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CURRENT AFFAIRS MARCH 2018

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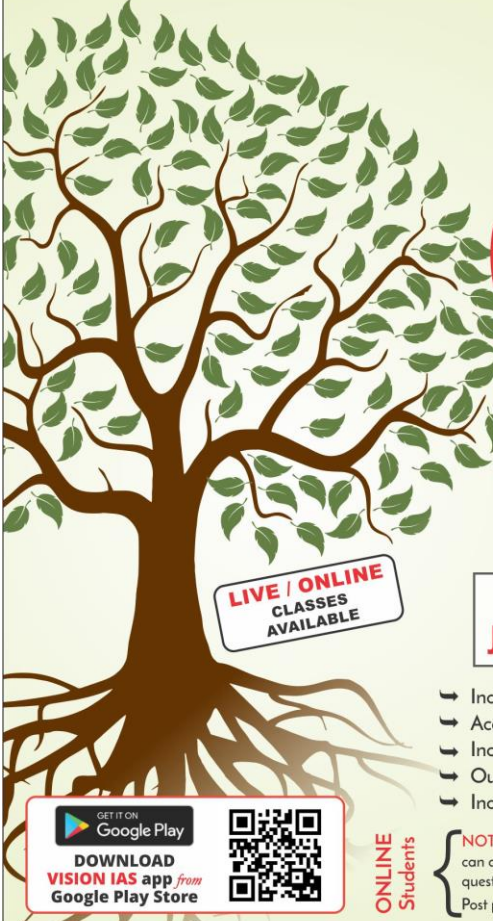
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1. POLITY AND CONSTITUTION

1.1. SPECIAL CATEGORY STATUS (SCS)

Why in news?

- Recently Andhra Pradesh MPs have been protesting for special category status for the state which centre has refused.

More about the news

- The demand is claimed on the basis of Andhra Pradesh Reorganisation Act which provides that “the Central Government may make appropriate grants and also ensure that adequate benefits and incentives in the form of special development package are given to the backward areas of that State”
- While Centre agreed to provide the **monetary equivalent** of SCS but has refused granting the status on the basis that 14th Finance Commission doesn't provide for such treatment to Andhra Pradesh.

What is SCS?

- The Constitution does not include any provision for categorisation of any State as a SCS. But, recognising that some regions in the country were historically disadvantaged in contrast to others, Central plan assistance to SCS States has been granted in the past by the erstwhile Planning Commission body, National Development Council (NDC).
- The concept of a special category state was first introduced in 1969 by the 5th Finance Commission based on the Gadgil formula. The formula was modified various times to suit the contemporary needs.
- In 1991 the Gadgil-Mukherjee formula was adopted that was in use till the 14th finance commission.
- The rationale for special status was that certain states, because of inherent features, have a low resource base and cannot mobilize resources for development.

Way Forward

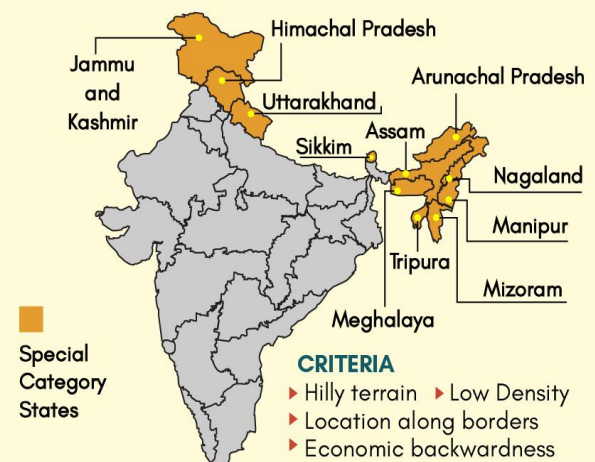
- Since Planning Commission ended there has been a drastic cut in the allocation to SCS and the difference between funds allotted to SCS and other States have been sizeably reduced and the status has remained more of symbol of Political mileage.
- With recent increase in tax devolution to 42% and decrease in normal central assistance to states, the benefits under SCS have reduced. But there is still a need of evolving more equitable methods of fund devolution.

14th Finance Commission recommendations

- The Commission has not categorised states between normal states or special category states as it is beyond its terms of reference.
- Instead, it suggested that the resource gap of each state be filled through **'tax devolution'**, urging the Centre to increase its share of tax revenues to the states from 32% to 42%.
- If devolution alone could not cover the revenue gap for certain states, the Commission said, the Centre could provide a **revenue deficit grant** to these states.

NOT SO SPECIAL ANYMORE

The Centre claims that following the increase in tax devolution to States from **32% to 42%** of divisible pool of central taxes, there is no further need to give 'Special Category' status to any State



BENEFITS AS PER GADGIL-MUKHERJEE FORMULA

On account of their location and backwardness, Special Category States have been allocated assistance as grants

- They are provided **30% of the total central assistance** (90% of it as grants)
- Special **plan assistance for projects** (90% of it as grants)
- Central incentives for the **promotion of industry** on account of economic backwardness
- Untied special central assistance** (100% of it provided as grant)
- Assistance for **externally aided projects** (90% grant)
- Accelerated Irrigation Benefit Programme (AIBP)** assistance (90% as grant)

DILUTION FOLLOWING UNION BUDGET 2015-2016

- Very few externally aided projects
- Discontinued are central assistance, special central assistance & special plan assistance
- Allocations under AIBP reduced from Rs. 8,992 crore in 2014-15 to just Rs. 1,000 crore: scheme to be run with a higher matching contribution by States

- The recommendations by Raghuram Rajan committee (2013) for the introduction of the "least developed states' category (based on the 10 equally weighted indicators for monthly per capita consumption expenditure, education, health, household amenities, poverty rate, female literacy, percentage of the Scheduled Caste/Scheduled Tribe population, urbanisation rate, financial inclusion and physical connectivity) and abolition of "SCS" may be introduced for better understanding the development needs of individual states.

1.2. TRANSFORMATION OF ASPIRATIONAL DISTRICTS

Why in News?

Government recently launched the 'Transformation of Aspirational Districts' programme.

Background

- The issue of a **widespread disparity in development** indicators among various regions of the country has been dealt with by the policy makers for a long time.
- However, the earlier programmes/schemes were infested by **certain loopholes**, including lack of convergence, absence of centralised monitoring mechanism, only a fraction of sanctioned amount reaching the districts, lack of availability of real time data, lack of people's participation and above all the 'one size fits all' approach.

About the Programme

- Transformation of Aspirational Districts programme aims to quickly and effectively transform the chosen 115 districts, with at least one from 28 states (excluding Goa).
- The broad contours of the programme are **Convergence** (of Central & State Schemes), **Collaboration** (of Central, State level 'Prabhari' Officers & District Collectors), and **Competition** among districts driven by a mass Movement. It will be based on the **real time data** and driven by **Mass Movement**.
- With **States as the main drivers**, this program will focus on the strength of each district, identify low-hanging fruits for immediate improvement, measure progress, and rank districts; while NITI Aayog will **anchor this programme**.
- One of the main elements of the strategy is to identify selected **Key Performance Indicators (KPIs)**, monitor the progress made in these indicators and carry out annual ranking on the incremental progress made. The KPIs chosen are to be district specific.
- For this purpose, **5 sectors have been identified**- Health & Nutrition, Education, Agriculture and Water Resources, Basic Infrastructure and Financial Inclusion and Skill Formation.
- The programme includes **appointment of Central and State Government Officers** at the level of Additional/Joint Secretary as the "**Prabhari**" and **Nodal Officers**. These officers are to act as a bridge between centre, state and district.
- A **district level team** would prepare a baseline report of the current status of different indicators and based on the resources available, would also prepare year-wise targets.

Related News

The Centre is mulling an initiative similar to the Integrated Action Plan (IAP), used in Left Wing Extremist (LWE) districts, for transforming 115 districts from "backward" to "aspirational".

What is an Integration Action Plan?

- An Integrated Action Plan (IAP) is a policy instrument that can be used to respond in a concrete way to a policy challenge. Each IAP is unique, in terms of local context, theme and coverage. There is no set template.
- Under IAP, launched in 2010 for LWE districts, additional central assistance with focus on creation of public infrastructure and services is granted to districts with an annual outlay of Rs 30 crore.

Additional Information-

- Out of 115 districts, 30 were identified by the NITI Aayog and another 50 districts by Central Ministries and remaining 35 identified by the Ministry of Home Affairs as Left-Wing Extremist districts.
- The **KPIs are a combination** of inputs, outputs, and outcomes across the five specified sectors.

Associated Recent Developments

- **Small Industries Development Bank of India (SIDBI)** has tied with the Common Service Centres (CSC) in these Aspirational Districts to implement a plan to **promote micro enterprises** in 115 aspirational districts across the country to contribute in their development.

Common Service Centre

- It is an information and communication technology (ICT) access point created under the National e-Governance Project. The project plan includes the creation of a network of over 100,000 CSCs throughout the country.

- **The central representatives** would be visiting the district at least once in two months and prepare a **report for NITI Aayog**, which after analysing it would place the findings for consideration to the **Empowered Committee of secretaries**.

1.3. ARUNACHAL'S 2-TIER PANCHAYATI RAJ

Why in News?

Arunachal Pradesh Assembly passed a bill to do away with the **Anchal Samiti** (Intermediate level) and set up a two-tier system in the state.

States/UTs with 2-Tier government

Goa, Manipur, Sikkim, D& N Haveli, daman & Diu and Lakshadweep do not have intermediate Panchayat as only 2 Tier system was in place.

Details

- According to the 73rd Amendment of the Constitution, states are required to constitute Panchayats at **three tiers**, i.e., Village, Intermediate and District except the States having a population of less than 20 lakhs, which may not constitute a Panchayat at Intermediate level.
- Arunachal Pradesh has a population of 13.84 lakh which, thus, makes it eligible for having 2-tier government.
- Moreover, it was claimed that plans and policies get delayed at the Anchal Samiti level. Thus, the move is meant to standardize the use of financial resources given the already small resource base.
- Further, planning and execution of schemes would be faster in a two-tier panchayati raj system, as there would be direct connection between Gram Panchayats and Zilla Parishads, the village and district levels of the panchayati raj system.

1.4. NORTH EASTERN COUNCIL (NEC) SCHEMES

Why in news?

The Union Cabinet approved Schemes of **North Eastern Council (NEC)** including continuation of existing Schemes.

More on news

- The Schemes under NEC – Special Development Project will be changed to be a Central Sector Scheme with 100% grant (from current 90:10 between centre and state).
- For other projects funded by NEC – both Revenue and Capital – as 100% Central funding basis, to continue with existing pattern.
- Extension of 100% centrally funded **North Eastern Road Sector Development Scheme (NERSDS)**.
- The Scheme namely **Non Lapsable Central Pool of Resources-Central [NLCPR (Central)]** is also transferred to NEC for implementation.
- NEC schemes as per Expenditure Finance Committee(EFC) are co-terminus with the 14th Finance Commission. So, all NEC schemes have to be completed by March 2020.
- Priority sectors have been identified such as bamboo; piggery; regional tourism; higher education, tertiary healthcare & special intervention in backward areas; livelihood project; Science & Technology Interventions in NER; Survey & Investigation and NER Promotion.
- The total funds available to NEC are proposed to be bifurcated in two components.
 - **State component (60%)**- would be utilised for the projects in each State as per their share on normative allocation basis.
 - **Central component (40%)**- the projects having regional character, requiring Inter-Ministerial intervention are to be taken up.

Non-Lapsable Central Pool of Resources-Central

- Created in 1997–98 (operationalized in 1998–99) is the **accrual of the unspent balance** of the mandatory 10% budgetary allocation of the Ministries/Departments.
- The broad objectives of the NLCPR Scheme is to ensure speedy development of infrastructure by way of filling the existing infrastructural gaps (economic and social) in the region by making funds available from the pool.

North Eastern Council (NEC)

- It is the **nodal agency for the economic and social development** of the North Eastern Region which consists of the eight States of the region, with their respective Chief Ministers and Governors representing them.
- It is a **statutory body** established in 1972 via the North Eastern Council Act, 1971 for three key objectives viz. balanced development of the North Eastern Region; effecting better inter-state coordination; and maintaining security and public order in the region.
- In the 2002 amendment of the Act the role of the NEC has been upgraded from advisory body to that of regional planning body.
- It operates under the administrative control of the Ministry of Development of the North Eastern Region (DoNER).

Benefits

- It is expected to **boost the development projects** in North-East thus accruing socio-economic benefits to the people.
- It will **ensure optimization of resources and avoid duplication** through convergence of efforts of various Ministries/Departments.

1.5. ARBITRATION AND CONCILIATION (AMENDMENT) BILL, 2018

Why in news?

The Union Cabinet recently approved the **Arbitration and Conciliation (Amendment) Bill, 2018** for introduction in the Parliament.

Background

- The Arbitration and Conciliation Act, 1996, was amended by the **Arbitration and Conciliation (Amendment) Act, 2015** in order to make arbitration process user friendly, cost effective and ensure speedy disposal and neutrality of arbitrators.
- However, to give a boost to institutional arbitration vis-a-vis ad hoc arbitration and to remove some practical difficulties in applicability of the Arbitration and Conciliation (Amendment) Act, 2015, a **High Level Committee (HLC) under the Chairmanship of Justice B.N. Srikrishna**, was constituted by the Government.
- The proposed amendments are as per the recommendations of the High Level Committee.

Salient features of the Bill

- Facilitate **speedy appointment of arbitrators** through designated arbitral institutions by the Supreme Court or the High Court. Parties may **directly approach arbitral institutions** designated by the Supreme Court for International Commercial arbitration and in other cases the concerned High Courts.
- It provides for **creation of an independent body namely the Arbitration Council of India (ACI)** which will grade arbitral institution and accredit arbitrators by laying down norms and take all such steps as may be necessary to promote the process, maintain an electronic depository of all arbitral awards, etc.
 - The ACI shall be a **body corporate** whose Chairperson should have been a Judge of the Supreme Court or Chief Justice or Judge of any High Court or any eminent person. Further, the other Members would include an eminent academician etc. besides other Government nominees.

Potential Benefits

- **Facilitates institutional arbitration** by establishing an independent body to lay down standards, make arbitration process more party friendly, cost effective and ensure timely disposal of arbitration cases.
- Catalyze making **India a centre of robust Alternative Dispute Resolution (ADR)** mechanism.
- **Protect India's foreign exchange reserves** as Indian companies lose significant amount of foreign Exchange on arbitration that usually happen in foreign countries like Singapore.
- **Improve the ease of doing business** and thus help in attracting foreign as well as domestic investments.

1.6. ANNUAL SURVEY OF INDIA'S CITY-SYSTEMS (ASICS), 2017

Why in news?

Recently Janaagraha Centre for Citizenship and Democracy released ASICS, 2017 which evaluated governance in cities.

About ASICS

- It is an annual study which evaluates the City-Systems which comprises of **mainly four interrelated aspects**- urban planning and design, urban capacities and resources, transparency, accountability & participation, and empowered and legitimate political representation.
- The result indicates **the health of the governance system** and its **ability to deliver good quality of life** and aims to push towards **transformative reforms in city governance**.

Findings of Report

- **Pune** (score 5.1) topped the survey while Bengaluru (3) was ranked the lowest in the list.
- Comparatively, global benchmarks of Johannesburg, London and New York have scored 7.6, 8.8 and 8.8 respectively whereas Indian cities have barely touched 5.1 (being highest).

Problems Highlighted by the Report

- A meagre increase in the score of few cities in last 3 years is attributed to several flagship urban missions such as Smart City Mission, Swachh Bharat, AMRUT and Housing for All.
- There is a **lack of local democracy**, with only two of the 23 cities putting in place ward committees and area sabhas at least on paper.
- Most cities are **neither financially well-off nor adequately staffed** at the urban body level.
- Only 9 of the 23 cities had a **citizen's charter**. Even in the cities where such a charter exists, there is no mention of service levels, or timelines for service delivery, or mechanisms for obtaining relief when service levels are not met.
- An **ombudsman**, specifically for resolving citizen's issues, is also missing in all but three Indian cities— Bhubaneswar, Ranchi and Thiruvananthapuram.
- 19 of the 23 cities don't release even **basic data about their functioning** in usable formats.
- Most Indian cities use **town and country planning acts** which were drafted decades before the economy was liberalized and the lack of a modern, contemporary urban planning framework may be costing India 3% of its GDP every year.

(For more details on urban governance please refer to December 2017 Current Affairs)

1.7. E-OFFICE

Why in News?

- Recently, government awarded certificates of appreciation to 34 central government ministries for implementing "e-office" in departments.

What is e-office?

- It is a project which intends to make transition of government functions from manual to digital ones.
- It is a core mission mode project (MMP) under the **e-Kranti: National e-Governance Plan (NeGP) 2.0**.
- The Department of Administrative Reforms and Public Grievances (DAR&PG) is the nodal department for implementation of e-office project.
- National Informatics Centre (NIC) is the technical partner in this project.

Related Information

- **e-Kranti: National e-Governance Plan 2.0**- It is one of the pillars of Digital India Programme, to ensure delivery of all government services electronically to citizens.
- There are 44 Mission Mode Projects under e-Kranti programme.

1.8. THE PAYMENT OF GRATUITY (AMENDMENT) BILL, 2017

Why in News?

The Payment of Gratuity (Amendment) Bill, 2017 was passed by the Parliament.

Key Facts

- It was enacted to provide for a scheme for the payment of gratuity to employees engaged in factories, mines, oilfields, plantations, ports, railway companies, shops or other establishments who have rendered a minimum five years of continuous service with the establishment employing ten or more persons.
- Gratuity is given the force of law by the **Payment of Gratuity Act 1972**, which is further administered and enforced by the Central Government and the designated establishments under its control.
- The Act provides for gratuity of Rs 10 lakh to workers with **five or more years of continuous service**.

Major Provisions of the Bill

- It increases the ceiling of **tax-free gratuity amount to Rs 20 lakh** from Rs 10 lakh bringing organized sector workers at par with Central Government employees.
- It **empowers** the Central government to
 - notify the gratuity ceiling without amending the law.
 - notify the period of maternity leave eligible for qualifying as continuous service **by removing the reference to 12 weeks** in the 1972 Gratuity Act.

1.9. PRASAR BHARATI

Why in news?

Recently Prasar Bharati (PB) turned down a resolution moved by the ministry of information and broadcasting (I&B) to appoint a serving IAS officer to its board, and also deferred its proposal to bring in professionals to head the news service units of Doordarshan and All India Radio.

Related Information

- The PB Act states that the President of India will appoint the Board members, decided by a selection committee, which is headed by the Vice President of India and includes the Chairman of the Press Council of India and a nominee of the President.
- The Ministry does not have a direct role in appointment of the chairman and whole-time members of the Board.
- The PBB also disagreed with the ministry's suggestion for immediate termination of the services of the entire contractual staff which by now may be almost three-quarters of the total.
- A manpower audit of the PB, as suggested by various committees, including the **Sam Pitroda committee (2014)**, will soon be conducted to identify overstaffed sections.

About Prasar Bharati

- It is a **statutory autonomous public broadcasting agency** which was set up in 1997 under the **Prasar Bharati (Broadcasting Corporation of India) Act, 1990**.
- It comprises **Doordarshan Television Network** and **All India Radio**, which were earlier part of the Ministry of Information and Broadcasting.

Other important Pitroda Panel recommendations (2014)

- The committee has recommended on issues such as governance, funding, content, technology, social media and global outreach.
- It suggested re-organising the Prasar Bharati board to make it a professionally managed body while setting up a regulator to ensure accountability.
- Develop a funding mechanism for Prasar Bharati that addresses the need for autonomy with financial accountability.
- Expansion of satellite and digital cable TV operations to meet the obligations of public service broadcasting.

Way forward

- The organization currently faces various challenges in terms of financial autonomy, recruitment of staff, competition from private sector and interference by the government.
- Therefore, there is a need for it to be adequately empowered and enabled with independent professionals and financial self-reliance to unleash its creative forces, its ethos, culture and aspirations in order to become a genuine public broadcaster rather than remaining a government broadcaster.
- Prasar Bharati Act of 1990 has conferred autonomy upon the corporation and iterated that its board alone will have the final say in matters pertaining to running it. Hence there is a need to implement the PB act along with the Pitroda committee recommendations in this regard.



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- ▶ निबंध टेस्ट सीरीज
- ▶ सीसेट टेस्ट सीरीज
- ▶ निबंध लेखन - शैली की कक्षाएं
- ▶ करेंट अफेयर्स मैगजीन

2. INTERNATIONAL RELATIONS

2.1. INDIA-FRANCE RELATIONS

Why in News?

French President Emmanuel Macron recently visited India.

Important Developments during the Visit

The two countries signed **14 agreements** including those in the field of education, environment, urban development and railways, etc. Important strategic engagements were-

- The **Joint Vision Statement** on the Indian Ocean Region has been laid down.
- Indian PM and the French President **co-chaired the founding conference** of the **International Solar Alliance (ISA)** and the two leaders also inaugurated a solar power plant at Dadar Kala village in Uttar Pradesh.
- The two leaders welcomed the signing of the "Agreement for the provision of **reciprocal logistics support** between their Armed Forces", which seeks to extend logistical support on reciprocal access to respective facilities for Indian and French armed forces.
- The "**Industrial Way Forward Agreement**" was signed between French utility EDF and India's NPCIL for the construction of **six nuclear reactors at Jaitapur**.

Background

India and France have traditionally close and friendly relations. In 1998, the two countries entered into **Strategic Partnership** which is based on three pillars of defence cooperation, space cooperation and civil nuclear cooperation. Important relations between the two are-

- **Institutional Dialogue relating to strategic areas**- India-France Strategic Dialogue takes place between NSAs from both sides. Joint Working Group on Counter, Cyber Dialogue, etc. are the other active mechanisms.
- **Defence Cooperation**- Regular exchange of visits at the level of Services Chiefs takes place. The three services also have regular defence exercises, viz. Exercise Shakti (Army), Exercise Varuna (Navy), Exercise Garuda (Air Force). Also, a civil nuclear cooperation agreement was signed between the two countries in 2008 during the visit of Indian PM to France.
- **Economic Cooperation**- France is the ninth largest foreign investor in India. The trade surplus remains in India's favour for the past ten years with Indian exports to France in 2016.

Importance of France for India

- **Partnership in the Indian Ocean**- The agreement for the provision of **reciprocal logistics support** between the two is important given the wide range of French military bases in the Indian Ocean (Djibouti, Abu Dhabi, and Reunion Island). It can be a **force multiplier** for India. The development gains importance with increasing Chinese presence in the region.
- **Partnership in ISA**- The ISA, first treaty-based international organization to be based in India, is a major **Indo-French initiative** which is a crucial step towards our commitment towards renewable energy.
- **France's support on international platforms**- France is among the countries that have consistently supported India's **permanent membership to UNSC**. Further, France support for India's inclusion in the **Wassenaar Group** is also worth mentioning. Paris was one of the only Western capitals to comment on the legitimacy of India's concerns vis-à-vis the refugee crisis in its border regions with Bangladesh.
- **Nuclear Cooperation**- After the nuclear tests in May 1998 when India declared itself a nuclear weapon state, France was the first major power to open dialogue and displayed a far greater understanding of India's security compulsions compared to other countries. It **refused to sermonize India** after the tests, and publicly opposed U.S. sanctions.
- **Defence Cooperation**- Defence cooperation with France began in the 1950s when India acquired the Ouragan aircraft and continued with the Mystères, Jaguar, Rafale, Scorpène submarines, etc.
- **Cooperation in Space and Technology** has continued since the 1960s when France helped India set up the **Sriharikota launch site**, followed by liquid engine development and hosting of payloads. Currently, other

projects include joint satellite mission – TRISHNA (for eco-system stress and water use monitoring) and also accommodation of French instrument on India's OCEANSAT-3 satellite.

- **Other areas of cooperation** include their strong **condemnation of terrorism** in all its forms and manifestations including cross-border terrorism and terror-related incidents in France and India.
 - Given its expertise in the sphere of urban planning **France is also helping in the Smart Cities Mission**. The three such smart cities are Chandigarh, Nagpur and Puducherry.

Way Forward

- Even though above specified areas provided a robust basis for engagement, it remained primarily at a **government-to-government level**. In recent years, it was clear that for a wider partnership, strengthening business-to-business and people-to-people relationships was essential. Also, the trade between India and France, although growing, is yet to reach its potential.
- As per the speculations **France intends to be India's gateway to Europe** and to make India France's first strategic partner in Asia.
- The underpinnings of global geopolitics are being rapidly altered with China's rise, the West being consumed by internal problems and Russia, the "America First" priorities of the US Administration, and growing threats to globalization. With such background India and France seek each other as desirable strategic partner.

2.2. INDIA GERMANY RELATIONS

Why in news?

Recently German President, Frank-Walter Steinmeier, was on a five day visit to India.

Key areas in India Germany Cooperation:

Germany is the most populous country in Europe and its location at the centre of the continent gives it a natural role as a bridge between East and West Europe. It is a global-centre and a pivot for R&D and skills.

- **Strategic Partnership:** India and Germany have a '**Strategic Partnership**' since 2001, which has been further strengthened with the Intergovernmental Consultations (IGC) at the level of Head of Governments
- **India-Germany cooperation on cleaning the river Ganga:** The National Mission for Clean Ganga (NMCG) and GIZ Germany signed an Implementation Agreement for Ganga Rejuvenation in 2016 under which Germany committed €3 million for data management and capacity building to deal with the pollution.
- **Bilateral cooperation** on the issue of UNSC expansion within the framework of G-4, consultations with each other in G-20 on global issues such as climate change, sustainable development, etc. and other regional and international issues such as UN issues, International Cyber Issues, Disarmament & Non-proliferation, Export Controls, East Asia, Eurasia, etc.
- **Defence Cooperation:** India-Germany Defence Cooperation Agreement (2006) provides a framework for bilateral defence cooperation.
- **Economic & Commercial Relations:** Germany is India's largest trading partner in Europe.
 - Germany is the 7th largest **foreign direct investor** in India since January 2000.
 - An MoU on Indo-German Solar Energy Partnership was signed in 2015 under which German Government is to provide concessional loan of Euro 1 billion over the next 5 years.

Importance of Indo-German cooperation

- India and Germany have **complementarities** that can make them effective partners. While **German expertise** lies in engineering state-of-the-art products, the futuristic technologies require IT innovations where Germany will need India's IT expertise. India can be a market for high end German goods and in turn a source of skills.
- India can benefit from the **Small and Medium Enterprises (SMEs)** of the Germany and has thus set up a fast track mechanism to promote the cooperation among both the countries.
- Germany is phasing out its nuclear power plants and replacing them with renewable energy. Since India is also planning to meet 40 per cent of its energy requirement by renewables by 2030 there is a large scope of **bilateral cooperation in energy sector** through organisations such as International Renewable energy agency.

- Germany's support is also important for balanced agreement on **climate change**, taking into account climate adaptation and mitigation as well as finance and technology transfer.
- The two countries also share **security concerns** with Germany affected through refugee crisis and India's concerns arising from Pakistan sponsored terrorism.

Conclusion

- With the **rise of protectionist trade measures** in USA India and Germany both have shown commitment to an international order based on mutual respect and rules, and cooperate for free and fair trade and investment.
- Further there is a large scope of cooperation in security and counter-terrorism, innovation and science and technology, cleaning of rivers, skill development (Skill India Mission), urban infrastructure, water and waste management, clean energy, development cooperation, health and alternative medicine etc.

2.3. INDIA-VIETNAM

Why in News?

- Recently, Vietnamese President Tran Dai Quang paid a State Visit to India.

More on News

- The visit also marks 45 years of diplomatic relations between Vietnam and India.
- Both inked three agreements pertaining to
 - **Civil nuclear energy MoU** was signed between Global Centre for Nuclear Energy Partnership, India (GCNEP) and the Vietnam Atomic Energy Institute (VINATOM).
 - **Work Plan for the years 2018-2022** between the Indian Council of Agricultural Research (ICAR) and Ministry of Agriculture and Rural Development of Vietnam.
 - **MoU on Economic and Trade Cooperation** for enhancing economic relations.
- Both stressed the need for freedom of navigation, over-flight and resolving the South China Sea disputes on mandate of **United Nation Convention on the Law of the Sea. (UNCLOS).**

Related Information

Global Centre for Nuclear Energy Partnership (GCNEP)

- It is the R&D unit under the aegis of Department of Atomic Energy (DAE).
- Established in 2010, under the aegis of Department of atomic energy.
- It promotes global nuclear energy partnership through collaborative research and training programs.

United Nation Convention on the Law of the Sea

- It was signed in 1984 and came into force in 1994.
- The law set the guideline for nations with respect to **their use** of the **world's oceans**, for businesses, environment, and the management of marine natural resources.
- The law led to introduction of Exclusive Economic Zone (EEZ) which prevents the fishermen to exploit the fish resource of other country.
- Within the EEZ, coastal countries have the right to use the marine resources within 200 nautical mile from their shore.
- The law made the provision for landlocked countries by providing right to access the sea through the territory of the neighbouring coastal country.

India Vietnam Relations

India and Vietnam have enjoyed close ties based on their shared history of fighting against colonial rule. In addition, there is a deep cultural connection between the two as well.

- **Strategic** - Vietnam is also an important partner in Southeast Asia and is currently the country coordinator for India with the Association of Southeast Asian Nations (ASEAN) regional bloc.
- **Defence and Security**- India has been training the Vietnamese military in operating its Russian-built Kilo-class submarines and SU-30 fighter jets.
 - After the signing of the MoU on Defence Cooperation by the two Defence Ministers in November 2009, the relations have grown from strength to strength.
 - Vietnam called on India to play a more proactive role in Southeast Asia while India on the other hand reiterated the importance of international law, especially the **United Nations Convention on the Law of the Sea (UNCLOS)**, in settling the South China Sea issue.

- **Economic-** India is now among the top ten trading partners of Vietnam. Indian companies registered 17 new projects with a total capital of US\$98.12 million in the areas of food processing, fertilizers, auto components, textile accessories etc.
- **In terms of Multilateral Cooperation,** apart from ASEAN, India and Vietnam closely cooperate in other regional forums such as the East Asia Summit, Mekong Ganga Cooperation, Asia Europe Meeting besides the UN and WTO.

