

MONTHLY

# EPIC!

*Supplementary reading material for MGP and Current Affairs classes  
of ForumIAS Academy*

AN EXCLUSIVE CURRENT AFFAIRS MAGAZINE FOR

PRELIMS + MAINS

PREPARATION

JULY 2020

## Every step is a milestone

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Dear Forumites,

We are pleased to release the July edition of EPIC! Magazine. Given the overwhelming response from aspirants, we are glad that the present format and content have been appreciated by the student fraternity. Most of you will be aware of the two-part format of EPIC! i.e. the Mains Magazine and the Factly. This format provides a segregated yet complete coverage of current affairs for civil services preparations.

ForumIAS is the sole organization built on the foundations of student engagement and participation. Therefore, based on your feedback, we have included very interesting analysis like the challenges of sustainable urbanization, the idea of data protection, the contours of global value chains etc. This along with relevant case studies will add value to your mains answers.

The issue-based coverage of mains articles is often restricted by the news cycle (editorials) of print media. A comprehensive coverage requires the culmination of various viewpoints, case studies, and analysis. Therefore, there are some important issues that might have started in the last week of July but will be covered in the August edition. Some of these topics include:

- The New Education Policy: a real reform or a paper tiger
- Contempt of Court: a misused power
- Does India need a Presidential system?
- Strategic autonomy in a multipolar world order
- WTO in the age of protectionism

and many more.

You can also contribute to the topic list/provide your feedback by writing to us at [feedback@forumias.academy](mailto:feedback@forumias.academy). We read every email, even if we cannot reply to all of them.

Wishing you Success,  
ForumIAS Academy

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## YOU SAID IT!

It's been quite a long journey for me in the civil services preparation, and almost equally long has been my association as a student with ForumIAS. I had joined the first SFG-programme, the Current Affairs Program, MGP and many other modules of ForumIAS. Each of them has helped me and made me much more prepared and confident for the CSE. Thanking everyone at ForumIAS from the bottom of my heart,

*Himanshu*  
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Pratyush Pandey

A big Thank you to the forumias team!  
In a world dominated by shallow content  
you really add value.



2 wks Like Reply More

## SHOWCASE ARTICLE

**Anti-Defection Law: An undemocratic dissent**

**In News:** Recently, some sitting MLAs in the Manipur government defected to the opposition creating instability in the state's polity.

**Defection and recent example:**

Defection refers to a situation in which a member of a political party gives up his position in the party from which he is elected to join an opposing party mostly.

**Madhya Pradesh:** The 22 Rebel Members of Madhya Pradesh Legislative Assembly tendered their resignation to the Speaker, thereby defecting from the ruling Party of the state, and thus paving way for the fall of the government of the day in Madhya Pradesh. This route by-passed the Anti-Defection law. Hence, the Anti-Defection Law has proven to be ineffective in achieving its key objective – that of preventing political instability.

This politics of defection in Manipur is not unique, there have been some other recent examples of defection in Karnataka, Madhya Pradesh, Arunachal Pradesh and Uttarakhand.

**What Is Anti-Defection Law?**

- The anti-defection law was passed in 1985 through the 52nd Constitutional Amendment Act.
- It added the Tenth Schedule to the Indian Constitution and amended four articles in the Constitution. (It amended Article 101, 102, 190 and 191 which are related to the vacating of seats and disqualification of MPs and MLAs.)

**Article 191(2):** A person shall be disqualified for being a member of the Legislative Assembly or Legislative Council of a State if he is so disqualified under the Tenth Schedule.

**Article 102 (2):** A person shall be disqualified for being a member of either House of Parliament if he is so disqualified under the Tenth Schedule.

- The main intent of the law was to combat the evil of political defections' and the problem of 'aaya ram-gaya ram'.
- The Anti defection law lays down the process by which legislators may be disqualified on the grounds of defection by presiding officer of house. The law applies to both Parliament and state legislative assemblies. The Presiding officer of the house decides on the question of the defection.

**Main Features in The Tenth Schedule**

- **Grounds Of Disqualification :**
- **Members of Political Parties:** A member of a house belonging to a political party becomes disqualified from being a member: -
  - If he voluntarily gives up the membership of his political party, or
  - Votes, or does not vote in the house, contrary to the direction of his political party. However, if the member has taken prior permission, or is condoned by the party within 15 days from such voting or abstention, the member shall not be disqualified.

- **Independent Member:** An independent member (Member not belonging to any political party) of the house becomes disqualified if he joins a political party after the elections.
- **Nominated member:** A nominated member of the house becomes disqualified if he joins any political party six months after his nomination to the house.
- **Exceptions:** The provisions of the anti-defection law don't apply in the following situations:
  - **Merger :** A merger of a political party with another takes place when two-thirds of the members of the party have agreed to such a merger. Thus, if a member leaves the party due to the merge, he cannot be disqualified under the anti-defection law.
  - **Presiding Officer :** A member can give up the membership of a political party after being elected as the presiding officer of the house. He can later rejoin the party after his term as the presiding officer of the house ends. This exception is provided to ensure impartiality in the office of the presiding officer of a house.

### 91<sup>st</sup> Constitutional Amendment Act, 2003

Made the following provisions to limit the size of Council of Ministers, to debar defectors from holding public offices, and to strengthen the anti-defection law:

- The total number of ministers, including the Prime Minister, in the Central Council of Ministers, shall not exceed 15% of the total strength of the Lok Sabha.
- A member of either house of Parliament belonging to any political party who is disqualified on the ground of defection shall also be disqualified to be appointed as a minister.
- The total number of ministers, including the Chief Minister, in the Council of Ministers in a state shall not exceed 15% of the total strength of the Legislative Assembly of that state. But, the number of ministers, including the Chief Minister, in a state shall not be less than 12.
- A member of either House of a state legislature belonging to any political party who is disqualified on the ground of defection shall also be disqualified to be appointed as a minister.
- A member of either House of Parliament or either House of a State Legislature belonging to any political party who is disqualified on the ground of defection shall also be disqualified to hold any remunerative political post. The expression "remunerative political post" means:
  - Any office under the central government or a state government where the salary or remuneration for such office is paid out of the public revenue of the concerned government or,
  - Any office under a body, whether incorporated or not, which is wholly or partially owned by the central government or a state government and the salary or,
  - Remuneration for such an office is paid by such a body, except where such salary or remuneration paid is compensatory in nature (Article 361-B).

- The provision of the Tenth Schedule (anti-defection law) pertaining to exemption from disqualification in case of split by one-third members of the legislature party has been deleted. It means that the defectors have no more protection on grounds of splits.
- **Deciding Authority:** The presiding officer of the house (Speaker in Lok Sabha, Chairman in Rajya Sabha) is the deciding authority in matters related to disqualifications due to defections. However, in the Kihoto Hollohan case (1993), the Supreme Court held that the presiding officer, while deciding a question under the Tenth Schedule, functions as a tribunal. Hence, his decision like that of any other tribunal is subject to judicial review on the grounds of malafides, perversity, etc.
- **Rule-Making Power:** The presiding officer of the house (Speaker in Lok Sabha, Chairman in Rajya Sabha) has the power to make rules to give effect to the Tenth Schedule. However, it must be placed before the house for 30 days. The House can modify or disapprove the rules.

### Anti-Defection Law: Merits & Demerits

#### Merits of the Anti-Defection Law

1. **Prevents Defection:** It is a tool to prevent defection by providing punitive measures. For instance, disobeying a three-line whip can put the lawmaker's membership of the House at risk.
2. **Promotes Govt. stability:** It increases stability of the Government by ensuring the legislators do not defect to other party.
3. **Promotes Party Discipline:** It promotes party discipline as legislators have to stick to party policies and party whip.
4. **Reduces Political Corruption:** It is expected to reduce political corruption by preventing horse-trading.
5. **Promotes citizens trust in elected legislators:** Voters exercise their preference for a set of policies espoused by contesting candidates of a party. Anti-defection law ensures a candidate is loyal to citizens voting for him.
6. **Improves Governance:** It frees government from challenge of defection and instability. Thus, the government can fully concentrate on governance and administration.
7. **Realignment of parties in House:** It promotes realignment of political parties in the House. The law does it through a democratic process by allowing merger of political parties.
8. **Reduces expenditure on frequent elections:** The anti-defection law reduces the scope of irregular defections by curbing political defections. Thus, it prevents the non-essential expenditure on frequent elections.
9. **Constitutional recognition to political parties:** Political parties play an important role in parliamentary democracy. The anti-defection law gave recognition to the political parties in the Constitution for the first time.



**Demerits of Anti – Defection Law**

1. **Violates freedom of expression:** The Anti defection Law forces the individual legislators to follow party whip. It thus interferes with the individual member's freedom of speech and expression by curbing dissent against party policies or party whip.
2. **Lowers accountability of elected candidate towards his electorate:** Following party diktat every time, the legislator cannot vote in line with his conscience, judgements and interest of his electorate. It lowers elected representative accountability towards his electorate. Thus, anti-defection law breaks the link between the elected legislator and his electors.
3. **Weakened Oversight:** The law weakens the legislator's oversight on executive action as they are bound by party whip.
4. **Against internal party democracy:** The law removes the need for the govt. to build broad consensus for its decisions/ policy making. The ruling party can ensure the support of each of its MP by issuing a whip. Thus, it works against internal party democracy. Secondly, if it needs to get further support to get a majority, it only needs to convince the leader of other parties and not individual MPs.
5. **Proliferation of Small political parties:** The law has led to the birth of small political parties out of existing ones, primarily in order to bypass the law. This has further resulted in the formation of a number of unstable coalition government.
6. **Circumvention of anti-defection law:** The law was introduced to curb political defection. However, political defection continues to be common even today. Example – Recent defection by 16 MLA's in Karnataka assembly.
7. **Decision making authority:** The presiding officer of the house is vested with adjudication powers related to the law. This is criticized on two grounds:
  - a. It may not be impartial due to political bias towards a political party.
  - b. For instance, in Karnataka, the Speaker kept 17 MLAs at bay for days by refusing to act on their resignations.
8. **No specific time period:** The Law does not provide a time limit for presiding officer to take decision regarding disqualifying a member.
9. **Individual vs Group Defection:** The law allows group defection by providing exception in the law for merger between political parties. But it doesn't allow individual defections. This distinction is irrational.
10. **Discrimination between a nominated and an independent member:** An independent member (Member not belonging to any political party) of the house becomes disqualified if he joins a political party after the elections. But a nominated member of the house becomes disqualified if he joins any political party six months after his nomination to the house. This discrimination between the nominated and the independent member of the house is considered to be irrational.

### Ambiguities In The Law

Ambiguities	Orders & Judgements
Right to freedom of speech and expression vs Tenth Schedule	The question raised was whether the Tenth Schedule curbed the right to freedom of speech and expression of the individual legislators. The Supreme Court in <u>Kihota Hollohon vs. Zachilhu and Others, 1993 ruled</u> that the provisions do not violate a legislator's right to free speech and expression.
Lack of complete clarity	Some provisions in the act lack clarity and can have multiple meanings. For example, the phrase "voluntarily giving up the membership of the party" can be interpreted in many ways and not just a formal resignation from the party. In <u>Ravi S Naik vs Union of India, 1994</u> , the Supreme Court said that the conduct of the member can also be amounted to leaving the party.
Judicial Review	Initially, the law made the decision of the Presiding Officer binding and not subject to judicial review. This condition was struck down by the Supreme Court in <u>Kihota Hollohon vs. Zachilhu and Others, 1993</u> . The Supreme Court said that the Speaker while adjudicating under the Tenth Schedule functions as a tribunal. Therefore, it is subject to judicial review. However, the Supreme Court allowed partial judicial review (i.e, the judicial intervention could take place only after the presiding officer has passed its final order).
Speaker's review of his decision	The issue raised was whether the speaker can review his own decision to disqualify a member under the tenth schedule. The Supreme Court in <u>Dr. Kashinath G Jhalmi v. Speaker, Goa Legislative Assembly, 1993</u> ruled that the law does not provide for such power.
Obeying party whip	In <u>G Viswanathan versus Honorable Speaker, Tamil Nadu State Assembly, 1996</u> the Supreme Court ruled that an expelled member was bound by the party's whip even after expulsion. His failure to adhere to it would result in his/her disqualification from the House.

### Global Scenario : Anti-Defection Law

<b>Bangladesh</b>	It has a law on defection. Article 70 of the Constitution says that a member has to vacate his seat if he resigns from the party or votes against the direction of his party. The dispute is referred by the Speaker to the Election Commission.
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<b>South Africa</b>	It has a law on defection. Section 47 of the Constitution provides that a member has to vacate his seat if he ceases to be a member of the party that nominated him.
<b>United Kingdom</b>	There is no law on defection, in particular. However, MPs can lose membership of the party on disobeying the party whip. But they can keep their House seats as Independents.
<b>Australia, Germany</b>	They have no laws on defection.

### Recommendations

<b>Body/Committee</b>	<b>Recommendations</b>
Dinesh Goswami Committee on electoral reforms (1990)	It recommended that disqualification under the Tenth Schedule should take place only in the following situations: If a member voluntarily gives up the membership of his political party, If a member abstains from voting, or votes contrary to the party whip in a motion of vote of confidence or motion of no-confidence. It further added that the President/ Governor should decide on the disqualification under the Tenth Schedule on the advice of the Election Commission.
Halim Committee on anti-defection law (1998)	It recommended to clearly define the following phrases in the law: voluntarily giving up membership of a political party Political party It prescribed certain restrictions (such as-prohibition on joining another party, prohibition on holding office in the government) on the defecting members.
Law Commission (170th Report, 1999)	Exceptions to the law such as in the case of mergers should be deleted. Pre-poll electoral alliances should be considered as political parties under the law. Political parties should issue a limited number of whips for important situations.
Election Commission	The President/ Governor should decide on the disqualification under the Tenth Schedule on the advice of the Election Commission.
Constitution Review Commission (2002)	Prohibition of defectors from holding public office for the duration of the remaining term. The vote cast by a defector to remove a government should be considered invalid.

**Way Forward**

In the Manipur Defection case, (January 2020) the SC had set an outer limit of three months to decide cases except in case of extraordinary circumstances. The speaker is the guardian of the 10th Schedule, but to address accusations of partisan behavior, the court had recommended the establishment of a permanent tribunal. Such measures can be considered to ensure the neutrality of decisions regarding defections.

Impartiality, fairness and autonomy in decision-making are the hallmarks of a robust institution. It is the freedom from interference and pressures which provide the necessary atmosphere where one can work with an absolute commitment to the cause of neutrality (as a Constitutional value).

**GENERAL STUDIES 1****Sustainable urbanization: Resilient and Liveable Cities****Syllabus: Urbanization their problems and their remedies**

**In News:** Amidst the pandemic, cities have become a major locus of power and politics consequently influencing vision achievement and dictating policy outcomes. Urbanization is thus providing the setting, the underlying base, and also the momentum for global change.

**Issues in urban areas of India**

As per 2011 census, In India only 31.16% of population lives in urban areas. However, there are some serious challenges which are faced by urban areas.

- **Urban Sprawl:** Areal expansion of a city in the countryside is called urban sprawl. Urban sprawl around the Indian cities have given rise to the following problems:
  - Population pressure on the infrastructure, like water, transport
  - Rise in land prices
  - Problem of employment
  - Slums and squatter settlements etc
- **Haphazard development:** Cities lack severely in holistic spatial plan preparation, implementation and enforcement and this is leading to sprawling, low density and haphazard development. About 17 percent of the urban population is living in slums, which is a cause of concern as it can lead to social unrest (As per census 2011). There is a shortage of about 2 crore houses in urban areas and a major part of this i.e. 96 percent is in economically weaker sections and low-income groups.
- **Urban Crime:** The mega cities are facing increased criminal activities due to the following reasons:
  - Unchecked migration,
  - Illegal settlements and
  - Diverse sociocultural disparities, organized groups, gangsters, professional criminals for wishing a lavish life in metropolis.

The problem of crime is bound to increase with the increase in urbanization.

- Growing materialism,

- consumerism, and competition in everyday life,
- selfishness, lavishness, appalling socio-economic disparities and rising unemployment
- **Physical issues**
- **Inadequate civic amenities:** Municipal bodies' traditional role is to provide basic amenities such as water supply, and sanitation, roads and drains, street-lights, collection and disposal of solid waste, maintenance of public places etc. However, the actual amenities have proved to be inadequate. As per census 2011, while 70% of urban households had access to water supply, only 49% had access to water supply within premises.
- **Pollution related problems:** Poor air and water quality, waste disposal sewage problems get worsened by the increasing population density and demands of urban environments.
  - Fourteen of the world's 20 cities with the worst air pollution are in India, according to data compiled in IQAir AirVisual's 2019 World Air Quality Report.
  - People who live near the rotting garbage and raw sewage fall easy victims to several diseases like dysentery, malaria, plague, jaundice, diarrhoea, typhoid, etc.
  - Further, the water and sanitation program (WSP) of the World Bank (2011) estimated that the total annual economic impact of inadequate sanitation in India amounted to a loss of Rs. 2.4 trillion in 2006, which is equivalent to about 6.4% of India's GDP.
- **Haphazard development:** Shortage of land for housing, the high prices of land beyond the reach of urban poor, a large influx of rural migrants to the cities searching for jobs are some reasons for proliferation of slum areas in urban spaces.
  - Their growth has been increasing sharply exerting tremendous pressure on the existing civic amenities and social infrastructure in spite of state and central government's effort.

#### Case Study: Dharavi Slum of Mumbai

- Around 7 lakh people reside in 2 sq. km of area;
- One of the most densely populated areas of the world
- High prevalence of diseases like cholera, typhoid etc.
- **Governance Issues:**
- **Improper Urban planning:** Present proposals of master plans are land use oriented and lack integration across sectors, i.e., land use with transportation, infrastructure, ecology and environmental issues and socio-economic needs.
- **Weak institutions:** Many states have not transferred functions, funds and functionaries to the Urban local bodies as required by the 74th Constitutional Amendment Act. This has led to the following problems:
- Further, the ULBs lack expertise that is needed in urban planning in hill states, coastal regions, riversides and disaster vulnerable areas.

- Organizational inefficiency,
- technical flaws in the form of high leakages,
- lack of preventive maintenance,
- poor accounting practices and
- Lack of autonomy.

This has led to failure of the public sector to provide adequate service delivery.

The Institutional arrangement for municipal governance and urban service delivery mainly comprises the following:

- **Constitutional provisions:** The 74th constitutional amendment Act expects that ULBs will assume responsibilities for urban planning, water supply, social and economic planning, slum upgradation, public health, etc.
- **State Municipal Laws:** The Government of India (GOI) has developed a Model Municipal Law (MML) in 2003 to guide States to enact municipal legislation. The basic objectives of the MML are to implement the provisions of the 74th CAA in totality.
- **State Finance Commission (SFC) and Central Finance Commission (CFC):** As per 74th CAA, state governments have set up SFCs that suggest ways to augment the resources of ULBs. CFC also can suggest ways and allocate resources for ULBs.
- **ULBs and parastatals:** It includes three broad institutional frameworks that are discernible in states in India with regard to water supply and sewerage services:
  - The states where the entire system is with a department or a parastatal of the State Government
  - The ULBs themselves handle the entire activity
  - As in some large cities, where exclusive water supply and sewerage boards have been set up for the city

### **Sustainable Urbanization and its potential**

#### **A. Sustainability**

- **Improve the public transport system:** Traffic has been a developmental problem in developing cities. In order to deal with this inclusion of mass transit public transport, increased car-centric road transportation or shared economy solutions in the policy initiatives can curb the emission of greenhouse gases.
- **Energy systems:** Cheap energy generation systems like diesel generators and coal-fired plants are often inefficient. Switching to investments in renewable resources (solar, wind or hydro) that may have higher capital costs can prove to be energy-efficient, less polluting and are sustainable options.
- Sustainable energy solutions can also contribute to other urban issues such as air quality, waste management, more efficient transport, better health and safety.
- **Environmental protection and waste management:** Developing cities to protect the environment from pollution should switch to innovative and unique options of waste management such as waste-to-energy technologies, reusing and recycling as an economic opportunity and ecosystem-based sewage treatment.

- Generation of energy from methane combustion can help in reducing methane emissions in landfills and is a great way of solid waste management.

#### B. Inclusiveness

- **The geography of urbanization: compact cities vs. sprawl:** Sustainable urbanization model provides scope of investing in planned compact cities that are more energy efficient as people from different economic strata mingle with each other, provide greater access to social services and employment.
- **People-centric development:** Local landholders should participate in subsistence activities but try to utilize proximity to markets and services as links between peri urban and urban areas.
- **Public space and land development:** Greater access to public spaces should be provided that offer opportunities for interaction and would enhance social and cultural development by making a city more inclusive.
- **Governance systems:** Government's choice of policies, programmes and plans should be based on people's demand and coordinated across the different levels of governance.

#### C. Resilience

- **Managing risk and investing in resilience:** Continuous development on vulnerable and disaster-prone areas and the pressure for land for growing population calls for effective planning and administrative systems to avoid such risks.
- **Addressing urban conflicts:** Establishing inclusive coalitions between elites and popular groupings under the urban governance policy choices can help in reducing conflicts and violence.

#### Steps taken by Indian government

- **Atal mission for rejuvenation and Urban Transformation (AMRUT),** one of the flagship missions of the Ministry of Housing and Urban Affairs (MoHUA), was launched in 500 cities across the country in June 2015.
  - It aims to provide basic services like water supply to all households, significantly upgrade sewerage and septage and provide for non-motorised transport and public amenities like parks and green spaces at least one in each city.
  - Thus, improving the quality of life for all, especially the poor and the disadvantaged.
- **Municipal Bonds-** Rs. 3,390 crores have been raised through municipal bonds during 2017-19 for upgrading urban infrastructure by 8 mission cities (Ahmedabad, Amravati, Bhopal, Hyderabad, Indore, Pune, Surat and Visakhapatnam).
  - Raising of bonds leads to improved governance, accounting systems, finance, transparency, accountability and delivery of services in the ULBs.
  - It will also enhance their self-dependence and confidence to serve the citizens.
- **Jal shakti Abhiyan-Urban:** The aim is to make water conservation measures a Jan andolan, through extensive Information, Education and Communication (IEC) activities across the country in 754 water-stressed cities.



- It is a campaign for water conservation and water security in the country through a collaborative effort of various ministries of the Government of India and state governments.
- **Smart cities mission:** The mission strategy includes components of area-based development in the Smart Cities Mission are city improvement (retrofitting), city renewal (redevelopment) and city extension (greenfield development) plus a Pan-city initiative in which Smart Solutions are applied covering larger parts of the city.
- **Pradhan Mantri Awas Yojana:** It intends to provide housing for all in urban areas by year 2022.
- **Sustainable Urban Transport Project (SUTP):** The strategies focus upon innovative financing mechanisms in transport sector, capacity building at institutional and individual levels under Sustainable Urban Transport Project (SUTP), financing of various traffic/transportation studies and surveys under the Scheme for Urban Transport Planning to encourage cities to better plan and manage their urban transport systems etc.

### Way Forward

Cities are going to face significant challenges from climate change, population growth, migration and land constraints in the coming decades. But cities are also the drivers of current and future economic growth. Therefore, institutionalising resilient cities in the urban planning would be essential.

## Why India Needs a New Population Policy?

**Syllabus: Population and associated issues**

**In News:** The World Population Day is time to examine the need for a new population policy in India that protects demographic assets and prepares for challenges lying ahead.

### World Population Day

It is observed annually on 11 July. The day was established in 1989 as an initiative taken by the Governing Council of the United Nations Development Programme (UNDP). The day aims to focus attention on the urgency and importance of population issues.

2020 theme: "How to safeguard the health and rights of women and girls now." It aims to raise awareness about safeguarding sexual and reproductive health needs and vulnerabilities of women and girls during the Covid-19 pandemic.

### State and Projection of India's Population

- According to UN's World Population Projection 2019, India is projected to surpass China as the world's most populous country by around 2027.
- It is expected to add nearly 273 million people between now and 2050 and will remain the most populated country through the end of the current century.



Indicators	Details
<b>Population</b>	India's population is forecasted to peak in 2048 at around 1.6 billion up from 1.38 billion in 2017 which will be followed by a 32% decline to around 1.09 billion in 2100.
<b>Working-age adults</b>	The number of working-age adults (20–64 years) in India is projected to fall from 748 million in 2017 to around 578 million in 2100. However, this will be the largest working-age population in the world by 2100
<b>Total Fertility Rate (TFR)</b>	India's TFR is already below 2.1 in 2019. It will reach 1.29 in 2100.
<b>Immigration</b>	India is projected to have the second largest net immigration in 2100, with an estimated half a million more people immigrating to India in 2100 than emigrating out.
<b>Life Expectancy</b>	By 2100, India is projected to have one of the lowest life expectancies (79.3 years in 2100, up from 69.1 in 2017).

**Data Source:** Lancet, 2020

### **Population Policy in India**

**National Population Policy, 1976:** The policy suggested a wide spectrum of programmes including rising the statutory age of marriage (increase the marriage age from 15-18 years for girls and from 18 to 21 years for boys), introducing monetary incentives for birth control, paying special attention to improving female literacy etc.

#### **Types of Population Policies:**

- The ante-natal policy which aims at discouraging the growth of the population. Example: In China,
- The Pro-natal policy that encourages population growth. Example: In Germany

**During the Emergency period (1975–77),** coercion and pressure were used in implementing the family planning programme. For the first time the Union government allowed some states to initiate legislation for compulsory sterilisation. However, in 1977, the new government ruled out the use of force and coercion, and the family planning programme was renamed as the 'family welfare programme'.

**Shift in Approach in 1990s:** In 1996, the Indian government made major policy shift by announcing the "Target Free Approach" to family planning, thus eliminating all centrally mandated targets for contraceptive acceptance. A new approach called the reproductive and child health approach was implemented.

**National Population Policy, 2000:** A number of socio-demographic goals were formulated to be achieved by 2010. These were:

- Reduce infant mortality rate (IMR) to 30 per 1,000 live births.
- Reduce maternal Mortality Rate (MMR) to below 100 per 1,00,000 live births.
- Achieve 80% institutional deliveries.

- The mid-term objective of the policy was to maintain a total fertility rate (TFR) as 2.1 children per women as it was considered as the replacement level

### Family Planning in India

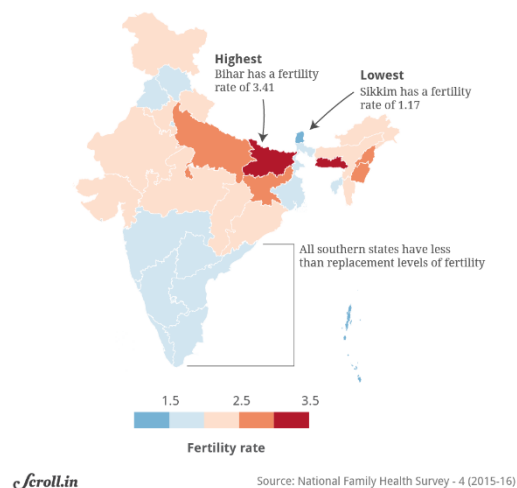
India was the first country to evolve a government-backed family planning programme in the 1950s. The different approaches of family planning followed in India were as follows:

- **The Clinic Approach:** The First Five- Year Plan emphasised field research with a view to identifying values norms, customs and beliefs concerning child-bearing. The natural method of family planning (the Rhythm Method) was propagated. It is based on the assumption that those who need family planning would visit such clinics without any hesitation.
- **Extension Approach:** The extension approach was outlined in the Report of the Director of Family Planning for 1962-63. It involved the adoption of an educational approach to bring about changes in the knowledge, attitudes and behaviour of the people in regard to family planning.
- **Integrated Approach:** According to the approach formulated for the Fifth Five-Year Plan, the Family Planning Programme formed an integral part of Maternal and Child Health (M.C.H.) and Nutrition Services.
- **Camp Approach:** The approach was introduced in 1971-72. Massive vasectomy camps were organised.

### Why India needs a new population policy?

- **Failed National Population Policy Targets:** The targets of National Population Policy, 2000, for infant mortality rate (IMR) and the maternal mortality ratio (MMR) are yet to be achieved. IMR stands at 32 in 2018 and MMR stands at 113 in 2018.
- To address non-uniform growth:
  - The latest National Family Health Survey (NFHS) indicates that the Total Fertility Rate (TFR) varies significantly across various wealth quintiles. The poorest wealth quintile has a TFR of 3.2 children per woman while the richest wealth quintile has a TFR of 1.5 children per woman.
  - Also, there lies a north-south divide when it comes to fertility rate, with the population growing much faster in the north.
- **Harnessing the demographic dividend:** The window of demographic dividend opportunity in India is available for five decades from 2005-06 to 2055-56. India needs a new population policy to help reap the benefits of the demographic dividend.
- **Addressing the needs of the greying population:** According to HelpAge Report, the population of those aged 60 and above will increase by 270% by 2050. A new population policy is

Fertility rates across India



needed to address the needs of elderly population and the increase in life expectancy accompanied by chronic diseases.

- **Skewed Sex ratios:** A new population policy is needed to address skewed female and child sex ratio. Child Sex Ratio (number of females per 1000 males in the age group 0–6 years) stood at 919 in the census 2011.
- **Addressing Migration:** Unplanned migration to the metros and large cities puts pressure on the infrastructure, housing and water availability. The issue of migration needs to be factored into population policy for more foresight and greater coordination.
- **For a revamped family planning approach:** Between 2008 and 2016, male contraceptive use declined 52% over eight years and vasectomies fell 73%. On the other abortions and consumption of emergency pills, both with health hazards and side effects, doubled. A renewed family planning approach to change societal needs is required.

#### **Suggested Reforms:**

- **Make Family planning more effective:** National Family Planning Program needs to be made effective by multi-stakeholder approach by involving governments (national, state, local), civil society, businesses and citizens. Use of contraception and vasectomies; awareness on sexual and reproductive rights of women must be promoted.
- **Human capital Development:** India must urgently strengthen policies to address its enormous young and working-age population. The quality of education, life skills and vocational training must be urgently addressed.
- **Increase Investment in health sector:** The family planning budget is only 4% of the entire health budget and within that India spends only 1.5% on birth spacing methods. India needs to increase its investments in these sectors. Further, quality sexual and reproductive health services must be made available to all
- **Ramping up the educational and work participation of women:** Better education will help women in better decision-making for family planning. Economic empowerment of women would ensure that they have decision-making powers. Therefore, policies must look at the whole issue of declining workforce participation by women.
- **Social Awareness:** Women and men especially in the rural areas must be educated about reproductive and sexual health.

**Conclusion:** By 2030, India will have the largest young population in the world. It is high time to put forward effective policies, strategies, and interventions to unleash the full potential of the young Indian population.

## GENERAL STUDIES 2

### **Right to Internet: Expanding the horizons of human rights**

**Syllabus:** Indian Constitution— features, amendments, significant provisions

**In News:** The Supreme Court has delivered verdict on a bunch of petitions challenging the restrictions imposed on internet services and movement of people in Jammu and Kashmir.

**Right to internet as a human right**

- People are entitled to enjoy their rights to freedom of expression (under Article 19) and opinion and other fundamental rights and so they have a right to access the internet.
- A non-binding resolution that effectively makes internet access a basic human right has been passed by the United Nations human rights commission.
- SDG 9 targets significant Increase in access to information and communications technology and makes every effort to provide universal and affordable access to the internet in least developed countries by 2020. Access to internet has been acknowledged in the sustainable development goals.
- The apex court declared that the Right to access internet is a basic fundamental right which could not be reduced at any cost, except for when it “violates into the boundary of illegality” in the case of Sabu Mathew George Vs Union of India and Ors. (2018).
- The Kerala high court had upheld the right to have access to internet as a part of the fundamental right to education and right to privacy under Article 21 of the Constitution.

**UNHRC resolution on internet access**

- People have same rights online as well as offline,” in particular freedom of expression, which is applicable regardless of frontiers and through any media of one’s choice.”
- All states should “refrain from and cease such measures” which attempt to “intentionally prevent or disrupt access” to internet and are “condemned unequivocally”.

