INDIA-EUROPEAN UNION COUNTER TERRORISM DIALOGUE

GS-III | 05 November,2020

INDIA-EUROPEAN UNION COUNTER TERRORISM DIALOGUE

- India and European Union held Counter Terrorism Dialogue.

Highlights

- The dialogue reviewed threats posed by UN-sanctioned terrorist entities.
- India and European Union are to soon conclude the Free Trade Agreement.
- During the dialogue, European Union stressed to increase India's investments in the field of Green Energy.

India-European Union

- European Union is the largest trading partner of India. The EU accounts to 12.5% of overall trade between India and European Union.

About Copernicus space Programme of EU

- It is an **Earth Observation Programme** of the European Union. Under the programme, European Union provides data and information free of cost.

Source: PIB

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BULK DRUG PARK - HIMACHAL PRADESH

GS-III | 10 November,2020

BULK DRUG PARK - HIMACHAL PRADESH

What are bulk drugs or APIs?

- A bulk drug is also called an **active pharmaceutical ingredient (API)**. It is the key ingredient of a drug or medicine, which lends it the desired therapeutic effect or produces the intended pharmacological activity.
- Example- Paracetamol- It is a bulk drug, which acts against pain. It is mixed with binding agents or solvents to prepare the finished pharmaceutical product, ie a paracetamol tablet, capsule or syrup, which is consumed by the patient.

How are APIs prepared?

- They are prepared from multiple reactions involving chemicals and solvents.
- The primary chemical or the basic raw material which undergoes reactions to form an API is called the **key starting material**, or KSM.
- Chemical compounds formed during the intermediate stages during these reactions are called drug intermediates or DIs

Why is India promoting bulk drug parks?

- India has one of the largest pharmaceutical industries in the world (**third largest by volume**).
- But this industry largely depends on other countries, particularly China, for importing APIs, DIs and KSMs.
- Drug manufacturers in India suffered repeated setbacks due to disruption in imports due to Covid 19.

Key features of the scheme for promotion of Bulk Drug parks:

- The scheme will support **three selected parks** in the country by providing a **one-time grant-in-aid** for the creation of common infrastructure facilities.
- The grant-in-aid will be **70 per cent** of the cost of the common facilities but in the case of Himachal Pradesh and other hill states, it will be 90 per cent.
- The Centre will provide a maximum of Rs **1,000 crore per park**.
- A state can only propose one site, which is not less than a thousand acres in area, or not less than 700 acres in the case of hill states.

ASPIRE IAS

Source: PIB

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Source: PIB

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GIANT METREWAVE RADIO TELESCOPE (GMRT)

GS-III | 11 November,2020

GIANT METREWAVE RADIO TELESCOPE (GMRT)

- The Giant Metrewave Radio Telescope observatory located in **Pune** has been provided with the prestigious **IEEE** milestone status.
- This is the 3rd IEEE milestone recognition being offered to India
- The previous two IEEE milestone recognition were awarded to **JC Bose** in 1895 and **CV Raman** in 1928.
- JC Bose is regarded as the **Father of Wireless Communication**.

Giant Metrewave Radio Telescope

- It is an array of 30 radio telescopes operated by National Centre for Radio Astrophysics.
- It is a part of the **Tata Institute of Fundamental Research** located in Mumbai.
- One of the major objectives of the telescope was to search for highly **red shift 21-line** radiation.
- These radiations are emitted from the primordial neutral **hydrogen clouds**.
- The determination of these radiations will help determine the epoch of **galaxy formation** in the universe.
- In February 2020 the telescope helped in observing the biggest explosion in the history of Universe called the **Ophiuchus Supercluster Explosion**.

Ophiuchus Supercluster Explosion

- The extremely powerful eruption occurred in the Ophiuchus supercluster about 390 million light years from the Earth.
- The eruption occurred due to a supermassive black hole.

Ophiuchus Supercluster

- It is one of the nearby Galaxy superclusters of the earth located in the **Ophiuchus constellation**.
- Supercluster is a a group of galaxies. For instance**, milky way is a part of Local Group Galaxy group**.

Source: TH

PARAM SIDDHI-AI

GS-III | 11 November,2020

PARAM SIDDHI-AI :

- Param Siddhi is a high-performance computing-artificial intelligence supercomputer established at **C-DAC** under the National Supercomputing Mission.
- It has secured rank **63** in TOP 500 most powerful non-distributed computer system list in the world.

Features :

- **Param Siddhi** was jointly developed by **Ministry of Electronics and Information Technology** and **Department of Science and Technology.**
- The supercomputer has a speed of **5.267 petaflops**. It has now got the recognition of non-distributed super computer systems.

What are petaflops?

- It is a unit of computing speed.
- n simple words, FLOP is the number of **arithmetic operations** a machine can do in a second.

What are non-distributed computer systems?

- In a non-distributed computer system, all the components are in a single location.
- In case of Param Siddhi, all of its components are located in **Pune.**
- The technology will help in agriculture, healthcare, energy, education space, cybersecurity, weather and AI application.

National Supercomputing Mission

- India is currently implementing third phase of **National Supercomputing Mission**.
- The main aim of the mission is to install **70** supercomputers & the Government has allocated **Rs 4,500 crores** to the mission.
- The **National Supercomputing Mission** was announced in 2015.
  - It will support "Digital India" and "Make in India" initiatives of GoI.
  - Under the mission, the first supercomputer of India was installed in **IIT-BHU**, Varanasi. It was named "**PARAM SHIVAY**".

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500 METRE TALL CORAL REEF

GS-III | 12 November,2020

500 METRE TALL CORAL REEF

- The scientists have discovered a detached coral reef in the **Great Barrier Reef of Australia** taller than the Empire State Building of the United States.

About the reef

- The newly discovered reef adds to the seven other tall detached reefs in the world. This includes the **Raine Island**.
- Raine Island is the most important **Green Sea Turtle nesting area** in the world.

What are Detached reefs?

- Detached reefs are the reefs that are **bedded** to the ocean floor but are **not a part** of the main body of the Great Barrier Reef.
- The newly found detached reef has great potential for the new species to evolve because there is lot of deep water between this reef and the next coral community.

Source: TH

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Source: TH

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SENTINEL-6 SATELLITE

GS-III | 19 November,2020

SENTINEL-6 SATELLITE

The **Copernicus Sentinel-6 Michael Freilich** satellite is designed to monitor **oceans.**

- It was recently launched from California aboard a **SpaceX Falcon 9 rocket.**
- This is a part of the next mission dedicated to measuring changes in the global sea level.

What is the mission?

- The mission is called the **Jason Continuity of Service** (Jason-CS) mission.
- It is designed to measure the **height of the ocean,** which is a key component in understanding how the Earth's climate is changing.
- It has been developed jointly by the **European Space Agency (ESA), NASA**, European Organisation for the Exploitation of Meteorological Satellites (**Eumetsat),** the USA's National Oceanic and Atmospheric Administration (NOAA) and the EU, with contributions from **France's National Centre for Space Studies (CNES).**

What will the satellite do?

- Provide measurements of global sea-level rise.
- Send pulses to the Earth's surface and measure how long they take to return to it, which will help scientists measure the sea surface height.
- Long-term forecasting, for instance for seasonal conditions like **El Niño** and **La Niña**.

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Source: TH

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ARIEL SPACE MISSION - ESA

GS-III | 24 November,2020

ARIEL SPACE MISSION - ESA

The **European Space Agency (ESA)** has formally adopted Ariel.

What is Ariel?

- Ariel (Atmospheric Remote-sensing Infrared Exoplanet Large-survey) will be launched in **2029**.
- It will perform a large-scale survey of over a thousand **exoplanets** over a period of 4 years.
- The explorer that will **study the nature**, formation and evolution of exoplanets.

Significance:

- Ariel is the first mission of its kind dedicated to measuring the **chemical composition** and thermal structures of exoplanets.

How exoplanets are found?

- Tracking the dimming of a star that happens when a planet passes in front of it.
- **NASA's Kepler Space telescope** uses this method to spot thousands of planets.
- Gravitational lensing and the "**wobbling method**", which is based on the idea that an orbiting planet will cause its parent star to orbit slightly off-centre.

Key Points:

- **Proxima Centauri b** is the closest **exoplanet to Earth** and is 4 light-years away and inhabits the "**habitable zone**" of its star, which means that it could possibly have liquid water on its surface.

Source: Twitter

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Pradhan Mantri Kisan Sampada Yojana

GS-III | 25 November,2020

Scheme for Creation of Infrastructure for Agro-Processing Cluster: PMKSY

Recently, the Union Minister of Food Processing Industries has attended the Independent Management Advisory Committee (IMAC) meeting to consider the proposals received under the Scheme for Creation of Infrastructure for Agro-Processing Cluster (APC) of Pradhan Mantri Kisan Sampada Yojana (PMKSY).

Features

- IMAC approved 7 proposals with a total project cost of Rs. 234.68 crore including grants-in-aid of Rs. 60.87 crore in Meghalaya, Gujarat, Madhya Pradesh, Karnataka and Maharashtra.
- These projects will leverage private investment of Rs. 173.81 crore and are expected to generate employment for 7750 persons.
- Scheme for Creation of Infrastructure for Agro-Processing Cluster:

It was approved in May 2017 under the PMKSY, to incentivise the setting up of APCs in the country.

Aims: To develop modern infrastructure and common facilities to encourage a group of entrepreneurs to set up food processing units based on cluster approach by linking groups of producers/farmers to the processors and markets.

- These clusters will help in reducing the wastage of the surplus produce and add value to the horticultural/agricultural produce which will result in an increase of income of the farmers and create employment at the local level.
- Under the scheme, each APC has two basic components:
- Basic Enabling Infrastructure like roads, water supply, power supply, drainage, etc.
- Core Infrastructure/Common Facilities like warehouses, cold storages, tetra pack, sorting, grading, etc.

Requirements for Setup:

- At least 5 food processing units with a minimum investment of Rs. 25 crore and at least 10 acres of land is required for at least 50 years.

Pradhan Mantri Kisan Sampada Yojana

- In 2016, the Ministry of Food Processing Industries (MoFPI) introduced an umbrella Scheme for Agro-Marine Processing and Development of Agro- Processing Clusters (SAMPADA), which was proposed to be implemented with an allocation of Rs. 6,000 crores for the period of 2016-20.
- In 2017, it was renamed as the Pradhan Mantri Kisan Sampada Yojana (PMKSY).
- It is a Central Sector Scheme.

Objectives:

- To supplement agriculture.
- To create processing and preservation capacities.
- To modernise and expand existing food processing units with a view to increasing the level of processing.
- To add value leading to the reduction of wastage.

Seven component schemes under PMKSY:

- Mega Food Parks.
- Integrated Cold Chain and Value Addition Infrastructure.
- Infrastructure for APC.
- Creation of Backward and Forward Linkages.
- Creation/Expansion of Food Processing and Preservation Capacities.
- Food Safety and Quality Assurance Infrastructure.
- Human Resources and Institutions.

Under PMKSY, capital subsidy in the form of grants-in-aid ranging from 35% to 75% of the eligible project cost subject to a maximum specified limit is provided to investors under the various schemes for undertaking infrastructure, logistic projects and setting up of food processing units in the country.

Source: TH

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National Nutrition Mission: NITI Aayog

GS-II | 25 November,2020

National Nutrition Mission: NITI Aayog

Recently, the NITI Aayog has released "Accelerating Progress On Nutrition In India: What Will It Take".

It is the third progress report on the National Nutrition Mission or the Poshan Abhiyaan.

Key features

- The third progress report (October 2019-April 2020) takes into account the status on the ground and implementation challenges encountered at various levels through large scale datasets.
- These datasets are the NFHS-4 and Comprehensive National Nutrition Survey (CNNS).
- According to the report, India's targets are conservative on stunting as compared to the

global target defined by the World Health Assembly (WHA). It is a prevalence rate of 5% of stunting as opposed to India's goal of reducing stunting levels to 13.3% by 2022.
- The targets of reducing prevalence levels of anaemia among pregnant women from 50.3% (2016) to 34.4% (2022) and among adolescent girls from 52.9% (2016) to 39.66% are also considered to be conservative as compared to the WHA's target of halving prevalence levels.
- In the wake of the pandemic, experts warn that deepening poverty and hunger may delay achieving the goals defined under the Mission.

#joinourtelegram#

Suggestions by the NITI Aayog:

- **On Stunting:** (1) To improve complementary feeding using both behaviour change interventions and complimentary food supplements in the Integrated Child Development Services (ICDS); (2) To work towards investments in girls and women; (3) To improve water, sanitation, handwashing with soap and hygienic disposal of children's stools.
- **On Wasting:** (1) To include interventions that go beyond the treatment of severe acute malnutrition (SAM) and also address moderate wasting; (2) To scale-up to reach facility-based treatment of SAM; (3) To urgently release a full strategy for prevention and integrated management of wasting nationally.
- **On Anaemia:** To scale-up scenario that focuses only on health sector interventions which will achieve modest improvements in anaemia among women of reproductive age.

#joinourtelegram#

National Nutrition Mission (2018)

Objective:

- To improve nutritional outcomes for children, pregnant women and lactating mothers.
- It is backed by a National Nutrition Strategy prepared by the NITI Aayog with the goal of attaining "Kuposhan Mukt Bharat" or malnutrition-free India, by 2022.

Aims:

- To reduce stunting, undernutrition, anemia and low birth weight by 2%, 2%, 3% and 2% per annum respectively; (2) To address the problem of malnutrition in a mission-mode.
- 50% of the total budget comes from the World Bank or other multilateral development banks and the rest of the 50% is through Centre's budgetary support.
- The Centre's budgetary support is further divided into 60:40 between the Centre and the States, 90:10 for the north-eastern region and the Himalayan States and 100% for the Union Territories (UTs) without legislature.

Source: TH

43 more Mobile Apps banned

GS-II | 25 November,2020

43 More Mobile Apps banned by India

Recently, the government of India has blocked 43 new mobile apps, mostly Chinese, in the country, including shopping website AliExpress. This is in addition to a total of 177 Chinese apps banned till now.

Key Points

- The Ministry of Electronics and Information Technology banned these mobile apps under **Section 69A of the Information Technology Act (IT Act), 2000**.
- Section 69A of the Information Technology Act, 2000, was introduced by an amendment to the Act in 2008.
- **What is in the Act?** It gives the Central government the power to block public access to any information online whether on websites or mobile apps.
- Under Section 69A, if a website threatens India's **defence, its sovereignty and integrity, friendly relations with foreign countries and public order**, the government can ban it, after following due procedure.

What are the reasons behind banning apps?

- The action was taken based on the imgs regarding these apps for engaging in activities which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order.
- Government has received many complaints from various sources about misuse of some mobile apps available on Android and iOS platforms for **stealing and transmitting users' data** in an unauthorized manner to servers which have locations outside India.
- I**ndian Cyber Crime Coordination Center,** Ministry of Home Affairs also gave a comprehensive report against the misuse of the apps.

What is the impact of the Ban?

- The decision to ban these apps, which comes amid continuing tensions between India and China, is the clear message from India that it will no longer be a victim of China's Nibble and Negotiate policy and will review the norms of engagement.
- The ban may affect one of China's most ambitious goals, namely to become the digital superpower of the 21st century.
- It will provide a good opportunity for Indian entrepreneurs to quickly rise to fill market gaps.
- This is also great for the Atmanirbhar Bharat mission.

- After the initial ban of apps, the government launched '**Digital India Atmanirbhar Bharat Innovate Challenge'** to encourage Indian application developers and innovators and facilitate their ideas and products.

Conclusion

The next source of economic growth lies in the digital economy. India must speed up indigenisation, research and development and frame- up a regulatory architecture to claim data sovereignty.

Source: TH

India's assistance to Afghanistan

GS-II | 25 November,2020

Afghanistan - India Relations

Recently, at the **Afghanistan 2020 Conference,** India has announced about 150 projects worth USD 80 million. Also, the USA has decided to reduce its troop presence in Afghanistan to about 2,500 by January 2021.

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India - Afghanistan relations:

- India will launch phase-IV of high-impact community development projects, which include around **150 projects** worth USD 80 million. It has signed an agreement for building the **Shahtoot dam**, which would provide safe drinking water to 2 million residents of **Kabul city**.
- It builds on the 202 km **Pul-e-Khumri transmission line** of 2009, through which India provides power to the city.

India - Afghan relations:

India's development programmes in Afghanistan are focused around 5 pillars:

1. Large **infrastructure** projects.
2. **Human resource** development and capacity building.
3. Humanitarian assistance.
4. High-impact **community** development projects.
5. Enhancing **trade** and investment through air and land connectivity.