Vietnam's Importance for India

- **Act East Policy-** Vietnam is an important element of India's Act East Policy, which aims to re-invigorate its historical ties with countries in Southeast and East Asia. Also, as a member of ASEAN, it is an important enabler for India's growing trade and investment ties with the rest of Southeast Asia
- **Physical Connectivity-** With the election of a civilian government in Myanmar, there are ample opportunities for closer connectivity between India and Vietnam via Myanmar and existing transit routes in Cambodia and Laos.
- **Energy Cooperation-** India's growing economy needs energy resources and Vietnam has rich hydrocarbon reserves. India's state-owned Oil and Natural Gas Corporation (ONGC) has been searching for oil in disputed waters off Vietnam, though China objected to this.

India's Importance for Vietnam

- **Security Reasons-** Responding to China's aggressive posturing in the South China Sea, Vietnam has called on India to play a more proactive role in Southeast Asia.
- **Capacity Building** is another area in which India has been helping Vietnam through Line of Credit, Scholarship, conducting programs for Vietnamese defense personnel, etc.

Way Forward

There are yet various areas that may be improved. For example, India-Vietnam bilateral trade is a miniscule one compared to Vietnam-China bilateral trade, which is around \$70 billion. It is important to help trade and investment pick up in the bilateral context between the two. This could in turn also give fillip to the bilateral strategic engagement, making the relationship a more comprehensive one.

2.4. INDIA JORDAN

Why in News?

Recently, King Abdullah II of Jordan visited India.

India Jordan Relations

- **Political Relations-** In 1950 the two countries established full-fledged diplomatic ties.
- **Commercial Relations-** India-Jordan trade is governed by an agreement signed in 1976. A **Trade and Economic Joint Committee** constituted under the Agreement promote and monitor the progress.
- **Defence-** Jordan has provided critical support to India during the 1991 evacuation of citizens from Iraq and also during the latest crisis in Iraq and Syria.
 - Both face the threat of extremism. Jordan has recently launched the **Aqaba process** to promote deradicalisation in which India is an active participant.
- **Cultural Relations-** There is immense interest in Jordan for Indian art and culture, especially Bollywood films.
- **Diaspora-** Jordan is home to more than 10,000 Indians, who are employed in various industries.

MoUs signed during the visit

- Framework agreement on Defence Cooperation
- For cooperation in the field of Health and Medicine between India and Jordan
- For setting up of the next generation Centre of Excellence (COE) in Jordan.
- For long term supply of Rock Phosphate and Fertilizer/ NPK
- Visa waiver for diplomatic and official passport holders
- Cultural Exchange Programme (CEP)
- Manpower Cooperation Agreement
- Customs Mutual Assistance Agreement
- Twinning Agreement between Agra and Petra (Jordan), etc.

The exchange of bilateral visits at high political and senior official levels declined significantly after King Abdullah's productive visit in 2006. The relationship has failed to realize the huge, untapped potential.

Importance of Jordan for India

- **To access Palestine (West Bank)** -One can visit Palestine only either through Israel or Egypt and Jordan. Due to political issues between Israel and Palestine, Jordan becomes an important connecting point with West Bank region of Palestine.
- Like India, **Jordan has special ties with both Israel and Palestine**. This can be further important for supporting India's 'De-hyphenation' policy towards the two countries.
- Both the countries share the view that nations must coordinate their positions to **fight against the misuse of religion** by groups and countries for inciting hatred and justifying terrorism. Jordan is crucial to India's effort to gather regional intelligence and enhance counter-terrorism cooperation.
- India can leverage Jordan's unique strategic location in the **Levant, with access to the Red Sea and the eastern Mediterranean**.
- Jordan also plays an important role in **India's food and energy security** through provision of fertilisers and phosphates. It also has one of the largest deposits of oil shale.

The improving relations between the two countries is a testimony to India's "Think West" policy where Jordan has an important place.

2.5. INDIA AFRICA DEVELOPMENT INITIATIVES

Why in news?

- Recently Indian government approved the opening of 18 new Indian missions up from current 29 missions over four years (2018-2021) in Africa with an aim to expand its footprints.

Other Related news

- The **India Development Foundation of Overseas Indians (IDF-OI)** was closed to enhance synergies in channelizing Diaspora's contributions to Government of India's flagship programmes such as National Mission for clean Ganga and Swachh Bharat Mission
- Export-Import Bank (**Exim Bank**) has decided to provide a \$500 million credit facility to ECOWAS Bank for Investment and Development (EBID) to fund various development projects in the western-south Africa.

India Development Foundation of Overseas Indians (IDF-OI)

- It was set up by Government of India in 2008 as an **autonomous not-for-profit Trust**, to facilitate Overseas Indian philanthropy into social and development projects in India.
- It has largely been **unsuccessful in mobilizing funds**.

Economic Community of West African States (ECOWAS)

- It was established in 1975 by 15 West African countries via the treaty of Lagos to **promote regional economic integration**.
- **EBID** is an international financial institution with two funding windows to promote private sector activities and fund the development of the public sector.
- It is headquartered in Lome, Togolese Republic.

Development initiatives between India and Africa:

- **Indian Technical and Economic Cooperation (ITEC) program** which aims at capacity building, skill development, transfer of technology and sharing of experiences with the partner countries. Around 5000 scholarships have been offered to officials from African countries under this.
- **Pan-African e-network: This programme is a joint effort of India and African Union with an aim to provide** satellite connectivity, tele-education and tele-medicine services to the African countries by linking them with top educational institutions and super-speciality hospitals in India.
- **Techno-Economic Approach for Africa-India Movement (TEAM-9):**
 - It was launched by India in 2004 together with eight energy and resource-rich West African countries viz. Burkina Faso, Chad, Cote D'Ivoire, Equatorial Guinea, Ghana, Guinea Bissau, Mali, Senegal, and India.
 - The initiative aimed at engaging the underdeveloped, yet resource-wealthy countries of West Africa, which required both low-cost technology and investment to develop their infrastructure.
- **Focus Africa:** Launched by India in 2002-03, the main objective of the programme is to increase interactions between the two regions by identifying the areas of bilateral trade and investment.
- **Supporting Indian Trade and Investment for Africa (SITA):** It is an International Trade centre supported project which aims at increasing value of business transactions between India and selected East African

countries (Ethiopia, Kenya, Rwanda, Uganda and Tanzania) with the ultimate objective to create jobs and income opportunities for people in East Africa.

- **Cooperation with African Development Bank (AfDB):** India joined AfDB in 1983 and has contributed to its General Capital increased and has also pledged capital for grants and loans.
- **Development Assistance:**
 - India extends development assistance through the Line of Credit extended by the Export-Import (Exim) Bank of India and the traditional technical assistance predominantly managed by the country's ministry of external affairs.
 - In **India Africa Forum Summit (2015)**, India announced a US\$ 10 billion line of credit to help financing the projects in African countries, capacity building, IT education, and higher education.
- **Training institutes:** India has set up over 100 training institutes in different African countries, encompassing areas ranging from agriculture, rural development and food processing to information technology, vocational training, and entrepreneurship development.
- **Other Initiatives:**
 - **Solar Mamas:** It is group of rural women solar engineers from Africa who have been trained under Government of India-supported programme to fabricate, install, use, repair and maintain solar lanterns and household solar lighting systems in their villages.
 - As a part of **Light up and power Africa initiative**, the African Development Bank has entered into partnership with the International Solar Alliance (ISA) to scale up solar energy in Africa.

2.6. INDIA USA SOLAR DISPUTE

Why in news?

WTO has agreed to set up a compliance panel to examine whether India has complied with its ruling in Solar Dispute or not.

Background

- India launched **National Solar Mission in 2011** under National Action Plan on Climate Change (NAPCC) to deploy 20,000 MW of grid connected solar power by 2022 which was revised in 2015 to be 100 GW.
- The government offered **financial support** of up to Rs.1 crore per MW to the implementing agency for setting up large solar capacities by placing orders with domestic manufacturers.
- U.S. complained to the WTO in 2013, saying the programme was discriminatory and **U.S. solar exports to India had fallen** by 90 per cent from 2011 and filed a suit in WTO.
- India lost the solar dispute in 2016, after the WTO's highest court the **Appellate Body** upheld a ruling that Domestic Content Requirements (DCRs) under Jawaharlal Nehru National Solar Mission (JNNSM) violated several core provisions on **national treatment and trade-related investment measures** as they favour domestic products over imported products.
- Subsequently India agreed to implement the Dispute Settlement Body (DSB) recommendations by 14 December 2017 and filed a report before DSB claiming that it had brought about changes in rules and procedures under the JNNSM and power purchase agreements no longer mandated domestic sourcing of cells and modules
- US continued to disagree with India's claims of compliance thus necessitating the setting up of the compliance panel.

National Treatment

Under national treatment, governments are required to treat imported products on par with the domestically manufactured products.

Trade Related Investment Measures (TRIMs)

It is one of the Multilateral Agreements on Trade in Goods which prohibits trade-related investment measures, such as local content requirements, that are inconsistent with basic provisions of GATT 1994.

Implication

- If India is found not to have complied, Washington could ask the WTO for permission to impose trade **sanctions on India** but the legal process in WTO dispute system is likely to continue for a year or more.

- Such disputes **have wider implications** not only for India but also for many developing countries that are struggling to switch to green economy. Domestic content requirements are envisaged to generate jobs to lift millions of people from abject poverty.

2.7. US IMPORT DUTY HIKE ON STEEL AND ALUMINIUM

Why in news?

US recently announced 25 per cent import duty on steel and 10 percent on aluminum.

Impacts of the import duty hike

For America domestically

- It will increase the domestic steel price by 5 per cent, leading to an **increase cost for industries** such as car and engineering.
- This may **create inflationary pressure**, leading to high-interest rates and dollar appreciation.

Global impact

- The largest supplier of steel and steel products to the US is China, Canada, Mexico, South Korea and Japan. These are the most affected countries, they may take retaliatory measures. These may escalate **to global trade wars**.
- These actions are **violative of the WTO rules**, they will further weaken the multilateral trade architecture.
- The US duty on steel and aluminium also mean that the **surplus would have to be dumped** in some other countries at a lower price.

Impact on India

- The move will not directly impact India in the short term because-
 - Indian steel and Aluminium exports to the US is less than 5% of total exports in 2017.
 - Expected growth in domestic consumption would offset any reduction in exports to the US
- However, if it escalates and other countries start doing the same then world trade will get hit and that will impact India. The Asian producers, seeing demand here, may dump their products here or create import surges.

2.8. AFGHANISTAN MAKES A PEACE OFFER TO TALIBAN

Why in news?

Afghanistan has made an offer for unconditional talks to Taliban and offered a pact to recognise the insurgents as a legitimate party in negotiations and end the 16-year old war.

Background

- The Islamic Republic of Afghanistan is a landlocked country in South-Central Asia. It was ancient focal point of the Silk Road and migration. It is an important geostrategic location, connecting East and West Asia or the Middle East.
- Afghanistan consists of various ethnic and religious satraps like Pashtuns- Sunni (located in Western Frontier Province of Pakistan and Eastern Afghanistan), Hazara- Shia (Iran's side), Uzbeks and Tajiks (located in central side).
- Afghanistan has been in a state of turmoil for the last 40 years including a Soviet invasion of Afghanistan in 1979 and withdrawal in 1989.
- The Taliban came to power in 1996 and were later ousted from power by **International Security Assistance Force (ISAF)** in an effort to counter Al-Qaeda in 2001.
- The Taliban has steadily expanded its reach since U.S. and NATO forces formally concluded their combat mission at the end of 2014 and transitioned to a support and counterterrorism role even after the formation of National Unity Government (NUG)
- In current **Kabul peace process**, Afghanistan has offered that in exchange for a ceasefire, the government will allow Taliban members to have a "peaceful and respectful life", political recognition, prisoner release, passports to Taliban members and visas to their families, as well as office space in Kabul.

Kabul Peace Process

- It is a gathering of 23 nations, the EU, U.N. and NATO intended to discuss security and political issues in the Afghanistan.

Challenges in Afghanistan peace process:

- **Number of war and civilian casualties** due to suicide bombings are on the rise after the international coalition forces embarked on Operation Resolute Support to “advise, train and assist” the Afghan forces and not to participate in war since 2014.
- **Rise of IS:** Despite the Afghan government’s claims of cracking down on militants, threats from the IS and Taliban have only grown both of which have a goal to destabilise the state that and throw the country into further chaos.
- **Failure of USA’s strategy:** USA has failed to evolve a cohesive strategy regarding military aid to Pakistan, troop presence in Afghanistan, indiscriminate use of airpower or infrastructure building in the country.
- **Role of Pakistan:** Pakistan has direct links with the Taliban and its allies in the Haqqani network and provides safe havens to terrorist groups within its territory.
- **Legitimacy of the National Unity Government (NUG)** seems eroded due to conflict between Chief Executive Abdullah Abdullah and President Ashraf Ghani, corruption, lack of implementation of Electoral reforms and refusal of Taliban to talk to Afghan government which it thinks as artificial, foreign imposed and not representative of Afghan people.

All these factors have contributed to regrouping and strengthening of Taliban which controls more than half of territory in the country.

Conclusion

- The United Nations mission in Afghanistan has welcomed the offer and said it “strongly supports the vision for peace through intra-Afghan dialogue”.
- India supports Afghan-led and Afghan-owned peace and reconciliation process which has also gained approval from Russia and China.
- United States has also launched a **new regional strategy** wherein it has stepped up assistance to the Afghan military and greatly increased air strikes against the Taliban, in a bid to break the stalemate and force the insurgents to the negotiating table.
- But most importantly The Taliban has refused to negotiate with the government until all foreign forces leave, and still refer to themselves as a government in exile.

2.9. TIBET FACTOR IN INDIA CHINA RELATIONS

Why in news?

Recently government functionaries were asked to stay away from Thank You India programme 2018 which marked the starting of 60th year of arrival of Dalai Lama.

Historical background

Tibet is bordered by Chinese Turkestan and Mongolia in the north; by China in the east; by Burma, India (Sikkim), Bhutan, and Nepal in the South; and by India (Punjab and Kashmir) in the west.

- 1912- Tibet declared itself an independent republic after a military conflict with China.
- 1951- China forced Tibet to sign “**Seventeen Point Agreement**” which guaranteed Tibetan autonomy and respect the Buddhist religion but also allowed the establishment of Chinese civil and military headquarters at Lhasa.
- 1954- India ceded India’s British-inherited extraterritorial rights in Tibet and accepted its annexation without any quid pro quo.
- 1959- Dalai Lama and his ministers fled to India and established the Tibetan exile administration (**Central Tibetan Administration**) in the north Indian hill station of Mussoorie. As a consequence, India and China went to war in 1962.
- 1965 – Chinese government established Tibetan Autonomous Region (TAR) making it essentially a province within the People’s Republic of China.



- Currently, the **CTA** functions from McLeod Ganj, a suburb of Dharamsala and India has played role in rehabilitation of Tibetans.

Tibet as a bone of contention between Indian & China

- Chinese occupation of Tibet in 1951 eliminated a buffer between the two Asian giants and transformed the border dispute in to a rivalry. Further, the entry of Chinese troops in Tibet in the wake of 1956 made the problem more critical.
- Recently, China's military build-up and infrastructure development in Tibet, as well as reported plans to divert or dam rivers that rise in Tibet and flow into India, have raised India's anxieties in the past.
- Conversely India has been unable to assuage China's insecurities about its possible use of the presence of the Dalai Lama in India and its large Tibetan refugee population to create trouble for China in Tibet.

Conclusion

- On one hand experts suggest that India should gradually reclaim its leverage over the Tibet issue by emphasizing its acceptance of China's claim over Tibet in 1954 in lieu of grant of genuine autonomy to that region.
- But on the other hand, some experts suggest that Tibet has changed a lot since 1959 and India should change its Tibetan strategy proactively considering factors such as:
 - Infrastructure development in Tibet for e.g. Beijing-Lhasa railway line,
 - Demographic shift in Tibet with Beijing populating areas with majority 'Han' Chinese workers,
 - China's promotion of Sino-friendly Kagyu sect of Tibetan Buddhism in Tibet and
 - Decline in number of refugees from Tibet suggesting it has changed a lot since 1959.

There is an urgent need for community outreach, surveys and a referendum, if necessary, to map what the Tibetan community in India wants in its future as India's current approach of playing Tibet card may be out of sync with reality.

2.10. AMENDMENT IN CHINA'S CONSTITUTION

Why in news?

National People's Congress (the Chinese Legislature) has amended the constitution and has scrapped the two term limit on Presidency and Vice-Presidency. The amendment empowers **President Xi Jinping** to possibly remain in office for life.

Requirement for Constitutional amendment in China

A constitutional change is either proposed by the NPC Standing Committee or by more than one-fifth of all NPC deputies, and then requires the approval of two-thirds or more of NPC deputies during the annual session.

Details

- The current amendment of 2018 is to include **Xi Jinping's Thought on Socialism with Chinese characteristics for a New Era** in the preamble of the constitution. **Prior to Xi, only founding fathers of PRC i.e. Mao Zedong and Deng Xiaoping had their personal ideologies engraved in Constitution.**
- National Supervisory Commission, as an anti-corruption super agency, has been included as a new type of state organ in the Constitution.
- There is a change in China's Foreign policy to replace the old approach of zero-sum game with **win-win cooperation** like China's Belt and Road Initiative.

China Under XI's Leadership

- As a paramount leader, Xi Jinping **holds all the 3 strongest positions** of the country i.e. he is the General Secretary of Communist Party of China (Only One party exists in China), President of the People's Republic of China (since 2013) and Chairman of the Central Military Commission.
- He **started anti-corruption campaign** which resulted in exit of most of his rivals.

Background

- This is the first amendment to the country's fundamental law in 14 years.
- The People's Republic of China enacted its first Constitution in **1954, during Mao's era.**
- **From 1988 to 1999**, amendments included replacing the phrase "**planned economy**" with "**socialist market economy**," and incorporation of **Deng Xiaoping Theory.**
- The most recent amendment in **2004** protected private property and human rights and gave constitutional authority to the **Theory of Three Represents.**

- The **One Belt One Road** project, which extends to more than 60 countries, is his brain child.
- He propagated **China Dream vision** as 'great rejuvenation of the Chinese nation'.
- Under his tenure, China has become **more assertive** in the South China Sea region.
- He became the **first Chinese President to attend** World Economic forum in 2017 in Davos.

Development of 'Socialism with Chinese characteristics'

- **Mao Zedong's Philosophy** was to integrate the universal theory of Marxism-Leninism with China's specific conditions. Mao said that **peasants should be the bulwark of the revolutionary energy**, led by the working class in China.
- **Deng Xiaoping Theory** was to integrate the universal principles of Marxism-Leninism-Mao Zedong Thought with the concrete practice of socialist modernization and develop it under the new historical conditions.
- **Jiang Zemin's "Theory of the Three Represents"** propagated that CPC must always represent 3 values i.e. the development trend of China's advanced productive forces, the orientation of China's advanced culture, and the fundamental interests of the overwhelming majority of the people in China.
- **Xi Jinping Thought**- It includes-
 - Following "socialism with Chinese characteristics" with "**people as the masters of the country**".
 - To adopt new development ideas based on science.
 - To promote the **one country two system** for Hong Kong and Macau with a future of "**complete national reunification**" and to follow the **One China Policy** and **1992 consensus for Taiwan**.
 - To **strengthen national security** and for that the Communist Party of China should have absolute leadership over China's People's Liberation Army.

2.11. SOUTH ASIA COOPERATIVE ENVIRONMENT PROGRAM (SACEP)

Why in news?

An MoU has been approved by Cabinet between India and SACEP for cooperation on the response to Oil and Chemical Pollution in the South Asian Seas Region.

Details about the MoU

- The MoU intends to promote closer cooperation between India and other maritime nations comprising the South Asian seas region.
- Indian Coast Guard (ICG) will be the nodal agency to respond to oil and chemical spills on behalf of Government of India.
- ICG Maritime Rescue Coordination Centres (MRCCs) will be the national emergency response centre for marine incidents.

South Asian Seas Programme

It is one of the 18 Regional Seas Programmes of UNEP. The South Asian Seas Action Plan was adopted in March 1995 and today enjoys the unqualified support of the region's five countries (Bangladesh, India, Maldives, Pakistan and Sri Lanka).

About SACEP

- It is an inter-governmental organization, established in 1982 by the governments of South Asia to promote and support protection, management and enhancement of the **environment in the region**.
- It also serves as the secretariat of South Asian Seas Programme (SASP).
- The Governments of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka are the members of SACEP.

2.12. INDUS WATER TREATY

Why in news?

The meeting of the Permanent Indus Commission (PIC) between India and Pakistan was held in New Delhi recently.

More about the news

- This was the 114th meeting of the **Permanent Indus Commission (PIC)** that looks into the sharing of the Indus waters since the Indus water treaty (IWT) was signed by the two countries in 1960.

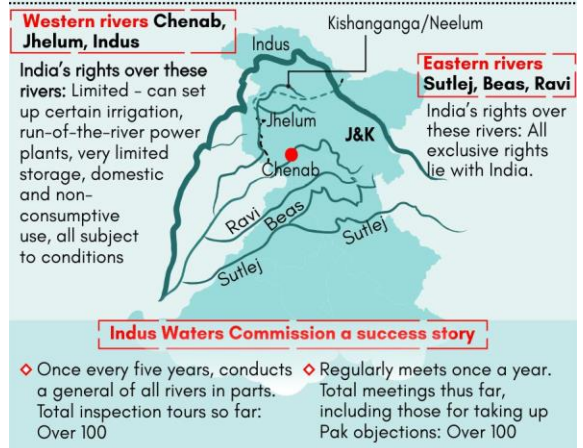
- Pakistan expressed concerns over India's Pakal Dul (1000 MW), Ratle (850 MW) and Lower Kalnai (48 MW) projects — located in Chenab basin – contending they violated IWT.
- India's stand is that designs of the projects are in accordance with the treaty. These are run of the river projects which is allowed under the treaty.

About Indus water treaty

- As per the treaty, control over three eastern rivers Ravi, Beas and Sutlej was given to India. While control over three western rivers Indus, Jhelum and Chenab was given to Pakistan. It allows India to use only 20% of the water of Indus river, for irrigation, power generation and transport.
- It is said to be the **most successful water treaty** in the world. As, it has survived various India-Pakistan wars and other issues. Most disagreements and disputes have been settled via legal procedures, provided for within the framework of the treaty.
- The **Permanent Indus Commission (PIC)** was set up as a bilateral commission to implement and manage the Treaty. The Commission also solves disputes arising over water sharing. It had last met in Islamabad in March 2017.
- The World Bank's role in relation to "disputes" and "differences" with respect of IWT is limited to the designation of people to fulfil certain roles when requested by either or both of the parties.

THE INDUS WATER TREATY (IWT)

- ◊ The distribution of waters of the Indus and its tributaries between India and Pakistan is governed by the Indus Water Treaty (IWT)
- ◊ Was signed on Sept 19, 1960, between India, Pakistan and a representative of World Bank after eight years of negotiations.
- ◊ Partition of India cut across the Indus river basin, which has the Indus river, plus five of its main tributaries.



2.13. ROOPPUR NUCLEAR POWER PLANT

Why in news?

Recently, a tripartite MoU was signed between India, Russia and Bangladesh for development of Rooppur Nuclear Power Plant in Bangladesh.

Important Aspects of MoU

- The Rooppur NPP will be built by Russia's **State Atomic Energy Corporation Rosatom** and the **Nuclear Power Corporation of India Limited (NPCIL)** will assist in construction, installation and infrastructural assignments.
- Russia will implement designing, manufacturing, and supply of the equipment, construction, erection, start-up, and adjustment, commissioning.
- India will provide the personnel training, consultation support and participate in the construction and erection activity and non-critical materials supply to the site in Bangladesh.
- It is the **first initiative under an Indo-Russian deal** to undertake atomic energy projects in third country and is being developed by Rosatom on a **turnkey basis** under which the contractor will complete the whole project and will be liable to any problems arising in the plant.

Significance for India

- India's partnership with Russia in developing Rooppur NPP despite India not being a member of NSG is very significant. It enhances India's stature as a **responsible nuclear partner**.
- This is the **first time** that India will participate in nuclear power project abroad thus **boosting Make in India** initiative through manufacturing some nuclear power reactor equipment in India.
- It may also strengthen India's case for **entry into NSG and United Nation Security Council** as a permanent member.

Rooppur Nuclear Power Plant

- It involves **two units each** with a capacity of 1200 MW and is situated in the banks of River Padma and it is being constructed under a contract signed by Russia and Bangladesh in 2005.
- **90% of the cost** is being provided by Russia which Bangladesh is required to pay back in 30 years with a grace period of 10 years.
- It will be the **first Nuclear Reactors in Bangladesh** and makes it **third country in South Asia** to have a civil nuclear plant after Indian and Pakistan.
- The Rooppur NPP will be Water Energetic Reactor of **3+ generation technology** i.e. it has been developed using the 'post Fukushima' safety standards for a nuclear power plant.

As of 2016, **India has signed civil nuclear agreements with 14 countries:** Argentina, Australia, Canada, Czech Republic, France, Japan, Kazakhstan, Mongolia, Namibia, Russia, South Korea, the United Kingdom, the United States, and Vietnam.

2.14. AUSTRALIA'S 457 VISA

Why in news?

Australia abolished the subclass 457 visa category, popular among skilled overseas workers, especially Indians.

More about the news?

- It has been replaced by **Temporary Skill Shortage (TSS)** visa which would help enable hiring of overseas employees.
- TSS visa has **two main streams**. A **short-term stream** that enables hiring of temporary expat skilled workers for maximum of two years. The second stream is a **medium and long-term stream** where expats can be hired for up to four years.
- Short term TSS visa holders are not eligible to apply for **permanent residence**. The medium or long term TSS visa holder may apply for permanent residence, after having held the TSS visa for a minimum period of three years.

2.15. UN BROADBAND COMMISSION FOR SUSTAINABLE DEVELOPMENT

Why in news

Recently, report of the Expert Group to the Broadband Commission recommended to close the broadband gap.

UN Broadband Commission for Sustainable Development

- It was established in May 2010 by ITU and UNESCO as Broadband Commission for Digital Development.
- Following adoption of the UN's Sustainable Development Goals in September 2015, the Commission was re-launched as the Broadband Commission for Sustainable Development
- **Aims:** To boost the importance of broadband on the international policy agenda and expand broadband access in every country as key to accelerating progress towards national and international development targets.
- **Report:** 'State of Broadband' is an annual report released by commission.

Broadband Commission for Sustainable Development 2025 Targets:

By 2025-

- All countries should have a funded national broadband plan or strategy or include broadband in their universal access and services definition.
- Entry-level broadband services should be made affordable in developing countries, at less than 2% of monthly gross national income per capita.
- Broadband-Internet user penetration should reach:
 - 75% worldwide
 - 65% in developing countries
 - 35% in least developed countries
- 60% of youth and adults should have achieved at least a minimum level of proficiency in sustainable digital skills.
- 40% of the world's population should be using digital financial services.
- Gender equality should be achieved across all targets.

More on Report

The report sets out specific actions for policymakers and regulators, addressing **four key themes**:

- Healthy investment climate
- Lower infrastructure supply costs
- Better functioning ICT markets
- Liberating demand for the wider digital economy to encourage supply and investment

About International Telecommunication Union (ITU)

- Based in Geneva, it is the **United Nations' specialized agency** for information and communication technologies – ICTs.
- As the global focal point for governments and the private sector, it's role in helping the world communicate **spans 3 core sectors**: radio communication, standardization and development.
- They allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect and strive to improve access to ICTs to underserved communities worldwide.

For more about Digital divide, refer to December CA, page 68

2.16. VIDESH AYA PRADESH KE DWAAR

Why in news?

The **Ministry of External Affairs** recently launched an initiative 'Videsh Aaya Pradesh ke Dwaar' from Hyderabad.

Details

- It is a part of the **enhanced public diplomacy outreach** to take the objectives of the foreign policy to the common people.
- The Ministry will have **direct interaction with the Local Media** to communicate foreign policy priorities in **simple terms**, highlight the **benefits** accruing to the common people through diplomatic efforts and bring the domain of foreign policy closer to the people.
- It also intends to create a **pool of media professionals interested in foreign policy** and guide them on connecting with the MEA.

2.17. STUDY IN INDIA PROGRAM

Why in news?

Ministry of Human Resource Development has approved Study in India Program to attract foreign students.

Objective

The 'Study in India' programme's primary objective is to target foreign students by branding India as an attractive education destination.

Details of the Program

- Meritorious foreign students will be given fee waiver.
- Deserving students will be selected by the Institution based on their merit e.g. the top 25% student will get 100% fee waiver in tuition fee.
- The expenditure on the fee waiver will have to be **borne by the Institute concerned**, based on cross-subsidisation or through its existing funding.
- No additional cash flow from Government is proposed for the same.

ADMISSION OPEN

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- 📖 Complete coverage of The Hindu, Indian Express, PIB, Economic Times, Yojana, Economic Survey, Budget, India Year Book, RSTV, etc from May 2017 to April 2018
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3. ECONOMY

3.1. DRAFT AGRICULTURE EXPORT POLICY

Why in News?

- Recently, Ministry of Commerce and Industry, released Draft Agriculture Export Policy.

Background

- India's agri export basket accounts for little over 2% of world agri-trade (estimated at US\$ 1.37 Trillion).
- India is currently **ranked ninth amongst** the major exporters globally (WTO 2015).
- Indian agricultural exports grew at 9% compared to China (8%), Brazil (5.4%) and US (5.1%) between 2007 and 2016.
- The draft Policy seeks to double farmers' income and increase the share of agricultural exports from around 30 billion USD currently to more than 60 billion USD by 2022.

Need of the Policy

- Low export:** India's value added agri-produce in its agri-export basket is less than 15% compared to 25% in US and 49% in China.
- Export rejections:** Indian agriculture produce **face more rejections** in key export markets compared to products from other developing countries (**ICRIER 2017**).
- Lack of Uniformity:** India is unable to export **its vast horticultural produce** due to lack of uniformity in quality, standardization and its inability to curtail losses across the value chain.
- Downward trend:** Cotton, oilseeds, bovine meat and cereals which **were country's highest forex earner** are showing a declining global trend in consumption and trade.