**How are other rights linked to the right to internet?**

- **Right to education:** students can gather knowledge using the internet, for instance, online classes during the pandemic.
- **Right to freedom of speech:** According to the United Nations resolution the same rights people have offline must also be protected online. Internet acts as a powerful medium of expression.
- **Right to development:** the right to development is a third generation right recognised by the United Nations general assembly. Access to internet would further enhance the economic development opportunities.
- **Right to freedom of assembly:** internet and social media networks such as Twitter and Facebook had played an important role to reach out to people and gather them for political events such as the Arab spring. The internet can act as a useful tool in the organisation of protest movements and demonstrations because it can reach people globally.

**Three generations of human rights**

- First generation, “civil-political” rights deal with participation and liberty in political life.
- Second generation, “socio-economic” human rights guarantee equal conditions and treatment.
- Third generation, “collective developmental” rights of people and groups held against their respective states aligns with the final tenet of “fraternity”.

**Issues with the right to internet access as a human right**

- **Not eligible to be tagged as a human right:** many people opine that technology is an enabler of rights and not a right itself.
- **Feasibility for developing nation:** there is a debate about considering the right to internet access necessity given other priorities that developing and least countries face.
- **Issue of digital divide:** making internet free may not be a feasible idea due to infrastructural gaps, lack of digital literacy and accessibility and also, there exists a huge digital divide in India.
- **Protecting free expression while nurturing tolerance and civility:** hateful or defamatory words can inflame conflicts, deepen divisions, and provoke violence as online everyone has a voice to say anything.
- **Potential misuse of internet:** there are many issues relating to data theft and privacy breaches on the internet. Also, terrorists and extremists use the internet to recruit members and plot and carry out terror attacks.

### Understanding the issues in depth

#### Internet shutdowns

- India has had the greatest number of internet shutdowns globally. There have been 381 internet shutdowns since 2012 and the year 2019 had 106 internet shutdowns according to the software freedom law center's tracker.
- The ongoing internet shutdown in Kashmir is the longest ever for any democratic country.

#### Supreme Court's Decision On Internet Shutdowns

- Freedom of speech and expression through the medium of internet is a fundamental right under Article 19(1)(a) of the Constitution.
- The restrictions on internet have to follow the principles of proportionality under Article 19(2). The doctrine essentially signifies that the punishment should not be disproportionate to the offence committed or the nature and extent of the State's interference with the exercise of a right must be proportionate to the goal it seeks to achieve
- Freedom of trade and commerce through internet is also a constitutionally protected right under Article 19(1)(g).
- Suspension of internet for indefinite period not permissible. It can only be for a reasonable duration and periodic review should be done. Government should publish all orders of prohibition to enable affected persons to challenge the same.

#### Legislative provisions:

- The information technology act, 2000, the criminal procedure code (CrPC), 1973 and the telegraph act 1885, all these acts deal with suspension of internet services.
- Before 2017, internet suspension orders were issued under section 144 of the criminal procedure code (CrPC) but later in 2017, the central government notified temporary suspension of telecom services (public emergency or public service) rules under the telegraph act to govern suspension of internet.

- Government has often used the broad powers under section 144, the criminal procedure code (CrPC) despite the changes in rules in 2017.
- **Economic costs:** India was the third most economically affected country after Iraq and Sudan in the year 2019 after the country lost over 1.3 billion dollars due to internet shutdowns.
- **Validations for internet shutdowns:**
  - The shutdown is a preventive measure used by law and order administration as a last resort to address the mass protests, civil unrest and so as to ensure peace. The shutdown is done on the basis of thorough research and analysis of the intelligence inputs.
  - Internet shutdowns may become necessary in certain extreme conditions where rumours start spreading through WhatsApp and other social media platforms which can lead to violence as it plays a disruptive role.

#### **Temporary Suspension of Telecom Services (Public Emergencies or Public Service) Rules, 2017 (Suspension Rules)**

- Ministry of communications framed these rules and its powers are derived from section 5(2) of the Indian telegraph act which talks about interception of messages in the “interests of the sovereignty and integrity of India”.
- In case of a public emergency or for public safety in any part of the country, it empowers the government to block transmission of messages.
- Any order of suspending internet under the rules, can only be for a temporary duration and not for an indefinite period.
- No one can issue directions to suspend the telecom services except for home secretary of the country and a secretary of a state’s home department and the order should be taken up by the

#### **Arguments against internet shutdowns:**

- **“There is no real evidence that internet shutdowns** actually help in reducing mass protests or civil unrest” according to the internet activists, law experts and human rights agencies.
- **Internet shutdowns make human rights a hostage** to the notions of the executive: there has been a compromise of fundamental rights to speech, conduct business, access health care, express dissent, and movement of the people in the state.
- **Shutting the internet down can lead to a complete information blackout** which can also create frenzy, panic and can result in even more disharmony.

#### **UN Resolution on Internet Shutdown**

- A non-binding resolution condemning international disruption of internet access by governments was released by the United Nations Human Rights Council in the year 2016.
- The resolution reaffirmed that “the same rights people have offline must also be protected online”.

#### **Conclusion**



The time has come for the legislature and judiciary to recognize the right to internet access as a fundamental right within our constitutional guarantees.

### Politics balancing rule makers and rule breakers!

**Syllabus: Structure, organization and functioning of the Executive and the Judiciary**

**In News:** A recent Supreme Court judgement on criminalisation in politics will be implemented for the first time in the upcoming Bihar elections in October 2020.

#### State of criminalisation of politics in India

- Criminalisation of politics refers to the increased participation of candidates with a criminal background in the electoral process and their subsequent election as the representative of people.
- Association for Democratic Reforms (ADR) analysis shows that candidates facing criminal charges had double the chances of winning as compared to those with a clean record.
- As per ADR, about 13% of the candidates who contested the election in 2019 are accused of heinous crimes that include murder, attempt to murder, kidnapping, rape and other crimes against women.
- There is an increase of 109% (in 2019) in the number of MPs with declared serious criminal cases since 2009.
- 29% of those elected to the Lok Sabha in 2019 have declared serious crimes.

#### The Present verdict

**In the Public interest foundation case 2018**, the Supreme Court had directed disclosure of criminal cases pending against the candidate by himself/herself through EC and his/her political party.

- Moreover, the criminal antecedent of candidates was ordered to be widely publicized through different media including the websites of concerned political parties. The present verdict has come on the basis of contempt petitions filed against political parties for allegedly disregarding the directions given in **the Public interest foundation case, 2018**.

**Article 142(2)** confers three different powers on the Supreme Court. They are:

- Securing the attendance of persons before it.
- Discovery and production of documents.
- Investigation and punishment of contempt of itself.

**Article 129** says that the Supreme Court shall be a court of record and shall have all the powers of such a court including the power to punish for the contempt of itself.

- It is supplemented by Article 142(2) which inter alia, deals with the investigation and punishment of the contempt of the Apex Court

#### Present ruling has passed the following order :

- **Mandatory provision:** It is mandatory for political parties (at the Central and State election level) to publish detailed information regarding candidates with pending

criminal cases and the reasons for selecting them over others as well as to why other individuals without criminal antecedents could not be selected as candidates.

- **Mode of publishing** : Such details have to be published on their websites, one local vernacular newspaper and one national newspaper, on the official social media platforms of the political party, including Facebook and Twitter.
- **Details of criminal antecedents**: Details of criminal antecedents of candidates should include nature of the offences, and relevant particulars such as whether charges have been framed, concerned Court, case number etc.
- **Criteria for selection** : The reasons as to selection shall be with reference to the qualifications, achievements and merit of the candidate concerned, and not mere “winnability” at the polls.
- **Compliance report**: The political party concerned shall then submit a report of compliance with these directions with the Election Commission within 72 hours of the selection of the said candidate. If a political party fails to submit such compliance report with the Election Commission (EC), EC shall bring such non-compliance by the political party concerned to the notice of the Supreme Court as contempt of Court’s orders/directions.

#### **Factors responsible for Criminalisation of Politics**

- **Collapse of electoral finance system**: Contesting the elections is an expensive process and candidates who do not have financial muscle are less likely to be elected. Thus, honest individual candidates more than often cannot afford the costs of an electoral campaign.
- **Ineffective criminal justice system** : Individuals with criminal background find it easier to contest in the elections due to judicial delays and toothless laws.
- **Low Conviction rate**: At national level conviction rate for crimes stands at 46 %. However, as per data submitted by Centre to SC, for MPs and MLAs it is not more than 6%.
- **Mala fide intentions to join politics**: Criminals join politics for self- preservation, protection and the potential financial benefits they stand to gain by holding office. A person with a criminal record is likely to use the law enforcement machinery against his/her adversaries on being successfully elected.
- **Role of political parties**: Parties look for candidates who can self- finance their campaign and contribute to pockets of party elites.
- According to Association of democratic reforms (ADR), 43 percent of the newly elected Lok Sabha members have criminal charges against them, a 26 percent increase as compared to 2014.
- **Lack of inner party democracy**: Though the Representation of the People Act (RPA) disqualifies a sitting legislator or a candidate on certain grounds, there is nothing regulating the appointments to offices within the party. A politician may be disqualified from being a legislator, but (s)he may continue to hold high positions within his/her party.



- **Politics of Vote bank:** The political parties and independent candidates have astronomical expenditure for vote buying and other illegitimate purposes. This leads to nexus between politicians and criminals.
- **Role of voters:** Some voters consciously elect such candidates for getting things done or for taking favours in the future while some voters are left with no options, as all competing candidates have criminal records.

#### **Impact of criminalisation of politics**

- **Affects good governance:** The efficacy of the democratic process in delivering good governance is affected when the lawbreakers become the lawmakers.
- **Affects probity in governance:** Circulation of black money increases during and after the elections which weakens the probity in public life. For instance, money spent during campaigning is considered as an investment which is compensated by corruption.
- **Culture of violence:** It introduces a culture of violence in society and sets a bad precedent for the youth to follow.
- **Reduces the Credibility of the judiciary:** It is apparent that those with political influence take advantage of their power by delaying hearings, obtaining repeated adjournments and filing innumerable interlocutory petitions to stall any meaningful progress.

#### **Recommendations of Committees**

- The **Santhanam Committee Report 1963:** It referred to political corruption as more dangerous than corruption of officials and recommended for Vigilance Commission both at the Centre and in the States.
- **Vohra Committee Report (1993):** It studied the problem of the criminalization of politics and of the nexus among criminals, politicians and bureaucrats in India. However, even after the submission of report 25 years ago, the report has not been made public by the government.
- **Padmanabhaiah Committee on Police Reforms:** It found that Corruption is the root cause of both politicization and criminalization of the police. Criminalization of police cannot be de-linked from criminalization of politics. It is the criminalization of politics, which has produced and promoted a culture of impunity that allows the wrong type of policeman

#### **Steps taken to address the issue**

- **ADR case, 2002:** SC directed that all the contesting candidates shall disclose their assets and liabilities, criminal conviction, if any, and pending cases in court of law during filling the nomination papers.
- **Lily Thomas VS union of India case, 2013:** SC struck down section 8(4) of the RPA act 1991. Thus, a sitting MP and MLA convicted of a jail term of two years or more would lose their seat in the legislative immediately.
- **People's Union for Civil Liberties (PUCL) vs Union of India, 2014:** Introduction of None of The Above (NOTA) option in the election to put moral pressure on political parties to put up clean candidates.
- **Public Interest Foundation Vs UoI 2014:** SC directed the trial courts to complete the trial of cases involving the legislators within one year.

- **Lok Prahari Vs UOI case 2018:** SC made mandatory the disclosure of the source of income of political candidates as well as their dependents and associates would be mandatory. Also, disclosure of information regarding contracts with the appropriate government either by the candidate or his/her spouse and dependants was also held to be disclosed mandatorily.
- **Establishment special courts** to take up cases of elected MP/MLA's: Based on SC directions given in 2017, central government established 12 fast track courts to deal with cases related to MPs and MLAs December 2017.
- **ECI and Law Commission recommendation:** proposed to bar candidates accused of an offence punishable with at least 5 years of imprisonment from contesting elections, after charges are framed against them by a court.

**Several concerns were raised by political parties against ECI's recommendation:**

- **False cases:** Opposition political parties have voiced their concerns that law enforcement agencies could be used to file false or frivolous cases against their candidates by the ruling party.
- This is a violation **of the due process of law** as debarring a candidate from elections is equivalent to considering him/her guilty even before he is proven guilty.
- **Instance of judicial activism/ overreach:** Any such legislation to disqualify MPs and MLAs should come from the parliament instead of the judiciary because legislation is the function of parliament.

The Election commission has proposed the following safeguards in this regard:

- First, all criminal cases will not invite a ban, only those concerned with heinous offences like rape, dacoits, murder and kidnapping will.
- Second, the case should be registered at least six months before the elections.
- Third, a court must have framed the charges.

**Way forward**

- **Involvement of all the stakeholders:** political parties, voters, media, legislature, ECI etc is a must to effect decriminalisation of politics. Following steps could be considered for making Indian elections freer and fairer:
- **State funding:** There has to be a more transparent way of raising funds and also limiting campaigning expenditures in order to clean the mess around campaign finances.
- Institutions dealing with the rule of law must be strengthened.
- **Media as a watchdog:** Media should play a more active but conscious role in bringing out the faces of criminals involved in the political system.
- An innovative step could be to make 'a right to reject and recall' a fundamental right of every voter and thereby securing Article 324 of the constitution which is a reservoir of power to act for the avowed purpose of having a free and fair political system.

- **Public awareness and participation:** Realisation amongst the citizens that a candidate who bribes them for votes cannot be trusted would bring about a massive change in the politics.
- **Monitoring the affidavits of candidates** can help in compliance.

### Social Security: The universal need

**Syllabus: Government policies and interventions for development in various sectors**

**In News:** The socio-economic distress caused by Covid-19 pandemic has highlighted the importance of social security measures

#### What is Social Security?

Social Security is the protection provided by the society to its members through a series of public measures against the economic and social distress.

The International Labour Organization recognises social security as a fundamental social right guaranteed by law to all human beings who live from their own labour and who find themselves unable to work temporarily or permanently because of certain reasons.

#### Need for Social Security:

1. **To address deprivation and Vulnerability:** Social security is required to prevent deprivation and vulnerability. Vulnerability is a chronic stage arising from the absence of any asset or resource that can ensure adequate livelihood.
2. **To address poverty:** Social security measures are needed to break the vicious cycle of poverty and address the multifaceted problems arising out of poverty. The government of India had introduced number of poverty alleviation programmes over the years. Example: Swarnjayanti Gram Swarozgar Yojana, Jawahar Rozgar Yojana.
3. **To achieve women empowerment:** According to a report by McKinsey Global Institute (MGI), women in India represent only 24% of the paid labour force, while the global average is 40%. Social Security measures like Maternity benefits encourage women to participate on par with men in the labour force and thus help in women empowerment.
4. **To assist disabled:** Social security measures provides valuable social insurance protection to workers who become disabled and to families whose breadwinner dies.
5. **To assist elderly:** With ever-increasing population of older persons and fast changing socioeconomic & demographic scenario, social security measures have become important to assist the elderly population in India. Example: Pradhan Mantri Vaya Vandana Yojana (PMVVY)- a pension scheme exclusively for the senior citizens aged 60 years and above
6. **Constitutional Provisions related to social security:**
  - **Article 41** of Directive Principles asks the state to “within the limits of its economic capacity and development,” make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement, and in other cases of undeserved want.
  - **Article 42** says the state shall make provisions for securing just and humane conditions of work and for maternity benefits.

- **Article 43** requires the State to strive to secure work to the worker, a living wage, conditions of work ensuring a standard of life etc

**Social Security Acts/ Schemes in India- An Overview**

Workmen's Compensation Act 1923	Compensation occupational injuries or death
Employees State Insurance Act, 1948	Health care and cash benefits for sickness, maternity and employment injury.
Employees Provident Fund and Miscellaneous Provisions Act, 1952	To provide compulsory Provident Fund, Pension, Deposit Linked Insurance
Maternity Benefit Act, 2017	Maternity protection before and after childbirth
Payment of Gratuity Act, 1972	To provide for payment of gratuity on ceasing to hold office
Atal Pension Yojana (APY)	It is a periodic contribution-based pension plan and promises a fixed monthly pension of Rs 1000/ Rs 2000/ Rs 3000/ Rs 4000 or Rs 5000.
Pradhan Mantri Shram-Yogi Maandhan	Under the scheme, an assured monthly pension of Rs.3000 rupees per month is provided to workers in the unorganised sector after 60 years of age.
National Pension Scheme	The scheme allows subscribers to contribute regularly in a pension account during their working life. Upon retirement, subscribers can withdraw a part of the corpus in a lump sum and use the remaining corpus to buy an annuity to secure a regular income after retirement.
Pradhan Mantri Laghu Vyapari Maan-dhan Yojana	The scheme assures a minimum monthly pension of ₹3000 per month to small shopkeepers, retail traders and self-employed people after attaining the age of 60 years.
MGNREGA	It aims to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.
Ayushman Bharat Scheme	It aims to provide universal health care to the poor, needy and vulnerable sections of the country. The scheme covers both prevention and health promotion
Pradhan Mantri Matru Vandana Yojana	It provides partial compensation for the wage loss in terms of cash incentives so that the woman can take adequate rest before and after delivery of the first living child.

Draft Social Security Code	The code has also proposed to offer a slew of benefits from provident funds to health cover, accident insurance and education for children of informal and gig workers.
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### Impact of Social Security Measures

**Poverty Alleviation:** According to 2011-12 official estimate of poverty, only 22% of the population were below the poverty line. Between 2005-2012, 110 million of rural poor and 27 million urban poor moved out of poverty.

**Pension Coverage:** According to the Melbourne Mercer Global Pension Index for 2017, only 7.4 percent of the working age population in India is covered under a pension program as against 65% in Germany and 31% in Brazil.

**Maternity Benefits:** the number of PMMVY beneficiaries for 2018-19 who were paid at least one instalment stands at 67.3 lakh.

### Universal Social Security- The Way forward

Covid-19 has brought economic hardship to billions of working class especially migrant workers. In absence of social security and weak state support, they were forced to migrate back to their native places.

The situation has been same for of 90% of Indian labour force who are in the informal sector (casual labour, agricultural labour, self-employed). They face uncertain incomes, lack job security and lack social security. Only 10% of the labour force in organized sector have social security in form of insurance, EPF (provident fund), pensions. Considering this there is a need for provision of universal social security. The universal social security should have the following features:

- **Employment guarantee:** MGNREGA is currently acting as a tool of providing relief to distressed rural workers. Demand for work under it has doubled in many states. It shows how it is an effective social security tool which works based on self-selection. Such employment guarantee schemes will provide incomes and reduce vulnerability to uncertain jobs in the informal sector.
- **Linking skill training to employment guarantee schemes:** “Learning while earning” principle should be employed to build up human capital of India. Schemes like MGNREGA must be linked to skill development training.
- **Universal free health care:** Limitations of private health care in serving the poor is discernible in the ongoing pandemic. Hence, there is a need for quality universal free public health care.
- **Addressing technology induced job disruptions:** Covid-19 will result in increased adoption of technology over physical labour. This has to be factored in designing universal social security.

**Conclusion:** Income support, training and health care for all those who need it must be an essential part of universal social security. Apart from the labour force, vulnerable sections like disabled, the elderly, and expectant mothers must be provided social security assistance. Only through that can India realize the welfare state as envisaged in the constitution.

## Data Protection: Securing the citizens

**Syllabus: Government policies and interventions for development in various sectors**

**In News:** Recently Kris Gopalakrishnan panel has submitted its report about various issues related to non-personal data and called for a new legislation to regulate such information.

### Data protection:

- **Data** refers to the large collection of information that is stored in a computer or on a network.
- Data can be broadly classified into two types: personal and non-personal data.
- **Personal data** refers to characteristics, traits or attributes of identity, that can be used to identify an individual. For example, it contains explicit information about a person's name, age, gender, sexual orientation, biometrics etc.
- **Non-personal data** refers to the aggregated data through which individuals cannot be identified. For example, All the data collected by government and its agencies such as census, data collected by municipal corporations on the total tax receipts or any information collected during execution of all publicly funded works is non-personal data.
- **Data protection** refers to the policies and procedures that aims to minimise intrusion into the privacy of an individual caused by collection and usage of their personal data.

### Need for Data protection:

- **Right to privacy is now a fundamental right:** The right to privacy encompasses the right to have data protected. (Justice K.S Puttaswamy vs Union of India case)
- **Increasing Digitalisation:** The government push for Digital India, digital payments, increasing number of people working from home through online networks, and rising e-commerce penetration, etc demands a stronger data protection regime to ensure sustainability of these services.
- **To prevent the misuse of personal data by the commercial entities:** Absence of exclusive Data Privacy Law in India giving rise to the concerns of State surveillance and data misuse.
- **Data is the new oil of 21st century:** Economic significance of Data has given rise to unauthorized leaks, hacking, cybercrime, and frauds: Economic cost of data loss/theft is high. Example: Unacademy data breach that led to the exposure of data of around 20 million of its subscribers.
- **Data colonisation:**
  - India has the second highest internet user base in the world. India has 450 million internet users and expected to increase up to 730 million by 2020.
  - New forms of economic value are created by using the vast amount of Data generated.
  - It facilitates uncompetitive practices and provides undue advantages for few companies that has access to large data sets. Example, Google, Facebook.
- **Share in global digital trade:** Cross-border data flows are increasingly becoming a key determinant for claiming a country's share in the global digital trade.



- **To sustain Democracy:** Power of Data is such that it can manipulate Election outcomes by pushing targeted advertisements to the citizens. For example, the government has sent a notice to U.K.-based Cambridge Analytica accused of misusing data of 50 million Facebook users.
- **Global Practices:** India still lacks a comprehensive legal framework to protect data privacy, unlike the data protection regulations in place in the European Union and in the U.S.

### Data protection in India

India does not have a separate law for data protection. However, the following safeguards exist.

- **Section 43A of the Information Technology Act** provides Compensation for failure to protect data.
- **Section 72A of Information Technology Act:** Provides Punishment for disclosure of information in breach of lawful contract.
- **In 2012, the Justice A.P. Shah Committee** recommended a set of principles for a legal framework for protecting privacy. Drawn from OECD guidelines, these principles were centred on sufficient notice and disclosure to citizens when data are collected, limitations on data collection and use, and norms related to data security and accountability.

### General Data protection Regulation (GDPR)

- Built on 7 Key principles: 1. Lawfulness, fairness and transparency. 2. Purpose limitation. 3. Data minimisation. 4. Accuracy. 5. Storage limitation. 6. Integrity and confidentiality (security) 7. Accountability.
- It is aimed at harmonizing data privacy laws across Europe, it will impose stiff penalty of up to 40% of the company's worldwide turnover in the event of a breach.
- Companies Should ensure that even their vendors are fully compliant with the GDPR as a condition for running their businesses
- **The Srikrishna Committee** has also flagged seven major principles
  - **It wants the law to be technology-agnostic:** so that the law will remain flexible to take into account changing technologies and standards.
  - **It reinforces the principle of Informed consent** before collecting the Data.
  - **It favours data minimization and accountability** of those who process and control data
  - It provides a **holistic approach** as the law would apply to both government and private entities, but with "differential obligations".
  - **It pushes for Structured enforcement by a high-powered statutory authority** that can coexist with appropriately decentralized enforcement mechanisms.
  - **It vouches for Penalties** on wrongful processing to ensure deterrence.

### Analysis of USA's version, Europe's version.

- In the US data controllers can get a one-time blanket consent for a variety of uses, Whereas the EU's GDPR takes a more restrictive approach, data collectors must obtain

consent for specific uses, and if they want to use personal data for other purposes, they need to obtain explicit content for those purposes.

- The US model has been viewed as inadequate in key respects of regulation, whereas Eu model has been criticized for being excessively stringent, and imposing many obligations on the organisations processing data.
- India must factor out the pitfalls of other global approaches. India must find the right balance to take advantage.

#### **What should be the contours/principles of non-private data protection**

- The objective of unlocking data should be of public interest and through collective consent.
- Recognition that, data are not just a subject of individual decision-making but that of communities, such as in the case of ecological information.
- **Global standards on non-personal data:** European Union regulation framework for the free flow of non-personal data suggested that member states of the union would cooperate with each other when it came to data sharing also it ruled that the aggregated non-personal data should be shared by member states without any hindrances.

**Conclusion:** The need of the hour is to legislate a comprehensive Data Protection Act considering the manner in which public data are being stored and used by both the state and private entities.

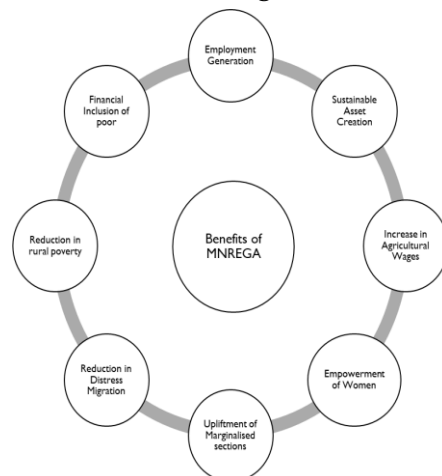
### **MGNREGA: A successful social revolution**

**Syllabus:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**Context:** Amidst Covid-19 pandemic, the demand for MGNREGA work has increased substantially.

#### **Achievements of MGNREGA**

1. **Women Empowerment:** MGNREGA has been a powerful instrument for empowerment of poor women by providing livelihood security and social protection. In FY2015-16 out of the total employment through MGNREGA, 56% was generated for women.
2. **Addressing Distress Migration:** It has reduced distress rural to urban migration and also seasonal migration by providing work closer to home a decent working condition. With unemployment figures at a 45-year high, and with the added economic destruction caused by the novel coronavirus pandemic, MGNREGA numbers are set to rise.
3. **Upliftment of Marginalised:** It has helped in the upliftment of SCs and STs through creation of livelihood opportunities, thus economically empowering the SCs and STs. The percentage of Scheduled Caste workers has consistently been about 20% and Scheduled Tribe workers has been about 17%.





4. **Creation of Sustainable Assets:** It has boosted agricultural productivity through development of wasteland/fallow land, construction of post-harvest storage facilities and work sheds. MGNREGA works have contributed to improved ground water levels, and increased availability of drinking water for humans and livestock.
5. **Rural Economic Growth:** It has boosted rural entrepreneurship as households often use supplementary income to start a rural business. It has had a multiplier effect on the rural economy. The additional purchasing power generated from the income from MGNREGA has been spent on items produced in the rural economy.
6. **Human Development:** In many states, up to half of the MGNREGA income is spent on food, which improves health and nutrition – a critical factor in a country plagued by malnutrition.
7. **Financial Inclusion:** Payment of wages through bank accounts/ post office has led to large financial inclusion of the poor. As per 2011- 12 data there are 376 banks working in different parts of country with 2.51 crores of accounts for MGNREGA workers, making MGNREGA the largest financial inclusion scheme of the rural poor.

#### About Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

- It is an employment guarantee act, introduced in 2005 through the National Rural Employment Guarantee Act, 2005.
- The Act aims to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.

#### Objectives:

- To ensure social protection for the most vulnerable people living in rural India.
- To ensure creation of livelihood security for the poor through creation of durable assets.
- A rights-based legislation for the empowerment of the marginalised communities.
- To strengthen decentralised, participatory planning through convergence of various anti-poverty and livelihoods initiatives.
- To deepen democracy at the grass-roots by strengthening the Panchayati Raj Institutions (PRIs).
- To improve transparency and accountability in governance

#### Features:

- It is a demand driven scheme and worker is hired when he demands and not when the Government wants it. Gram Panchayat is mandated to provide employment within 15 days of work application failing which worker is entitled to unemployment allowance
- Payment of wages is provided within 15 days of completion of work failing which worker is entitled to delay compensation of 0.05%/ day of wages earned. Wages are electronically transferred to the worker's bank/ post office accounts through National Electronic Fund Management System (NeFMS)
- Ministry of Rural Development (MRD), Government of India in association with state governments monitors the implementation of the scheme.
- **GeoMGNREGA:** Geo-tagging all assets created under MGNREGA

**Issues with MGNREGA**

1. **Labour Market Distortions:** MGNREGA has altered the power balance between the landless poor and their employers (agricultural landlords, labour contractors) and has led to increased cost of agricultural labour.
2. **Right to work denied:** In this fiscal year, 8.07 crore workers demanded work, but work was provided only to 6.25 crore workers.
3. **Insufficient budget allocation:** MGNREGA's success at the ground level is subject to proper and uninterrupted fund flow to the states. However, almost every year, more than 80% of funds get exhausted within the first six months

**PM Garib Kalyan Rozgar yojana**

- It is a one-time scheme which seeks to provide 125 days of guaranteed employment and focuses on 116 districts across six states, which received the highest number of returnees.

**Issues with PM Garib Kalyan Rozgar Yojana**

- **Exclusion of States**– States of West Bengal and Chhattisgarh be omitted when reverse migration is particularly high in these States. The exclusion is due to criteria of selection, which is unclear.
  - **Politicisation of scheme**– Of the ₹4,794 crore spent between June 20 and June 28, Bihar received more than 50% of the fund which can be attributed to the fact that Bihar elections are scheduled for later in 2020
  - **Overlapping with MGNREGA**– According to the list of 25 kinds of work available under this “scheme” it is clear that almost every single one of them is already covered under the convergence programmes of MGNREGA which leads to wastage of resources and duplication of efforts.
4. **Supply driven scheme:** Most states have implemented the scheme; till the time the funds are granted to them by Centre. Over time, this led to MGNREGS running in a supply driven way instead of a demand-based model.
  5. **Low wage rate:** MGNREGA wage of ₹202 per day is 30-40% lower than average wage offered to unskilled workers.
  6. **Delay in wage payments:** Wages remain uncleared even after 15 days, and many get denied work. In 2019, Rs 11,499 crore wage was pending.
  7. **Dilution of MGNREGA:** A new scheme, the Garib Kalyan Rojgar Abhiyaan, to provide work to migrant workers in 116 selected districts was notified by central government, instead of expanding MGNREGA
  8. **Poor Quality of assets:** The durability of the assets is questionable as currently, 60% of funds is spent on wages and 40% on material.
  9. **Weak Local governance:** A real-time MIS-based implementation and a centralized payment system has left the representatives of the PRIs with literally no role in implementation, monitoring and grievance redress of MGNREGA schemes.

**Suggested Reforms:**

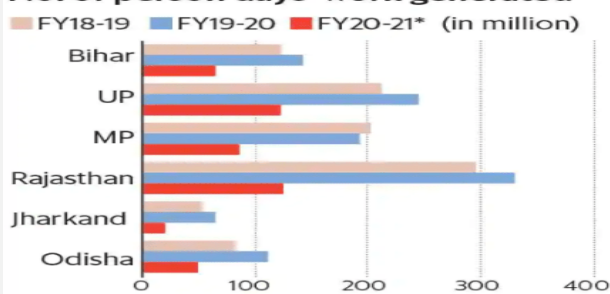
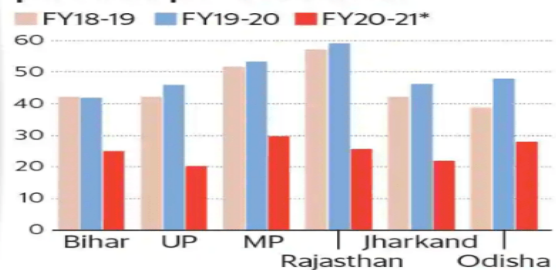
1. **Increase Funding:** In 2020-21, the budget allocated for MGNREGA is above Rs 100k crore. This is the highest allocation for MGNREGA in any year since the passage of the law. However, the allocation, which amounts to 0.47% of the GDP continues to be much lower than the World Bank recommendations of 1.7% for the optimal functioning of the program. The government must ensure the release of funds on an emergency basis.
2. **Revise wages and ensure timely payment:** Wages offered under MGNREGA increased in April, from Rs 182 to 202 per person. This is too small an increase and need be revised upwards.
3. **Expand coverage:** The limit of 100 workdays per year for a member of each rural family needs to be raised to at least 150 days.
4. **Demand Orientation:** There is need to strengthen the demand-driven aspects of MGNREGA through a focus on local level social audits, funding and tracking of outcomes.
5. **Ensuring Transparency:** To improve transparency and the accountability of Sarpanchs, it is recommended that MGNREGA projects be tracked right down to the village-level and not just the Gram Panchayat level as is the practice now.
6. **Build State's Capacity:** States should be provided with support to improve their capacity and allowed a degree of flexibility in MGNREGA implementation.