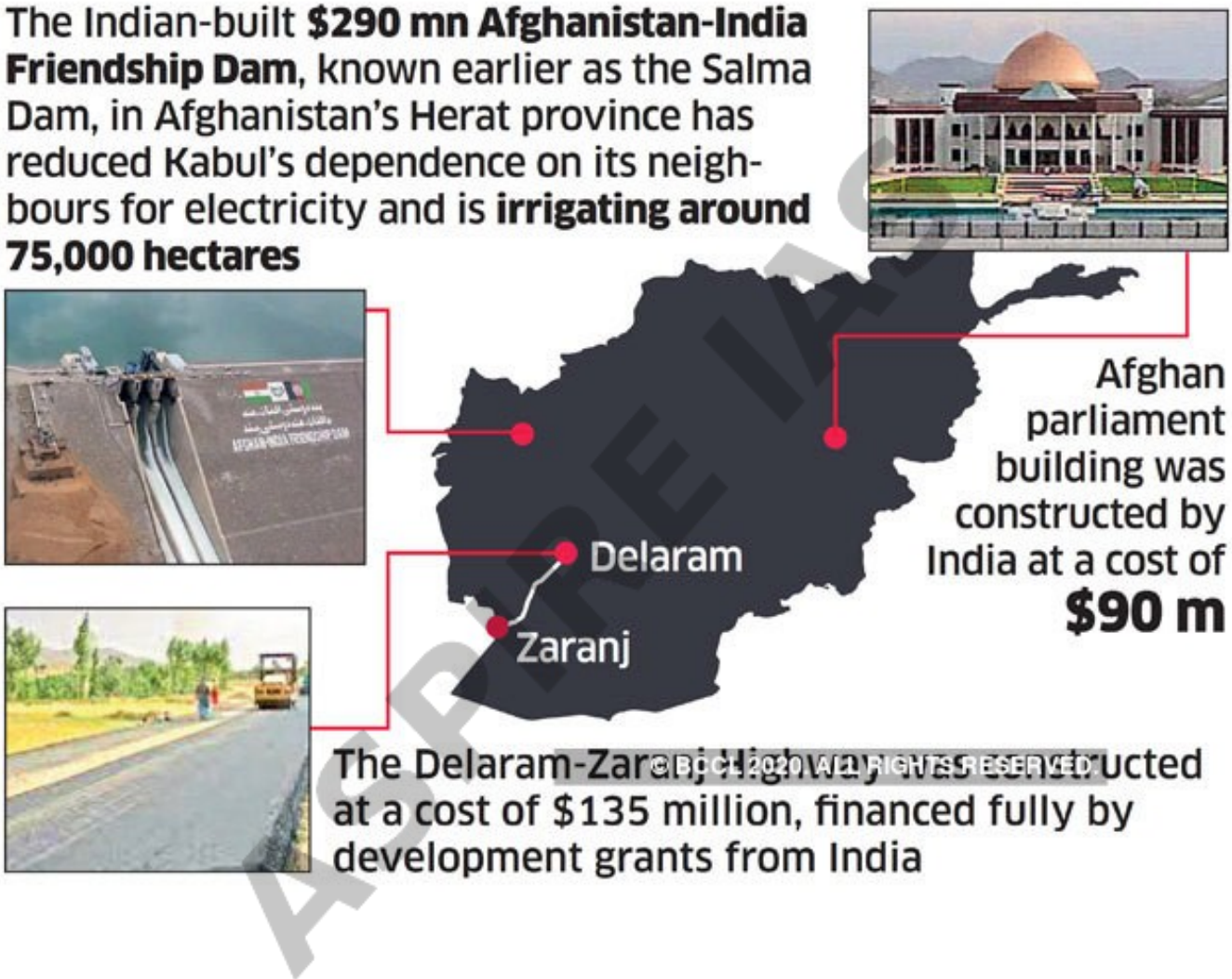
Since 2001, India has committed USD 3 billion towards rebuilding and reconstruction of Afghanistan. During the Taliban years from 1996 to 2001, India did not invest in Afghanistan.

Chabahar Port in Iran, which provides alternate connectivity to Afghanistan.

- Afghanistan's growth has been constrained by its landlocked geography and Pakistan blocking transit access made the situation even worse.

Pandemic Support

- India sent more than 20 tonnes of medicines, other equipment and transported 75,000 tonnes of wheat to Afghanistan to address the Covid-19 challenge.



Shift in Indian Perspective:

- The Indian government's decision to invest in Afghanistan's future, where the Taliban is set to play a dominant role, is being seen as a major departure from the past.
- India also participated in the commencement ceremony of the **intra-Afghan talks in Doha in September 2020**, where a 21- member Taliban team was also present. It reflects India's realisation of ground realities and shifting sands in Kabul's power structure.

Reduction of Troops by USA:

- In February 2020, the USA and the Tabilan signed an **agreement in Doha**, (Qatar's capital).
- According to it, the USA would withdraw all of its troops from Afghanistan in 14 months and would also release Taliban prisoners, held captive by the Afghan government.
- In return, the Taliban assured that they would not allow transnational jihadist organisations such as al-Qaeda and the Islamic State to use Afganistan as their base and also committed to start direct talks with the Afghan government, which began in September 2020.
- With the USA leaving at such a crucial point, it not only deprives Afghan forces of the support they need, particularly the airpower, but also affects their morale.

- The North Atlantic Treaty Organization (NATO) has committed to funding Afghan troops for four more years.
- However, this decision will leave Afghanistan with an uncertain future as the Taliban is expected to take over after the troops' withdrawal.
- The Taliban, who were ousted from power in 2001 after the USA invasion, have since been fighting both foreign troops and the Afghan government.
- It now controls more than half of the country and contests the whole of it. Since the agreement was signed, the Taliban have conducted more than 13,000 attacks nationwide.
- According to a UN Assistance Mission in Afghanistan (UMAMA) report in October 2020, nearly 6,000 Afghan civilians were killed in the first nine months of the year and 45% of the deaths were by the Taliban.

Conclusion

- The increasing level of violence in Afghanistan is a pressing concern. India calls for an immediate and comprehensive ceasefire and also believes that the peace process must be Afghan-led, Afghan-owned and Afghan-controlled.
- India looks forward to walking hand in hand with the people of Afghanistan and the world community to work towards a peaceful, prosperous, sovereign, democratic and united Afghanistan.

Source: Livemint

ASPIRE IAS

ASTEROID 16 PSYCHE

GS-III | 25 November,2020

ASTEROID 16 PSYCHE

- The NASA has found that 16 Psyche asteroid orbiting between **Mars and Jupiter** is made of rare metals such as gold, cobalt, platinum, rhenium and iridium.
- The total worth of the **precious metals** in the asteroid has been estimated as 10,000 Quadrillion USD by NASA scientists.

About Asteroid 16 Psyche

- **Oxidation** is constantly occurring at the surface of the asteroid due to solar winds.
- Solar winds are stream of **charged particles** from the hot outer atmosphere

of the sun called **Corona**.

How is earth protected from Solar Winds?

- Earth protects itself from the solar winds with its magnetic field.
- The magnetic field of the earth **deflects** most of the charged particles from the sun.
- However, some of the charged particles get trapped in the **Van Allen Radiation** belt.
- There are two such belts around the earth. They are in the inner regions of the **magnetosphere** of the earth.

Mission Psyche

- It is a journey to a unique metal asteroid orbiting the sun between **Jupiter and Mars**.
- It has been planned to be launched by **2022**.
- The mission will discover will characterize **topography** of Psyche.

Source: PIB

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Pradhan Mantri Kisan Sampada Yojana

GS-III | 25 November,2020

Scheme for Creation of Infrastructure for Agro-Processing Cluster: PMKSY

Recently, the Union Minister of Food Processing Industries has attended the Independent Management Advisory Committee (IMAC) meeting to consider the proposals received under the Scheme for Creation of Infrastructure for Agro-Processing Cluster (APC) of Pradhan Mantri Kisan Sampada Yojana (PMKSY).

Features

- IMAC approved 7 proposals with a total project cost of Rs. 234.68 crore including grants-in-aid of Rs. 60.87 crore in Meghalaya, Gujarat, Madhya Pradesh, Karnataka and Maharashtra.
- These projects will leverage private investment of Rs. 173.81 crore and are expected to generate employment for 7750 persons.
- Scheme for Creation of Infrastructure for Agro-Processing Cluster:

It was approved in May 2017 under the PMKSY, to incentivise the setting up of APCs in the country.

Aims: To develop modern infrastructure and common facilities to encourage a group of entrepreneurs to set up food processing units based on cluster approach by linking groups of producers/farmers to the processors and markets.

- These clusters will help in reducing the wastage of the surplus produce and add value to the horticultural/agricultural produce which will result in an increase of income of the farmers and create employment at the local level.
- Under the scheme, each APC has two basic components:
- Basic Enabling Infrastructure like roads, water supply, power supply, drainage, etc.
- Core Infrastructure/Common Facilities like warehouses, cold storages, tetra pack, sorting, grading, etc.

Requirements for Setup:

- At least 5 food processing units with a minimum investment of Rs. 25 crore and at least 10 acres of land is required for at least 50 years.

Pradhan Mantri Kisan Sampada Yojana

- In 2016, the Ministry of Food Processing Industries (MoFPI) introduced an umbrella Scheme for Agro-Marine Processing and Development of Agro- Processing Clusters (SAMPADA), which was proposed to be implemented with an allocation of Rs. 6,000 crores for the period of 2016-20.
- In 2017, it was renamed as the Pradhan Mantri Kisan Sampada Yojana (PMKSY).
- It is a Central Sector Scheme.

Objectives:

- To supplement agriculture.
- To create processing and preservation capacities.
- To modernise and expand existing food processing units with a view to increasing the level of processing.
- To add value leading to the reduction of wastage.

Seven component schemes under PMKSY:

- Mega Food Parks.
- Integrated Cold Chain and Value Addition Infrastructure.
- Infrastructure for APC.
- Creation of Backward and Forward Linkages.
- Creation/Expansion of Food Processing and Preservation Capacities.
- Food Safety and Quality Assurance Infrastructure.
- Human Resources and Institutions.

Under PMKSY, capital subsidy in the form of grants-in-aid ranging from 35% to 75% of the eligible project cost subject to a maximum specified limit is provided to investors under the various schemes for undertaking infrastructure, logistic projects and setting up of food processing units in the country.

Source: TH

ASPIRE IAS

National Nutrition Mission: NITI Aayog

GS-II | 25 November,2020

National Nutrition Mission: NITI Aayog

Recently, the NITI Aayog has released "Accelerating Progress On Nutrition In India: What Will It Take".

It is the third progress report on the National Nutrition Mission or the Poshan Abhiyaan.

Key features

- The third progress report (October 2019-April 2020) takes into account the status on the ground and implementation challenges encountered at various levels through large scale datasets.
- These datasets are the NFHS-4 and Comprehensive National Nutrition Survey (CNNS).
- According to the report, India's targets are conservative on stunting as compared to the

global target defined by the World Health Assembly (WHA). It is a prevalence rate of 5% of stunting as opposed to India's goal of reducing stunting levels to 13.3% by 2022.
- The targets of reducing prevalence levels of anaemia among pregnant women from 50.3% (2016) to 34.4% (2022) and among adolescent girls from 52.9% (2016) to 39.66% are also considered to be conservative as compared to the WHA's target of halving prevalence levels.
- In the wake of the pandemic, experts warn that deepening poverty and hunger may delay achieving the goals defined under the Mission.

#joinourtelegram#

Suggestions by the NITI Aayog:

- **On Stunting:** (1) To improve complementary feeding using both behaviour change interventions and complimentary food supplements in the Integrated Child Development Services (ICDS); (2) To work towards investments in girls and women; (3) To improve water, sanitation, handwashing with soap and hygienic disposal of children's stools.
- **On Wasting:** (1) To include interventions that go beyond the treatment of severe acute malnutrition (SAM) and also address moderate wasting; (2) To scale-up to reach facility-based treatment of SAM; (3) To urgently release a full strategy for prevention and integrated management of wasting nationally.
- **On Anaemia:** To scale-up scenario that focuses only on health sector interventions which will achieve modest improvements in anaemia among women of reproductive age.

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National Nutrition Mission (2018)

Objective:

- To improve nutritional outcomes for children, pregnant women and lactating mothers.
- It is backed by a National Nutrition Strategy prepared by the NITI Aayog with the goal of attaining "Kuposhan Mukt Bharat" or malnutrition-free India, by 2022.

Aims:

- To reduce stunting, undernutrition, anemia and low birth weight by 2%, 2%, 3% and 2% per annum respectively; (2) To address the problem of malnutrition in a mission-mode.
- 50% of the total budget comes from the World Bank or other multilateral development banks and the rest of the 50% is through Centre's budgetary support.
- The Centre's budgetary support is further divided into 60:40 between the Centre and the States, 90:10 for the north-eastern region and the Himalayan States and 100% for the Union Territories (UTs) without legislature.

Source: TH

43 more Mobile Apps banned

GS-II | 25 November,2020

43 More Mobile Apps banned by India

Recently, the government of India has blocked 43 new mobile apps, mostly Chinese, in the country, including shopping website AliExpress. This is in addition to a total of 177 Chinese apps banned till now.

Key Points

- The Ministry of Electronics and Information Technology banned these mobile apps under **Section 69A of the Information Technology Act (IT Act), 2000**.
- Section 69A of the Information Technology Act, 2000, was introduced by an amendment to the Act in 2008.
- **What is in the Act?** It gives the Central government the power to block public access to any information online whether on websites or mobile apps.
- Under Section 69A, if a website threatens India's **defence, its sovereignty and integrity, friendly relations with foreign countries and public order**, the government can ban it, after following due procedure.

What are the reasons behind banning apps?

- The action was taken based on the imgs regarding these apps for engaging in activities which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order.
- Government has received many complaints from various sources about misuse of some mobile apps available on Android and iOS platforms for **stealing and transmitting users' data** in an unauthorized manner to servers which have locations outside India.
- I**ndian Cyber Crime Coordination Center,** Ministry of Home Affairs also gave a comprehensive report against the misuse of the apps.

What is the impact of the Ban?

- The decision to ban these apps, which comes amid continuing tensions between India and China, is the clear message from India that it will no longer be a victim of China's Nibble and Negotiate policy and will review the norms of engagement.
- The ban may affect one of China's most ambitious goals, namely to become the digital superpower of the 21st century.
- It will provide a good opportunity for Indian entrepreneurs to quickly rise to fill market gaps.
- This is also great for the Atmanirbhar Bharat mission.

- After the initial ban of apps, the government launched '**Digital India Atmanirbhar Bharat Innovate Challenge'** to encourage Indian application developers and innovators and facilitate their ideas and products.

Conclusion

The next source of economic growth lies in the digital economy. India must speed up indigenisation, research and development and frame- up a regulatory architecture to claim data sovereignty.

Source: TH

India's assistance to Afghanistan

GS-II | 25 November,2020

Afghanistan - India Relations

Recently, at the **Afghanistan 2020 Conference,** India has announced about 150 projects worth USD 80 million. Also, the USA has decided to reduce its troop presence in Afghanistan to about 2,500 by January 2021.

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India - Afghanistan relations:

- India will launch phase-IV of high-impact community development projects, which include around **150 projects** worth USD 80 million. It has signed an agreement for building the **Shahtoot dam**, which would provide safe drinking water to 2 million residents of **Kabul city**.
- It builds on the 202 km **Pul-e-Khumri transmission line** of 2009, through which India provides power to the city.

India - Afghan relations:

India's development programmes in Afghanistan are focused around 5 pillars:

1. Large **infrastructure** projects.
2. **Human resource** development and capacity building.
3. Humanitarian assistance.
4. High-impact **community** development projects.
5. Enhancing **trade** and investment through air and land connectivity.

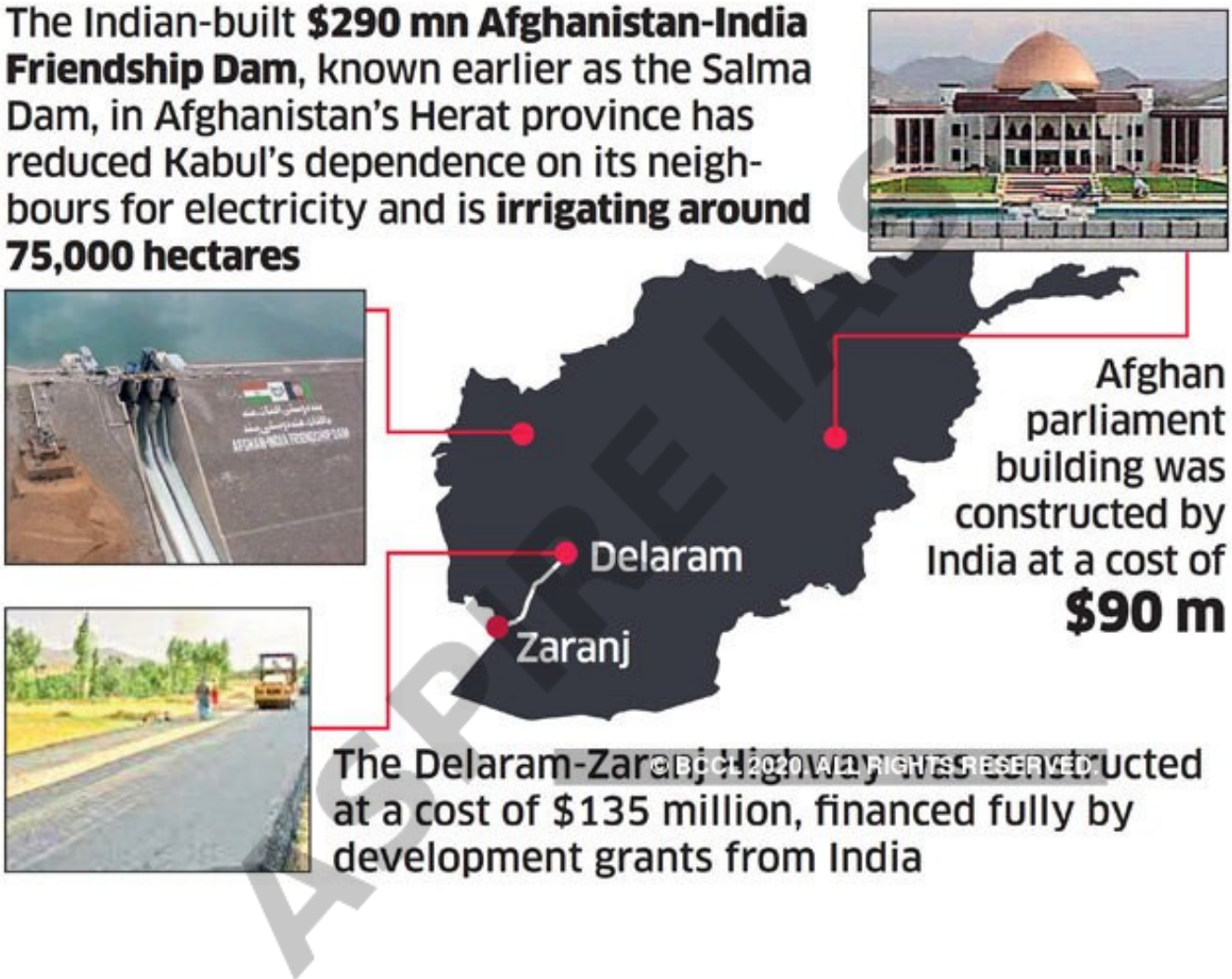
Since 2001, India has committed USD 3 billion towards rebuilding and reconstruction of Afghanistan. During the Taliban years from 1996 to 2001, India did not invest in Afghanistan.