Draft Agri-Export Policy Framework

• Strategic measures

- **Policy measures-** It includes **Stable Trade Policy regime** free of ban or imposition of Minimum Export Price; **reforms in APMC Act** to remove perishables from its purview and streamlining of Mandi fee; **Liberalising Land Leasing norms** without compromising the rights of the land owner as provided in Model Contract Farming Act.
- **Infrastructure and logistic boost-** includes port development having dedicated agri infrastructure at ports with 24x7 customs clearance for perishables, enhancing hinterland connectivity, better cargo handling etc.
- **Whole Government approach-** The policy advocates a quality control at farm level and coordination across different ministries involving agri chain. This would address the issues of R & D for improved varieties, establishing standards regime, response to SPS & TBT barriers, identification of winning sectors etc.
- **Greater Involvement of state government in agri-export:** by identification of a nodal State Department/Agency for promotion of agriculture export and including agricultural exports in State Export Policy along with development of product specific clusters in different agro climatic zones

• Operational Measures

- **Focus on Clusters:** The policy favours the establishment of **Farmer Producer Organisation**, digitization and geo-mapping of land records, identification of suitable production clusters coupled with a transition agri export zones (AEZs).
- **Promoting Value Added Exports-** This includes establishment of organic export zone/organic food park, branding of organic products, developing a uniform packaging and quality protocols standard for organic and ethnic products. Moreover, there should be financial support for the non-forest produce under **SHEFEXIL**.

SHEFEXIL- SHELLAC and Forest Products Promotion Council

- It is nodal Export Promotion Council for Non Timber Forest Produce, such as , Veg Saps & Extracts, Guar Gum, Sesame seeds, Herbs etc.
- It is the nodal EPC for the North Eastern Region of India.
- It is **sponsored by** Ministry of Commerce and industry.

- **Marketing and promotion of “Produce of India”**- There should be a **product specific market campaign** and a separate fund for marketing of organic products, ethnic products, and GI products.
- **Post-harvest Infrastructure to ensure smooth logistical movement of produce** – This include undertaking ease of doing business measures, developing sea protocol for perishables etc.
- **Establishment of a Strong Quality Regime**- It includes establishment and maintenance of single supply chain and standards for domestic and export market, striving towards recognition of our conformity assessment procedures.
- **Other measures**- include ensuring self-sufficiency and export-oriented production, creation of an agri-startup fund, formulating action plan on R&D, testing labs with strong infra in NE region to support export of organic produce, involving private sector in export promotion etc.

3.2. FARM MSP MODELS BY NITI AAYOG

Why in news?

In the recent Budget, the government has announced to ensure the minimum support price (MSP) to farmers for all agricultural crops. In light of this, the NITI Aayog has come out with three models.

Details

- The three models are:
 - **The market assurance scheme:** It proposes procurement by States and compensation of losses up to certain extent of MSP after the procurement and price realisation out of sale of the procured produce.
 - **The price deficiency procurement scheme:** Under this, if the sale price is below a modal price then the farmers may be compensated to the difference between MSP and actual price subject to a ceiling which would not exceed 25 per cent of the MSP. No compensation would be due if modal price in neighbouring states is above the MSP.
 - Madhya Pradesh is implementing this scheme as Bhawaawantar Bhugtaan Yojana (BBY) (*refer January 2018 current affairs*).
 - **Private procurement and stockist scheme:** Under this, procurement would be done by private entrepreneurs at MSP. The government would provide some policy and tax incentives to these entrepreneurs. The private player is nominated through a transparent bidding process by the state government.
- States can adopt one or more options depending on their requirements. However, all the three options may not be implemented for the same crop.
- Before finalizing any model, the government must also consider report of National Commission for Farmers (NCF) which had recommended that MSP should be at least 50% more than the weighted average cost of production.

Positive Impact of private procurement

- It would reduce fiscal implications for the government
- It will involve private entities as partners in agriculture marketing and improve the competition in the market.
- It would also limit the government’s liabilities for storage and post procurement management & disposal are also avoided.

However, there are concerns that it may fail like earlier attempts because back-end facilities of storage and warehousing are handed over to them and they don’t have the wherewithal to purchase farm goods in bulk.

MSP and procurement in India

- Minimum Support Price is the price at which government purchases crops from the farmers, whatever may be the price for the crops.
- In our country, **MSP for certain agricultural commodities** of Kharif and Rabi season are announced by the **Cabinet Committee on Economic Affairs (CCEA)**, Government of India **at the beginning of the sowing season** based on the recommendations of the **Commission for Agriculture Cost and Prices (CACP)**.
- However, procurement by Central and State Agencies is limited to rice and wheat and some amount of coarse cereals. The Government also procures limited quantity of oil seeds and pulses through NAFED, SFAC and some other agencies.

Some crops covered under MSP includes

- seven cereals (paddy, wheat, barley, jowar, bajra, maize and ragi);
- five pulses (gram, arhar/tur, moong, urad and lentil);
- eight oilseeds (groundnut, rapeseed/mustard, toria, soyabean, sunflower seed, sesamum, safflower seed and nigerseed);
- cash crops: copra, raw cotton, raw jute and virginia flue cured (VFC) tobacco.

Present method of calculation of MSP:

For MSP, the CACP takes into account a comprehensive view of the entire structure of the economy of a particular commodity including factors like cost of production, changes in input prices, input-output price parity, trends in market prices, demand and supply, inter-crop price parity, effect on industrial cost structure, effect on cost of living, effect on general price level, international price situation, yield and production, imports, exports and domestic availability and stocks with the Government/public agencies or industry, cost of processing of agricultural products, cost of marketing - storage, transportation, marketing services, taxes/fees and margins retained by market functionaries, effect on issue prices and implications for subsidy etc.

3.3. NUTRIENT BASED SUBSIDY SCHEME

Why in News?

- Recently, government has approved the continuation of Nutrient Based Subsidy (NBS) till 2019-20.

About Nutrient Based Subsidy Scheme (NBS)

- Under this scheme a fixed amount of subsidy decided on annual basis, is provided to fertilizer companies (**other than Urea**) depending on its nutrient content to fertilizer manufacturer.
- Under this scheme Minimum Retail Price (MRP) of Phosphatic & Potassic (P&K) fertilizers has been left open and the manufacturers/importers/marketers are allowed to fix MRP of P&K fertilizers at reasonable level.
- **MRP** will be decided taking into account the **international and domestic prices** of P&K fertilizers, exchange rate, and inventory level in the country.
- **The scheme aims:**
 - to ensure that adequate quantity of P&K is made available to the farmers at statutory controlled price.
 - to ensure balanced use of fertilizers, improve agriculture productivity, promote growth of indigenous fertilizer industry and to reduce the burden of subsidy.

Issues involved and solutions

- **Roadmap:** There was no clear roadmap in front of government to achieve the NBS objectives which resulted in failure of the policy in checking the imbalanced use of fertilizers. Specific well-coordinated measures with quantifiable deliverables and specific timelines need to be formulated.
- **Monitoring mechanism:** There is no monitoring mechanism in the department of fertilizers (DoF) to ensure prices fixed by fertilizer companies are based on their reasonable cost of production.
- There is **absence of price fixation benchmark** at a reasonable level for import of DAP (di-ammonium phosphate) fertilizer, which delays finalization of contracts between international suppliers and domestic fertilizer companies.
- High **canalisation** of urea import (fertiliser companies have to import it through only three agencies such as: State Trading Corporation, MMTTC and Indian Potash Ltd.) often leads to mismatch in demand and supply of urea for the industry. Thus, de-canalisation needs to be done to allow fertiliser supply to respond flexibly and quickly to changes in demand.
- **Distorted consumption pattern:** under-pricing of urea relative to other fertilisers, especially P&K, encourages distorted consumption pattern and unscientific use of it, resulting in significant environmental degradation, including depleted soil quality.
 - Thus, subsidies should be rationalized along with dedicated awareness generation in farmers regarding the benefits of balanced usage of fertilizers. Also, modelling the fertilizer proportion according to different agro-climatic regions, is needed for the better growth and health of crops and soil.
- **Fiscal state:** Fertiliser accounts for large fiscal subsidies (about 0.73 lakh crore or 0.5 percent of GDP), the **second highest after food** and only 35% of total subsidy reaches the intended beneficiaries.

3.4. FERTILISER SUBSIDY

Why in news?

- **DBT scheme** has been approved by cabinet for fertiliser subsidy payment across India
- The **Cabinet Committee on Economic Affairs** (chaired by PM) has approved continuation of **Urea Subsidy Scheme upto 2019-20** and there will be no increase in price of urea, till 2020.

Details of the DBT scheme in Fertiliser

- DBT would entail **100% payment to fertilizer companies** on sale of fertilizers to farmers at subsidized rates.
 - a. Hence, the DBT model for fertilizers is slightly different from other schemes such as LPG, in which the ultimate consumer gets the entitlement in their bank account. **PAHAL** was the first actual roll-out of a scheme using the DBT approach for providing subsidies.
- At the time of the sale, details of the buyer, the quantity purchased, Aadhaar number, land records (wherever available) and soil health will be captured using a point-of-sale machine.

Urea Subsidy Scheme

- Urea Subsidy is a part of **Central Sector Scheme** (wholly financed by the GoI).
- The continuation of Urea Subsidy Scheme till 2020 will ensure the timely payment of subsidy to the urea manufacturers resulting in **timely availability of urea to farmers**.
- Urea subsidy also includes **Imported Urea subsidy** which is directed towards import to bridge the gap between assessed demand and indigenous production of urea in the country.
- It also includes **freight subsidy** for movement of urea across the country.
- This is in continuation to **farmer-friendly policies** of the Central Government such as:
 - 100% **Neem Coated Urea** was made mandatory in 2015 to plug the diversion of the subsidized Urea towards non-agricultural purposes.
 - Decision to bag Urea in **45kg bags** to help reduce the cost of fertilizers to the farmers.
 - Notification of **New Urea Policy, 2015**:
 - ✓ maximise indigenous urea production through setting up of new units and revival of old ones.
 - ✓ promoting energy efficiency in urea production
 - ✓ rationalizing subsidy burden on the government

Benefits of DBT in Fertiliser:

- It is a beneficiary driven subsidy payment scheme.
- It creates Aadhaar seeded database of beneficiaries and provides transaction visibility at the level of buyers.
- It facilitates a more transparent and faster tracking of funds along the value chain i.e. from manufacturer to beneficiaries.
- It minimises diversion of fertiliser for commercial use.
- It generates data on the usage of the nutrients to help farmers

Challenges of DBT in Fertiliser:

- During peak seasons, taking biometric authentication of each individual will cause **unnecessary delays** (biometric mismatch, authentication failure, internet connectivity, etc.) or the retailer may resort to '**adjusted transaction**' (registers all sales of the day on few Aadhaar numbers). There should be a faster check-out mechanism such as advanced-booking system.
- There is need for **effective communication** so that farmers are not overcharged.
- There should be an effective **Grievance Redressal mechanism**.

3.5. INTEGRATED MANAGEMENT OF PUBLIC DISTRIBUTION SYSTEM

Why in news?

IM-PDS is new central sector scheme that has been approved for implementation under Ministry of Consumer Affairs, Food & Public Distribution

About IM-PDS

- The key objectives of the scheme are
 - To **integrate PDS system/portals** of States/UTs with Central System/portals,
 - Introduction of **National Portability**: provide the option to PDS beneficiaries to lift their entitled foodgrains from the Fair Price Shops (FPS) of their choice at the national level. Presently, Andhra

Pradesh, Haryana, Delhi has started portability at the State level, whereas, Karnataka, Maharashtra, Chhattisgarh and Telangana have also started portability in the few FPS areas within the State.

- **De-duplication of ration cards/beneficiary**
- It will bring more transparency and efficiency in distribution of foodgrains.

3.6. CITY COMPOST SCHEME

Why in news?

- Recently, government has approved the continuation of City Compost Scheme till 2019-20.

About City Compost Scheme

- **Market Development Assistance-** under the scheme a market development assistance of Rs. 1500 per tonne of city compost for scaling up production and consumption of the product, is being provided.
- **Marketing:** Fertilizer companies and marketing entities will also co-market City Compost with chemical fertilizers through their dealers' network.
- Under the provision of adoption, companies also adopt villages for promoting the use of compost.
- An appropriate BIS standard/ Eco-Mark ensures that environment friendly quality product reaches the farmers.

About Compost

- Composting is nature's way of recycling. Composting biodegrades organic waste. i.e. food waste, manure, leaves, grass trimmings, paper, wood, feathers, crop residue etc., and turns it into a valuable **organic fertilizer**.
- Finished compost can be classified as a 100% organic fertilizer containing primary nutrients as well as trace minerals, humus and humic acids, in a slow release form.

3.7. EDIBLE OIL EXPORT

Why in News?

- Recently, Cabinet Committee on Economic Affairs (CCEA) removed the **decades-old ban** on export of bulk edible oils, except mustard oil.

More on News

- Moreover, mustard oil will continue to be exported only in consumer packs up-to 5 kgs and with a **minimum export price** of \$900 per tonne.
- At present, only certain edible oils were allowed to be exported in bulk and other oils only in 5 kg packs.

Background

- India's vegetable oil economy is world's fourth largest after USA, China and Brazil.
- The oilseed accounts for 13% of the gross cropped area, 3% of the Gross National Product and 10% value of all agricultural commodities
- Major oils produced in the country include mustard oil, cottonseed oil, soya-bean oil and groundnut oil.

Government initiatives

ISOPOM

- Various schemes such as Oil Palm Development Programme, National Pulses Development Project etc. have been merged into one Centrally Sponsored Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM) in 2004.
- It is being implemented by Department of Agriculture & Cooperation.
- Financial assistance is provided to farmers for purchase of breeder seed, production of foundation seed, production and distribution of certified seed.

National Mission on Oilseeds and Oil Palm (NMOOP)

- Implemented under three sub-mission namely MM I – Oilseeds, MM II – Oil Palm, MM III – TBOs (Tree Based Oil).
- The strategy and guideline for NMOOP includes:
 - Increasing Seed Replacement Ratio (SRR) with focus on Varietal Replacement;
 - increasing irrigation coverage under oilseeds from 26% to 36%
 - diversification of area from low yielding cereals crops to oilseeds crops; inter-cropping of oilseeds with cereals/ pulses/ sugarcane;
 - use of fallow land after paddy /potato cultivation
 - expansion of cultivation of Oil Palm and tree borne oilseeds in watersheds and wastelands;
 - increasing availability of quality planting material enhancing procurement of oilseeds and collection;
 - Processing of tree borne oilseeds.

Arguments in favor

- It will support growing production of oilseeds and would explore additional avenues for marketing of edible oils.
- It may also result in utilization of idle capacity in India's edible oils industry and is a step towards **Ease of Doing Business**.
- As much as liberal imports are necessary to support consumers, exports are critical to support domestic growers.
- It would be step toward progressive foreign trade policy in which both export and import windows are kept open.

Counter Arguments

- Domestic **production is already low** because acreage under oilseeds also remained lower this kharif season due to falling prices in the spot market throughout last year.
- Country's annual edible oil demand stands at nearly 22 million tonnes and is growing by 3% to 4% per year. India meets only about 40% of its total edible oil demand.
- Mills prefer to import refined oil for blending directly with the oil of their choice for repacking and distribution for local consumption.

Conclusion

To ensure that local market is not affected much and lowering the need of imports in wake of increased exports, the focus should be on improving oilseeds production. It can be done through

- ensuring the availability of quality seeds by increasing investment in oilseeds R&D and developing new location-specific high yielding varieties.
- bridging the awareness gap in farmers regarding better techniques and effective agricultural extension system.
- developing supportive infrastructure facilities.
- ensuring an efficiently managed market for better price recovery.

3.8. FINANCE BILL 2018

Why in news?

The Lok Sabha passed the Finance Bill 2018 and it became law by April 1 on receiving assent of the President.

Highlights of the finance bill 2018

- **Long-term capital gains:** Currently, long term capital gains from transfer of equity instruments or a unit of business trust is exempt from payment of income tax. These transfers will now be taxed at 10% under Section 112A of Income Tax Act, if the profit from the transaction exceeds one lakh rupees.
- **Deductions for farm producer companies (FPCs):** Tax deduction of 100% for 5 years starting from 2018-19, has been introduced for farm producer companies with a total turnover up to Rs 100 crores.
- **Fiscal Responsibility and Budget Management Act, 2003 (FRBM Act):** The FRBM Act is being amended based on the recommendations of the Fiscal Reform and Budget Management Committee under chairmanship of N. K. Singh.
- **Income tax:** For salaried individuals, a standard tax deduction of Rs40,000 has been introduced. The deduction for transport allowance and medical expenses has been removed.
- **Education cess:** The 3% Education Cess has been replaced by a 4% Health and Education Cess for non-resident persons, including foreign companies.
- **Corporate tax:** Currently, companies with turnover less than Rs.50 crore pay corporate tax at the rate of 25%. This threshold has been increased to Rs.250 crore.
- **Salaries and pensions:** The Bill amends five laws to increase emoluments of the President of India, the Vice President, Governors of states, and Members of Parliament (MPs). Moreover, emoluments of MPs will be indexed to inflation, and will be revised every five years.
- **Taxing the digital income:** An amendment to the Bill also widened the scope of India taxing the "digital income" that some multinationals earn in the country without a permanent establishment here.

3.8.1. ISSUES RELATED TO INTRODUCTION OF LTCG TAX

Concerns regarding LTCG tax

- **Increase in cost of trading stocks** at a time when 'export of capital' is happening to other countries due to lower transaction costs in those nations.
- **Double taxation:** In 2004-05, to encourage long-term investment in equity shares, the government had abolished LTCG tax replacing it with securities transaction tax (STT). While LTCG tax is reintroduced, STT has not been abolished or reduced.
- **Advantage to foreign investment:** Foreign portfolio investors (FPIs), who invest in India from places like Mauritius and Singapore, would not be subjected to LTCG tax, due to tax treaties.

Related Facts

- The short-term capital gains (securities sold within one year) are taxed at 15%
- For immovable property (land or building or both) also the period of holding is 24 months to qualify as a long-term capital asset. Earlier, this period was 36 months to qualify as a long-term capital asset. However, The Finance Act 2017 reduced it to 24 months.

Rationale

- **Bias against manufacturing:** as financial assets attracted way less taxation as compared to manufacturing sector, thus encouraged diversion of investment to financial assets.
- **Return on investment in equity is already quite attractive** even without tax exemption. There is, therefore, a strong case for bringing long-term capital gains from listed equities in the tax net.
- **Different purpose of STT and LTG:** STT only helps the government in keeping a track of equity transactions without any windfall revenue collection.
- **Small investors still protected:** By taxing gains above ₹1 lakh, the finance minister has ensured that small investors do not come under the ambit of this tax.
- **Large untaxed benefits:** The total amount of exempted capital gains from listed shares and units is around Rs.3,67,000 crores as per returns filed for assessment year 2017-18.
- **Indexation benefits:** Government has announced indexation benefit as a relief. **Indexation** is a technique to adjust income payments by means of a price index, in order to maintain the purchasing power of the public after inflation.

For more details on FRBM Act and FPCs, refer to February Current Affairs 2018

3.9. CHANGES IN PRIORITY SECTOR LENDING

Why in news?

- The Reserve Bank of India (RBI) has revised certain priority sector lending targets & classification

Changes made

- From FY 2018-19 the **foreign banks with 20 branches and above** will have to ensure that:
 - minimum 8% of Adjusted Net Bank Credit (ANBC) or Credit Equivalent Amount of Off-Balance Sheet Exposure (CEOBE), whichever is higher, is earmarked for lending to the **small and marginal farmers**.
 - minimum 7.5 per cent of ANBC or CEOBE, whichever is higher, is earmarked for lending to **micro-enterprises**.
- The **loan limits per borrower for Micro/ Small and Medium Enterprises (Services) has been removed** for classification under priority sector. Now all bank loans to MSMEs, engaged in providing or rendering of services as defined in terms of investment in equipment under MSMED Act, 2006, shall qualify under priority sector without any credit cap.

Impact

- This will create a level playing field within banks.
- It will increase credit flow to these sections thereby promoting growth.
- The removal of loan limits under the MSME could help PSU banks meet their target better as higher-value loans to MSMEs could qualify as priority sector and earn them better returns.

Targets and sub-targets for banks under priority sector:

Categories	Domestic scheduled commercial banks and Foreign banks with 20 branches and above	Foreign banks with less than 20 branches
Total Priority Sector	40 percent of ANBC or CEOBE, whichever is higher. Foreign banks to achieve the Total Priority Sector Target by March 31, 2018.	Same target but to be achieved by 2020.
Agriculture	18 percent of ANBC or CEOBE, whichever is higher. Within this, 8% of ANBC is prescribed for Small and Marginal Farmers.	Not applicable
MSME	7.5 percent of ANBC or CEOBE, whichever is higher.	Not Applicable
Weaker Sections	10 percent of ANBC or CEOBE, whichever is higher.	Not Applicable

Priority Sector Lending: A brief

What is Priority Sector Lending (PSL)?

Lending by a commercial bank for certain sectors which are identified as “priority sector” by the central bank (Reserve Bank of India) is called as priority sector lending.

- Banks having any shortfall in lending to priority sector have to contribute to the Rural Infrastructure Development Fund (RIDF) established with Nabard and other specified funds.

Categories under priority sector include

- Agriculture (include three sub-categories viz. Farm credit, Agriculture infrastructure and Ancillary activities.)
- Micro, Small and Medium Enterprises;
- Export Credit;
- Education;
- Housing;
- Social Infrastructure (include activities namely schools, health care facilities, drinking water facilities and sanitation facilities);
- Renewable Energy (include like solar based power generators, biomass based power generators, wind mills, micro-hydel plants and for non-conventional energy based public utilities viz. street lighting systems, and remote village electrification); and
- Others

What is included under Weaker Sections under priority sector?

This include Small and Marginal Farmers, Distressed farmers indebted to non-institutional lenders, Artisans, village and cottage industries, SCs and STs, SHGs, Persons with disabilities, women, Minority communities as notified by Government of India etc.

Priority Sector Lending Certificates (PSLCs)

- Priority Sector Lending Certificates (PSLCs) are a mechanism to enable banks to achieve the priority sector lending target and sub-targets by purchase of these instruments in the event of shortfall.
- This also incentivizes surplus banks as it allows them to sell their excess achievement over targets thereby enhancing lending to the categories under priority sector.
- Under the PSLC mechanism, the seller sells fulfilment of priority sector obligation and the buyer buys the obligation with no transfer of risk or loan assets.

3.10. NATIONAL FINANCIAL REPORTING AUTHORITY

Why in news?

- Recently, Union Cabinet approved establishment of National Financial Reporting Authority, a key recommendation under the Companies Act 2013.

Members of NFRA

- According to the **NFRA (Manner of Appointment and other Terms and Conditions of Service of Chairperson and Members) Rules, 2018**, NFRA shall consist of a Chairperson, three full time members, nine part-time members.
- Chairperson and full-time members would be selected through a **search-cum-selection committee** headed by Cabinet Secretary
- **Terms of Office** – The chairperson and full-time members shall have **tenure of 3 years or until they attain the age of 65**

years, whichever is earlier. They shall be **eligible for re-appointment for only one more term.**

- In case of a **part-time member**, the tenure would be **not more than three years** but would be **eligible for re-appointment.**
- **Removal** – The Chairperson or members could be removed by the central government if adjudged insolvent, convicted of moral turpitude, mentally or physically incapable of performing duties, acquired financial interest, abuse his position to render continuance.
- Chairpersons and full-time members of NFRA **should not be associated with any audit firm** during their tenure as well as two years after demitting office.

National Financial Reporting Authority (NFRA)

- It will be established as an independent regulator to oversee the **auditing profession and accounting standards** with jurisdiction extending to **all listed companies and large unlisted companies.**
 - **ICAI under the Chartered Accountants Act, 1949** shall continue to audit smaller unlisted companies.
 - **Quality Review Board** will also continue quality audit in respect of private limited companies, public unlisted companies and also with respect to audit of those companies delegated by NFRA.
- It will have the power to **investigate Chartered Accountants and their companies** either suo motu or on a reference for any misconduct.
- If professional or other misconduct is proved,
 - it can impose a penalty of not less than one lakh rupees, but which may extend to five times of the fees received, in case of individuals and not less than ten lakh rupees, but which may extend to ten times of the fees received, in case of firms
 - It can also debar an auditor for 6 months to maximum 10 years.
- NFRA will have the **same powers as of a Civil Court** while trying a suit.
- It would **enhance investor and public confidence in financial disclosure** of companies and assist in further **development of audit profession.**

3.11. NITI AAYOG PANEL ON GOLD MARKET

Why in News?

- Recently, NITI Aayog panel, headed by Ratan P Watal, proposed a more liberalised approach toward the gold market.

Proposed recommendations

- **Target** - To increase its contribution to the gross domestic product (GDP) to 3 per cent by 2022.
- **On Tax** - a sharp cut in all taxes on the gold business, including import duty and goods and services tax (GST) is needed.
- **On Institution** - setting up a **Gold Board** with statutory powers as a single-window agency to resolve all issues and for export promotion there should be **gold domestic council** in line with export promotion council.
- **On Gold Monetisation Scheme (GMS)** -
 - Reducing minimum quantity of gold to be offered by customers under the GMS.
 - Link gold metal loans with international lease rates.
 - Temples should hold gold in prescribed limit and deposit rest under GMS.
- **Replace sovereign gold bonds (SGB)** with **gold saving accounts** and the gold investment in rupee terms in proposed savings accounts should be **backed by physical gold** lying with Indian households.
- It proposed a **liberal PAN (permanent account number) limit** and a new limit for providing data to respective organisation under the Prevention of Money Laundering Act.
- **Others** - promoting gold mining, responsible sourcing and good delivery of unrefined gold, making Indian standards for gold refined by Indian refineries etc.

Gold related schemes

- **Gold Monetisation Scheme**
 - A revamped version of an older **Gold Deposit Scheme**—to make idle gold productive, by getting consumers to either sell their gold or store it with banks.

- Its aim is to merge the gold into the formal economy and reduce the country's gold imports.
- **Only Resident Indians** (Individuals, HUF, Trusts including Mutual Funds/Exchange Traded Funds registered under SEBI (Mutual Fund) Regulations and Companies) can make deposits under the scheme, either individually or jointly.
- **Sovereign Gold Bond Scheme:**
 - SGBs are government **securities denominated** in grams of gold issued by RBI.
 - They are substitutes for holding physical gold. Investors have to pay the issue price in cash and the bonds will be redeemed in cash on maturity.
 - The Bond is issued by Reserve Bank on behalf of Government of India.
 - SGBs carry a fixed interest rate and only resident Indian can invest in minimum 1g and maximum of 500g per year. Later, this limit of 500g was modified and raised to 4 kg for individuals, 4 Kg for Hindu Undivided Family (HUF) and 20 Kg for Trusts and similar entities notified by the Centre.
- **Gold Coin/ Bullion Scheme**
 - It is a part of Gold Monetisation Programme.
 - Initially the coins will be available in denominations of 5 grams and 10 gm. A 20 gm gold bar will also be available through 125 MMTC outlets across the country.
 - Coins have anti-counterfeit features and tamper proof packaging.
- **Measures announced in Budget 2018-19**
 - The Government will formulate a comprehensive Gold Policy to develop gold as an asset class.
 - The Government will also establish a consumer friendly and trade efficient system of regulated gold exchanges in the country.
 - Gold Monetization Scheme will be revamped to enable people to open a hassle-free Gold Deposit Account

3.12. NPA IN POWER SECTOR

Why in News?

Parliamentary Standing Committee on Energy presented its report on 'Stressed/Non-performing Assets in Electricity Sector'.

Background

- Power sector is one of the sectors that have **contributed the most** to the NPAs and accounts for Rs 37,941 crore as NPAs and restructured advances amounted to Rs 60,858 crore.
- The report noted that there were 34 stressed assets in the sector with an overall capacity of 40 GW and a total outstanding debt of nearly Rs 2 lakh crore.

Rise of NPAs in Power Sector is due to multiple reasons

- **Due prudence** not given while considering loan applications
- **Non-availability** of regular fuel supply arrangements
- Cancellation of coal block and shortfall in supply of coal
- Lack of Power Purchase Agreement (PPA)
- **Aggressive bidding** by developers in PPA
- Inability of the Promoter to **infuse the equity & working capital**
- **Regulatory** and **Contractual/Tariff** related disputes
- **Delays in project implementations** leading to cost overrun
- **Change of law** in other countries resulting in spike of coal prices making power generation and supply at the contracted rate unviable.

Steps Taken by Govt to Help Power Sector

- UDAY scheme
- Deen Dyal Upadhyaya Gram Jyoti Yojana
- Garv (Rural Electrification App)
- Integrated Power Development Scheme
- 24X7 Power For All
- TARANG (Transmission System Monitoring) App
- SHAKTI coal allocation policy where coal linkages are awarded on auction basis

Major Recommendations of the Committee

- A task force should be formed to help power sector come out of the mire of NPAs. Banks should keep in view the **factors that are responsible for an asset becoming NPA** and try to **help the asset** to the extent possible in not becoming NPA.
- The **process** of grant of loan, **supervisory mechanism** and its **subsequent monitoring** should be **overhauled** and banks should **follow credit rating system**.
- **National Electricity Policy, 2005** needs to be **revisited** to address the problems of the electricity sector including clearances, land acquisition, continuance of old and inefficient plants etc.

- The **revival schemes** of the RBI or the Government should **be realistic and not symbolic**.
- Coal India Limited should ensure that every promoter is provided with the coal required in a time-bound manner. Further, the **power plants should be provided enough coal** to enable them to run at 85% of plant load factor.
- Power plants should **primarily use domestic coal**. However, they may be allowed to use 15-20% of imported coal, only if they can remain economically viable.
- **Old power plants** which have already outlived their expected life and are having higher than prescribed emission rate **should be phased out**.
- **Appropriate steps** should be taken to ensure that there should **be consistency and uniformity with regard to orders emanating from the status of change in law**.