**Status of MGNREGA amidst Covid-19 pandemic**

- The demand for MGNREGS work jumped by 55% from 21.2 million workers in May 2019 to 32.9 million in May 2020.
- Since April, 3.5 million new workers have registered under the scheme reflecting the job losses in cities.
- 116 districts, with the highest number of returnees, have witnessed 86% increase in demand under MGNREGS in May from 2019.

**Lockdown impact**

The demand for MGNREGS has peaked in three months of FY21 as migrants returned home. Since April, 3.5 million new workers have registered under the scheme.

**No. of person days' work generated****Average days of employment provided per household**

**Skilling India.**

**Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.**

**In news:** In the wake of pandemic and Prime minister's call for self-reliant economy, India needs to focus on skill development.

**Need of Skill development in India**

- **To increase employment opportunities:**
  - According to data from the **Centre for Monitoring Indian Economy**, India's overall unemployment rate for the month of July (2020) stood at 7.43 percent.
  - Unemployment rate in big states like Bihar, Andhra Pradesh, Rajasthan are higher than the national average.
  - Also, according to the 2018 **Periodic Labour Force Survey (PLFS)**, the unemployment rate among the urban 15-29-years-old was 23.7%.
- **To create productive employment:** According to Economic Survey 2014-15, skill development overdrive is needed for productive employment.

**Skill development models in India:**

- Government-funded programmes that fully or partially subsidize training/apprenticeships.
  - Market-led trainings (where trainees pay for the course), market-led apprenticeships and industry-led/on-the-job training.
  - The not-for-profit National Skill Development Corporation (NSDC) was set up as a public-private partnership (PPP) to stimulate private sector participation in the Indian skill development sector.
  - Ministry of Skill Development and Entrepreneurship (MSDE) implement government grant-based vocational training programmes, where infrastructure is set up by private providers and training costs are subsidized by the government.
- **To reduce skill gap:**
    - Percentage of skilled workforce in developed countries are between 60% and 90% of the total workforce. For instance, 68% in the UK, 75% in Germany, 52% in USA, 80% in Japan and 96% in South Korea.
    - According to the **Periodic Labour Force Survey (PLFS) 2017-18**, merely 1.8% of the population received formal training on technical aspects and employment-ready skills.
    - Around 6% of workforce have received informal training on job skills, self-learning, etc.
  - **To harness demographic dividend:**
    - India is one of the **youngest nations** in the world, with more than 54% of the total population below 25 years of age and over 62% of the population in the working age group (15-59 years).

- The demographic advantage will last only until 2040 and India has narrow time frame to harness its demographic dividend.
- At the same time, ageing populations found in several developed countries present opportunities for the migration of skilled persons from India to the benefit of both the host and destination countries.
- **To revive economy:** Pandemic-induced lockdown has battered economies, disrupted global supply chains and affected livelihoods across different sectors. Skilling the masses is essential for giving sufficient cushion for reviving the economy.
- **Development of Human Capital:** skill development is a tool to groom an individual's personality. It helps an individual get better job opportunities as well as make him empower to generate employment for others.
- **Development of nation:** Skill development helps a country prosper as skilled people demand less support from the government in terms of social security net while contributing more towards the growth and development of the nation.
- **Increase adaptability:** Countries with higher skilled population adjust more effectively to challenges and opportunities in domestic and international job markets.
- **To build Atmanirbhar Bharat:** it is important to focus on employment in the current scenario, which will further accelerate the demand for a skilled workforce. This transitioning phase requires a robust foundation of an aligned learning ecosystem to foster new-age skills and an everyday innovation mindset.

#### **Challenges in skill development.**

- **Information asymmetries:** a skilled person knows his or her skills, but a potential employer does not. The last PLFS for 2018 revealed that 33 percent of the formally trained 15-29-year-olds were jobless.
- **Informal economy:** 90% of workers in India are informal workers, many of whom possess skills that have not been formally recognized.
- **Skill development is viewed in isolation:** skill development should be treated as integral part of employment and growth strategies to spur employment and productivity. Coordination with other macroeconomic paradigms is critical.
- **Lack of training capacity:**
  - The training given through many schemes are not sufficient to ensure a job for those who got the training and this is why the employability rate remains very low.
  - The target of Skill India scheme was to reach out to 300 million young people by 2022, but only a mere 25 million had been trained under this scheme by the end of 2018.
- **Unavailability of Funds:** According to PLF Survey, in 2018, only 16 per cent of the youth who had received "formal training was funded by the government".
- **Lack of entrepreneurship skills:** It was expected that some of the PMKVY-trainees would create their own enterprise, only 24% of the trainees started their business. And out of them, only 10,000 applied for MUDRA loans.

- **Low awareness level among youths:** Enrolment in skill development programme is low due to low awareness level among youths.
- **lack of appetite of industrialists:** due to the decline of the investment rate, rising NPAs and lack of credit availability the demand is weak.
- **Less fund allocation to education sector:** allocation for school education has declined from 2.81 percent of the budget in 2013-14 to 2.05 percent in 2018-19.
- **Arbitrariness in Policy making:** India's skill development ecosystem is leaning more towards formal education and rarely accommodates vocational training.
- **New emerging challenges:** According to the UN, the pandemic and lockdown measures have led to the worldwide closure of technical and vocational education and training (TVET) institutions which are threatening the continuity of skill development.
- **Reskilling of the youth for Fourth Industrial revolution:** the fourth industrial revolution has triggered a paradigm change with digital technology driving the job market. To remain globally competitive India needs to train the youth.

**Steps taken by the government to promote skill development.**

- **“Skill India” programme:**
  - Its objective is “to train a minimum of 300 million skilled people by the year 2022”.
  - It aspires to **establish and enforce cross-sectoral, nationally and internationally acceptable standards** for skill training in the country by creating a sound quality assurance framework for skilling.
  - Under Skill India mission, companies were requested to earmark 2 percent of their payroll bill (including for contract labour) for skill development initiatives.
- **Creation of Ministry of Skill Development and Entrepreneurship:** To harmonise training processes, assessments, certification and outcomes and, crucially, to develop Industrial Training Institutions (ITIs).
- **India Skills Report 2020:**
  - It is a joint initiative by **Wheebox - Global Talent Assessment Company**, People Strong - a leading HR solutions company from India, in collaboration with Confederation of Indian Industry (CII) along with partners like UNDP, AICTE, and AIU.
  - The report consists of an in-depth study of employability amongst the fresh candidates joining the workforce.
- **Pradhan Mantri Kaushal Vikas Yojana:**
  - This is the flagship scheme for skill training of youth to be implemented by the new Ministry of Skill Development and Entrepreneurship through the National Skill Development Corporation (NSDC).
  - The scheme will cover 10 million youth during the period 2016 -2020.
  - **Recognition of Prior Learning:** Individuals with prior learning experience or skills shall be assessed and certified under the Recognition of Prior Learning



(RPL) component of the Scheme. RPL aims to align the competencies of the unregulated workforce of the country to the NSQF.

- **Green Skill Development Programme:** The Green Skill Development Programme (GSDP) of the Ministry of Environment, Forest and Climate Change (MoEF&CC) is an initiative for skill development in the environment and forest sector to enable India's youth to get gainful employment and/or self-employment.
- **National Apprenticeship Promotion Scheme:** The main objective of the scheme is to promote apprenticeship training and to increase the engagement of apprentices from present 2.3 lakh to 50 lakhs cumulatively by 2020.
- **Upgrading the Skills and Training in Traditional Arts/ Crafts for Development (USTTAD):** The scheme aims at capacity building and updating the traditional skills of master craftsmen/artisans.
- **Nai Manzil:** To benefit *the minority youth who did not have a formal school-leaving certificate*, i.e. those in the category of school dropouts or educated in the community education institutions like Madrasas, in order to provide them formal education and skills, and enable them to seek better employment in the organized sector and thus to equip them for better lives.
- **Aatamanirbhar Skilled Employee Employer Mapping (ASEEM) portal:** To improve the information flow and bridge the demand-supply gap in the skilled workforce market, the Ministry of Skill Development and Entrepreneurship (MSDE) has launched 'Aatamanirbhar Skilled Employee Employer Mapping (ASEEM)' portal to help skilled people find sustainable livelihood opportunities.
- **Financial Assistance for Skill Training of Persons with Disabilities:** The Scheme aims at providing financial assistance for skill training for persons with disabilities. It covers Persons with Disabilities (PwDs) with not less than 40% disability and having a disability certificate to this effect issued by a competent medical authority.
- **Setting up of India International Skill Centres (IISC):** to provide skill trainings and certification benchmarked to International Standards.
- **Indian Institute of skill development:** to build world-class skill training centres by learning from and imbibing best practices from internationally renowned existing skill institutions.

#### Way forward:

- **Increase expenditure on education and training:** Skill India will not be enough if government expenditures in education remain low and ground needs to be prepared for proper training.
- **Transform education:** The higher education curriculum should focus on industrial demands and skill development to increase the employability of Indian graduates.
- **Conduct skill surveys:** Surveys can be conducted to find the exact skill requirements and address the information asymmetry. It would help in designing course structures of the training programs and thus standardized course curriculum or training delivery systems can be developed.

- **Spread awareness:** inculcate an urge to acquire new skills in masses by educating them about the need and benefit of skills acquisition.
- **Collaboration:** PSUs and the private sector must not only play a complementary role in building a self-reliant India but collaborate wherever feasible.
- **Industry-academia affiliation:** Institutes need to collaborate with the industry to co-create curriculum to develop contextual learning in the form of business problems, case studies, simulated project tools and infrastructure for hands-on learning and mentoring.
- **Inculcation of Digital Technology in skills:** training must be done in all domains so that people in remote locations can also learn new and industry relevant skills.
- **Adding context in learning:** India needs to transition learning model from a conceptual model into a contextual model. Contextual understanding seems more interesting and easier to retain, enhancing real-time learning and improving the prospects of employment.

The need of the hour is to upgrade the skills or upskill the youth to meet the employment needs of technology-driven 21st century and accelerate the pace of self-reliance.

### Custodial Violence: A crime by the State

**In News:** The recent death of a father-son duo from Tamil Nadu, allegedly due to custodial violence, has raised questions on the criminal justice system of India.

#### Custodial Violence in India

- Custodial violence primarily refers to violence in police custody and judicial custody. It may be mental or physical in nature.
- Rape and torture are the two common manifestations of custodial violence which may turn out to be fatal and cause death.

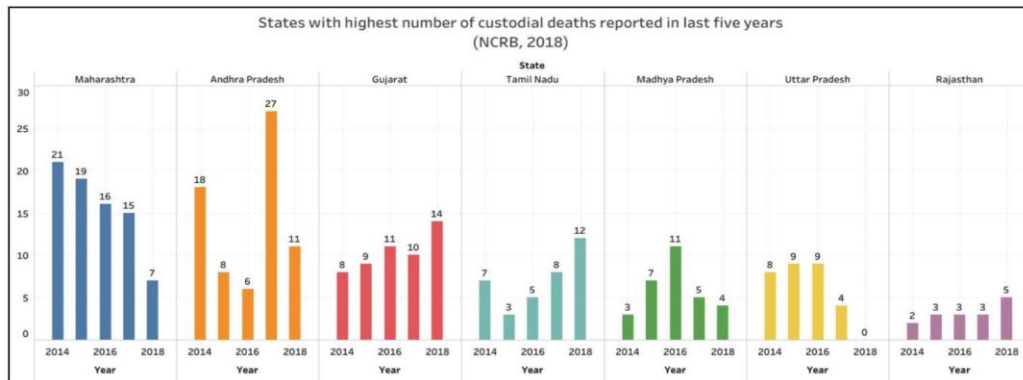
#### Types of Custodial Violence:

- **Physical:** This includes methods of physical torture on the victim
- **Physiological:** It includes mental torture. For instance, depriving a person of food. It also includes threat and humiliation of the victim
- **Sexual:** It is employed through rape/sodomy. It is directed towards social and psychological harassment of the victims.

#### State of custodial violence in India:

- According to the data published by The National Crime Records Bureau (NCRB), between 2001 and 2018, a total of 1,727 persons have died in police custody including those in judicial remand and those who have been arrested but not yet produced before the court.
- 75% of the people who died in police custody were tortured.
- Low conviction rate: Apart from custodial deaths, more than 2,000 human rights violation cases were also recorded against the police between 2000 and 2018. And only 344 policemen were convicted in those cases.





### Challenges in curbing custodial violence

- **Absence of a strong legislation:** India is yet to criminalise custodial violence. The available safeguards have proved insufficient to deal with issues of custodial violence.
- **State of prisons:**
  - There is a lack of facilities of medical, sanitation, security, and food in the prison.
  - Further, a disproportionate ratio between crime rate and man power makes the enforcement of laws difficult.
  - India has failed to bring adequate prison reforms to curb the existence of police subculture and punitive violence.
- **Non-ratification of UN Convention against torture:**
  - The United Nations convention against torture in 1997 was signed by India but the country did not ratify it.
  - While signing only indicates the country's intention to meet the obligations set out in the treaty, Ratification, on the other hand, entails bringing in laws and mechanisms to fulfil the commitments.
- **Politicisation of police :** The Police Act, 1861 which governs the Indian police system has no explicit provisions on the superintendence and general control and directions of police. This leaves the executive with a lot of power to control the law enforcement authorities as per vested interests.
- **Lack of police accountability:** The Prakash Singh guidelines of 2006 had recommended the constitution of an independent complaints authority to inquire into police misconduct. However, this has not been implemented by many states.

**Police brutalities:** The instances of custodial violence point to the mindset of police authorities who believe in a sense of impunity by conducting such types of acts. This is further corroborated by the following facts revealed by NCRB:

- **Underreporting:** Only 810 of the 1700 cases of custodial violence were registered as torture and the rest were put as suicide and death category.
- **Low conviction rate:** Between 2001 and 2018, no policeman was convicted for custodial deaths across the country except in the states of Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Odisha.

- **Poor witness protection regime:**

- Investigations related to custodial killings often run into delays due to lack of witnesses.
- The lack of strength in the institutional system to protect the witnesses result in the intimidation of the families of witnesses and thus, they turn hostile.
- Though a witness protection bill was introduced in 2015, its yet to get a place in the statute books.

**Provisions available to deal with custodial violence.**

- **Constitutional safeguards:**

- Article 20: Right to protection against conviction of offences.
- Article 21: Right to life and liberty.
- Article 22: Right to protection against arrest and detention in certain circumstances:
  - Being informed of the grounds of arrest.
  - To be defended by a legal practitioner of his choice.
  - Production in the nearest magistrate within 24 hours of the arrest.

- **Statutory safeguards :**

- **Indian evidence act, 1872:** Section 25 mentions that a confession to a police officer cannot be proved as against a person accused of any offence.
- **Code of criminal procedure, 1973 (amendment in 2008):** Section 46 and 49 of the code protect those under custody, from torture, who are not accused of an offence punishable with death or life imprisonment.
- **Indian police act, 1861:** Section 7 and 29 of the Act provide for dismissal, penalty or suspension of police officers who are negligent in the discharge of their duties or unfit to perform the same.
- **Indian penal code:** Section 330, 331 and 348 were enacted to curb the tendency of policemen to resort to torture to extract confessions.

**Judicial Pronouncements regarding custodial violence**

- **D.K. Basu v. State of West Bengal, 1987:** Under this case, the Supreme Court of India observed that using torture is impermissible and offensive to Article 21.
- **Munshi Singh Gautam and others vs the State of Madhya Pradesh:** The Supreme Court ruled that the dehumanising torture, assault in alarming proportions raise serious questions about the credibility of the rule of law and administration of the criminal justice system.
- **Rama Murthy v. State of Karnataka (1996):** The SC while upholding fundamental rights of prisoners identified 'Torture and ill-treatment' in prisons as an area that needs reform.
- **Nilabati Behera v. State of Orissa:** It ensured that the state could no longer escape liability in public law and had to be compelled to pay compensation.

**Way forward**

Death due to custodial violence is a heinous act. India, being a flourishing democracy can undertake the following measures to address the issue:

- **Dk Basu guidelines:** Implementing the 11-point guidelines mentioned in DK Basu case by the Supreme Court.
- **Implementation of Law Commission of India's 273rd Report:** The report recommends that those accused of committing custodial torture – be it policemen, military and paramilitary personnel – should be criminally prosecuted instead of facing mere administrative action establishing an effective deterrent.
- **Implementing Prison reforms:** Prison reforms are required for ensuring humane conditions and security for the people in custody.
  - CCTV cameras should be installed in police stations and in interrogation rooms.
  - Introduction of a monetary body to keep an eye on the activities in the prison.
- **Police reforms:**
  - Adoption of an effective mechanism for police will enable the police supervisory structures to reduce torture.
  - Police reforms to include ethical policing.
  - Implementing the recommendations of the Prakash Singh guidelines in letter and spirit.

The need of the hour is that government should ratify the United Nations Convention against Torture, which was also recommended by Law Commission in its 273rd report.

### India-EU: An unrealised partnership

**Syllabus:** Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

**In News:** Recently, India and the European Union (EU) held their 15th “annual” summit after a gap of more than two years.

#### Key Outcomes of the 15th EU-India summit

- **"India-EU Strategic Partnership: A Roadmap to 2025"** to guide cooperation between India and the EU over the next five years was unveiled.
- **A Joint Declaration on Resource Efficiency and Circular Economy** was adopted that provides for reduction in primary resource consumption and enhances the use of secondary raw materials.
- **A high-level economic and investment dialogue** to address trade issues was launched during the summit to take the stalled Bilateral Trade and Investment Agreement forward.
- **An agreement between Europol and the Central Bureau of Investigation (CBI)** has been finalised to deal with organised crime and terrorism.
- **Establishment of Maritime security dialogue** to deepen cooperation between two navies was one of the key outcomes of this summit.
- **Both India and EU affirmed their support to promote effective multilateralism** and a rules-based multilateral order with the United Nations (UN) and the World Trade Organisation (WTO).
- After 13 years of negotiation **Euratom-India agreement**, a framework agreement on cooperation in the civil nuclear sector has been finalised.

**Analysis on India -EU relation**

The EU and India have much in common. Interests of both the countries converge in a range of areas including economy, infrastructure, technology, security and global multilateralism.

**Economic cooperation:**

- The EU is India's first trading partner and the biggest foreign investor, with €67.7 billion worth of investments made in 2018, equal to 22% of total FDI inflows. Hence, an early conclusion of an FTA (Free Trade agreement) and Investment treaty can benefit India economically.
- Equally, India's large market presents the EU an economic opportunity to benefit from closer ties
- Also, India's demographic dividend will provide it with a young, skilled, competitive workforce which Europe lacks.

**Cooperation in Digital Technology:**

- With Chinese equipment and technologies being a common security concern, both can collaborate to develop suitable technologies in the field of 5G, IT, artificial intelligence (AI), space etc.
- Both support for common standards for data protection to protect fundamental freedoms in cyber space and the free flow of data (Example GAFA tax, India's Equalisation Levy, GDPR (General Data Protection Regulation) etc.
- Hence, EU and India should deepen cooperation to protect fundamental freedoms in cyberspace and the free flow of data and counter the drift towards high-tech "de-coupling"

**Investment:**

- India needs investments in infrastructure development domestically to the tune of 102 lakh crore (National Infrastructure pipeline). EU can be a credible investor which can bring in technology, expertise, the much-needed foreign investment.
- Similarly, with falling interest rate in most of the countries, India will be an attractive destination for European FDI's. The European Union is the largest source for foreign investment to India.

**Tackling the assertive China**

- Through debt trap diplomacy and BRI strategy, china is increasing influence in Europe. This is a common concern for India as well, Chinese BRI affects India's territorial sovereignty as it passes through POK (Pakistan Occupied Kashmir) and it also threatens India's dominance in Indian Ocean. To counter the same there is a need for collaboration to present alternatives.
- To reduce dependency, enhanced business cooperation can help both the EU and India diversify their strategic value chains and reduce economic dependency, notably on China.

**Multilateral cooperation:**

- Ensuring relevance of institutions like WTO, WHO in the context of USA's exit needs collaboration of EU and India.
- Terrorism and radicalization invading through digital medium are a common concern for both nations.
- Further, India's strategic goals in counter-terrorism, UNSC (Security council) reforms need EU support.

**Cooperation in Maritime Security:**

- To secure Indo-Pacific, to thwart piracy, and to ensure freedom of navigation and overflight both, EU and India need cooperation in maritime domain awareness & information sharing in Indian ocean.
- Stronger cooperation with like-minded, democratic powers like EU can support India's efforts in the Indo-Pacific region and to tackle assertive competitors like China.

**Cooperation in Environment and Climate Change:**

- Both, the India-EU have established a Joint Working Group on Environment which meets annually since 2007.
- To foster a sustainable growth, The EU-India Action Plan Support Facility Programme (APSF) provides technical assistance in five priority sectors: waste, water, climate change, air pollution and chemicals.
- To strengthen the joint activities for deployment of climate friendly energy sources, India and EU agreed on a Clean Energy and Climate Partnership (CECP) in 2016.
- In 2018, the EU joined efforts with the International Solar Alliance, headquartered in India.

However, there are various outstanding issues between India and the EU which needs to be fixed at the earliest to realise the true potential of India-EU partnership.

**Trade concerns:**

- Bilateral Trade and Investment Agreement is a Free Trade Agreement between India and EU, which was initiated in 2007 have failed to resolve certain issues.
- The EU have been historically reluctant about moving forward on India's demand for liberalisation of services in cross border trade and people's mobility and this has become more challenging with the rise of populism and protectionism in Europe.
- India is also opposed to negotiate sustainable development issues such as labour laws and climate changes issued under the FTA.
- According to a study by the European Parliament both the sides can increase gains between €8 billion and €8.5 billion with the signing of free trade agreement.
- EU trade partners, namely Pakistan, Sri Lanka, enjoy GSP+ benefits whereas India enjoys Generalised Scheme of Preferences (GSP) status under EU. This can be related to the fact that EU perceives India's policies such as 'Make in India' and 'Aatmanirbhar Bharat' as an approach towards protectionism.

**Investment disputes:**

- India cancelled most bilateral investment agreements with EU member states in 2016 on grounds that they were outdated and enacted a New model Bilateral Investment Treaty. Whereas EU wants the current BITs to be extended until the FTA talks restart.
- The provision that the countries can only seek the option of international arbitration when all domestic legal routes have been exhausted is a concern for EU.
- With rising tax disputes in India, for example the Vodafone case, Cairn India case it's unlikely that New model BIT can attract foreign investments into India.

**Information Technology**

- EU has denied Data-secure status to India citing loopholes in the India's data security system. This can impact future developments as recognition as a data secure nation by the EU is a key demand from India.
- It has prevented the flow of sensitive information to India which is a big deal for its IT industry. This has also impacted the movement of people through restrictions on business development as it restricts transfer of personal data to locations outside EU.

**Human rights:** EU had raised concerns over India's move to scrap Article 370, the Citizenship Amendment Act. It also stated National Register of Citizens (NRC) exercise as "the largest statelessness crisis in the world". Where India views it as an Intervention in India's internal affairs.

**Conclusion:** The western-led order is in crisis, as marked from the US withdrawal from the global order, increasingly assertive China, US-China strategic rivalry and a real crisis of multilateralism. A strong partnership between India – EU would help both the countries to become global decision-makers.

**Chabahar Port: A missed opportunity.**

**Syllabus:** Effect of policies and politics of developed and developing countries on India's interests

**In News:** The government of Iran has decided to drop India from the Chabahar-Zahedan railway line project.

**Chabahar-Zahedan railway project:** The 628km railway line connecting Chabahar to ring road of Afghanistan. It also has strategic importance as it would be laid along Iran-Pakistan-Afghanistan border. Though the project was supposed to be completed by March 2022, Iran has started on its own citing funding delay from Indian side.

This unilateral action from Iran comes amidst the backdrop of Sino-Iran trade deal.

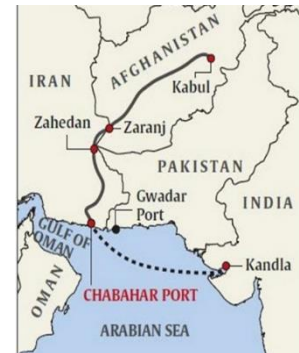
- China pledges around 400 billion US dollar Investment in Iran over the period of 25 years, as a part of its Belt and Road Initiative.
- The deal also includes the plan to station over 5,000 Chinese security personnel to safeguard the Chinese investments in Iran
- In return, China will get long-term energy contracts plus discounts of more than 30% and first refusal rights on all major energy projects in Iran.
- The proposed agreement mentions that China will 'assist Iran in Chabahar duty free zone'.



- The deal calls for joint training and exercises, joint research and weapons development and intelligence sharing.

#### **Implications of Sino-Iran deal on India:**

- The deal adds another pearl to the Chinese string of pearl, which aims to strategically contain India.
- The permanent presence of Chinese military will further strengthen China-Pakistan-Iran axis.
- The first refusal right to China, would effectively restrict all India's Investment in Iran.
- The deal could curtail India's possible connectivity route to Central Asia.



#### **Significance of Chabahar in Iran-India relationship.**

The relationship of India and Iran can be understood through the following contours:

- **Strategic dimension:**
  - **Access to Central Asia:** Iran can provide an alternative route to access Central Asia and in extension to Eurasia bypassing Pakistan. Ex- the International North South Corridor being an extension from Chabahar. [See fig.]
  - **Strategic location of the Chabahar Port:** The port is located near In Baluchistan province of Pakistan and near to the Strait of Hormuz and the Gwadar port (built under the CPEC). This would help India in managing both symmetric and asymmetric threats arising from the region.
  - **Promoting India's role as 'Net Security Provider' in the Indian Ocean:** Iran borders the Persian Gulf and controls the strait of Hormuz, a critical choke point. Cordial Indo-Iran relation is important for maritime security, combating piracy and ensuring 'open and free Indo-Pacific'.
- **Geo-Economic Dimension:**
  - **Safeguarding energy security:** Two-thirds of the oil and half the liquefied natural gas India imports passes through the strait of Hormuz between Iran and Oman.
  - **Access to resource rich Central Asian countries:** The port provides access to explore, extract and supply of metallic and non-metallic minerals of Central Asia. Ex- Kazakhstan provides 80% of uranium supplies to India, TAPI pipeline project.
  - **Access to Eurasian markets:** India's trade with central Asian countries stands at annual 1.5 billion USD of which Indo-Kazakhstan trade accounts for 1 billion USD. Infrastructural connectivity can help in exploiting the complementary economic relations of Indian and Central Asian economies.
  - **Indo-Iran bilateral trade and Investment:** In 2018-19, bilateral Indo-Iran trade stood at 17 billion US Dollar. Though the trade has declined following American sanctions on Iran. Earlier, New Delhi and Tehran had set up Rupee-Rial payment mechanism for purchase of Iranian oil.
  - **Blue Economy:** As members of Indian Ocean Rim Association, cooperation in maritime security and port led development model can help boost 'Blue Economy'

● **Geo-Political Dimension:**

- **Stakeholders in Afghanistan Peace process:** Shia-Majority Iran is antagonistic about return of Taliban in Afghanistan which is in alignment with India's Interests. Increased economic engagement and geostrategic presence can help India earn a seat at the Afghanistan peace process.
- **Possible development of Iran-China-Pakistan axis:** This would affect New Delhi's traditional sphere of Influence in the neighbourhood. There Is chance of possible meddling in internal issues of India. Ex-Kashmir dispute.
- **Partnership in global organisations:** Iran has observer status in SAARC. Iran frequently objected to Pakistan's attempts to draft anti-India resolutions at international organisations such as the Organisation of Islamic Communities and the Human Rights Commission.

**Brief timeline of India - Iran relations**

- Post 1979 Islamic revolution Iran followed the policy of non-alignment.
- Cordial relations till 2005, collaborated in resisting the Taliban in Afghanistan and supported the Northern alliance.
- 2005: India-US Nuclear deal was conditioned on change in India's Iran policy.
- 2005: India voted against Iran in the crucial International Atomic Energy Agency vote.
- 2008: Tehran alleged that New Delhi launched an Israeli spy satellite which targeted Iran.
- 2015: Relations improved after the signing of Joint Comprehensive Plan of Action or JCPOA which ended international sanctions against Tehran
- 2016: India increased the oil import and Iran quickly became India's second-largest oil supplier. India and Iran agreed to develop the Chabahar free trade zone, Chabahar port and transport corridors such as Chabahar-Zahedan railway line.
- 2017: The Trump administration however unilaterally abrogated the Joint Comprehensive Plan of Action and Imposed sanction via CAATSA act. This forced India to cut oil Import, leading to deterioration of relationship.

**Present scenario:** There has been a perception that India has aligned its national interest with the USA. China has capitalised on the growing mistrust between Iran and the USA.

**Instances of India-US rapprochement.**

- Signing of Civil Nuclear Deal In 2005
- Signing of three foundational military agreement i.e. General Security of Military Information Agreement (GSOMIA), Logistics Exchange Memorandum of Agreement (LEMOA) and Communications Compatibility and Security Agreement (COMCASA)
- US placing India in a privileged category of non-NATO U.S. ally and a major defence partner.

**TIMELINE: CHABAHAR AND FARZAD-B**

**Dec 25, 2002:** A consortium of ONGC Videsh, IOC and Oil India signs contract for carrying out exploration at Farzad-B block

**Jan 25, 2003:** Former PM Atal Bihari Vajpayee and then Iran president Seyyed Mohammad Khatami sign a deal to develop Chabahar port complex and Chabahar-Fahranj-Bam railway link

**June, 2009:** Farzad-B contract expires

**May 6, 2015:** Union minister Nitin Gadkari signs an MoU with Iran

**May 22, 2016:** PM Narendra Modi visits Tehran; discusses Chabahar and Farzad with Iranian President Hassan Rouhani

**Dec 3, 2017:** Rouhani inaugurates first phase of port

**Jan 2018:** Iran and India sign pact worth \$2 bn for cooperation in rail

**Feb 10, 2018:** Iran signs agreement to lease the operational control of Chabahar port

**Jul 2020:** Iran shows the door to India in both Chabahar and Farzad-B projects

- Industrial Security Annex which allows for greater collaboration among the two countries' private defence industries.
- New '2+2' foreign and defence ministers dialogue.
- The bilateral Strategic Energy Partnership through which India has started importing crude and LNG from the US.
- Inauguration of the first India-US tri-service military exercise and expansion of Malabar exercise.
- Reconceptualization of QUAD.

**Implications of Western tilt to India's foreign policy:**

- **Chinese assertion against India:** The ongoing tension along the Line of Actual Control has occurred due to Chinese apprehension that India is acting as a de-facto ally of the USA and both of them are inimical to China's 'peaceful rise'.
- **Chabahar Infrastructure development:** The possibility of sanctions under the USA's CAATSA law may lead to loss of opportunity for regional integration with Central Asia via Chabahar.
- **Development of multipolar axis:** Possible development of Russia-China-Pakistan axis or Iran-Pakistan-China axis would affect India's interests both in South Asia and the extended neighbourhood.
- **Decline of Soft Power:** There is already decline of India's soft power in the region. For example, Except Bhutan, all countries in Indian neighbourhood are have become part of the China-led Belt and road Initiative despite India's resentment against the CPEC.
- **Possible rise of bipolarity:** China is rising as a sole challenger to the western dominated multipolar world order. Aligning with the west would have Implications from the east. It may also dilute India's strategic autonomy.

**Way Forward:**

- India should use its influence in Washington to gain exception to infrastructural investments in its neighbourhood.
- It should pursue a policy of positive relation with Iran, Arabs and Israel and not convert its foreign policy into a zero-sum game with the Chinese.
- India can also invest diplomatic capital in restarting P5+1 format to address the nuclear concerns of USA.

## GENERAL STUDIES 3

### Digital Space and Taxes

**Syllabus:** Indian Economy and issues relating to planning, mobilization, of resources

**In News:** India has witnessed an exponential growth in its digital economy and during the pandemic when businesses are shifting online, India has expanded equalization levy.