Chabahar Port in Iran, which provides alternate connectivity to Afghanistan.

- Afghanistan's growth has been constrained by its landlocked geography and Pakistan blocking transit access made the situation even worse.

Pandemic Support

- India sent more than 20 tonnes of medicines, other equipment and transported 75,000 tonnes of wheat to Afghanistan to address the Covid-19 challenge.



Shift in Indian Perspective:

- The Indian government's decision to invest in Afghanistan's future, where the Taliban is set to play a dominant role, is being seen as a major departure from the past.
- India also participated in the commencement ceremony of the **intra-Afghan talks in Doha in September 2020**, where a 21- member Taliban team was also present. It reflects India's realisation of ground realities and shifting sands in Kabul's power structure.

Reduction of Troops by USA:

- In February 2020, the USA and the Tabilan signed an **agreement in Doha**, (Qatar's capital).
- According to it, the USA would withdraw all of its troops from Afghanistan in 14 months and would also release Taliban prisoners, held captive by the Afghan government.
- In return, the Taliban assured that they would not allow transnational jihadist organisations such as al-Qaeda and the Islamic State to use Afganistan as their base and also committed to start direct talks with the Afghan government, which began in September 2020.
- With the USA leaving at such a crucial point, it not only deprives Afghan forces of the support they need, particularly the airpower, but also affects their morale.

- The North Atlantic Treaty Organization (NATO) has committed to funding Afghan troops for four more years.
- However, this decision will leave Afghanistan with an uncertain future as the Taliban is expected to take over after the troops' withdrawal.
- The Taliban, who were ousted from power in 2001 after the USA invasion, have since been fighting both foreign troops and the Afghan government.
- It now controls more than half of the country and contests the whole of it. Since the agreement was signed, the Taliban have conducted more than 13,000 attacks nationwide.
- According to a UN Assistance Mission in Afghanistan (UMAMA) report in October 2020, nearly 6,000 Afghan civilians were killed in the first nine months of the year and 45% of the deaths were by the Taliban.

Conclusion

- The increasing level of violence in Afghanistan is a pressing concern. India calls for an immediate and comprehensive ceasefire and also believes that the peace process must be Afghan-led, Afghan-owned and Afghan-controlled.
- India looks forward to walking hand in hand with the people of Afghanistan and the world community to work towards a peaceful, prosperous, sovereign, democratic and united Afghanistan.

Source: Livemint

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ASTEROID 16 PSYCHE

GS-III | 25 November,2020

ASTEROID 16 PSYCHE

- The NASA has found that 16 Psyche asteroid orbiting between **Mars and Jupiter** is made of rare metals such as gold, cobalt, platinum, rhenium and iridium.
- The total worth of the **precious metals** in the asteroid has been estimated as 10,000 Quadrillion USD by NASA scientists.

About Asteroid 16 Psyche

- **Oxidation** is constantly occurring at the surface of the asteroid due to solar winds.
- Solar winds are stream of **charged particles** from the hot outer atmosphere

of the sun called **Corona**.

How is earth protected from Solar Winds?

- Earth protects itself from the solar winds with its magnetic field.
- The magnetic field of the earth **deflects** most of the charged particles from the sun.
- However, some of the charged particles get trapped in the **Van Allen Radiation** belt.
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Mission Psyche

- It is a journey to a unique metal asteroid orbiting the sun between **Jupiter and Mars**.
- It has been planned to be launched by **2022**.
- The mission will discover will characterize **topography** of Psyche.

Source: PIB

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UPSC "PT" DNA (Daily News Analysis)

Constitution Day

GS-II | 26 November,2020

The Constitution Day

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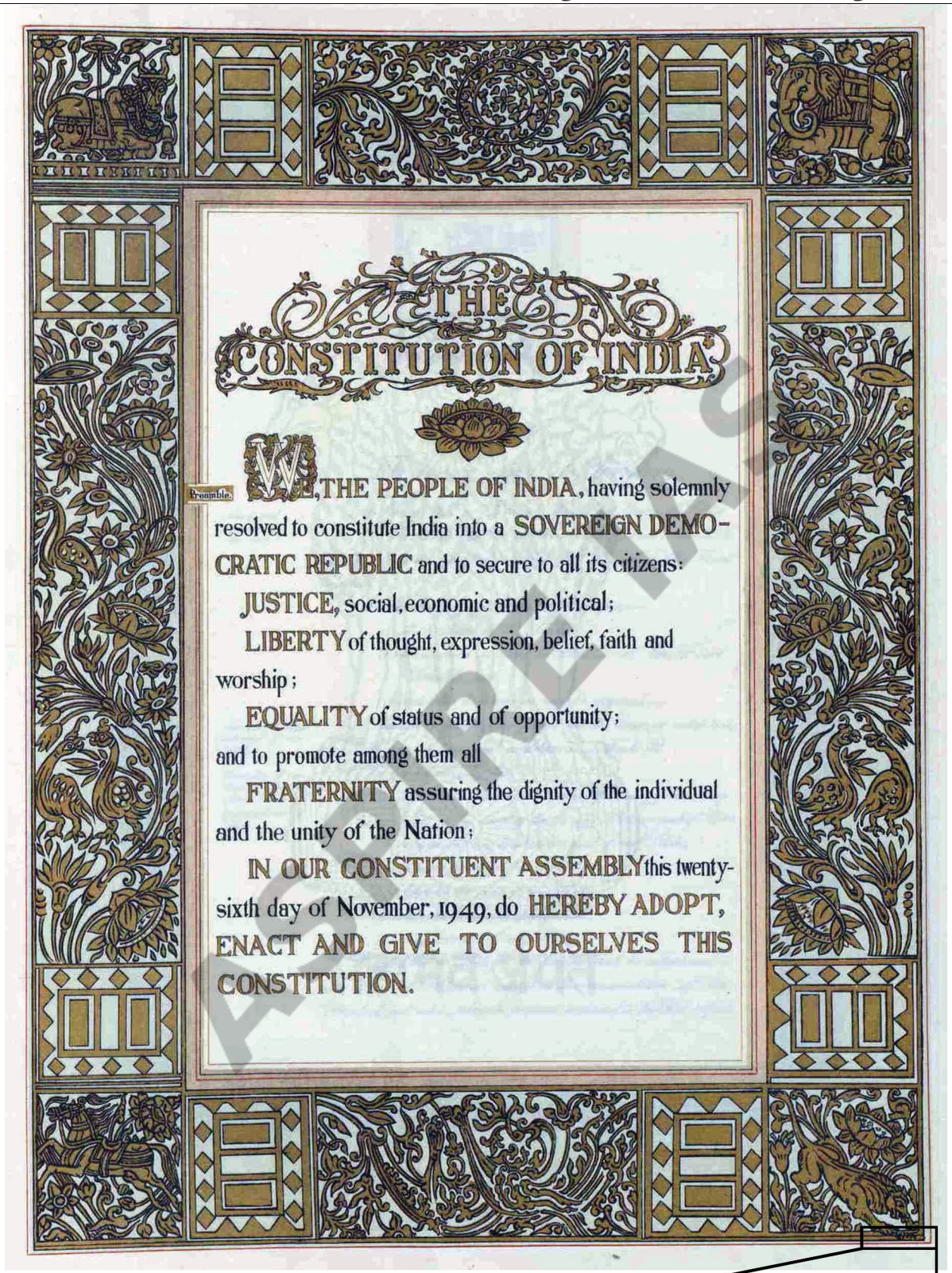

THE CONSTITUTION OF INDIA

Preamble

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LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity;

and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

Signature of the artist Beohar Rammanohar Sinha as 'Ram'
अलंकरणकर्ता व्यौहार राममनोहर सिंहा के संक्षिप्त हस्ताक्षर 'राम'

UPSC "PT" DNA (Daily News Analysis)

Today on **26th November**, 71st constitution day will be celebrated in the country. Every year as part of the celebrations, a number of activities aimed at highlighting and reiterating the values and principles enshrined in the Constitution are organised.

Key Points

- In 1934, M N Roy first proposed the idea of a constituent assembly. Under the Cabinet Mission plan of 1946, elections were held for the formation of the constituent assembly.
- Constitution Day or Samvidhan Diwas is also known as National Law Day.
- The day commemorates the adoption of the Constitution in India.
- On this day in 1949, the Constituent Assembly of India formally adopted the Constitution of India that came into force on 26 January 1950.
- The Ministry of Social Justice and Empowerment on 19 November, 2015, notified the decision of the Government of India to celebrate 26 November as 'Constitution Day'.

About the Constitution of India:

- The framing of the Constitution took over 2 years, 11 months and 18 days.
- The original copies of the Indian Constitution weren't typed or printed. They have been handwritten and are now kept in a helium-filled case within the library of the Parliament.
- **Prem Bihari Narain Raizada** had written the unique copies of the Structure of India.
- Originally, the Constitution of India was written in English and Hindi.
- The Constitution of India has borrowed some of its features from a number of countries, including Britain, Ireland, Japan, USA, South Africa, Germany, Australia, and Canada.
- The basic structure of the Indian Constitution stands on the Government of India Act, 1935.
- World's lengthiest Constitution Federal System with Unitary Features Parliamentary Form of Government

Drafting Committee:

- The Drafting Committee had seven members: Alladi Krishnaswami Ayyar,

N. Gopalaswami, B.R. Ambedkar, K.M Munshi, Mohammad Saadulla,

B.L. Mitter and D.P. Khaitan.

- At its first meeting on 30th August 1947, the Drafting Committee elected

B.R Ambedkar as its Chairman.

Source: TH

ASPIRE IAS

Protest Against Bru Resettlement

GS-III | 26 November,2020

Protest Against Bru Resettlement

Recently, parts of north Tripura have witnessed violent protests over the proposed resettlement of Bru tribals.

Background:

- **Bru or Reang** is a community indigenous to Northeast India, living mostly in **Tripura, Mizoram and Assam**. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group.
- In Mizoram, they have been targeted by groups that do not consider them indigenous to the state.
- In 1997, following ethnic clashes, nearly 37,000 Brus fled Mamit, Kolasib and Lunglei districts of Mizoram and were accommodated in relief camps in Tripura.
- Since then, 5,000 have returned to Mizoram in eight phases of repatriation, while 32,000 still live in six relief camps in North Tripura.
- In January 2020, a quadrilateral agreement was signed by the Centre, the two state governments and Bru representatives to allow the remaining 32,000 to permanently settle in Tripura.

2020 Agreement:

- After the agreement was made in January 2020, the state has planned 12 resettlement spots across six districts with 300 families each.
- The Centre has announced a special development project with funding of Rs. 600 crore.

Each resettled family will get an estimated 0.03 acres of land for building a home, Rs. 1.5 lakh as housing assistance, and Rs. 4 lakh as a one-time cash benefit for sustenance, a monthly allowance of Rs. 5,000 and free rations for two years from the date of resettlement.

Reason for the Protest:

- The 2020 agreement led to protests from Bengali and Mizo groups in Tripura. They claim that settling thousands of migrants permanently in Kanchanpur sub- division of North Tripura district would lead to demographic imbalance, exert pressure on local resources and potentially lead to law and order problems.
- They alleged that 650 Bengali families from around Kanchanpur and 81 Mizo families from Jampui Hill range, who fled due to “atrocities” by Brus, were yet to be resettled two decades on.

Conditions of the Brus:

- They are in fear and uncertainty as they suffer an economic blockade due to these protests.

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- They haven't received foodgrains as per their relief package this month and if the protest continues, their condition will deteriorate further.

Source: IE

Northeast Monsoon

GS-I | 26 November,2020

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Subdued Northeast Monsoon

Rainfall over the southern peninsular region has been deficient so far, indicating that the northeast monsoon has remained subdued this year.

Significance:

Pattern of Rainfall in India: India receives rainfall during two seasons:

- About 75% of the country's annual rainfall is received from the Southwest monsoon between June and September.
- The Northeast monsoon occurs during October to December, and is a comparatively small-scale monsoon, which is confined to the Southern peninsula. It is called the winter monsoon.

Northeast Monsoon and Rainfall:

- After the complete withdrawal of the Southwest monsoon from the country takes place by mid-October, the wind pattern rapidly changes from the south-westerly to the north-easterly direction.
- The period after the Southwest monsoon season, from October to December, is the peak time for cyclonic activity in the North Indian Ocean region covering the Arabian Sea and the Bay of Bengal.

The winds associated with the formation of low pressure systems, depressions, or cyclones influence this monsoon, and therefore, the rainfall.

Regions associated with Northeast Monsoon:

- The rainfall associated with the Northeast monsoon is important for Tamil Nadu, Puducherry, Karaikal, Yanam, coastal Andhra Pradesh, Kerala, north interior Karnataka, Mahe and Lakshadweep.
- Tamil Nadu records about 48% of its annual rainfall during these months, making it the key factor for undertaking agricultural activities and reservoir management in the state.

- Some South Asian countries such as Maldives, Sri Lanka and Myanmar, too, record rainfall during October to December.

Reasons for deficient rainfall this Northeast monsoon:

Prevailing La Niña conditions in the Pacific Ocean:

- La Niña conditions enhance the rainfall associated with the Southwest monsoon, but has a negative impact on rainfall associated with the Northeast monsoon.
- La Niña (Spanish for 'little girl') refers to the large-scale cooling of the ocean surface temperatures in the central and eastern equatorial Pacific Ocean, coupled with changes in the tropical atmospheric circulation, namely winds, pressure and rainfall.
- It usually has the opposite impacts on weather and climate as El Niño, which is the warm phase of the so-called El Niño Southern Oscillation (ENSO).

  - El Niño (Spanish for 'little boy') is the abnormal surface warming observed along the eastern and central regions of the Pacific Ocean (region between Peru and Papua New Guinea).
  - La Nina and El Nino are large-scale ocean phenomena which influence the global weather winds, temperature and rainfall.
  - They have the ability to trigger extreme weather events like droughts, floods, hot and cold conditions, globally.
  - Each cycle can last anywhere between 9 to 12 months, at times extendable to 18 months and re-occur after every three to five years.

Inter Tropical Convective Zone (ITCZ):

- The current position of the ITCZ has also contributed to the poor rainfall during the ongoing monsoon season.
- The ITCZ is a low-pressure belt, whose northward and southward movements along the equator determine the precipitation in the tropics.
- Currently, the ITCZ is located to the north of its normal position.

Other Important Atmospheric Circulation

Madden-Julian Oscillation (MJO): The MJO can be defined as an eastward moving 'pulse' of clouds, rainfall, winds and pressure near the equator that typically recurs every 30 to 60 days.

Source: TH

Tropical Cyclone Nivar

GS-I | 26 November,2020

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Cyclone Nivar

Why in News?

Recently, the tropical cyclone Nivar has made landfall along the Tamil Nadu- Puducherry coast.

Landfall refers to the phenomenon of a cyclone's outer wall moving over the coastline and beyond.

Key Points

Tropical Cyclone:

- A tropical cyclone is an intense circular storm that originates over warm tropical oceans and is characterized by low atmospheric pressure, high winds, and heavy rain.
- A characteristic feature of tropical cyclones is the eye, a central region of clear skies, warm temperatures, and low atmospheric pressure.
- Storms of this type are called hurricanes in the North Atlantic and eastern Pacific and typhoons in SouthEast Asia and China. They are called tropical cyclones in the southwest Pacific and Indian Ocean region and Willy- willies in north-western Australia.
- Storms rotate anticlockwise in the northern hemisphere and clockwise in the southern hemisphere.

Cyclone Category	Wind Speed in Km/h	Damage Capacity
01	120-150	Minimal
02	150-180	Moderate
03	180-210	Extensive
04	210-250	Extreme
05	250 +	Catastrophic

Type of Disturbances	Wind Speed in Km/h
Low Pressure	Less than 31
Depression	31-49
Deep Depression	49-61
Cyclonic Storm	61-88
Severe Cyclonic Storm	88-117
Very Severe Cyclone	118-221
Super Cyclone	More than 221

Cyclone Nivar:

- It is the fourth cyclone that has taken shape in the North Indian Ocean region this year. The first three cyclones were Cyclone Gati (made landfall in Somalia in November), Cyclone Amphan (eastern India witnessed it in May), and Cyclone Nisarga (in Maharashtra).
- Nivar will be the second cyclone to hit Tamil Nadu in two years after Cyclone Gaja in 2018.
- The storm has been named Cyclone Nivar, based on the guidelines of the World Meteorological Organisation (WMO). Nivara has been selected from the list of names given by Iran.

  - According to WMO guidelines, countries in every region are supposed to give names for cyclones.
  - The North Indian Ocean Region covers tropical cyclones formed over Bay of Bengal and Arabian Sea.
  - The 13 members, which come under the region, are Bangladesh, India, Maldives, Myanmar, Oman, Pakistan, Sri Lanka, Thailand, Iran, Qatar, Saudi Arabia, the UAE and Yemen.
  - A total of 169 cyclones were named by these countries for this year, with 13 names from each country.

- It has weakened from a very severe cyclonic storm to a severe cyclonic storm with a wind speed of 100-110 km per hour.

Government Steps:

The Tamil Nadu government has announced a public holiday under the Negotiable Instruments Act, 1881, in 16 districts, including Chennai, considering the impact of Cyclone Nivar.

Fishing activities have been restricted and residents evacuated in coastal areas hit by the cyclone. The National Disaster Response Force (NDRF) has deployed its teams in the affected regions.

Source: TH

ASPIRE IAS

Center within its rights to suspend MPLADS: Bombay HC

GS-II | 26 November,2020

Centre within its rights to suspend MPLADS, says Bombay high court:

Recent Bombay High Court ruling:

The Union government was within its powers to suspend the MPLAD scheme and divert such funds to combat Covid-19.

Besides, this (Covid-19) is a disaster so the government will have to resort to Disaster Management Act. It is within its powers to invoke the Act.

What's the issue?

- The Union government had resorted to Disaster Management Act to suspend the member of Parliament local area development (MPLAD) scheme in April this year.
- A petition was filed against this in the Court.

About MPLAD scheme: Launched in December, 1993.