3.13. INTEGRATED SCHEME FOR DEVELOPMENT OF SILK INDUSTRY

Why in news?

Recently, Cabinet Committee on Economic Affairs has given its approval for **Integrated Scheme for Development of Silk Industry** for **three years** from 2017-18 to 2019-20.

About the Scheme

- It is a central sector scheme implemented by Central Silk Board (under Ministry of Textiles).
- It consists of following four components:
 - Research & Development, Training, Transfer of Technology and I.T. Initiatives,
 - Seed Organizations,
 - Coordination & Market Development,
 - Quality Certification Systems (QCS)/Export Brand Promotion & Technology Up-gradation.
- The scheme aims to achieve self-sufficiency in silk production by 2022 by focussing on improving productivity and increasing production of highest grade quality silk & import substitute bivoltine silk.
- It also seeks to provide livelihood opportunities for women, SC, ST and other weaker sections of the society including Left Wing Extremism affected areas and North Eastern Region.
- **Cost bearing –**
 - **100% for government owned facilities** by Central Government,
 - For SC and ST individuals beneficiaries **65% by Central Government, 25% by state government and 10% by the individuals,**
 - For beneficiaries from Jammu and Kashmir, Himachal Pradesh, Uttrakhand, Jharkhand, Chattisgarh and NE States **80% by Central Government, state government and individuals will bear 10%**

Bivoltine Silk

It is a hybrid silk which is cultivated in temperate region such as China, Japan and Thailand.

This breed can withstand the high temperature stress and high humidity as prevalent in India due to tropical climate. Therefore, Central Silk Board is stepping up production of variety of bivoltine hybrid through crossbreeding.

Silk Industry in India

India is the second largest producer of Silk in the world only after China.

India currently produces all four variety of silk - mulberry, eri, muga and tassar. The silk production is mostly prevalent in Karnataka, Assam, West Bengal, Tamil Nadu, Andhra Pradesh and Jammu and Kashmir.

Major Export destination of Indian Silk exports are USA and UAE followed by UK, France, Italy and Germany. Mostly natural silk yarns, fabrics, made-ups, readymade garments, silk carpets and silk waste are exported.

For growth and development of the silk industry Indian **Silk Export Promotion Council** has also been set up. It organises trade shows and fairs across the world to promote trade with different countries. The council also facilitates meetings between exporters and potential customers.

3.14. NATIONAL E-MOBILITY PROGRAMME

Why in news

Recently, Minister of Power has launched National E-Mobility Programme in India.

About the Programme

- **Aim:** To provide an impetus to the entire e-mobility ecosystem including vehicle manufacturers, charging infrastructure companies, fleet operators, service providers, etc.
- Programme will be implemented by **Energy Efficiency Services Limited (EESL)**.
- Under it, Electric Vehicles (EVs) will be procured by EESL in bulk to increase aggregate demand and ensure economies of scale.

About EESL

- It's a joint venture company under the **Ministry of Power**, working towards mainstreaming energy efficiency and is implementing the world's largest energy efficiency portfolio in the country (SLNP & UJALA).
- **Aim:** To create market access for efficient and future ready transformative solutions that create a win-win situation for every stakeholder.
- It is responsible for procuring electric vehicles for the Government
- It has begun its operations in UK, South Asia and South-East Asia.

Significance

- **Make in India:** Adoption of EVs will promote indigenous production of e-vehicles and create a booming market for ancillary industries which will further give fillip to employment generation.
- **Environment friendly:** India is expected to save over 5 crore litres of fuel every year leading to a reduction of over 5.6 lakh tonnes of annual CO2 emission with **20,000 EVs** on road.
- **Foreign Exchange Saving:** EVs help us achieve autonomy from expensive petroleum imports as cost for an electric car is just 85 paise/km against Rs 6.5/km for normal cars.
- Aligned with the Government's vision of 100 per cent e-mobility by 2030.

Way Forward

- **Framing policy for electric vehicle charging infrastructure** to consider charging of e-vehicles as a service (no need of license for charging station).
- **Dedicated ministry for Automobile Sector** on the lines of Aviation, as it employs 7% of our working age population and contributes to 49% of our manufacturing GDP

- NITI Aayog has tasked seven ministries (heavy industries, power, new and renewable energy, road transport and shipping and highways, earth sciences, urban affairs and information technology) with framing guidelines to encourage the use of such vehicles.
- Nagpur is the first city in India which is equipped with battery swapping and charging stations.

For more on EV, refer to December CA, page 53.

3.15. DRAFT LABOUR CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS, 2018

Why in news?

- Recently, the draft code on occupational safety, health and working conditions was put forward by the Ministry of labour and employment.

More on the news

- The second National Commission of labour had recommended simplification, amalgamation and rationalisation of Central Labour Laws and following 4 Labour Codes have been drafted on the same lines:
 - Labour Code on Wages Bill, 2015,
 - Labour Code on Industrial Relations Bill 2015,
 - Labour Code on Social Security & Welfare, 2017 and
 - Labour Code on Occupational Safety, Health & Working Conditions, 2018
- The draft Code on Occupational Safety, Health and Working Conditions, 2018 will amalgamate 13 labour laws including the Factories Act, 1948; the Mines Act, 1952; the Building and Other Construction Workers

(Regulation of Employment and Conditions of Service) Act, 1996; the Contract Labour (Regulation and Abolition) Act, 1970 etc.

- The proposed code is the first single legislation prescribing standards for working conditions, health and safety of workers and it will apply on factories with at least 10 workers.

Key Provisions of draft labour code on occupational safety:

- The Centre has been empowered to prescribe standards on occupational safety and health.
- **Annual health check** to be made mandatory in factories and its charge will be borne by the employers.
- **Appointment letters** for all workers (including those employed before this code), underlying their rights to statutory benefits.
- **At least 50% of penalty** levied on employers could go towards providing some relief to families of workers who die or are seriously injured while working.
- Employers will need to **register under one law**, instead of going for separate registrations under labour laws for construction, contracts, plantations etc.
- A **National Occupational Safety and Health Advisory Board** has been proposed to recommend standards on these matters. Similar body such as State Occupational Safety and Health Advisory Board at the state level as well as safety committee & safety officer in certain factories and establishments is also proposed
- **Appointment of facilitators** with prescribed jurisdiction for inspection, survey, measurement, examination or inquiry has been proposed under this Code.
- **Mandatory license** for every contractor who provides or intends to provide contract labour. Also, license is needed for industrial premises as well.
- Various allowances such as **journey allowance and displacement allowance** have been proposed for inter-state migrant workers
- A **Site Appraisal Committee** is proposed to be established by state government to examine applications for the establishment of a factory involving hazardous process and make its recommendation to the State Government. A centre may appoint an **Inquiry committee** for factory engaged in hazardous process
- Various welfare provisions regarding washing facilities, working hours, extra wages for overtime, prohibition of overlapping shifts etc. are included in the code.

3.16. NORTH-EAST INDUSTRIAL DEVELOPMENT SCHEME (NEIDS) 2017

Why in news?

Recently, Union Cabinet approved the North East Industrial Development Scheme (NEIDS) 2017 up to March 2020.

More about scheme

- **Objective:** To promote **employment** in the North East States including Sikkim, the government is incentivizing primarily the **MSME Sector** through this scheme
- Various **specific incentives** given under the scheme includes incentive on capital investment in Plant & Machinery; interest incentive on credit; reimbursement of insurance premium to the tune of 100% for 5 years; reimbursement of central government share of GST and income tax; transport incentive and employment incentive through part contribution to EPF.
- There is an overall cap of Rs. 200 crores per units for all components of incentives.

3.17. DRAFT INDIAN NATIONAL STRATEGY FOR STANDARDS (INSS)

Why in News?

- Recently, Ministry of Commerce and Industry released, the **Draft Indian National Strategy for Standards (INSS)**.

About INSS

- INSS is in consonance with affordable standard and '**Zero Effect, Zero Defect**' products campaign of the government.

What is Standard or Standardisation?

- It is a framework of agreements to which all relevant parties in an industry or organization must adhere to ensure that all processes associated with the creation of a good or performance of a service are performed within the set guidelines.

- It is based on **three pillars of quality framework** – Standardisation, Conformity assessment and Technical regulations
- **Objectives of the INSS**
 - Using standards as enhancer of competitiveness in domestic and international markets.
 - Create an integrated infrastructure, roadmaps and institutions for their effective management.
 - Aligning the strategy with other national policies related to trade & industry, consumers and environment.
- **Implementation of strategy** would be monitored by a high-level committee with quarterly reviews.
- The standardisation strategy will minimise a lot of grey areas which are used to stop imports from various countries using sanitary and phytosanitary standards (SPS) and technical barriers to trade (TBT) requirements.

Standardisation/Standard Development	Conformity Assessment	Technical Regulation
<p>Developing a dynamic, relevant and priority driven standards ecosystem would include;</p> <ul style="list-style-type: none"> • Convergence of all standards development activities in India and avoid duplication & overlaps • Make standardization a key priority area across all sectors • Inclusive participation of all stakeholders in standards development including States, MSMEs, private sector • Focus on critical sectors of traditional strength for standard development such as tourism, yoga, ancient medicine etc. • Increasing awareness at district level through National Institute for training of Standard. • Facilitate development of Regional SAARC Standards for hassle free trade. • Ensure continuous participation at international standards committees by identified experts through liberal funding support. 	<p>The Conformity Assessment is done before it is placed on the market to ensure that all legislative requirements are met. It includes testing, inspection and certification by Conformity Assessment Bodies (CABs). For following efforts are required:</p> <ul style="list-style-type: none"> • Provide suitable incentives and adopt other measures to bring all Conformity Assessment Operators within the fold of national accreditation. • Secure and enhance global equivalence through mutual recognition agreements in accreditation across a broad range of goods and services • Export inspection council for the certification should be assisted by commodity boards, accreditation boards. • Upscale the ISI Mark Scheme to Made in India certification labelling and promoting Indian products across global markets. • Minimise the cost of Conformity assessment for MSMEs to make them globally competitive. 	<p>Minimise the technical regulation, for having least burden or disruption on business.</p> <ul style="list-style-type: none"> • There should be a balance between costs of compliance and administration versus gains; effectiveness in compliances; transparency in notification, openness in communications. • There must be a separation of regulatory roles from policy development and conformity assessment. • There is a need to identify gaps between India and global practices on technical regulations. • There is need to establish a professional agency for carrying out or coordinating all market surveillance • Technical regulations must select the least burdensome route of conformity assessment that is capable of covering the risks. • A new enabling legislation is needed for regulatory impact assessment and periodic review

3.18. CORPORATE SOCIAL RESPONSIBILITY (CSR)

Why in News?

- Recently, Ministry of Corporate Affairs has decided to put in place a centralized system to keep a tab on entities' compliance with CSR obligations in the backdrop of non-compliance to CSR by one-third of firms on the S&P BSE 100 list.

More on news

- Activities that witnessed **rise in CSR expenditure** included promotion of education, vocational skill development, environmental sustainability, gender equality, national heritage, slum development, community development, infrastructure, social welfare, welfare of armed forces veterans, war widows and their dependents.

- Activities that witnessed a **dip in CSR expenditure** included eradication of hunger and poverty, promotion of healthcare and sanitation, the contribution towards the Prime Minister's National Relief Fund.
- Industrialized states with large corporate presence such as Maharashtra, Gujarat, Karnataka and Tamil Nadu top the list of highest recipients of CSR expenditure by India Inc. However, Maharashtra followed by Daman & Diu and Odisha witnessed the biggest increase

About Corporate Social Responsibility

- Corporate social responsibility is a management concept whereby companies **integrate social and environmental concerns** in their **business operations** and **interactions with their stakeholders**.
- The corporate firms **utilize valuable resources from the society** in the **form of raw materials** etc. for their operations, so the firms must give **back something for the welfare of the society**.
- Section 135 of the Companies Act, 2013 which contains **CSR provisions is applicable** to companies
 - With an annual turnover of INR 1,000 crore and more,
 - Or a net worth of INR 500 crore and more,
 - Or a net profit of five crore INR and more.
- The Act mandates companies to **spend at least 2% of their average net profit in the previous three years** on CSR activities.
- Schedule VII of the Act contains the list of activities which a firm can take up.

Anil Bajjal Committee Recommendations

It was constituted to suggest measures for **improved monitoring of implementation of CSR** policies by companies.

Major Recommendations-

- The rationale behind CSR legislation is not to generate financial resources but to use corporate innovative ideas and management skills in the delivery of 'public goods'.
- There should be two models of implementation strategies for CSR: for companies having more than INR 5 crore CSR outlay; for companies having less than INR 5 crore CSR outlay.
- No additional mechanism for monitoring of CSR is required as the Board and CSR Committee are accountable for their own shareholders and public at large.
- Annual awards for incentivizing companies to take up CSR activities be set up – one each for the two categories of companies, large and small.

Benefits of a Robust CSR Programme for a Company

- Gaining of trust of communities
- Attracting and retaining employees
- Enhancing corporate reputation and brand building
- Attract investors as they include ethics as part of their assessment while investing
- Increased profitability as ethical conduct exerts a growing influence on purchasing decisions of customers.

Few Challenges in CSR

- **Lack of robust policy:** Lack of capability in many firms to formulate a long term robust CSR policy leads to failure in giving definitive directions to CSR spending
- **Disconnect with local requirements:** A disconnect can be seen in what the requirements on the ground are and what the companies are allocating money towards. There is non-availability of well-organized NGOs in remote and rural areas that can assess and identify real needs of the community.
- **Ease of implementation as basis:** Many CSR efforts are driven purely by the company's operational perspectives and ease of implementation of their CSR projects.
- **Duplication of activities by different corporate houses** which results in competitive approach rather than collaborative approach.
- **Lack of awareness in local communities about CSR:** There is a lack of trust and interest of the local community in participating and contributing to CSR activities of companies. In fact, all stakeholders need to be involved including government, NGO, local agencies, community as well as private sector
- **Lack of focus on rural areas:** Many CSR initiatives and programs are taken up in urban areas and localities leaving the needy and the poor in the rural areas out from benefits of CSR.
- **Inadequate monitoring:** There is lack of an independent agency which can monitor and accreditate CSR efforts.

3.19. CORPORATE GOVERNANCE NORMS

Why in news?

- SEBI accepted about half the suggestions made by Uday Kotak panel constituted by SEBI in 2017 to improve corporate governance.

Details

- Governance norms for Indian listed companies are set out in the Companies Act and Listing Obligations and Disclosure Requirement Regulations of 2015 of SEBI.
- SEBI constituted a series of committees — Kumar Mangalam Birla Committee in 2000, Narayana Murthy Committee in 2003 and Adi Godrej Committee in 2012 — to come up with more elaborate governance norms for India Inc.
- Later Uday Kotak committee was appointed to review reforms on whose recommendations SEBI has approved changes in the norms.

Key Recommendations of the Kotak Committee approved by SEBI:

- Increasing Transparency -Enhanced Disclosure Requirements such as:**
 - Full disclosure of utilization of funds raised through Preferential Allotment and QIPs.
 - Disclosures of Auditor Credentials, Audit Fee, Reasons for Resignation of Auditors
 - Disclosure of Expertise/Skills of Directors and Enhanced Disclosure of Related Party Transactions (RPT) to enhance accountability.
- Reshaping the Institution of the Board of Directors and Enhancing the Role of Committees of the Board through:**
 - Separation of the office of the chairperson (i.e. the leader of the board) and CEO/MD (i.e. the leader of the management) by Top 500 listed companies.
 - Augmenting board strength and diversity by having minimum of 6 directors on the boards of Top 1000 listed companies by 1 April 2019 and Top 2000 companies by 1 April 2020.
 - Also, top 500 listed entities (by market capitalization) and the top 1000 listed entities have to have a minimum of one-woman independent director by April 1, 2019 and April 1, 2020 respectively.
 - Quorum of the board of directors will be one-third of the total strength of the board of directors
 - Capping the Maximum Number of Directorships for a person to 8.

RECOMMENDATIONS OF UDAY KOTAK committee



Issues with Corporate Governance in India

- Nepotism in board appointments
- Lack of effectiveness and transparency in performance appraisal of directors.
- The Independent directors in India have either played a passive role or they can be removed easily if they do not side with promoters.
- Entire boards are not often present at general meetings for stakeholders to ask questions from them.
- Executive Compensation policies are not transparent and do not require shareholders' approval.
- Family owned Indian companies have excessive controls and poor succession planning.
- Unrealistic risk assessment policies.
- Inadequate emphasis on privacy and data protection, cyber security.
- Lack of serious effort by board towards Corporate Social Responsibility (CSR) projects.

- **Levelling the playing field in Algorithmic Trading for all investors:**
 - Stock exchanges would be allowed to introduce shared colocation services to reduce the cost for trading members
 - Free tick-by-tick data feed for all the trading members
- **Enhanced Role of committees**
 - **Audit Committee** will have to review the utilization of loans and/or advances from/investment by the holding company in the subsidiary exceeding Rs 100 crore or 10 percent of the asset size of the subsidiary, whichever is lower
 - **Role of Nomination and Remuneration Committee** which recommends appointment and removal of the senior management has been expanded.
 - **Risk Management Committee** shall now specifically cover cyber security.
- **Down-streaming Corporate Governance** in case of complex corporate structures with multiple subsidiaries through enhanced Obligations and mandatory secretarial audits for Listed Entities with Respect to Subsidiaries.
- **Increase requirements for Shareholder Participation and Involvement** by making the approval of minority shareholder mandatory for payments to related parties exceeding 2% of revenue.

Significance

- The approved changes to corporate governance norms are aimed towards aligning corporate governance standards to global best practices.
- It will help in reducing the risks of promoter-raj at the cost of minority shareholders in Indian corporate sector.
- The recommendations, such as the enhanced disclosure requirements, will help reducing information asymmetry between the managers of a company and its shareholders.

However, there are concerns that smaller listed entities have been precluded from such compliance requirements as well as compliance burden would increase on listed companies.

3.20. MUNICIPAL BONDS

Why in news?

Ministry of Housing and Urban Affairs has decided to provide incentive to ULBs covered under AMRUT for Issuance of Municipal Bonds.

More on news

- The ministry will incentivise up to 10 Urban Local bodies (ULBs) for up to a maximum of 26 crores.
- The amount will be paid in one lump sum in the escrow account opened by ULB for the concerned purpose.
- The bonds issued will be taxable municipal bonds and not green bonds.

Need for Municipal Bonds

- **Improving urban infrastructure:** A High Powered Expert Committee (HPEC) on Urban Infrastructure estimated a requirement of Rs 3.92 million crores to provide urban services conforming to national benchmarks for urban infrastructure over a period 2012-31.
- **Alternative source of finance:** It may help corporations in raising funds without looking to State grants or agencies such as World Bank. Also, rating agency CARE estimates that large municipalities in India could

SEBI Guidelines on municipal bonds:

As per the SEBI Regulations, 2015, a municipality or a Corporate Municipal Entity (CME) to issue Municipal Bonds should meet certain conditions:

- The ULB should **not have negative net worth** in any of three immediately preceding financial years.
- **Non-default:** The municipality should not have defaulted in repayment of debt securities or loans obtained from banks or financial institutions during the last 365 days.
- Municipalities need to contribute at least 20% of the project cost.
- **No wilful defaulter:** The corporate municipal entity, its promoter, group company or director(s), should not have been named in the list of the wilful defaulters published by the RBI or should not have defaulted on payment of interest or repayment of principal amount in respect of debt instruments issued by it to the public, if any.
- Municipal bonds should have **mandatory ratings above investment grade** for public issue.

raise Rs. 1,000 to Rs. 1,500 crore every year considering municipal bond markets in US and China touch around \$3.7 trillion and in China \$187 billion.

- **Attracting institutional investors:** They may ensure participation of large institutional investors such as pension funds and insurance companies by providing less risky avenues of investments to them.

Challenges for Municipal Bond Market in India

- **Issues with municipal bond:** They are relatively **illiquid instruments** due to absence of secondary market for them which results in investors having to hold municipal bonds until maturity.
 - Also, PFRDA classify municipal bonds as **Class C instruments** instead of Class G (Government securities) making them compete with other Class C instruments which have higher yields thus making municipal bonds unattractive.
- **Credit worthiness:** Earlier 94 cities which are part of Smart City Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT), were rated by agencies such as CRISIL. Out of 94, 55 cities got investment grade rating (BBB- and above), while other 39 were rated below BBB-. Reasons affecting credit worthiness include:
 - Thirteenth finance Commission data reflected that the **municipal tax to GDP ratio** is a meagre 0.5 per cent as compared to central tax to GDP ratio at 12 per cent.
 - Dependence of Municipal bodies for funds and **unpredictability of transfers** from State governments to ULBs impact the outlook of financial position of ULBs.
- Except in a few big ULBs the **budgeting and accounting systems** of ULBs still lack transparency which leaves scope for misappropriation of assets and misleading picture of income and expenditure of ULBs.
- The **absence of buoyant sources of revenues** for ULBs in the past has increased their reluctance to borrow in future.
- There may be increased **cases of default** when the debts on Municipalities increase too much as is happening in china currently.
- Further there are no **insolvency and bankruptcy laws and security enforcement laws** applicable against municipalities unlike corporate sector.

Other Suggestions

- **Increasing the marketability** of the bonds by bringing them under EEE category (Where the initial investment, the interest earned and the maturity amount are all exempted from taxation) so that retail investors can be brought into the market.
- **Corporate Bonds and Securitisation Advisory Committee** of SEBI had recommended for providing tax free status to municipal bonds charging an interest higher than 8% as well. At present, only bonds carrying interest rate upto maximum 8% per annum are eligible for this
- **Need to encourage establishment of bond markets:**
 - Structuring of bonds by **securitizing revenues** such as property tax collections through an escrow mechanism to help 'A'-rated ULBs (urban local bodies) get a credit enhancement and access to the capital market.
 - SEBI has also suggested a **Pooled mechanism** to float bonds which can help lower rated urban local bodies to come together and issue bonds.
 - Creating a **secondary market for bond trading** to tap long-term savings and allowing households or institutions to sell their long-term bonds before maturity.
- **Municipal bonds could be given the status of 'public securities'** so that they become admissible for statutory liquidity ratio (SLR) investment by commercial banks.
- Further urban infrastructure can be made part of **priority sector lending** to increase the demand for municipal bonds from institutional investors.
- **Introduction of a debt recovery and bankruptcy law** applicable to urban entities
- **Improving transparency and disclosure norms** to increase investor confidence by disclosing information regarding the management, administration, projects, revenue generation, risk factors etc. to the public along with the future revenue generating capacity of the ULB.
- **Structural reforms** at the governance level must also be undertaken to equip municipalities with the technical and financial expertise to generate adequate credit worthy municipal finance opportunities.

- There is also a need to **empower political executives** in charge in municipalities and ideas such as directly elected mayors needs to be seriously considered.
- **Other reforms** such as realistic user charges and fees for municipal service, increase in property taxes must also be implemented to complement fiscal devolution and boost their capacity for issuance of bonds.

3.21. PRADHAN MANTRI ROZGAR PROTSAHAN YOJANA (PMRPY)

Why in news?

The scope of PMRPY under Ministry of Labour & Employment has been enhanced by the cabinet.

About PMRPY

- The scheme is active since 2016 and has been designed to **incentivise employers** for generation of new employment.
- Under the scheme, the government provided **8.33% of the contribution of Employers to the Employees' Pension Scheme (EPS)** (12% in case of textile, leather and footwear industry) in respect of new employees (who have joined on or after 1st April 2016) having a new Universal Account Number (UAN), with salary up to Rs 15,000/- per month.
- The scheme has a **dual benefit** as the employers are incentivized for increasing the employment base of workers in the establishments and a large number of workers also find jobs and access to social security.
- All establishments registered with Employees' Provident Fund Organisation (EPFO) can apply for availing benefits under the scheme. The establishments must have a valid LIN (Labour Identification Number).

What is new?

- The GoI will now contribute the **employer's full admissible contribution** (12%) for the **first three years** from the date of registration of the new employee, and for all the sectors including **existing beneficiaries for their remaining period of three years**.
- Now the **informal sector workers** would also get social safety net and there would be more job creation.

3.22. NATIONAL SKILL DEVELOPMENT CORPORATION (NSDC) AND NATIONAL SKILL DEVELOPMENT FUND (NSDF)

Why in News?

- Recently, cabinet has approved the restructuring the NSDC and NSDF.

More on News

- Restructuring pertains to composition of Board of NSDF, strengthening its oversight role and the NSDC to strengthen governance, implementation and monitoring framework.
- NSDF has given a supervisory role over NSDC's functions by including a provision in the Investment Management Agreement (IMA). IMA is agreement of NSDF with NSDC for utilization of its corpus to meet the desired objectives of National Skill Development Mission.

National Skill Development Corporation (NSDC) (2008)	National Skill Development Fund (NSDF)
<ul style="list-style-type: none"> • It is a not-for-profit company set up by the Ministry of Finance and works under the Ministry of Skill development and Entrepreneurship. • It has an equity base of Rs.10 crores, of which the Government of India holds 49%, while the private sector has the balance 51%. • Its primary mandate is to catalyse the skills landscape in India. It creates vocational training institutions, funds patents and enables support for skill development. • It has been designated as the implementation agency for Pradhan Mantri Kaushal Vikas Yojana (PMKVY). 	<ul style="list-style-type: none"> • It was set up in 2009 by the Government of India for raising funds both from Government and Non-Government sectors for skill development in the country. • A public Trust set up by the Government of India is the custodian of the Fund. Fund is operated and managed by a Board of Trustees. The secretary of the Ministry of Skill is the Chairperson of this Trust. • NSDF trust was incorporated to act as a receptacle for financial contributions from Governmental sources, bilateral/ multilateral and other agencies.

3.23. ENERGY TRANSITION INDEX

Why in news?

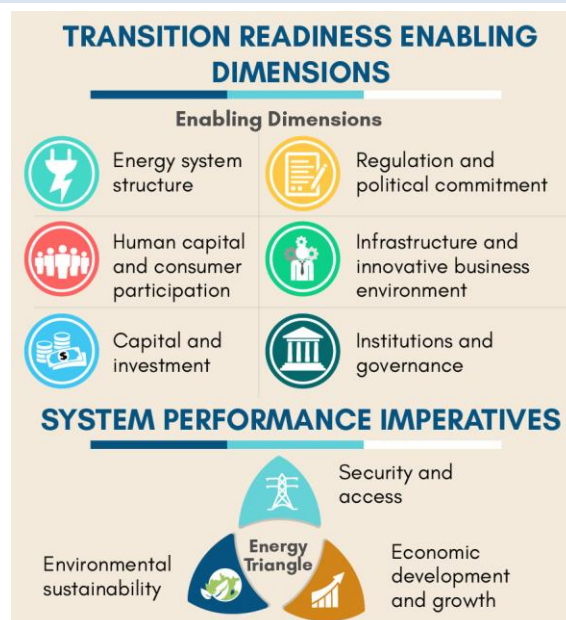
Recently, energy Transition index was released by **World Economic Forum**.

About Energy Transition Index (ETI)

- It is a part of first edition of the **Fostering Effective Energy Transition Report** which builds upon previous series of **Global Energy Architecture Performance Index**.
- It ranks countries on how well they are able to balance energy security and access with environmental sustainability and affordability.
- It is a composite index that focuses on tracking specific indicators to measure the **energy system performance** and **transition readiness** of 114 countries. The score vary from 0-100%.

Major Findings of the Index

- India has been **ranked at 78th position** which is lower than Brazil and China.
- Although report recognizes India's bold measures to improve energy access, energy efficiency and deployment of renewable sources of energy, it notes that energy transition in the country will require large investments and an enabling environment and robust regulatory frameworks.
- The index has been topped by Sweden followed by Norway and Switzerland.
- Over the last five years, more than 80% countries have improved their energy systems however more efforts are needed to resolve the world energy challenges.



ALL INDIA TEST SERIES

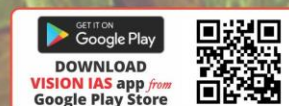
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 - **CSAT** (हिन्दी माध्यम में भी उपलब्ध)
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MAINS

- **General Studies** (हिन्दी माध्यम में भी उपलब्ध)
- **Essay** (हिन्दी माध्यम में भी उपलब्ध)
- **Geography • Sociology • Philosophy**



4. SECURITY

4.1. DRAFT DEFENCE PRODUCTION POLICY 2018

Why in news?

Recently, **Ministry of Defence** released the draft Defence Production Policy 2018 (DProP 2018).

Background

- India defence production has progressively increased from Rs. 43,746 crores in 2013-14 to Rs. 55,894 crores in 2016-17.
- However, according to Stockholm International Peace Research Institute (SIPRI) report India is the largest weapons importer country, accounting for nearly 12% of all global weapon imports between 2013-17.

Highlight

- The policy aims to make India among the top five countries of the world in Aerospace and Defence industries, with active participation of public and private sector.
- **Objectives:**
 - To create an environment that encourages a dynamic, robust and competitive defence industry as an important part of the 'Make in India' initiative
 - To facilitate faster absorption of technology and create a tiered defence industrial ecosystem in the country
 - To **achieve self-reliance** in 13 identified areas by 2025 such as manufacturing fighter aircraft, missile systems, small arms, land combat vehicles etc.
 - To **increase domestic arms sales** to Rs1.7 lakh crore (\$26 billion) by 2025 and achieve export of Rs 35,000 crore (\$5.0 billion) in defence goods and services by 2025.
 - To make India as a global leader in Cyberspace and AI technologies.
- **The policy aims to improve ease of doing business through:**
 - Liberalisation of licensing process and rationalising the taxation system to support domestic manufacturing especially Startups and MSMEs
 - Undertaking **Competency Mapping** of private defence industry including MSMEs, to establish their core competence/ability to absorb various technologies.
 - Formulating **Technology Perspective Capability Roadmap (TPCR)**, to list out the platform/weapon systems being considered for procurement in the next 10 year timeframe by our Services
 - **Make-II process of DPP 2016** will be streamlined to make it easier for industry to enter in defence production sector.
 - **Increasing the FDI cap** under automatic route from the current 49 to 74 per cent for certain niche technologies.
 - **Defence Investor Cell** in DPP will be setup to provide handholding to MSMEs and other investors in defence production and to resolve issues with Central, State and other authorities.
- **FDI regime** in defence will be further liberalized and FDI up to 74% under automatic route will be allowed in niche technology areas.
- **Intellectual Property Cell** will be created in DDP to facilitate the registration of intellectual property rights.
- **Encouraging Startups: Innovation for Defence Excellence (iDeX) Scheme** will be formulated to set up **Defence Innovation Hubs** throughout the country to provide necessary incubation and infrastructure support to the start-ups in defence area and setting up of a corpus of Rs 1,000 crore to fund them to meet specific defence R&D requirements.
- **Defence Industrial Corridors** will be setup in Tamil Nadu and Uttar Pradesh, where each corridor would have one major cluster of defence production units around an anchor unit.
- **Defence Export Organisation** will be set up jointly with industry to promote export of Indian defence products abroad.
- **Boosting OFB and Public Sector:** Ordnance Factories will be professionalized to make them competitive and improve their productivity.

