

WEEKLY CURRENT AFFAIRS MAGAZINE for



U.P.S.C. - C.S.E.

JULY-VOL-IV-2020

23 July to 31 July



-
- UPSC/MPSC/NDA/CDS
 - PUNE/THANE/DADAR/ANDHERI
 - Offline/Online batches/Video course
 - www.pioneeracademypace.com/.in
 - IVR No. - 80 80 046 046
-

PIONEER ACADEMY

PUNE



PUNE Address:

301/5 3rd Flr, Pinnacle Prestige (Near Durvankur Hotel), Above Cosmos Bank, Opp. Maharashtra Electronics, Tilak Road, Sadashiv Peth, Pune - 411 030
Mob.: 91453 39324 / 25

THANE



THANE Address:

201/202, 2nd Floor, Laizer Arcade, Raghoba Shankar Road, Chendani, Thane(W) - 400 601.
Mob.: 75060 10635

Email : pioneeracademypace@gmail.com

Website: www.pioneeracademypace.com / .in

IVR Number : 8080 046 046

ANDHERI



ANDHERI Address:

3rd Flr, Syndicate Chamber, Above Vaibhav Restaurant, Next To Better Home Hotel, Opp. Andheri (E) Station, Andheri (E) - 400 601
Mob. 84518 55673 / 70302 92316

DADAR



DADAR Address:

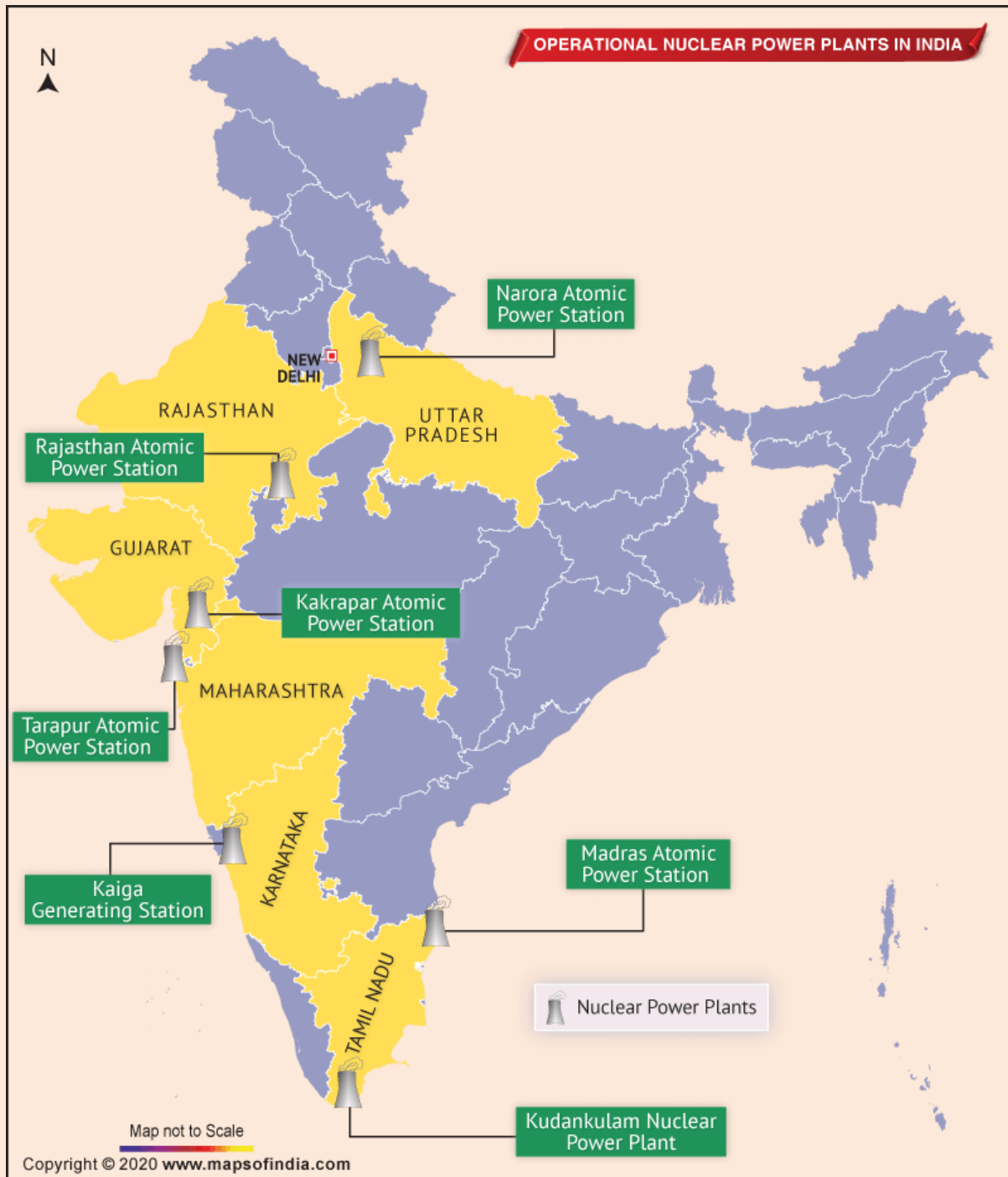
306/7/8, 3rd flr, Blue Pearl Society, Senapati Bapat Road, Plot No. 14, Near Janata Cloth Market, Near Dadar Railway Station, Dadar (W), Mumbai-400 028
Mob : 93241 69627 / 91375 41508

Success is born of action...

Topic 1: Nuclear Power plant

Importance for Prelims: Science and tech

Importance for Mains: Science and tech



The third unit of the Kakrapar Atomic Power Project (KAPP-3) in

Gujarat has achieved its first criticality.

Nuclear fission:

- In nuclear fission, an **unstable atom splits into two or more smaller pieces** that are more stable, and releases energy in the process.
- The fission process also **releases extra neutrons, which can then split additional atoms**, resulting in a chain reaction that releases a lot of energy.
- **There are also ways to modulate the chain reaction by soaking up the neutrons.**

Nuclear reactor:

- **The energy released from nuclear fission can be harnessed to make electricity** with a nuclear reactor.
- A nuclear reactor is a piece of equipment **where nuclear chain reactions can be controlled and sustained.**
- When a large, fissile atomic nucleus such as uranium-235 or plutonium-239 absorbs a neutron, it may undergo nuclear fission.
- The nucleus splits into two or more lighter nuclei, **releasing kinetic energy, gamma radiation, and free neutrons.**
- A portion of these neutrons may later be absorbed by other fissile atoms and trigger further fission events, which release more neutrons, and so on. This is known as a nuclear chain reaction.

Criticality

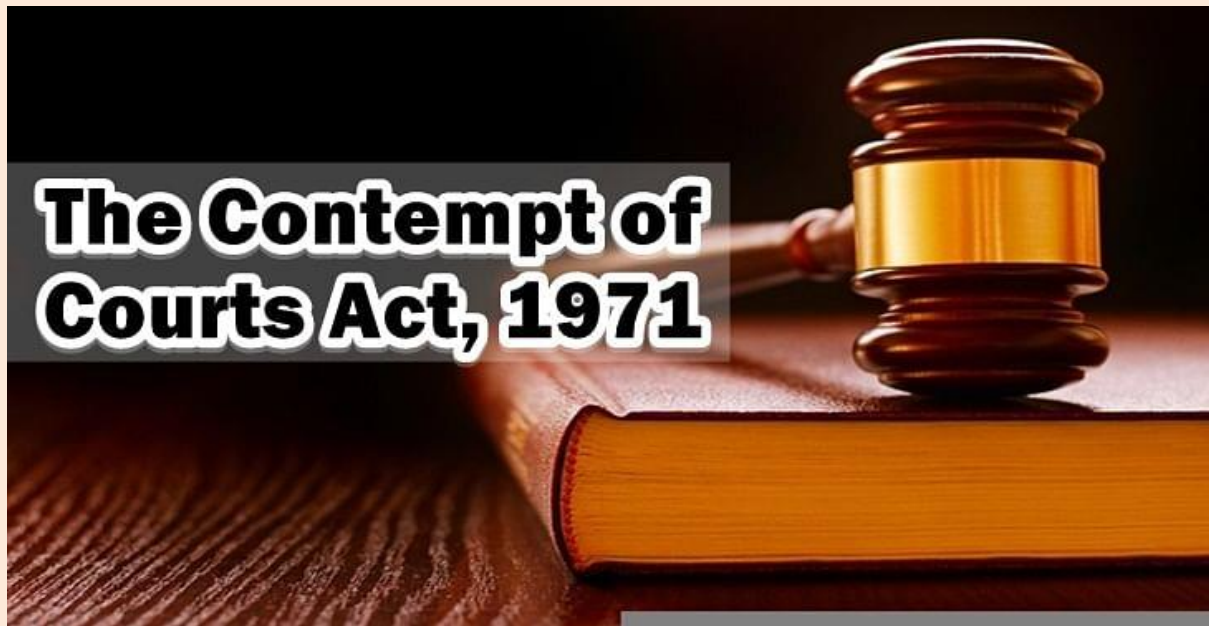
- When a reactor's **neutron population remains steady** from one generation to the next by creating as many new neutrons as are lost, the **fission chain reaction is selfsustaining** and the reactor's condition is referred to as "critical."

Significance:

- KAPP-3 is the **country's first 700 MWe** (megawatt electric) unit, and the **biggest indigenously developed** variant of the Pressurised Heavy Water Reactor (PHWR).

Topic 2: Contempt of Court

Importance for Prelims: Polity



The contempt case has been initiated against advocate Prashant Bhushan.

- According to the **Contempt of Courts Act, 1971**, contempt of court can **either be civil contempt or criminal contempt**.
- Civil contempt means **willful disobedience to any judgment, decree, direction, order, writ or other process of a court or willful breach of an undertaking given to a court**.
- On the other hand, criminal contempt means the publication of any matter or the doing of any other act whatsoever which scandalizes or lowers the authority of, any court; or prejudices or interferes with the due course of any judicial proceeding; or Interferes or obstruct the administration of justice in any other manner.

- A contempt of court may be **punished with simple imprisonment** for a term which may extend to six months, or **with fine** which may extend to two thousand rupees, or with both, provided that the accused may be discharged or the punishment awarded may be remitted on apology being made to the satisfaction of the court.