- Seeks to provide a mechanism for the Members of Parliament to recommend works of developmental nature for creation of durable community assets and for provision of basic facilities including community infrastructure, based on locally felt needs.
- The MPLADS is a Plan Scheme fully funded by Government of India.
- The annual MPLADS fund entitlement per MP constituency is Rs. 5 crore.

Special focus:

- MPs are to recommend every year, works costing at least 15 per cent of the MPLADS entitlement for the year for areas inhabited by Scheduled Caste population and 7.5 per cent for areas inhabited by S.T. population.
- In order to encourage trusts and societies for the betterment of tribal people, a ceiling of Rs. 75 lakh is stipulated for building assets by trusts and societies subject to conditions prescribed in the scheme guidelines.

Release of Funds:

- Funds are released in the form of grants in-aid directly to the district authorities.
- The funds released under the scheme are non-lapsable.
- The liability of funds not released in a particular year is carried forward to the subsequent years, subject to eligibility.

The MPs have a recommendatory role under the scheme.

1. The district authority is empowered to examine the eligibility of works, sanction funds and select the implementing agencies, prioritise works, supervise overall execution, and monitor the scheme at the ground level.
2. At least 10% of the projects under implementation in the district are to be inspected every year by the district authority.

Recommendation of works:

- The Lok Sabha Members can recommend works in their respective constituencies.
- The elected members of the Rajya Sabha can recommend works anywhere in the state

from which they are elected.
- Nominated members of the Lok Sabha and Rajya Sabha may select works for implementation anywhere in the country.

Source: TH

Sahakar Pragya launched by Ministry of Agriculture

GS-III | 26 November,2020

Sahakar Pragya launched by Ministry of Agriculture

Objective: To impart training to primary cooperative societies in rural areas.

Key takeaways

- There will be 45 new training modules of Sahakar Pragya.
- Training imparted by: National Cooperative Development Corporation (NCDC) and Lakshmanrao Inamdar National Cooperative Research and Development Academy (LINAC).
- Sahakar Pragya shall enhance NCDC's training capacity by 18-fold through an elaborate network of 18 Regional Training Centres across the country by the dedicated LINAC set up and fully funded by NCDC.

Source: TH

Maharashtra sets up Desalination plants

GS-III | 26 November,2020

Maharashtra sets up Desalination Plants in Mumbai

It is now the fourth state in India to experiment with the idea.

Features

- A desalination plant turns salt water into water that is fit to drink.
- The most commonly used technology used for the process is reverse osmosis where an

external pressure is applied to push solvents from an area of high-solute concentration to an area of low-solute concentration through a membrane.

- The microscopic pores in the membranes allow water molecules through but leave salt and most other impurities behind, releasing clean water from the other side.
- Desalination is an expensive way of generating drinking water as it requires a high amount of energy.
- The other problem is the disposal of the by-product — highly concentrated brine — of the desalination process.
- While in most places brine is pumped back into the sea, there have been rising complaints that it ends up severely damaging the local ecology around the plant.

What is desalination?

- Worldwide, desalination is seen as one possible answer to stave off water crisis.
- These plants are mostly set up in areas that have access to sea water.
- Desalination has largely been limited to affluent countries in the Middle East and has recently started making inroads in parts of the United States and Australia.
- In India, Tamil Nadu has been the pioneer in using this technology, setting up two desalination plants near Chennai in 2010 and then 2013.
- The other states that have proposed these plants are Gujarat and Andhra Pradesh.

Source: TH

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UPSC "PT" DNA (Daily News Analysis)

Constitution Day

GS-II | 26 November,2020

The Constitution Day

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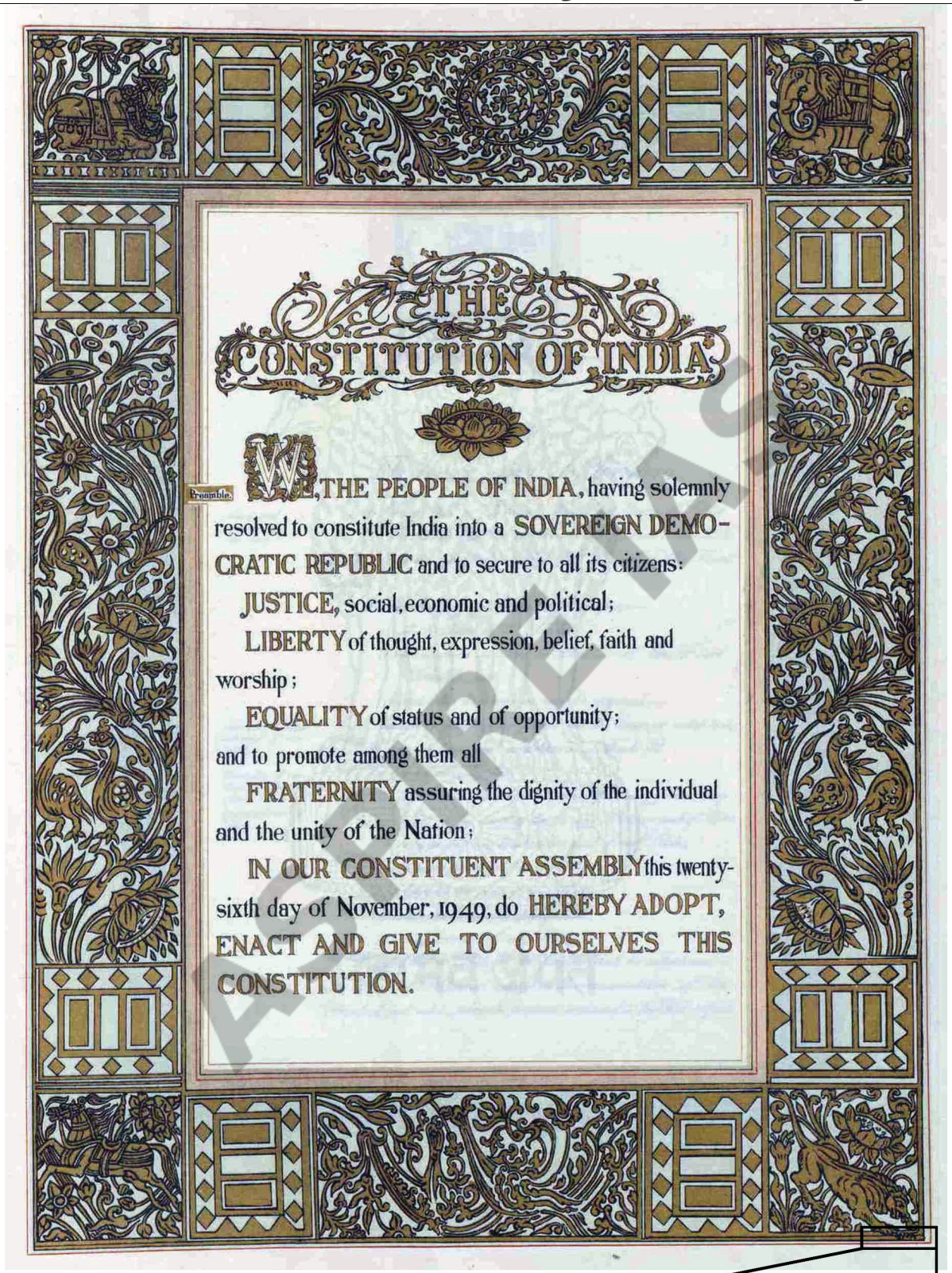

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FRATERNITY assuring the dignity of the individual and the unity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

Signature of the artist Beohar Rammanohar Sinha as 'Ram'
अलंकरणकर्ता व्यौहार राममनोहर सिंहा के संक्षिप्त हस्ताक्षर 'राम'

UPSC "PT" DNA (Daily News Analysis)

Today on **26th November**, 71st constitution day will be celebrated in the country. Every year as part of the celebrations, a number of activities aimed at highlighting and reiterating the values and principles enshrined in the Constitution are organised.

Key Points

- In 1934, M N Roy first proposed the idea of a constituent assembly. Under the Cabinet Mission plan of 1946, elections were held for the formation of the constituent assembly.
- Constitution Day or Samvidhan Diwas is also known as National Law Day.
- The day commemorates the adoption of the Constitution in India.
- On this day in 1949, the Constituent Assembly of India formally adopted the Constitution of India that came into force on 26 January 1950.
- The Ministry of Social Justice and Empowerment on 19 November, 2015, notified the decision of the Government of India to celebrate 26 November as 'Constitution Day'.

About the Constitution of India:

- The framing of the Constitution took over 2 years, 11 months and 18 days.
- The original copies of the Indian Constitution weren't typed or printed. They have been handwritten and are now kept in a helium-filled case within the library of the Parliament.
- **Prem Bihari Narain Raizada** had written the unique copies of the Structure of India.
- Originally, the Constitution of India was written in English and Hindi.
- The Constitution of India has borrowed some of its features from a number of countries, including Britain, Ireland, Japan, USA, South Africa, Germany, Australia, and Canada.
- The basic structure of the Indian Constitution stands on the Government of India Act, 1935.
- World's lengthiest Constitution Federal System with Unitary Features Parliamentary Form of Government

Drafting Committee:

- The Drafting Committee had seven members: Alladi Krishnaswami Ayyar,

N. Gopalaswami, B.R. Ambedkar, K.M Munshi, Mohammad Saadulla,

B.L. Mitter and D.P. Khaitan.

- At its first meeting on 30th August 1947, the Drafting Committee elected

B.R Ambedkar as its Chairman.

Source: TH

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Protest Against Bru Resettlement

GS-III | 26 November,2020

Protest Against Bru Resettlement

Recently, parts of north Tripura have witnessed violent protests over the proposed resettlement of Bru tribals.

Background:

- **Bru or Reang** is a community indigenous to Northeast India, living mostly in **Tripura, Mizoram and Assam**. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group.
- In Mizoram, they have been targeted by groups that do not consider them indigenous to the state.
- In 1997, following ethnic clashes, nearly 37,000 Brus fled Mamit, Kolasib and Lunglei districts of Mizoram and were accommodated in relief camps in Tripura.
- Since then, 5,000 have returned to Mizoram in eight phases of repatriation, while 32,000 still live in six relief camps in North Tripura.
- In January 2020, a quadrilateral agreement was signed by the Centre, the two state governments and Bru representatives to allow the remaining 32,000 to permanently settle in Tripura.

2020 Agreement:

- After the agreement was made in January 2020, the state has planned 12 resettlement spots across six districts with 300 families each.
- The Centre has announced a special development project with funding of Rs. 600 crore.

Each resettled family will get an estimated 0.03 acres of land for building a home, Rs. 1.5 lakh as housing assistance, and Rs. 4 lakh as a one-time cash benefit for sustenance, a monthly allowance of Rs. 5,000 and free rations for two years from the date of resettlement.

Reason for the Protest:

- The 2020 agreement led to protests from Bengali and Mizo groups in Tripura. They claim that settling thousands of migrants permanently in Kanchanpur sub- division of North Tripura district would lead to demographic imbalance, exert pressure on local resources and potentially lead to law and order problems.
- They alleged that 650 Bengali families from around Kanchanpur and 81 Mizo families from Jampui Hill range, who fled due to “atrocities” by Brus, were yet to be resettled two decades on.

Conditions of the Brus:

- They are in fear and uncertainty as they suffer an economic blockade due to these protests.

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- They haven't received foodgrains as per their relief package this month and if the protest continues, their condition will deteriorate further.

Source: IE

Northeast Monsoon

GS-I | 26 November,2020

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Subdued Northeast Monsoon

Rainfall over the southern peninsular region has been deficient so far, indicating that the northeast monsoon has remained subdued this year.

Significance:

Pattern of Rainfall in India: India receives rainfall during two seasons:

- About 75% of the country's annual rainfall is received from the Southwest monsoon between June and September.
- The Northeast monsoon occurs during October to December, and is a comparatively small-scale monsoon, which is confined to the Southern peninsula. It is called the winter monsoon.

Northeast Monsoon and Rainfall:

- After the complete withdrawal of the Southwest monsoon from the country takes place by mid-October, the wind pattern rapidly changes from the south-westerly to the north-easterly direction.
- The period after the Southwest monsoon season, from October to December, is the peak time for cyclonic activity in the North Indian Ocean region covering the Arabian Sea and the Bay of Bengal.

The winds associated with the formation of low pressure systems, depressions, or cyclones influence this monsoon, and therefore, the rainfall.

Regions associated with Northeast Monsoon:

- The rainfall associated with the Northeast monsoon is important for Tamil Nadu, Puducherry, Karaikal, Yanam, coastal Andhra Pradesh, Kerala, north interior Karnataka, Mahe and Lakshadweep.
- Tamil Nadu records about 48% of its annual rainfall during these months, making it the key factor for undertaking agricultural activities and reservoir management in the state.

- Some South Asian countries such as Maldives, Sri Lanka and Myanmar, too, record rainfall during October to December.

Reasons for deficient rainfall this Northeast monsoon:

Prevailing La Niña conditions in the Pacific Ocean:

- La Niña conditions enhance the rainfall associated with the Southwest monsoon, but has a negative impact on rainfall associated with the Northeast monsoon.
- La Niña (Spanish for 'little girl') refers to the large-scale cooling of the ocean surface temperatures in the central and eastern equatorial Pacific Ocean, coupled with changes in the tropical atmospheric circulation, namely winds, pressure and rainfall.
- It usually has the opposite impacts on weather and climate as El Niño, which is the warm phase of the so-called El Niño Southern Oscillation (ENSO).

  - El Niño (Spanish for 'little boy') is the abnormal surface warming observed along the eastern and central regions of the Pacific Ocean (region between Peru and Papua New Guinea).
  - La Nina and El Nino are large-scale ocean phenomena which influence the global weather winds, temperature and rainfall.
  - They have the ability to trigger extreme weather events like droughts, floods, hot and cold conditions, globally.
  - Each cycle can last anywhere between 9 to 12 months, at times extendable to 18 months and re-occur after every three to five years.

Inter Tropical Convective Zone (ITCZ):

- The current position of the ITCZ has also contributed to the poor rainfall during the ongoing monsoon season.
- The ITCZ is a low-pressure belt, whose northward and southward movements along the equator determine the precipitation in the tropics.
- Currently, the ITCZ is located to the north of its normal position.

Other Important Atmospheric Circulation

Madden-Julian Oscillation (MJO): The MJO can be defined as an eastward moving 'pulse' of clouds, rainfall, winds and pressure near the equator that typically recurs every 30 to 60 days.

Source: TH

Tropical Cyclone Nivar

GS-I | 26 November,2020

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Cyclone Nivar

Why in News?

Recently, the tropical cyclone Nivar has made landfall along the Tamil Nadu- Puducherry coast.

Landfall refers to the phenomenon of a cyclone's outer wall moving over the coastline and beyond.

Key Points

Tropical Cyclone:

- A tropical cyclone is an intense circular storm that originates over warm tropical oceans and is characterized by low atmospheric pressure, high winds, and heavy rain.
- A characteristic feature of tropical cyclones is the eye, a central region of clear skies, warm temperatures, and low atmospheric pressure.
- Storms of this type are called hurricanes in the North Atlantic and eastern Pacific and typhoons in SouthEast Asia and China. They are called tropical cyclones in the southwest Pacific and Indian Ocean region and Willy- willies in north-western Australia.
- Storms rotate anticlockwise in the northern hemisphere and clockwise in the southern hemisphere.

Cyclone Category	Wind Speed in Km/h	Damage Capacity
01	120-150	Minimal
02	150-180	Moderate
03	180-210	Extensive
04	210-250	Extreme
05	250 +	Catastrophic

Type of Disturbances	Wind Speed in Km/h
Low Pressure	Less than 31
Depression	31-49
Deep Depression	49-61
Cyclonic Storm	61-88
Severe Cyclonic Storm	88-117
Very Severe Cyclone	118-221
Super Cyclone	More than 221

Cyclone Nivar:

- It is the fourth cyclone that has taken shape in the North Indian Ocean region this year. The first three cyclones were Cyclone Gati (made landfall in Somalia in November), Cyclone Amphan (eastern India witnessed it in May), and Cyclone Nisarga (in Maharashtra).
- Nivar will be the second cyclone to hit Tamil Nadu in two years after Cyclone Gaja in 2018.
- The storm has been named Cyclone Nivar, based on the guidelines of the World Meteorological Organisation (WMO). Nivara has been selected from the list of names given by Iran.

  - According to WMO guidelines, countries in every region are supposed to give names for cyclones.
  - The North Indian Ocean Region covers tropical cyclones formed over Bay of Bengal and Arabian Sea.
  - The 13 members, which come under the region, are Bangladesh, India, Maldives, Myanmar, Oman, Pakistan, Sri Lanka, Thailand, Iran, Qatar, Saudi Arabia, the UAE and Yemen.
  - A total of 169 cyclones were named by these countries for this year, with 13 names from each country.

- It has weakened from a very severe cyclonic storm to a severe cyclonic storm with a wind speed of 100-110 km per hour.

Government Steps:

The Tamil Nadu government has announced a public holiday under the Negotiable Instruments Act, 1881, in 16 districts, including Chennai, considering the impact of Cyclone Nivar.

Fishing activities have been restricted and residents evacuated in coastal areas hit by the cyclone. The National Disaster Response Force (NDRF) has deployed its teams in the affected regions.

Source: TH

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Center within its rights to suspend MPLADS: Bombay HC

GS-II | 26 November,2020

Centre within its rights to suspend MPLADS, says Bombay high court:

Recent Bombay High Court ruling:

The Union government was within its powers to suspend the MPLAD scheme and divert such funds to combat Covid-19.

Besides, this (Covid-19) is a disaster so the government will have to resort to Disaster Management Act. It is within its powers to invoke the Act.

What's the issue?

- The Union government had resorted to Disaster Management Act to suspend the member of Parliament local area development (MPLAD) scheme in April this year.
- A petition was filed against this in the Court.

About MPLAD scheme: Launched in December, 1993.

- Seeks to provide a mechanism for the Members of Parliament to recommend works of developmental nature for creation of durable community assets and for provision of basic facilities including community infrastructure, based on locally felt needs.
- The MPLADS is a Plan Scheme fully funded by Government of India.
- The annual MPLADS fund entitlement per MP constituency is Rs. 5 crore.