- **Aeronautical University** will be setup on a 50:50 cost sharing basis between Hindustan Aeronautics Ltd (HAL) and the government, to promote design, development and manufacturing industry.
- Autonomous **National Aeronautical Commission** will be created to link military and civil aviation need for expansion and indigenisation.
- **Outreach Programmes** will be conducted in various parts of the country to spread awareness about the potential opportunities and to understand the challenges being faced by stakeholders.
- **Department of Defence Production (DDP), Ministry of Defence** will be the nodal department for implementation of the Defence Production Policy 2018.
- State Governments will be encouraged to come up with State specific aerospace and defence related policies to attract investment in this sector

Concern

- Though unlike the 2011 policy, the draft of the 2018 policy sets a clear vision, a set of objectives and strategies, it does not fully address the **private sector's trust deficit** with the government which is largely due to the representation of senior MoD officials in the governing boards of the defence public sector companies, which often leads to the nomination of larger contracts in their favour.
- The draft policy does not provide concrete solutions to the **divergent interests of various stakeholders** such as DDP, DRDO and Acquisition Wing of the MoD which are more or less independent of each other.
- The 13 different sets of items identified for indigenous production are mostly generic names and includes items which are under production or cleared for production in the near future. The policy does not identify any specific new projects by name that would have given the industry an indication of the likely business prospects.
- **Budgetary Constraints** may not allow the policy's promised investments to fructify in a time bound manner.

4.2. DEFENCE INDUSTRIAL CORRIDOR

Why in News?

The Government initiated work for preparing a Detailed Project Report (DPR) to set up a defence production corridor in Tamil Nadu.

About Defence Industrial Corridors

- The government, in Budget 2018, announced establishment of two defence corridors-
 - One in **Uttar Pradesh** which will run from Agra to Chitrakoot.
 - Another in **Tamil Nadu** called **Tamil Nadu Defence Production Quad** connecting Chennai, Hosur, Salem, Coimbatore and Tiruchirappalli to Bengaluru.
- The draft defence production policy, 2018 provides that these defence industry Corridors will be set up in collaboration with States. Govt of India will contribute 50% of assistance subject to a ceiling of Rs 3000 Crores to the SPV set up for development of each defence corridor.
- Government has also announced the creation of a dedicated defence and aerospace small and medium enterprises (SME) fund, registered with the Securities and Exchange Board of India (SEBI), where a minority stake could be taken by investors. This fund would help channelise investments into the two defence corridors.
- Benefits of the corridors:
 - They will give **thrust to the manufacturing sector** and will help in making India **self-reliant** in the defence sector.
 - They are expected to **bolster interaction between all industry players** in order to **create long-term synergy** and **eventual development of the area into a Defence Production powerhouse**.
 - These corridors will **attract investment and create lakhs of jobs**.

4.3. INTEGRATED THEATRE COMMAND

Why in news?

Government has notified new “statutory rules and orders” to ensure an officer from any one service can now “exercise direct command” over personnel from the other two services, who are all governed by different acts and rules, in tri-service organisations.

Significance

- The move has been implemented especially for the strategically-located Andaman and Nicobar Command (ANC), which was established as India’s first theatre command in October 2001 but has largely failed to achieve its potential due to turf wars among the three services, general politico-bureaucratic apathy, fund crunches and environmental concerns.
- The naval commander-in-chief of the ANC can now directly control and discipline Army and IAF officers and other personnel under him, even as similar moves are afoot to eventually bring all land and assets under him.
- A fully unified approach in ANC is important due to the expanding Chinese threat in the Indian Ocean Region (IOR).
- The tweaking of the Army, Navy and IAF rules represents the first step towards having a **chief of defence staff (CDS) and integrated theatre commands**.

What is an integrated theatre command?

- It envisages a unified command of the three Services, under a single commander, for geographical theatres that are of security concern.
- The integrated theatre commander will not be answerable to individual Services. He will be free to train, equip and exercise his command to make it a cohesive fighting force.
- The logistic resources required to support his operations will also be placed at the disposal of the theatre commander so that he does not have to look for anything when operations are ongoing.

MISSING IN ACTION	
TRI-SERVICE CHIEF	
▶	To provide single-point military advice to government bring synergy among 3 Service in doctrinal, planning, procurement & operational matters
▶	Chief of Defence Staff (CDS) post strongly recommended by GoM report after the 1999 Kargil conflict
▶	Naresh Chandra Taskforce in 2012 also wanted Permanent Chairman of Chiefs of Staff Committee (diluted version of CDS)
▶	Lt-Gen D B Shekatkar Committee in 2016 also suggested new 4-star general, apart from the Army, Navy and IAF chiefs, as ‘chief coordinator’
▶	Over 70 countries have CDS-like post to integrate military planning and operations
JOINT COMMANDS	
▶	Theatre commands cost effective, save resources & prepare forces for integrated land-air sea operations
▶	Unified commands needed to handle space, cyber-space & special operations
▶	India has 17 single Service commands (Army 7, IAF 7 & Navy3)
▶	Only 2 join commands for Andaman & Nicobar Command (theatre) & Strategic Forces Command to handle nuclear weapons

4.4. FIRST 'CRIME FREE ZONE' ON INDIA-BANGLADESH BORDER

Why in news?

A crime-free stretch of **8.3 kms** has been established between the BSF border posts at Gunarmath and Kalyani and the BGB (Border Guards Bangladesh) border posts at Putkhali and Daulatpur.

More on news

- The objective of creating a crime-free zone is **to have select border locations that are clear of illegal, anti-social and criminal activities** (such as Human trafficking/Drugs and Fire arm smuggling/terrorist activities) by integrating the efforts of the BSF and the BGB, with assistance from the district administration, NGOs and border population of both the countries.
- Border **surveillance devices** such as closed-circuit cameras, search-lights and thermal imaging devices have been installed to ensure that the area remains crime-free. Drones will also be used to keep a tight vigil on the border.
- The BSF and BGB have also been raising **awareness among the locals** regarding crime prevention in the border area.

- India and Bangladesh share a **4,096 km land boundary**, largest among the international boundaries that India shares with its neighbours.
- The border **runs along five states**, West Bengal (2,216.7 km), Assam (263 km), Meghalaya (443 km), Tripura (856 km) and Mizoram (318 km).
- Half of the Indo-Bangladesh boorder has been **fenced**. The remaining half will be fenced by 2019 deadline.

4.5. PROTECTED AREA PERMIT

Why in News?

The Government has decided to relax Protected Area Permit for foreign tourists.

About Protected Area Permit (PAP)

- Due to **security reasons**, certain **areas** have been **declared as Protected Area/Restricted Areas** where **no foreigner can enter or stay without obtaining permit** from the competent authorities.
- Under the **Foreigners (Protected Areas) Order, 1958**, all **areas falling between the 'Inner line' and the International Border of the State have been declared as 'Protected Areas'**.
- Currently **Protected Areas are located in-** all of Arunachal Pradesh and Sikkim, parts of Himachal Pradesh, Jammu and Kashmir, Manipur, Mizoram, Nagaland, Rajasthan and Uttarakhand.
- Under the **Foreigners (Restricted) Areas Order, 1963**, parts of Sikkim and entire Andaman & Nicobar Islands have been declared as 'Restricted' Areas.
- **Relaxing PAP will increase tourism and create job opportunity and revenue** for the state.

Inner Line Permit System

- The Inner Line Permit **regulates the entry of non-domicile Indian citizens** into a **restricted region**.
- The British used this to **safeguard their revenue-generating regions** in the Northeast **against raiding tribal communities** from the hills.
- Today, ILP is seen as **a way to protect the demographic, cultural, political and social integrity of the small tribal populations** in the hill states.
- At present, it is imposed in **Arunachal Pradesh, Mizoram and Nagaland**.

4.6. MALWARES

Why in News?

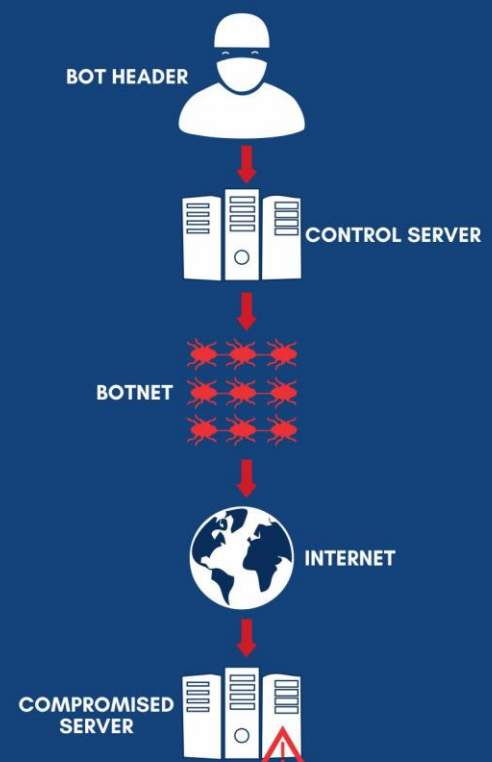
- '**Saposhi**', a new malware which can create **botnet** and launch **Distributed Denial of Service (DDoS)** attack, was detected by the security agencies.

What is a Malware?

- The term is contraction of "**Malicious Software**" and is any piece of software that was written with the intent of doing harm to data, devices or to people.
- **Different kinds of Malware include**
 - **Virus:** They attach themselves to clean files and spread uncontrollably, damaging a system's core functionality and deleting or corrupting files. They usually appear as an executable file.
 - **Trojans:** They disguise themselves as legitimate software and tend to act discretely and create backdoors in your security to let other malwares in.
 - **Spyware:** It hides in the background and takes notes of what one does online, including passwords, credit card numbers, surfing habits and more.
 - **Worms:** Worms infect entire networks of devices, either local or across the internet, by using network interfaces. It uses each consecutive infected machine to infect more.
 - **Ransomware:** Also called scareware, this kind of malware can lock down computer and threaten to erase everything — unless a ransom is paid to its owner.
 - **Adware:** These can undermine security which can give a lot of other malware a way in.

WHAT IS A DDoS ATTACK

DDoS, or distributed denial of service attack, is a malware (malicious software) attack



- DDoS attacks knock off web services and network connectivity by bombarding servers with millions of packets, which in turn overload the server's making them defunct
- As the number of pings are far beyond the server's capacity, the server crashes and denies service to its consumers

- A malicious software first creates a network of bots - called botnet
- It then uses all the botnets to ping a single server at the same time

- **Botnets:** Botnets are networks of infected computers that are made to work together under the control of an attacker.

Cyber Swachhta Kendra to Tackle Malware

- Government has established the “**Cyber Swachhta Kendra**” which is a **Botnet Cleaning and Malware Analysis Centre**.
- It is part of **Digital India initiative** to create a secure cyber space by detecting botnet infections and providing information and enabling citizens for removal of BOTs/malware.
- It is being **operated by CERT-In**
- Also, the Kendra will **strive to create awareness** among citizens to secure their data, computers, mobile phones and devices such as home routers.
- It also **collaborates** with Department of Telecommunications, Internet Service Providers, Antivirus companies and academia to carry out its work.

4.7. NAVAL EXERCISES

Why in news?

- Recently, the biennial eight-day exercise 'Milan' was organised at the Andaman and Nicobar Islands. The Indian Navy also conducted a **tri-service maritime exercise** named ‘**Exercise Pashchim Leher (XPL)**’ in the Arabian Sea.

About MILAN

- It is a multi-lateral navy exercise along with leading maritime powers of the Indian Ocean region and was first held in 1995. Milan 2018 was its 10th edition and largest participation till now.
- The participating nations include at least 16 countries i.e. Australia, Malaysia, Maldives, Mauritius, Myanmar, New Zealand, Oman, Vietnam, Thailand, Tanzania, Sri Lanka, Singapore, Bangladesh, Indonesia, Kenya and Cambodia
- MILAN 2018 was not attended by Maldives as there was state of emergency in the country.

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5. ENVIRONMENT

5.1. DRAFT NATIONAL FOREST POLICY, 2018

Why in News?

Recently, Ministry of Environment, Forests & Climate Change (MoEFCC) has released the draft National Forest Policy, 2018.

Background

- According to latest Forest Survey of India (FSI) reports 2018, India has about 7,08,273 square kilometres of forest, which is 21.53% of the geographic area of the country.
- India targets a carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.
- More than 300 million tribals and other forest dwellers in India are either directly or indirectly dependent on forest lands for their livelihood.
- There is a need to revise the existing National Forest Policy, 1988 through integrating:
 - Sustainable forest management.
 - Climate change mitigation strategies.
 - An evaluation mechanism to oversee participation of multiple stakeholders in forests

Salient feature of Draft Policy

- **Objective:** To safeguard the **ecological and livelihood security** of present and future generations.
- **Eco-security:** The country should aim to have a **minimum of one-third** of the total land area under forest and tree cover and in hilly and mountainous regions, the aim will be to maintain two-third of the area under forest and tree cover.
- **Institutions:** Setting up **National Board of Forestry (NBF)** at central level (headed by the Environment Minister) and **State Boards of Forestry** at state level (headed by state ministers in charge of forests) for ensuring inter-sectoral convergence, simplification of procedures, conflict resolution, etc. They will also **periodically review** implementation of this policy.
- **Strengthening community participation in forestry:** To ensure synergy between gram sabhas and joint forest management committees for successful community participation in forestry, **National Community Forest Management Mission** will be launched under Forest Rights Act (FRA).
- **Promote agro-forestry, farm forestry and Urban Green** to increase the tree cover outside forests.
- **Stabilizing ecologically sensitive catchment areas** with suitable soil and water conservation measures.
- **Biodiversity Conservation** through surveying of forest areas and promoting modern techniques of ex-situ conservation for Relic, Endangered and Threatened (RET) species.
- **Identifying and maintaining wildlife rich areas and corridors** outside protected areas for ensuring ecological and genetic continuity.
- Develop a **national forest ecosystems management information system** for scientific planning and management.
- **Research and Education in Forest management** for increasing forest productivity, enhancing the capacity of the forest ecosystems for carbon sequestration, reclamation of degraded and mined areas for ecological security, addressing the contemporary priorities and for increasing livelihood support and economic growth.
- **Enhance Quality and Productivity of natural forests** by promoting natural regeneration through locally suitable indigenous species.
- **Increase the productivity of forest plantations** by intensive scientific management of commercially important species like teak, sal, sisham, poplar, eucalyptus, bamboo etc.
- **Public private participation models:** will be developed for undertaking afforestation and reforestation activities in degraded forest areas and forest areas available with Forest Development Corporations and outside forests.
- **Forest Based Industry will be incentivized** as it being labour intensive can help in increasing green jobs and meeting the demand of raw materials as well.

- **Management of Non-Timber Forest Produce** through Value Chain approach would be made compulsory and part of the business plans related to NTFP.
- **Management of North-Eastern Forests** which have a vital impact on climate, agriculture production, and mitigation of floods in the plain areas of North-East.
- **Forest Certification** to enhance value of forest product harvested sustainably.
- **Forest Skill Development Centres**, for skilling forest dependent population in forestry sector jobs, will be instituted for training of frontline staff who are at the cutting edge of the forest department.
- **Addressing forest fires** by mapping vulnerable areas and develop early warning systems and methods to control fire through remote-sensing technology and community participation.
- **Human-wildlife conflicts**: It proposes dedicated and well-equipped quick response teams with health and veterinary services for speedy assessment of damage and quick payment of relief to the human victims, to minimise conflicts with the wildlife.

Concern

Although, it recognizes the role of forests in climate change mitigation unlike previous policies, there are various concerns as well:

- Environmentalists object in involving PPP model for afforestation and reforestation activities, pointing out that this would mean **privatisation of India's natural resources** and creating **private forests**.
- **National Community Forest Management** mission is based on the joint forest management model (involving both the state **forest** departments & local communities) that has no legal standing after enactment of Forest Rights Act, which vests management authority with gram sabhas.
- Policy orients itself more on the conservation and preservation of forest wealth rather than regenerating them through people's participation.
- Concern over the achievement of policy, as most of the objectives mentioned in **earlier National Forest Policy 1988** have not been met so far.
- It fails to mention or address the degradation of growing stock in the natural forests
- It persists with the methodological weakness of the Indian Forest Survey Reports of the past 30 years that conflate plantations with forest cover.

5.2. SAND MINING

Why in news?

Recently, Ministry of Mines has released a sand mining framework to assist the state governments in addressing the issues of the Sand mining sector.

Background

- Demand of sand in the country was around 700 million tonnes in FY-2017 and it is increasing at the rate of 6-7% annually.
- Government amended the Mineral Auction Rules 2015 in November 2017 to make the auction process less cumbersome and help states auction mineral blocks.
- Government in May, 2017, constituted a committee to study the existing system of sand mining in various States and suggest a comprehensive sand mining policy/guideline as a model for replication by the States.

Sand

Under the **Mines and Minerals (Development and Regulation) Act, 1957** (MMDR Act), sand is a **minor mineral** and sand mining is **regulated by the respective state governments**.

About Sand Mining

- Sand mining is a practice that is used to extract sand, mainly through open pit mining.
- Main sources of sand are agricultural fields, riverbeds and floodplains, coastal and marine sand, lakes and reservoirs.
- Sand mining is also done on beach, inland dunes and dredged from ocean beds and river beds.
- It's done to extract minerals such as Rutile, Ilmenite and Zircon which contain useful elements Titanium and Zirconium.

Issues

- Loss of revenue for exchequer due to cartelisation among mining companies during auction.
- Higher prices of sand in many cities due to non-availability there and absence of robust monitoring mechanism or regulation by the Government.
- Mixing of low quality sand with usable sand leading to construction of weak buildings.

Features of the framework

- Mining will be done as per the guidelines laid down in the **Sustainable Sand Mining Management Guidelines 2016** by the MoEFCC.
- **Alternatives to sand:** To meet the growing pace of urbanization and infrastructure development alternatives should be explored like
 - **Manufactured sand (M-sand)** which is produced by crushing of rocks, quarry stones to a stipulated size of 150 microns. As compared to river sand, it is cheaper and has marginally higher bond strength and its mortar shows higher compressive strength
 - **Sand produced from coal overburden.**
 - **Importing sand** from other countries such as Malaysia and Philippines to meet the requirement of coastal states.
 - Encouraging alternative technologies in construction materials processing for reduced dependence on natural sand.
- **Affordability:** can be achieved by
 - Controlling the price from supply side rather than through administrative mechanism
 - Reducing illegal mining, closure of quarries and smuggling of sand to neighboring States.
 - Regulating transportation through use of GPS/ RFID enabled dedicated vehicles for better and efficient management of resource.
- **Business Model:** States should opt out of either of the two models depending upon their objective:
 - **Market Model (Simple Forward Auction)** for revenue maximization by State.
 - **Notified/ Controlled Price Model** for keeping the prices and operations under control.
- **Classification of states:** as Sand surplus State, Sand sufficient State and Sand deficit State on the basis of analysis of **demand and supply situation** and to help them in framing policy and regulation according to the needs of the states.
- **Separate Sand Mining Policy and Rules:** for each state to better manage the sector and only the State Mining Department should be entrusted for regulating sand mining in the State.
- **District Survey Report (DSR):** shall be prepared by the State Government to estimate the annual quantity of sand available in a particular district and their usage.

Salient features of the Sustainable Sand Mining Management Guidelines, 2016:

- It allows environment clearances for up to five hectares of mine lease area for sand and minor minerals to be done at the district level by the District Environment Impact Assessment Authority headed by the District Collector.
- States will give clearances for mine lease areas up to 50 hectares, while the Centre would give permissions for areas larger than 50 hectares.
- It calls for use of technology for stringent monitoring of sand mining through tools such as bar coding, remote sensing etc.
- It calls for promotion of manufactured sand, artificial sand, fly ash and alternative technologies in construction materials and processes for reducing the dependence on naturally occurring sand and gravel.
- It also calls for training of architects and engineers, new laws and regulations, and positive incentives to initiate a shift for lowering dependency on sand.

Steps taken by government to Promote Sustainable Mining

- **Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY):** It's to be implemented by the funds collected under District Mineral Foundations (DMF) and utilised for the welfare and development of the mining affected areas.
- **Mining Surveillance System (MSS):** Ministry of Mines, through the Indian Bureau of Mines (IBM), has developed the MSS in collaboration with the Ministry of Electronics and Bhaskaracharya Institute of Space Applications and Geo-Informatics (BISAG) to use the space technology to check illegal mining.
- **Mining Tenement System (MTS):** It will facilitate end to end national scale accounting of all the minerals produced in the country through automation from the pithead to its end use, reducing the scope for illegal mining.

Importance of sustainable sand mining

- To ensure the conservation of the river equilibrium and its natural environment by protection & restoration of the ecological system.
- To avoid aggradation at the downstream reach especially those with hydraulic structures such as jetties, water intakes etc. and to ensure the rivers are protected from bank and bed erosion beyond its stable profile.
- To ensure there is no obstruction to the river flow, water transport and restoring the riparian habitats.
- To avoid pollution of river water leading to water quality deterioration.
- To prevent ground water pollution by prohibiting sand mining on fissures where it works as filter prior to ground water recharge.
- To maintain the river equilibrium with the application of sediment transport principles in determining the locations, period and quantity to be extracted.

- **Clearances and approvals:** Responsibility of seeking the clearances and approvals should be given to the lessee/contractors only and department should play the role of facilitator/ regulator only.
- **360-degree monitoring mechanism:** States need to create and establish a robust system to monitor and measure the mined-out mineral at each lease location and its transportation in the State.
- **Classification of the rivers:** States need to classify the rivers based on the stream orders i.e. **stream orders I, II, III, IV and above**, where for stream I, II and III, sand may be allowed to be extracted by manual means for local use in villages or towns bordering the streams, while for order IV and above streams, bidding is done for sustainable commercial mining and usage.

5.3. BRAZZAVILLE DECLARATION

Why in news?

Recently, Brazzaville Declaration was signed to promote better management and conservation of Cuvette Centrale Region in Congo Basin.

About the Brazzaville Declaration

- The declaration has been signed by Democratic Republic of Congo, the Republic of Congo and Indonesia in the backdrop of the **3rd Conference of Partners of the Global Peatlands Initiatives (GPI)**, taking place in Brazzaville, Republic of Congo.
- GPI is an initiative by leading experts and institutions to save peatlands as world's largest terrestrial organic carbon stock and to prevent it being emitted.

What are Peats?

- Peats are a **heterogeneous mixture of plant material** (vascular plants, mosses and humus) that had accumulated in a water-saturated area and are only partially decomposed due to absence of oxygen.
- The natural areas covered by peat are called peatlands. Various types of peat are – swamp forests, fens, bogs or mires.
- They form where climate, bedrock and relief create an area with permanent water saturation i.e. either in shallow water over layers of lake sediments (called terrestrialisation) or directly on mineral soil (called paludification).
- They are **mostly found in permafrost regions** towards the poles and at high altitudes, in coastal areas, beneath tropical rainforest and in boreal forests. Countries with largest peatland areas are – Russia, Canada, Indonesia, USA, Finland etc.
- Several multilateral conventions take peatland into consideration such as UNFCCC, Ramsar Convention on Wetlands, Convention on Biodiversity and United Nation Convention to Combat Desertification.

Importance of Peatland

- **Carbon Storage** – Although they cover less than 3% of the global surface, estimates suggest that peatlands contain twice as much carbon as in the world's forest.
- **Supporting unique and critically threatened biodiversity** – They are home to some of the most unique and even endangered species which are adapted to live there. e.g. 37% of all the vascular plants in the peatlands of Yamal Peninsula and 10% fish species within Malay Peninsula are only found in peatland ecosystem.
- **Supporting water cycle** – They regulate water flow, exert a cooling effect during hot periods through evaporation and cloud formation, play an important role in retention of pollutants and nutrients and water purification, counteract eutrophication of water bodies and also prevent intrusion of salt water.
- **Supporting livelihood** – They are source of berries, mushrooms and medicinal plants in boreal and temperate regions and of non-timber forest products in tropical regions. Even the peat itself is used as fuel.
- **As a cultural landscape and archive** – They hold some of the most evocative archeological discoveries of last decades such as 4th millennium BCE footpath 'sweet tracks'. They also record environmental changes.

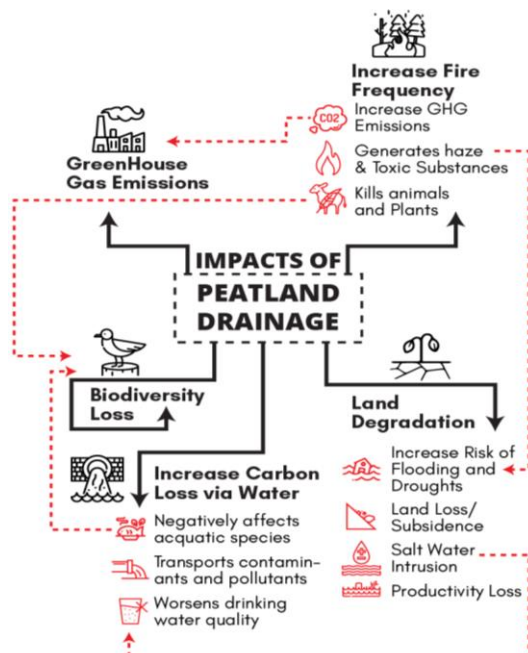
Threats to Peatlands

- **Dra inage for agriculture** – Agriculture expansion has been main driver of changes in peatlands. Peat soil needs to be regularly saturated otherwise they lose nutrients very fast.

- **Commercial Forestry** – It is the second greatest cause of land-use changes in peatland mostly prevalent in Scandinavian countries, UK, Russia, South-east Asia etc.
- **Peat extraction and usage** – Peat as a source of energy is being used on a large scale by households. It is also used as raw material for producing growing media for professional horticulture and for home gardening.
- **Infrastructure Development** – Conversion of peatlands in coastal areas to meet the urban development, waste disposal needs, development of roads and other infrastructure.

Solutions

- **Rewetting** - It is an essential step in the restoration of Peatlands as they rely on waterlogged conditions for their survival.
- **Placidiculture and sustainable management techniques** – It is a practice of crop production on wet soils, predominantly in peatlands. Other sustainable techniques could be cultivation of fish or pursuit of eco-tourism.
- **Legal and Fiscal environment and Polices** – Various policies that have been put in place both at global as well domestic levels should be implemented properly.
- **Creating a market to finance peatland management** – Using Funding mechanism such as Green Bonds, private capital (equity and debt), funding from government sources etc.
- **Institutional framework for coordinated action** – Integrated global partnerships should be established.
- **Restricting new agriculture & industrial activities** that threaten their long-term viability and developing long-term land use policies which favour conservation and protection of peatlands.
- **Capacity building** – Focused action is required with support from developed countries for capacity building, outreach and awareness raising.



5.4. CONSERVATION ASSURED | TIGER STANDARDS (CA|TS)

Why in news?

- Recently a survey has found that only 13 per cent of the tiger conservation areas meets the global standards of an accreditation system- the Conservation Assured | Tiger Standards.

More on news

- The survey is the first and largest rapid assessment of site-based tiger conservation across Asia and has been driven by 11 conservation organisations and tiger-range governments that are part of the CA|TS coalition.
- It found out that tiger monitoring is being implemented in 87 per cent of the sites and all sites surveyed in South Asian and East Asian countries like Bangladesh, Bhutan, China, India, Nepal and Russia have management plans.

Conservation Assured (CA|TS)

- It is a management tool which sets basic criteria for effective management of tiger conservation reserves or other conservation reserves and protected areas which have tiger populations.
- It is based on a set of seven pillars with 17 minimum standards and associated criteria for effective management.
- It addresses multiple factors which impact conservation management, including support for resident human populations (including their social, cultural, spiritual and economic needs), enhancing overall biodiversity richness, prey-base and habitat cover, and also considers the legal context of an area in terms of content, application and capacity of those on the ground to enforce those laws.
- It is **driven by the CA|TS Partnership**, which comprises of tiger range governments, intergovernmental agencies, conservation organisations and other institutions, such as Global Tiger Forum, IUCN, United Nations Development Program (UNDP), WWF etc.

- The secretariat for CA|TS is hosted by WWF.
- It is a key element in realizing the ambitious goal of doubling the global tiger population by 2022, a commitment made by all 13 Tiger Range Countries (TRC).
- **Nepal is the first** TRC to implement the process.
- To date, three sites- **Lansdowne Forest Division in Uttarakhand, India**, Chitwan National Park in Nepal and Sikhote-Alin Nature Reserve in Russia have been awarded CA|TS Approved status.

5.5. RISE IN RHINO POPULATION IN KAZIRANGA NATIONAL PARK

Why in news?

- According to a recent census conducted by the Assam Forest Department, it was found that the population of the iconic one-horned Rhino has risen from 2401 in 2015 to 2413.

