and conduct research to mitigate the effects. **The interdisciplinary focus, the work plan for which is developed with IIT Guwahati as the nodal agency**, will **also aim at a thorough study of freshwater resources of North East India**. The integrated approach is aimed to combine data, science and judgement that can impact policy.

### 9.13. Himachal Pradesh: Country's First Electric Bus Service Launched

- In a boost for green transport in Himachal Pradesh, the state launched the **country's first electric bus service for Rohtang Pass, a tourist destination near Manal**i. It's a pioneering initiative to check vehicular pollution at Rohtang Pass in the wake of the National Green Tribunal (NGT) orders to restrict the number of diesel and petrol operated tourist vehicles in the ecologically fragile area.The initiative **aims to curb carbon emission which is resulting in melting of glaciers in Himalayas.**

- With this initiative Himachal becomes first in the **world** to ply electric buses at an altitude of **13 thousand feet**.

- **Background:** The NGT had shown concern over **melting of glaciers in Rohtang Pass area** as they were receding at an alarming rate of 19-20 meters per year. The entry of vehicles were restricted to 1,000 vehicles per day, including both diesel and petrol vehicles, however, electric and CNG vehicles are exempted.

## 9.14. <u>Union Government Notifies Wetland (Conservation And Management) Rules 2017</u>

- The Ministry of Environment, Forests and Climate Change (MoEFCC) notified new Wetland (Conservation and Management) Rules 2017 to prohibit range of activities in wetlands.
- **Wetland is transitional land between terrestrial and aquatic ecosystems** where the water table is usually at or near the surface or it may be land covered by shallow water.It supports rich biodiversity and provides wide range of ecosystem services such as water storage, water purification, flood mitigation, erosion control, aquifer recharge etc.
- There are **115 wetlands** officially **identified by Central Government and of those 26 are identified as wetlands of international importance under Ramsar Convention** (an international intergovernmental treaty for the conservation of wetlands to which India is a party).

### Highlights Of The Rules

- **State Wetlands Authority (SWA**): It stipulates setting up of SWA in each State/UTs headed by State's environment minister and include range of government officials. State government will also nominate one expert each in fields of wetland ecology, hydrology, fisheries, landscape planning and socioeconomics.
- **Functions of SWA**: It will develop comprehensive list of activities to be regulated and permitted within notified wetlands and their zone of influence.It will also recommend additional prohibited activities for specific wetlands, define strategies wise use of wetlands and its conservation and undertake measures to enhance awareness within stakeholders and local communities on values and functions of wetlands. In this case, wise use has been defined as principle of sustainable uses that is compatible with conservation.
- **Prohibited Activities**: The rules prohibit activities like conversion of wetland for non-wetland uses including encroachment of any kind, setting up and expansion of industries, waste dumping and discharge of untreated wastes and effluents from industries, cities, towns, villages and other human settlements.
- **Digital inventory of all wetlands**: Mandatory for state authorities to prepare list of all wetlands and list of wetlands to be notified within six months Based on it, a comprehensive digital inventory of all wetlands will be created and will be updated every ten years.
- **National Wetlands Committee (NWC**): The rules stipulates for setting up of NWC, headed by MoEFCC Secretary, to monitor implementation of these rules and oversee work carried out by States. NCW will also advise Central Government on appropriate policies and action programmes for conservation and wise use of wetlands, recommend designation of wetlands of international importance under Ramsar Convention, advise on collaboration with international agencies on issues related to wetlands etc