Topic 3: Zero MDR

Importance for Prelims: Economy

Curbing Revenue

CRITICS SAY

- **It will** put NPCI's domestic RuPay cards under competitive disadvantage over its multinational competitors
- **It will** kill the business models of homegrown PSPs
- **It will** hit banks' earnings that are into the business of merchant acquiring

It can also result in a loss of GST revenue to the tune of **₹2,500 CRORE** a year

© BCCL 2020. ALL RIGHTS RESERVED.

Government's waiver of Merchant discount rate (MDR) on certain payments will hamper payment innovations and growth says RBI constituted the Committee under the Chairmanship of D.B. Phatak.

- MDR is a **fee charged from a merchant by a bank for accepting payments** from customers through credit and debit cards in their establishments.
- MDR **compensates the card issuing bank, the lender which puts the Point of Sale terminal and payment gateways** such as Mastercard or Visa for their services.
- MDR charges are usually **shared in pre-agreed proportion between the bank and a merchant** and are expressed in percentage of transaction amount.

Topic 4: GST compensation Fund

Importance for Prelims: Economy



Reduced GST revenues due to pandemic has translated into delayed and pending compensation payments to states by the centre.

- **Compensation cess** was introduced as relief for States for the loss of revenues arising from the implementation of GST.
- States, in lieu of giving up their powers to collect taxes on goods and services after local levies were subsumed under the GST, were guaranteed a **14 per cent tax revenue growth in the first five years** after GST implementation by the Central government.
- States' tax revenue as of **FY16 is considered as the base year** for the calculation of this 14 per cent growth.
- Any shortfall against it is supposed to be **compensated by the Centre using the funds specifically collected as compensation cess.**

- Compensation cess is **levied on five products considered to be 'sin'** or luxury goods like SUV, pan masala, cigattes.
- The collected compensation cess **flows into the Consolidated Fund of India**, and then **transferred to the Public Account of India**, where a GST compensation cess account has been created.
- States are **compensated bi-monthly** from the accumulated funds in this account.

Topic 5: Impact of climate change

Importance for Prelims: Geography /Environment



The first ‘**Assessment of Climate Change over Indian Region**’ report by Ministry of Earth Sciences warned about India’s climatic vulnerabilities and stressed for need of mitigations.

Findings:

Temperature

- Surface air temperature over India has **risen by 0.6°C per year during 1901- 2018.**
- Regions of North India have undergone warming more than the South, where warming has been mainly during winters.
- In coming decades, the **average duration of heatwaves during April-June is projected to double**, and their frequency to rise by 3 to 4 times compared to 1976-2005.

Monsoon

- **During 1951-2015, annual rainfall over India showed a declining trend.**
- The reduction ranged between 1-5 mm over central India, Kerala and the far Northeast regions.
- Contrarily, precipitation increased over J&K and Northwest India.
- The coming decades are **projected to witness a considerable rise in the mean, extreme and inter-annual variability of rainfall associated with monsoon.**

Droughts and floods

- Since the 1950s, the **frequency and intensity of both heavy rainfall events and dry days have gone up.**
- **Flood risks are higher over the east coast, West Bengal, eastern Uttar Pradesh, Gujarat, Konkan and cities like Mumbai, Chennai and Kolkata.**
- The Himalayan flood basins are projected to greater floods, **due to the faster glacial and snow melting.** Major flooding events are projected over the Brahmaputra, Ganga and Indus.

Sea level

- During 1993-2015, the **sea level over the North Indian Ocean (Arabian Sea and Bay of Bengal) rose by 3.3 mm per year,** which is in tune with the Global Mean Sea Level (GMSL) rise.

Tropical cyclones

- **Storms in the Arabian Sea are gaining more strength** and the

trend is projected to continue.

- The number of extremely **severe cyclonic storms formed in the Arabian Sea has increased** in the last 20 years.

Himalaya snow cover

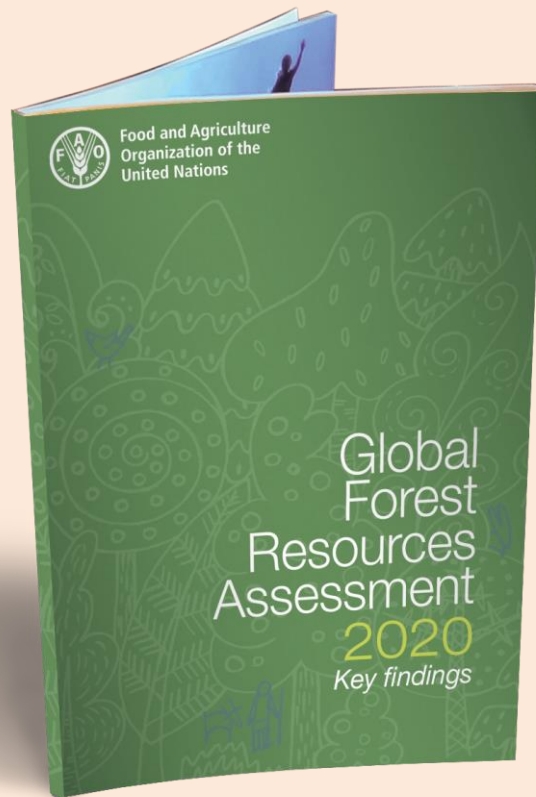
- During the last seven decades, the Hindukush Himalayas have warmed at an average 0.2°C per decade, **leading to a decline in snow cover and glaciers in the last four to five decades.**
- The Karakoram Himalayas have reported an increase in snowfall during winter.

Cause & effect

- The main contributor to climate change is **anthropogenic activities pushing up concentrations of greenhouse gases.** This has led to rise in temperature and atmospheric moisture content.
- A **higher concentration of water vapour**, in turn, leads to intense rainfall during monsoon.
- Heating leads to vaporisation, which is directly linked to **decreasing soil moisture, resulting in droughts.** This can lead to reduction in food production and in availability of potable water, the report says.
- Rising sea levels would make India's big cities **vulnerable to erosion and damage to coastal projects.**

Topic 6: Global Forest Resources Assessment

Importance for Prelims: Environment



According to the latest Global Forest Resources Assessment (FRA) report, **India has ranked third** among the top 10 countries that have **gained in forest areas in the last decade**.

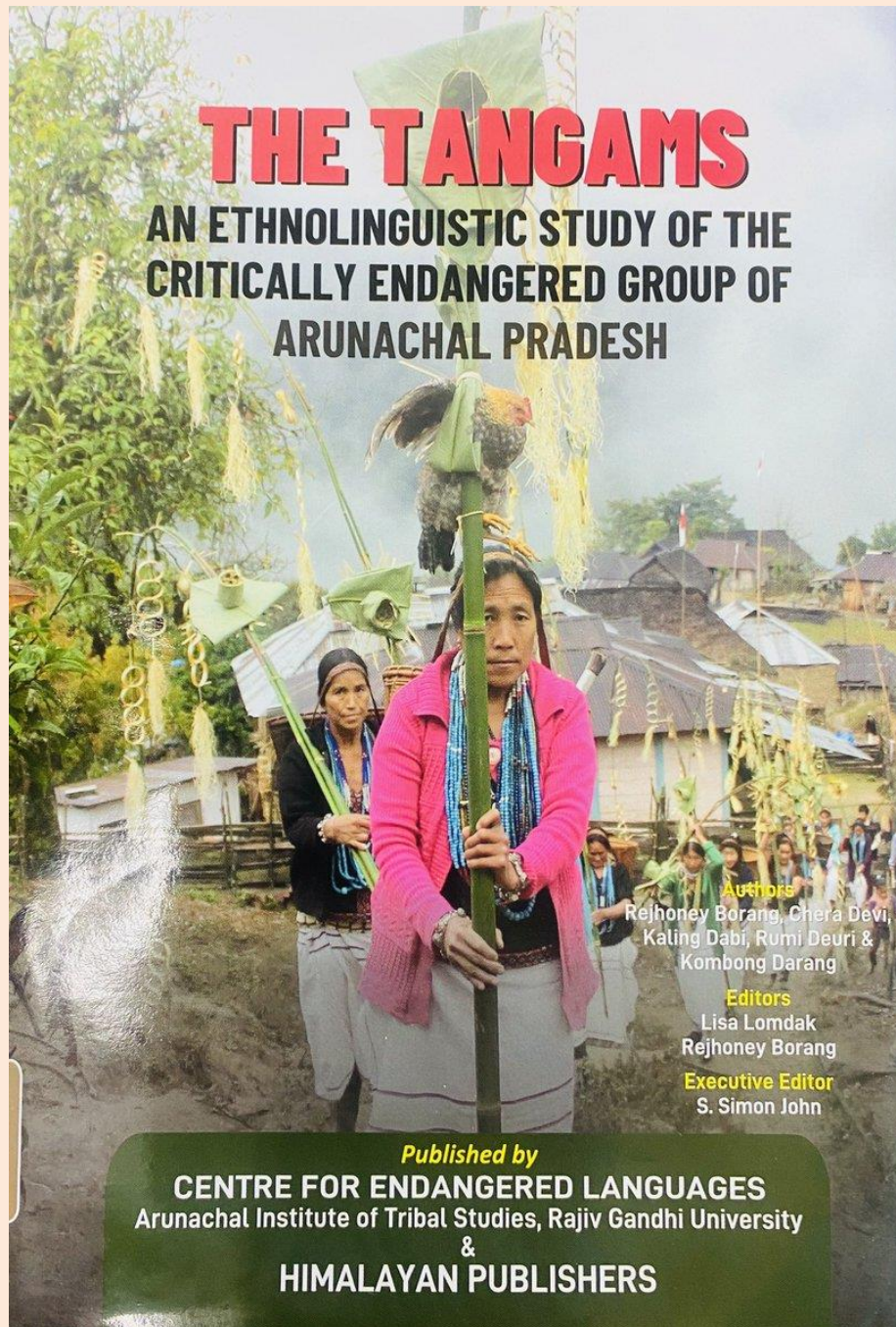
- **Food and Agriculture Organization** has brought out this comprehensive assessment every five years since 1990.
- This report **assesses the state of forests, their conditions and management** for all member countries.
- The top 10 countries that have recorded the **maximum average annual net gains in forest area during 2010-2020** are China, Australia, India, Chile, Vietnam, Turkey, the United States,

France, Italy and Romania.