The Great One-Horned Rhinoceros

- The great one-horned rhino or Indian Rhino is the largest of the rhino species found commonly in Nepal, Bhutan, Pakistan and India.
- In India, it is found in Assam – Kaziranga National Park, Manas National Park, Pobitora Reserve Forest, Orang National Park, Laokhowa Reserve Forest etc.
- It is listed as **Vulnerable on the IUCN Red List** and is protected under the Schedule I of the Wildlife Protection Act. It is threatened by poaching, habitat destruction, flooding etc.
- **Indian Rhino Vision 2020** – It has been implemented by Assam State Government with the Bodo autonomous council as an active partner and supported by WWF- India. The aim is to increase the number of Rhinos and provide long term viability of the one-horned rhino population.

Kaziranga National Park

- It is located in Assam and is one of the **UNESCO world heritage site** and is also located in the edge of the **Eastern Himalaya biodiversity hotspot**.
- It hosts two-third of the world's Great One-horned rhinoceros.
- The Park area is circumscribed by the Brahmaputra River, Mora Dhansiri, Diphlu and Mora Diphlu.
- It has also been identified by **Birdlife International** as an Important Bird Area and it is home to important migratory birds such as lesser white fronted goose, ferruginous duck, lesser adjutant etc.

Northern White Rhino

- The world's last male northern white rhino named Sudan died as he was euthanised after suffering from "age-related complications" in the Kenya.
- Now only 2 females of this subspecies are alive leaving invitro fertilization technique as the only option with egg from female, stored semen from male & surrogate southern white rhino females

Recently Extinct Species

- Baiji River Dolphin – 2006
- Western Black Rhino – 2011
- Formosan Clouded Leopard – 2013
- Barrier Reef Rodent – 2016 (first mammal to go extinct due to climate change)

5.6. NATIONAL CLEAN AIR PROGRAMME (NCAP)

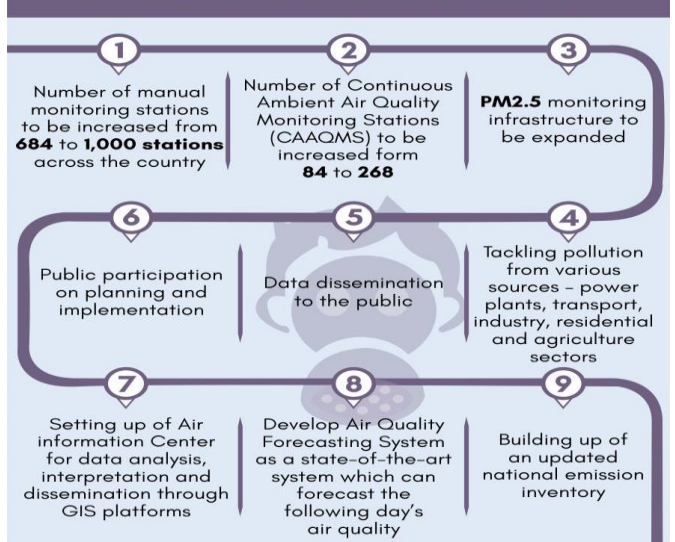
Why in news?

- Recently, the Ministry of Environment, Forests and Climate Change (MoEFCC) has released draft of National Clean Air Programme (NCAP) proposing multiple strategies to reduce air pollution

About the programme

- The programme involves various steps to be taken by the government (**see figure**)
- Earlier the environment ministry had announced its targets of 35% reduction of air pollution in the

STEPS TO BE TAKEN UNDER NCAP



next three years and 50% reduction in the next five years for at least the 100 identified non-attainment cities across India.

- A non-attainment city is considered to have air quality worse than the **National Ambient Air Quality Standards**.
- However, no reference of these targets is there in latest released document by the Ministry.

5.7. NATIONAL BIOGAS AND MANURE MANAGEMENT PROGRAMME

Why in news?

Recently, **Ministry of New and Renewable Energy** (MNRE) has fixed a target to set up 65,180 biogas plants in current year under the National Biogas and Manure Management Programme (NBMMP).

Background

- As per Census 2011, about 65.9 percent of households depend on solid biomass, including firewood, crop residue and cow dung as primary fuel for cooking in India.
- Bio-fuels are expected to contribute 5000 MW to the overall renewable energy target of 175,000 MW by 2022
- Under NBMMP, about 47.5 Lakh biogas plants have already been installed in the country upto 31st March, 2014.

Biogas Plant generates biogas from organic substances such as cattle dung, and other bio-degradable materials such as biomass from farms, gardens, kitchens and night soil wastes etc. through **anaerobic digestion (AD)**.

Biogas: Major constituent is methane (55-70%), CO₂ (30-45%) and some traces of gases such as H₂S and ammonia.

About the programme

- It is a Central Sector Scheme, which aims at setting up of family type biogas plants for providing biogas as **clean cooking fuel** and a **source of lighting in rural and semi-urban areas** of the country.
- The programme is being implemented under ministry of New and Renewable energy by the State Nodal Departments/State Nodal Agencies and Khadi and Village Industries Commission (KVIC), Biogas Development and Training Centers (BDTCs).

Advantages

- **Enhancing Productivity:** Slurry produced from biogas plants can be used as an organic bio-manure for enhancing crop yield and maintaining soil health
- **Social benefits** to rural families by reducing drudgery of women involved in collecting fuel wood and mitigating health hazards during cooking in smoky kitchens.
- Sanitation can be improved in villages by linking sanitary toilets with biogas plants.
- **Environmental Benefit:** By reducing environmental degradation and preventing the emissions of Green House Gases (GHGs) such as Carbon Dioxide (CO₂) and Methane into the atmosphere.
- **Economic Benefit:** Annual Saving of LPG via saving on cost of refilling of LPG cylinder, savings on cost of production from reduced need of fertilizers like urea and equivalent etc.

5.8. UN WORLD WATER DEVELOPMENT REPORT

Why in news?

- Recently UN World Water Development Report 2018 was released titled **Nature-based solutions (NBS) for water**.

More on news

- The report aims to address contemporary water management challenges across all sectors, and particularly regarding water for agriculture, sustainable cities, disaster risk reduction and water quality.
- The world is facing immense water-related challenges such as
 - Tremendous **increase in water demand** due to increasing population
 - **Water scarcity** due to impact of climate change on global water cycle with wet regions generally becoming wetter and dry regions drier
 - **Decreasing water quality** due to water pollution by discharge of industrial and municipal wastewater.

What are Nature-based Solutions?

- These are solutions that are inspired and supported by nature and use, or mimic, natural processes to address societal challenges effectively and simultaneously providing human well-being and biodiversity benefits.
- NBS are designed to address major societal challenges, such as food security, climate change, water security, human health, disaster risk, social and economic development.

Role of NBS in addressing water problems:

- **Managing water availability** through ecosystem-friendly forms of water storage (natural wetlands, soil moisture, efficient recharge of groundwater) and environmental-friendly agricultural practices like conservation tillage rather than traditional grey infrastructure such as dams.
- **Managing water quality through proper management of forests, wetlands, grasslands, soils and crops** for reducing sediment loadings, capturing and retaining pollutants, and recycling nutrients and reduction of non-point (diffuse) source pollution from agriculture by rehabilitating ecosystem services that enable soils to improve nutrient management.
- **Managing water-related risks and disasters, such as floods and droughts:** NBS for flood management can involve water retention by managing infiltration and overland flow, and thereby making space for water storage through floodplains.
- **Enhancing water security:** by improving water availability and water quality while simultaneously reducing water-related risks and generating additional social, economic and environmental co-benefits.

Challenges and limitations

- There remains a historical inertia against NBS due to the continuing overwhelming dominance of grey infrastructure solutions.
- NBS often require cooperation among multiple institutions and stakeholders, something that can be difficult to achieve.
- There is a lack of awareness, communication and knowledge at all levels, from communities to regional planners and national policy makers, of what NBS can really offer. Lack of understanding of how to integrate green and grey infrastructure at scale, and an overall lack of capacity to implement NBS in the context of water.
- There are limits to how NBS can perform. For example, NBS options for industrial wastewater treatment depend on the pollutant type and its loading.
- While some small-scale NBS applications can be low- or no-cost, some applications, particularly at large scale, can require large investments.

Way forward

- **Leveraging financing:** there is a need of redirecting and making more effective use of existing financing. The emerging 'green bond' market can be tapped.
- **Creating an enabling regulatory and legal environment:** Rather than making drastic changes in regulatory regimes, NBS can be promoted effectively through existing frameworks. Identifying where and how NBS can support existing planning approaches at different levels can be a useful first step in this process.
- **Improving cross-sectoral collaboration** through better harmonization of policies across economic, environmental and social agenda.
- **Improving the knowledge base** on NBS, through more rigorous research.

5.9. STATE OF GLOBAL CLIMATE REPORT, 2017

Why in News?

- **World Meteorological Organization (WMO)** recently released its **State of the Global Climate in 2017**.

Major Points of the Report

- **2017** was **2nd warmest year** on record after 2016, and **the warmest non-EL Nino year**.
- The 2013-17 was the **warmest five-year average** on record.
- **Global sea surface temperatures** were ranked as the third warmest, as they were somewhat below the levels of 2015 & 2016.
- Total global disaster losses from climate-related events in 2017 stood at US\$ 320 billion making 2017 the most expensive year on record.
- **Cryosphere** continued to shrink, with Arctic and Antarctic sea ice well below average. Cryosphere is the frozen water part of the Earth which includes the continental ice sheets found in Greenland and Antarctica, as well as ice caps, glaciers, and areas of snow and permafrost. It also includes frozen parts of the ocean, such as waters surrounding Antarctica and the Arctic and frozen rivers and lakes, which mainly occur in polar areas.
- **Ocean acidification** continued with seawater pH progressively falling from values above 8.10 in the early 1980s to between 8.04 and 8.09 in the last five years.

World Meteorological Organization

- It is a **specialized agency** of the **United Nations (UN)**.
- It is the **UN system's authoritative voice** on the state and behaviour of the Earth's atmosphere, its interaction with the land and oceans, the weather and climate it produces and the resulting distribution of water resources.

5.10. CLEAN SEAS CAMPAIGN

Why in news?

- Recently, New Zealand joined the **United Nations-led Clean Seas campaign**.

About the Clean Seas Campaign

- It was launched in 2017, with the aim of engaging governments, public, civil society and the private sector in the fight against marine plastic litter.
- It contributes to the goals of the **Global Partnership on Marine Litter**, and **Global Programme of Action** of UNEP.
- The campaign is in consonance with **SDG 12-** sustainable consumption and production, **SDG13-** Climate Change, and **SDG 14-Life below the water**.
- **India is not a member country** to Clean Seas campaign.

The UNEP Global Programme of Action (UNEP/GPA):

- It aims at preventing the degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment.
- It was created through the **Washington Declaration** on Protection of the Marine Environment from Land-based Activities, 1995.
- It is unique in that it is the only global initiative directly addressing the connectivity between terrestrial, freshwater, coastal and marine ecosystems.
- The GPA secretariat has established three global multi-stakeholder partnerships: the Global Partnership on Nutrient Management (GPNM), the Global Partnership on Marine Litter (GPML) and the Global Wastewater Initiative (GWI).
- **The Global Partnership on Marine Litter (GPML)** was launched in June 2012 at Rio + 20 in Brazil. It is a global partnership gathering international agencies, Governments, NGOs, academia, private sector, civil society and individuals to protect human health and the global environment by the reduction and management of marine litter as its main goal, through several specific objectives.

Other related initiatives

- **Honolulu Strategy** - a global framework for the prevention and management of marine debris.
- **Nairobi Convention**- is a partnership between governments, civil society and the private sector and part of UNEP's Regional Seas Programme. It works towards a prosperous Western Indian Ocean Region with healthy rivers, coasts and oceans.

5.11. ONE PLANET ONE CITY CHALLENGE OF WWF

Why in news?

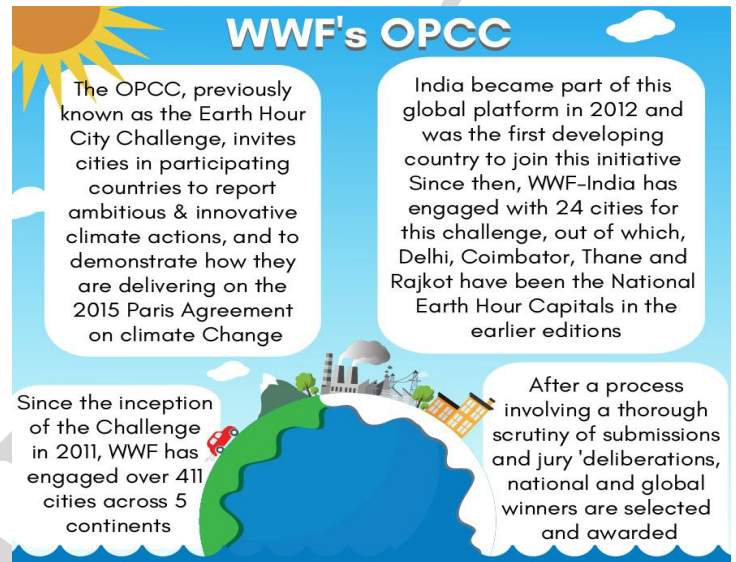
Recently 3 Indian cities have been selected as national finalists in the 2017-18 edition of WWF's One Planet City Challenge (OPCC).

More about the news

- World Wildlife Fund for Nature (WWF) works in collaboration with **ICLEI - Local Governments for Sustainability** (a global network of more than 1,500 cities, towns and regions committed to building a sustainable future) to mobilize cities to participate in the One Planet City Challenge.
- The three cities Panaji, Pune and Rajkot that are among cities in India's Smart City Mission, will now compete for the title of National and Global Winner.
- Given the increasing urbanization in India, cities have a significant role in providing solutions for mitigating carbon emissions as well as preparing for climate resilient development.

World Wildlife Fund for Nature

- It is an **international non-governmental organization** founded in 1961, working in the field of the wilderness preservation, and the reduction of human impact on the environment.
- The **Living Planet Report** is published every two years by WWF.
- Earth Hour is organized by the WWF. The event is held worldwide annually encouraging individuals, communities, households and businesses to turn off their non-essential lights for one hour, from 8:30 to 9:30 p.m. towards the end of March, as a symbol for their commitment to the planet.



5.12. PERSISTENT ORGANIC POLLUTANTS

Why in news?

- Recently, the environment ministry has notified new Regulation of Persistent Organic Pollutants (POP) Rules, 2018.

Details about the notification

- It bans the manufacture, trade, use, import and export of the seven toxic chemicals listed under the **Stockholm Convention**.
- The notification held that industrial units or persons, "shall not drain or discharge or dispose the chemicals directly or indirectly in effluent treatment plant, sewage treatment plant, onto any land, in public sewers, in inland surface water or in marine coastal areas".

What are POPs?

- POPs are **organic chemical substances—toxic to both humans and wildlife—**which once released into the environment **remain intact for years on end**.
- They become widely distributed throughout the environment as a result of natural processes and accumulate in **the fatty tissues (thus they have to be fat soluble)** of living organisms including humans.
- POPs are recognized by the International Agency for Research on Cancer as Group 1 carcinogens or cancer-causing substances.
- Specific effects of POPs can include **cancer, allergies and hypersensitivity, damage to the central and peripheral nervous systems, reproductive disorders, and disruption of the immune system**.

Stockholm Convention on Persistent Organic Pollutants

- It is a **legally binding** global treaty that aims to protect human health and the environment from the effects of persistent organic pollutants (POPs).
- The Convention sought initially 12 chemicals, for restriction or elimination of the production and release. Now, it **covers 23 chemicals**.
- The **Global Environmental Facility (GEF)** is the designated interim financial mechanism for the Stockholm Convention.
- India has ratified the Convention and its 12 initially listed chemicals.

- It further held that the waste containing these chemicals “shall be disposed of as per the provisions of the **Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016**”.
- These rules apply to hazardous and other wastes like metal and metal bearing wastes, wastes which may contain either inorganic or organic constituents. They do not apply to wastes covered under other acts such as waste-water and exhaust gases, radio-active wastes, bio-medical wastes and municipal solid wastes.

5.13. E-WASTE (MANAGEMENT) AMENDMENT RULES, 2018

Why in News?

- Recently, Ministry of Environment, Forest and Climate Change (MoEF&CC) amended the earlier E-Waste Management Rules, 2016.

Highlights of new rules

- It aims to **formalise the e-waste recycling sector** by channelizing the E-waste generated towards authorized dismantlers and recyclers.
- **Phase wise Collection:** It introduced the phase-wise collection targets for e-waste, which shall be 10% of the quantity of waste generation as indicated in the EPR Plan during 2017-

18, with a 10% increase every year until 2023. After 2023 onwards, the target has been made 70% of the quantity of waste generation as indicated in the EPR Plan.

- Separate **e-waste collection targets** have been drafted for new producers, i.e., those producers whose number of years of sales operation is less than the average lives of their products.
- **Reduction of Hazardous Substances (RoHS):** Under this, cost for sampling and testing shall be borne by the government for conducting the RoHS test and if the product does not comply with RoHS provisions the cost will be borne by the Producers.
- **Producer Responsibility Organizations (PROs)** shall apply to the Central Pollution Control board (CPCB) for registration to undertake activities prescribed in the Rules.

About E-waste (Management) Rules, 2016

- It is applicable to all the stakeholders such as Producer Responsibility Organisations, Consumers, Dismantlers, Recyclers, Dealers, Manufacturers etc.
- It adopted **collection mechanism-based approach** which includes collection centre, collection point, and take back system etc. for collection by Producers under EPR.
- It covered even components and spare parts of electric & electronic equipments. Mercury containing lamps like CFLs were also included.
- It has the **interest-bearing Deposit Refund Scheme** charged by the producer to the consumer at the time of purchase.
- It introduced Pan India EPR Authorization by CPCB replacing the state wise EPR authorization.

What is E-waste?

- It refers to electrical and electronic equipment (EEE) and its parts which have been discarded by its owner as waste without the intent of re-use.
- Common hazardous materials found in e-waste are: **heavy metals** (such as mercury, lead, cadmium etc.) and **chemicals** (such as CFCs/chlorofluorocarbon or various flame retardants).
- India is 5th largest producer of e-waste.
- The main sources of electronic waste in India are the government, public and private (industrial) sectors, which account for almost 71% of total waste generation.
- About 90.5% of the e-waste in India is being handled by the informal sector.

Producer Responsibility Organisation: It is an organisation that helps producers meet their EPR targets through various recyclers and dismantlers.

Extended Producer Responsibility (EPR): It is a strategy designed to promote the **integration of environmental costs associated with goods** throughout their life cycles into the market price of the products. Three basic objectives of EPR:

- Manufacturers shall be incentivised to improve the environmental design of their products and the environmental performance of supplying those products.
- Products should achieve a high utilisation rate.
- Materials should be preserved through effective and environmentally-sound collection, treatment.

5.14. BIO-MEDICAL WASTE MANAGEMENT RULES, 2018

Why in news?

Recently, Ministry of Environment, Forest and Climate Change released the amendments to Bio-medical Waste Management Rules.

Context

- Government had notified Bio-medical Waste Management Rules in 1998 under the **Environment Protection Act 1986** which were later amended twice in 2000 and 2003.
- In 2016 government notified revamped **Bio-medical Waste (BMW) Management Rules 2016** to enhance, widen and bring a comprehensive regime for **bio-waste management**.
- The latest amendments have been further introduced to improve compliance and strengthen the implementation of environmentally sound management of biomedical waste.

Features of Bio-medical Waste Management (Amendment) Rules 2018

- Bio-medical waste generators i.e. hospitals, clinics, vaccination camps etc. will now be required to phase out the use of **chlorinated plastic bags** and gloves by **March 2019**.
- Common biomedical waste treatment facility (CBMWTF) shall **establish GPS and Bar coding facility** in accordance with guidelines issued by the **CPCB**.
- **Pre-treatment of Bio-medical waste** – Every occupier of health care facility needs to pre-treat the laboratory waste, microbiological waste, blood samples etc. on-site in accordance with **guidelines on safe management of wastes from health care activities by WHO and WHO Blue Book 2014** and then send it to CBMWTF for final disposal. This will ensure that the toxic discharge such as infectious liquid waste is not discharged into the sewerage network.
- All healthcare facilities shall provide **annual report on its website** within two years of the publication of the amended rules.

What is Bio-medical Waste?

- Bio-medical waste consists of any waste which is generated during diagnosis, treatment or immunisation of human beings or animals or in research activities.
- It includes syringes, needles, cotton swabs, vials that may contain bodily liquids and spread infections.
- It has been found that only 15% of the bio-medical waste that is generated is hazardous. However, all the waste needs to be treated.

Central Pollution Control Board (CPCB)

- It is a statutory organisation which was constituted in 1974 and was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.
- Main functions of CPCB is to -
 - Promote cleanliness of streams and wells in different areas of the States by prevention, control and abatement of water pollution
 - to improve the quality of air and to prevent, control or abate air pollution in the country.

Features of Bio-medical Waste Management Rules 2016

- **Widened jurisdiction** – The ambit of the rules was widened to include vaccination camps, blood donation camps, surgical camps etc.
- **Pre-treatment of waste** – Waste generated in laboratories, microbiological waste, blood samples and blood bags to be pre-treated through disinfection or sterilisation on-site in the manner as prescribed by WHO or NACO.
- **Better segregation** – Bio-medical waste has been classified into 4 categories instead of 10 namely – Untreated human anatomical waste, Animal anatomical waste, Soiled waste and Biotechnology waste.
- **Bar-code system** for bags or containers to be established containing bio-medical waste for disposal.
- **Training and Immunisation** – Regular training to all its health care workers and immunising all health workers.
- **Stringent pollution norms** for incinerator to reduce the emission of pollutants in environment including the emission limits for Dioxins and furans.
- Phasing out of use of chlorinated plastic bags, gloves and blood bags **within 2 years**.
- **Procedure of Disposal** –The biomedical waste must be segregated in **coloured bags according to the category of the waste**. It can be **stored up till 48hrs** after which it is either needed to be **treated at in-situ site** or collected by the worker from CBMWTF.

5.15. REGIONAL INTEGRATED MULTI-HAZARD EARLY WARNING SYSTEM

Why in news?

Odisha government will collaborate with RIMES for strengthening its early warning services and enhancing preparedness for management of hazards in the State.

Highlight

- Odisha State Disaster Mitigation Authority (OSDMA) and RIMES would forge a partnership in the field of drought monitoring and early warning for different natural disasters.
- It would also help in strengthening the prediction and response capability of the OSDMA through specialised expert training.

About RIMES

- Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), an inter-governmental body **registered under the United Nations**, is owned and managed by 45 collaborating countries in Asia Pacific and African Region.
- **Objective:** to establish a regional early warning system within a multi-hazard framework for the generation and communication of early warning information, and capacity building for preparedness and response to trans-boundary hazards
- The programme unit of the agency is located in Thailand. India is the chairman of the body
- RIMES is already working with the Tamil Nadu State Disaster Management Authority.

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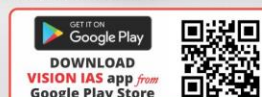
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6. SCIENCE AND TECHNOLOGY

6.1. ARTIFICIAL INTELLIGENCE TASK FORCE REPORT

Why in news?

- The task force on Artificial Intelligence (AI) constituted under the Department of Industrial Policy and Promotion in August 2017 submitted its report recently.

Highlights of the report

- According to the report, Artificial Intelligence "is the science and engineering of making intelligent machines, especially intelligent computer programmes." It involves variety of sub-fields such as computer vision, neural networks, machine learning, robotics etc.
- It identifies **10 specific domains** for rapid AI incorporation such as: manufacturing, fintech, healthcare, agriculture/food processing, education, retail/customer engagement, aid for differently abled/accessibility technology, **environment, public utility services and national security**.
- Within these domains too, the report identifies four "**grand challenges**" for AI incorporation:
 - Improving manufacturing to increase profitability and increase manufacturing jobs, especially in the SME (small and medium-sized enterprises) sector
 - Improving healthcare quality, reach and cost;
 - Improving agriculture yields and profitability; and,
 - Improving delivery of public services
- The report has argued that AI will in all likelihood create more jobs than it will destroy. It has potential to assist in various sectors which would in turn create new jobs.
- **National Artificial Intelligence Mission (N-AIM)**: An Inter-Ministerial N-AIM with funds allocated under Union Budget should be established with an allocation of Rs1,200 crore for a period of five years.
- **Digital data banks**: Digital data banks, marketplaces and exchanges should be set up to ensure availability of data and information across industries, with requisite sharing regulations.

Challenges with AI

- Data collection, archiving and encouraging **data availability** with adequate safeguards, possibly via data marketplaces / exchanges.
- Ensuring data security, protection, privacy, and **ethical use** via enabling frameworks, both **regulatory** and technological.
- Digitization of systems and processes with Internet of Things (IoT) systems while ensuring **safety from cyber-attacks**.
- **Socially disruptive impact** of AI in areas such as Employment generation, Wealth generation, changing preference of an AI empowered middle class.
- Rigorous auditing to ensure non-contamination by **human biases & prejudices**
- Lack of **consumer awareness**
- Channel impediments in technology delivery like **poor Internet access**
- Absence of widespread **expertise in AI technologies**. This could lead to policy decisions being taken based on a narrow spectrum of opinions
- Scenario planning for **human/robot interaction**

Key features of N-AIM

- Fund establishment of a network of **alliances** among Academia Services Industry, Product Industry, Start-ups and Government Ministries;
- Establishing & administering **National AI Challenge funds**;
- Increasing **awareness** of AI through AI-yatras;
- **Coordination of projects of national importance**: to accelerate development and commercialisation of AI based products and technology through PPP models and start-ups
- **Establishing Centres of Excellence** for promoting interdisciplinary research
- Setting up of a **generic AI test bed** for verification & validation of AI based products
- Funding an inter-disciplinary & dedicated large **data integration center**

Enablers for AI promotion

- Positive social attitudes towards machines and trust in autonomous systems
- Data literacy to create awareness about value of their own data
- An ecosystem (digital data marketplaces, exchanges, infrastructure) which encourages free flow of data & information
- Enabling policy & regulatory framework
- Skill sets available with workforce
- Establishment of standards for data exchange and safety
- Synergy between government, civil society, industry, academia and R&D.

- Ministry of Commerce & Industry need to create and functionalise a **data-ombudsman** to quickly address data-related issues & grievances
- **Standard setting:** by the central government for the design, development and deployment of AI based systems. For example, data storage and privacy standards, and communication standards for autonomous systems such as cars.
- **Enabling policies:** need to be developed by the central government. Two major recommendations in this regard are: (i) developing a data policy including ownership, sharing rights, and usage policies, and (ii) providing tax incentives for income generated due to the adoption of AI technologies and applications for socially relevant projects
- **Human Resource Development:** through developing an AI Education strategy and recommending AI-based curriculums. This also includes reskilling via identification of skill sets required for AI as well as creating an AI Readiness Index for states.
- **International rule-making:** Participate actively in shaping international policy discussions on governance of AI related technologies. This also includes enhanced bilateral cooperation.

6.2. E-CIGARETTES

Why in news?

The government recently quoted a WHO report to state that there is **sufficient evidence** to warn children, adolescents, pregnant women, and women of reproductive age against use of e-cigarettes.

About E-Cigarettes

- E-cigarettes are a type of **Electronic Nicotine Delivery Systems (ENDS)** which **claims to emit nicotine without other harmful chemicals that are present** in normal cigarettes.
- They aim to provide a **similar sensation to inhaling tobacco smoke**, without the smoke and are **sold as aids to reduce or quit smoking**.
- They produce an **aerosol by heating a fluid** that usually **contains nicotine, flavorings, and other chemicals** which is then **inhaled by users of e-cigarettes**.
- Smoking e-cigarettes is also called **vaping**.
- However, **some serious concerns regarding their use** have been highlighted by **WHO-**
 - vaping can **get teens addicted to nicotine** and they can go on to **use other tobacco products**.
 - No **convincing evidence** proving that e-cigarettes help quit smoking.
 - Smoking e-cigarettes **delivers cancer-causing chemicals** into the body.
 - It may function as a **“tumour promoter”** and seems to be involved in the **neuro-degeneration**.
 - May also contribute to **cardiovascular disease**.
 - **Foetal and adolescent nicotine exposure** may have **long-term consequences for brain development**, potentially leading to **learning and anxiety disorders**.
- It is **because of above concerns** that **worldwide a need is being felt to regulate the e-cigarettes** just as traditional tobacco products are regulated.

WHO Report on the Regulation on ENDS recommends to-

- ban the use of ENDS indoors and in public places.
- bring regulations to stop ENDS promotion to non-smokers and protect existing tobacco control efforts.

[Please refer to article titled- “Pictorial Warning on Tobacco Products” in January 2018 issue for more information on Impact of Using Tobacco and Initiatives to control Use of Tobacco]

6.3. ASSISTED REPRODUCTIVE TECHNOLOGY (REGULATION) BILL

Why in news?

Recently, Draft Assisted Reproductive Technology (ART) (Regulation) Bill, 2017 was released by Department of Health Research under **Ministry of Health & Family Welfare**.

Need For the Bill

- **Lack of regulation in the ART industry:** Approx. 50% of the IVF cycles performed in India is by unorganized clinics with lack of experience leading to a lot of unethical practices
- **Lack of ART penetration:** Approx. 1% of the total infertile population comes forward for evaluation and less than 40% out of these are prescribed treatment.

About the bill

- **Objective:** The Bill seeks to prevent the misuse of ART services and promote its safe and ethical practice by regulating and supervising ART clinics and ART banks. Key features of the Draft Bill include:
- **Setting National and State Board for ART for:**
 - Advising the government on policy matters relating to ART.
 - Reviewing and monitoring the implementation of the Bill.
- **Setting up a National Registry:** It will be established under the National Board to act as registration authority, central data base of the ART clinics and banks in India
- Child born will be entitled to all the rights and privileges available to a natural child only from the commissioning couple.
- **Sex selection:** Bill strictly prohibited the pre-determination of childsex.
- Other important provisions include – creation of **Assisted Reproductive Technology of India General Fund**, confidentiality of information etc.

- **ART** refers to all techniques that attempt to obtain a pregnancy by handling the sperm or the egg outside the human body and transferring the gamete or the embryo into the reproductive tract of a woman. In Vitro Fertilization (IVF) is the most common form of ART
 - **IVF process** involves fertilization by combining an egg and sperm in a laboratory dish manually and then transferring the embryo to the uterus.
- **Surrogacy:** Surrogacy is an ART process, where an intending couple commissions a surrogate mother to carry their child.