Special focus:

- MPs are to recommend every year, works costing at least 15 per cent of the MPLADS entitlement for the year for areas inhabited by Scheduled Caste population and 7.5 per cent for areas inhabited by S.T. population.
- In order to encourage trusts and societies for the betterment of tribal people, a ceiling of Rs. 75 lakh is stipulated for building assets by trusts and societies subject to conditions prescribed in the scheme guidelines.

Release of Funds:

- Funds are released in the form of grants in-aid directly to the district authorities.
- The funds released under the scheme are non-lapsable.
- The liability of funds not released in a particular year is carried forward to the subsequent years, subject to eligibility.

The MPs have a recommendatory role under the scheme.

1. The district authority is empowered to examine the eligibility of works, sanction funds and select the implementing agencies, prioritise works, supervise overall execution, and monitor the scheme at the ground level.
2. At least 10% of the projects under implementation in the district are to be inspected every year by the district authority.

Recommendation of works:

- The Lok Sabha Members can recommend works in their respective constituencies.
- The elected members of the Rajya Sabha can recommend works anywhere in the state

from which they are elected.
- Nominated members of the Lok Sabha and Rajya Sabha may select works for implementation anywhere in the country.

Source: TH

Sahakar Pragya launched by Ministry of Agriculture

GS-III | 26 November,2020

Sahakar Pragya launched by Ministry of Agriculture

Objective: To impart training to primary cooperative societies in rural areas.

Key takeaways

- There will be 45 new training modules of Sahakar Pragya.
- Training imparted by: National Cooperative Development Corporation (NCDC) and Lakshmanrao Inamdar National Cooperative Research and Development Academy (LINAC).
- Sahakar Pragya shall enhance NCDC's training capacity by 18-fold through an elaborate network of 18 Regional Training Centres across the country by the dedicated LINAC set up and fully funded by NCDC.

Source: TH

Maharashtra sets up Desalination plants

GS-III | 26 November,2020

Maharashtra sets up Desalination Plants in Mumbai

It is now the fourth state in India to experiment with the idea.

Features

- A desalination plant turns salt water into water that is fit to drink.
- The most commonly used technology used for the process is reverse osmosis where an

external pressure is applied to push solvents from an area of high-solute concentration to an area of low-solute concentration through a membrane.

- The microscopic pores in the membranes allow water molecules through but leave salt and most other impurities behind, releasing clean water from the other side.
- Desalination is an expensive way of generating drinking water as it requires a high amount of energy.
- The other problem is the disposal of the by-product — highly concentrated brine — of the desalination process.
- While in most places brine is pumped back into the sea, there have been rising complaints that it ends up severely damaging the local ecology around the plant.

What is desalination?

- Worldwide, desalination is seen as one possible answer to stave off water crisis.
- These plants are mostly set up in areas that have access to sea water.
- Desalination has largely been limited to affluent countries in the Middle East and has recently started making inroads in parts of the United States and Australia.
- In India, Tamil Nadu has been the pioneer in using this technology, setting up two desalination plants near Chennai in 2010 and then 2013.
- The other states that have proposed these plants are Gujarat and Andhra Pradesh.

Source: TH

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National Organ Donation Day

GS-III | 27 November,2020

National Organ Donation Day

Context

National Organ Donation Day was celebrated on 27th November by the Ministry of Health and Family Welfare.

Key Points

National Organ Transplant Programme (NOTP)

Provides financial grants for establishing ROTTOs, SOTTOs, developing new and upgrading existing retrieval and transplant centres.

Organ Donation Institutional Set up:

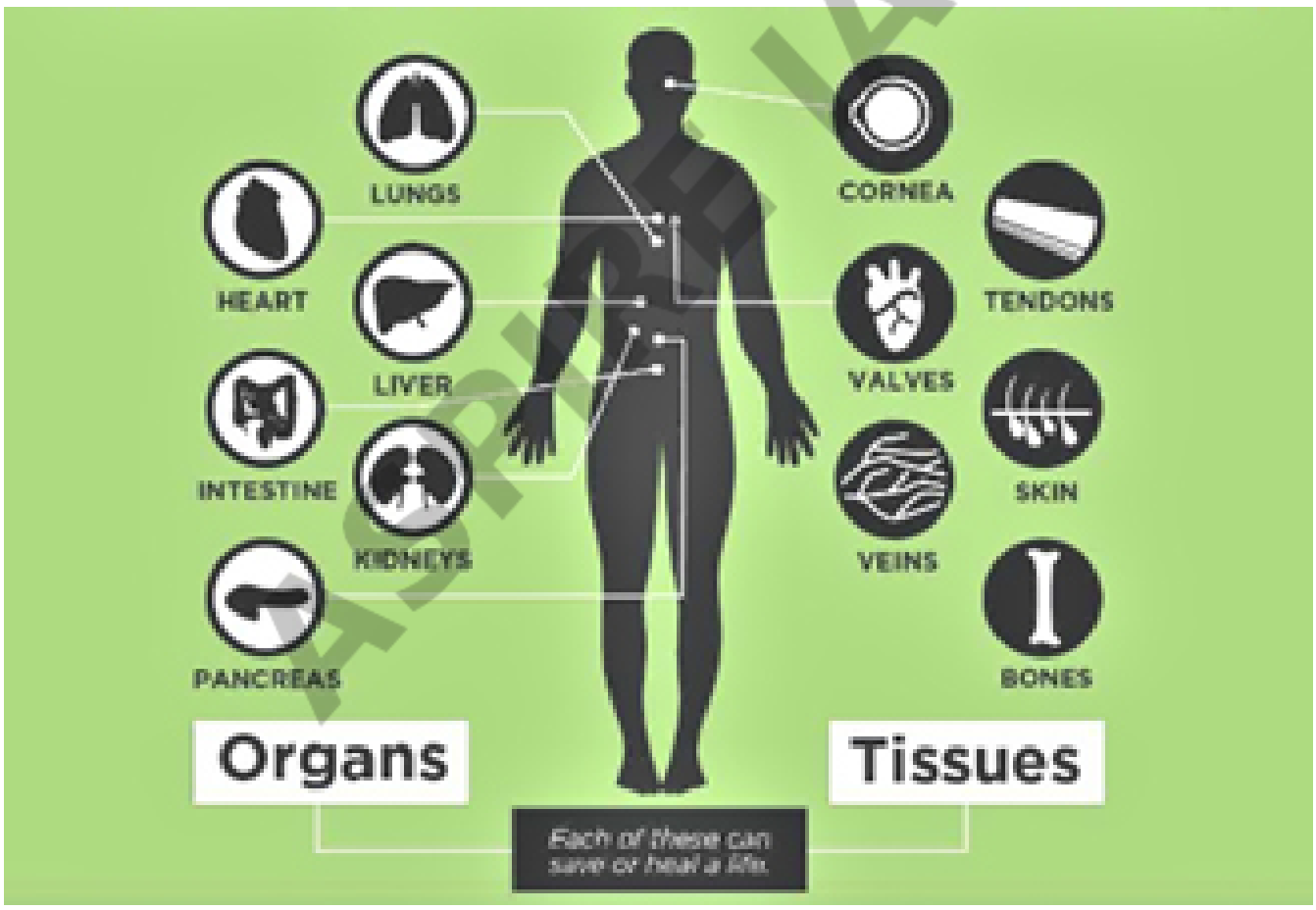
The National Organ & Tissue Transplant Organisation (NOTTO), the Regional Organ & Tissue Transplant Organisations (ROTTO) at regional level and the State Organ & Tissue Transplant Organisations (SOTTO) at state level.

State of Organ Donation in India:

India ranked **third** in the world as per WHO Global Observatory on Donation and Transplantation (GODT) in terms of organ donation.

Transplantation of Human Organs Act, 1994

- Transplantation of Human Organs Act was passed in 1994 and subsequently amended in 2011 thus bringing in form Transplantation of Human Organs (Amendment) Act 2011.
- It provides various regulations for the removal of human organs and its storage.
- It also regulates the transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs.



Main Provisions

- The act recognises brain death identified as a form of the death process and defines criteria for brain death.

- It provides regulatory and advisory bodies for monitoring transplantation activity.
- It also provides for maintenance of a registry of donors and recipients of human organs and tissues.

Source: PIB

Anti Defection Law

GS-II | 27 November,2020

Anti Defection Law

Context

India's first Member of Parliament to have been disqualified from the Lok Sabha has now been disqualified as an MLA in Mizoram. Mizoram Assembly Speaker disqualifies Zoram People's Movement MLA Lalduhoma.

Ground for disqualification:

The disqualification was on the ground that Mr. Lalduhoma had declared himself as a representative of the Zoram People's Movement (ZPM) despite being elected as an independent candidate from the Serchhip Assembly constituency.

He lost the character of an independent legislator because of the declaration.

What is the anti-defection law?

The Tenth Schedule was inserted in the **Constitution in 1985 by the 52nd Amendment Act.**

It lays down the process by which legislators may be disqualified on grounds of defection by the Presiding Officer of a legislature based on a petition by any other member of the House. The law applies to both Parliament and state assemblies.

When can a member be disqualified?

- If a member of a house belonging to a political party: Voluntarily gives up the membership of his political party, or Votes, or does not vote in the legislature, contrary to the directions 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.
- If an independent candidate **joins a political party** after the election.
- If a nominated member joins a party six months after he becomes a member of the legislature.

However, Legislators may change their party without the risk of disqualification in certain circumstances:

- The law allows a party to merge with or into another party provided that at **least two-thirds of its legislators are in favour of the merger.**
- In such a scenario, neither the members who decide to merge, nor the ones who stay with the original party will face disqualification.

Decision of the Presiding Officer is subject to judicial review:

The law initially stated that the decision of the Presiding Officer is not subject to judicial review. This condition was struck down by the Supreme Court in 1992, thereby allowing appeals against the Presiding Officer's decision in the High Court and Supreme Court.

However, it held that there may not be any judicial intervention until the Presiding Officer gives his order.

Various Recommendations to overcome the challenges posed by the law:

Dinesh Goswami Committee on electoral reforms:

Disqualification should be limited to following cases:

- A member voluntarily gives up the membership of his political party.
- A member abstains from voting, or votes contrary to the party whip in a motion of vote of confidence or motion of no-confidence. Political parties could issue whips only when the government was in danger.

Law Commission (170th Report):

- Provisions which exempt splits and mergers from disqualification to be deleted.
- Pre-poll electoral fronts should be treated as political parties under anti-defection
- Political parties should limit issuance of whips to instances only when the government is in danger.

Election Commission:

Decisions under the Tenth Schedule should be made by the President/ Governor on the binding advice of the Election Commission.

Source: TW

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Should there be one Nation one Election?

GS-II | 27 November,2020

PM on One Nation, One Election

Recently, the Prime Minister of India has addressed the concluding session of the 80th All India Presiding Officers Conference via videoconference, at Kevadiya (Gujarat) on the occasion of Constitution Day (26th November).

All India Presiding Officers Conference

- It began in 1921, and the Gujarat event marks its centenary year.
- Theme for 2020: 'Harmonious Coordination between Legislature, Executive and Judiciary: Key to a Vibrant Democracy'.
- It emphasises on the need for coordination between all three wings of the state, viz. Legislature, Executive and Judiciary and suggests them to be guided by the Constitution which mentions their role to their decorum.

In the meeting, PM raised the pitch for 'One Nation, One Election', a single voter list for all polls and also asked the presiding officers to simplify the language of statute books and allow for an easier process to weed out redundant laws.

One Nation, One Election:

The idea is about structuring the Indian election cycle in a manner so that elections to the Lok Sabha and the State Assemblies are synchronised together so that the election to both can be held within a given span of time.

Advantages:

- Help keep a check on the poll expenses, party expenses, etc. and also save public money.
- Reduce the burden on administrative setup and security forces. Ensure timely implementation of the government policies and also ensure that the administrative machinery is engaged in developmental activities rather than electioneering.
- Solve the problem of governance on the part of the politicians who are ruling. It is generally seen that for short term political gains from a particular assembly election, ruling politicians avoid taking a harsh long term decision which can ultimately help the country in the long run.
- Provide more time to all the stakeholders i.e. political parties, Election Commission of India (ECI), paramilitary forces, civilians for the preparation of elections once in five years.

Challenges:

- The synchronisation is a major problem considering the traditions and conventions that India's Parliamentary system follows. The government is accountable to the Lower House and it is possible that the government can fall before completing its term and the moment the government falls, there has to be an election.
- It is difficult to convince and bring together all the political parties on the idea.
- For holding simultaneous elections, the requirements for Electronic Voting Machines (EVMs) and the Voter Verified Paper Audit Trails (VVPATs) will double as the ECI has to provide two sets (one for election to the Legislative Assembly and second for that to the Lok Sabha).
- There will also be an additional requirement of the polling staff and for better security arrangements.

Suggestions:

- India held the elections for the assembly as well as the Lok Sabha from 1951-52 to till 1967. As such, therefore, there are no disagreements on adequacy and efficacy of the idea. India can even think of holding elections at the same time even for the local bodies.
- To sync the term of the State Legislative Assemblies with that of the Lok Sabha, the term of the state legislative assemblies can be reduced and increased accordingly. However, to do so, constitutional amendments may be needed in Articles 83, 85, 172, 174 and 356.
- In India, fixing the dates is not feasible because of the Parliamentary form of government so one radical solution is to switch to the Presidential form of Government where the President is not accountable to the House.
- Synchronising only the elections to the Lok Sabha and the Rajya Sabha.

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Source: TH

Comparison between the pardoning powers of President of USA vs India

GS-II | 27 November,2020

Comparison between President's Powers to Pardon in USA vs India

Context:

- Recently, the President of the United States of America (USA) has exercised his powers under the constitution to pardon his former National Security Advisor.
- Unlike the USA President, whose powers to grant pardons are almost unrestrained, the President of India has to act on the advice of the Cabinet.

Comparison between USA vs India

Pardoning Power of the President in the USA:

- The President of the USA has the constitutional right to pardon or commute sentences related to **federal crimes**.
- Clemency is a broad executive power, and is discretionary which means the President is **not answerable** for his pardons, and does not have to provide a reason for issuing one. But there are few limitations.
- The USA has a Presidential system.
- The USA Supreme Court has held that this power is granted without limit and cannot be restricted by Congress (legislature).

Limitations:

- All Presidents shall have power to grant Reprieves and Pardons for offenses against the United States, except in cases of impeachment.
- Further, the power only applies to federal crimes and **not state crimes**.
- Those pardoned by the President can still be tried under the laws of individual states.

Pardoning Power of the President in India:

Under **Article 72 (PT)** of the Constitution, the President shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence where the sentence is a sentence of death.

Limitation:

- The President cannot exercise his power of pardon independent of the government.
- In several cases, the Supreme Court (SC) has ruled that the President has to act on the advice of the Council of Ministers while deciding mercy pleas. These include **Maru Ram vs Union of India in 1980**, and **Dhananjoy Chatterjee vs State of West Bengal** in 1994.

Reconsideration:

Although the President is bound by the Cabinet's advice, **Article74 (1)** empowers him to return it for **reconsideration** once. If the Council of Ministers decides against any change, the President has no option but to accept it.

Under **Article 161**, the Governor in India too has pardoning powers.

Difference Between Pardoning Powers of President and Governor:

The scope of the pardoning power of the President under Article 72 is **wider** than the pardoning power of the Governor under Article 161 which differs in the following two ways:

1. **Court Martial:** The power of the President to grant pardon extends in cases where the punishment or sentence is by a Court Martial but Article 161 does not provide any such power to the Governor.
2. **Death sentence:** The President can grant pardon in all cases where the sentence given is the sentence of death but the pardoning power of the Governor does not extend to death sentence cases.

Terms for Prelims

Pardon: It removes both the sentence and the conviction and completely absolves the convict from all sentences, punishments and disqualifications.

Commutation: It denotes the substitution of one form of punishment for a lighter form. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.

Remission: It implies reducing the period of sentence without changing its character. For example, a sentence of rigorous imprisonment for two years may be remitted to rigorous imprisonment for one year.

Respite: It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.

Reprieve: It implies a stay of the execution of a sentence (especially that of death) for a temporary period. Its purpose is to enable the convict to have time to seek pardon or commutation from the President.

Source: Reuters

CPCB Study: Trends in Air Pollution

GS-III | 27 November,2020

Trends in Air Pollution: CPCB

According to a recent study commissioned by the Central Pollution Control Board (CPCB), the rate of increase in pollution levels in **southern and eastern India is far greater than the Indo-Gangetic plain (IGP).**

It has also found that air pollution in **rural areas has increased** at par with urban India.

About the Study:

- It was jointly carried out by IIT-Delhi and CPCB and analysed data from 2000 to 2019.
- The study, conducted on the basis of satellite data, is the first of its kind to look at air pollution spatially.
- Spatial mapping of pollution will be vital for the government to form its future policies under the National Clean Air Programme (NCAP).

Findings:

- The rate of increase of PM2.5 over eastern and southern India is more than 1.6% per year during this period, and less than 1.2% annually in the IGP.
- PM2.5 are fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.
- It is a major pollutant affecting the environment, human health and the climate.
- 436 cities/towns with a population of more than 1 lakh in 2019 exceeded the National Ambient Air Quality Standard (NAAQS) of 40 micrograms per metric cube (?g/m3).
- Population-weighted 20-year averaged PM2.5 over India is 57.3 ?g/m3, with a larger increase observed between 2010 and 2019 than in the 2000-09 period.
- As of 2019, 99.5% of districts in India did not meet the World Health Organisation (WHO) air quality guideline of 10 ?g/m3.

Statewise Data:

- In Odisha and Chhattisgarh, which have reported among the highest increase in air pollution in eastern India, this is due to mining activities and thermal coal power plants.
- In southern India, high urbanisation in and around cities such as Bengaluru or Hyderabad has led to increased emissions.
- Unfavourable meteorological conditions in eastern and peninsular India, along with

increase in emissions, has led to an overall increase in PM 2.5.