- India reported **38 per cent annual gain in forest, or 266,000 ha of forest increase every year** at an average.
- The FRA 2020 has **credited the government's Joint Forest Management programme** for the significant increase in community-managed forest areas **India accounts for two per cent of total global forest area.**
- **India reported the maximum employment in the forestry sector in the world.**
- Globally, 12.5 million people were employed in the forestry sector. Out of this, India accounted for 6.23 million, or nearly 50 per cent.

Topic 7: Tangams

Importance for Prelims: Arts and culture



Arunachal Pradesh Chief Minister released a book titled “Tangams: An Ethnolinguistic Study Of The Critically Endangered Group of Arunachal Pradesh”.

- The **Tangams** are a little-known community within the larger **Adi tribe of Arunachal Pradesh** and reside in the hamlet of **Kugging** in **Upper Siang district**.
- As per the **UNESCO World Atlas of Endangered Languages(2009)**, **Tangam** an oral language under the greater **Tibeto-Burman language family** is marked '**critically endangered**'.

Topic 8: H-CNG

Importance for Prelims: Science and tech



Ministry of Road Transport and Highways has notified draft notification for amendment to Central Motor Vehicles Rules 1979 for **inclusion of Hydrogen enriched CNG as an automotive fuel.**

- H-CNG is a **blend of hydrogen and CNG**, the **ideal hydrogen concentration being 18%**. Compared to conventional CNG, use of H-CNG **can reduce emission of carbon monoxide up to 70%**, besides enabling up to **5% savings in fuel.**
- While recommending the use of H-CNG as an alternative fuel, the NITI Aayog- Action Plan for Clean Fuel notes that physical blending of CNG and hydrogen involves a series of energy-intensive steps that would make **H-CNG more expensive than CNG**

CNG

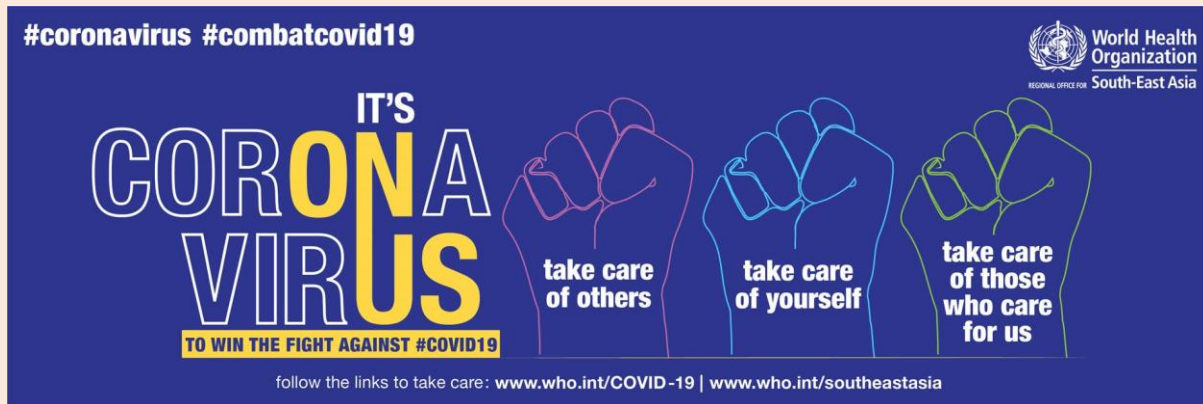
- CNG is compressed natural gas. With natural gas mainly **composed of methane**, CNG **emits less air pollutants** —

carbon dioxide, carbon monoxide, nitrogen oxides and particulate matter — than petrol or diesel.

- **Environmental Benefits:** No impurities, No Sulphur (S), No lead (Pb) and Very low levels of polluting gaseous emissions without smell and dust. Molecular structure compactness prevents the reactive processes which lead to the formation of Ozone (O₃) in the troposphere

Topic 9: Covid-19 Law Lab

Importance for Prelims: International institutions/I. relations



World Health Organisation (WHO) has launched its Covid-19 Law Lab.

- It **gathers and shares legal documents from over 190 countries** across the world to help states establish and implement strong legal frameworks to manage the pandemic.
- The goal is to **ensure that laws protect the health and wellbeing of individuals** and communities and they **adhere to international human rights standards**.
- It is a **joint project of the United Nations Development Programme (UNDP), WHO, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the O'Neill Institute for National and Global Health Law at Georgetown University.**

Topic 10: Financial Stability Report

Importance for Prelims: Economy

Importance for Mains: Economy



RBI's Financial Stability Report (FSR)

Reserve Bank of India (RBI) has released its Financial Stability Report which reflects **the collective assessment of the Sub-Committee of the Financial Stability and Development Council (FSDC)** on risks to financial stability, and the resilience of the financial system in the context of contemporaneous issues relating to development and regulation of the financial sector.

Findings:

- **Gross nonperforming assets (GNPA)** ratio of all scheduled commercial banks (SCBs) may **increase from 8.5 per cent in March 2020 to 12.5 per cent by March 2021.**
- In the case of public sector banks, the GNPA ratio of 11.3 per cent as of March 2020 might elevate to 15.2 per cent by March 2021
- The **capital to risk-weighted assets ratio (CRAR)** of banks

edged down to 14.8 per cent in March 2020 from 15 per cent in September 2019.

- At the same time, the provision coverage ratio (PCR) improved to 65.4 per cent from 61.6 per cent over this period.

Scheduled commercial banks

- By definition, **any bank which is listed in the 2nd schedule of the Reserve Bank of India Act, 1934** is considered a scheduled bank.
- The list includes the **State Bank of India and its subsidiaries**, all nationalised banks, **regional rural banks (RRBs)**, foreign banks and **some co-operative banks**.
- These also **include private sector banks**, both classified as old and new.
- To qualify as a scheduled bank, the **paid up capital and collected funds of the bank must not be less than Rs 5 lakh**.
- Scheduled banks are eligible for loans from the Reserve Bank of India at bank rate, and are given membership to clearing houses.

Capital to risk-weighted assets ratio

- Capital Adequacy Ratio (CAR) is the **ratio of a bank's capital in relation to its risk weighted assets and current liabilities**.
- It is decided by central banks and bank regulators to **prevent commercial banks from taking excess leverage and becoming insolvent** in the process.
- The risk weighted assets take into account credit risk, market

risk and operational risk.

- The **Basel III norms stipulated a capital to risk weighted assets of 8%.**
- However, as per RBI norms, Indian scheduled commercial banks are required to **maintain a CAR of 9%** while Indian public sector banks are emphasized to maintain a CAR of 12%.

Topic 11: Cabinets decision and Governor's discretion

Importance for Prelims: Polity

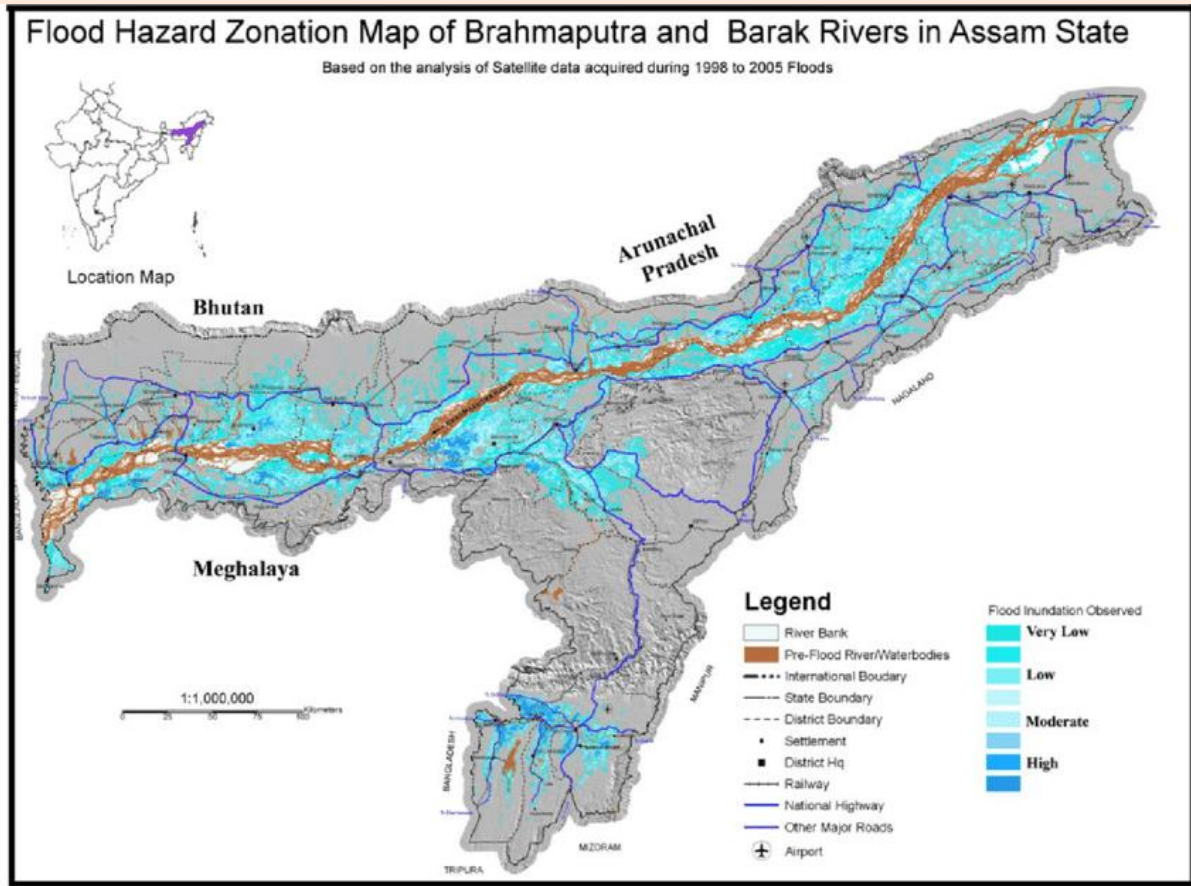
Growing crisis in Rajasthan brings into discussion powers of Governor

- **Article 163** states that **there shall be a council of Ministers with the chief Minister at the head to aid and advise the Governor** in the exercise of his functions, except in so far as he is by or under this constitution required to exercise his functions or any of them in his discretion.
- If any question arises whether any matter is or is not a matter as respects which the Governor is by or under this Constitution required to act in his discretion, **the decision of the Governor in his discretion shall be final.**
- The advice tendered by Ministers to the Governor shall not be inquired into in any Court.