6.4. STEPHEN HAWKING

Why in news

- Recently, a known theoretical physicist of his time, Stephen Hawking passed away at the age of 76.
- He suffered from amyotrophic lateral sclerosis, or ALS (also known as Lou Gehrig's disease).

Contribution of Stephen Hawking

Hawking-Penrose theorem / Big Bang Theory

- **Sir Roger Penrose and Stephen Hawking in 1970** proved in a theorem that Einstein's General Relativity must break down at a certain point in Space-time under certain generic physical conditions. This point is called 'Singularity' which inside a Black Hole indicate towards the beginning of the Universe. Big Bang is now the most widely accepted theory of the origin of the universe.

Information Paradox, or Hawking Paradox,

- By using Quantum Mechanics in the General Relativistic realm, he showed that Black Holes can radiate and has temperature. Emission is similar to something escaping from Black Holes. He also showed that because of the emission of this thermal radiation or **Hawking Radiation**, the black hole would lose energy and eventually disappear or “evaporate”.

Amyotrophic Lateral Sclerosis (ALS)

- ALS is a neurodegenerative condition, that attacks the motor nerve cells in the brain and spinal cord, hampering their ability to communicate with muscles and control voluntary movements, leading to eventual paralysis.
- ALS is very rare, occurring on average among two new cases per 100,000 people every year, most typically among individuals aged between 55 and 65.
- There is currently no cure or treatment that halts or reverses ALS

Singularities: Points where space time appeared to be infinitely curved.

Albert Einstein's in his **Theory Of General Relativity 1915**, suggested the existence of **black holes** — an object whose gravitational pull is so intense that once something passes a region known as the event horizon, there's no escape.

Quantum theory: It describes the behaviour of very small particles, those smaller than an atom, like protons or electrons, or the even smaller ones like quarks.

General relativity: It describes how gravity works around massive objects like planets, stars and Black Holes.

- If the paradox is true, it would require some radical revision of physics as it left two pillars of modern physics quantum mechanics and Einstein's general theory of relativity irreconcilable.
- This could also open a path towards the final unified theory of Physics called 'Quantum Gravity' or more popularly 'The Theory of Everything'.

Hawking-Hurtle state

- Hawking with colleague James Hurtle developed a Quantum Mechanical model of the Universe that says the Universe is self-contained (like Earth surface which has no starting point) but has No Boundary (We can't fall from the edge of Earth). So Universe is finite but boundary-less (Like Earth surface having finite area but no edge).

Breakthrough Initiative

- It was launched by Russian tech investor **Yuri Milner** and **cosmologist Stephen Hawking**, to explore the Universe, seek scientific evidence of life beyond Earth. Various component of initiative are:
 - **Breakthrough Listen Project:** It's a \$100 million program of astronomical observations to survey one million stars, the galactic plane and 100 neighbouring galaxies in the search for intelligent life.
 - **Breakthrough Message:** It's a \$1 million competition to design a message representing Earth, life and humanity that could potentially be understood by another civilization.
 - **Breakthrough Watch:** It's multi-million dollar astronomical program to develop Earth- and space-based technologies that can find Earth-like planets in our cosmic neighborhood – and try to establish whether they host life.
 - **Breakthrough Starshot:** It's a \$100 million research and engineering program aiming to demonstrate proof of concept for a new technology, enabling ultra-light unmanned space flight at 20% of the speed of light and to lay the foundations for a flyby mission to Alpha Centauri within a generation.

6.5. GSAT-6A

Why in news

Recently, GSAT-6A was launched on board the GSLV F08, from the Satish Dhawan Space Centre at Sriharikota.

Highlight

- Launch marked the **12th flight of Geosynchronous Satellite Launch Vehicle GSLV-F08** and sixth flight with the **indigenous Cryogenic upper stage**.
- GSAT-6A, similar to GSAT-6, is a high-powered **S-band communication** satellite which would help improve mobile communications to handheld devices, as well as network management techniques useful in satellite-based mobile communication applications.
- However, **ISRO lost contact with its communication satellite GSAT-6A.**



The GSAT-6A is scheduled to be launched from Sriharikota in Andhra Pradesh on march 29. (ISRO)

AIMING HIGH

- | | |
|---|---|
| <ul style="list-style-type: none"> ▶ GSAT-6A, similar to GSAT-6, is a high power S-band communication satellite ▶ It is designated for the use of the Armed Forces ▶ Mission Life: 10 years ▶ Handheld ground terminals | <p>The satellite will help demonstrate to and develop technologies like:</p> <ul style="list-style-type: none"> ▶ Unfurling of a 6 metre S-Band antenna ▶ Network management techniques useful in satellite based mobile communication application |
|---|---|

6.6. COPERNICUS PROGRAMME

Why in News?

India and the European Union recently signed an agreement that will enable them to share earth observation data from each other's satellite.

About the Arrangement

- **Copernicus Programme** is Earth observation programme headed by the European Commission (EC) in partnership with the European Space Agency (ESA).
- India will get **free, full and open access to the data from the Copernicus Sentinel family of six satellites.**
- **Reciprocally** India will provide free, full and open access to the **data from ISRO's land, ocean and atmospheric series** of civilian satellites (Oceansat-2, Megha-Tropiques, Scatsat-1, SARAL, INSAT-3D, INSAT-3DR) with the **exception of commercial high-resolution satellites data.**
- The services address **six thematic areas:** land, marine, atmosphere, climate change, emergency management, and security.

6.7. AIR-BREATHING ELECTRIC THRUSTER

Why in news?

Recently European Space Agency (ESA) fired world's first ever air-breathing electric thruster which could keep satellites in low orbit for longer time.

What is Air-Breathing Electric Thruster or Ion Thruster?

- It is an ion thruster which uses **Air Breathing Electric Propulsion (ABEP) or RAM electric propulsion** method.

How does ABEP works?

- ABEP sucks in air molecules from top of the atmosphere instead of using on-board propellant.
- Then it gives these molecules an electric charge and accelerates them.
- Finally, it ejects the ionized molecules back into space which causes thrust.

Significance of ABEP

- The new system is very significant as it **reduces the weight of the satellite**, thus **reducing the consumption of fuel.**
- **It extends the stay of satellites in space** to almost indefinite time and also opens the **doors for deep space exploration.**

6.8. MICRO-LED: THE NEXT-GEN DISPLAY TECHNOLOGY

Why in news?

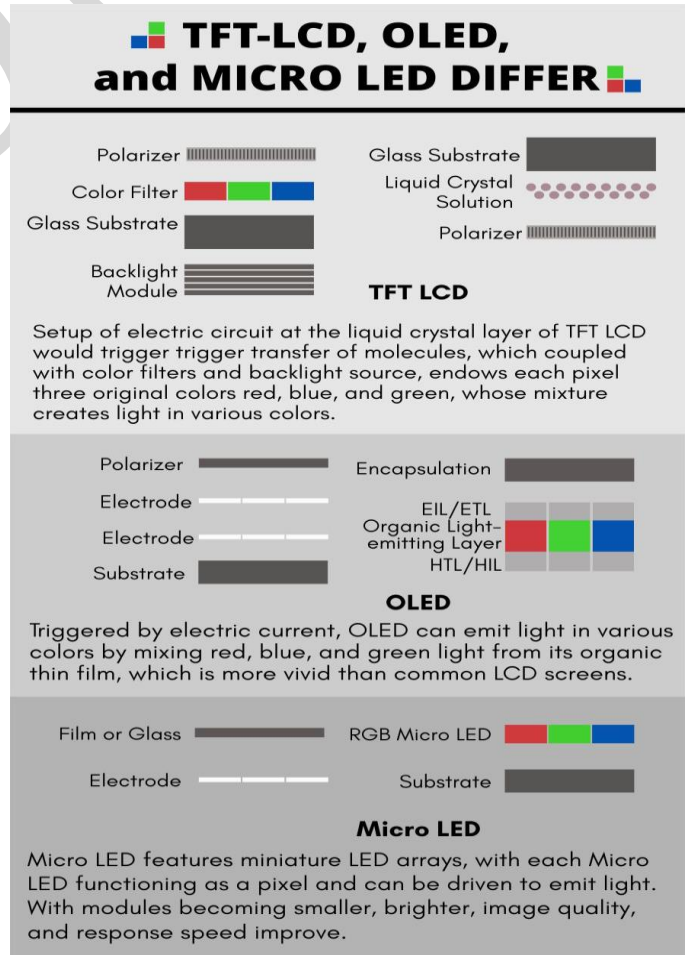
Samsung recently demonstrated a prototype MicroLED based TV of 146 inches display.

About MicroLED

- It is an emerging flat panel display technology in which displays consist of arrays of microscopic LEDs forming the individual pixel elements.
- These are simply traditional LEDs shrunk down and placed into an array. The LED technology is not new but manufacturing a panel array using such tiny components is very difficult and currently not commercially viable over OLED.

OLEDs and MicroLEDs

- OLEDs are self-emissive, which means they requires no backlight; instead, it lights each individual pixel as needed. Like OLED, Micro LED too don't need backlight.
- OLEDs are made of organic materials that age, resulting in a decrease in luminance over time,



with the potential for uneven ageing. MicroLEDs being inorganic (gallium nitride) are not as susceptible to ageing.

- This switch from organic to inorganic also reduces the need for a polarizing and encapsulation layer, making panels thinner.
- The OLED manufacturing process also limits the possible screen shapes and sizes. The MicroLED technology are “modular” in nature which are flexible to configure any size.
- MicroLEDs are more power-efficient than OLEDs.

6.9. COLD FUSION REACTOR

Why in News?

India is taking steps to start research into **Cold Fusion Reactor**.

Cold Fusion Reactor

- Cold Fusion Reaction or Low Energy Nuclear Reaction (LENR) technology is nuclear fusion **supposedly occurring at or close to room temperature** and is still in **research phase**.
- It is a form of energy generated **when hydrogen interacts with various metals like nickel and palladium**.
- Cold fusion seeks to **produce nuclear energy without harmful radiation**, complex equipment and the application of very high temperatures and pressures.

Comparison Between Cold Fusion Reactor and Nuclear Fusion/ Fission Reactor	
Cold Fusion Reaction	Nuclear Fission/Fusion
No radioactive material is used as raw material	Radioactive material is used
Uses weak nuclear forces	Uses Strong Nuclear Force
Uses slow neutrons with energy below 1 eV	Uses fast neutrons with energy 1 MeV
No radioactive waste or radiation is generated	Radioactive waste and radiation

Potential Benefits

- LENR technology could be used to **build vehicular and at-home nuclear reactors** that provide both heat and electricity.
- Radioactive materials can be **transmuted to benign elements**, promising a path to **ridding the planet of thousands of tons of radioactive waste**.
- **Ultra-clean and Energy Dense:** Cold fusion energy generators will not need to **be connected to an electrical grid**. Small and portable power units will provide **energy on-demand in any location**.

6.10. NOVEL MATERIAL TO CONVERT WASTE HEAT TO ELECTRICITY

Why in news?

Recently, a team of researchers from **Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)** have developed a novel material.

About Silver Copper Telluride (AgCuTe)

- It is a **thermoelectric material** which can be used for **converting waste heat into electricity** as it exhibits **poor conductivity in 25-425 degree C range** but shows **good electrical conductivity**.
- Silver, Copper and Tellurium in the material have different properties which have resulted in successful experiment.
- Properties –
 - **Tellurium:** Its atoms are **strongly bound** and the lattice is very rigid which provides a conduction channel for holes thus rendering **good electrical conductivity** to the compound.
 - **Silver and Copper:** contribute to low thermal conductivity. Over 170-degree C, both silver and copper ions flow like liquid within the rigid tellurium sublattice, thereby reducing the thermal conductivity to the level of glass without affecting the hole (electrical carrier) transport.

- Significance:
 - AgCuTe has the **efficiency of 14%** to convert heat into electricity which can be used to avoid loss of about **65% of the utilized energy which is wasted as heat.**
 - The development of AgCuTe could be very helpful for **automobile industry, chemical and thermal power plants, steel plants, waste to energy plants** etc.

6.11. VATERITE - RARE MINERALS IN PLANTS

Why in News?

- Vaterite, a rare and unstable mineral, was found on the leaves of a number of alpine plants. This is the first-time rare minerals have been found to be associated with the plants.

About Vaterite

- Vaterite is a mineral, a **polymorph** (a solid chemical compound that exists in more than one crystalline form) of calcium carbonate (CaCO_3).
- Being unstable in Earth's humid atmosphere, it often reverts to more common forms of calcium carbonate, such as calcite.
- Vaterite is often associated with outer space and on earth it is found in some sea and freshwater crustaceans, bird eggs, the inner ears of salmon, meteorites and rocks.
- Its special properties make it a **potentially superior carrier for medications** due to its high loading capacity, high uptake by cells and its solubility properties that **enable it to deliver a sustained and targeted release of therapeutic medicines to patients.**

6.12. GALLENE

Why in news?

Researchers have isolated a 2D form of soft metal gallium, called "gallenene," which could make thin and efficient metallic contacts in electronic devices.

More about news

- Reducing a regular three-dimensional material in two dimensions can fundamentally change its electrical, magnetic, physical or chemical properties.
- Apart from graphene scientists have created 2D versions of materials such as black phosphorus, molybdenum disulfide and chromium trichloride.
- Gallenene is first metal to be created in 2D. Near 2D metals are difficult to extract, since these are mainly high-strength, uncoated and layered structures. So Gallenene is an exception that could save the need for metals in the 2D world.
- As Gallenene binds semiconductors well and can now be created using a relatively simple technique, it could be used as an efficient nanoscale electronic metal contact, a field that currently does not have many 2D metal options for this type of applications.

6.13. RYDBERG POLARONS: A NEW STATE OF MATTER

Why in news?

An international team of physicists have successfully created a "giant atom" and filled it with ordinary atoms, creating a new state of matter termed "**Rydberg polarons**".

How was the new polaron created?

- It uses ideas from two different fields: Bose Einstein Condensation and Rydberg atoms.
- A BEC (Bose Einstein Condensate) is a liquid-like state of matter that occurs at very low temperatures. A BEC can be perturbed to create excitations which are akin to ripples on a lake.
- A 'Rydberg atom' is an atom in which an electron has been kicked out to a very large orbit.

- In this work, Laser light on a BEC of strontium atoms is used. This excites an electron into a large orbit, forming a Rydberg atom. This orbit is large enough to encircle many other strontium atoms inside it.
- As the electron moves around many strontium atoms, it generates ripples of the BEC. The Rydberg atom becomes inextricably mixed with these ripples and forms a new super-atom called a 'Rydberg polaron'.

Use of Rydberg polarons

- It will be helpful in cosmology. Some theories of dark matter postulate that it is a cosmic Bose Einstein Condensate. If we are indeed living in an invisible all-pervading Bose Einstein Condensate, this experiment can suggest ways to detect it.
- This new, weakly bound state of matter is a new possibility of investigating the physics of ultracold atoms.

6.14. SCIENTISTS FOUND RARE 'ICE-VII' ON EARTH

Why in news?

Scientists detected the first ever samples of naturally occurring ice-VII on Earth inside Diamonds.

More about ice-VII

- The common ice is called ice-I, which has hexagonal crystal arrangement that causes it to have lower density than water. Compressing ice can change the shape of the crystals, turning ice-I into ice-II (rhombus-shaped crystals), ice-III (tetragonal crystals), and so on.
- Ice-VII has cubic crystal arrangement with 1.5 times denser than ice-I.
- It requires both low temperature and high pressure exceeding 30,000 atmospheres (3 gigapascals) for ice-VII to form. The only place such pressure can be achieved is deep in the Earth's mantle, but the temperature is very high for ice to form there.
- Diamonds often pick up molecules during their formation deep in the Earth. The trapped water inside can become super-rare ice-VII in such high pressure.

6.15. DISEASE 'X'

Why in news?

The World Health Organisation (WHO) has issued a global alert for 'Disease X'.

More about the news

- WHO in its 2018 annual review of the **Blueprint priority diseases** has listed this new and potentially dangerous pathogen along with eight better-known diseases such as MERS and Marburg Virus, that could possibly spark an international epidemic.
- The Blueprint review lists diseases and pathogens to prioritise for research and development. These diseases pose major public health risks, and further research and development is needed, including surveillance and diagnostics.

What is Disease X?

- "Disease X" is not a newly identified killer pathogen. It's a so called "known unknown" — that could be created by different reasons like biological mutation such as Spanish Flu or HIV or it might be spawned by a terror attack, or simply an accident.
- Disease X represents the knowledge that a serious international epidemic could be caused by a currently unknown pathogen.

6.16. INTERSTITIUM

Why in news?

A new human organ called Interstitium has been identified by the scientists. Excluding Interstitium, **79 organs** have been identified within human body by now.

Details about Interstitium

- They are **fluid filled compartments** found beneath the skin, as well as lining the gut, lungs, blood vessels and muscles, and join together to form a network supported by a mesh of strong, flexible proteins.
- They were earlier considered as dense connective tissue.
- They may act as “shock absorbers” that protect body tissues from damage.
- This newly discovered organ may help in understanding of the spread of cancer in human body.
- Interstitium is among one of the largest organs of human body.

Why the organ was not located earlier?

The traditional methods for examining body tissues had missed the interstitium because the “fixing” method for assembling medical microscope slides involves draining away fluid - therefore destroying the organ’s structure.

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7. SOCIAL

7.1. INTEGRATED SCHOOL EDUCATION SCHEME

Why in news?

Government has decided to subsume Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE) which were operational since more than 15 years under an integrated school education scheme.

Objectives of the Scheme

The integrated scheme will be in place from 2018 to 2020, with an estimated allocation of Rs. 75,000 crores over the period, a 20% increase over the current allocation. The objectives include:

- Provision of quality education and enhancing learning outcomes of students;
- Bridging Social and Gender Gaps in School Education;
- Ensuring equity and inclusion at all levels of school education;
- Ensuring minimum standards in schooling provisions;
- Promoting vocationalization of education;
- Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009; and
- Strengthening and up-gradation of State Councils for Educational Research and Training (SCERTs)/State Institutes of Education and District Institutes for Education and Training (DIET) as nodal agencies for teacher training.

Potential Benefits

- **Flexibility to States/UTs** to plan and prioritize their interventions within the scheme norms and the overall resource envelope available to them.
- **Integrated administration looking at 'school' as a continuum**- It will help improve the transition rates across the various levels of school education and aid in promoting universal access to children to complete school education. There has been inclusion of senior secondary levels and pre-school levels in support for school education for the first time.
- **Enhanced Capacity Building of Teachers** through strengthening Teacher Education Institutions like State Council of Educational Research and Training (SCERT) and District Institute for Education and Training (DIET).
- It would lead to an **optimal utilization of budgetary allocations** and effective use of human resources and institutional structures created for the erstwhile Schemes.
- **Other benefits** include an enhanced use of technology in education, support 'Swachh Vidyalaya', improved quality of infrastructure in schools, preference to Educationally Backward Blocks, etc.

Sarva Shiksha Abhiyan (SSA)

SSA is being implemented since 2001 for universalization of elementary education. After enactment of Right to Free and Compulsory Education Act 2009 which confers the right to elementary education on all children, in the age group of 6-14 years, SSA became the central programme to fulfil its objectives.

Rashtriya Madhyamik Shiksha Abhiyan

- RMSA was launched in 2009 with the objective to enhance access to secondary education and improve its quality.
- The scheme envisages to enhance the enrolment by providing a secondary school with a reasonable distance of habitation, with an aim to ensure GER of 100 per cent and universal retention by 2020.

Centrally Sponsored Scheme for Teacher Education:

- **Strengthening Teacher Education:** The Centrally Sponsored Scheme for Teacher Education was initiated in 1987 pursuant to the formulation of the National Policy of Education, 1986. It aims to establish District Institutes of Education and Training (DIETs) in all districts created up to 2011, strengthen Colleges of Teacher

Education (CTEs), Institutes of Advanced Studies in Education (IASEs) and establish Block Institutes of teacher education (BITEs) in identified SC/ST/ minority concentration districts.

- **Quality in Teacher Education:** Creation of Separate Cadre for teacher educators and strengthen the cadre of teacher educators with a view to achieving planned and co-ordinated development of the teacher education system throughout the country,

7.2. RASHTRIYA UCHCHATAR SHIKSHA ABHIYAN

Why in news?

Recently Cabinet Committee on Economic Affairs (CCEA) approved continuation of centrally-sponsored Rashtriya Uchchatar Shiksha Abhiyan (RUSA) till 2020.

Important Initiatives under RUSA 2.0

With a view to ensure greater resource flow to the State higher education sector, RUSA 2.0 will encourage states and institutions to undertake projects in a public-private partnership mode based on viability gap funding

- It seeks to increase gross enrolment ratio by 30 per cent during this period, creation of 70 new model degree colleges and 8 new professional colleges.
- Besides, it seeks to enhance quality and excellence in 10 select State universities and 70 autonomous colleges, providing infrastructural support to 50 universities and 750 colleges.
- An **on-line virtual platform of infrastructure** and equipment (inventory) will be created so that institutions can share these resources.
- The scheme will give **priority to the Aspirational Districts**, identified by the NITI Aayog to improve access and equity through improved enrolment and retention.
- Creation of **National Higher Education Resource Centre (NHERC)** to be a resource centre for Research, Policy Advocacy, Capacity Building and providing well-informed policy and evidence-based research inputs.
- Components of Institutional Reforms and Restructuring, Capacity Building and Management Information Systems have been merged into one single component.
- It will enhance ongoing **mechanisms for Monitoring and Evaluation** and look at innovative ways of scaling up Monitoring and Evaluation, such as Fund Tracker, Reform Tracker, Bhuvan-RUSA and PFMS, so that projects can be completed by their scheduled time.

About RUSA

- It is an overarching Centrally sponsored scheme, launched in 2013, operated in a mission mode which seeks to provide strategic funding to eligible state higher educational institutions.
- Transformative reforms such as governance, academic, affiliation and accreditation reforms are pre-requisites in the implementation of the scheme in State higher educational institutions.
- The funding to States is based on critical appraisal of State Higher Education Plans which are required to address each State's strategy to address issues of equity, access and excellence in higher education.
- All funding under the RUSA are norm based, and future grants are outcome dependent.

7.3. NATIONAL ACADEMIC DEPOSITORY (NAD)

Why in news?

The recently launched NAD has been integrated with the e-SANAD portal.

About NAD

NAD will be a 24x7 online store house of academic awards digitally lodged by various academic institutions/school boards/eligibility assessment bodies. Employers and other person with prior approval of the concerned student can verify the authenticity of any academic award.

Other Details

- All the Central and State Universities, Deemed to be Universities, CBSE, State School Education Boards

e-Sanad is a project aimed at online submission/verification of documents with an ultimate object to extend contactless, cashless, faceless and paperless document attestation service for apostille and normal attestation to applicants in India (to be extended to Indians residing abroad as well in a phased manner). It is designed and developed by **NIC**. The e-Sanad service will start with CBSE depository.

Parinam Manjusha

- It is **CBSE's digital repository** of academic records
- Employers and Educational Institutions can use this repository **to verify academic records of CBSE students online.**
- The digital academic records of this repository will also be available to students through **Digi Locker.**

will participate in the depository.

- The UGC will be authorised body to operationalise the NAD.
- It will comprise of two inter-operable digital depositories i.e. NSDL Database Management Ltd (NDML) and CDSL Venture Ltd (CVL).
- NAD being an online, permanent and safe record will eliminate the need for issuing duplicate academic awards and any risk of losing, spoiling, damaging or forging the awards, will provide convenience in the availability of academic awards.

7.4. STATUS OF ANGANWADI CENTRES

Why in news?

Recently, Parliamentary Standing Committee on Human Resource highlighted the infrastructure status of Anganwadi Centres.

Highlights of the report

- There is a gap between the number of sanctioned and operational AWCs. The gap is maximum in the states of Bihar (20%) and J & K (7.3%).
- Around 4.5 lakh Anganwadi centres lacked both drinking water and toilet facilities. It adds that nearly 25 per cent of Anganwadi centres don't have drinking water facilities and 36 per cent of these don't have toilets.
- Large number of posts of supervisors, AWWs and AWHs are lying vacant.

About Anganwadi Centres (AWCs)

- It is a courtyard play centre - located within the village or a slum, for providing various services as specified under ICDS scheme.
- **Responsibilities** of Anganwadi Workers(AWW) include quick survey of all the families, organise non-formal pre-school activities at AWCs, campaign for family planning & birth preparedness, check the child's nutrition progress (**National Nutrition Mission**), to assist in preparation of Village, Health Plan **Depot Holder** of Medicine Kit/Contraceptives of ASHA/AMN & under ICDS, assist in implementation of Kishore Shakti Yojana (KSY), etc.

Challenges faced by AWCs

- **Shortage of fund and implementation tools:** various reports highlighted about the problem of delay in receiving funds for necessary items.
- **Incentives**— AWWs are classified as 'voluntary' workers and their pay is treated as an 'honorarium', despite being worked for over 10 hours daily. They even fulfil the extra duties like surveying public toilets, pregnant women, and supervising the quality of drinking water.
- **Lack of supervision:** Anganwadi centres have very less or nil supervision by the higher officials, which leads to poor performance and implementation of ICDS.
- **Inadequate knowledge** – Various studies show that Anganwadi workers don't have any knowledge regarding the revised norms for calories, protein and funds allocated for nutrition for each beneficiary.
- **Social-Religious prejudices:** A report by the Institute of Human Development showed how caste and religious prejudices in many villages have affected service delivery at Anganwadi centres, due to caste-based discrimination against children, as well as lack of cooperation between Asha workers and AWWs of different castes and communities.
- **Corruption:** It is being noticed that there is corruption in the appointment of Anganwadi workers, black marketing of rations, illegal diversion of medical kits and funds.

Integrated Child Development Scheme (ICDS)

- Launched in 1975, for children (6 months to 6 years) and pregnant & lactating mothers irrespective of their economic and social status.
- Categorised as **Core Scheme** under Centrally Sponsored Scheme.
- Intended to achieve the **Goals 2 and 3 of SDGs** (improvement in nutrition and ensuring healthy lives & promoting well-being for all at all ages respectively).
- Provides an **integrated package of six services** which include; i) Supplementary nutrition programme; (ii) Referral services (iii) Pre-school non-formal education (iv) Immunization; (v) Health check-up; (vi) Nutrition & health education.
- Services **related to health** and are provided by Ministry/Department of Health and Family Welfare.
- 5-tier monitoring and review mechanism at National, State, District, Block and Anganwadi Levels.

Way forward

- **PPP modal for Anganwadi-** Haryana based modern and model Anganwadi centre '**NandGhar**' -build on the lines of public private partnership should be extended to other states.
- **Regular training** should be provided to AWC workers and their supervisors. Further they should also get refresher training to handle various register works independently.
- **Comprehensive assessment** of all the services and facilities along with knowledge and practice of the AWWs is need of the hour.
- **Dedicated programme** for the extension of IT-enabled services such as smartphones and tablet devices to update data on child nutrition, unique identification code and geo-mapped of Anganwadi centres, should be rolled out on pan Country scale.

7.5. CHILD MARRIAGE NUMBERS DROP SHARPLY

Why in news?

- The proportion of girls getting married in India has nearly halved in a decade, the United Nations children's agency UNICEF said recently.
- 25 million child marriages were prevented worldwide in the last decade, with the largest reduction seen in South Asia — where India was at the forefront.

Drivers of high prevalence

- **Deeply entrenched and widely practised social customs** with wide social approval is a major, often the most critical, driving factor of high prevalence of child marriage in states such as Andhra Pradesh, Rajasthan and Gujarat.
- **Poverty, high wedding costs and other economic considerations:** political economy of child marriage is also determined by high demand for labour and high female work participation in certain geographic areas.
- **Lack of easy access to schooling, especially at secondary level:** According to UNICEF, a girl with 10 years of education has a six times lower chance of being pushed into marriage before she is 18.
- **Political patronage** due to social acceptance as politicians find it difficult to oppose the practice of child marriage as it may mean losing votes and support.
- Child marriage is also widely reported to be used as a **disguise to traffic girls from poor and tribal families** for either the sex trade or as cheap labour.

Efforts to reduce child marriage

- The Women and Child Development Ministry has taken a number of steps to enhance the status of girl child and to address the problem of child marriage:
 - Every year, State Governments are requested to take special initiative to delay marriage on AkhaTeej— the traditional day for such marriages, by coordinated efforts.
 - It has developed a convergent national strategy- "**National Strategy Document on Prevention of Child Marriage**" and is currently drafting a plan of action on child marriage to guide all states in the implementation of strategies to prevent the problem. The suggested strategic areas of intervention to prevent child marriage are-
 - **Law Enforcement- The Prohibition of Child Marriage Act**, main piece of legislation to prevent child marriage, 2006 makes it illegal for girls to marry under 18 years and for boys under 21 years. Such laws need to be enforced by ensuring appointment of Child Marriage Prohibition Officers, awareness of the law among communities and individuals, capacity building for the same, etc.
 - **Access to quality education** and other opportunities since Education can be an important refraining factor from early marriage.
 - **Changing mindsets and social norms-** Perceptions about gender and the role of women in the family and society, practices around marriage and puberty, and wide acceptance that marriage should be performed after puberty all contribute to child marriage.
 - **Empowerment of adolescent girls** through schemes like **SABLA** which promote life skills training among girls.

- **Knowledge and Data** are at the base of shaping evidence-based interventions.
- **Developing Monitorable Indicators** in order to understand the impact of interventions on prevention of child marriage.
- Other laws that may provide protection to a child bride include the Juvenile Justice (Care and Protection of Children) Act, 2000, the Domestic Violence Act, 2005, and the Protection of Children from Sexual Offences Act, 2012.

7.6. PASSIVE EUTHANASIA

Why in News?

The Supreme Court has recently given judgement on Passive Euthanasia.