Analysis:

- While in absolute terms the level of air pollution continues to be the highest in the IGP, the rate of increase in air pollution is much higher in southern India and certain areas of eastern India.
- If the focus continues to be on IGP and the increasing pollution (levels) in southern and eastern India is not addressed now, in another 10 years these regions will also have the same problem as northern India does.

Urban-rural Divide:

- On PM2.5 levels cutting across the urban-rural divide, the study cites the example of Delhi, where it increased by 10.9% between 2001 to 2015.
- During the same period, PM2.5 exposure in rural India rose by 11.9%.
- A steady air pollution rise in rural India is due to high reliance on solid fuel for domestic use, which is the largest contributor to ambient PM2.5 in India.
- This implies that poor air quality in India is not an urban-centric problem.
- Air pollution in rural areas is rarely discussed with air pollution policies which continue to focus on urban centres.
- Schemes like the Pradhan Mantri Ujjwala Yojana (PMUY) are expected to decrease the pollution levels but it lacks a mechanism to track its progress.
- Since the household sources contribute more than 50% to ambient PM2.5 in rural areas, successful implementation of PMUY with sustained usage should arrest or even reverse the increasing trend in rural PM2.5.

Source: IE

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Swadhar Greh and Portal for Transgender Persons

GS-II | 27 November,2020

Initiatives for Transgender Persons: Garima Greh

Recently, the Ministry of Social Justice and Empowerment has launched the National Portal for Transgender Persons and has inaugurated Garima Greh, a shelter home for transgender persons.

National Portal for Transgender Persons:

- It has been launched in consonance with the Transgender Persons (Protection of Rights) Rules, 2020.

- It would help transgenders in digitally applying for a certificate and identity card from anywhere in the country, thus preventing any physical interaction with officials.
- It will help them track the status of application, rejection, grievance redressal, etc. which will ensure transparency in the process.
- The issuing authorities are also under strict timelines to process the applications and issue certificates and I-cards without any necessary delays.

Garima Greh:

- It has been opened in **Vadodara**, Gujarat and will be run in association with the Lakshya Trust, a community-based organisation entirely run by the transgenders.
- The Scheme of 'Shelter Home for Transgender Persons' includes shelter facility, food, clothing, recreational facilities, skill development opportunities, yoga, physical fitness, library facilities, legal support, technical advise for gender transition and surgeries, capacity building of trans-friendly organizations, employment, etc.
- The scheme will rehabilitate a minimum of 25 transgender persons in each homes identified by the Ministry.
- 10 cities have been identified to set up the 13 Shelter Homes.

Transgender Persons (Protection of Rights) Rules, 2020

- The Central Government made the rules under the powers conferred by the

Transgender Persons (Protection of Rights) Act, 2019.

- The Act came into effect on 10th January 2020, which is the first concrete step towards ensuring welfare of transgender persons.
- The rules seek to recognise the identity of transgenders and prohibit discrimination in the fields of education, employment, healthcare, holding or disposing of property, holding public or private office and access to and use of public services and benefits.

Background:

- In 2014, the Supreme Court of India, in the case of the National Legal Services Authority versus Union of India, established the foundation for the rights of transgender persons in India by recognising 'transgender' as a 'third gender' and laying down several measures for prohibition of discrimination against transgender persons and protection of their rights.
- The judgment recommended reservations for transgenders in jobs and educational institutions and their right to declare the self-perceived gender identity without undergoing a sex reassignment surgery.

Key Features of the Law Relating to Transgender Persons:

Definitions:

Definitions of 'person with intersex variation' and 'transgender person' have been provided to include trans men and trans women (whether or not such person has undergone sex

reassignment surgery, hormone or other therapy).

Non-discrimination:

- It prohibits the discrimination of transgender persons at educational establishments, in employment or occupational opportunities, healthcare services and access to public facilities and benefits.
- It further reinforces transgender persons' right to movement, right to reside, rent, or otherwise occupy property.

Certificate of Identity:

- It provides for a right to self-perceived gender identity and casts an obligation on the district magistrate to issue a 'certificate of identity' as a transgender person, without the requirement of any medical or physical examination.
- If the transgender person undergoes medical intervention to change sex either as a male or female and requires a revised identity certificate then they would need to apply to the district magistrate along with a certificate issued by the medical superintendent or chief medical officer of the concerned hospital.

Equal Opportunity Policy:

- Every establishment has been mandated to formulate an equal opportunity policy for transgender persons with certain specific information as prescribed under the law.
- This will help create inclusive establishments like inclusive education, etc.
- The process of inclusion also requires creation of infrastructure facilities like separate wards in hospitals and washrooms (unisex toilets).

Complaint Officer:

- Every establishment has been mandated to designate a person as a complaint officer to handle complaints from transgender persons.

Transgender Protection Cell:

- Every state government will also have to set up a Transgender Protection Cell under District Magistrate and Director general of Police to monitor offence against transgender persons.

Welfare schemes:

- The government has been mandated to formulate welfare schemes and programs which are transgender sensitive, non-stigmatising and non-discriminatory.

Medical Care Facilities:

- The government has been mandated to set up separate Human Immunodeficiency Virus (HIV) sero-surveillance centres to conduct sero-surveillance for transgender persons;

provide for medical care facilities including sex reassignment surgery and hormonal therapy; and provide for a coverage of medical expenses by a comprehensive insurance scheme for surgeries and other therapies.

National Council for Transgender Persons:

- Constitution of the NCT to advise the government for the formulation and monitoring of policies and redress the grievances of transgender persons.

Offences and Penalties:

- Offences, like indulging transgender persons in forced or bonded labour or denial of access to public places or physical, emotional or sexual abuse.
- Other offences committed under the provisions of the Transgender Persons Act, are punishable with imprisonment for a term of at least six months, extending up to two years along with fine.

Source: PIB

HC has virtually taken over executive function: A.P Govt to SC

GS-II | 27 November,2020

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Andhra Pradesh government recently told the Supreme Court that Andhra Pradesh High Court has "virtually taken over the executive functions of the State".

What's the issue?

- State government says that the High Court had "seriously violated the doctrine of Separation of Powers".
- Besides, in doing so, the High Court has completely ignored the warning that the Supreme Court has, time and again, sounded advising the courts to respect the other co-equal organs of the State and to refrain from assuming such powers to itself.

What has the Supreme Court said on the issue?

- A 2008 judgment of the Supreme Court said "in the name of judicial activism, judges cannot cross their limits and try to take over functions which belong to another organ of the State".

What is Judicial Activism?

It refers to the court's decision, based on the judges personal wisdom that do not go rigidly within the text of the statutory passed by the legislature and the use of judicial power broadly to provide remedies to the wide range of social wrongs for ensuring proper justice.

The Doctrine of separation of Power:

- The Constitution, under various provisions, has clearly drawn the line between Legislature and the Judiciary to maintain their independence in their respective functioning.
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Benefits:

- Provides a system of checks and balances to the other government branches.
- Brings out required innovation in the form of a solution.
- Provides judges to use their personal wisdom in cases where the law failed to provide a balance.
- It shows the instilled trust placed in the justice system and its judgments.
- Checks misuse of public power.
- Provides speedy solutions where the legislature gets stuck in the issue of majority.

Disadvantages or concerns associated:

- Violates the line drawn by the constitution.
- Judicial opinions of the judges become standards for ruling other cases.
- Judgment may be influenced by personal or selfish motives.
- Repeated interference of courts can erode the faith of the people in the quality, integrity and efficiency of governmental institutions.
- Courts limit the functioning of government.
- The independence of the judiciary is jeopardised when courts become embroiled in the passions of the day (Observation made by the U.S. Supreme Court).

Way forward:

In **Ram Jawaya v. The State of Punjab (1955),** the court observed: "Our Constitution does not contemplate assumption, by one organ or part of the state, of functions that essentially belong to another." This implies that there should be a broad separation of powers in the Constitution among the three organs of the state (legislative, executive, judiciary) and that one organ should not encroach into the domain of another. If this happens, the delicate balance in the Constitution will be upset and there will be chaos.

ASPIRE IAS

Source: TH

Reservation in Super Speciality Medical courses: SC

GS-II | 27 November,2020

Reservation in Super-speciality Medical Courses: SC

Recently, the Supreme Court (SC) has reserved its order on the state governments providing a 50% in-service reservation for admissions to super-speciality medical courses (Doctorate of Medicine/DM and Master of Chirurgiae/M. Ch.) in government colleges for the academic year 2020-21.

Features

In August 2020, the SC allowed states to grant the benefit of reservation of seats to in-service doctors in the National Eligibility cum Entrance Test (NEET) postgraduate (PG) degree courses.

The judgment held that the state has the legislative competence and authority to provide for a separate source of entry for in-service candidates seeking admission to PG/diploma courses in the exercise of powers under Entry 25, List III.

- **Entry 25 of List-III**: Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour.

In November 2020, Tamil Nadu government allowed counselling and filling of 50% of the super-speciality seats in the government medical colleges with in-service candidates in the state.

- The seats would be filled with candidates who have cleared NEET-Super Speciality Courses (SS) and the selection committee of the Directorate of Medical Education would prepare the merit list and conduct counselling.
- The state government argued that there was an acute need for super- speciality qualified doctors both in the medical academia and in practice.
- After 50% of seats in DM/M. Ch. courses in government medical colleges are allocated to in-service candidates, the rest will be surrendered to the Directorate General of Health Services (DGHS).

- DGHS is a repository of technical knowledge concerning public health, medical education and health care. It is an attached organisation of the Ministry of Health and Family Welfare.
- Doctors, including PG holders qualified in NEET 2020, challenged the decision saying that there is no concept of any reservation for admission to super- speciality medical courses.

They referred to the verdict in Dr Preeti Srivastava & Anr. versus State of Madhya Pradesh &

Ors, 1999 which held that "merit, and merit alone, is the basis for admission at the super-speciality level".

- Their appeal argued that the State order was contrary to the Postgraduate Medical Education (Amendment) Regulations of 2019, which mandated that the DGHS should be in charge of the admission process.
- The regulations empower DGHS to conduct the counselling for all super- speciality courses in medical educational institutions of the Central and state governments, deemed universities, medical educational institutions established by municipal bodies, trusts, etc.

Source: TH

IRNSS RECOGNIZED UNDER WWRNS BY IMO

GS-III | 27 November,2020

IRNSS RECOGNIZED UNDER WWRNS BY IMO

- The Indian Regional Navigation Satellite System (IRNSS) has been accepted as a component of the **World-Wide Radio Navigation System** by the International Maritime Organisation (IMO) for its operation in the Indian Ocean Region.
- This will enable the vessels to use IRNSS to obtain position information similar to GLONASS and GPS.

Impacts

- The navigation system up to **1,500 km** in the Indian Ocean waters can now **replace GPS**.
- This means that the ships in the Indian Ocean can obtain information from IRNSS for their position at sea.

What does the IMO recognition mean?

- The **IMO is an organization of the United Nations.**
- With the recognition, India has become the fourth country after **US, Russia and China** to have its own navigation systems.

What is IRNSS?

- It is an independent regional navigational satellite system developed by India to provide accurate position information services to help **ships** in their navigation.
- The GPS is Global Positioning System owned by the United States.
- GLONASS is Global Navigation Satellite System of Russia.

Who can use IRNSS?

- **Security agencies** can use IRNSS & **merchant vessels** including small fishing boats are authorized to use the system.
- However, IRNSS is only a **regional** navigational system and not a global navigational system.

Source: PIB

ASPIRE IAS

National Organ Donation Day

GS-III | 27 November,2020

National Organ Donation Day

Context

National Organ Donation Day was celebrated on 27th November by the Ministry of Health and Family Welfare.

Key Points

National Organ Transplant Programme (NOTP)

Provides financial grants for establishing ROTTOs, SOTTOs, developing new and upgrading existing retrieval and transplant centres.

Organ Donation Institutional Set up:

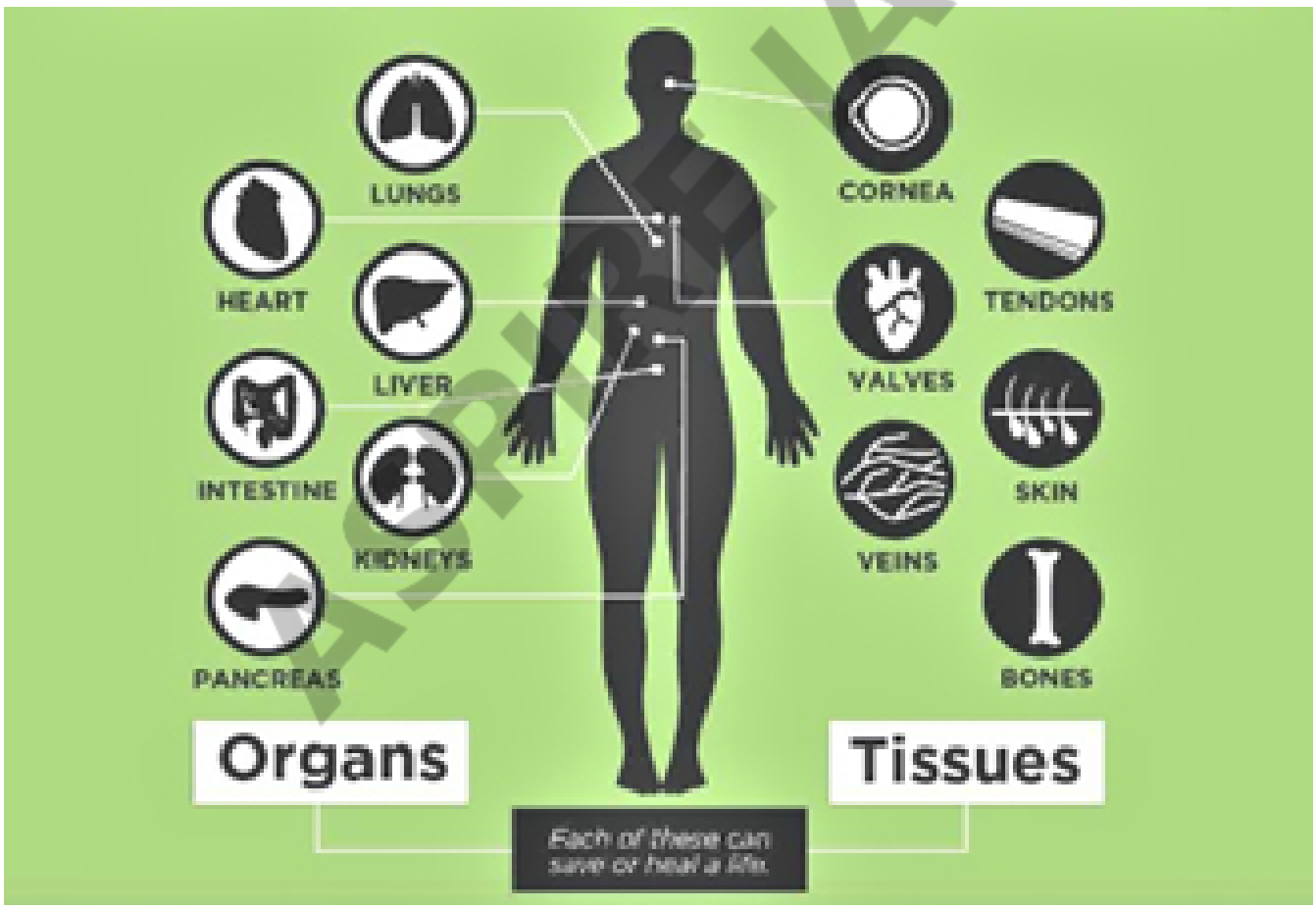
The National Organ & Tissue Transplant Organisation (NOTTO), the Regional Organ & Tissue Transplant Organisations (ROTTO) at regional level and the State Organ & Tissue Transplant Organisations (SOTTO) at state level.

State of Organ Donation in India:

India ranked **third** in the world as per WHO Global Observatory on Donation and Transplantation (GODT) in terms of organ donation.

Transplantation of Human Organs Act, 1994

- Transplantation of Human Organs Act was passed in 1994 and subsequently amended in 2011 thus bringing in form Transplantation of Human Organs (Amendment) Act 2011.
- It provides various regulations for the removal of human organs and its storage.
- It also regulates the transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs.



Main Provisions

- The act recognises brain death identified as a form of the death process and defines criteria for brain death.

- It provides regulatory and advisory bodies for monitoring transplantation activity.
- It also provides for maintenance of a registry of donors and recipients of human organs and tissues.

Source: PIB

Anti Defection Law

GS-II | 27 November,2020

Anti Defection Law

Context

India's first Member of Parliament to have been disqualified from the Lok Sabha has now been disqualified as an MLA in Mizoram. Mizoram Assembly Speaker disqualifies Zoram People's Movement MLA Lalduhoma.

Ground for disqualification:

The disqualification was on the ground that Mr. Lalduhoma had declared himself as a representative of the Zoram People's Movement (ZPM) despite being elected as an independent candidate from the Serchhip Assembly constituency.

He lost the character of an independent legislator because of the declaration.

What is the anti-defection law?

The Tenth Schedule was inserted in the **Constitution in 1985 by the 52nd Amendment Act.**

It lays down the process by which legislators may be disqualified on grounds of defection by the Presiding Officer of a legislature based on a petition by any other member of the House. The law applies to both Parliament and state assemblies.

When can a member be disqualified?

- If a member of a house belonging to a political party: Voluntarily gives up the membership of his political party, or Votes, or does not vote in the legislature, contrary to the directions 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.
- If an independent candidate **joins a political party** after the election.
- If a nominated member joins a party six months after he becomes a member of the legislature.

However, Legislators may change their party without the risk of disqualification in certain circumstances:

- The law allows a party to merge with or into another party provided that at **least two-thirds of its legislators are in favour of the merger.**
- In such a scenario, neither the members who decide to merge, nor the ones who stay with the original party will face disqualification.

Decision of the Presiding Officer is subject to judicial review:

The law initially stated that the decision of the Presiding Officer is not subject to judicial review. This condition was struck down by the Supreme Court in 1992, thereby allowing appeals against the Presiding Officer's decision in the High Court and Supreme Court.

However, it held that there may not be any judicial intervention until the Presiding Officer gives his order.