Topic 12: Assam floods

Importance for Prelims: Geography

Importance for Mains: Geography/Disaster management



In Assam, over 24.68 lakh people affected and death toll rises to 102

- Apart from **incessant rainfall during the monsoon**, there are many contributory factors to yealy floods in Assam.
- Major cause is the very **nature of the river Brahmaputra** — **dynamic and unstable**.
- The Brahmaputra features among the **world's top five rivers in terms of discharge as well as the sediment it brings**.
- At 19,830 cubic meters per second (cumec), it **ranks fourth in**

discharge at the mouth, behind only the Amazon (99,150 cumec), the Congo (39,660 cumec) and the Yangtze (21,800 cumec).

- **In terms of sediment yield, two spots** along the Brahmaputa's course were at second and third places in 2008. Brahmaputra's annual sediment yield was 1,128 tonnes per sq km at Bahadurabad of Bangladesh, and 804 tonnes per sq km at Pandu of Guwahati.
- The vast amount of sediment comes from Tibet, where the region is cold, arid and lacks plantation. **Glaciers melt, soil erodes and all of it results in a highly sedimented river.**
- As the river comes from a high slope to a flat plain, its **velocity decreases suddenly and this results in the river unloading the sediment.** The river's **channels prove inadequate amid this siltation, leading to floods.**
- Again, because of the earthquake-prone nature of the region, the **river has not been able to acquire a stable character.**
- Besides these natural factors are the man-made ones **habitation, deforestation, population growth in catchment areas** which lead to higher sedimentation. For example, the sediment deposition itself creates temporary sandbars or river islands.

Topic 13: Tsirkon (Zircon) hypersonic cruise missile

Importance for Prelims: Science and tech



Russia is going to deploy Tsirkon (Zircon) hypersonic cruise missile on surface ships.

- Cruise missiles differ from ballistic missiles in that they **fly towards their target at lower altitudes, remaining within the Earth's atmosphere** throughout their trajectory.
- Cruise missiles are defined as “an **unmanned self-propelled guided vehicle** that sustains flight through **aerodynamic lift for most of its flight path** and whose primary mission is to place an ordnance or special payload on a target.”
- The hallmark of a cruise missile is its **incredible accuracy**. Cruise missiles are also very **effective at evading detection** by the enemy because they fly very low to the ground (out of the

view of most radar systems).

- Cruise missiles **can use multiple guidance methods** in order to accurately place their ordinance on the desired target and avoid missile defense systems Cruise missiles can be categorized by size, speed (subsonic or supersonic), and range, and whether launched from land, air, surface ship, or submarine.

Topic 14: Floor Test

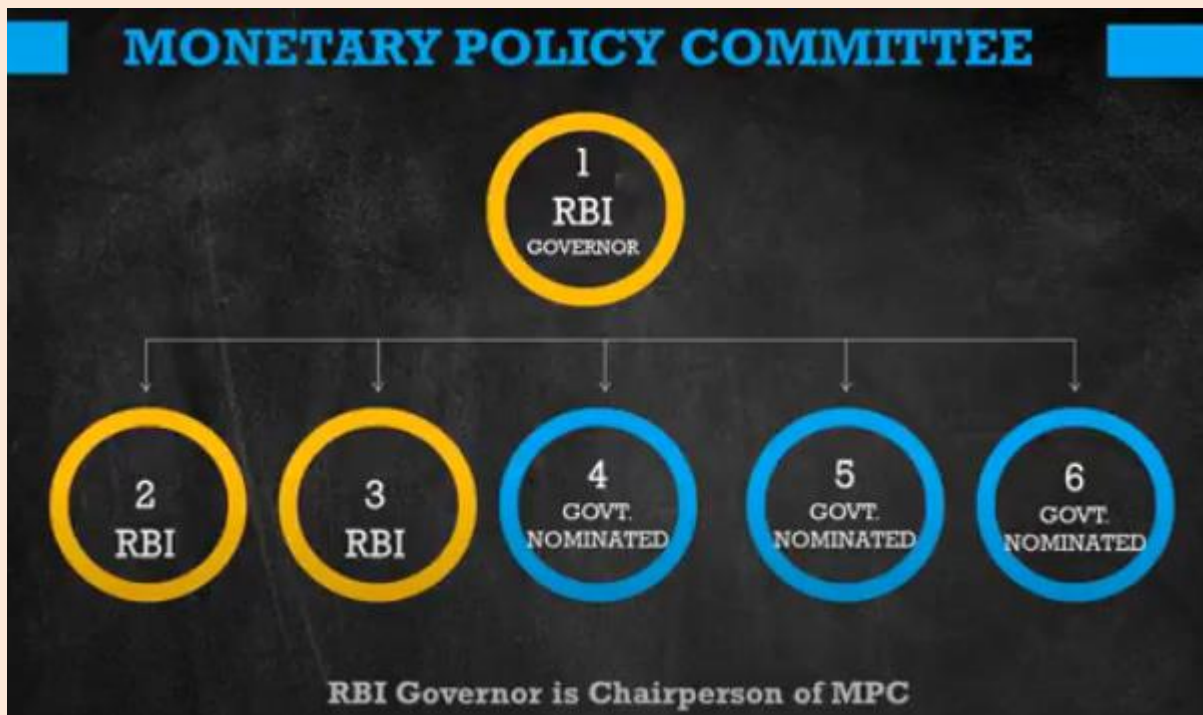
Importance for Prelims: Polity

Rajasthan cabinet wants to have assembly session to prove majority.

- A floor test is a **motion initiated by the government seeking to know if it enjoys the confidence of the legislature.**
- As part of this procedure, the chief minister appointed by the governor will be asked to prove majority on the Legislative Assembly.
- When a floor test is called for in the assembly of a state, the chief minister will move a vote of confidence and prove that he has the majority support.
- **If the floor test fails, fails, the government will have to resign.**

Topic 15: Monetary Policy Committee

Importance for Prelims: Economy



Monetary policy committee is soon to be reconstituted as the terms of three independent people on the panel expire at the end of next month and one internal member retired in June.

- Monetary policy refers to the use of monetary instruments under the control of the central bank to regulate magnitudes such as interest rates, money supply and availability of credit with a view to achieving the ultimate objective of economic policy

What is Monetary Policy Committee?

- **The Monetary Policy Committee (MPC) constituted by the Central Government under Section 45ZB of RBI Act determines the policy interest rate required to achieve the inflation target.**

- Accordingly, the Central Government in September 2016 **constituted the MPC as under Governor of the Reserve Bank of India – Chairperson, ex officio;**
- The primary objective of monetary policy is to **maintain price stability while keeping in mind the objective of growth.** Price stability is a necessary precondition to sustainable growth.
- In May 2016, the Reserve Bank of India (RBI) Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.
- The amended RBI Act also provides for the **inflation target to be set by the Government of India, in consultation with the Reserve Bank, once in every five years.**
- Accordingly, the Central Government has notified in the Official Gazette 4 per cent Consumer Price Index (CPI) inflation as the target for the period from August 5, 2016 to March 31, 2021 with the upper tolerance limit of 6 per cent and the lower tolerance limit of 2 per cent.
- The MPC is required to **meet at least four times in a year.**
- The composition of the MPC is as follows;
 - ✓ Governor of the Reserve Bank of India – Chairperson, ex officio;
 - ✓ Deputy Governor of the Reserve Bank of India, in charge of Monetary Policy –(Member, ex officio)
 - ✓ One officer of the Reserve Bank of India to be nominated

by the Central Board –Member, ex officio;

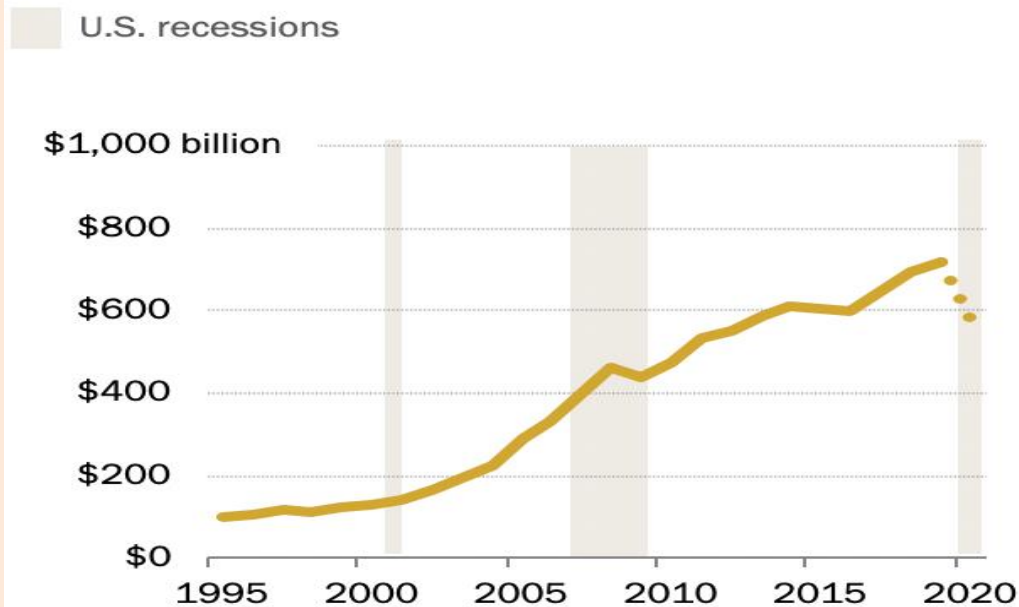
- ✓ Except ex-officio members, **three independent members will hold the office for a period of 4 years or until further orders, whichever is earlier.**
- The quorum for the meeting of the MPC is four members. Each member of the MPC has one vote, and in the event of an equality of votes, the Governor has a second or casting vote.

Topic 16: Remittances to fall

Importance for Prelims: Economy

Global remittances projected to decline sharply in 2020

Global remittances by year, in billions of U.S. dollars



Source: World Bank, National Bureau of Economic Research.

PEW RESEARCH CENTER

According to a global banking group, remittances to India are **estimated to decline sharply by about 25 per cent in FY2021** amid the economic crisis induced by the COVID-19 pandemic and shutdown.