More about the Judgement

- The bench upheld that the **fundamental right to life and dignity includes right to refuse treatment and die with dignity** because the fundamental right to a "meaningful existence" includes a person's choice to die without suffering (including terminally ill).
- The judgment includes **specific guidelines to test the validity of a living will**, by whom it should be certified, when and how it should come into effect, etc.
- The guidelines also cover a situation where there is no living will and how to approach a **plea for passive euthanasia**.
- A person need not give any reasons nor is he answerable to any authority on why he should write an advanced directive.
- But the judge held that **active euthanasia is unlawful**.

What is Euthanasia?

Euthanasia, also known as **assisted suicide**, and more loosely termed **mercy killing**, means to take a deliberate action with the expressed intention of ending a life to relieve intractable (persistent, unstoppable) suffering.

In **active euthanasia** a person directly and deliberately causes the patient's death. In **passive euthanasia** they don't directly take the patient's life, they just allow them to die. India is witnessing a debate on whether right to die is a part of right to life under **Article 21**.

Background

- The 196th Law Commission of India report in 2002 advocated passive euthanasia. However, it decided not to make any laws on euthanasia.
- In the Aruna Shanbaug's case in (2011), a major milestone, the Supreme Court decided to legalise passive euthanasia by means of withdrawal of life support to patients in a persistent vegetative state (PVS). According to the Court, the decision of the patient must be an informed decision.
- The Law Commission, later in its 241st report came out in favour of allowing withdrawal of life support for certain categories of people — like those in persistent vegetative state (PVS), in irreversible coma, or of unsound mind, who lack the mental faculties to take decisions.
- The Supreme Court guidelines form the law of the land regarding euthanasia, till the time. Active euthanasia is still not legal in the country.
- Recently, the Central government, objected to legalising the concept of 'Living Will' — an advance written directive to physicians for end-of-life medical care.

Related Information

- A '**living will**' is a concept where a patient can give consent that allows withdrawal of life support systems if the individual is reduced to a permanent vegetative state with no real chance of survival.
- It is a type of **advance directive** that may be used by a person before incapacitation to outline a full range of treatment preferences or, most often, to reject treatment.
- When a person is not in a position to give his consent for the keeping or withdrawing the treatment, two cardinal principles of medical ethics are crucial:
 - His wishes expressed in advance in the form of a living will, or the wishes of surrogates acting on his behalf (substituted judgment) are to be respected.
 - Beneficence which means acting in what is the patient's best interest and is not influenced by personal convictions, motives or other considerations.

Arguments in favour of Passive Euthanasia

- Some believe that every patient has a right to choose when to die similarly as they have right to life enshrined in the constitution.

- Proponents believe that euthanasia can be safely regulated by government legislation. Passive euthanasia has already been practised in various cases around the world.
- In case of palliative sedation, widely used across the world, many of the sedatives used carry a risk of shortening a person's lifespan. So, it could be argued that palliative sedation is a type of euthanasia.

Arguments against Passive Euthanasia

- Alternative treatments are available, such as palliative care and hospices. We do not have to kill the patient to kill the symptoms. Nearly all pain can be relieved.
- There is no 'right' to be killed'. Opening the doors to voluntary euthanasia could lead to non-voluntary and involuntary euthanasia, by giving doctors the power to decide when a patient's life is not worth living.
- The assumption that patients should have a right to die would impose on doctors a duty to kill, thus restricting the autonomy of the doctor. Also, a 'right to die' for some people might well become a 'duty to die' by others, particularly those who are vulnerable or dependent upon others.

7.7. DRAFT DIGITAL INFORMATION IN HEALTHCARE SECURITY ACT (DISHA)

Why in news?

Recently draft of Digital Information in Healthcare Security act (DISHA) was released by the Central Government.

Important Provisions

- It lays down that any health data including physical, physiological and mental health condition, sexual orientation, medical records and history and biometric information are the **property of the person who it pertains to**.
- It envisages a **health information exchange, a State Electronic Health Authority and a National Electronic Health Authority** which jointly will have responsibility to protect the privacy, confidentiality and security of the owner's digital health data.

Relevance of Digital Health Data

- The recent advances in computing technology can be exploited for better health. Smartphones could become advanced tools in the hands of thousands of patients and practitioners. Equipped with the right software, they could provide easily to use, out-of-the-box solutions to major medical challenges - preventing the over-prescription of medication, promoting patient self-care, introducing positive lifestyle changes and warning of the early signs of health problems.
- Use of big data analytics can help in identifying emerging social changes and lifestyle trends in the communities. Being forewarned of patterns of change will give health authorities time to respond. New technologies could also provide significant savings in healthcare costs through identifying inefficient and wasteful practices.

Various Government Initiatives within Digital Healthcare

- **e-Hospitals:** includes patient care, laboratory services, work flow-based document information exchange, human resources, and medical records management.
- **NIKSHAY:** a web enabled and case-based monitoring application, developed by the National Informatics Centre (NIC) to effectively monitor the Revised National Tuberculosis Programme (RNTCP). It also includes sms services to interact with patients.
- **Digital AIIMS:** an effective linkage between AIIMS, Unique Identification Authority of India (UIDAI) and the Ministry of Electronics and Information Technology (MeiTY) has been made within this. A unique identification number is generated for every patient visiting AIIMS on an Aadhar platform.
- **Mother & Child Tracking System (MCTS):** It is an initiative by the Ministry of Health and Family Welfare which uses information technology for ensuring healthcare and immunization services to pregnant women and children up to 5 years of age.

7.8. LAQSHYA PROGRAM

Why in news?

Ministry of Health and Family Welfare recently launched 'LaQshya' Program.

More about the Program

- 'LaQshya' will **improve quality of care during delivery** and immediate post-partum period thus providing **Respectful Maternity Care (RMC)** to all pregnant women attending public health facilities. This will reduce maternal and newborn morbidity and mortality.
- It aims at implementing 'fast-track' interventions for achieving tangible results within 18 months.
- A multi-pronged strategy has been adopted such as improving infrastructure up-gradation, ensuring availability of essential equipment, providing adequate human resources, capacity building of health care workers and improving quality processes in the labour room.
- It is being implemented at all Medical College Hospitals, District Hospitals and First Referral Unit (FRU), and Community Health Center (CHCs).
- The Quality Improvement in labour room and maternity OT will be assessed through NQAS (National Quality Assurance Standards).
- India has come a long way in improving maternal survival as Maternal Mortality Ratio (MMR) has reduced from 301 maternal deaths in 2001-03 to 167 in year 2011-13, an impressive decline of 45% in a decade.

7.9. SUVIDHA

Why in news?

Recently, Ministry of Chemicals & Fertilizers has launched 100% Oxo-biodegradable sanitary napkin, under the Pradhan Mantri Bhartiya Janaushadhi Pariyojana.

About SUVIDHA

- It is an **affordable sanitary napkin** launched to ensure '**Swachhta, Swasthya and Suvidha**' for the **underprivileged Women** of India.
- The initiative has been taken by **Department of Pharmaceutical** and has been manufactured by **Bureau of Pharma Public Sector Undertaking of India**.
- It has been launched on World Women's Day and is currently available at 3200 Janaushudhi Kendras.
- **Significance** –
 - **Accessibility**- The move is significant as it will increase accessibility. The recent NFHS (2015-16) data shows that about 4 out of 10 women do not use hygienic method of protection during menstrual cycle.
 - **Disposability**- According to Menstrual Health Alliance India data shows that around 13% of menstrual waste is thrown in open spaces such as rivers, lakes etc., 10% waste is disposed in toilets, 9% is burnt and 8% is buried.
 - **Menstrual Hygiene**- It would also prevent fungal infections, Reproductive Tract Infection, Urinary Tract Infection, Cervical cancer caused by unhygienic protection methods used during menstrual cycle and also make women less vulnerable to infertility.

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

It is a campaign launched by the **Department of Pharmaceuticals**, to provide quality medicines at affordable prices to the masses through special kendra's known as Janaushadhi Kendra.

Bureau of Pharma PSU of India

- It was established in 2008 comprising all the Pharma CPSUs under the Department of Pharmaceuticals.
- It brings about effective collaboration and cooperation in furthering the working and resources of these organizations.

7.10. GENDER PAY DISPARITY

Why in news?

Recently **World Bank report** indicated a bias towards men over women in the workplace, both in terms of hiring and salaries offered.

Related Data

- Globally, the unemployment rate for women stands at 6.2% in 2017, higher than the male unemployment rate of 5.5 per cent.
- In India there exists:
 - **Low Property right:** Women contribute almost 40% of agricultural labour but control only 9% of land.
 - **Financial Dependence:** Nearly half of the women do not have a bank or savings accounts for their own use, and 60% of women have no valuable assets to their name
 - **Low Economic Activity:** Women's contribution to the GDP is only 17% while the global average is 37%.
 - **International Labour Organisation (ILO) survey** in 2017 had ranked **India's Female Labour Force Participation (FLFP)** rate at 121 out of 131 countries in 2013.
 - **Reverse Trend:** Between 2004 to 2011 Indian economy grew 7%, however, instead of increase in female participation in the country's labour force, there was a decline in from over 35% to 25%.
 - India also ranked poorly at 108 on the **World Economic Forum's "Global Gender Gap Report 2017"**.
 - **According to Monster Salary Index, 2018, women in india earn 20% less than men.**

Monster Salary Index (MSI), 2018

- According to it, women in India earn 20% less than men.
- However, gender pay gap has narrowed by about 5% points from 24.8% in 2016 and there was a marginally inverted pay gap in the experience group of 3-5 years, where women earned more.

Increase in female enrolment in education:

According to some research, one plausible explanation for the recent drop in FLFP is that with the recent expansion of secondary education, as well as rapidly changing social norms in India, more working age young females (15 to 24 years) are opting to continue their education rather than join the labour force early.

Challenges Faced by working women

- **Legal Restriction:** According to a study by the International Monetary Fund (IMF), almost 90% of the 143 economies have at least one important, gender-based legal restriction.
- **Patriarchal attitudes:** From NSSO data of 2011, it was found that women from higher castes and higher income families spent less time working outside the house.
- According to the **2012 "Gender Pay Gap in the Formal Sector" report**, pay gap increases with women's age, work experience, educational qualifications and rise in occupational hierarchy.
- **Biased human capital model** in country which focuses on gender differences in skills, education and experience.
- **Workplace insecurity:** The rate of crimes against women in India stands at 53.9%
- **Other challenges:** Lack of attractive job alternatives and income security, inadequate travel and transport facilities, Societal perception of women who work long hours, lack of crèches facility at workplace etc.

Steps taken to close Gender Gap in India

Constitutional

- **Article 39 (d) under DPSP:** According to it, the state shall, in particular, direct the policy towards securing that there is equal pay for equal work for both men and women.

Judicial

- **Randhir Singh vs. Union of India and Grih Kalyan Kendra vs. Union of India-** SC held that the principle of "equal pay for equal work" as a constitutional goal and, therefore, capable of enforcement under article 32 of the constitution.

Legislative

- **Equal Remuneration Act of 1976-** aims to provide equal remuneration to men and women workers and to prevent discrimination on the basis of gender in all matters relating to employment and employment opportunities.
- **Maternity Benefit Act** was amended in 2017, to increase the duration of maternity leave from 12 weeks to 26 weeks.
- **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 [SHW ACT]:** it was enacted to implement the Vishakha Guidelines and to ensure a safe workplace for woman.
- **Other Steps:** Government of India's **MUDRA scheme** to support micro and small enterprises and direct benefit transfers under the **Jan Dhan Yojana** seeks to empower women. Women entrepreneurs account for about 78% of the total number of borrowers under MUDRA.

Way Forward

- **Formalization of Workforce** to create better job opportunities for women and streamlining labour laws.
- **Skill Development:** Vocational and technical training, life skills and financial literacy programmes for women to help them develop marketable skills and better decision-making abilities.
- **Mandating parental leave** rather than maternal leave will help women to reintegrate into the workforce after childbearing and allowing men to take on the responsibility of parenthood.
- **Step by Companies:** Corporate India need to step up and implement pragmatic policies to bridge the pay gap, change employee perception of a healthy work culture and foster equal opportunities.

7.11. GENDER VULNERABILITY INDEX

Why in news

Recently, first-ever gender vulnerability index (GVI) was released by Child development NGO Plan India.

Highlight

- Index is aimed at comprehensively understanding the dimensions of various **problems affecting children**, particularly girls, in difficult circumstances.
- It identifies the **challenges women face** with respect to four parameters — education, health, poverty and protection against violence
- Index can be used to **assist policy makers** mark out priorities.
- The study's dataset was **based on 170 indicators** for which data is available across all states, including Census 2011.
- Goa, Kerala and Mizoram are among the top three while Bihar, UP and Delhi are the bottom three states.

7.12. NIRBHAYA FUND

Why in news?

Recently, Government has approved projects worth Rs.2919 crore under Nirbhaya Fund for creating 'safe cities'.

More from news

- The move is aimed at **women safety** in public spaces and **quick response systems** to create deterrence against crime after the recommendations of **Empowered Committee**.
- The initiative will take shape in 8 cities namely – Delhi, Mumbai, Chennai, Ahmedabad, Kolkata, Bengaluru, Hyderabad and Lucknow.
- Plans for safe cities have been prepared in accordance and **coordination with Municipal and police commissionerates** of these cities.
- The proposals have been approved for a **period of three years** on a **cost sharing basis** of 60:40 ratio with states. The plan is to enhance the use of technology for surveillance, training investigation officers and creation of safety islands in vulnerable places.

Nirbhaya Fund

- It was created after its **announcement in 2013** Union Budget with a corpus of 100 crore for empowerment and safety of girl child and women.
- It is administered by Dept of Economic Affairs.

7.13. WORLD HAPPINESS REPORT 2018

Why in news?

Recently World Happiness Report was released by United Nations Sustainable Development Solutions Network.

About World Happiness Report, 2018

- It is an **annual publication** which ranks countries based on their **level of happiness**.

United Nations Sustainable Development Solutions Network

It has been operating since 2012 under UN Secretary-General.

It mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of SDG and the Paris Climate Agreement.

- This is the **sixth edition** of World Happiness Report while the first report was released in 2012. The report **ranks 156 countries** by happiness level and 117 countries by the happiness of their immigrants.
- Key **variables of well-being** are - GDP per capita, social support, healthy life expectancy, social freedom, generosity, and absence of corruption.
- The main **focus of this year's survey** apart from the above-mentioned variables is **migrations** within and between countries.

Key Findings of the Report

- Finland has topped the report replacing Norway followed by Denmark. Burundi is the unhappiest country preceded by Central African Republic.
- Ten happiest countries are also top eleven spots of happy immigrants.
- The countries with the happiest immigrants are not the richest countries instead the countries with a more balanced set of social and institutional support for better lives.

India has been ranked low at 133rd position highlighted by low scores on generosity, perception on corruption, freedom to make life choices, life expectancy etc.

- It lagged far behind neighbouring countries such as China (86th), Pakistan (75th) and Nepal (101st) and behind all the SAARC nations.

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8. CULTURE

8.1. SAORA PAINTINGS

Why in news?

Recently, it was reported that the demand for Saora paintings of Odisha has been rising in international and domestic markets.

Saora Paintings

- Saora Paintings are **traditional murals** (made on walls) and are locally called as **Idital** and the painters are known as **iditalmar**.
- **Features of Saora Paintings** –
 - They are painted with **figurative patterns and figures** which are drawn in stylized manner.
 - Each painting has a **rectangular frame** and has icons of **deities and motifs from nature**.
 - **Purpose of the painting** – to please Gods and ancestors, averting diseases, promoting fertility, honour deceased etc.
 - **Central theme** – Idital is a house which is represented by a circle. The figures are placed in panels like circles, triangular around the Idital.
- **Process of making Saora Painting**
 - Before painting the walls are cleaned and smeared with locally available red soil and the rice paste is applied as white colour. The Iditalmars follow a stringent ritual by eating one meal a day for 10-15 days till the painting is complete.
 - For paintings, a brush is made from a bamboo split, black color from soot generated from the lamp. Sun dried rice powder for white, all these are mixed with water and juice from roots and herbs to make a paste.

Saura Tribe

- Saura (also called Saora or Lanjia Saora) are one of the tribal communities who inhabit remote ranges near Bansadhara River in **southern Odisha**.
- They have their racial affinity with the proto-Australoid.
- They speak an ancient Mundari dialect of their own called 'saora'.
- Saoras depend on land and forest for their subsistence and practice shifting cultivation.
- They are enumerated as one among the 13 Particularly Vulnerable Tribal Groups in Odisha.

8.2. KUTHIYOTTAM

Why in news?

- Kerala State Commission for the Protection of Child Rights registered a suo motu case in connection with the **Kuthiyottam ritual**.

Background

- The Kuthiyottam ritual has been under scanner for **violating child's rights and not taking child's consent into account**.
- Kerala State Commission for Protection of Child Rights (KSCPCR) banned the ritual at Chettikulangara temple in Alappuzha district in 2016 citing violation of child rights.

About Kuthiyottam Ritual

- The Kuthiyottam ritual is usually performed every year during the **Pongala festival at the Attukal Bhagavathy Temple in Thiruvananthapuram, Kerala**.
- Nearly 1,000 young boys undertake a seven-day penance before Pongala day. These boys are said to represent the wounded soldiers of the goddess.
- The boys have to observe strict discipline and stay inside the temple for seven days. They are made to wear **thin towels (thorthu)**.
- They have to sleep on the floor, have measly meals and bathe three times a day. They also have to prostrate 1,008 times before the deity
- The ritual also involves piercing the child's side with a small hook and knotting a thread through it to symbolise their bond with the Goddess.

Pongala is a harvest festival of Tamil Nadu and Kerala. One of the most famous of them is Attukal Pongala. It is also considered as **the largest religious congregation of women in the world**.

Pongala meaning 'to boil over', is a ritual in which women prepare a pudding made from rice, jaggery, coconut and plantains cooked together, and offer it to the goddess. The ritual can only be performed by women.

- This ritual is performed at various temples all across Kerala. It is also called **choral muriyal** in several parts of the state.

8.3. MADHAVPUR MELA

Why in news?

Recently, the famous Madhavpur Mela saw its first-ever cultural integration with the North-East.

About the Mela

- The Madhavpur Mela is an annual event at Madhavpur Ghed of Porbandar district in Gujarat.
- Madhavpur in Gujarat has its historical identity as a place where Lord Krishna married Rukmini.
- Madhavpur Mela shares its connect to the Mishmi Tribe of Arunachal Pradesh. The Mishmi Tribe traces its ancestry to the legendary King Bhishmak and through him to his daughter Rukmini.
- During the event, a jatha (group of people) of 150 people from North-East will visit the Mela as representatives of Rukmini's family.

8.4. NABAKALEBAR FESTIVAL

Why in news?

- **Recently, the President** released Rs 1,000 and Rs 10 commemorative coins on the occasion of Nabakalebar festival.

About the Festival

- This festival is symbolic recreation of wooden forms of the four deities at **Jagannath Temple, Puri**. Naba means new and the Kalebar is body.
- In Jagannath cult, there is a periodical renewal of the wooden forms of Jagannath, Balabhadra, Subhadra and Sudarshana.
- The soul or the Brahma is transferred from the old idols to their new bodies in a highly technical prescribed and secret method.
- The Nabakalebar festival is observed in a gap of 12 to 19 years.
- During this festival the annual Rathayatra becomes the Nabakalebar Ratha Yatra.

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9. ETHICS

9.1. ETHICS AND ORGAN DONATION

Organ donation is when a person allows an organ of theirs to be removed legally either by consent while the donor is alive or after death with the assent of the next of kin. This donation may be for research, or, for transplantation into another person. Some organs and tissues can be donated by living donors, such as a kidney or part of the liver etc. while most donations occur after the donor has died.

Ethical Issues Involved in organ transplantation

- **Justice versus benefit in allocation:** Due to shortage of donors, the question of who should get the organs - the one who is the sickest or the one who is waiting for long, or the one who can get benefited the most or to the richest person in queue – becomes an ethical dilemma
- **Individual beliefs system:** The treatment of body and its parts after death has great significance for an individual not only for religious and spiritual reasons, but also in terms of cultural and social perspectives.
- **Monetizing body parts:** Selling an organ for the need of money raises question of ethics and exploitation of poor sections. There are countries like Iran where buying a Kidney is legal.
- **Coercion:** In India, opt-in system is followed and only the willing donors can donate their organs but several times it is found that women have been forced to donate their organs to the male family members.
- **Non-informed donation:** Scandals of trafficking of organs raise issues regarding informed consent of the donor.
- **Potential risks of donation:** At times, donors are unaware of the potential risks and aftereffects they may undergo. The well-being of donor needs to be placed above than the recipient.
- **Non-universality:** The development and use of technology related to organ and tissue transplants is quite expensive and beyond the means of many people.

Stakeholders in Organ transplantation

- Person whose organs are being transplanted
- Person/Organisation to whom organs are being donated
- If the donor is dead, the kin of donor who is giving consent
- Doctor performing donation
- Society as a whole

Regardless of these issues, there are various positive values attached to organ donation as well:

- **Altruism:** the act of donation is a selfless act of giving a valuable thing to other
- **Saving of life:** Organ donation of a dead or dying part gives the gift of a new life to the receiver.

However, due to complex ethical issues involved in organ donation, the Government must try to regulate it. People should be encouraged to donate in case the benefits to patient and society is more than the harms to the donor. The step towards altruistic donation is good because it can check organ trafficking, as well as those who have to sell their organs out of poverty. The living donor should be tested psychologically as well to find out whether the consent is coerced or genuine. There should also be an opt-out system where people who are not willing to donate their organs might make a will about it.

9.2. ETHICS AND VANDALISM

Vandalism is an offence that occurs when a person or group of people **willingly destroy or deface public or private property without the permission of the owner**. The acts of vandalism may include burning shops, destroying vehicles, breaking windows, defacing billboards, or destructing public buildings, railway lines, etc. The cases of Vandalism have increased a lot in recent days such as destroying the statue of Lenin and Periyar, railway line destruction during Jat agitation, burning of buses during Padmavati movie protests etc. In India, Vandalism is a criminal offence which comes within the ambit of **Prevention of damage to Public Property Act, 1984 and Section 425 of IPC** which terms it as 'creating Mischief'.

Ethical issues involved in vandalism

- **Reduced social cohesion:** It may lead to **social tensions** in the society. Destruction of statues of leaders like Ambedkar, Periyar, or incidents like Babri Masjid demolition divides the society on caste and religious lines. The effects of such acts are long term.

- **Destroying common good:** Generally public property faces more destruction due to act of vandalism. This indirectly involves wastage of hard-earned tax-payers' money.
- **Mindless and permanent damage:** The purpose behind such acts may or may not be successful, but the loss is permanent e.g. the Jat reservation Agitation paralysed the whole machinery for several days and led to mindless destruction of public property but the outcome is not according to the will of the protestors.
- **Psychological effects** over minorities, women, children and other affected people. The recent vandalism over release of Padmavati movie led to bad impression over innocent minds of school going children. Several women got molested and passerby got abused during such acts of vandalism.
- **Impacts sanctity of a place:** Vandalism may lead to destruction of precious art and art forms. It destroys the aesthetic beauty of ancient inscriptions, and permanent damage to the monuments. The act of writing over walls of monuments, defacing the idol, spitting of chewed tobacco etc. are examples of such vandalism.
- **Legitimizes aggression:** because such acts generally go unpunished and are usually done in groups.
- **Reduces trust in the system:** When system is not able to stabilize such acts immediately and muscle power is able to silence critics the trust of people gets affected.
- **Represent degrading values:** Such acts represent the failure of society and education system as a whole, because they were unable to impart the basic virtues of respect, compassion, peace, and resolution of issues through dialogue mechanism.
- **Lack of patience and tolerance:** It shows lack of patience in getting justice or meeting their demands through proper channels.

Vandalism even for the sake of valid reasons cannot be justified because it represents lack of faith in judicial systems and constitutional provisions, unscientific temperament, creation of panic and chaos in the society, disrespect for heritage, and violation of fundamental rights of privacy, choice and movement of other people.

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10. MISCELLANEOUS

10.1. WOMEN ENTREPRENEURSHIP PORTAL AND UDYAM SAKHI PORTAL

Why in news?

Recently, **NITI Aayog** launched Women Entrepreneurship Portal (WEP) and **Ministry of MSME** launched Udyam Sakhi Portal on World Women's Day.

About the Women Entrepreneurship Portal

- It will provide vibrant entrepreneurial ecosystem free of gender-based barriers and cater to all age-groups along with women who take break in their career and prepare them for the next wave of New India.
- It aspires to substantially **increase the number of women entrepreneurs** by providing them opportunities through services such as credit evaluation of women-led startups by CRISIL and potential equity investments through an INR 10 crore fund established by DICE Districts
- Some aims of WEP includes - industry linkages, increasing visibility of existing schemes, identify and address issues, developing a centralised national database for registering women entrepreneurs etc.

About Udyam Sakhi Portal

- The portal has been launched for **nurturing social entrepreneurship** creating business models revolving around **low-cost products and services** to resolve **social inequities** and make women **self-sufficient and self-reliant**.
- It will provide assistance for entrepreneurial learning tools, incubation facility, training programs for fund raising, providing mentors, one-to-one investor meet, providing market survey facility and technical assistance.
- The initiative is in sync with the **Make in India and Start up India Initiative** and will provide benefits to around 8 million women entrepreneurs in India.

10.2. INCREDIBLE INDIA 2.0 CAMPAIGN

Why in news?

- The **Ministry of Tourism** has launched the Incredible India 2.0 campaign **to promote various destinations and tourism products of the country** in important and potential source markets overseas.

More on news

- The Incredible India campaign was first **conceptualized in 2002 with the primary objective of creating a distinctive identity of the country**.
- The campaign successfully established India as a high-end destination and generating 16% in tourism traffic in the first year.
- The new campaign has been launched with the **objective of doubling tourism traffic from both foreign and domestic tourists**.
- The campaign will mark a **shift from generic promotions across the world to market specific promotional plans, content creation and use of thematic creatives**.
- Apart from promoting flora and fauna, the tourism will also **focus on spiritual, wellness and medical tourism**.

10.3. NATIONAL VIRTUAL LIBRARY

Why in News?

- Centre for Development of Advanced Computing (C-DAC) launched the National Virtual Library of India.

About National Virtual Library

- It will be a **multi-lingual online platform**, of the collection of documents, books, audio-visual of different subjects.
- It is a part of the **National Mission on Libraries**.
- The platform will be freely accessible for editing or contributions from outsiders or subject experts, making it more user-friendly.
- Other partnering institutions for this project include IIT-Mumbai, Indira Gandhi National Open University (IGNOU), Raja Ram Mohan Roy Library Foundation, Kolkata, and Kalyani University, West Bengal.

About Centre for Development of Advanced Computing

- C-DAC is R&D organization of the Ministry of Electronics and Information Technology (MeitY).
- Its projects include Supercomputer PARAM, Indian Language Computing Solutions with setting up of GIST group (Graphics and Intelligence based Script Technology) etc.

National Mission on Library

- It is an initiative of the Ministry of Culture to modernise and digitally link public libraries.
- It was established on the basis of recommendations of report of **National Knowledge Commission**.
- The scheme consists of four components;
 - Creation of National Virtual Library of India (NVLI)
 - Setting up of NML Model Libraries,
 - Quantitative & Qualitative Survey of Libraries
 - Capacity Building

10.4. INTERNATIONAL COMPETITION NETWORK CONFERENCE

Why in news?

- The **Competition Commission of India** hosted the 17th annual conference of **International Competition Network (ICN)**.

More on news

- ICN is an informal network comprising 138 competition authorities from 125 jurisdictions.
- The ICN advocates adoption of superior standards and procedures in competition enforcement around the world, formulates proposals for procedural and substantive convergence, and facilitates effective international cooperation to the benefit of member agencies, consumers and economies worldwide.
- This is the first time India is hosting the ICN2018 Annual Conference since it joined International Competition Network (ICN) in 2009.

Competition Commission of India

- The Competition Commission of India (CCI) was established under **the Competition Act, 2002** for the administration, implementation and enforcement of the Act.
- It is an affiliated office of the Ministry of Corporate Affairs.
- **Objectives:**
 - To prevent practices having adverse effect on competition.
 - To promote and sustain competition in markets.
 - To protect the interests of consumers and
 - To ensure freedom of trade

10.5. KERALA'S ENERGY-POSITIVE CAMPUS

- The Energy Management Centre (EMC), an autonomous institution under the Kerala government, has grabbed the global spotlight for its energy-positive campus, located at Sreekaryam in the State capital.
- The '**Global Status Report 2017: Towards a zero-emission, efficient, and resilient buildings and construction sector**', published by the **United Nations Environment Programme (UNEP)**, has listed it as one of the recent achievements in the deployment of key technologies for energy-efficiency in buildings.
- It is the only one from India to figure in the list, along with five other projects worldwide.

10.6. KADAKNATH

Why in news?

Madhya Pradesh has won the Geographical Indication (GI) tag for Kadaknath, a black-feathered chicken.

Details about Kadaknath

- It is found mainly in the tribal district of Jhabua in MP.
- Chhattisgarh was too claiming over the Chicken after its successful breeding project in Dantewada, but the claim got rejected.
- Kadaknath is in demand because of its flavourful meat and also due to its low cholesterol and high protein content.
- The GI tag will ensure that **no one else can use the name Kadaknath while selling any other black chicken** and will also translate into higher prices for producers.

For details on GI tag, refer November 2017 current affairs of Vision IAS

10.7. PRITZKER PRIZE

Why in news?

Balkrishna V. Doshi is the first Indian who won the prestigious Pritzker Prize for his innovative work of designing low-cost housing.

About Balakrishna Doshi

- Balakrishna Doshi is an Ahmedabad based architect and educator.
- He had been awarded Padma Shri and had established many institutions such as Vastu-Shilpa Foundation, Sanganth Studio, School of Architecture in Ahmedabad etc.
- He was also associated with Le Corbusier's projects in Chandigarh and Ahmedabad.

About Pritzker Prize

- Pritzker Prize is awarded each year to a living architect for his/her significant achievements and is also referred to as Architecture's Nobel and the profession's highest honour.
- It was established by the Pritzker family of Chicago through their Hyatt Foundation in 1979.
- The award consists of \$100,000 and a bronze medallion.

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