**Digital taxation in India:**

- **Background:** It was introduced in India with the intention of taxing the digital transactions i.e. the income accruing to foreign e-commerce companies from India.

- **Equalization levy:** It is a direct tax, which is withheld at the time of payment by the service recipient.
- **Objective:** It is aimed at taxing (B2B) business to business transactions.
- **Equalization Levy 2.0:**
- The Equalization Levy introduced by the Finance Act 2016, was charged at 6% on certain online advertising and related services.
- The Finance Act 2020 amended the Finance Act 2016 and introduced a new Equalization Levy at 2% on the consideration received/receivable by an e-commerce operator from the following transactions (e-commerce supply or services):
  - Online sale of goods owned by the e-commerce operator; or
  - Online provision of services provided by the e-commerce; or
  - Online sale of goods or provision of services or both, facilitated by the e-commerce operator; or
  - Any combination of the above-mentioned activities.
- **The levy is applicable on consideration received by the e-commerce operator from a:**
  - Person resident in India
  - Non-resident, where the Sale of advertising, which targets a customer who is resident in India, or a customer who accesses the advertising through an IP address located in India.
  - Sale of data, collected from a person who is resident in India or from a person who uses an IP address located in India.
  - Person who buys goods or services, or both, uses an IP address located in India
- **Significant Economic Presence:** The government had introduced the concept of significant economic presence (SEP) in line with its plan to tax digital companies in the Finance Act, 2018. SEP was defined to mean systematic and continuous soliciting of business activities or engaging in interaction with such number of users as may be prescribed in India through digital means.
- **Collection of tax –** The burden of paying the equalization levy, which is often called the 'Google tax', to the central government, falls upon the Indian company or a non-resident company with a physical establishment in India.

**Google tax:** A Google tax, also known as a diverted profits tax, refers to anti-avoidance tax provisions that have been introduced in several jurisdictions to deal with the practice of profits or royalties being diverted to other jurisdictions that have lower or zero tax rates.

#### **Need of Digital taxation:**

- **To provide equal platform to both foreign companies with permanent establishment and companies with digital presence:** Foreign firms with permanent establishments are taxed at the rate of 40%. But the digital companies did not have any permanent establishment in India, so their income could not be taxed.

- **Level playing field for domestic companies:** It aims to equalize tax component between the domestic e-commerce company which is taxed under corporate tax and foreign non-resident e-commerce company which was not under Indian tax jurisdiction.
- **Digital growth in India:** Tech giants or e-commerce companies such as Google and Facebook benefit from growth of digital sector in India by generating revenue from outside the country of residence.

**GAFA tax:** named after Google, Apple, Facebook, Amazon is a proposed digital tax to be levied on large technology and internet companies. European countries in particular say the so-called GAFA are unfairly exploiting tax rules that let them declare profits in low-tax havens, depriving them of a fair share of their fiscal payments.

- **Large consumer base:** India has the second-largest online users in the world, with over 560 million internet users, and hence, from the viewpoint of its tax revenue base, digital businesses cannot be overlooked.
- **Source of revenue:** according to UN Committee of Experts on International Cooperation in Tax Matters, developing countries are often the main source of tax revenue loss in the digital economy, as they provide a substantial consumer and user base, but are less likely to host digital economy businesses.
- Non taxation creates opportunities for Base Erosion and Profit Shifting (BEPS):
  - Currently, international laws provide for the companies to be taxed in the jurisdiction in which they have a physical presence instead of end user-based taxation. However, digital businesses generate revenues from markets without a significant physical presence in a country but do not pay taxes there.
- The **OECD and G20 nations constituted the BEPS project** that typically targets tax strategies aimed at artificially shifting profits to low or no tax jurisdictions. Action Plan 1 of this project deals with the tax aspects of the digital economy.
- France as well as U.K., Spain, Italy and others have imposed taxes on the largest digital firms (Big Four).

**Base erosion and profit shifting:** It refers to corporate tax planning strategies used by multinationals to "shift" profits from higher-tax jurisdictions to lower-tax jurisdictions, thus "eroding" the "tax-base" of the higher-tax jurisdictions.

#### Issues with Digital taxation:

- **Increased burden on Indian firms:** Indian start-ups are requesting reduction in the equalization levy on the advertising revenue that overseas firms generate from India as the burden is shouldered by local start-ups and SMEs who advertise on these platforms.
- **Double taxation leading to less investment:** It discourages foreign firms from indulging in activities in India as they might not be liable for a tax deduction in their home country and can face double taxation.
- **It reduces competition in the market:** As a tax on revenue, the equalization levy is essentially a tariff and is not based on ability to pay. Businesses with higher profit

margins on their digital business with India will face a lower marginal tax rate than businesses with lower profitability.

- **Affect delivery of services during pandemic:** Digital taxation might impact the business models of the companies that are providing significant value worldwide during the current outbreak.
- **Towards protectionism:**
  - For instance, the recent implication of the 3% tax by the French government has been called out as being an anti-America move.
  - Tax authorities in **Saudi Arabia and Kuwait** have introduced the concept of a 'virtual service Permanent Establishment', which is deemed to exist even with no physical presence in the countries.
  - US considers such measures to single out its digital companies as major digital companies are based in USA. The USTR has initiated a probe into the imposition of digital taxes on firms like Facebook, Netflix and Google in the EU and nine countries, including India.
  - The inconsistent unilateral rules adopted by several nations might end up increasing tax burden of digital firms.

#### **Multilateral Convention to Implement Tax Treaty Related Measures to prevent Base Erosion and Profit Shifting (MLI)**

- To close the gaps in existing international tax rules by transposing results from the OECD/G20 BEPS Project into bilateral tax treaties worldwide.
- It also implements agreed minimum standards to counter treaty abuse and to improve dispute resolution mechanisms while providing flexibility to accommodate specific tax treaty policies.

#### **Way forward:**

- **Consensus building:** India pitched for a global mechanism technically called Multilateral Instrument (MLI) which would be a permanent measure to tax digital companies that earn revenues from a large user base in the country. This would automatically amend bilateral tax treaties to include the taxation provisions for digital business.
- **Bring more clarity on digital taxation:** the equalization levy in India is deemed widely worded and requires more clarity as to what transactions need to be taxed by the government, as it brings thousands of online transactions under its scope.
- The Indian government should consider **narrowing the scope of EL 2.0** and announce the required clarifications.
- OECD's two-pillar approach to tackle tax challenges from digitalization:
- **Unified approach:** continuing engagement with stakeholders to preserve the multilateral process. It addressed taxable nexus and the allocation of taxing rights among jurisdictions.
- It addressed the **global anti-base erosion (GloBE) issue and presented an approach to implement a global minimum tax** through a coordinated set of global tax rules that contain both income inclusions and base-erosion payments.



- A good tax system must have the axes of certainty, simplicity, and neutrality. A uniform solution is needed to mitigate complications of varied approaches. It may be more pragmatic to accept such levies and negotiate bilaterally.

### Agri Marketing: The way to double farmers' income

#### Syllabus: Marketing of agricultural produce and issues and related constraint

**In News:** The Covid-19 pandemic had disrupted the forward and backward linkages of agriculture value chain.

#### What is Agricultural Marketing

- The agriculture sector needs structured and functional markets, preferably to vicinity of farmers, to drive growth, employment, remunerative prices and economic prosperity in rural areas of the country.
- Agriculture marketing is a mechanism that facilitates the movement of farm-produced foods, raw materials and their derivatives to different marketplaces. It involves assembling, storage, processing, transportation, packaging, grading and distribution of different agricultural commodities across the country.
- An efficient marketing system ensures availability of quality inputs and outputs at desired place, at right time and in the suitable form. This is only possible with strong infrastructure support, efficient transportation, processing, grading and storage facilities.

#### Significance of Agricultural Marketing:

- **Resource Optimization:** An efficient marketing system can scale down the losses arising out of inefficient processing, storage and transportation thereby increasing the marketable surplus
- **Doubling Farmers Income:** An efficient marketing system limits the number of middlemen and restricts the malpractices adopted by them thereby ensuring higher levels of income for the farmers.
- **Enlarges the market:** An efficient marketing system can enlarge the markets for a product by distributing it away from the production points. This helps in sustaining the demand and thereby guarantees a higher income to the producer.
- **Growth of Agro-based Industries:** Perishable nature of Agri products requires a well knitted marketing system such as assembling, storage, processing, transportation, packaging, grading to ensure long shelf life. This can benefit the growth of agro-based industries.
- **Better Price discovery:** An efficient marketing system can forecast the price fluctuations based on demand and supply. This will help farmers in planning their production according to the demand so that farmers can save themselves from the crash of crop prices.
- **Adoption of New Technology:** Better income to farmers through realisation of exact demand will further encourage farmers to invest in technology.

- **Employment Generation:** As the marketing system involves activities, such as packaging, transportation, storage and processing, etc. It has a huge potential to provide employment for millions.
- **Increase in National Income:** Marketing activities add value to the product thereby increasing the nation's gross national product and net national product.

#### Issues in Agricultural marketing in India

- **Too many intermediaries:** geographical isolation of markets necessitates the role of middlemen which results in high cost of goods and services and upsets the price realisation of farmers.
- **Inadequate infrastructure for storage, sorting, grading or post-harvest management:** this results in huge wastage of agricultural produces. It also leaves less room for further value addition leading to distress sale by farmers.
- **Private sector unwilling to invest in logistics or infrastructure:** lack of investment in cold storage, warehouses, processing and export has limited the development of agricultural sector.
- **Price Volatility in Agricultural Markets:** The agricultural sector is exposed to a variety of risks such as climate and weather risks, natural catastrophes pest and diseases etc. Lack of reliable price risk managements such as agriculture insurance, minimum support price system and future's markets expose farmers to production and price shocks.
- **Lack of market intelligence:** The present Marketing infrastructure is inadequate to pass on real-time demand leading to surplus of some commodities in some crops while shortage of other commodities.
- **Essential Commodities Act impedes free movement, storage and transport of produce:** This has obstructed the creation of integrated value chains across the country. The anti-hoarding provisions of ECA discourage open reporting of stock holdings, storage capacities, trading and carry forward positions.
- **Fragmentation of Agricultural market:** The requirement of APMC act to possess Multiple licences to trade in different market areas of the same State have caused fragmentation of the markets thereby inducing inefficiency over space and time.
- Apart from these issues, Adulteration, hoarding and profiteering, and collusion among traders to suppress prices also impedes the development of agriculture in India.

#### Steps Taken

- **Creation of Electronic-National Agricultural Market (e-NAM)** that enables One nation, one market to ensure fair price discovery: It aims to unify mandis across the nation by enabling a buyer located anywhere in India to place an order in any mandi in India, breaking the monopoly of Intermediaries.
- **Mega food park scheme:** it aims to link agricultural production to the market by bringing together farmers, processors and retailers. This would ensure maximizing value addition, minimizing wastage, increasing farmers' income.

- **Agri-Market Infrastructure Fund (AMIF):** Rs. 2,000 crores for Agri Market Infrastructure Fund (AMIF) to be created with NABARD for development and upgradation of agricultural marketing infrastructure in rural agricultural markets.
- **Grameen Agricultural Markets (GrAMs):** these are defined as Retail agricultural markets in proximity of the farm gate, that promote and service a more efficient transaction of the farmers' produce across the agricultural sub-sectors, by enabling both direct sale, between the producer and consumer, and aggregation of small produce-lots for subsequent transaction, both of which can occur either physically or online. It was announced in Budget 2018-19 to develop and upgrade existing 22,000 rural haats into Gramin Agricultural Markets (GrAMs).
- **Model Agricultural Produce and Livestock Marketing Act (APLM), 2017,** provides for progressive agricultural marketing reforms, including the setting up of markets in the private sector.
- **The Essential Commodities (Amendment) Ordinance 2020** was passed recently to deregulate commodities such as cereals, pulses, oilseeds, edible oils, onion and potatoes. This move is expected benefit India's Agri-exports and enable private investment in supply chains.
- **The Farming Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020,** was passed recently to provide for barrier-free trade of farmers' produce outside the markets state APMC.
- **The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020** was passed to provide a legal basis to the existing practice of contract farming in India's agriculture and allied sectors. This will provide the price assurance to the farmers at the time of sowing.
- **Single point levy of market fee across the State/UT:** The Market Committee were mandated to levy market fee on agricultural produce from a buyer only once, whether brought from outside or within the state/UT
- **Unified single trading licence for State/UT:** the provision of multiple licenses within states has been dismantled.
- **Kisan rail:** This train will help in bringing perishable agricultural products like vegetables, fruits to the market in a short period of time. The train with frozen containers is expected to build a seamless national cold supply chain for perishables, inclusive of fish, meat and milk.

#### Way forward

- **Market Access to farmers:** The National commission on farmers had observed that the density of APMC is poor, so providing market access within five kilometres from the farmer's residence should be prioritised.
- **Strengthen the Farmer Producer Organizations:** Farmer Producers organizations (FPO) enables aggregation of the produce thereby provides the necessary bargaining power to get better price. It has to be strengthened by enhancing its Credit availability, Capacity Building, Alternatives State Support to Producer Companies.

- **Promoting contract farming:** will help farmers to get access to modern technology, quality inputs, other support and a guaranteed price.
- **Developing reliable Marketing Intelligence System** to provide demand led decision making support system for agricultural produce and crop area estimation to aid price stabilisation and risk management.
- **Upgrading storage facilities:** India's cold storage facilities has a capacity to store only about 11 percent of the country's total perishable produce along with unequal distribution that are scattered around few states. Upgrading storage infrastructure will prevent post-harvest losses and distress selling by Farmers.
- **Assist price discovery:** Auction of the produce should take place simultaneously on the electronic platform in all regulated markets all over the country.
- **Direct marketing:** Promote more of Rythu Bazaars / Kisan Bazaars that allows farmers to directly sell their produce to consumers without intermediaries. This would save losses as well as increase farmers' share in the price paid by the consumer.
- **PPP for efficiency and effectiveness:** Partnership with the private sector will provide the necessary technology, finance and upgrade business quality and social standards to strengthen agri- marketing system in India.

### Global Value Chains: Integrating the world economy.

**Syllabus:** *Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.*

**In News:** The pandemic has triggered a debate whether the global value chains (GVCs) may lead to increased fragility of economies actively participating in them.

#### **Background:**

**Value Chain:** A value chain refers to the “full range of activities that firms and workers do to bring a product from its conception to its end use and beyond”. It involves activities like production of a good or service and its supply, distribution, and post-sales activities etc.

**Global value chain:** When the value chain is distributed across countries, it means that these activities are divided among different countries. This phenomenon where the value chain is spread across the globe is called GVC.

#### **Importance of GVCs for India**

- **Augment growth and employment:** As per the World Bank's World Development Report 2020 (WDR 20), cross-country estimates have suggested that a 1% increase in GVC participation can boost per-capita income by more than 1% particularly when countries engage in limited and advanced manufacturing.
- **Improves Firm-level productivity:** WDR 20 has suggested that GVC firms engaged in manufacturing activities show higher labour productivity than one-way traders or non-traders after controlling for firm-level capital intensity. In particular, firms that engage in both import and export are 76% more productive than non-trading firms as compared with a 42% difference for export-only firms and a 20% difference for import-only firms.
- Backward participation in GVCs can be particularly beneficial for economies:

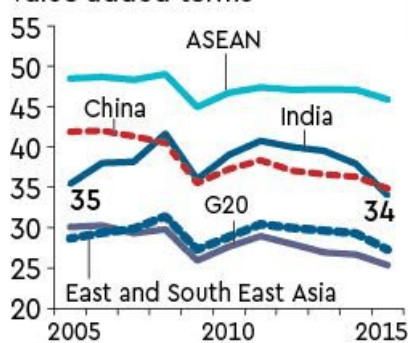
- A 10% increase in the level of GVC participation could increase average productivity by close to 1.6%.
- As the accompanying graphic shows while China has seen a rise in its forward GVC participation and a corresponding drop in the backward participation, the trend has been just the opposite for India.
- India's share of foreign value-added content in total GVC trade has steadily increased from 53% in 2005 to 61% in 2014.
- **Value addition at the midstream stages:** If India can seize FDI looking to relocate from China and create conditions for firms to leverage the labour-cost arbitrage opportunities.
- **Promote Hyper-specialization:** GVCs promote hyper-specialization, which improves efficiency. By breaking up complex production process, GVCs allow countries to specialize in specific parts or tasks of production. E.g. China's "Button Town," where hundreds of factories produce more than 60 percent of all buttons on Earth.
- **Encourage Technology transfer:** Unlike in traditional trade in which firms in different countries compete, GVCs are networks of firms with common goals. GVCs involve longer-term firm-to-firm relationships. This nature of GVCs makes them a particularly powerful vehicle for technology transfer and sharing know-how along the value chain.

#### Experiences during the ongoing pandemic:

The ongoing pandemic has fueled calls for further de-globalization of such production networks to reduce industry- and economy-level vulnerabilities. Major demand- and supply side shocks to value chains and lack of redundancy planning in such networks.

#### Total GVC participation (Forward+backward)

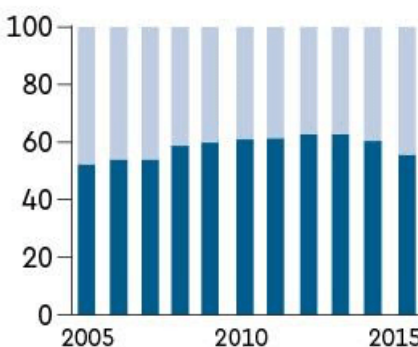
% of gross exports in value added terms



Source: OECD TiVA Database (2018)

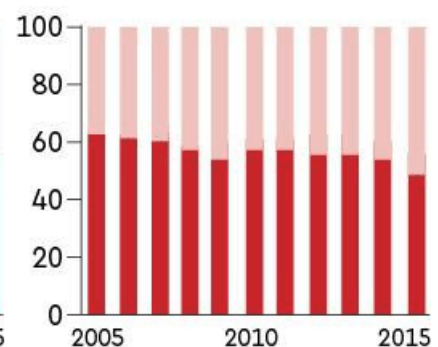
#### GVC profile - India

% of total GVC participation  
■ Forward ■ Backward



#### GVC profile - China

% of total GVC participation  
■ Forward ■ Backward



#### The graphic shows:

- It is clear that between 2005 and 2015, there has been a steady decline in GVC intensity across all major economies.
- For India, GVC participation peaked at 41.6% in 2008, but has dropped ever since, hitting a low of around 34% in 2015.



- The stagnation of GVC trade since the global financial crisis and the unfavourable impact of the ongoing pandemic on GVCs notwithstanding.

#### Concerns associated with GVCs

- **Inequality and non-inclusiveness:** Gains from GVC participation are not distributed equally across and within countries. Inequalities arise in the distribution of capital and labor, between skilled and unskilled workers as well as between male and female workers and geographically within countries.
- **Spillover effect:** When production in one country relies on inputs from its trading partners, the economic conditions in other countries affect its domestic activity. This affects how shocks are transmitted across borders.
- **Amplify protectionism:** GVCs are affected to a greater extent by trade barriers. The hyper-specialization in tasks and parts across borders means that trade barriers are incurred multiple times.
- **Policy uncertainty:** GVCs amplify the costs of sudden increases in trade policy uncertainty because firms may wait to invest in relationships with foreign suppliers until the uncertainty is resolved.

#### Conclusion

Long-term gains from globally connected value chains can far outweigh the benefits from localization. Instead of a piecemeal approach, India needs to adopt a holistic perspective focused on the 'whole of the supply chain', by driving strategic changes in its investment-development paradigm, and through greater integration into the GVCs

### MSMEs - The engines of India's growth

**Syllabus:** Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

**In News:** The pandemic has hit the MSME sector hard by depleting the internal reserves and a possibility of low demand for next six months at least.

#### Introduction

- MSMEs have been a stimulator for economic growth and for promoting equitable development globally.
- As per the new definition, the manufacturing enterprises can be defined as:
  - Micro manufacturing and services unit was increased to Rs. 1 Crore of investment and Rs. 5 Crore of turnover.
  - The limit of small unit was increased to Rs. 10 Crore of investment and Rs 50 Crore of turnover.

Category	Old Capital	Old Turnover	New Capital	New Turnover
Micro	25 Lakh	10 Lakh	1 Crore	5 Crore
Small	5 Crore	2 Crore	10 Crore	50 Crore
Medium	10 crore	5 Crore	50 Crore	250 Crore



- The limit of medium unit was increased to Rs. 20 Crore of investment and Rs. 100 Crore of turnover for medium Enterprises, now it will be Rs. 50 Crore of investment and Rs. 250 Crore of turnover.

The chief responsibility in promoting this industry lies with the state government.

- The Indian economy aims to become a \$5 trillion economy by 2024 and so the development of the sector has become critical as it owns 90 percent of the industrial units and employs 40 percent of India's workforce already.

#### **Significance of the MSME sector**

- **Contribution to GDP:** India's 63.38 million MSMEs contribute significantly to the country's economic growth. The sector accounts for about 45 percent of manufacturing output, more than 40 percent of exports, over 28 percent of gross domestic product.
  - MSME ministry has set a target to up its contribution to GDP to 50% by 2025 as India becomes a \$5 trillion economy.
  - MSMEs contribute around 6.11% of the manufacturing GDP and 24.63% of the GDP from service activities as well as 33.4% of India's manufacturing output. Further, the sector has consistently maintained a growth rate of over 10%.
- **Providing employment opportunities:** MSMEs employ more people than any other sector except for agriculture. Since the enterprises falling in this sector require low capital to start the business, it creates huge employment opportunities for many unemployed youths.
  - As per 73rd round of the NSSO survey (2015-16) conducted by MoSPI, the number of workers in unincorporated agricultural MSMEs were 11.10 crore.
  - It employs around 120 million persons in India, hence the second largest employment generating sector after agriculture.
- **Fostering inclusive growth:** MSMEs promote inclusive growth by providing employment opportunities in rural areas especially to people belonging to weaker sections of the society. It does so by promoting non-agricultural livelihood at minimum cost, unbiased regional development, large female participation etc. It can play an instrumental role in poverty elimination and prevention of distress migration.
  - For example: Khadi and other village industries require low per capita investment and employs a large number of women in rural areas.
- **Increase Financial inclusion:** Small industries and retail businesses in tier-II and tier-III cities create opportunities for people to use banking services and products.
- **Promoting exports:** The MSME sector in India is contributing more than 40% to exports. The share of MSME exports has increased from 43% in 2012-13 to 49% in 2017-18.
- **Promote innovation:** It provides opportunity for budding entrepreneurs to build creative products boosting business competition and fuels growth.

#### **Issues and challenges with MSMEs Sector**

The contribution of the MSME sector in the economy is currently constrained due to several challenges affecting the growth of the sector. Some major ones are explained below:

- **Low value addition:** With poor infrastructure, lack of technology innovation and unskilled labour, MSMEs production cost increases whereas the production capacity decreases. It is also low due to the small size of these firms, which in turn is due to the labour laws which create perverse incentives for firms to remain small.
- **Compliance burden:** India has a plethora of laws, rules and regulations, both at the Centre and State level that govern the employer-employee relationship. Each of these regulations exempt smaller firms (less than 100 employees) from complying with these legislations. So, rather than growing the firm beyond a threshold, entrepreneurs find it optimal to operate as small firms or start a new firm to obtain incentives.
- **Lack of access to timely and affordable credit:** According to Economic Survey 2017-18, MSME sector faces a major problem in terms of getting adequate credit for expansion of business activities. The survey had pointed out that the MSME received only 17.4 percent of the total credit outstanding.
- **Lack of integration with Global Value Chains:** There is a direct link between internationalization and MSME performance. International activities reinforce growth, enhance competitiveness and support the long-term sustainability of companies.
  - Presently, MSME clusters are inadequately equipped in areas such as tool rooms, innovation centres, testing facilities, etc. This results in a lack of critical connection between the Indian MSMEs with that of their global counterparts, resulting in a reduced competitiveness.
- **Lack of technology adoption:** Most of the MSMEs are reluctant to adopt technology due to their lack of understanding while choosing the right technology solution, and low impact on overall profitability. This is followed by the lack of skilled manpower to operate technology, lack of trust in technology, and the high cost of equipment.
  - For instance, as per a survey by the private sector lender Yes Bank, out of 2700 MSMEs surveyed, only 5% have fully embraced digital adoption.
- **Skill Deficit:** According to a study of MSMEs in the northern region, only 42 percent of the respondents said they conduct skill development training of their employees. It also found that 20 per cent of employees in the sector were unskilled and 21 percent were getting on-the-job training.
- **Cumbersome registration process:** Presently, MSMEs must do multiple registrations with various entities such as Udyog Aadhaar portal, GSTN, National Small Industries Corporation (NSIC), etc. This leads to a cumbersome registration process and duplication of effort.
- **Problem of dwarfism:** According to the Economic Survey 2019-20, while dwarfs (small firms that remained small despite aging) consume vital resources that could possibly be given to infant firms, they contribute less to creation of jobs and economic growth as compared to infant firms.

#### Key Government Initiatives.

- **Prime Minister Employment Generation Programme:** It is a credit linked subsidy program under Ministry of MSME.

- **Credit Linked Capital Subsidy Scheme (CLCSS):** CLCSS aims at facilitating technology upgrade of MSEs by providing 15% capital subsidy (limited to maximum ₹15 lakhs) for purchase of plant and machinery.
- **PSB loans in 59 minutes:** Enable easy access to credit to MSMEs.
- **Micro and Small Enterprise Cluster development (MSE-CDP):** It aims to support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, infrastructure development, access to capital, setting up of common facility centres.
- **GeM: Government e-Marketplace (GeM)** portal provides transparency in procurement and facilitates MSMEs to directly reach out to the buyers.
- **National Manufacturing Competitiveness Programme:** The objective is to develop global competitiveness among Indian MSMEs. This programme targets enhancing the entire value chain of the MSME sector. It targets enhancing the entire value chain of MSMEs.
- **Udyami Mitra Portal:** Launched by SIDBI to improve the accessibility of credit and hand holding services to MSMEs.
- **Interest subvention scheme:** Provides for 2 percent interest subvention for MSMEs under the Goods and Service Tax (GST) on fresh or incremental loans.
- **Digital MSME scheme:** It involves usage of Cloud Computing where MSMEs use the internet to access common as well as tailor-made IT infrastructure.
- **MSME Samadhaan:** The Ministry of MSME launched a portal [samadhaan.msme.gov.in](http://samadhaan.msme.gov.in) to facilitate MSMEs to file their delayed payments related complaints online.
- **MSME Sambandh:** It is a public procurement portal to monitor the implementation of the public procurement from MSMEs by Central Public Sector Enterprises.
- **Market Assistance Scheme:** Offers MSME businesses the necessary finance so that they can engage in marketing activities such as organising, participating, co-sponsoring exhibitions at international organisations, organising buyer-seller meets, marketing promotional events or intensive campaigns for the business.

#### Way forward.

- **As per the India MSME Report 2018,** there is a need to give incentive to infant firms. In a bid to make them self-sustainable, there has to be a sunset clause for incentives.
  - Firms should be incentivised for a period of less than 10 years with necessary gathering, post which they should be able to sustain themselves.
  - Further, the following reforms could be undertaken to give a boost to the sector:
- **Infrastructure development:** The government can start with providing enhanced development and upgrading of existing rail and road networks along with developing infrastructure in less developed and rural areas.
- **Skill development and training:** Skill development and imparting training to MSME workers is a crucial step to increase the productivity of the sector. The government should emphasize predominantly on skill development and training programs.
- **Credit and institutional finance:** The RBI should bring stringent norms to review the asset quality to curb loan defaulters and motivate potential good debts.

- **Technology and innovation:** There should be proper research and development respecting innovative methods of production and service rendering. Further, the government should promote and subsidise the technical know-how to Micro and small enterprises.
- **Marketing and procurement:** Digital solutions are multiple and help in better targeting the audiences, giving a brand high visibility at a fraction of the cost of newspaper and television advertising.
- **Institutional structure:** Chambers of commerce and industry associations can play an important role in sharing, learning, training and sharing of good practices. They can become the main entry point for MSMEs in becoming a part of the local innovation networks.

### Railways Reforms: Privatising railways

#### Syllabus: Infrastructure: Railways

**In News:** Indian Railways initiated the process to allow private firms to operate passenger trains on its network. The private trains are expected to begin operations by April 2023.

#### Current developments

- The Railways invited Request for Qualifications (RFQ) for operation of passenger trains by private operators on 109 routes with 151 modern trains.
- Railways were running 2,800 Mail Express Trains and 151 modern trains — for which the RFQ was invited which accounted for only 5% of them. So, 95% of trains will still be run by Indian Railways.
- **Investment:** This project is expected to attract ₹30,000 crore in private investment.
- **Selection process:**
  - While shortlisting will be based on financial capacity (with sharing of gross revenue), the selected parties can fix fares by themselves.
  - These parties have to pay fixed haulage charges, energy charges based on actual consumption, and a share in gross revenue through the bidding process.
  - Railways has also set certain key performance indicators for the private player, like punctuality, reliability, and maintenance of trains.

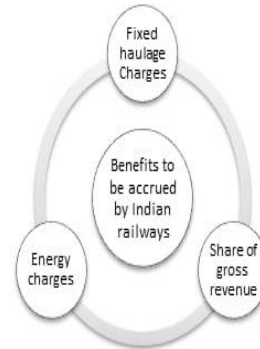
#### The major objectives of this project are:

- **Improved technology:** The project aims to introduce modern technology for the rolling stock.
- **Reduced costs:** Induction of the private players would also lead to reduced maintenance cost for the government.
- **Improved safety:** Better maintenance due to private ownership is expected to reduce the number of accidents, thus resulting in safe travel. The success of private trains in Japan in this regard is a good example.
- **World class travel experience:** Privatisation is expected to bring in better amenities for travellers. Thus, it would provide world class travel experience to passengers.

- **To increase confirmed reservation:** Data shows that during the busy seasons/summer season nearly 13.3% passengers were not able to get confirmed reservations. Thus, privatisation is expected to reduce demand supply deficit in the passenger transportation sector.
- **Attract investment:** Private sector is expected to bring in more investment into the railways sector, which has been languishing despite allowing 100% FDI in railway infrastructure. The government envisages around Rs 50 lakh crore of investment in rail projects up to 2030, but as per the Union Budget 2019, only a part of it can be financed through government coffers.

That is why, public-private partnerships are needed for faster development.

- **Self-reliant India:** The railway has said that 70% of the private trains will be manufactured in India which will be designed for a maximum speed of 160 kmph.



**Critical Issues which need to be addressed for this initiative:**

- **Financial Viability:** There will be questions over the financial viability of some routes which have not been good for Indian Railways in terms of revenue earned in the last few years.
- **Subsidy by Indian Railway:** Railways tend to cross-subsidize passenger fares through freight revenue. This translates to below cost pricing which will make it difficult for private players to compete.
- **Fixing responsibility in accidents, derailments:**
  - The responsibility of the private investor ends with investment in the procurement and maintenance of coaches. While, train operation, safety and dealing with everyday problems rest with the Railways.
  - In case of an unfortunate event, the question would be how to fix responsibility when the coaches are owned by the investor but operated by the Railways and its staff.
- **Issues associated with higher pricing:** The higher fares needed to cover costs by private players might bring them in direct competition with airlines, pricing them out of the market.
- **Speed and changes:**
  - While raising the maximum running speed to 160 kmph is a welcome measure but accomplishing this in the timeframe given will be difficult.
  - Nearly all trunk routes in the existing network are speed limited to 110 kmph (maximum speed) and very few permit speeds of upto 120-130 kmph.
    - To raise it to 160 kmph, as proposed, there has to be:
    - Track strengthening

- Elimination of curves and level crossing gates
- Strengthening of bridges.
- It also calls for track fencing especially in densely populated areas.
- **Timing:** From the timings for different trains given by the Railway Board there is no appreciable reduction in transit time for most trains when compared with the timings of the fastest train now operating on that route. This requires a critical review.
- **Marginalizing the vulnerable sections:** The private investor is not bound to follow reservation regulations in employment, in turn depriving employment opportunities for those who are on the margins of society.
- **Absence of independent regulator:** Further, as the experience of private operators in running container trains suggests, setting up an independent regulator will be critical for creating a level playing field for private players. Currently, the same entity is effectively the policymaker, regulator and service provider, rolled into one.
- **Conflict of Interest:** The Ministry of Railways is effectively the policy maker, regulator and service provider. This is against the Bibek Debroy committee recommendation. It would undermine the fair competition between private and government railway operations and impede the efficient privatisation process of Indian Railways.