- **India is the largest recipient of remittances** (in value terms) in the world and received nearly \$76 billion of flows (2.7 per cent of GDP) in FY20.
- These flows **help boost household income, support private**

consumption and add stability to current account balance (CAB).

- Many Indians working in the **Gulf region had recently lost jobs and more layoffs** are in the offing as lockdown and the decline in global trade are set to hit the global economic growth.
- Kerala, which is one of the largest recipients of remittances in India is expected to witness a decline in remittances.
- The projected fall, which would be the sharpest decline in recent history, is **largely due to a fall in the wages and employment of migrant workers**, who tend to be more vulnerable to loss of employment and wages during an economic crisis in a host country.

Topic 17: Unnat Bharat Abhiyan

Importance for Prelims: Schemes

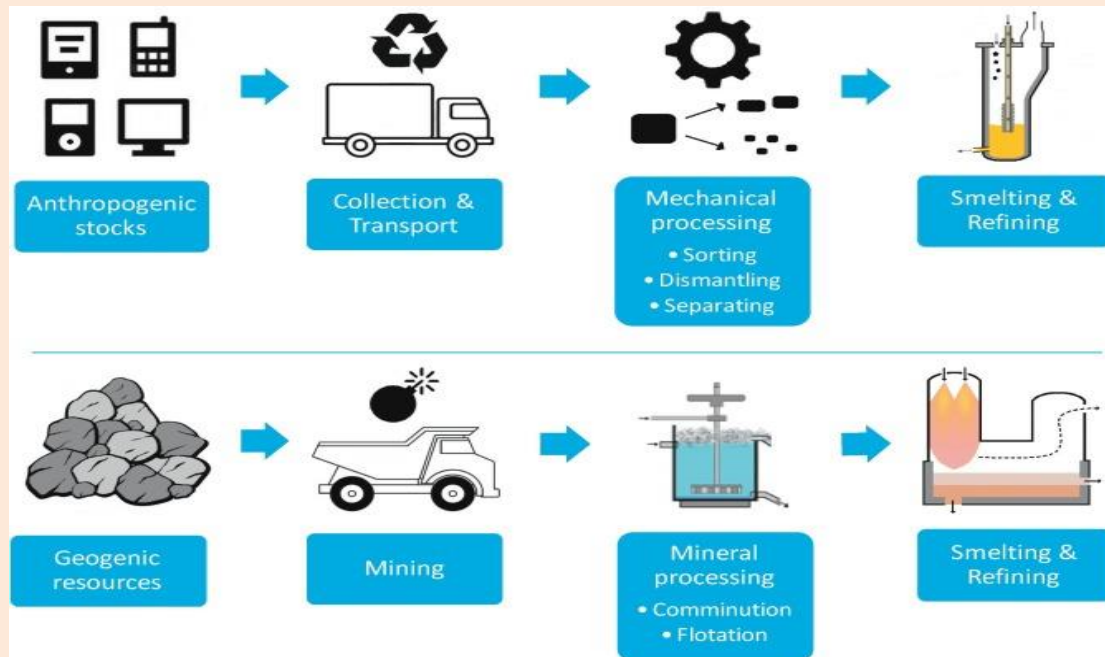


TRIFED has entered into a partnership with IIT Delhi for the Unnat Bharat Abhiyan (UBA) by which forest dwellers will get an exposure to newer processing technologies, product innovation, mentorship, transformational digital systems and handholding.

- Unnat Bharat Abhiyan (UBA) is a **flagship national programme of the Ministry of Human Resource Development (MHRD)** envisioning the **transformational change in rural development** processes.
- The **knowledge base and resources of the Premier Institutions** of the country are to be leveraged to bring in transformational change in rural developmental process.
- It also aims to **create a vibrant relationship between the society and the higher educational institutes**, with the latter providing the knowledge and technology support to improve the livelihoods in rural areas and to upgrade the capabilities of both the public and private organisations in the society.

Topic 18: Urban mining

Importance for Prelims: Environment

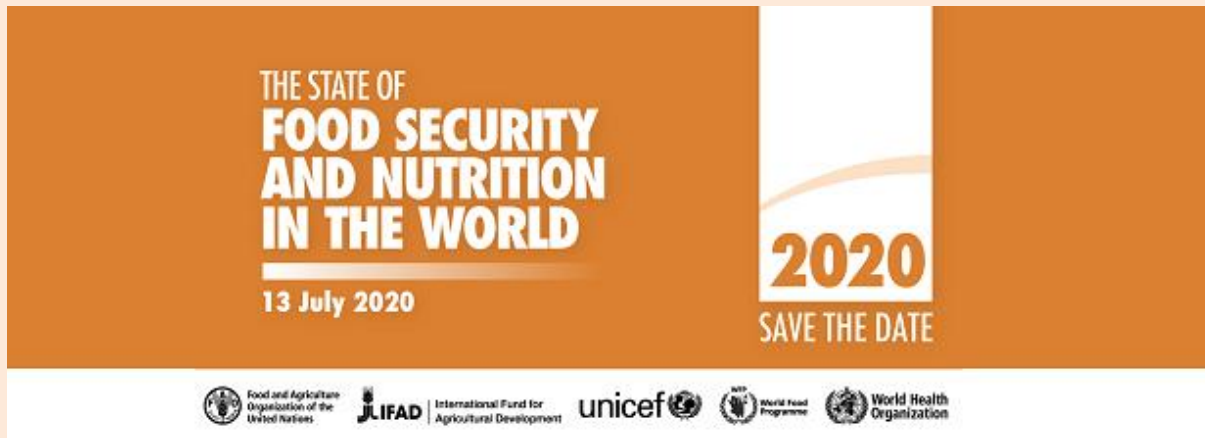


With increasing e waste around the cities, urban mining gains importance.

- Urban mining is the **practice of extracting valuable metals and materials** from electronic waste. This makes it possible to obtain high quality steel from old washing machines.
- Precious metals such as gold, silver, platinum or palladium can be extracted from old mobile phones and computers.
- **Urban mining has many advantages over primary mining:** the materials are already in the city where they are likely to be needed again, so there is **no need for long transport routes**. And the **environmental impact, particularly in land use, is clearly lower than mining** for natural resources.

Topic 20: State of Food Security and Nutrition in the World 2020

Importance for Prelims: Economy/World Affairs



State of Food Security and Nutrition in the World 2020 (SOFI 2020)

- State of Food Security and Nutrition in the World 2020 warns difficulty in achieving SDG goal of Zero hunger.
- The State of Food Security and Nutrition in the World is the most **authoritative global study tracking progress towards ending hunger and malnutrition.**
- It is produced jointly by the **Food and Agriculture Organization (FAO)**, the International Fund for Agricultural Development (IFAD), the United Nations Children’s Fund (UNICEF), the UN World Food Programme (WFP) and the World Health Organization (WHO).
- Its first edition was brought out in 2017

Findings:

- **Hunger continues to be on the rise since 2014** and the global

prevalence of undernourishment, or overall percentage of hungry people, is 8.9%.

- **Asia remains home to the greatest number of undernourished (38 crore).** Africa is second (25 crore), followed by Latin America and the Caribbean (4.8 crore).
- According to current estimates, in 2019, 21.3% (14.4.crore) of children under 5 years were stunted, 6.9% (4.7 crore) wasted and 5.6% (3.8 million) overweight.
- **Healthy diet costs more than ₹143 (or \$1.90/ day),** which is the international poverty threshold. The number of people globally who **can't afford a healthy diet is at 300 crore people,** or more than the combined population of the two most populous countries in the world, i.e. China and India.
- The previous editions of the report cited that **conflict, climate variability, and economic slowdowns** acted as hindrances on the path to achieve the global target.
- **COVID-19 pandemic is expected to only aggravate this problem.**
- **Desert Locust outbreaks** in Eastern Africa, Arabian Peninsula, and parts of South Asia, especially amidst the pandemic, has only exacerbated the situation.

Topic 21: Operation breathing space

Importance for Prelims: IR



An Israeli team led by a research and development (R&D) defence official arrived with a multi-pronged mission codenamed “Operation Breathing Space” to work with Indian authorities.

- In this mission scientists from both countries **work on COVID response.**
- **Four different kinds of rapid tests**, which will be jointly developed after trials on Indian COVID-19 patients, as well as **high-tech equipment to minimise exposure of medical staff to the virus**, advanced respirators and special sanitisers developed in Israel were brought.
- The cooperation between Indian and Israeli scientists will also include sharing the most effective treatment protocols for COVID-19 patients.

Topic 22: Acclimatization

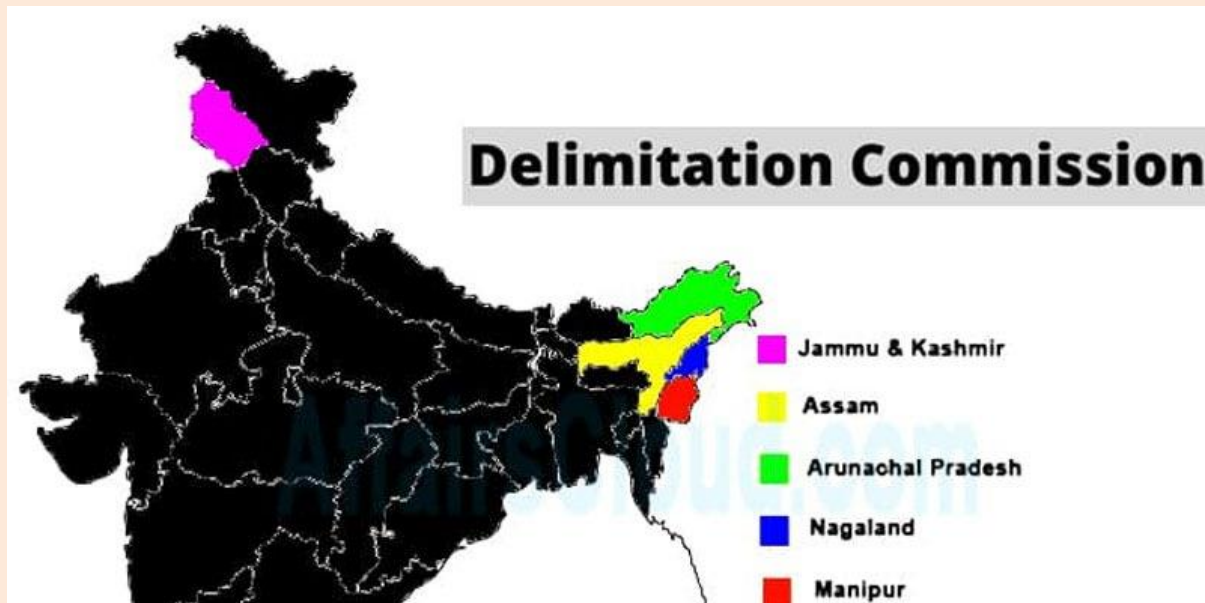
Importance for Prelims: Environment

“Periglacial Flora of Western Himalayas Diversity And Climate Change Vulnerability” study by Botanical survey of India found **high altitudes plants are facing the “climb higher or die” situation due to climate change.**