Various Recommendations to overcome the challenges posed by the law:

Dinesh Goswami Committee on electoral reforms:

Disqualification should be limited to following cases:

- A member voluntarily gives up the membership of his political party.
- A member abstains from voting, or votes contrary to the party whip in a motion of vote of confidence or motion of no-confidence. Political parties could issue whips only when the government was in danger.

Law Commission (170th Report):

- Provisions which exempt splits and mergers from disqualification to be deleted.
- Pre-poll electoral fronts should be treated as political parties under anti-defection
- Political parties should limit issuance of whips to instances only when the government is in danger.

Election Commission:

Decisions under the Tenth Schedule should be made by the President/ Governor on the binding advice of the Election Commission.

Source: TW

ASPIRE IAS

Should there be one Nation one Election?

GS-II | 27 November,2020

PM on One Nation, One Election

Recently, the Prime Minister of India has addressed the concluding session of the 80th All India Presiding Officers Conference via videoconference, at Kevadiya (Gujarat) on the occasion of Constitution Day (26th November).

All India Presiding Officers Conference

- It began in 1921, and the Gujarat event marks its centenary year.
- Theme for 2020: 'Harmonious Coordination between Legislature, Executive and Judiciary: Key to a Vibrant Democracy'.
- It emphasises on the need for coordination between all three wings of the state, viz. Legislature, Executive and Judiciary and suggests them to be guided by the Constitution which mentions their role to their decorum.

In the meeting, PM raised the pitch for 'One Nation, One Election', a single voter list for all polls and also asked the presiding officers to simplify the language of statute books and allow for an easier process to weed out redundant laws.

One Nation, One Election:

The idea is about structuring the Indian election cycle in a manner so that elections to the Lok Sabha and the State Assemblies are synchronised together so that the election to both can be held within a given span of time.

Advantages:

- Help keep a check on the poll expenses, party expenses, etc. and also save public money.
- Reduce the burden on administrative setup and security forces. Ensure timely implementation of the government policies and also ensure that the administrative machinery is engaged in developmental activities rather than electioneering.
- Solve the problem of governance on the part of the politicians who are ruling. It is generally seen that for short term political gains from a particular assembly election, ruling politicians avoid taking a harsh long term decision which can ultimately help the country in the long run.
- Provide more time to all the stakeholders i.e. political parties, Election Commission of India (ECI), paramilitary forces, civilians for the preparation of elections once in five years.

Challenges:

- The synchronisation is a major problem considering the traditions and conventions that India's Parliamentary system follows. The government is accountable to the Lower House and it is possible that the government can fall before completing its term and the moment the government falls, there has to be an election.
- It is difficult to convince and bring together all the political parties on the idea.
- For holding simultaneous elections, the requirements for Electronic Voting Machines (EVMs) and the Voter Verified Paper Audit Trails (VVPATs) will double as the ECI has to provide two sets (one for election to the Legislative Assembly and second for that to the Lok Sabha).
- There will also be an additional requirement of the polling staff and for better security arrangements.

Suggestions:

- India held the elections for the assembly as well as the Lok Sabha from 1951-52 to till 1967. As such, therefore, there are no disagreements on adequacy and efficacy of the idea. India can even think of holding elections at the same time even for the local bodies.
- To sync the term of the State Legislative Assemblies with that of the Lok Sabha, the term of the state legislative assemblies can be reduced and increased accordingly. However, to do so, constitutional amendments may be needed in Articles 83, 85, 172, 174 and 356.
- In India, fixing the dates is not feasible because of the Parliamentary form of government so one radical solution is to switch to the Presidential form of Government where the President is not accountable to the House.
- Synchronising only the elections to the Lok Sabha and the Rajya Sabha.

ASPIRE IAS

Source: TH

Comparison between the pardoning powers of President of USA vs India

GS-II | 27 November,2020

Comparison between President's Powers to Pardon in USA vs India

Context:

- Recently, the President of the United States of America (USA) has exercised his powers under the constitution to pardon his former National Security Advisor.
- Unlike the USA President, whose powers to grant pardons are almost unrestrained, the President of India has to act on the advice of the Cabinet.

Comparison between USA vs India

Pardoning Power of the President in the USA:

- The President of the USA has the constitutional right to pardon or commute sentences related to **federal crimes**.
- Clemency is a broad executive power, and is discretionary which means the President is **not answerable** for his pardons, and does not have to provide a reason for issuing one. But there are few limitations.
- The USA has a Presidential system.
- The USA Supreme Court has held that this power is granted without limit and cannot be restricted by Congress (legislature).

Limitations:

- All Presidents shall have power to grant Reprieves and Pardons for offenses against the United States, except in cases of impeachment.
- Further, the power only applies to federal crimes and **not state crimes**.
- Those pardoned by the President can still be tried under the laws of individual states.

Pardoning Power of the President in India:

Under **Article 72 (PT)** of the Constitution, the President shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence where the sentence is a sentence of death.

Limitation:

- The President cannot exercise his power of pardon independent of the government.
- In several cases, the Supreme Court (SC) has ruled that the President has to act on the advice of the Council of Ministers while deciding mercy pleas. These include **Maru Ram vs Union of India in 1980**, and **Dhananjoy Chatterjee vs State of West Bengal** in 1994.

Reconsideration:

Although the President is bound by the Cabinet's advice, **Article74 (1)** empowers him to return it for **reconsideration** once. If the Council of Ministers decides against any change, the President has no option but to accept it.

Under **Article 161**, the Governor in India too has pardoning powers.

Difference Between Pardoning Powers of President and Governor:

The scope of the pardoning power of the President under Article 72 is **wider** than the pardoning power of the Governor under Article 161 which differs in the following two ways:

1. **Court Martial:** The power of the President to grant pardon extends in cases where the punishment or sentence is by a Court Martial but Article 161 does not provide any such power to the Governor.
2. **Death sentence:** The President can grant pardon in all cases where the sentence given is the sentence of death but the pardoning power of the Governor does not extend to death sentence cases.

Terms for Prelims

Pardon: It removes both the sentence and the conviction and completely absolves the convict from all sentences, punishments and disqualifications.

Commutation: It denotes the substitution of one form of punishment for a lighter form. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.

Remission: It implies reducing the period of sentence without changing its character. For example, a sentence of rigorous imprisonment for two years may be remitted to rigorous imprisonment for one year.

Respite: It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.

Reprieve: It implies a stay of the execution of a sentence (especially that of death) for a temporary period. Its purpose is to enable the convict to have time to seek pardon or commutation from the President.

Source: Reuters

CPCB Study: Trends in Air Pollution

GS-III | 27 November,2020

Trends in Air Pollution: CPCB

According to a recent study commissioned by the Central Pollution Control Board (CPCB), the rate of increase in pollution levels in **southern and eastern India is far greater than the Indo-Gangetic plain (IGP).**

It has also found that air pollution in **rural areas has increased** at par with urban India.

About the Study:

- It was jointly carried out by IIT-Delhi and CPCB and analysed data from 2000 to 2019.
- The study, conducted on the basis of satellite data, is the first of its kind to look at air pollution spatially.
- Spatial mapping of pollution will be vital for the government to form its future policies under the National Clean Air Programme (NCAP).

Findings:

- The rate of increase of PM2.5 over eastern and southern India is more than 1.6% per year during this period, and less than 1.2% annually in the IGP.
- PM2.5 are fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.
- It is a major pollutant affecting the environment, human health and the climate.
- 436 cities/towns with a population of more than 1 lakh in 2019 exceeded the National Ambient Air Quality Standard (NAAQS) of 40 micrograms per metric cube (?g/m3).
- Population-weighted 20-year averaged PM2.5 over India is 57.3 ?g/m3, with a larger increase observed between 2010 and 2019 than in the 2000-09 period.
- As of 2019, 99.5% of districts in India did not meet the World Health Organisation (WHO) air quality guideline of 10 ?g/m3.

Statewise Data:

- In Odisha and Chhattisgarh, which have reported among the highest increase in air pollution in eastern India, this is due to mining activities and thermal coal power plants.
- In southern India, high urbanisation in and around cities such as Bengaluru or Hyderabad has led to increased emissions.
- Unfavourable meteorological conditions in eastern and peninsular India, along with

increase in emissions, has led to an overall increase in PM 2.5.

Analysis:

- While in absolute terms the level of air pollution continues to be the highest in the IGP, the rate of increase in air pollution is much higher in southern India and certain areas of eastern India.
- If the focus continues to be on IGP and the increasing pollution (levels) in southern and eastern India is not addressed now, in another 10 years these regions will also have the same problem as northern India does.

Urban-rural Divide:

- On PM2.5 levels cutting across the urban-rural divide, the study cites the example of Delhi, where it increased by 10.9% between 2001 to 2015.
- During the same period, PM2.5 exposure in rural India rose by 11.9%.
- A steady air pollution rise in rural India is due to high reliance on solid fuel for domestic use, which is the largest contributor to ambient PM2.5 in India.
- This implies that poor air quality in India is not an urban-centric problem.
- Air pollution in rural areas is rarely discussed with air pollution policies which continue to focus on urban centres.
- Schemes like the Pradhan Mantri Ujjwala Yojana (PMUY) are expected to decrease the pollution levels but it lacks a mechanism to track its progress.
- Since the household sources contribute more than 50% to ambient PM2.5 in rural areas, successful implementation of PMUY with sustained usage should arrest or even reverse the increasing trend in rural PM2.5.

Source: IE

ASPIRE IAS

Swadhar Greh and Portal for Transgender Persons

GS-II | 27 November,2020

Initiatives for Transgender Persons: Garima Greh

Recently, the Ministry of Social Justice and Empowerment has launched the National Portal for Transgender Persons and has inaugurated Garima Greh, a shelter home for transgender persons.

National Portal for Transgender Persons:

- It has been launched in consonance with the Transgender Persons (Protection of Rights) Rules, 2020.

- It would help transgenders in digitally applying for a certificate and identity card from anywhere in the country, thus preventing any physical interaction with officials.
- It will help them track the status of application, rejection, grievance redressal, etc. which will ensure transparency in the process.
- The issuing authorities are also under strict timelines to process the applications and issue certificates and I-cards without any necessary delays.

Garima Greh:

- It has been opened in **Vadodara**, Gujarat and will be run in association with the Lakshya Trust, a community-based organisation entirely run by the transgenders.
- The Scheme of 'Shelter Home for Transgender Persons' includes shelter facility, food, clothing, recreational facilities, skill development opportunities, yoga, physical fitness, library facilities, legal support, technical advise for gender transition and surgeries, capacity building of trans-friendly organizations, employment, etc.
- The scheme will rehabilitate a minimum of 25 transgender persons in each homes identified by the Ministry.
- 10 cities have been identified to set up the 13 Shelter Homes.

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- The Act came into effect on 10th January 2020, which is the first concrete step towards ensuring welfare of transgender persons.
- The rules seek to recognise the identity of transgenders and prohibit discrimination in the fields of education, employment, healthcare, holding or disposing of property, holding public or private office and access to and use of public services and benefits.

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- In 2014, the Supreme Court of India, in the case of the National Legal Services Authority versus Union of India, established the foundation for the rights of transgender persons in India by recognising 'transgender' as a 'third gender' and laying down several measures for prohibition of discrimination against transgender persons and protection of their rights.
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Disadvantages or concerns associated:

- Violates the line drawn by the constitution.
- Judicial opinions of the judges become standards for ruling other cases.
- Judgment may be influenced by personal or selfish motives.
- Repeated interference of courts can erode the faith of the people in the quality, integrity and efficiency of governmental institutions.
- Courts limit the functioning of government.
- The independence of the judiciary is jeopardised when courts become embroiled in the passions of the day (Observation made by the U.S. Supreme Court).

Way forward:

In **Ram Jawaya v. The State of Punjab (1955),** the court observed: "Our Constitution does not contemplate assumption, by one organ or part of the state, of functions that essentially belong to another." This implies that there should be a broad separation of powers in the Constitution among the three organs of the state (legislative, executive, judiciary) and that one organ should not encroach into the domain of another. If this happens, the delicate balance in the Constitution will be upset and there will be chaos.

ASPIRE IAS

Source: TH

Reservation in Super Speciality Medical courses: SC

GS-II | 27 November,2020

Reservation in Super-speciality Medical Courses: SC

Recently, the Supreme Court (SC) has reserved its order on the state governments providing a 50% in-service reservation for admissions to super-speciality medical courses (Doctorate of Medicine/DM and Master of Chirurgiae/M. Ch.) in government colleges for the academic year 2020-21.

Features

In August 2020, the SC allowed states to grant the benefit of reservation of seats to in-service doctors in the National Eligibility cum Entrance Test (NEET) postgraduate (PG) degree courses.

The judgment held that the state has the legislative competence and authority to provide for a separate source of entry for in-service candidates seeking admission to PG/diploma courses in the exercise of powers under Entry 25, List III.

- **Entry 25 of List-III**: Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour.

In November 2020, Tamil Nadu government allowed counselling and filling of 50% of the super-speciality seats in the government medical colleges with in-service candidates in the state.

- The seats would be filled with candidates who have cleared NEET-Super Speciality Courses (SS) and the selection committee of the Directorate of Medical Education would prepare the merit list and conduct counselling.
- The state government argued that there was an acute need for super- speciality qualified doctors both in the medical academia and in practice.
- After 50% of seats in DM/M. Ch. courses in government medical colleges are allocated to in-service candidates, the rest will be surrendered to the Directorate General of Health Services (DGHS).

- DGHS is a repository of technical knowledge concerning public health, medical education and health care. It is an attached organisation of the Ministry of Health and Family Welfare.
- Doctors, including PG holders qualified in NEET 2020, challenged the decision saying that there is no concept of any reservation for admission to super- speciality medical courses.

They referred to the verdict in Dr Preeti Srivastava & Anr. versus State of Madhya Pradesh &

Ors, 1999 which held that "merit, and merit alone, is the basis for admission at the super-speciality level".

- Their appeal argued that the State order was contrary to the Postgraduate Medical Education (Amendment) Regulations of 2019, which mandated that the DGHS should be in charge of the admission process.
- The regulations empower DGHS to conduct the counselling for all super- speciality courses in medical educational institutions of the Central and state governments, deemed universities, medical educational institutions established by municipal bodies, trusts, etc.

Source: TH

IRNSS RECOGNIZED UNDER WWRNS BY IMO

GS-III | 27 November,2020

IRNSS RECOGNIZED UNDER WWRNS BY IMO

- The Indian Regional Navigation Satellite System (IRNSS) has been accepted as a component of the **World-Wide Radio Navigation System** by the International Maritime Organisation (IMO) for its operation in the Indian Ocean Region.
- This will enable the vessels to use IRNSS to obtain position information similar to GLONASS and GPS.

Impacts

- The navigation system up to **1,500 km** in the Indian Ocean waters can now **replace GPS**.
- This means that the ships in the Indian Ocean can obtain information from IRNSS for their position at sea.

What does the IMO recognition mean?

- The **IMO is an organization of the United Nations.**
- With the recognition, India has become the fourth country after **US, Russia and China** to have its own navigation systems.

What is IRNSS?

- It is an independent regional navigational satellite system developed by India to provide accurate position information services to help **ships** in their navigation.
- The GPS is Global Positioning System owned by the United States.
- GLONASS is Global Navigation Satellite System of Russia.

Who can use IRNSS?

- **Security agencies** can use IRNSS & **merchant vessels** including small fishing boats are authorized to use the system.
- However, IRNSS is only a **regional** navigational system and not a global navigational system.

Source: PIB

ASPIRE IAS

India - Vietnam

GS-II | 28 November,2020

India-Vietnam Talks

Recently, Defence Ministers of India and Vietnam have discussed collaboration in defence industry capability building, training and cooperation in United Nations (UN) peacekeeping operations, etc.

Defence Cooperation:

Both countries reaffirmed the strong India-Vietnam Defence cooperation which is a key pillar of Comprehensive Strategic Partnership (2016).

Underlining the vision of "**Atmanirbhar Bharat"** for enhancing self-reliance including defence industries, India urged closer defence industry cooperation by concluding an institutionalised framework agreement in the near future.

Cooperation in the field of Hydrography:

This will enable sharing of Hydrographic data and assist in production of navigational charts by both sides.

What is Hydrography?