#### Suggested solutions

- **Global best practices:** The United Kingdom and Japan have privatised their rail systems completely and not partially but most countries have retained their rail networks for public convenience.
- **Considering IRCTC as an alternative partner:** Instead of a private entrepreneur, entrusting this task to the Indian Railway Catering and Tourism Corporation, a government undertaking which has gained experience in running the Tejas Express trains. It will lead to 'unity of command' in maintenance, operation and passenger services under the single administration of the Railways and its undertaking.
- **Hyderabad Metro Model:** In the case of the metro railway services (Hyderabad, for example), an ideal PPP project, the private sector is solely responsible for daily maintenance, operation, passenger amenities and staff issues. The State government steps in when it comes to land, power, permissions, law and order, etc. Fare determination is in consultation with the government.
- **Ensuring affordability:** The government must offer subsidies and tax incentives to companies that would provide low-cost services similar to low cost airlines to these very pockets of population.
- **Setting up RDA:** There is a need to expedite the process of establishing the Rail Development Authority, as it is already approved by the government.
- **Modernization of Railways:** There is a need to implement the recommendations of the Bibek Debroy committee, such as expansion of Indian Railways manufacturing company, Corporatization of core functions of railways, etc.



**Conclusion**

The Indian Railways is a strategic resource for the nation and provides a vital public good. Hence, it should not be judged solely on its profit-generating capability or market-based return on investment rather it needs to be considered as a social welfare organization.

**Industrial Revolution 4.0: A new disruption****Syllabus: Awareness in the fields of IT, Space, Computers**

**In News:** The present technological age on going in 21<sup>st</sup> century that has come up since the first such revolution took place in 18<sup>th</sup> century is described as the fourth industrial revolution.

The Centre for the Fourth Industrial Revolution, an initiative of the World Economic Forum was launched by India's current Prime minister. The fourth Industrial Revolution describes the huge changes brought about by smart technologies.

**What is the fourth Industrial revolution?**

- The fourth industrial revolution is theorised as an upgrade on the third revolution and is marked by a blend of technologies including the physical, digital and biological worlds.
- It includes cyber-physical systems, the Internet of things, big data analytics, cloud computing, cognitive computing, artificial intelligence, 3-D printing, and autonomous vehicles etc.
- Cyber-physical systems communicate and cooperate with each other and with humans in real-time both internally and across organizational services offered and used by participants of the value chain over the internet of things.

**Background:**

- The 1st Industrial Revolution which occurred in 18th century in Britain used water and steam power to program production, connecting of steam power and birth of modern factory.
- The 2nd Industrial Revolution, from the last 3rd of the 19th century to the outburst of World War I, was powered by developments in electricity, transportation, chemicals, steel, and mass production and consumption.
- Now a 4th Industrial Revolution is building on the 3rd, the digital revolution that has been happening since the middle of the last century. It is categorised by a mixture of technologies that is clouding the lines between the physical, digital, and biological spheres.

**Challenges and impacts of 4<sup>th</sup> industrial revolution.****Impact on Business:**

- The 4th industrial revolution will have a major impact on the businesses as many industries are seeing the introduction of new technologies that create entirely new ways of catering the existing needs and suggestively unsettle existing industry value chains.
- Customer expectations, product enhancement, collaborative innovation, and organizational forms are all affected by the fourth industrial revolution.
- It will lower the barriers for businesses and individuals to create wealth, altering the personal and professional environments of workers.

**Impact on Government:**

- Citizens would be able to easily engage with the governments, voice their opinions, coordinate their efforts, and even avoid the supervision of public authorities with the introduction of new platforms and technologies.
- Governments will increasingly face pressure to change their current approach to public engagement and policymaking albeit, they will gain powers to increase their control over populations, based on widespread surveillance systems and the ability to control digital infrastructure with new technologies.
- Impact on security:
- The nature of national and international security will be affected by the 4th industrial revolution as it has the potential to reduce the scale or impact of violence, through the development of new modes of protection, for example, greater precision in targeting.
- Impact on citizens:
- The 4th Industrial Revolution will impact sense of privacy, notions of ownership, consumption patterns, the time people devote to work and leisure, and how they develop careers, cultivate skills, meet people, and nurture relationships.
- With the advent of new technological advancements, the role of people at their work places will also change drastically.

**India and Fourth Industrial Revolution.**

- India is preparing for a massive digital and technological transformation as the World Economic Forum has opened its centre for Fourth Industrial Revolution making India the fourth country in the world where the centre has been setup.
- The centre will work in collaboration with NITI Aayog in India to co-devise new policies and protocols for emerging technologies. The centre for Fourth Industrial Revolution works as a network that already includes USA, China and Japan.
- India will focus on Artificial Intelligence, Blockchain and drones initially.
- The youth of India is being developed to use new technologies with the help of schemes like Skill India, Start-up India, Atal Innovation Mission and Digital India.
- Industrial Revolution 4.0 can help in transforming India by alleviating poverty, strengthening infrastructure for better and low-cost healthcare and can also help in enhancing farmer's income by providing new technology and equipment to farmers.
- Corporates will have a key role in backing this on-going movement, leveraging the ART Model – Alliances, Relationships enabled through Technology.
- Positive initiatives and policies to build on the positive aspects of the new industrial revolution and preventing further widening of the inequality gap are necessary. The Government of India, through its unique initiatives like Digital India, Start-up India and Make in India Initiative is strengthening the opportunities for industry 4.0 and green entrepreneurs.
  - Participation of relevant ministries (like MoEFCC, MNRE) and Government-led coalitions (like International Solar Alliance) optimum advantage must be taken to victor this on-going movement.

- World Economic Forum, in partnership with the Government of India has set up the Center for the Fourth Industrial Revolution India to design and pilot practical tools for specific technologies. Such platforms and coalitions must be leveraged to assess the feasibility and scale innovative business models.

#### **Challenges of fourth industrial revolution**

- The spread of machines increases markets and unsettles the labour markets and so revolution is likely **to increase inequality** in the world.
- The net displacement of workers by machines might **worsen the gap between returns to capital and returns to labour**.
- Prejudice and inherent bias of the creator of the machine will come along with the technology and one **cannot change the functioning of the machine** which is predesigned for a purpose.
- The country will face a **challenge in training its work force** to get accustomed to new technology and machinery.
- Many people could **face unemployment** as robots and advanced technology will replace the human capital.

#### **Suggestions for the government:**

##### **As Enabler**

- Encourage, promote and support original research aimed at developing technologies in emerging areas.
- Mandate an industry-oriented curriculum in state-driven education boards at a graduation level.
- Strengthen the vocational training infrastructure in partnership with the private sector and include elements of Industry 4.0 in vocational training.

##### **As Facilitator**

- Set up a dedicated wing in the Industry Ministry to oversee and promote Industry 4.0 adoption.
- Establish a network of 'test labs' that will work with enterprises, industry bodies, government, academia, labour organisations, and the wider community to advance Industry 4.0. Also connect with similar labs and Industry 4.0 initiatives worldwide.

##### **As Policy-maker**

- Provide financial incentives and aid for MSMEs – e.g. tax breaks, subsidies to make Industry 4.0 affordable to them.
- Continue push with initiatives such as Smart cities, Digital India and Make in India and improve telecommunications infrastructure to ensure seamless IoT implementation.
- Formulate adequate cyber security policies, encourage FDI and improve ease of doing business.

#### **Way forward**

- Have a long-term strategic vision to lead an organisational transformation in the Industry 4.0 era.
- Focus on talent retention and re-skilling; enable timely up-skilling of workforce, relevant to Industry 4.0 trends.

- Foster a culture of innovation and trust in the organisation; provide a conducive environment for humans and bots to work together.
- Focus on strengthening organisational data privacy and cybersecurity protocols, as threats may arise due to connected ecosystem.

**Suggestions for the industry:**

- As Adopter (Manufacturing sector)
- Include MSMEs in their supply chain
- Embrace disruption in business model
- Invest in Leadership 4.0

**As Supplier (Technology sector)**

- Invest in research on I4.0 technologies and innovation to improve output quality
- Continue developing upended technology solutions for industry 4.0

## Single Use Plastics - The gravest environmental Concern of the 21st Century.

### Syllabus: Conservation, environmental pollution and degradation

**In News:** During the Covid-19 pandemic, strides made over the last few years in dealing with single-use plastic have suffered a setback.

#### What are single-use plastics?

- Single-use plastics, often also referred to as disposable plastics, include items intended to be used only once before they are thrown away or recycled.
- They are commonly used for plastic packaging. These include, among other items, grocery bags, food packaging, bottles, straws, containers, Styrofoam cups and cutlery.
- According to World Wildlife Fund (WWF), plastic is harmful to the environment as it is non-biodegradable, takes years to disintegrate. Single-use plastics slowly and gradually break down into smaller pieces of plastic known as microplastics

#### Microplastics:

- These are plastics which are less than five mm in diameter in size. Microplastics are further categorized into primary and secondary sources. Primary sources include manufactured products such as micro beads in cosmetics.
- Secondary micro-plastics are formed from the breakdown of macro-plastics. Macro plastic degrades into microplastics due to different process such as hydrolysis, photodegradation, physical degradation

#### Single-Use Plastic- Extent of the Problem

##### Global:

- In 2015, plastic packaging waste accounted for 47% of the plastic waste. China is the largest worldwide generator of plastic packaging, while, USA is the largest generator of plastic packaging waste on a per-capita basis.
- According to UN Environment, Only 9% of all plastic waste ever produced has been recycled. About 12% has been incinerated, while the rest – 79% – has accumulated in landfills, dumps or the natural environment.

**India:**

- According to CPCB, India generates nearly 26,000 tonnes of plastic waste every day, making it the 15th biggest plastic polluter globally.
- As per CPCB reports, plastic contributes to 8% of the total solid waste, with Delhi producing the maximum quantity followed by Kolkata and Ahmedabad. Around 43% of manufactured plastics are used for packaging purpose and most are of single use.

**Threat posed by Single-use Plastic****Environmental Degradation:**

- **Soil Contamination:** Single-use plastics can take up to thousands of years to decompose, thus contaminating soil and posing threat to food production. Chemicals such as Bisphenol A, Phthalates, and Brominated Flame Retardants have detrimental impact on terrestrial ecosystems.
- **Marine Plastic Pollution and loss of Biodiversity:** It has been estimated that 8 million tons (Mt) of plastic waste, mostly SUPS, reach the ocean and makes up 80% of all marine litter.
  - Numerous aquatic organisms ingest plastics which often lead to physical damage or blockage of the intestinal tract.
  - Further, ingestion of microplastics poses a great threat as they contain persistent organic pollutants which concentrate further through the marine food chain through the process of bio accumulation and bio magnification.
  - Plastics accumulated in coral reefs increases the risk of diseases in corals by blocking light and oxygen reaching the reefs.
- **Choking of Waterways:** SUPs can choke waterways and increase risk of natural disasters. For example, in 1988, poor drainage resulting from plastic bag litter clogging drains contributed to floods in Bangladesh
- **Air Pollution:** Plastic burning releases poisonous chemicals into the atmosphere causing respiratory disorders in living beings.
- **Greenhouse gas emission:** plastic contributes to greenhouse gas emissions at every stage of its lifecycle, from its production to its refining and the way it is managed as a waste product.

**Economic**

- **Negative impact on Tourism:** Plastic waste reduce tourism potential of due to loss of aesthetic value.
- **Marine plastic and Economic cost:** Huge economic costs are incurred due to beach clean-ups initiatives, waste management in marinas and harbours. Further, marine plastic reduces fishing stock and pose navigational hazard.
  - For example, Asia-Pacific Economic Cooperation (APEC) estimated a \$1.3 billion economic impact of marine plastics to the tourism, fishing and shipping industries.
- **Burden on exchequer:** removing all single-use plastics accumulating in the environment is estimated to be higher than the costs of preventing littering today.

**Threat to Health:**

- Styrofoam or expanded polystyrene (EPS) items, one of most abundantly used single use plastics, contain chemicals such as styrene and benzene which are carcinogenic and pose severe threat to nervous, respiratory and reproductive systems.
- Through ingestion, contaminants from plastic waste enter into digestive tracts of marine organisms and overtime accumulate in the food web. The contaminants are transferred to humans through seafood consumption and has been identified as a potential public health threat.

**Covid-19 Pandemic and Single-Use Plastic Waste**

The hyper-hygienic way of life has led to increased dependence on non-recyclable items such as plastic-lined masks, gloves, hand sanitizer bottles and PPE kits which has increased SUP waste. The WHO estimates that the planet is using about 89 million masks and 16 million gloves each month.

**How Covid-19 pandemic pose a setback to SUPs reduction movement?**

- Thailand had planned to slash plastic waste completely in 2020. Now it expects to see such waste rise by as much as 30%.
- In Singapore, the Bring Your Own (BYO) movement was started in 2017 where consumers were urged to bring their own utensils to restaurants in the effort to reuse and recycle. This has received a blow with global giants such as Starbucks doing away with their “Bring Your Own Cups” policy due to the pandemic.

**Proposed Solutions to Combat Single Use Plastic Pollution:**

- **Banning and Phasing Out SUPs:** at the national levels, government should bring legislation to ban single use plastics along with ensuring access to alternatives, proper implementation of the ban and consumer awareness.
- **Improved Waste Collection and Management:** Investments should be made towards environmentally sound waste collection, recycling, waste-to energy plants etc. For example, less than 1% of waste in Sweden ends up in landfills. Sweden converts its waste-to-energy through efficient Waste to energy plants.
- **Promoting Alternatives to Single Use Plastics:** Governments should facilitate use of eco-friendly alternatives by providing economic incentives (including tax rebates, research and development funds etc.). For example, Antigua and Barbuda, as part of the plastic bag ban, kept certain materials used to manufacture alternatives (sugar cane, bamboo, paper) tax-free.
- **Economic Measures to restrict use of SUPs:**
  - **Encourage Deposit refund Schemes:** Under the scheme, during purchase the consumers have to pay a small deposit for the objects bought. The money is given back when he returns them. Example: automatic ‘return-deposit’ machines in Germany and Finland which returns of up to 90% of the amount for PET.
  - **Increase Taxes and fees:** These are effective tools to discourage inefficient use of resources and polluting behaviour. Example: In India, under the plastic waste



management rules, no carry bags should be made available free of cost by retailers to consumers

- **Effective Extended Producer Responsibility:** It is important to legislate robust extended producer responsibility for all plastic producing sectors. This would help ensure greater accountability of companies in management of the plastic waste originating in their trade chains.

#### **Circular plastic economy as a Possible solution**

Circular plastic economy is a sustainable long-term solution in which value of plastic is kept within the economy rather than leaking it out to the natural environment. It is opposite to the present linear, make, use, dispose, economy model and is based on 6 'R's:

**Table showing Circular Economy Solutions to the Plastic Challenge**

Circular Economy Solutions	Examples
Plastic from alternative sources (Bioplastics)	Biodegradable plastic made primarily from the juice of prickly pear cactus
Plastic waste as a resource	Clothing and footwear from recycled plastic by Adidas Roads made out of plastic waste in India
Redesign and innovation	Companies starting bulk delivery of cleaning and personal care products with refillable plastic containers to single-use bottles.
Policy instruments to reduce use	Regulatory ban on single use plastic by Rwanda, Kenya, Sikkim (India) etc.

- **Social Engineering:** Consumer awareness about single-use plastic pollution and available reuse systems, alternatives is low. This needs to be strengthened through consumer awareness campaigns, raising business awareness, media outreach activities, education etc.

#### **Major Initiatives Taken:**

- **Un-Plastic Collective (UPC):** It is a voluntary initiative launched by the UN-Environment Program-India, Confederation of Indian Industry and WWF-India.
- **Plastic Waste Management Rules, 2016:** It states that every local body has to be responsible for setting up infrastructure for segregation, collection, processing, and disposal of plastic waste. Plastic Waste Management (Amendment) Rules 2018 introduced the concept of Extended Producer Responsibility (EPR)

**Conclusion:** Single-use plastic pollution is one of the gravest environmental threats the Earth is facing today. It is time that governments across take effective measures to combat the menace. Changing social attitudes is crucial and will have significant effect on consumption patterns, littering behaviour and success of anti-pollution strategies.

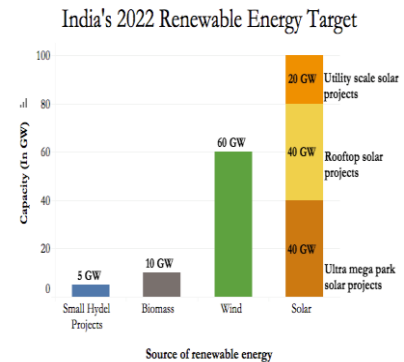
## Powering the solar sector

### Syllabus: Infrastructure- Energy

**In news:** Prime Minister recently inaugurated Rewa Solar plant set up at Rewa, Madhya Pradesh. It is Asia's largest solar power project and has a total solar installed capacity of 750 MW.

### Solar Sector in India- An overview

- **Target:** As a part of its Paris Agreement commitments, India has set a target of achieving 175 gigawatt (GW) of renewable energy capacity by 2022. It consists of 100 gigawatts (GW) of solar energy, 60 GW of wind power, 10 GW of biomass and 5 GW of small hydropower.
- **Installed Capacity:**
  - As on April 30, 2020, the installed renewable energy capacity in India stood at 87.26 GW, of which, solar comprised 34.81 GW.
  - In 2019, India installed 7.3 GW of solar power across the country and emerged as the third-largest solar market in the world.



### Policy approach for Solar Power development in India:

- **National Solar mission:** Launched in 2010, it aims to achieve 100GW capacity by 2022. It seeks to reduce the cost of solar power generation in the country through long-term policy; large scale deployment goals; R&D; domestic production of critical raw materials, components and products.

**Renewable Purchase Obligation:** The National Tariff Policy 2006 mandates the State Electricity Regulatory Commissions (SERC) to fix a minimum percentage of energy purchase from renewable sources of energy taking into account availability of such resources in the region and its impact on retail tariff. It requires states to reach 10.5% solar RPO by the year 2022.

- **Grid Connected Rooftop and Small Solar Power Plants Programme:** It aims at installation of grid connected roof top solar systems from 1 kWp to 500 kWp capacity in residential, commercial, institutional and industrial buildings.
- **Off-Grid and solar PV Applications Programme:** It aims to promote off- grid applications of SPV systems for meeting lightning, electricity requirements.
- **Sustainable Rooftop Implementation for Solar Transfiguration of India (SRISTI) Scheme:** Financial Incentives to be provided to the beneficiary for installing solar rooftop projects.
- **Clean Energy Fund:** It encourages private solar companies by reducing custom duty on solar panels by 5% and exempting excise duty on Solar photovoltaic systems.
- **Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan (PM KUSUM) Scheme:** Launched by Ministry of New and Renewable Energy (MNRE), it is a scheme for farmers for installation of solar pumps and grid connected solar and other renewable power plants in the country. It aims to add solar and other renewable capacity of 25,750 MW by 2022

### Why does India need a new solar policy?

#### Institutional/ Policy Challenges:

- **Too ambitious target:** India's target to achieve of 100GW of solar capacity is too ambitious given the low funding in the sector and policy issues. It is estimated that meeting the 2022 target of 175 GW through renewable sources would require funding of at least USD 125 billion.
- **Misplaced Policy Focus:** The policy focus has largely been on the solar plant installation. It has been done with a view to increase the solar capacity. However, India is yet to make appropriate policy push towards solar panel manufacturing.
- **Abrupt Policy changes:** abrupt policy changes hamper solar energy developers. For example, Rajasthan proposed an additional annual charge of Rs 2.5-5 lakh per MW in its new draft solar policy.
- **Fall In prices:** Due to government incentives the price of solar power has been falling. This has disincentives the producers and affects quality of solar energy installations in India.
- **Issue of Renewable Purchase Obligation (RPO):** There is lack of enforcement of RPO regulations and absence of penalties when obligations are not met. Many of the state DISCOMs (distribution companies) do not comply fully with their RPO targets.
- **Issue with Rooftop Solar:**
  - Homeowners at large have not been installing solar panels at roof top. This is because small deployments naturally cost more than grid-scale farms. Homeowners do not generally consume all the energy it generates and is being unable to sell it due to issues with net metering.
  - Rooftop solar segment need support of firm battery market and the legal enforcement of contracts because developers run the risk of the host establishment not honouring a contract when tariffs change.
- **Land Acquisition:** Land scarcity and issues with land acquisition hinder the establishment of large solar parks.

#### Dependence on Imports and Manufacturing Challenge:

- **Imports Dependence:** India lacks a local supply chain to support its solar generation capacity and depends on the imports from China. The imports from China has risen from 86% in 2014 to 90% in 2017.
- **Shortfall in manufacturing capacity:** As per the Ministry of New and Renewable Energy, India's average annual solar cell manufacturing capacity is about 3 GW. However, India's average annual demand is 20 GW.

#### Fiscal challenges:

- **Counterproductive trade duties on imported solar modules:** India introduced two-year trade import duty in 2018. This has been counterproductive and disruptive and has neither reduced imports nor significantly improved the competitiveness of Indian manufactured solar cells. Instead, it has severely slowed down solar installations.

- **Investment:** Issues such as uncertainty around import duties and future tax rates around purchasing power agreements (PPAs) have hampered investment. For example, PE investment into renewables have remained stagnant in 2018 (\$1.93 billion) and 2019 (\$1.8 billion). Further, banks like State Bank of India do not lend to renewable energy projects that sell power at below Rs.3 a unit.
- **Dues of Discoms:** a major concern is payment delays by already debt-ridden DISCOMs. As of July 2019, state DISCOMs owe Rs.9,735.62 crore to the renewable energy companies.

**Covid-19 Impact on Solar power sector:** Solar power projects have halted due to production slowdown in China and the lockdown orders in India. Further, developers have been facing delays in procurement of modules, solar cells, and other components.

**Way Forward:**

**What does India need to do going forward?**

- **Boost manufacturing:** India needs to enhance domestic manufacturing of solar components by having integrated policies and providing low-cost financing to industries. The Chinese solar manufacturing industry offers the following learnings:

STRATEGY	DEVELOP CORE COMPETENCE	FACILITATIVE GOVERNMENT POLICY	REDUCE COST OF CAPITAL
The Chinese Model	-core competency in semiconductors -made moving into solar cell manufacturing easy	Subsidized land acquisition, raw materials, labour -government procurement over the long run	-Cost of debt in China is 5% while in India, its 11 %
What India needs to do	-State governments need to support local manufacturing -Favorable policies for MSMEs	-Consolidation of labor laws. -Improve the ease of doing business	-Making access to credit easier for MSMEs -Large bids with supplies spread over years.

- **Focusing on emerging trends:** India should look at emerging trends in deploying solar innovatively. These include newer technologies such as aesthetic photovoltaic window and roof tiles for buildings, multi-role urban structures, and greater use of residential and commercial buildings to deploy more panels.
- **Draft Electricity Act (Amendment) Bill 2020:** It is a step-in right direction to bring much-needed reforms that the renewable energy sector needs such as cost-reflective tariff, simplification of tariff structure and reduction of cross subsidies.

- **Financial Incentive:** The government needs to provide support to solar power producers with liquidity via financial incentives.
- **Human Resource and R&D:** Investment in R&D programmes, as well as human resource development is necessary. Training regarding the various stages of solar cell manufacturing supply chain can be made a part of the National Skill Development Mission.
- **Better Centre-State Coordination:** Centre-state coordination on renewable energy development and increasing the expansion of necessary transmission networks and balancing capacity (batteries, pumped hydro storage, demand response management and more flexible thermal capacity) are required.

#### **International Solar Alliance (ISA) and 'One Sun One World One Grid' (OSOWOG) Project**

ISA was jointly launched by the Prime Minister of India and the President of France in 2015 at UNFCCC CoP 21 Paris, France. It is an intergovernmental body registered with the United Nations under Article 102 of the UN Charter. It is partnership of solar resource rich countries to address their special energy needs and provide a platform to collaborate on development of solar energy resource.

#### **Significance of ISA**

- **Energy Security:** ISA will help address the growing need for renewable energy as an alternative source of energy both at the global and regional level.
- **Energy Diplomacy:** As most of the member states of the ISA are poorer countries, they can join together and bargain with the oil- rich countries to break their monopoly over oil and gas.
- **Geopolitical significance for India:** The ISA has given India the opportunity to position itself in a key global leadership role in the arena of climate, renewable energy (RE) and sustainable development. Further, the establishment of ISA headquarters in Gurugram has diplomatic significance for India
- **Economic significance:** ISA can help India can reduce its energy dependence on the West Asian countries and help save foreign exchange.

#### **Concerns with ISA**

- ISA is more a platform for some countries to showcase their technologies and programmes.
- Many of the member countries of ISA have poor technical capabilities, therefore they do not know how best to leverage the platform
- The cost of solar installations remains high in many of the ISA countries. Most African countries have a high most favoured nation (MFN) tariffs for photo voltaic (PV) cells, modules and semi-conductor devices.
- Capital cost is the biggest obstacle to solar deployment. An important challenge for ISA is attracting investments

**'One Sun One World One Grid' (OSOWOG) Project:** It is India's initiative to build a global ecosystem of interconnected renewable energy resources. The blueprint for the OSOWOG will be developed under the World Bank's technical assistance programme that is implemented to accelerate the deployment of grid connected rooftop solar installations.

**Conclusion:**

To conclude, solar deployment in emerging markets has increased leaps and bounds during the last five years. There is an immediate necessity to develop the entire value chain ecosystem to become competitive and achieve sustainable growth in the long run.

**Floods in Assam: A repeating disaster.****Syllabus: Disaster Management**

**In News:** Assam has faced devastating floods this year and 85% area of the Kaziranga National Park has submerged.

**Why does Assam face floods every year?**

According to the Rastriya Barh Ayog (RBA), 31.05 lakh hectares of the total 78.523 lakh hectares area of Assam is prone to frequent floods. The main reasons for frequent floods in Assam are:

**Natural Factors**

- **High sedimentation and changing course of River Brahmaputra**– River Brahmaputra is in its youth stage in valleys of Assam which leads to frequent changes in course causing flood as water swells up. Further, the river comes from a high slope (Tibet) to a flat plain in Assam, its velocity decreases suddenly and this results in the river unloading the sediment.
- **Frequent Earthquakes and Landslides:** Assam is prone to frequent earthquakes, which causes landslides. The landslides and earthquakes send in a lot of debris in the rivers, causing the river bed to rise and thus contributing to flooding.

**Note:** According to Earthquake Disaster Risk Index (EDRI), India's hazard profile shows that about 59% area of India is vulnerable to moderate to major earthquakes

- **Monsoonal rainfall:**
  - India receives 80% of rainwater from monsoon and that too is erratic and uneven in nature. High concentrated rain in parts of north-east leads to heavy rainfall in short time causing flooding.
  - Assam receives both the monsoon rains and water from the rivers originating from the Himalayas – of which the Brahmaputra is by far the biggest.
  - The glacial melt in summer coincides with the monsoon, intensifying downstream, causing the annual flooding.
- **Bank Erosion:** There has been large scale bank erosion around the Brahmaputra and Barak rivers as well as their tributaries. This has led to rise in bed of the rivers.
- **Topography of Guwahati:** It's shaped like a bowl which makes it susceptible to water logging which is exacerbated by flooding.

**Anthropogenic Factors**

- **Release of water from Dams:** One of the key cause of floods in Assam region is releasing of water from dams situated uphill.
- **Climate Change:** According to the International Panel for Climate Change, the rainfall intensity, duration and frequency are going to increase in the future. According to a



study, by 2050, the average annual runoff of the river Brahmaputra will decline by 14%. However, there is a risk of glaciers melting, leading to flash floods.

- **Unplanned expansion of the cities** – Lack of scientific approach in planning has led to severe encroachments in the wetlands, low-lying areas, hills and shrinkage of forest cover. This also contributes in higher sedimentation of the areas. The denuded hills and loss of wetlands lead to artificial floods.
- **Overreliance on embankments**–Assam has primarily relied on embankments to control floods since 1950's. The pressure of the surging water and frequent changes in course of river takes a toll on these walls and they need constant reinforcement which has not happened.
- **Faulty embankments**: For instance, when the floods come, while the embankments protect Dibrugarh, the same embankments channel the floodwater in greater volume and intensity towards Bhurbhanda
- **Lack of cooperation among basin states**– The rainwater from Meghalaya and the surrounding hills often causes flash floods in Guwahati. However, recognition of the problem has not led to any meaningful conversation between the two states on flood control.

#### Issues with Flood management in India

- **Incomplete Projects**: Delays in completion of projects under the flood management programmes primarily due to shortfall of Centre's assistance is a major issue hindering effective flood management in India. There are also huge delays in completion of all the projects under River Management Activities and Works related to Border Areas.
- **Projects are not integrated**: Flood management works are taken up in an integrated manner covering entire river/tributary or a major segment of rivers/tributaries.
- **Dams lack Emergency Action Plans**: Most of the large dams in India do not have disaster management plans- only 7% of total large dams in the country have emergency action plans/disaster management plans
- **Poor flood forecasting system**: Flood forecasting network of the CWC is not sufficient to cover the country adequately. Further, most of the existing flood forecasting stations are not operational.
- **Poor flood risk mapping**: A task force set up by the Central Water Commission (CWC) in 2006 did not complete the task of flood risk mapping. Further, the Vulnerability Atlas of India has stopped flood zonation
- **Recommendations of Rastriya Barh Ayog not followed**: Key recommendations of Rastriya Barh Ayog such as scientific assessment of flood prone areas and enactment of Flood Plain Zoning Act have not been materialised pan India.

- **Poor Damage Assessments:** Flood damage assessments are not done adequately which hampers evaluating flood disaster mitigation options and economical optimizations of possible measures.

### **Flood Management in India-An Overview**

#### **Structural and Non-Structural Measures for Flood Protection in India**

##### **Structural measures**

- Dams & Reservoirs – Flood Cushion/ storage of flood waters
- Embankments, Sea Walls – restricting flow of water
- Natural Detention Basins – retarding & absorbing flood waters
- Channel Improvement – increasing flood carrying capacity of rivers
- Drainage Improvement
- Flood Ways/ Spill Channels – diversion of flood water from one channel to another

##### **Non-structural Measures:**

- Flood Forecasting & Warning, temporary evacuation
- Flood Plain Zoning/ management – regulation of land use
- Flood Proofing & removal of flood prone structures
- Public Awareness campaigns & people participation drills
- Financial Mechanism – Disaster Relief, Rehabilitation & Flood Insurance

##### **Government Initiatives:**

- **National Flood Risk Mitigation Project (NFRMP):** It aims at ensuring that arrangements are in place to mobilise the resources and capability for relief, rehabilitation, reconstruction and recovery from disasters besides creating awareness among vulnerable communities.
- **Flood Management Programme:** The scheme provides financial assistance to the state governments for undertaking flood management works in critical areas.

#### **NDMA Recommendations on Flood Management:**

- Need for effective data collection on existing flood control works, flood damages etc.
- The states should undertake legislation to prevent unauthorised riverbed cultivation and encroachments into drains etc.
- Flood plain management measures should be undertaken by the states
- The central government should prepare a model bill dealing with all aspects of flood control to serve as a guide for the state governments.

#### **NDMA Guidelines on Urban Flood Management:**

- To create a National Hydro-meteorological Network
- Use of Doppler Weather Radars to be expanded to cover all urban areas in the country
- Catchment to be the basis for planning and designing the storm water drainage systems in all ULBs
- Urban Flooding has to be dealt as a separate disaster, de-linking it from riverine floods which affect the rural areas.