- Acclimatization is the process in which an **individual organism adjusts to a change in its environment** (such as a change in altitude, temperature, humidity, photo period, or pH), allowing it **to maintain performance across a range of environmental conditions.**
- Acclimatization occurs in a short period of time (hours to weeks), and within the organism’s lifetime (compared to adaptation, which is a development that takes place over many generations).
- This may be a discrete occurrence (for example, when mountaineers acclimate to high altitude over hours or days) or may instead represent part of a periodic cycle, such as a mammal shedding heavy winter fur in favor of a lighter summer coat.
- Organisms can **adjust their morphological, behavioral, physical, and/or biochemical traits in response to changes in their environment.**

Topic 23: Delimitation Exercise

Importance for Prelims: Polity



Delimitation committee is appointed for Jammu and Kashmir

- Delimitation literally means the **act or process of fixing limits or boundaries** of territorial constituencies in a country or a province having a legislative body.
- Under **Article 82 of the Constitution**, the **Parliament by law enacts a Delimitation Act** after every census.
- The Delimitation Commission is **appointed by the President of India** and works in collaboration with the Election Commission of India

Composition:

- ✓ Retired Supreme Court judge
- ✓ Chief Election Commissioner
- ✓ Respective State Election Commissioners

Functions:

- To determine the **number and boundaries of constituencies** to make population of all constituencies nearly equal.
- To **identify seats reserved for Scheduled Castes and Scheduled Tribes**, wherever their population is relatively large.
- In case of difference of opinion among members of the Commission, the opinion of the majority prevails.
- The Delimitation Commission in India is a high power body whose **orders have the force of law and cannot be called in question before any court.**
- Delimitation Commissions have been set **up four times — 1952, 1963, 1973 and 2002** under the Acts of 1952, 1962, 1972 and 2002.
- The present delimitation of constituencies has been done on the basis of 2001 census figures under **the provisions of Delimitation Act, 2002.**
- Notwithstanding the above, the Constitution of India was specifically amended in 2002 **not to have delimitation of constituencies till the first census after 2026.**

Topic 24: National Green Tribunal (NGT)

Importance for Prelims: Environment

The National Green Tribunal (NGT) has ordered Oil India Limited (OIL) to deposit ₹25 crore with the administration of eastern Assam's Tinsukia district for environmental damage due to the fire in Baghjan well.

- The well is close to the Maguri-Motapung wetland, which is within the eco-sensitive zone of the fragile Dibru-Saikhowa National Park.

NGT

- It is a specialized body set up under the **National Green Tribunal Act (2010)** for **effective and expeditious disposal of cases** relating to environmental protection and conservation of forests and other natural resources.
- With the establishment of the NGT, India became the **third country in the world to set up a specialised environmental tribunal**, only after Australia and New Zealand, and the first developing country to do so.
- NGT is mandated to make disposal of applications or appeals finally **within 6 months of filing of the same**.

Structure of NGT

- The Tribunal comprises of the **Chairperson, the Judicial Members and Expert Members**. They shall hold office for **term of five years and are not eligible for reappointment**.

The Chairperson is **appointed by the Central Government** in consultation with Chief Justice of India (CJI)

Powers & Jurisdiction

- The Tribunal **has jurisdiction over all civil cases involving substantial question relating to environment**. The Tribunal is **not bound by the procedure laid down under the Code of Civil Procedure 1908**, but shall be guided by principles of ‘natural justice’.
- The NGT deals with **civil cases under the seven laws** related to the environment, these include:
 - ✓ The Water (Prevention and Control of Pollution) Act, 1974,
 - ✓ The Water (Prevention and Control of Pollution) Cess Act, 1977,
 - ✓ The Forest (Conservation) Act, 1980,
 - ✓ The Air (Prevention and Control of Pollution) Act, 1981,
 - ✓ The Environment (Protection) Act, 1986,
 - ✓ The Public Liability Insurance Act, 1991 and
 - ✓ The Biological Diversity Act, 2002.
- Two important acts – **Wildlife (Protection) Act, 1972** and **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006** have been kept out of NGT’s jurisdiction.

Topic 25: Status of Tiger

Importance for Prelims: Environment



Union Ministry for Environment, Forests and Climate Change has released the detailed Status of Tigers Report 2018 on occasion of International Tiger Day celebrated on July 29.

Findings:

- Tigers were observed to be **increasing at a rate of 6 per cent per annum in India** from 2006 to 2018.
- There were nine tiger reserves when Project Tiger started in 1973. Now, India has 50 tiger reserves. **Seventy per cent of the world's tigers are in India and the conservation effort has been a huge success.**
- While tiger populations remain stable in the country, the report warns that with the **populations being confined to small**

Protected Areas, some of which have habitat corridors that permit tiger movement between them, “**most of the corridor habitats in India are not protected areas, and are degrading due to unsustainable human use and developmental projects**”.

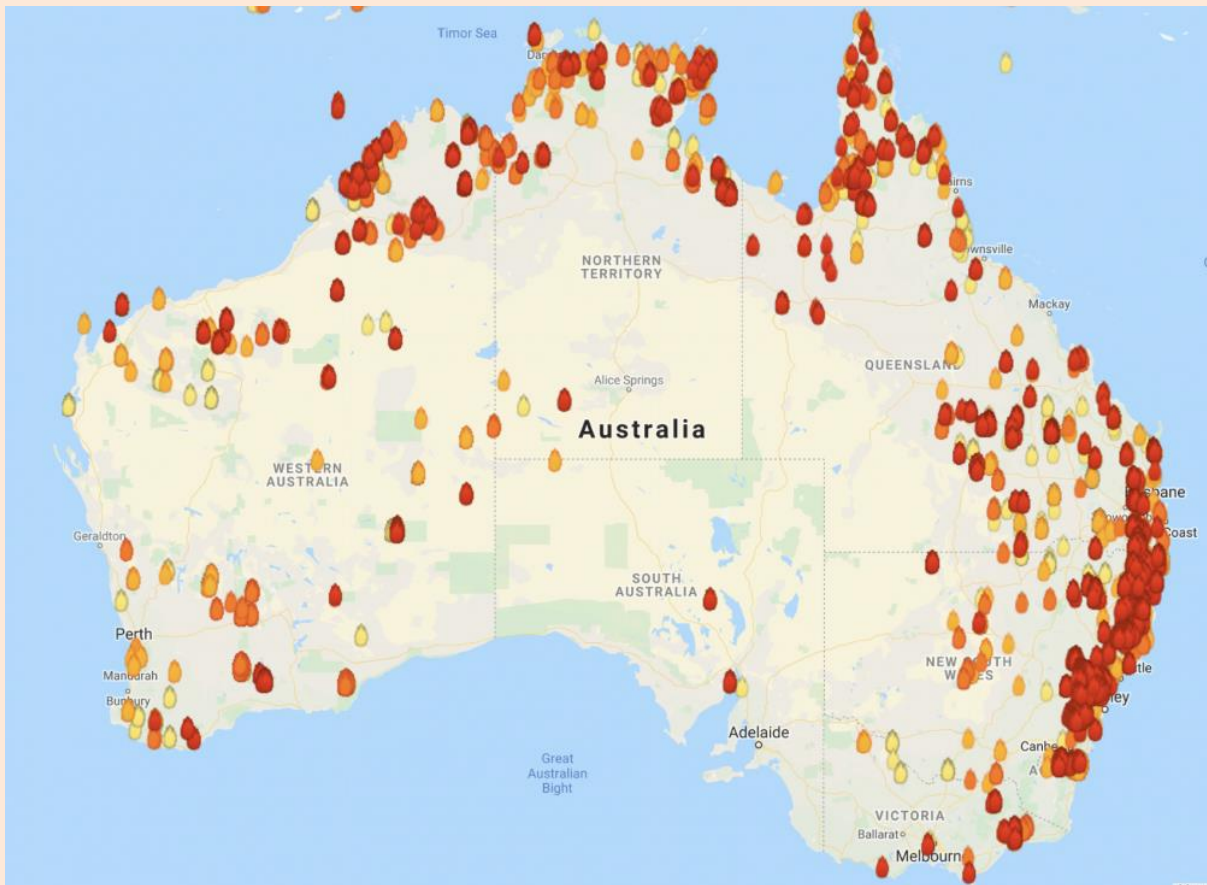
- **Tiger occupancy has increased in Madhya Pradesh and Andhra Pradesh.** The former also registered a substantial increase in tiger population, and along **with Karnataka, ranks highest in tiger numbers.**
- **The Northeast has, meanwhile, suffered losses in population.**
- The population in Jharkhand, Chhattisgarh and Odisha too have seen a decline in the number of tigers.
- **The largest contiguous tiger population in the world of about 724 tigers was found in the Western Ghats (Nagarhole-Bandipur-Wayanad- Mudumalai- Satyamangalam-BRT block).**

International Tiger Day (29th July)

- International Tiger Day was **established in 2010 at Saint Petersburg Tiger Summit in Russia** to raise awareness about the decline of wild tiger numbers, leaving them in the brink of extinction and to encourage the work of Tiger conservation.

Topic 26: Australian bush fire

Importance for Prelims: Geography/Disaster Management



Nearly three billion animals were killed or displaced during Australia's devastating bushfires of the past year.

- Bushfires are a **routine occurrence in the country**, but this bushfire season is believed to be the worst and has started even before the beginning of the Southern Hemisphere summer.
- Australia, where the **summer starts around October**, is known to be the **most fire-prone of all continents**.
- This is mainly because Australia is also the driest inhabited continent. **Almost 70% of its area comprises arid or semi-arid land**, with average annual rainfall less than 350 mm.

Reasons

- **Prolonged Drought:** The three years between 2017 and 2019 were the driest 36-month period ever in the New South Wales (a state of Australia). 2019 happened to be the warmest and driest year for the country since 1900.
- **Rare stratospheric warming over Antarctica:** Temperatures were 30°C to 40°C higher than normal in the region 10 to 50 km from Earth's surface- another extraordinary weather event that could have contributed to the unusual heat and dryness in Australia.
- **Link with climate change:** Experts say climate change has worsened the scope and impact of natural disasters such as fires and floods. Weather conditions are growing more extreme, and for years, the fires have been starting earlier in the season and spreading with greater intensity.

Topic 27: Rafale

Importance for Prelims: Science and technology



India has inducted five French Rafale aircraft which will be a game changer in many ways in Indian Air force.

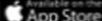
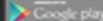

- The delivery is part of the India-France deal for 36 fighter jets that was signed in September 2016 for around Rs 58,000 crore
- The aircraft are capable of carrying a range of potent weapons. European missile maker MBDA's **Meteor beyond visual range air-to-air missile** , **SCALP cruise missiles** and **MICA weapons system** will be the mainstay of the weapons package of the Rafale jets.
- Meteor is the **next generation of BVR air-to-air missile (BVRAAM) designed to revolutionise air-to-air combat**. The Meteor missile can target enemy aircraft from 150 km away. It can destroy enemy aircraft before they actually even get close to the Indian aircraft.
- The Indian Air Force is also procuring new generation medium-range modular air-to-ground weapon system Hammer to integrate with the Rafale jets.

Topic 28: National Education Policy 2020

Importance for Prelims: Government policy

MINISTRY OF HUMAN RESOURCES IS NOW MINISTRY OF EDUCATION

<p>FOR SCHOOLS From 10+2 to 5+3+3+4: Current 10+2 structure in which policy covered schooling from Class 1 to 10 (age 6-16) and then Class 11-12 (age 16-18) gives way to 5 years of foundational education, 3 of preparatory, 3 of middle & 4 years of secondary schooling</p> <p>Multi-Stream: Flexibility to choose subjects across streams; all subjects to be offered at two levels of proficiency</p> <p>Diluted Board: Board exams to test only core competencies; could become modular (object and subjective) and will be offered twice a year</p> <p>Multilingual: 3-language policy to continue with preference for local language medium of instruction till class 8</p> <p>Bag-Less Days: School students to have 10 bag-less days in a year during which they are exposed to a vocation of choice (i.e. informal internship)</p>	<p>FOR COLLEGES SAT-Like College Test: National Testing Agency to conduct common college entrance exam twice a year</p> <p>4-Year Bachelor: 4-year multi-disciplinary bachelor's programme to be preferred; mid-term dropouts to be given credit with option to complete degree after a break</p> <p>No Affiliation: Over next 15 years colleges will be given graded autonomy to give degrees, affiliation with universities to end, so would deemed university status</p> <p>Fee Cap: Proposal to cap fee charged by private institutions of higher learning</p> <p>Going Global: Top-rated global universities to be facilitated to come to India, top Indian institutions to be encouraged to go global</p>
--	---

TOI FOR MORE INFOGRAPHICS DOWNLOAD **TIMES OF INDIA APP**   

The Union Cabinet has approved the New Education Policy

- The new policy aims to pave way for transformational reforms in **school and higher education** systems in the country.
- This policy will **replace the 34 year old National Policy on Education (NPE),1986.**

Highlights:

- New Policy aims for **universalization of education from pre-school to secondary level** with 100 % Gross Enrollment Ratio (GER) in school education by 2030.
- NEP 2020 will bring 2 crore out of school children back into the main stream through open schooling system.

- The current 10+2 system to be **replaced by a new 5+3+3+4 curricular structure** corresponding to ages 3-8, 8-11, 11-14, and 14-18 years respectively.
- Emphasis on **Foundational Literacy and Numeracy**, no rigid separation between academic streams, extracurricular, vocational streams in schools ; **Vocational Education to start from Class 6 with Internships Teaching up to at least Grade 5 to be in mother tongue/ regional language.** No language will be imposed on any student.
- **Assessment reforms with 360 degree Holistic Progress Card**, tracking Student Progress for achieving Learning Outcomes
- A new and comprehensive National Curriculum Framework for Teacher Education, NCFTE 2021, will be formulated by the NCTE in consultation with NCERT. By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree .

Higher Education

- **Gross Enrolment Ratio in higher education to be raised to 50 % by 2035** ; 3.5 crore seats to be added in higher education.
- The policy envisages broad based, multi-disciplinary, **holistic Under Graduate education with flexible curricula, creative combinations of subjects**, integration of vocational education and multiple entry and exit points with appropriate certification.
- UG education can be of 3 or 4 years with multiple exit options

and appropriate certification within this period.

- **Academic Bank of Credits** to be established to facilitate Transfer of Credits
- Multidisciplinary Education and Research Universities (MERUs), at par with IITs, IIMs, to be set up as models of best multidisciplinary education of global standards in the country.
- The **National Research Foundation** will be created as an apex body for fostering a strong research culture and building research capacity across higher education.
- **Higher Education Commission of India(HECI)** will be set up as a single overarching umbrella body the for entire higher education, **excluding medical and legal education.**
- HECI to have four independent verticals – **National Higher Education Regulatory Council (NHERC)** for regulation, **General Education Council (GEC)** for standard setting, **Higher Education Grants Council (HEGC)** for funding, and **National Accreditation Council(NAC)** for accreditation.
- Public and private higher education institutions will be governed by the same set of norms for regulation, accreditation and academic standards.
- Affiliation of colleges is to be phased out in 15 years and a stage-wise mechanism is to be established for granting graded autonomy to colleges.
- Over a period of time, it is envisaged that every college would

develop into either an Autonomous degree-granting College, or a constituent college of a university.

Others

- An autonomous body, the **National Educational Technology Forum (NETF)**, will be created to provide a platform for the **free exchange of ideas on the use of technology** to enhance learning, assessment, planning, administration.
- NEP 2020 emphasizes setting up of **Gender Inclusion Fund, Special Education Zones** for disadvantaged regions and groups
- New Policy promotes Multilingualism in both schools and higher education. **National Institute for Pali, Persian and Prakrit**, Indian Institute of Translation and Interpretation to be set up
- The Centre and the States will work together to increase the public investment in Education sector to reach **6% of GDP at the earliest.**

Evolution of education policy

- ✓ University Education Commission (1948-49)
- ✓ Secondary Education Commission (1952-53)
- ✓ Education Commission (1964-66) under Dr. D. S. Kothari
- ✓ National Policy on Education, 1968
- ✓ 42nd Constitutional Amendment, 1976- Education in Concurrent list
- ✓ National Policy on Education (NPE), 1986

- ✓ NPE 1986 Modified in 1992 (Programme of Action, 1992)
- ✓ S.R. Subramaniam Committee Report (May 27, 2016)
- ✓ K. Kasturirangan Committee Report (May 31, 2019)

Topic 29: UDAN

Importance for Prelims: Economy

PawanHans Ltd adds MORE ROUTES to offer better AIR CONNECTIVITY

Effective 29th July 2020, PawanHans will provide passengers better connectivity options on these routes:
Dehradun- New Tehri- Dehradun
New Tehri- Srinagar- New Tehri
Srinagar- Gauchar- Sringer

For booking, visit:
<https://booking.pawanhans.co.in>

Pawan Hans Limited launched the helicopter service on the new route Dehradun-New Tehri-Srinagar-Gauchar under the Central government's regional connectivity scheme UDAN (Ude Deshka Aam Naagrik)

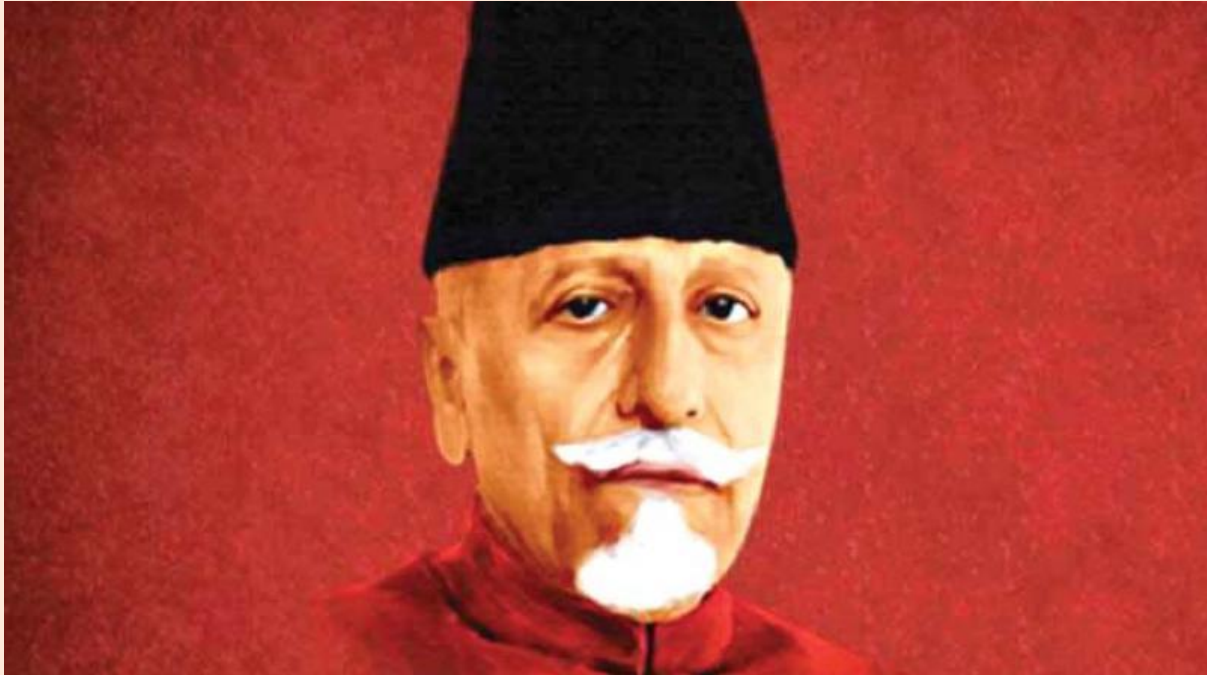
- UDAN (Ude Desh Ka Aam Nagrik) is the Government's initiative to **make air travel to India's tier II and tier III cities affordable** to Common man.
- The idea is to **put smaller cities and remote regions on the aviation map**, by getting domestic airlines to ply more regional routes.
- Under the scheme, the **Government offers incentives to airlines to flag off new flights to neglected smaller cities and**

towns by providing **Viability Gap Funding** to make these operations profitable.