**Way Forward:**

- **Improvements in flood Forecasting:**
  - There is an urgent need of extension of flood forecasting network by using more of satellite imagery and Geographic Information Systems.
  - Lead-time for flood forecasting should be improved through the use of hydraulic and hydrologic models which are linked to the weather forecasting system, the real-time data acquisition system, and the reservoir operation system.
- **Improved Flood Risk mapping:** There should proper flood-risk mapping and flood damage assessments for better formulation of plans and measures.
- **Proper disaster Management plans for Dams:** Pre and post monsoon inspection of dams is important. Further, emergency/ disaster management plans should be prepared by concerned authorities of large dams.
- **Increasing Community Resilience:** With increasing effects of climate change, there should be focus on development of community resilience in flood-prone areas.
- **Preventing encroachment in green cover–** The government needs to bring in public domain the bye-laws associated with constructing building, implement the environment impact assessment in letter and spirit and mobilize people for participative approach in preventing loss of green cover.
- **Refocusing on traditional methods –** Traditional methods of water harvesting used by ethnic communities, especially in the north-east, needs to be practiced to prevent flooding.
- **International Collaboration:** “Integrated basin management” – one that needs all the basin sharing (China, India, Bangladesh and Bhutan) countries to come to an understanding about taking measures in the catchment areas is the long-term solution to address flood situation in Assam. Further, the Sendai Framework has to be Implemented In letter and spirit to reduce disaster risk

**GENERAL STUDIES 4****Vaccines: Private profit vs public need****Syllabus: Ethics – in private and public relationships**

**In News:** The Coronavirus pandemic and the search for a vaccine has again raises the issue of public access to essential medicines. Several countries, mostly the technically advanced developed nations have started clinical testing for potential vaccine against COVID-19.

**Ethical Dilemmas involved in this issue:**

- **Protection of IPR to promote innovation vs right to health:**
  - Innovation and research is a time-taking and costly endeavour. If a researcher/scientist does not receive proper reward for his/her discovery or if

the scientist's intellectual property rights are not protected, he/she will not be motivated to invest effort in research work.

- On the other hand, right to health is a basic right which emerges from a person's natural right to dignified life. The article 21 of the constitution of India guarantees the fundamental right to life and liberty. The Supreme Court of India has held that right to health is integral to the right to life and the government has a constitutional obligation to provide health facilities.
  - **Corporate profit vs Business Ethics:**
    - In capitalist mode of production, the industry needs to pay wages for labour, rent for land and other requirements, interests on the capital borrowed and also earn surplus profit for future or expansion of business. It leaves little scope for corporate to lower the cost of their produce to make them better accessible.
    - The concept of Business ethics includes Corporate social responsibility. Business ethics promotes production of profitable solutions to problems of citizens and the community and earning profits in the process. It generates trust among the stakeholders such as consumers, regulators, government or the public in general which in turn benefits the industry by creation of brand value. For example, the brand value of TATA enterprise has received boost due to philanthropic efforts of the chairman of TATA Trust, Mr. Ratan Tata.
  - **Commercialism vs Human Right:** Commercialism promotes the values of profitability and efficiency in the market. The motive of profit maximization by the corporate may potentially raise the cost of the vaccine which may make many deprived of the access to the vaccine. However, this would adversely affect the idea of human rights, concept of dignity, liberty and equality, the idea of right to life as enshrined in the Universal declaration of Human Right (UDHR)
  - **Role of the Government in Market economies Vs welfare state:** In modern economy based on the ideas of free market, free trade and globalization, there is limited scope for the government to regulate the price or volume of industrial production or to ensure equitable distribution of industrial produce among the citizens.  
In Welfare State, the government takes care of the basic needs of citizens, specially the poor and disadvantaged ones. Welfare State aims to reduce the social and economic inequality among citizen and thus build a cohesive society.
- It would be wrong to assume that unequal access to the vaccine would only affect the poor people in the third world countries. In absence of universal vaccination, the pandemic may raise several problems,
- **The SARS-COV-2 virus does not discriminate on the basis of wealth and status:** We must realize that in a crisis like pandemic no person is safe if there is an outbreak in any corner of the earth.
  - **Rising social inequality:** The pandemic has also created social segregation of people in the community based on wealth and status. Many people in unorganised sector such as

domestic help, casual industrial labour have lost their employment. This would further raise social inequality and may lead to social unrest in near future.

- **Threat to Globalization:** Immigration control, border closure would affect the free movement of goods, people and ideas.

**Steps need to be taken to ensure equitable access to vaccine:**

- **Civil Society Activism:** The human rights activist, civil rights activists and also the public have often been at the forefront in demanding basic rights such as right to dignified life or right to health for citizens.

**Example:**

- **Access to antiretroviral drug to treat AIDS:**

By 1997, antiretroviral drugs have been available for treatment for AIDS.

However, Annually the treatment did cost around 10,000 to 15,000 US dollar per patient. During the period due to non-access to the crucial drug around 2.2 million people died annually in sub-Saharan Africa. Human rights activists started 'Global AIDS Campaign'. The political and health education to common citizen in Africa made them aware of the global developments and provided the tool to voice their demands. By 2000, public demand and competition from generic drug manufacturers brought the price of antiretroviral down to around \$350 per patient per year.

- **Access to TB drugs:** In early 2000, the spread of tuberculosis had effectively diminished in the developed countries such as the U.S.A. and Europe but remained deadly in many other places. The rise of drug-resistant strains, especially in the former Soviet Union and parts of Africa and Asia, created a terrible challenge. It was assumed that people with drug-resistant TB couldn't be saved. The drugs were too expensive, treatment courses too long and disease management too complicated. An organisation named 'Partners in Health' undertaken a project and successfully treating 50 tuberculosis patients in Peru, then one of the world's poorest countries.

That project helped convince the World Health Organization to endorse multi-drug-resistant TB treatment. Global funding for TB treatment increased greatly and generic medicines were produced. Today more than 70 percent of people diagnosed with drug-resistant TB receive treatment.

- **Responsibility of International community:**
  - **Instances of Past experience:**
    - **The global polio eradication initiative** involves institutions such as World Health Organisation (WHO), UNICEF and the Bill and Melinda Gates foundation. It is the largest public health initiative in history. Today, only 3 countries (Afghanistan, Pakistan and Nigeria) are yet to eradicate polio.
    - The WHO has performed commendable job in containing **2014-16 Ebola outbreak** in west Africa. For example,

**Creative solution to tackle COVID-19:**

- For example, the **Medicines Patent Pool**, an organization backed by the United Nations that encourages companies to share their patents in order to speed up innovation is pushing this method for advancing the research and development of COVID-19 drugs.

**Recommendations for National Governments:**

- **Provide incentive to research and innovation:** Governments can create international prize or national award which would gauge the success of the companies in saving lives by their COVID-19 drugs and other essential medicines. That could offset profit as the primary motivation for drug research, development and sales.
- **Permission to produce Generic Medicine:** if pharmaceutical companies don't voluntarily serve the poor people, the government can allow other companies to produce generic versions of patented medicines, to protect the common good.

**Section 84** of the Indian Patents Act, 1970 allows for compulsory Licensing. It is defined as “authorizations permitting a third party to make, use, or sell a patented invention without the patent owner's consent”. In 2012, India granted the compulsory license to Indian generic drug manufacturer 'Natco Pharma' to manufacture a cancer drug, 'Sorafenib tosylate' patented by Pharmaceutical mogul Bayer.



## APPENDIX -1 | FACTLY MAGAZINE

## POLITY

**New consumer protection Act comes into force**

**News:** The Consumer Protection Act, 2019 has come into force replacing the old Consumer Protection Act, 1986.

**Facts:**

**Aim:** To protect the rights of consumers by establishing authorities for timely and effective administration and settlement of consumers dispute.

**Key Features of the Act:**

- **Central Consumer Protection Authority (CCPA):** It has been set up to promote, protect and enforce the rights of the consumer by inquiring into violations of consumer rights, investigating and launching prosecution at the appropriate forum among others.
- **Consumer Disputes Redressal Commission (CDRCs):** They will be set up at the district, state and national levels.
- **Alternate Dispute Resolution Mechanism of Mediation:** A complaint will be referred by a Consumer Commission for mediation wherever scope for early settlement exists and parties agree for it.
- **Product liability:** A manufacturer or product service provider or product seller will be held responsible to compensate for injury or damage caused by defective product or deficiency in services.
- **Rules on E-commerce and Unfair Trade Practices:** Consumer Protection (E-commerce) Rules, 2020 will be notified under the Act where E-commerce entities are required to provide information to consumers relating to return, refund, exchange, warranty and guarantee, delivery and shipment and country of origin among others.
- **Redressal:** E-commerce entities have to acknowledge the receipt of consumer complaint within 48 hours and redress the complaint within one month from the date of receipt. They will also have to appoint a grievance officer for consumer grievance redressal.

CONSUMER PROTECTION ACT 1986	PROVISIONS	CONSUMER PROTECTION ACT 2019
No separate regulator	Regulator	Central Consumer Protection Authority (CCPA) to be formed
Complaint could be filed in a consumer court where the seller's (defendant) office is located	Consumer court	Complaint can be filed in a consumer court where the complainant resides or works
No provision. Consumer could approach a civil court but not consumer court	Product liability	Consumer can seek compensation for harm caused by a product or service
District: up to ₹20 lakh State: ₹20 lakh to ₹1 cr National: above ₹1 cr	Pecuniary jurisdiction	District: up to ₹1 cr State: ₹1 cr to ₹10 cr National: Above ₹10 cr
No provision	E-commerce	All rules of direct selling extended to e-commerce
No legal provision	Mediation cells	Court can refer settlement through mediation

### What is non-personal data?

**News:** The committee headed by Kris Gopalakrishnan has submitted its draft report on framing rules on non-personal data governance.

**Facts:**

- **Non-Personal Data:** It is any set of data which does not contain personally identifiable information. This means that no individual or living person can be identified by looking at such data.
- **Recommendations of committee:**
  - The non-personal data generated in the country can be allowed to be harnessed by various domestic companies and entities.
  - To set up a new authority which would be empowered to monitor the use and mining of such non-personal data.
- **Categories:** The committee has classified non-personal data into three main categories:
  - **Public Non-Personal Data:** All the data collected by government and its agencies such as census, data collected by municipal corporations on the total tax receipts in a particular period or any information collected during execution of all publicly funded works
  - **Community Non-Personal Data:** Any data about a set of people who have either the same geographic location, religion, job or other common social interests. For example, the data collected by ride-hailing apps, electricity distribution companies among others.
  - **Private non-personal data:** It can be defined as those which are produced by individuals which can be derived from application of proprietary software or knowledge.

### India designates nine individuals linked to Khalistani groups as terrorists

**News:** The Ministry of Home Affairs (MHA) has declared nine wanted men as designated terrorists under the amended Unlawful Activities (Prevention) Act (UAPA), 2019.

**Facts:**

**Unlawful Activities (Prevention) Amendment Act 2019:** The act amends the Unlawful Activities (Prevention) Act, 1967 which aims to curb certain unlawful activities including terrorist activities and related matters, carried out by individuals and associations in India and abroad.

	UAPA 1967 Act	UAPA 2019 Act
<b>Who may commit terrorism?</b>	Under the Act, the central government may designate an organisation as a terrorist organisation if it: (i) commits or participates in acts of terrorism, (ii) prepares for terrorism, (iii) promotes terrorism, or (iv) is otherwise involved in terrorism.	The act additionally empowers the government to designate individuals as terrorists on the same grounds.

<b>Approval for seizure of property by NIA:</b>	Under the Act, an investigating officer is required to obtain the prior approval of the Director General of Police to seize properties that may be connected with terrorism.	The act empowers the Director-General, National Investigation Agency (NIA) to grant approval of seizure or attachment of property when the case is being investigated by the agency
<b>Investigation by NIA:</b>	Under the Act, investigation of cases may be conducted by officers of the rank of Deputy Superintendent or Assistant Commissioner of Police or above.	The act additionally empowers the officers of the NIA, of the rank of Inspector or above, to investigate cases.
<b>Insertion to schedule of treaties:</b>	The act defines terrorist acts to include acts committed within the scope of the treaties listed in a schedule to the Act. The Schedule lists nine treaties.	The act added the International Convention for Suppression of Acts of Nuclear Terrorism (2005) to the Schedule

### Strength of M.P. Ministry exceeds Constitutional limit, says Congress

**News:** Congress is planning to move the court as the strength of the Council of Ministers in Madhya Pradesh reportedly exceeds the prescribed limit.

**Facts:**

**Constitutional Provision Related to the Issue:**

- **Article 164(1A):** It prescribes that the total number of Ministers including the Chief Minister in the Council of Ministers in a State shall not exceed 15% of the total number of members of the Legislative Assembly of that State.
- **Exception:** Provided that the number of Ministers, including the Chief Minister in a State shall not be less than twelve.
- **Constitutional amendment:** This provision was introduced through the 91st Constitution (Amendment) Act, 2003.

**Additional Facts:**

- **Article 163(1):** It provides that there shall be a Council of Ministers with the Chief Minister as the head to aid and advise the Governor in the exercise of his functions.
- **Article 164(1):** It provides that the Chief Minister shall be appointed by the Governor and the other Ministers shall be appointed by the Governor on the advice of the Chief Minister.
- However, in the states of Chhattisgarh, Jharkhand, Madhya Pradesh and Odisha there shall be a Minister in charge of tribal welfare who may in addition be in charge of the welfare of the scheduled castes and backward classes or any other work.
- **Article 164(4):** It provides that a person can remain as Minister without being a member of the state legislature for a period of six consecutive months.

### Pointly for Polity

1. **Permanent Commission for Women in Indian Army:** Ministry of Defense has issued a formal sanction letter to grant permanent commission to women officers in the Indian

Army. Earlier, the male Short Service Commission (SSC) officers could opt for permanent commission at the end of 10 years of service, this option was not available to women officers.

2. **Plea Bargaining:** Many members of the Tablighi Jamaat belonging to different countries have obtained release from court cases in recent days by means of plea bargaining. It refers to a person charged with a criminal offence negotiating with the prosecution for a lesser punishment than what is provided in law by pleading guilty to a less serious offence. It was introduced in 2006 as part of a set of amendments to the Criminal Procedure Code (CrPC) as Chapter XXI-A, containing Sections 265A to 265L
3. **Same benefits for Disabled as SC and STs:** The Supreme Court has said that persons suffering from disabilities are also socially backward and entitled to the same benefits of relaxation as Scheduled Caste/Scheduled Tribe candidates in public employment and education.
4. **e-Lok Adalats:** Chhattisgarh has become the first state to organize e-Lok Adalats in India. Lok Adalat is one of the alternative dispute redressal mechanisms, it is a forum where disputes/cases pending in the court of law or at the pre-litigation stage are settled/compromised amicably.
5. **Draft of Aids to Navigation Bill, 2020:** It seeks to replace the Lighthouse Act, 1927 to incorporate the best global practices, technological developments and India's International obligations in the field of Aids to Marine Navigation.
6. **Postal ballots:** Ministry of law and justice has amended the rules to allow those over the age of 65 and Covid-19 positive patients under home quarantine or hospitalized to use the postal ballot to exercise their right to vote. Postal ballot is a type of voting in elections whereby Electronically Transmitted Postal Ballot Papers (ETPB) are distributed to electors and returned by post.

## POLICY

### HRD Minister launches India Report on Digital Education, 2020

**News:** Ministry of Human Resources and Development (MHRD) has launched India Report on Digital Education, 2020. Recently, the Ministry of HRD has been renamed as Ministry of Education.

**Facts:**

- The report has been prepared by the Digital Education Division of the Ministry of HRD in consultation with Education Departments of States and UTs.
- **Aim:** To elaborate on the innovative methods adopted by the Ministry of HRD, Education Departments of States/UTs for ensuring education to children at home.
- **What does the report talk about?** The report mentions how the education facilitators have managed the critical task of providing digital education at the door step of the students during this pandemic.
- It also talks about the initiatives taken by the State Governments to ensure inclusive learning in remote areas where internet connectivity and electricity is poor.

**Digital Education Initiatives launched by Government:**

- **DIKSHA platform:** It offers teachers, students and parents engaging learning material relevant to the prescribed school curriculum.

- **VidyaDaan 2.0:** The programme brings together academicians and organisations to develop and contribute fun and engaging e-learning content aligned to the curriculum.
- The content will be monitored by a panel of academic experts and released for use on the DIKSHA app.
- **Digitally Accessible Information System (DAISY):** The study material for the differently abled has been developed on DAISY platform.
- **SWAYAM:** Study Webs of Active Learning for Young Aspiring Minds (SWAYAM) is an integrated platform for offering online courses, covering school (9th to 12th) to Postgraduate Level.
- **e-PATHSHALA:** It is a joint initiative of Ministry of HRD and NCERT to showcase and disseminate all educational e-resources including textbooks, audio, video, periodicals and a variety of other digital resources.

#### Initiatives launched by States:

- SMILE (Social Media Interface for Learning Engagement) in Rajasthan,
- Mission Buniyaad in the State of Delhi
- Project Home Classes in Jammu.
- Padhai Tunhar Duvaar (Education at your doorstep) in Chhattisgarh
- Mera Mobile Mera Vidyalaya launched by Bihar for Students among others.

### Cabinet approves New National Education Policy

**News:** The Union Cabinet has approved the New National Education Policy (NEP).

#### Facts:

- **Aim:** To create an education system that contributes directly to transforming the country, providing high-quality education to all, and making India a global knowledge superpower.

#### Key Highlights:

- **Public Spending:** To increase public spending on education to nearly 6% of gross domestic product (GDP) from around 4%.
- **Renamed:** Ministry of Human Resource and Development (MHRD) to be renamed Ministry of Education.

Categories	Key policy Highlights
<b>School Education</b>	<p><b>New Curriculum:</b> The 10+2 structure of school curriculum is to be replaced by a 5+3+3+4 which includes 5 years of foundational education, 3 years of Preparatory, 3 of middle and 4 years of Secondary Schooling.</p> <p><b>Medium of Instruction:</b> Mother Tongue as medium of instruction till Class 5 wherever possible.</p> <p><b>Coding and Vocational Integration:</b> New Curriculum will include coding and Vocational Integration from Class 6.</p> <p><b>National Mission</b> to ensure Foundational Literacy and Numeracy skills by 2025.</p>

<b>Assessment Reforms</b>	<p><b>Examinations:</b> All students will take school examinations in Grades 3, 5, and 8 which will be conducted by the appropriate authority. Board exams for Grades 10 and 12 will be continued, but redesigned with holistic development.</p> <p><b>PARAKH:</b> A new National Assessment Centre, PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development) will be set up as a standard-setting body.</p>
<b>Equitable and Inclusive Education</b>	<p><b>Bal Bhavans:</b> Every state/district will be encouraged to establish Bal Bhavans as a special daytime boarding school to participate in art-related, career-related and play-related activities.</p> <p><b>Special Funds:</b> Government will set up a Gender Inclusion Fund and Special Education Zones for disadvantaged regions and groups.</p>
<b>Teachers</b>	<p><b>Professional Standards:</b> A common National Professional Standards for Teachers (NPST) will be developed by the National Council for Teacher Education by 2022.</p> <p><b>Qualifications:</b> By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree.</p> <p><b>National Mission for Mentoring</b> will be established with a pool of outstanding senior/retired faculty who would be willing to provide short and long-term mentoring/professional support to university/college teachers.</p>
<b>Technology in Education</b>	<p><b>National Educational Technology Forum (NETF)</b> will be created to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration.</p>
<b>Higher Education</b>	<p><b>Increase GER to 50% by 2035:</b> The policy aims to increase the Gross Enrolment Ratio (GER) in higher education including vocational education from 26.3% (2018) to 50% by 2035.</p> <p><b>Certification:</b> There will be Multiple entry and exit points with appropriate certification with the option of choosing a 1-year Diploma, a 3-year bachelor's degree or a 4-year bachelors' degree with research across disciplines. The M. Phil programme would be discontinued.</p> <p><b>Single Regulator:</b> Higher Education Commission of India (HECI) will be set up as a single overarching umbrella body for the entire higher education, excluding medical and legal education.</p> <p><b>Academic Bank of Credit:</b> An Academic Bank of Credit will be established for digitally storing academic credits.</p> <p><b>The National Research Foundation</b> will be created as an apex body for fostering a strong research culture and building research capacity across higher education.</p>



<b>Promotion of Indian Languages</b>	<b>Institutions:</b> The policy recommends setting up an Indian Institute of Translation and Interpretation (IITI) and National Institute (or Institutes) for Pali, Persian and Prakrit to ensure the preservation, growth, and vibrancy of all Indian languages.
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### PM SVANidhi app launched to help street vendors apply for micro loans

**News:** The Ministry of Housing and Urban Affairs has launched the PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) App.

**Facts:**

- **Objective:** To provide a user-friendly digital interface for lending institutions (LIs) and their field functionaries for sourcing and processing loan applications of street vendors under the PM SVANidhi scheme.

**Additional Facts:**

**PM SVANidhi scheme:** It is a Central Sector Scheme to facilitate street vendors to access affordable working capital loan for resuming their livelihoods activities after easing of lockdown.

- **Features:**
  - Initial working capital of up to 10,000/.
  - Interest subsidy on timely/ early repayment @ 7%.
  - Higher loan eligibility on timely repayment of the first loan.
- **Beneficiaries:** Street vendors/ hawkers vending in urban areas as on or before March 24,2020 including the vendors of surrounding peri-urban and rural areas.
- **Lending Institutions:** Scheduled Commercial Banks, Regional Rural Banks, Small Finance Banks, Cooperative Banks, Non-Banking Financial Companies, Micro-Finance Institutions and SHG Banks.
- **Tenure:** The Scheme shall be implemented up to March, 2022.

### Start-up Village scheme has generated 1.33 lakh jobs in 2 years: Centre

**News:** According to the Ministry of Rural Development, over 64,000 rural enterprises have been formed under the Start-up Village Entrepreneurship Programme(SVEP) which have generated an estimated 1.3 lakh employment opportunities across States in two years.

**Facts:**

- **Start-up Village Entrepreneurship Programme (SVEP):** It was launched in 2015-16 as a sub-scheme under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM).
- **Aim:** To help the rural households including women to set up enterprises.
- **Objectives:**
  - To enable rural poor to set up their enterprises by developing a sustainable model for Village Entrepreneurship promotion through integrated ICT techniques.
  - Develop local resources by training a pool of village level community cadre (CRPEP)

- Help the rural entrepreneurs to access finance for starting their enterprises from the NRLM SHG and federations, the banking systems including the MUDRA bank.

**Additional Facts:**

- **DAY-NRLM:** It was launched by the Ministry of Rural Development (MoRD) in 2011.
- **Aim:** To create efficient and effective institutional platforms of the rural poor by enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.
- **Funding:** The program is aided in part through investment support by the World Bank.

### North Eastern Region Community Resource and Management Program (NERCORMP)

**News:** Union Minister for Development of North Eastern Region (DoNER) has interacted with Self Help Groups associated with North Eastern Region Community Resource and Management Program (NERCORMP).

**Facts:**

- North Eastern Region Community Resource Management Project (NERCORMP) is a livelihood and rural development project.
- **Aim:** To transform the lives of the poor and marginalized tribal families in North East (NE) India.
- **Objectives:**
  - Social mobilization, organization and capacity building to tap and realize the great potential of the communities.
  - Intervene with the economic, social activities and infrastructure with predominant thrust on income generating activities to achieve economic transformation.
- **Bodies Involved:** It is a joint initiative of the North Eastern Council (NEC), Ministry of DoNER and International Fund for Agricultural Development (IFAD).
- **Implementation:** It is operating in four states Arunachal Pradesh, Assam, Meghalaya and Manipur.

**Additional Facts: IFAD:** It is an international financial institution and a specialized agency of the United Nations that works to address poverty and hunger in rural areas of developing countries. It is headquartered in Rome, Italy.

### Cabinet approves development of Affordable Rental Housing Complexes for migrants

**News:** The Union cabinet has approved a scheme to provide affordable rental housing complexes (ARHCs) to urban migrants and poor as a sub-scheme of Pradhan Mantri Awas Yojana (PMAY)(Urban).

**Facts:**

- The scheme had been announced under the Atma Nirbhar Bharat Abhiyan.
- **Nodal Ministry:** Ministry of Housing and Urban affairs.
- **Approach:** The scheme will have a two-pronged approach:

- The existing vacant government funded housing complexes will be converted into ARHCs through a concession agreement for 25 years.
- Special incentives like use permission, 50% additional Floor Area Ratio, concessional loan at priority sector lending rates, tax reliefs at par with affordable housing will be offered to private and public entities to develop ARHCs on their own available vacant land for 25 years.
- **Beneficiaries:** A large part of the workforce in manufacturing industries, service providers in hospitality, health and construction or other sectors, labourers, students who come from rural areas or small towns seeking better opportunities will be the target beneficiary under ARHCs.

**Additional Facts:**

**Pradhan Mantri Awas Yojana (Urban):** The scheme was launched in 2015 to provide Central assistance to implementing agencies through States/Union Territories (UTs) for providing houses to all eligible families/beneficiaries by 2022.

### Cabinet approves setting up ₹1 lakh-crore Agriculture infrastructure fund

**News:** Government of India has approved setting up of an agriculture infrastructure fund with a corpus of Rs 1 lakh crore.

**Facts:**

- **Type:** Central Sector Scheme.
- **Aim:** To provide a medium-long term debt financing for investment in viable projects for post-harvest management Infrastructure and community farming assets through interest subvention and financial support.
- **Duration:** The duration of the Scheme shall be from FY2020 to FY2029 (10 years).
- **Coverage:** The fund will provide loans to Primary Agricultural Credit Societies (PACS), Marketing Cooperative Societies, Farmer Producers Organizations (FPOs), Self Help Group (SHG), farmers, Joint Liability Groups (JLG) among others.
- **Interest subvention:** All loans will have interest subvention of 3% per annum up to a limit of ₹2 crore. This subvention will be available for a maximum period of seven years.
- **Credit Guarantee:** Credit guarantee coverage will also be available for eligible borrowers from this financing facility under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to ₹2 crore.
- **Monitoring:** The National, State and District level Monitoring Committees will be set up to ensure real-time monitoring and effective feed-back.

### ‘Accelerate Vigyan’ to strengthen scientific research mechanism

**News:** Science and Engineering Research Board (SERB) has launched a new scheme called ‘Accelerate Vigyan’(AV).

**Facts:**

- **Aim:** To give more thrust on encouraging high-end scientific research and preparing scientific manpower which can lead to research careers and knowledge-based economy.

- **Components:** The scheme has two components ABHYAAS and SAMMOHAN.
- **Mission ABHYAAS:** It is an attempt to boost Research & Development in the country by enabling and grooming potential PG / PhD level students by developing dedicated research skills in selected areas through high-end workshops and research internships.
  - The mission has two sub components: High-end workshops ('KARYASHALA') and research internships ('VRITIKA').
- **Mission SAMMOHAN:** It aims to encourage, aggregate and consolidate all scientific interactions in the country under one common roof.
- The mission has two sub components: **Sayonjika** is an open-ended programme to catalogue capacity building activities in science and technology supported by all government funding agencies in the country and **Sangoshthi** is designed to facilitate the scientific community to establish an interaction with other individuals and research groups to enhance knowledge exchange.

### PM Formalization of Micro Food Processing Enterprises (PM FME) scheme

**News:** Union Minister for Food Processing has launched the PM Formalization of Micro Food Processing Enterprises (PM FME) scheme.

#### Facts:

- **Type:** Centrally Sponsored Scheme
- **Aim:** To provide financial, technical and business support for the upgradation of existing micro food processing enterprises.
- **Duration:** It will be implemented over a period of five years from 2020-21 to 2024-25.
- **Funding:** It would be shared in 60:40 ratio between Central and State Governments, in 90:10 ratio with North Eastern and Himalayan States, 60:40 ratio with UTs with legislature and 100% by Centre for other UTs.

#### Features of the Scheme:

- **One District One Product (ODOP) Approach:** The States would identify food products for districts keeping in view the existing clusters and availability of raw material.
- **Other Focus Areas:** The scheme would also focus on Waste to wealth products, minor forest products and Aspirational Districts.
- **Financial Support:**
  - Existing micro food processing units can avail credit-linked capital subsidy at 35% of the eligible project cost with a maximum ceiling of Rs.10 lakh per unit.
  - Seed capital at Rs.40,000/- per SHG member would be provided for working capital and purchase of small tools.

### Extension of Operation Greens from TOP to Total

**News:** Union Minister for Food Processing has announced the extension of Operation Greens from TOP (Tomato-Onion-Potato) crops to all Perishable Fruits & Vegetables (TOP to Total).

#### Facts:

- **Operation Greens:** It was announced in the Budget 2018-2019 to stabilize the supply of Tomato, Onion and Potato (TOP) crops. It is being implemented by the Ministry of Food Processing Industries.
- The scheme has now been extended from tomato, onion and potato (TOP) crops to other all Perishable Fruits & Vegetables (TOP to Total).
- **Objective:** To protect the growers of fruits and vegetables from making distress sale due to lockdown and reduce the post-harvest losses.
- **Duration of Scheme:** for the period of six months from the date of notification, i.e., 11/06/2020.
- **Eligible entities:** Food Processors, Co-operative Societies, Individual farmers, Exporters, State Marketing/Co-operative Federation engaged in processing/ marketing of fruits and vegetables.
- **Pattern of Assistance:** Ministry will provide subsidy 50% of the cost of the following two components subject to the cost norms:
  - Transportation of eligible crops from surplus production cluster to consumption centre and/or
  - Hiring of appropriate storage facilities for eligible crops (for a maximum period of 3 months).

### India's second Voluntary National Review at UN's High-Level Political Forum

**News:** NITI Aayog has presented India's second Voluntary National Review (VNR) at the United Nations High-level Political Forum (HLPF) on Sustainable Development, 2020.

#### Facts:

- **Voluntary National Review(VNR):** It is a comprehensive account of the adoption and implementation of the Sustainable Development Goals (SDG) 2030 Agenda in India.
- **Title of the report:** Decade of Action: Taking SDGs from Global to Local.
- **NITI Aayog** has the mandate of overseeing the adoption and monitoring of SDGs at the national and sub-national level.

#### Additional Facts:

**United Nations High-level Political Forum on Sustainable Development (HLPF):** It was established in 2012 by the outcome document of the United Nations Conference on Sustainable Development (Rio+20).

**Purpose:** It is responsible for the organization's policy on sustainable development. It adopts negotiated declarations, reviews commitment and the progress of the 2030 Agenda for Sustainable Development.

**Meeting:** It meets annually since 2016 under the auspices of the UN Economic and Social Council (ECOSOC).

### Housing and Urban Affairs Minister launches toolkit for Swachh Survekshan 2021

**News:** Union Minister for Housing and Urban affairs has launched the 'Swachh Survekshan 2021' -- the sixth edition of the annual cleanliness survey. A new category of awards titled 'Prerak Daaur Samman' were also announced as part of the survey.

**Facts:**

- **Swachh Survekshan:** It is an annual cleanliness survey of urban India conducted by the Ministry of Housing and Urban Affairs under the aegis of Swachh Bharat Mission- Urban (SBM-U).
- **Objectives:** **a)** To encourage large scale citizen participation and create awareness about cleanliness **b)** inculcate a spirit of healthy competition among cities and towns towards creating cleaner cities/towns.
- **Swachh Survekshan 2021:** In a departure from the present criteria of evaluating cities on 'population category', the 2021 survey will categorize cities based on six select indicator wise performance criteria which are as follows:
  - Segregation of waste into Wet, Dry and Hazard categories
  - Processing capacity against wet waste generated
  - Processing and recycling of wet and dry waste
  - Construction & Demolition (C&D) waste processing
  - Percentage of waste going to landfill
  - Sanitation status of cities
- **Prerak Daaur Samman:** It is a new category of awards announced as part of Swachh Survekshan 2021. The award has a total of five additional sub- categories - Divya (Platinum), Anupam (Gold), Ujjwal (Silver), Udit (Bronze), Aarohi (Aspiring) - with top three cities being recognized in each.

**Pointly for Policy**

1. **Green-Ag Project:** It is a recently launched project by government of India which seeks to reduce emissions from agriculture and ensure sustainable agricultural practices. The project is funded by the Global Environment Facility while the Department of Agriculture, Cooperation, and Farmers' Welfare (DAC&FW) is the national executing agency.
2. **Centre for Augmenting WAR with COVID-19 Health Crisis (CAWACH):** A Bangalore-based start-up has developed a mobile app named 'Lyfas' for detection and risk assessment of Covid-19-infected individuals. This application was developed with support from the CAWACH Initiative. CWACH is an initiative by the National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST).
3. **Financial Management Index for Rural Development Programmes:** It has been recently launched by Ministry of Rural Development. It aims to rank states on efficient management of financial resources allocated for implementing rural development programmes.
4. **Indian Scholastic Assessment (Ind-SAT):** Ministry of Human Resource Development (HRD) has conducted the first-ever Indian Scholastic Assessment (Ind-SAT) Test 2020. It is an exam conducted for grant of scholarships and admissions to foreign students for studying in select Indian universities under the Study in India programme.
5. **RAISE Initiative:** Ministry of Power has launched the Retrofit of Air-conditioning to improve Indoor Air Quality for Safety and Efficiency (RAISE) national programme. It aims to develop



healthy and energy-efficient buildings by improving indoor air quality, thermal comfort and energy efficiency (EE) in workspaces across the nation

6. **Manodarpan Initiative:** It has been recently launched by Ministry of Human Resource Development as a part of the Atma Nirbhar Bharat Abhiyan. It aims to monitor and provide psychosocial support to students, teachers and families for Mental Health and Emotional Wellbeing during the conditions like COVID outbreak and beyond.
7. **National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA):** Ministry of Human Resource Development has launched the first online NISHTHA programme for 1,200 key resources persons of Andhra Pradesh. It is an Integrated Teacher Training Programme at the elementary stage under Samagra Shiksha Abhiyan.
8. **PRAGYATA:** Launched by Ministry of Human Resource Development, it is a set of guidelines which aims to assist School Heads, Teachers, parents and students in E-learning
9. **ASSEM Portal:** Launched by Ministry of Skill Development and Entrepreneurship, it is an artificial intelligence-based platform that aims to help skilled people find sustainable livelihood opportunities by providing employers a platform to assess the availability of skilled workforce and formulate their hiring plans.
10. **Atma Nirbhar Bharat App Innovation Challenge:** Launched by the Ministry of Electronics and Information Technology in partnership with Atal Innovation Mission- NITI Aayog, it aims to facilitate the techies and start-up community to create world-class Made in India Apps.
11. **Committee to develop India as educational hub:** Ministry of Human Resource and Development (HRD) has set up a committee headed by **UGC Chairman DP Singh** to prepare guidelines to ensure more students 'Stay in India and Study in India.

## INTERNATIONAL RELATIONS

### DST launches India-Russia collaboration joint R&D for technology development

**News:** Department of Science and Technology has launched the India-Russia Joint Technology Assessment and Accelerated Commercialization Programme.

**Facts:**

- The programme has been launched in partnership with Federation of Indian Chambers of Commerce and Industry (FICCI) and Foundation for Assistance to Small Innovative Enterprises (FASIE) of the Russian Federation.
- **Aim:** To connect Indian and Russian Science & Technology(S&T) led SMEs and Start-ups for joint R&D for technology development and for cross-country technology adaptation.

### Joint Statement on U.S.-India Strategy Energy Partnership

**News:** India and the United States have issued a joint statement with the U.S.-India Strategy Energy Partnership.

**Facts:**

- **U.S.-India Strategic Energy Partnership(SEP):** It was established in 2018 to build upon energy partnership and set the stage for meaningful engagements through robust government-to-government cooperation and industry engagement.

- **Pillars:** The SEP organizes inter-agency engagement on both sides across four primary pillars of cooperation: (1) Power and Energy Efficiency; (2) Oil and Gas; (3) Renewable Energy; and (4) Sustainable Growth.

#### Key Takeaways:

- **Partnership to Advance Clean Energy(PACE):** It was launched in 2009 by India and the United States to accelerate inclusive, low carbon growth by supporting research and deployment of clean energy technologies.
- **Hydrogen Task Force:** It is a public-private initiative launched by India and US to help scale up technologies to produce hydrogen from renewable energy and fossil fuel sources and to bring down the cost of deployment for enhanced energy security and resilience.
- **Solar Decathlon:** The two countries signed an MOU to collaborate on India's first-ever Solar Decathlon® India in 2021 establishing a collegiate competition to prepare the next generation of building professionals to design and build high efficiency buildings powered by renewables.
- **South Asia Women in Energy (SAWIE) platform:** It was launched by USAID with an aim to promote women's empowerment and gender sensitization in the energy sector in the South Asia region.
- **India Energy Modeling Forum:** It was launched jointly by USAID and NITI Aayog to provide a platform for policymakers to study important energy and environmental issues and ensure induction of modelling and analysis in informed decision-making process.

#### Pointly for International Relations

- **COVID-19 Law Lab initiative:** Launched by WHO, it is a database of laws that countries have implemented responding to the pandemic. It includes state of emergency declarations, quarantine measures, disease surveillance, legal measures relating to mask-wearing, social distancing and access to medication and vaccines.

## ECONOMY

### RBI signs \$400 million currency swap with Sri Lanka

**News:** The Reserve Bank of India (RBI) has signed a \$400-million currency swap facility with Sri Lanka under the SAARC Currency Swap Framework 2019-22.

#### Facts:

- **Currency Swap:** The term swap means exchange. Under this, a country provides dollars to a foreign central bank which simultaneously provides the equivalent funds in its currency to the former based on the market exchange rate during the transaction.
  - The parties agree to swap back these quantities of their two currencies at a specified date in the future which could be the next day or even two years later using the same exchange rate as in the first transaction.
- **Benefits:** These swap operations carry no exchange rate or other market risks as transaction terms are set in advance.

- Hence, it provides benefit to the country which is getting dollars to use reserves at any time in order to maintain an appropriate level of balance of payments or short-term liquidity.

**Additional Facts:**

- **SAARC Currency Swap Framework 2019-22:** The SAARC currency swap framework came into operation in 2012. In 2019, the RBI revised the framework from 2019-2022.
  - Under the framework for 2019-22, RBI will offer swap arrangement within the overall corpus of USD 2 billion. The draws can be made in US Dollar, Euro or Indian Rupee.
  - The framework also provides certain concessions for swap draws in Indian Rupee.
- **South Asian Association for Regional Cooperation (SAARC):** It is a regional intergovernmental organization of states in South Asia. It was established in 1985. Members: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

### Consumer Protection (E-Commerce) Rules Comes into Force

**News:** Government has notified Consumer Protection (E-Commerce) Rules, 2020.

**Facts:**

- **Aim:** To prevent unfair trade practices in e-commerce, direct selling and also to protect the interest and rights of consumers.
- **Rules:** The rules will be applicable to all electronic retailers registered in India or abroad but offering goods and services to Indian consumers.

**Key Provisions of the Rules:**

- **Unfair Trade Practices:** The rules empower the central government to act against unfair trade practices in e-commerce and direct selling.
- **Grievance officer:** Marketplaces as well as sellers would be required to have grievance officers who have to respond in a time-bound manner.
- **Consumer Complaint:** The companies need to acknowledge the receipt of any consumer complaint within 48 hours and redress the complaint within one month from the date of receipt of the complaint.
- **Manipulation of Price:** The E-commerce companies are not allowed to manipulate the price of goods and services offered on their platforms to gain unreasonable profit and to discriminate between consumers.
- **Country of Origin:** E-commerce companies are required to mention the 'expiry date' of goods offered for sale and 'country of origin' for enabling the consumer to make an informed decision at the pre-purchase.
- **False Reviews:** The rules do not permit any inventory e-commerce entity to falsely represent itself as a consumer and post reviews about goods and services or misrepresent the quality or the features of any goods and services.

### Gross NPA of banks may rise to 12.5% by March 2021: RBI Financial Stability Report

**News:** The Reserve Bank of India (RBI) has released its 21st Financial Stability Report.

**Facts:**

- **Financial Stability Report (FSR):** It is a bi-annual report published by the Reserve Bank of India (RBI).
- **Aim:** To review the nature, magnitude and implications of risks that may have a bearing on the macroeconomic environment, financial institutions, markets and infrastructure.
- The report is also the collective assessment of the Sub-Committee of the Financial Stability and Development Council (FSDC) on risks to financial stability.

**Additional Facts:**

- **Financial Stability and Development Council (FSDC):** It is an apex level body setup in 2010 on the recommendations of Raghuram Rajan committee (2008).
- **Objectives:** To strengthen and institutionalize the mechanism for maintaining financial stability, enhancing inter-regulatory coordination and promoting financial sector development.
- **Composition:** The Chairman of the Council is the Finance Minister and its members include heads of Financial Sector Regulators (RBI, SEBI, PFRDA & IRDA), Secretaries of various Departments, Chief Economic Adviser among others.
- **FSDC Sub-committee:** It has been set up under the chairmanship of Governor, RBI. It meets more often than the full Council.

### World Bank to give \$750 million funding support to MSMEs

**News:** The World Bank's Board of Executive Directors has approved a \$750 million MSME Emergency Response program for India.

**Facts:**

- **MSME Emergency Response program:** It aims to support increased flow of finance into the hands of micro, small, and medium enterprises (MSMEs) which are severely impacted by the COVID-19 crisis.
- **Impact:** It will address the immediate liquidity and credit needs of some 1.5 million viable MSMEs to help them withstand the impact of the current shock and protect millions of jobs.

**Additional Facts:**

**Accelerating India's COVID-19 Social Protection Response Program (PMGKY):** It is a World Bank's programme to support India's efforts at providing social assistance to the poor and vulnerable households severely impacted by the COVID-19 pandemic.

### Govt notifies draft rules for Code on Wages

**News:** The Labour and Employment Ministry has notified the draft Code on Wages (Central) Rules under the Code on Wages, 2019.

**Facts:**

- **Code on wages, 2019:** It has amended and consolidated laws relating to wages, bonus and related matters. The Code subsumed four labour laws – a) Payment of Wages Act, 1936, b) Minimum Wages Act, 1948 c) Payment of Bonus Act, 1965 and the d) Equal Remuneration Act, 1976.

#### **Key Provisions of Draft Wage Rules:**

- **Working hours:** The normal working day shall comprise eight hours of work and one or more intervals of rest which in total shall not exceed one hour.
- **Central Advisory Board:** Government will set up a Central advisory board to fix the floor-level minimum wages.
- **Calculation of minimum wage:** The criteria for fixing the minimum rate of wages per day for employees include: (i) standard family of four (self, spouse and two children) (ii) daily intake of 2700 calories per consumption unit, (iii) 10% expenditure on rent, (iv) 20% expenditure of fuel, electricity, and miscellaneous items, and (v) 25% expenditure on education, medical requirements and contingencies.
- **Norms for fixing minimum wage:** Minimum wages will be calculated based on the geographical area of employment and the skill category of an employee.
  - For this purpose, the central government will divide the geographical area into three categories: metropolitan, non-metropolitan and rural areas.
  - The occupations are also divided into four skill categories: unskilled, semi-skilled, skilled and highly skilled.
- **Technical committee:** A Technical Committee will be formed to suggest, modify, add or delete particular occupations in the tentative list of four categories: unskilled, semi-skilled, skilled and highly skilled.

#### **RBI announces special liquidity scheme for NBFCs and HFCs through SPV**

**News:** Reserve Bank of India (RBI) has operationalized the Rs 30,000 crore special liquidity scheme for non-banking finance companies (NBFCs) and Housing finance companies (HFCs).

#### **Facts:**

- **Aim:** To improve the liquidity position of non-banking finance companies (NBFCs) and housing finance companies (HFCs).
- Under the scheme, a Special Purpose Vehicle (SPV) has been set up to manage a Stressed Asset Fund (SAF) of the NBFCs/ HFCs.
- The SPV will issue securities which would be guaranteed by the Government of India and purchased by the Reserve Bank of India (RBI) only.
- The proceeds of sale of such securities would be used by the SPV to acquire short-term debt of NBFCs/HFCs.
- The Scheme will be administered by the Department of Financial Services (Ministry of Finance).
- **Eligibility Conditions for NBFCs/HFCs to avail this scheme:**
  - All investment grade RBI-registered NBFCs excluding Core Investment Companies (CICs) and NHB-registered HFCs are eligible.

- Capital adequacy ratio (CAR) of NBFCs/HFCs should not be below the regulatory minimum, i.e. 15% and 12% respectively as on March 31, 2019.
- Net non-performing assets should not be more than 6% as on March 31, 2019.
- They should have made profits in at least one of the last two financial years.
- They should not have been reported under SMA-1 or SMA-2 category by any bank for their borrowings during the last one year prior to August 1, 2018

### Pointly for Economy

1. **'AIM-iCREST'**: It has been launched by Atal Innovation Mission (AIM) in partnership with Bill & Melinda Gates Foundation and Wadhvani Foundation. AIM's iCREST stands for Incubator Capabilities enhancement program for a Robust Ecosystem focused on creating high performing Start-ups. It has been designed to enable the incubation ecosystem and to support the growth of AIM's established incubators across India
2. **Surety Bond**: Insurance Regulatory and Development Authority (IRDAI) has formed a panel under G Srinivasan to assess the suitability of the Indian insurance industry or any other sector to offer Surety Bonds for road contracts in India. Surety Bond is a three-party agreement that legally binds together a principal who needs the bond, that obliges who requires the bond and a surety company that sells the bond.
3. **World Youth Skills Day**: It has been celebrated every year on 15th July since 2014. The theme for 2020 was Skills for a Resilient Youth.

## ENVIRONMENT

### Aerial seeding to increase green cover in Aravalli

**News:** Haryana Forest Department has employed aerial seeding technique to improve green cover in the Aravalli area of Faridabad.

#### Facts:

- **Aerial Seeding:** It is a plantation technique wherein seed balls — seeds covered with a mixture of clay, compost, char and other components — are sprayed using aerial devices, including planes, helicopters or drones.
- **How does it work?**
  - Seed balls/pellets are dispersed in a targeted area by low-flying drones with the coating providing the required weight for seeds to airdrop on a predetermined location rather than getting deterred by the wind.
  - These pellets sprout when there is enough rain with nutrients present within them helping in initial growth.
- **Species to be Used for Aerial Seeding:** The plant species which are native to the area and hardy, with seeds that are of an appropriate size for preparing seed balls are usually used for aerial seeding with a higher survival percentage.
- **Advantages:**
  - Inaccessible areas having steep slopes or no forest routes can be targeted using this method.



- The process of the seed's germination and growth is such that it requires no attention after it is dispersed and thus seed pellets are known as the fire and forget way of plantation.
- They eliminate any need for ploughing and do not need to be planted since they are already surrounded by soil, nutrients, and microorganisms. The clay shell also protects them from birds, ants and rats.

### India to apply CA|TS standards across all Tiger Reserves

**News:** National Tiger Conservation Authority (NTCA) has announced the adoption of the Conservation Assured | Tiger Standards [CA|TS] across all the country's 50 Tiger Reserves.

**Facts:**

- **CA|TS:** It was launched in 2013 as a partnership of tiger range governments, inter-governmental agencies, institutions, NGOs and conservation organisations.
- **Purpose:** It is a conservation tool that sets best practice and standards to manage target species and encourages assessments to benchmark progress. Tigers are the first species selected for the initiative.
- **Implementation:** World Wildlife Fund for Nature (WWF) is helping tiger range countries to implement CA|TS and is joined by other key global organisations.

**Additional Facts:**

- **Global Tiger Forum (GTF):** It is the only inter-governmental international body established in 1993 with members from willing countries to embark on a global campaign to protect the Tiger. It is located in New Delhi, India.
- **Global Tiger Initiative (GTI):** It was launched in 2008 as a global alliance of governments, international organizations, civil society and the private sector with the aim of working together to save wild tigers from extinction. In 2013, the scope was broadened to include Snow Leopards.
- **WWF:** It is an international non-governmental organization founded in 1961 to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. Headquarters: Gland, Switzerland.

### Gas flaring: An emission that escapes global attention

**News:** According to a World Bank report, the gas flaring has hit the highest level in a decade mostly due to an increase in three countries – the United States, Venezuela and Russia.

**Facts:**

- **Gas Flaring:** In chemical factories, oil refineries, oil wells and landfills, gaseous waste products and even non-waste gases produced are routed to an elevated vertical chimney called a gas flare and burnt off at its tip. This is called gas flaring.
- **Why is gas flaring done?** Waste gases are subjected to such a process either because the gases are waste or it is difficult to store and transport them. Non-waste gases are burnt off to protect the processing equipment when unexpected high pressure develops within them.

- **Harmful Effects:** Gas flaring in oil rigs and wells contribute significantly to greenhouse gases in our atmosphere.

**Additional Facts:**

- **Global Gas Flaring Reduction Partnership (GGFR):** It is a public private initiative managed by the World Bank that aims to end gas flaring at oil production sites across the world by helping remove barriers to flaring reduction, conducting research, sharing best practices among others.
- **Zero Routine Flaring by 2030 Initiative:** It was launched by the World Bank in 2015 to eliminate the existing oil industry practice of routinely flaring gas at production sites by 2030.

### India among top 10 countries gaining forest area in the world: FAO

**News:** Food and Agriculture Organization (FAO) has released the latest Global Forest Resources Assessment (FRA).

**Facts:**

- The FAO has brought out this comprehensive assessment every five years since 1990.
- **Aim:** To assess the state of forests, their conditions and management for all member countries.

**Key Takeaways:**

- **The Highest Forest Area:** The 10 countries that have recorded maximum average annual net gains in forest area during 2010-2020 are China, Australia, India, Chile, Vietnam, Turkey, the United States, France, Italy and Romania.
- **Net Gain in Forest Area:** The Asian continent reported the highest net gain in forest area in 2010-2020. It recorded 1.17 million hectares (ha) per year net increase in forests in the last decade.
- **India:** India reported 0.38% annual gain in forest or 266,000 ha of forest increase every year at an average during 2010-20.
- The forest area managed by local, tribal and indigenous communities in India increased from zero in 1990 to about 25 million ha in 2015.
- **Forest Employment:** India reported the maximum employment in the forestry sector in the world.

**Additional Facts:**

- **FAO:** It is a specialized agency of the United Nations that leads international efforts to defeat hunger. It is headquartered in Rome, Italy.
- **Aim:** To achieve food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives.
- **Reports:** Global Food Price Index, State of the World's Forests report among others.

### Assam govt decides to upgrade Dehing Patkai wildlife sanctuary to a national park

**News:** Assam government has decided to upgrade the Dehing Patkai wildlife sanctuary into a national park amid an ongoing row over allowing coal mining within its jurisdiction.

**Facts:**

- **Dehing Patkai Wildlife Sanctuary:** The sanctuary is also known as the Jeypore Rainforest. It is located in the districts of Dibrugarh and Tinsukia in Assam.
- **Vegetation:** It is a deciduous rainforest interspersed with semi-evergreen and lush green flora.
- **Habitat:** Chinese pangolin, Flying fox, Rhesus macaque, Assamese macaque, Himalayan black bear, Lesser Adjutant Stork, White and Slender-billed Vulture, Leopard, Golden Cat, Jungle Cat and Marbled Cat.

**Note:** Post upgradation, Dehing Patkai will be the sixth national park in Assam – the other five being Kaziranga, Nameri, Manas, Orang and Dibru-Saikhowa.

**Additional Facts:**

Wildlife Sanctuary	National Park
It is a protected area constituted for the protection and conservation of wildlife or its environment. They are declared in areas that are considered to be of adequate ecological, geomorphological and natural significance.	It is a protected area constituted for the protection and conservation of wildlife or its environment. They are declared in areas that are considered to be of adequate ecological, geomorphological and natural significance.
Some restricted human activities are allowed inside the Sanctuary area	No human activity is permitted inside the national park except for the ones permitted by the Chief Wildlife Warden of the state.
Boundaries of sanctuaries are not well defined	Boundaries of a national park are well defined
Wildlife Sanctuary can be upgraded as a National Park.	National Park cannot be downgraded as a Sanctuary

## Unite human, animal and environmental health to prevent the next pandemic – UN Report

**News:** United Nations Environment Programme (UNEP) and the International Livestock Research Institute (ILRI) has released a report titled “Preventing the Next Pandemic: Zoonotic diseases and how to break the chain of transmission”.

**Facts:**

- **Aim:** The report focuses on the context and nature of potential future zoonotic disease outbreaks during the Covid-19 pandemic by identifying the anthropogenic (changes in environment due to human activity) factors.

- **Anthropogenic Factors:** **a)** Increased Use of Wildlife **b)** Changes in Food Supply Chains **c)** Increased Demand for Animal Protein **d)** Intense and Unsustainable Farming and **e)** Use of Antimicrobials in farm settings contributing to the burden of antimicrobial resistance (AMR).

**Additional Facts:**

- **Zoonoses or Zoonotic Disease:** It is a disease that passes into the human population from an animal source directly or through an intermediary species.
- Zoonotic infections can be bacterial, viral or parasitic in nature, with animals playing a vital role in maintaining such infections.
- **Examples** of zoonoses include HIV-AIDS, Ebola, Malaria, and the current Covid-19 disease.
- **UNEP:** It was founded by the UN General Assembly as a result of the United Nations Conference on the Human Environment (Stockholm Conference) in 1972.
  - **Reports:** Emission Gap Report, Global Environment Outlook among others.
  - **Headquarters:** Nairobi, Kenya.
- **International Livestock Research Institute (ILRI):** It is an international agricultural research institute formed in 1994 through the merger of the International Livestock Centre for Africa and the International Laboratory for Research on Animal Diseases. **Headquarters:** Nairobi, Kenya.

### Average global temperature can rise by 1.5 °C in next 5 years: WMO report

**News:** World Meteorological Organization (WMO) has released a report titled “The Global Annual to Decadal Climate Update”.

**Facts:**

- The Global Annual to Decadal Climate Update report is led by the United Kingdom’s Met Office.
- **Aim:** To provide a climate outlook for the next five years by harnessing the expertise of internationally acclaimed climate scientists and the best computer models from leading climate centers around the world.

**Key Takeaways:**

- **Global Temperature:** Annual global temperature is likely to be at least 1 °C warmer than pre industrial levels (defined as the 1850-1900 average) in each of the coming 5 years.

**Additional Facts:**

- **Paris agreement:** It was adopted at the UNFCCC COP21 held in Paris in 2015. It aims to keep global temperature rise in the 21st century well below 2 degrees Celsius above pre-industrial levels and pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.
- **World Meteorological Organization (WMO):** It is an intergovernmental organization established by the ratification of the WMO Convention in 1950.
  - Members: 193 Member States and Territories.
  - Significance: It is a specialized agency of the United Nations (UN).
  - Headquarters: Geneva, Switzerland.

### Sustainable space heating solutions in the Himalayan region : Report

**News:** WWF India (World Wide Fund for Nature) and The Energy and Resources Institute (TERI) have released a report titled “Sustainable Space Heating Solutions in the Himalayan Region”.

**Facts:**

- This report is part of an ongoing initiative of WWF-India’s ‘Climate Solver’ programme.
- **Climate Solver Programme:** It is a climate innovations platform by WWF which began in Sweden in 2008 and launched in India in 2012.
- **Aim:** To strengthen development and widespread use of low carbon technologies developed by startups and SMEs which can reduce greenhouse gas emissions or provide clean energy access.

**Additional Facts:**

- **WWF:** It is an international non-governmental organization founded in 1961 to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature. It is headquartered in Gland, Switzerland.
- **TERI:** It is a non-profit research institute established in 1974. It conducts research work in the fields of energy, environment and sustainable development for India and the Global South.

### Union Environment Minister attends virtual Climate Action Ministerial

**News:** The 4th edition of the virtual Ministerial on Climate Action was organized to advance discussions on implementation of the Paris Agreement.

**Facts:**

- The virtual meeting was co-chaired by European Union, China and Canada.
- **Key Discussions:** India highlighted that developed country parties have not fulfilled their promise for extending financial and technological support to developing countries as envisaged under UNFCCC and its Paris Agreement.
- The developed countries had made the commitment to mobilize \$100 billion a year in climate finance by 2020 and agreed to continue mobilizing finance at the level of \$100 billion a year until 2025.

**Additional Facts:**

**Paris Agreement:** It was adopted at the UNFCCC Conference of Parties (COP) 21 in 2015 to address climate change and its negative impacts.

- **Goals:**
  - **Temperature:** hold warming below 2°C above pre-industrial levels with effective efforts to limit warming to 1.5°C
  - **Adaptation:** Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development
  - **Low Emission Finance flows:** Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

## Union Environment Minister Releases Tiger Census report on Global Tiger Day

**News:** Union Environment Minister has released a detailed report of All India Tiger Census 2018 ahead of Global Tiger Day.

### Facts:

The All India tiger estimation has been carried out once in every four years since 2006.

### Key Takeaways:

- **Tigers:** The total count of tigers has risen to 2,967 in 2018 from 2,226 in 2014 — an increase of 741 individuals or 33% in four years.
- **Tiger population** within reserves is 1,923 (65% of the total tiger population of India) which means 35% of the tiger population still lives outside the reserves.
- **State wise:** Madhya Pradesh has maximum tigers at 526 followed by Karnataka at 524 and 442 in Uttarakhand.
- **Chhattisgarh** and Mizoram saw a decline in the tiger population and all other States saw a positive increase.
- **Highest Tiger Reserves:** Corbett Tiger Reserve (Uttarakhand) has the highest tigers followed by Nagarhole tiger reserve (Karnataka) and Bandipur Tiger Reserve (Karnataka).
- **Dampa** Tiger Reserve (Mizoram), Buxa Tiger Reserve (West Bengal) and Palamau Reserve (Jharkhand) have no tigers left.

### Additional Facts:

- **Global Tiger Day:** It was observed for the first time in 2010 on July 29th at the St. Petersburg Tiger Summit in Russia when all 13 tiger range countries came together for the first time with the commitment of doubling the number of wild tigers by 2022.
- **13 tiger range countries:** India, Bangladesh, Bhutan, Cambodia, China, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam.
- **Project Tiger:** It is a Centrally Sponsored Scheme of Government of India launched in 1973 for in-situ conservation of wild tigers in designated tiger reserves.

## Pointly for Environment

1. **Tillari Conservation Reserve:** It will be the seventh wildlife corridor in Maharashtra to be declared as a 'conservation reserve'. It connects the Mhadei sanctuary in Goa and Bhimgad in Karnataka.
2. **Central Zoo Authority:** Ministry of Environment, Forests and Climate Change has reconstituted it. It is a statutory body established in 1992 under the Wildlife Protection Act, 1972. It regulates zoos across India.
3. **"Towards a Clean Energy Economy: Post-Covid-19 Opportunities for India's Energy and Mobility Sectors":** It has been released by NITI Aayog and Rocky Mountain Institute (RMI). It aims to highlight emerging challenges and opportunities for India's transition to clean mobility and power systems in the context of Covid-19.
4. **Direct Seeding of Rice (DSR):** It is being used by Punjab farmers. It refers to the process of establishing a rice crop from seeds sown in the field rather than by transplanting seedlings from nursery.
5. **High levels of ammonia in Yamuna:** Delhi Jal Board (DJB) had to reduce water production capacity by 25% after high levels of ammonia were detected in the river. It is a colourless gas



and is used as an industrial chemical in the production of fertilisers, plastics, synthetic fibres, dyes and other products. It occurs naturally in the environment from the breakdown of organic waste matter and also through industrial effluents or through contamination by sewage.

6. **National Ganga River Basin project:** The World Bank has approved a five-year loan to the Namami Ganga under the project. It is a World Bank assisted project approved in the year 2011. It aims to help rejuvenate the Ganga River by helping stem river pollution, and strengthening the management of the river basin.
7. **Mausam App:** Launched by Ministry of Earth sciences, it aims to provide current weather of a location, issue warnings of severe weather events that are likely to occur in the immediate future and provide tracking of approaching weather events.
8. **Knowledge Resource Centre Network (KRCN):** Launched by Ministry of Earth Sciences, it will be a one-point stop to access research, publications, e-resources of all institutions functioning under the Ministry of Earth Sciences (MoES).
9. **Vriksharopan Abhiyan:** It is a tree plantation drive organized by the Ministry of Coal
10. **World Wildlife Crime Report 2020:** It has been released by United Nations Office on Drugs and Crime (UNODC). According to the report, India and Thailand are the two main countries which are the suppliers of the illegal tiger products in the world.
11. **KURMA App:** Launched by MoEFCC, it is aimed at turtle conservation by providing users a database to identify a species but also provides the location of the nearest rescue centre for turtles across the country.
12. **Kaziranga National Park:** Flooding has caused havoc in the national park. It is located in the State of Assam and is the single largest undisturbed and representative area in the Brahmaputra Valley floodplain. It is a World Heritage Site by UNESCO. It houses the world's largest population of Great One-horned Rhinoceros (IUCN Status- Vulnerable).
13. **Ophiocordyceps sinensis:** Also known as Himalayan Viagra, it is a caterpillar fungus endemic to the Himalayan and Tibetan plateau and found in China, Bhutan, Nepal and India. It has been listed under the 'vulnerable category' as per IUCN Red List.
14. **Saiga Antelope:** It has experienced its largest mass calving in recent years. It is a large migratory herbivore of Central Asia found in Kazakhstan, Russia, Mongolia, Turkmenistan and Uzbekistan. It is listed as Critically endangered by IUCN.
15. **Global E-waste Monitor 2020:** It is a collaborative product of the Global E-waste Statistics Partnership (GESP), International Telecommunication Union (ITU), International Solid Waste Association (ISWA) and UN Environment Programme (UNEP). according to the report, global e-waste will increase by 38% in the decade between 2020 and 2030.
16. **Koalas:** According to Australian Parliamentary report, Koalas could become extinct by 2050. They are a tree-dwelling marsupial animal endemic to Australia. IUCN Status: Vulnerable.
17. **Lonar Lake:** colour of Lonar lake water turned pink due to a large presence of 'Haloarchaea'- a bacteria culture which produces pink pigment and is found in water saturated with salt. Lonar, India's only crater lake, is a notified National Geo Heritage Monument located at Lonar, Maharashtra
18. **Melghat Tiger Reserve:** Maharashtra has sought an alternate alignment to be considered for the upgradation of the railway line passing through the reserve. The reserve lies in Amravati

district in the state of Maharashtra. It has dry deciduous forest. The Tapti River and the Gawilgarh ridge of the Satpura Range form the boundaries of the reserve.

19. **'Winter Diesel':** India's armed forces may soon use winter diesel for operations in high altitude areas. It is a specialized fuel that was introduced by Indian Oil Corporation (IOC) for high altitude regions and low-temperature regions such as Ladakh where ordinary diesel can become unusable.

## SCIENCE and TECHNOLOGY

### Is SARS-CoV-2 a latent virus which can recur?

**News:** Scientists have said that COVID-19 could be a latent virus as a Delhi policeman tested positive for Covid-19 within one and a half months of having recovered.

**Facts:**

- **What is Latent Viral Infection?** It is an infection that is inactive or dormant and does not replicate within the host. However, it possesses the capacity to be reactivated at some point causing a flare-up of the disease much later.
- **Is it similar to active infection?** It is opposite to active infections as the virus in active infections are actively replicating and potentially causing symptoms.
- **Does it spread?** Latent viral infections can be reactivated into a lytic form (the replication of a viral genome). The ability to move back and forth from latent to lytic infections helps the virus spread from infected individuals to uninfected individuals.
- **Examples of LVI:** Herpes simplex viruses type 1 and 2, varicella-zoster virus, HIV, Epstein-Barr virus (human herpesvirus 4) and cytomegalovirus.

### International Thermonuclear Experimental Reactor (ITER)

**News:** The International Thermonuclear Experimental Reactor (ITER) has entered its years-long assembly phase.

**Facts:**

- **What is ITER?** It is a major International scientific experiment intended to prove the viability of fusion as an energy source.
- **Where is it being constructed?** An experimental tokamak nuclear fusion reactor is currently under construction in the south of France.
- **Funding:** The project is funded and run by seven member entities: European Union, China, India, Japan, Russia, South Korea and the United States.
- **What will ITER do?**
  - It will produce 500 MW of fusion power from 50 MW of thermal power injected into the tokamak resulting in a ten-fold gain of plasma heating power.
  - Demonstrate the integrated operation of technologies for a fusion power plant
  - Test components required for a fusion power plant among others.
- **Significance of the project:**

- It will be the first fusion device to produce net energy and maintain fusion for long periods of time.
- It will also be the first fusion device to test the integrated technologies, materials and physics regimes necessary for the commercial production of fusion-based electricity.