- Airlines are **required to bid for exclusive rights to fly on the regional routes** opened up under the scheme.

Topic 30: Maulana Abul Kalam Azad

Importance for Prelims: History



Senior IPS officer has made an allegation that Indian history had been distorted under education ministers including Maulana Abul Kalam Azad

- He born in Mecca, Saudi Arabia in 1888, his family relocated to Calcutta (now Kolkata) two years after his birth.
- He studied a variety of languages such as Persian, Urdu and Arabic, and subjects such as history, philosophy and geometry.

Contribution to freedom struggle

- In 1912, Azad **started publishing a weekly called Al-Hilal** which he used as a weapon to attack and question British policies. The publication gained immense popularity among the masses, so much so that the British finally banned it in 1914.

- Azad soon started another weekly, **Al-Balagh**, which ran until he was externed under Defence of India Regulations in 1916. The governments of Bombay, Punjab, Delhi, and United Provinces had banned his entry and he was deported to Bihar until 1920.
- After his release, Azad, already inspired by Mahatma Gandhi's philosophy of non-cooperation to fight the British, **started leading the Khilafat Movement**, launched by Indian Muslims to demand that the British preserve the authority of the 'Ottoman Sultan as Caliph of Islam after World War I'.
- **He became the youngest party leader in 1923.**
- In 1942, he along with the rest of the leadership was arrested and put in jail for four years for participating in the Quit India movement.

Free India

- Azad was a **strong believer in the co-existence of all religious communities**. He was deeply affected by the violence witnessed during India's Partition. Azad travelled through the violence-affected regions of Bengal, Assam and Punjab and contributed in establishing the refugee camps and ensured supply of food and other basic resources.
- The 7th schedule of the Constitution lists subjects on which the central and state governments can enact legislation. Under British India, education had been listed as a subject, for which

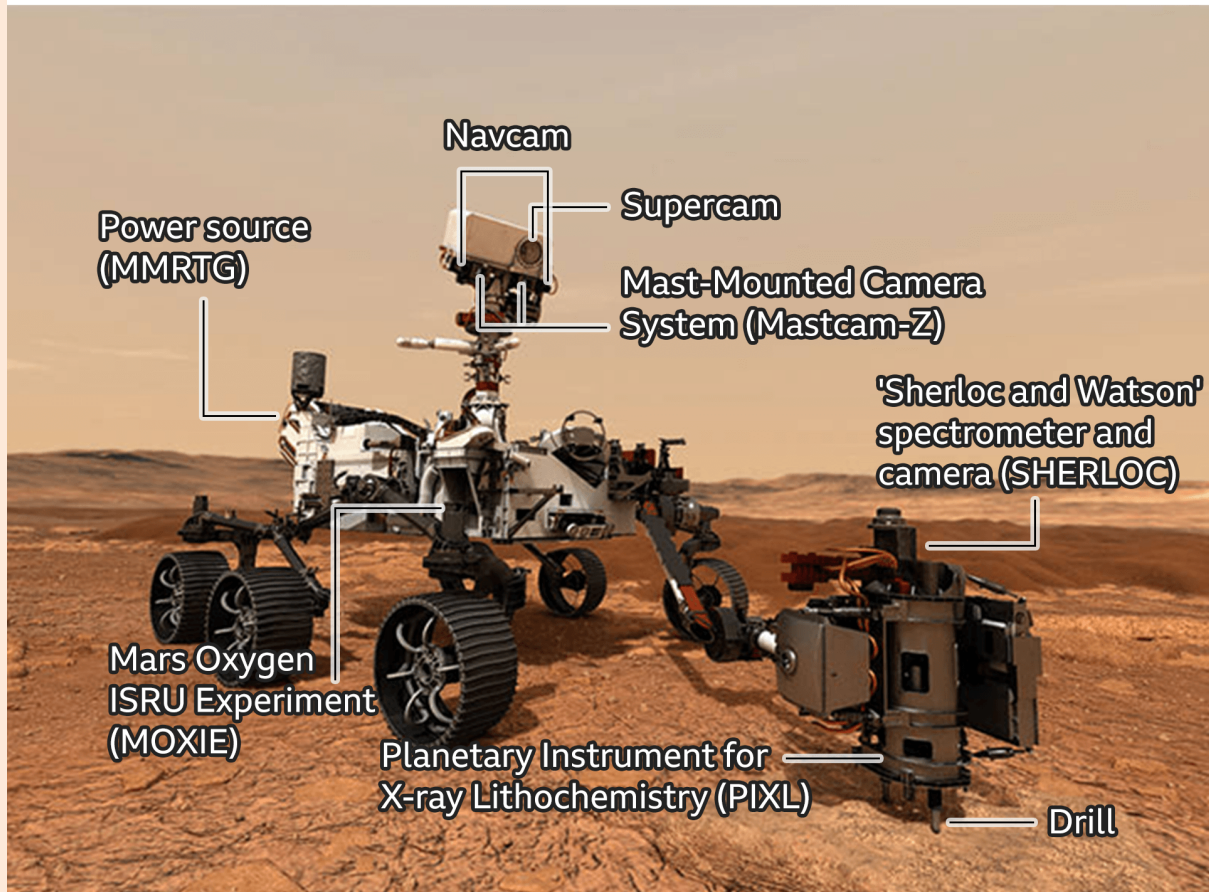
only provinces could enact legislation. **Maulana Azad was strongly against leaving education to the states.**

- **As first education minister of the country from 1947 to 1958,** he advocated for free and compulsory primary education for all children up to the age of 14 as he believed it was the right of all citizens.
- Later, he went on to **establish the Jamia Millia Islamia in Delhi and contributed to the setting up of the IITs.**
- He was also one of the the **brains behind the University Grants Commission,** India's higher education regulator, and played a key role in the establishment of other educational institutions.
- His birthday, **11 November, is celebrated as National Education Day.**

Topic 31: Perseverance Mission

Importance for Prelims: Science and technology

Mars Rover Perseverance



Source: Nasa

BBC

NASA's Mars 2020 Perseverance rover is going to be launched. Perseverance will carry a unique instrument, **MOXIE** or **Mars Oxygen ISRU Experiment**: which for the first time will manufacture molecular oxygen on Mars using carbon dioxide from the carbon-dioxide-rich atmosphere.

- It will carry **Ingenuity**, the first ever helicopter to fly on **Mars**. This is the first time NASA will fly a helicopter on another planet or satellite.

- Like a drone on Earth, a Mars helicopter can help in **rover drive planning and in fetching samples from locations that the rover cannot safely drive to.**
- It is the **planned first step to bring back rock samples from Mars for analysis in sophisticated laboratories on Earth** with the goal of looking for bio signatures: or signatures of present or past life.
- The analysis of Martian rocks on Earth will likely provide a reliable indication of whether life on Mars is feasible in the past or at present.

Topic 32: Green-Ag Project

Importance for Prelims: Government scheme



Indian government has launched a project named Green – Ag in Mizoram

- The project will be implemented in **Dampa Tiger Reserve and Thorangtlang Wildlife Sanctuary** in the state covering more than 30 villages Mizoram is among the five states where the Green-Ag project **funded by Global Environment Facility (GEF)** is being implemented.
- The other states are **Madhya Pradesh, Odisha, Rajasthan and Uttarakhand**.
- The project aims to **catalyse transformative change of India's agricultural sector** to support achievement of national and global **environmental benefits and conservation of critical biodiversity and forest landscapes**.
- The institutionalization of inter-sectoral mechanisms (agricultural and allied sectors, forestry and natural resources management, and economic development) at the national and

five States will facilitate **continued mainstreaming of environmental concerns and priorities related to resilience into the agriculture sector.**

Topic 33: Central Consumer Protection Authority established

Importance for Prelims: Government bodies



The government has established the Central Consumer Protection Authority to promote, protect and enforce the rights of consumers.

- The authority is being **constituted under Section 10(1) of The Consumer Protection Act, 2019.**
- The CCPA aims to **protect the rights of the consumer by cracking down on unfair trade practices, and false and misleading advertisements** that are detrimental to the interests of the public and consumers.
- It will have a **Chief Commissioner as head, and only two other commissioners** as members— one of whom will deal with matters relating to goods while the other will look into cases relating to services.
- The CCPA will have an Investigation Wing that will be headed by a Director General.

Powers and Functions:

- Inquire or investigate into matters relating to violations of consumer rights or unfair trade practices **suo motu, or on a complaint received**, or on a direction from the central government.
- **Recall goods or withdrawal of services** that are “dangerous, hazardous or unsafe.
- **Pass an order for refund the prices of goods or services** so recalled to purchasers of such goods or services; discontinuation of practices which are unfair and prejudicial to consumer’s interest”.
- **Impose a penalty up to Rs 10 lakh, with imprisonment up to two years**, on the manufacturer or endorser of false and misleading advertisements. The penalty may go up to Rs 50 lakh, with imprisonment up to five years, for every subsequent offence committed by the same manufacturer or endorser.
- **Ban the endorser of a false or misleading advertisement from making endorsement of any products or services** in the future, for a period that may extend to one year. The ban may extend up to three years in every subsequent violation of the Act.

Topic 35: AIM-iCREST

Importance for Prelims: Government scheme



NITI Aayog's Atal Innovation Mission (AIM) has launched AIM iCREST – an Incubator Capabilities enhancement program.

- AIM has joined hands with Bill & Melinda Gates Foundation and Wadhvani Foundation – organizations that can lend credible support and expertise in the entrepreneurship and innovation space.
- AIM iCREST has been **designed to enable the incubation ecosystem and act as a growth hack for AIM's Atal and Established incubators** across the country.
- Under the initiative, the AIM's incubators are set to be upscaled and **provided requisite support to foster the incubation enterprise economy**, that will help them to significantly

enhance their performance.

- This will be complemented by providing training to entrepreneurs, through technology driven processes and platforms.
- The program aims at going beyond incubator capacity building. Given the current pandemic crisis, the **effort will focus on supporting start-up entrepreneurs in knowledge creation and dissemination as well as in developing robust and active networks.**