**Additional Facts:**

- **Fusion:** It is the energy source of the Sun and stars. In this, tremendous heat and gravity at the core of these stellar bodies, hydrogen nuclei collide and fuse into heavier helium atoms and release tremendous amounts of energy in the process.
- **Difference between Fusion and Fission:** The main difference between fusion and fission reactions is that fission is the splitting of an atom into two or more smaller ones while fusion is the fusing of two or more smaller atoms into a larger one.
- **Tokamak:** It is an experimental machine designed to harness the energy of fusion. Inside a tokamak, the energy produced through the fusion of atoms is absorbed as heat in the walls of the vessel. Just like a conventional power plant, a fusion power plant will use this heat to produce steam and then electricity by way of turbines and generators.

**What is Comet C/2020 F3 Neowise?**

**News:** The recently discovered comet called C/2020 F3 also known as NEOWISE after the NASA telescope that discovered it will make its closest approach to the Earth on July 22.

**Facts:**

Types	Definition
<b>Comets</b>	They are cosmic snowballs of frozen gases, rock and dust that orbit the Sun. They are thought to be remnants of the formation of the Solar System.
<b>Asteroid</b>	They are relatively small, inactive, rocky bodies orbiting the Sun. They are smaller than a planet but are larger than meteoroids.
<b>Meteoroids</b>	Sometimes one asteroid can smash into another. This can cause small pieces of the asteroid to break off. Those pieces are called meteoroids. Meteoroids can also come from comets.
<b>Meteors</b>	If a meteoroid comes close enough to Earth and enters Earth's atmosphere, it vaporizes and turns into a meteor: a streak of light in the sky.
<b>Meteorites</b>	Sometimes meteoroids don't vaporize completely in the atmosphere. In fact, sometimes they survive their trip through Earth's atmosphere and land on the Earth's surface. When they land on Earth, they are called meteorites.

**Additional Facts:**

- **NEOWISE Telescope:** The Wide-field Infrared Survey Explorer (WISE) is a NASA infrared-wavelength astronomical space telescope active from 2009 to 2011.
- In 2013, the spacecraft was reactivated and was renamed as NEOWISE. It was assigned a new mission: to assist NASA's efforts to identify and characterize the population of near-Earth objects (NEO).

**ISRO's MOM captures image of the biggest moon of Mars**

**News:** The Mars Colour Camera (MCC) onboard ISRO's Mars Orbiter Mission has captured the image of Phobos, the closest and biggest moon of Mars.

**Facts:**

- **Phobos:** It is the closest and biggest moon of Mars and is largely believed to be made up of carbonaceous chondrites.
- **Significance:** Phobos is nearing Mars at a rate of six feet every hundred years and at that rate, it will either crash into Mars in 50 million years or break up into a ring.

**Additional Facts:**

- **Mars Orbiter Mission (MOM) or Mangalyaan:** It is a space probe launched by the ISRO in 2013 and has been in the Martian orbit since 2014.
- **Launcher:** It was launched using a Polar Satellite Launch Vehicle (PSLV) rocket C25.
- **Objectives:**
  - To explore Martian surface features, mineralogy, morphology and atmosphere using indigenous scientific instruments.
  - To develop technologies required in planning, designing, management and operations of an interplanetary mission.
- **Instruments:** The Mars Orbiter has five scientific instruments - Lyman Alpha Photometer (LAP), Methane Sensor for Mars (MSM), Mars Exospheric Neutral Composition Analyzer (MENCA), Mars Colour Camera (MCC) and Thermal Infrared Imaging Spectrometer (TIS).

**The G4 flu virus with 'pandemic potential'**

**News:** Researchers in China have discovered a new strain of the H1N1 swine flu virus named G4 virus.

**Facts:**

- **G4 virus:** It is a new strain of virus that has descended from the H1N1 Influenza that was responsible for the 2009 flu pandemic.
- The evidence of the virus has been found in people who work in abattoirs and the swine industry.

- However, the virus hasn't shown evidence of human-to-human transmission so far.

#### Additional Facts:

- **H1N1(Swine Flu):** It is a highly contagious acute respiratory disease of pigs caused by type A influenza virus.
- Swine flu virus does not normally infect humans. However, sporadic human infections with swine flu have occurred.
- **Symptoms:** Cough, nasal secretions, fever, loss of appetite, fatigue, and headache.
- **Transmission:** It is transmitted by exposure to infected droplets expelled by coughing or sneezing or through contact to contaminate hands or surfaces.
- **Pandemic:** In 2009, WHO declared the outbreak of type A H1N1 influenza virus a pandemic.

#### Pointly for Science and Technology

1. **BelYo:** It is the country's first COVID-19 blockchain platform that converts COVID-19 related clinical and vaccination data of citizens from physical form into digital assets which can be retrieved by contact tracing apps like Arogya Setu. It has been developed by BelfricsBT, a global blockchain start-up along with IIIT Bangalore:
2. **Spyware and Stalkerware:** According to a report, there was a 51% increase in the use of spyware and stalkerware during the lockdown period from March to June. These are apps like viruses and malware that infect devices that are connected to the internet. These are apps like viruses and malware that infect devices that are connected to the internet.
3. **ASTHROS:** It stands for Astrophysics Stratospheric Telescope for High Spectral Resolution Observations at Submillimetre-wavelengths. It is a NASA mission which aims to send a telescope into the stratosphere to observe wavelengths of light invisible from the Earth.
4. **Blackrock:** Recently, discovered, it is a Trojan malware that is based on the source code of the Xeres malware, itself derived from malware called LokiBot
5. **ZyCoV-D:** It is a plasmid DNA vaccine designed and developed by Zydus, a pharmaceutical company. The vaccine comes under the Vaccine Discovery Programme supported by the Department of Biotechnology under the National Biopharma Mission.
6. **Itolizumab:** It has been approved by the Drugs Controller General of India (DCGI) for treating moderate to severe Covid-19 patients. It is a monoclonal antibody drug manufactured by Biocon for the treatment of severe chronic plaque psoriasis.
7. **Kakrapar-3 Atomic Power Plant:** Recently, the third unit of the Kakrapar Atomic Power Project (KAPP-3) achieved its first criticality. It is a nuclear power station located in Gujarat. It is the country's first 700 MWe (megawatt electric) unit and the biggest indigenously developed variant of the Pressurised Heavy Water Reactor (PHWR).
8. **Tianwen-1:** Recently launched, it is China's first Mars exploration mission.
9. **COVAX Alliance:** India has expressed its keen interest in joining the alliance. It is a facility that aims to guarantee rapid, fair and equitable access to COVID-19 vaccines for every country in the world.
10. **HOPE Spacecraft or Emirates Mars Mission:** It is a Mars mission launched by the United Arab Emirates. It is also the first interplanetary mission for the Arab World.

11. **Mars Perseverance rover mission:** It is a part of NASA's Mars Exploration Program, a long-term effort of robotic exploration of Mars.
12. **Solar Orbiter Mission:** European Space Agency has released the closest pictures ever taken of the Sun captured by the Solar Orbiter Mission. It is a space mission between ESA (European Space Agency) and NASA launched in February 2020. It aims to perform close-up, high-resolution studies of the Sun and inner heliosphere.

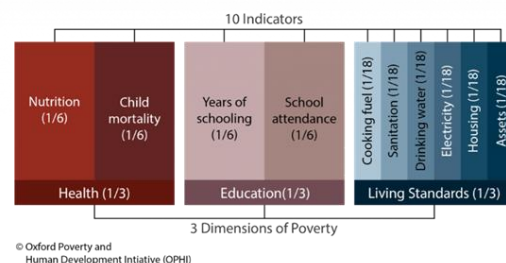
## SOCIAL

### 273 million Indians out of poverty in 10 years\_

**News:** The 2020 Global Multidimensional Poverty Index (MPI) has been released.

**Facts:**

- **Released by:** The index has been released by Oxford Poverty and Human Development Initiative (OPHI) in collaboration with the United Nations Development Programme.
- **Aim:** To provide a comprehensive picture of global trends in multidimensional poverty.
- **Title of the report:** Charting pathways out of multidimensional poverty: Achieving the SDGs.
- **Parameters:** The index identifies how people are being left behind across three key dimensions: health, education and standard of living, comprising 10 indicators.



**Note:** A person is multidimensional poor if she/he is deprived in one third or more (means 33% or more) of the weighted indicators (out of the ten indicators).

**Key Takeaways:**

- **Multidimensional Poverty:** Around 1.3 billion people are still living in multidimensional poverty. Half of multidimensionally poor people are children under age 18.
- **Region:** About 84% of multidimensionally poor people live in Sub-Saharan Africa and South Asia.

**India Specific Data:** During 2005-06 and 2015-16, India was successful in lifting around 273 million people out of multidimensional poverty.

### India's population may peak by 2047: Lancet

**News:** Lancet has released a study on world population trends in 195 countries.

**Facts:**

- The study was conducted by the researchers at the University of Washington's Institute for Health Metrics and Evaluation (IHME).
- The researchers used data from the Global Burden of Disease Study 2017.
- The Global Burden of Disease Study is a comprehensive regional and global assessment of mortality and disability from major diseases, injuries and risk factors.



**Key Takeaways:**

- **World Population:** World population will peak in 2064 at 9.73 billion. This is 36 years earlier than the 11 billion peak projected for 2100 by the UN World Population Prospects report 2019.
- **Total Fertility Rate(TFR):** Global total fertility rate (TFR) which indicates the average number of children expected to be born to a woman during her reproductive span of 15-49 years is predicted to steadily decline from 2.37 in 2017 to 1.66 in 2100.
- **Most Populated in 2100:** The five largest countries in 2100 (are projected) to be India, Nigeria, China, the U.S and Pakistan.

**India Specific Data:**

Indicators	Projections by Lancet
<b>Population</b>	India's population is forecasted to peak in 2048 at around 1.6 billion up from 1.38 billion in 2017 which will be followed by a 32% decline to around 1.09 billion in 2100.
<b>Working-age adults</b>	The number of working-age adults (20–64 years) in India is projected to fall from 748 million in 2017 to around 578 million in 2100. However, this will be the largest working-age population in the world by 2100
<b>GDP of India</b>	From 2017 to 2100, India is projected to rise up the rankings of countries with the largest total Gross Domestic Product (GDP) globally from 7th to 3rd, in terms of nominal GDP
<b>Total Fertility Rate (TFR)</b>	India's TFR is already below 2.1 in 2019. It will reach 1.29 in 2100.
<b>Immigration</b>	India is projected to have the second largest net immigration in 2100, with an estimated half a million more people immigrating to India in 2100 than emigrating out.
<b>Life Expectancy</b>	By 2100, India is projected to have one of the lowest life expectancies (79.3 years in 2100, up from 69.1 in 2017).

**Transgender law: Centre publishes draft rules**

**News:** Government has released a new Draft of Transgender Persons (Protection of Rights) Rules, 2020 under the Transgender Persons (Protection of Rights) Act, 2019.

**Facts:****Key Draft Rules:**

- **Application for issue of the certificate:** The rules have done away with the requirement of a medical examination for trans persons applying for a certificate of identity to the district magistrate.
  - However, in case of gender change application by a trans person, a certificate from the medical superintendent of the medical institution where the applicant underwent the intervention would be required.
- **Educational Institutions:** All educational institutions shall have a committee that transgender persons can approach in case of any harassment or discrimination.

- **Provisions for non-discrimination:** Governments shall take adequate steps to prohibit discrimination in any Government or private organization or establishment including in the areas of education, employment among others.
- **Transgender Protection Cell:** Every State Government shall set up a Transgender Protection Cell under the charge of the District Magistrate and Director General of Police to monitor cases of offences against transgender persons.
- **Punishment:** States will be responsible for timely prosecution of individuals charged under Section 18 of the Act which proscribes offences against the transgender community and penalties. The offences would be punishable with imprisonment for six months up to two years with a fine.

#### Additional Facts:

- **Transgender Persons (Protection of Rights) Act, 2019:** The act aims to ensure Social, economic and educational empowerment of transgender persons.
- **Definition of Transgender:** Those whose gender does not match the gender assigned to that person at birth.
- **Right of residence:** Every transgender person shall have a right to reside and be included in his household.
- **National Council for Transgender persons (NCT):** It would advise the central government on related policies and legislation and also act as a centre for grievance redressals.

### First indigenous vaccine for infant pneumonia approved

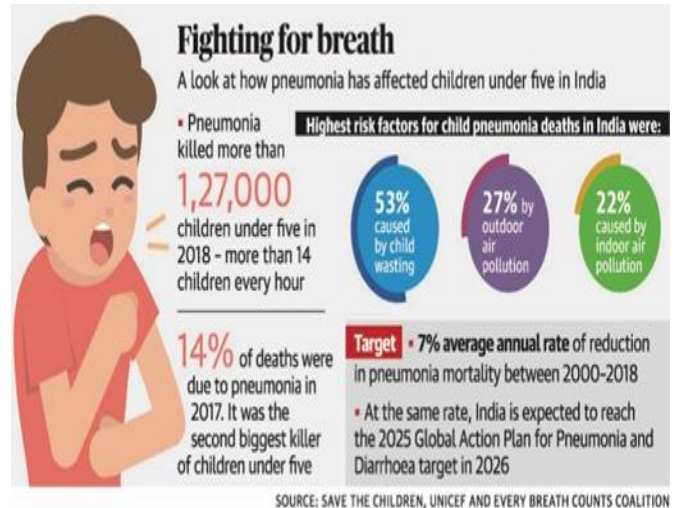
**News:** The Drug Controller General of India (DCGI) has approved the first fully indigenously developed conjugate vaccine for pneumonia developed by the Serum Institute of India, Pune.

#### Facts:

- **Pneumonia:** It is an infection in one or both lungs. The infection causes inflammation in the air sacs in your lungs which are called alveoli. The alveoli fill with fluid or pus making it difficult to breathe.
- **Causes:** It is caused by a number of infectious agents, including viruses, bacteria and fungi.
- **Symptoms:** High fever and chills, cough with phlegm, physical weakness and a feeling of being unwell, shortness of breath and rapid breathing and a racing pulse.
- **Transmission:**
  - The viruses and bacteria that are commonly found in a child's nose or throat can infect the lungs if they are inhaled.
  - They may also spread via air-borne droplets from a cough or sneeze.
  - It may also spread through blood especially during and shortly after birth.
- **Treatment:** Pneumonia is both preventable and treatable.

**Initiatives against Pneumonia:**

- **Integrated Global Action Plan for Pneumonia and Diarrhoea (GAPPD):** It was launched by WHO and UNICEF in 2009. It aims to end preventable childhood deaths due to pneumonia and diarrhea by 2025.
- **Social Awareness and Action to Neutralise Pneumonia Successfully (SAANS) campaign:** It was launched by the Union Health Ministry to mobilize people to protect children from pneumonia and train health personnel and other stakeholders to provide prioritized treatment to control the disease.

**Achieving Zero Hunger by 2030 in doubt, UN report warns**

**News:** The report titled “State of Food Security and Nutrition in the World” has been released.

**Facts:**

- The report is jointly produced by the Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), United Nations Children’s Fund (UNICEF), UN World Food Programme (WFP) and World Health Organization (WHO).
- **Aim:** To produce most authoritative global study on the progress towards ending hunger and malnutrition.

**Key Takeaways:**

- **Undernourishment:** The number of undernourishment people in India declined from 21.7% in 2004-06 to 14% in 2017-19,
- **Asia** remains home to the greatest number of undernourished people followed by Africa, Latin America and Caribbean.
- **Stunting:** The prevalence of stunting in children under 5 years of age in India declined from 47.8% in 2012 to 34.7% in 2019.
- **Obesity:** The number of adults (18 years and older) who are obese grew from 3.1% in 2012 to 3.9% in 2016.
- **Anaemia among women:** The number of women of reproductive age (15-49) affected by anaemia grew from 165.6 million in 2012 to 175.6 million in 2016.
- **SDG 2:** The world is not on track to achieve the Sustainable Development Goal (SDG) of ‘Zero Hunger’ by 2030.

**Note:** Stunting- low height for age, wasting- low weight compared to height, Underweight- low weight for age, Malnutrition includes both under and over nutrition and Anaemia-Lack of Healthy Red blood cells.

### India accounts for 45.8 million of the world's 'missing females', says UN report

**News:** United Nations Population Fund (UNFPA) has released the State of World Population Report 2020.

**Facts:**

- **Title of the report:** 'Against my will: defying the practices that harm women and girls and undermine equality'.
- **Focus of the report:** The report focuses on the problem of child marriage, son preference, gender biased sex selection (GBSS) and female genital mutilation (FGM).

**Key Takeaways:**

- **Harmful practices:** The report identifies 19 harmful practices against women out of which 3 are most widespread and persistent: Female genital mutilation (FGM), child marriage and son preference.
- **Missing Females:** India accounts for 45.8 million of the world's 142.6 million missing females over the past 50 years due to gender-based sex selection and preference for sons.
- **Child marriage:** Globally, one in five girls is married by age 18.
- **Female Genital Mutilation:** In 2020, an estimated 4.1 million girls will be subjected to female genital mutilation.

**Additional Facts: UNFPA:** It is the United Nations sexual and reproductive health agency. It aims to deliver a world where every pregnancy is wanted, every childbirth is safe and every young person's potential is fulfilled. Its headquarters is located at New York, United States.

### Pointly for Social

1. **Tangam community:** They are lesser-known ethnolinguistic groups within the Adi tribe of Arunachal Pradesh. They are concentrated in only one village (Kugging) with only 253 reported speakers.
2. **Mongolian Kanjur:** It is a Buddhist canonical text in 108 volumes which is considered to be the most important religious text in Mongolia.
3. **Zardozi Art:** It is an art form of Lucknow which involves making elaborate designs, using gold and silver threads. Further adding to the magnificence of the work are the studded pearls and precious stones. It has been accorded GI Tag.
4. **Dharma Chakra Day:** It is being organized by the International Buddhist Confederation under the aegis of the Ministry of Culture. It commemorates Buddha's First Sermon to his first five ascetic disciples at the Deer Park, Rsiapatana in the present day Sarnath near Varanasi, UP.
5. **Madhubani painting:** Also referred as Mithila Art as it originated in the Mithila region of Bihar. The painting is done using fingers, twigs, brushes and nib-pens, wherein sketches are made with folk motifs of Mithila. It is also characterized by its eye-catching geometrical patterns.

## INTERNAL SECURITY

**Dhruvastra: DRDO test fires 'made in India' anti-tank guided Nag missile**

**News:** Defence Research and Development Organization has successfully conducted flight trials of Dhruvastra.

**Facts:**

- **Dhruvastra:** It is a helicopter variant of the HELINA (Helicopter based NAG) Weapon System being inducted into the Indian Air Force (IAF).
- HELINA is a third-generation fire and forget class anti-tank guided missile (ATGM) system mounted on the Advanced Light Helicopter (ALH).
- **Purpose:** The missile can be fired to target enemy battle tanks, armored vehicles and bunkers.

**Additional Facts:**

- **Nag Missile:** It is a third-generation fire and forget class anti-tank guided missile (ATGM) system developed under Integrated Guided Missile Development Programme (IGMDP).
- The other missiles under IGMDP are **Prithvi** (Short range surface to surface ballistic missile) **Agni** (Intermediate Range surface to surface ballistic Missile), **Trishul** (Short-range low-level surface to air missile) and **Akash** (Medium range surface to air missile)
- **India's Nag range of missiles:** DRDO has developed a number of state-of-the-art anti-tank missiles in the 'Nag' range. These include:
  - **Prospina** which is used by the infantry and has a range of up to 4km
  - **Man Portable Anti-tank Guided Missile (MPATGM)** which can be launched from the shoulder and the
  - **Helina (Helicopter based NAG)** missiles which are customized for a helicopter-led assault on the enemy's tanks.

**Five Rafale fighter jets arrive at Ambala air base**

**News:** The first five of a batch of French Rafale fighter jets has arrived at Haryana's Ambala air base.

**Facts:**

- **Rafale Fighter Jet:** It is a twin-engine medium multi-role combat aircraft manufactured by the French company Dassault Aviation.

- **Purpose:** It can be used to perform ground and sea attacks, reconnaissance, high-accuracy strikes and nuclear strike deterrence.

**Additional Facts:**

- **SCALP:** It is an air-to-ground cruise missile that has a capability of long-range deep strike missile.
- **MICA:** It is an air-to-air missile that can be used for operations such as close-quarter dogfights and Beyond Visual Range (BVR).
- **HAMMER:** It is an air-to-ground precision guided missile produced by French conglomerate Safran which can be used against bunker-type hardened targets within the range of 70 km.
- **Meteor:** It is a Beyond Visual Range Air-to-Air Missile (BVRAAM) system developed by European firm MBDA

### The new weapons DAC has approved 'for defence of borders'

**News:** Defence Acquisition Council (DAC) chaired by Defence Minister has cleared several proposals worth close to Rs 39,000 crore that will boost the combat capabilities of all three services—Army, Navy and the Air Force.

**Facts:**

**Key Proposals:**

Missiles and Aircraft's	Details
Astra Missile for Navy and Air Force	It is a Beyond Visual Range Air-to-Air Missile (BVRAAM) developed by DRDO Purpose: It is designed to be mounted on fighter aircraft to engage and destroy supersonic aircraft with a range of over 70 km.
Pinaka Missile system for Army	It is an all-weather artillery rocket system developed by DRDO. Purpose: It has the capability of accurately striking against a variety of targets such as exposed enemy troops, armored vehicles, communication centers and air terminal complexes.
Long-Range Land Attack Cruise Missile Systems (LRLACM) for Navy and Air Force	Purpose: It is aimed at enhancing India's firing range from between 400 km and 500 km of the Brahmos to 1000 km.
MIG-29 from Russia	It is a twin-engine, multirole fighter jet developed by the Soviets since the 1970s, but has been upgraded since.
Sukhoi Su-30MKI	It is a twinjet multirole fighter jet developed by Russia's Sukhoi and built under license by India's Hindustan Aeronautics Limited (HAL) for the Indian Air Force (IAF)



### Pointly for Internal Security

1. **Passage Exercise (PASSEX):** Indian naval ships conducted a PASSEX with the United States Navy's USS Nimitz carrier strike group near the Andaman and Nicobar (A&N) islands. It is an exercise done between two navies to ensure that the navies can communicate and cooperate during war or humanitarian relief.
2. **Carmel and Arad:** They are Israeli assault rifles set to be manufactured in India. Carmel is a multi-purpose, modular, caliber assault rifle for modern warfare. Arad is an M4-type Assault Rifle intended for all kinds of combat scenarios with its ability to change calibers.
3. **Bharat:** It is an indigenously developed drone developed by Defence Research and Development Organization (DRDO). The drone is equipped with artificial intelligence that helps it to detect friends and enemies and act accordingly.

## MISCELLANEOUS

### Kashmir saffron now has GI certificate

**News:** The government has issued certification of geographical indication (GI) for saffron grown in Kashmir Valley.

**Facts:**

- Kashmir saffron is the only saffron in the world that is grown at an altitude of 1,600 meters. This adds to its unique characteristics like longer and thicker stigma, natural deep-red colour, high aroma, bitter flavour, high quality colour strength, flavour and bitterness.

**Production:** There has been a steep decline in production by around 65%, from 16 metric tonnes to 5.6 metric tonnes, in 2018

**Additional facts:**

**Geographical Indication Tag:**

- It is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- The Geographical Indications of Goods (Registration and Protection) Act, 1999 provides registration and also protection of GI goods in India.
- The act is administered by the Controller General of Patents, Designs and trademarks under the Ministry of Commerce and Industry.
- **Recent GI Tags:** Green and White Tea- Darjeeling, Srivilliputhur palkova – Tamil Nadu, Dindigul lock- Tamil Nadu, Kandangi saree- Tamil Nadu, Tirur Vettala- Kerala, Tawlhlohpuan – Mizoram, Mizo Puanchei – Mizoram, Palani panchamirtham- Tamil Nadu, Kandhamal Haldi – Odisha among others.

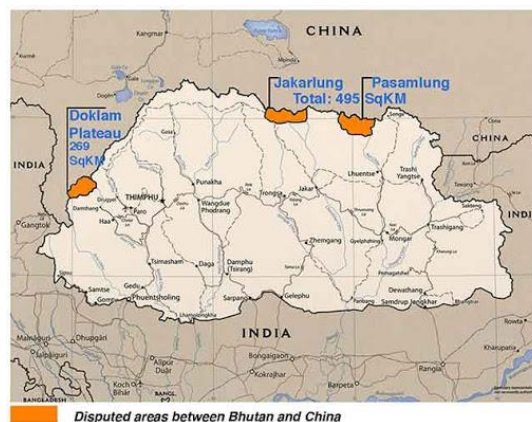
### China repeats claim on Bhutan's east

**News:** China has said that it has offered Bhutan a “package solution” to its boundary dispute.

**Facts:**

- There are three separate areas of disputed territory between Bhutan and China:

  1. **Eastern sector dispute over the Sakteng Wildlife Sanctuary:** It is located in Trashigang District, Eastern Bhutan- close to the border with Arunachal Pradesh. China recently made territorial claims over Sakteng wildlife sanctuary at an online meeting of the Global Environment Facility (GEF)
  2. **Western Sector dispute over Doklam plateau:** Doklam is an 89 sq.km patch of territory in Chumbi Valley between Sikkim and Bhutan which is claimed by China. It's called the Donglang region by China, Bhutan calls it Doklam Plateau and India refers to it as Doka La.
  3. **Middle sector dispute over Pasamlung and Jakarlung valleys:** It is a 495 sq km in Central Bhutan



**Covid-19 will have severe impact on most SDGs: Report**

**News:** Sustainable Development Solutions Network (SDSN) has released the Sustainable Development Report, 2020.

**Facts:**

- The report was prepared by teams of independent experts at the Sustainable Development Solutions Network (SDSN) and the Bertelsmann Stiftung.
- The annual report also presented the SDG index which tracks the performance of United Nations (UN) member states on the 17 SDGs in terms of six broad transformations:
  - Education and skills,
  - Health and wellbeing,
  - Clean energy and industry,
  - Sustainable land use,
  - Sustainable cities,
  - Digital technologies.
- **Key Takeaways:**
  - Top Countries:** Sweden has been ranked first followed by Denmark and Finland.
  - India:** It has been ranked at 117 with a score of 61.9 out of 100.

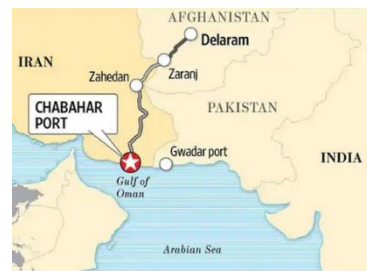
**Additional Facts:**

- **Sustainable Development Solutions Network (SDSN):** It was set up in 2012 under the auspices of the UN Secretary-General. It mobilizes global scientific and technological expertise to promote practical solutions for the implementation of SDGs.
- **Sustainable Development Goals (SDGs):** These were launched at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012. It consists of 17 goals and 169 specific targets that are to be achieved by 2030. However, they are not legally binding.

**Pointly for Miscellaneous**

1. **Operation Muskaan:** Also called Operation Smile, it is an initiative of the Ministry of Home Affairs (MHA) to rescue/rehabilitate missing children.
2. **Aditya:** It is India's first solar-powered ferry and the largest solar powered boat in India. It has won the prestigious Gustave Trouve Award for Excellence in Electric Boats and Boating. It has been in operation between Vaikkom and Thavanakkadavu in Kerala since 2017
3. **Operation Breathing Space:** It is a collaboration between India and Israel to jointly conduct trials to determine the effectiveness of advanced technologies developed for the rapid diagnosis of coronavirus infection. The cooperation also includes sharing the most effective treatment protocols for COVID-19 patients.
4. **Dare to Dream 2.0:** Launched by Defence Research Development Organisation (DRDO), it is an open challenge that aims to promote the individuals & startups for innovation in defence and aerospace technologies.
5. **BIS-Care:** Launched by Ministry of Consumer Affairs, the app aims to allow consumers to check the authenticity of the ISI-marked and hallmarked products and also lodge complaints using the application.
6. **LIDAR:** Digiantra Research and Technology (DRT), a space tech startup has developed India's first In-orbit Space Debris Monitoring and tracking system based on the LIDAR (Light Detection and Ranging) technology. LIDAR is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth.
7. **National Transit Pass System Portal:** Launched by Ministry of Environment, Forest and Climate Change, it is an online system for issuing transit permits for timber, bamboo and other forest produce.
8. **United Nations (UN) Alliance for Poverty Eradication:** India has become a founding member of the alliance. It aims to focus on efforts to boost the global economy in the aftermath of the COVID-19 pandemic and to serve as a forum for Member States to raise awareness about the danger that poverty poses to world peace, human rights and sustainable development
9. **Godhan Nyay Yojana:** Launched by Chhattisgarh government, it aims to put money in the pockets of people living in the rural areas and also solve the problem of stray cattle
10. **Corosure:** It is a low-cost RT-PCR Covid-19 test kit developed by IIT Delhi.
11. **India Digitization Fund:** Launched by Google, it aims to help accelerate the adoption of digital services in India

12. **Cycles4Change Challenge:** Launched by Ministry of Housing and Urban Affairs, it aims to help cities connect with their citizens as well as experts to develop a unified vision to promote cycling.
13. **World Population Day:** Celebrated annually on 11<sup>th</sup> July, the day was established in 1989 as an initiative taken by the Governing Council of the United Nations Development Programme (UNDP) The theme for 2020 was "How to safeguard the health and rights of women and girls now."
14. **Samadhan se Vikas:** It is a one-time settlement scheme introduced by Haryana government for the recovery of long-pending dues on account of External Development Charges (EDC) and Infrastructural Development Charges (IDC). The scheme is modeled on the Vivad se Vishwas scheme.
15. **Azad Pattan hydel power project:** It is a 700 MW hydroelectric project on the Jhelum River in Pakistan Occupied Kashmir (POK).
16. **Nagorno-karabakh(Artsakh):** The territorial dispute and ethnic conflict between Armenia and Azerbaijan over Nagorno-Karabakh region have erupted again. It is a landlocked region in the South Caucasus within the mountainous range of Karabakh
17. **Chabahar Port:** Iran government has decided to move ahead with the construction of Chabahar Rail Line that connects Chabahar Port to Zahedan, along the border with Afghanistan. Chabahar Port is a seaport in Chabahar in South-Eastern Iran. Its location lies in the Gulf of Oman and it serves as Iran's only oceanic port.
18. **Hagia Sophia:** Turkey's highest court has allowed for the conversion of the nearly 1,500-year-old Hagia Sophia from a museum into a mosque. It is the former Greek Orthodox Christian patriarchal cathedral, later an Ottoman imperial mosque now a museum located in Istanbul, Turkey. It has been listed as a UNESCO World Heritage Site.
19. **Plasma Bank:** Delhi has inaugurated India's first plasma bank at the Institute of Liver and Biliary Sciences (ILBS). Plasma bank functions like a blood bank and has been created specifically for those who are suffering from Covid-19 and have been advised Convalescent Plasma therapy by doctors.
20. **e-SamikSha platform:** Cabinet Secretary has ordered a revamp of the platform. Developed by National Informatics Centre (NIC), It is a real time, online system for monitoring follow-up action on the decisions taken during the presentations made by different Ministries/Departments to the Prime Minister.
21. **Drug Discovery Hackathon 2020:** Jointly organized by the All India Council for Technical Education (AICTE) and the Council of Scientific and Industrial Research (CSIR), it aims to provide a platform to all people who have ideas for the development of cures for COVID-19.
22. **Padmanabhaswamy temple:** Reversing the 2011 Kerala High Court decision, the Supreme Court upheld the right of the Travancore royal family to manage the property of deity at the temple. It is a Hindu temple located in Thiruvananthapuram, Kerala. The temple is built in the



unique Chera style of architecture, and its main deity is Lord Vishnu who is found in the Anantha Shayana posture (reclined posture of eternal yoga) on Adishesha or king of all serpents.