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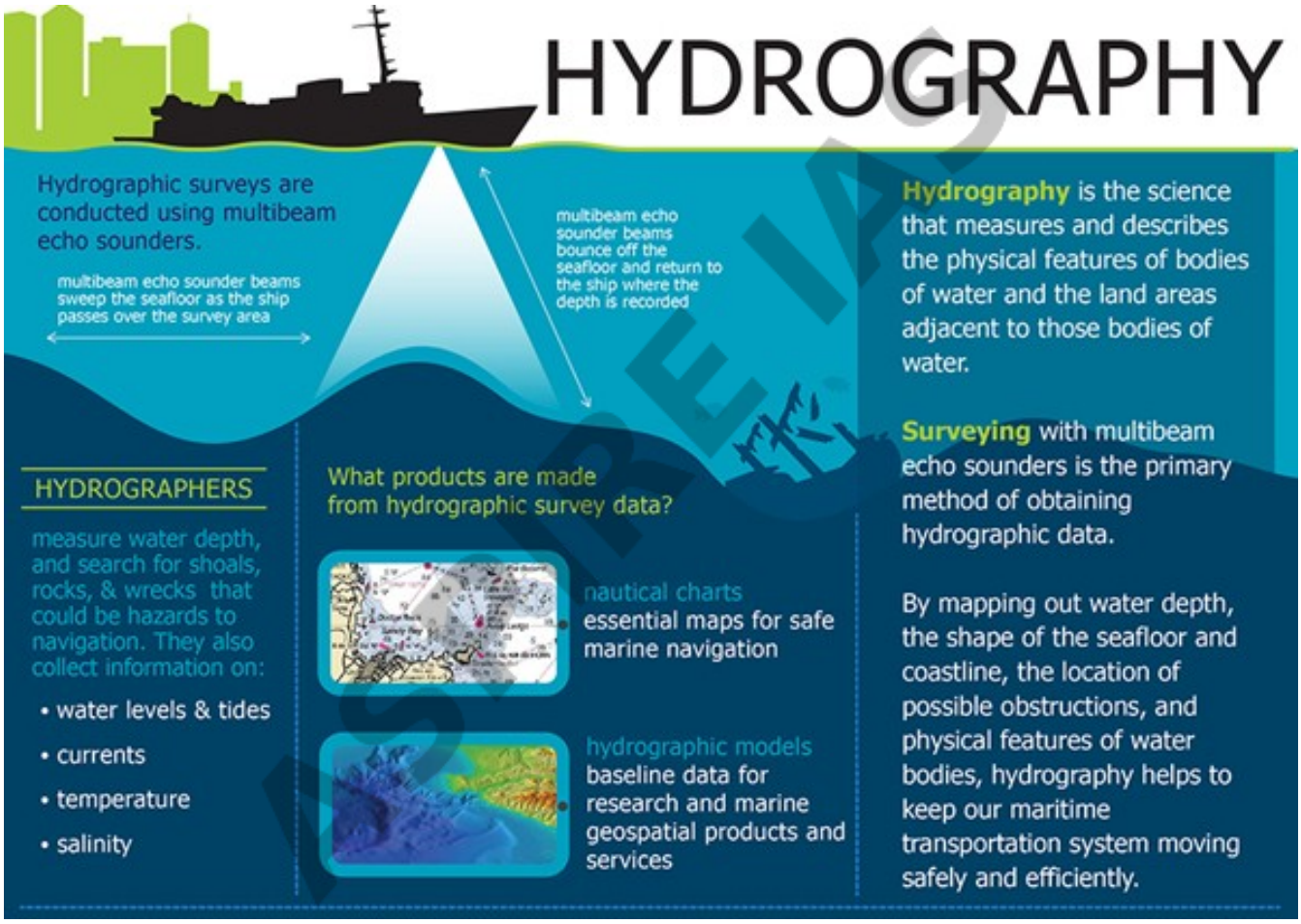

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Vietnam invited India for ASEAN Defence Ministers'

Meeting-Plus (ADMM Plus) being hosted by Vietnam in December 2020.

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The ADMM-Plus is a platform for the Association of Southeast Asian Nations (ASEAN) and its eight Dialogue Partners Australia, China, India, Japan, New Zealand, Republic of Korea, Russia and the USA (collectively referred to as the "Plus Countries"), to strengthen security and defence cooperation for peace, stability, and development in the region.

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India-Vietnam Relations

India and Vietnam have agreed to enhance their bilateral cooperation in line with India's **Indo-Pacific Oceans Initiative (IPOI)** and the ASEAN's Outlook on Indo-Pacific.

Cooperation at Multiple Fora:

At the UN Security Council, both India and Vietnam will serve concurrently as non-permanent members in 2021. India and Vietnam closely cooperate in various regional forums such as **East Asia Summit, Mekong Ganga Cooperation, Asia Europe Meeting (ASEM).**

Economic Relations:

Vietnam is also the second largest export destination for India after Singapore in the ASEAN region. Bilateral trade for the period April-November 2019 reached **USD 9.01** billion.

Source: TH

ASPIRE IAS

Honey FPO Programme: NAFEDÂ Â Â Â Â Â Â

GS-III | 28 November,2020

Honey FPO Programme: NAFED

Context

Recently, the Minister of Agriculture and Farmers' Welfare has virtually inaugurated the Honey Farmer Producer Organisation (FPO) Programme of the National Agricultural Cooperative Marketing Federation of India Limited (NAFED).

- A **Producer Organisation (PO)** is a legal entity formed by primary producers, viz. farmers, milk producers, fishermen, weavers, rural artisans, craftsmen, etc. FPO is one

type of PO where the members are farmers.

- **Apiculture** or beekeeping is the care and management of honey bees for the production of honey and wax. In this method, bees are bred commercially in apiaries, an area where a lot of beehives can be placed.

Key Points

- The programme has been launched under the Formation and Promotion of FPOs.
- It is a new **Central Sector Scheme** for the promotion of 10,000 new FPOs.
- Under it, the National Level Project Management Advisory and Fund Sanctioning Committee (N-PMAFSC) had allocated FPO clusters for 2020- 21 to all implementing agencies.
- Initially there will be three implementing agencies to form and promote FPOs, namely **Small Farmers Agri-business Consortium (SFAC),**
- National Cooperative Development Corporation (NCDC) and National Bank for Agriculture and Rural Development (NABARD). NAFED has been appointed as the 4 national implementing agency.
- States may also, if so desire, nominate their implementing agency in consultation with the Department of Agriculture, Cooperation and Farmers' Welfare (DAC&FW). FPOs will be developed by specialist Cluster Based Business Organizations (CBBOs) engaged by implementing agencies.
- NAFED, through CBBOs and the Indian Society of Agribusiness Professionals (ISAP) has initiated the formation and promotion of FPOs of beekeepers and honey collectors in 5 states of India.

These 5 locations are **East Champaran (Bihar), Morena (Madhya Pradesh), Bharatpur (Rajasthan), Mathura (Uttar Pradesh) and Sunderbans (West Bengal).**

The first Honey FPO has been registered in the state of **Madhya Pradesh** under the National Beekeeping and Honey Mission (NBHM).

Benefits:

- Skill Upgradation in scientific beekeeping.
- State of the art infrastructural facilities for processing honey and allied

beekeeping products like bee's wax, propolis, royal jelly, bee venom, etc.

- Quality upgradation by quality control laboratories.
- Better supply chain management by improving collection, storage,

bottling and marketing centres.

- Promotion and Formation of FPOs is the first step for converting Krishi into

Atmanirbhar Krishi.

Other Efforts by Government to Promote Beekeeping:

Government is promoting beekeeping as part of its aim to double farmers' income and ensure tribal upliftment. The Government has allocated Rs. 500 crore towards beekeeping under the Atmanirbhar Abhiyan.

Apiary on Wheels:

It is a unique concept designed by the **Khadi and Village Industries Commission** (**KVIC)** for the easy upkeep and migration of Bee Boxes having live Bee colonies.

The Government launched NBHM as part of **'Sweet Revolution'.** The 'Sweet Revolution' was launched in 2016 to promote beekeeping and associated activities.

National Agricultural Cooperative Marketing Federation of India Ltd

It is an apex organization of marketing cooperatives for agricultural produce in India. It was founded on 2 October 1958 and is registered under the **Multi-State Cooperative Societies Act, 2002.** NAFED is now one of the largest procurement as well as marketing agencies for agricultural products in India.

Objectives:

- To organize, promote and develop marketing, processing and storage of

agricultural, horticultural and forest produce.

- To distribute agricultural machinery, implements and other imgs, undertake inter-state, import and export trade, wholesale or retail as the case may be.
- To act and assist for technical advice in agricultural production for the promotion and the working of its members, partners, associates and cooperative marketing, processing and supply societies in India.

Source: PIB

ASPIRE IAS

Climate Change Knowledge Portal

GS-III | 28 November,2020

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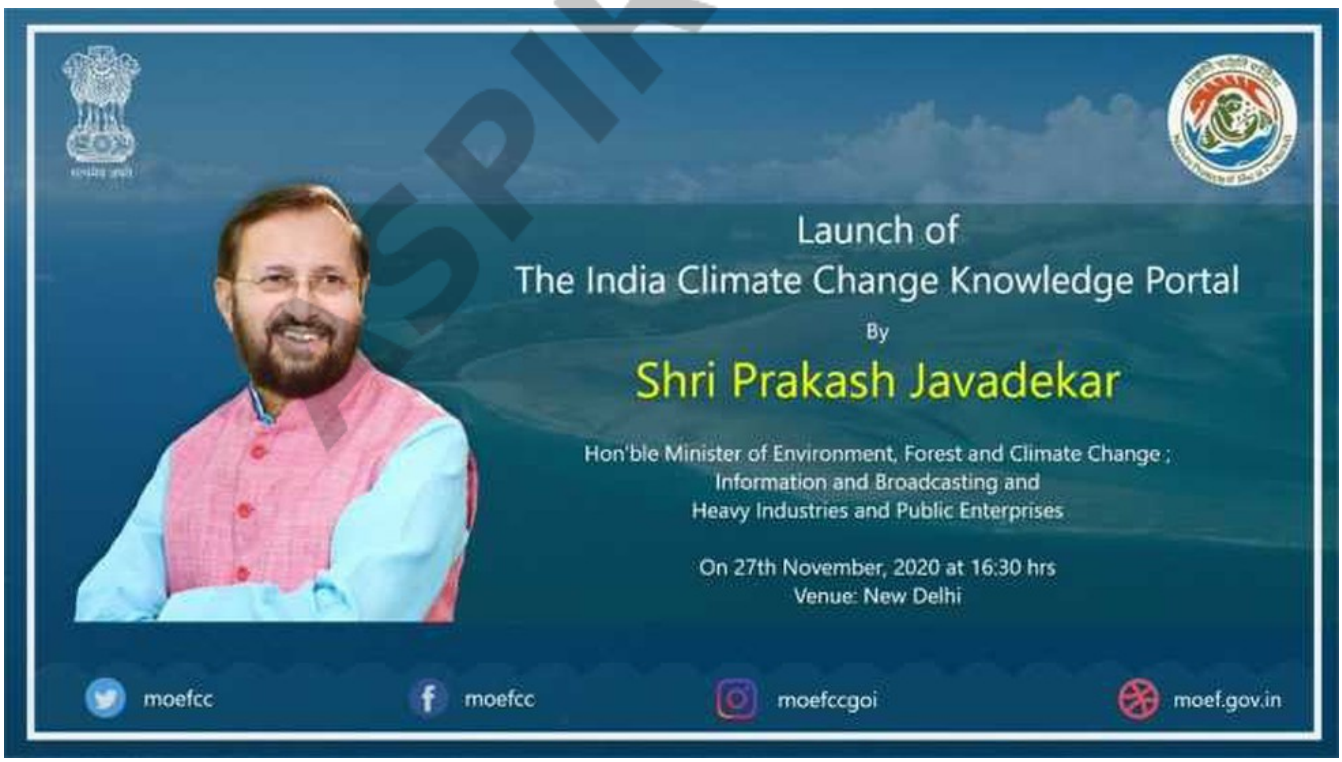

Objective:

The Portal will help in disseminating knowledge among citizens about all the major steps the Government is taking at both national and international levels to address climate change issues.

Benefit:

It will be a single point Information resource which provides information on the different climate initiatives taken by various Line Ministries enabling users to access updated status on these initiatives.

Components: The eight major components included in the knowledge portal are:

1. India's Climate Profile: The northern part of the country is characterized as a continental climate with hot summers and cold winters. The coastal regions of the country, however, experience warmer temperatures with little variation throughout the year and frequent rainfall.

2. National Policy Framework

For Example In order to strengthen the implementation of environmentally sound management of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change has amended the **Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.**

India's Nationally determined contributions (NDC) Goals NDC's are at the heart of the Paris Agreement and the achievement of these long-term goals.

NDC's embody efforts by each country to reduce national emissions and adapt to the impacts of climate change.

3. Adaptation Actions: To meet the high energy demand India is adapting to clean energy development. Example: Jawaharlal Nehru National Solar Mission which aims to increase the share of solar energy in India.

4. Mitigation Actions: For example, to mitigate water issues Indian government launched the National Water Mission.

5. Bilateral and Multilateral Cooperation: The Paris climate deal is a great example of multilateral cooperation.

6. International Climate Negotiations: In the Conference of Parties (COP21) in Paris in 2015, India accepted 1.5 degrees Celsius as a target limit for the increase in the global average temperature and announced an ambitious domestic renewable energy programme.

7. Reports & Publications: For example, reports like Assessment of Climate Change over the Indian Region published by the Ministry of Earth Sciences (MoES).

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Dry Swab RT-PCR Covid-19 Test

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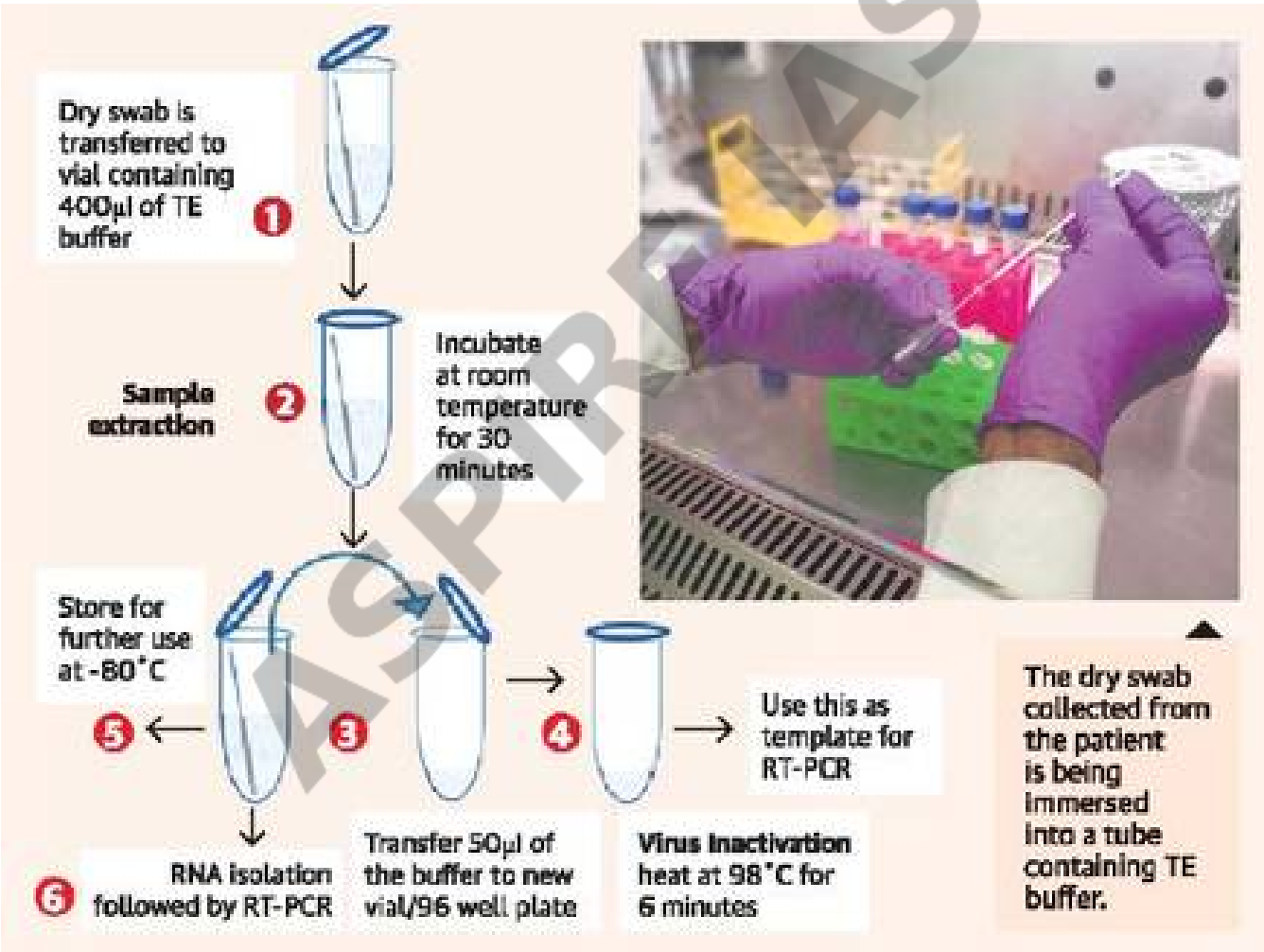
Recently, the Council of Scientific and Industrial Research-Centre for Cellular and Molecular Biology (CSIR-CCMB) has got the permission of the Indian Council of Medical Research (ICMR) to commercially use the dry swab RNA-extraction free testing method for the Covid-19.



Key Points

About:

Dry swab method has a consistency of 96.9%.

UPSC "PT" DNA (Daily News Analysis)

The comparison of conventional (swab-VTM-RNA extraction-RT-PCR) and the simplified (direct elution from dry swab-RT-qPCR) protocols suggested that dry swabs eluted directly into a simple buffered solution can support molecular detection of SARS-CoV-2 via endpoint RT-PCR without substantially compromising sensitivity.

Conventional Method:

- In the conventional testing method, nasopharyngeal or oropharyngeal swab samples are collected by sample collection centres from the suspected coronavirus patients. These are then transported to testing centres, sometimes even hundreds of kilometres away.
- The nasopharynx is the upper part of the pharynx (throat) behind the nose.
- The oropharynx is the middle part of the pharynx just beyond the mouth and includes the back part of the tongue (base of tongue), tonsils, soft palate (back part of the roof of the mouth), and the sides and walls of the throat.
- The swab samples are generally placed in a liquid called Viral Transport Medium (VTM) and to avoid leakage, the samples are packed heavily that adds on to sample processing times at both the sample collection and testing centres.
- RNA extraction, even with automation, takes four hours for roughly 500 samples. VTM and RNA extraction both add a significant burden on money and time required for mass testing.

New and Simplified Method:

- Dry swab technique does not require VTM and RNA extraction process, and can be directly used for RT-PCR testing.
- It has the potential of bringing the costs and time of testing by 40-50% and the screening can also be enhanced several-fold with immediate effect while, at the same time, making the whole process safer.
- It is easy to implement with no requirement of new kits and existing manpower can perform this with no additional training

RT-PCR Test

- Kary Mullis, the American biochemist invented the PCR technique. He was awarded the Nobel Prize for Chemistry in 1993.
- Under the test, copies of a segment of DNA (deoxyribonucleic acid) are created using an enzyme called Polymerase.
- The 'chain reaction' signifies how the DNA fragments are copied exponentially, where one is copied into two, the two are copied into four, and so on.
- A fluorescent DNA binding dye called the "probe" is added to DNA, which shows the presence of the virus on a fluorometer.
- Covid-19 is made of RNA (ribonucleic acid), so to detect it, RNA is converted into DNA using a technique called reverse transcription.
- Then the copies of the DNA are then made and amplified.

ASPIRE IAS

Source: TH

Fiscal deficit reaches 120% of annual target

GS-III | 28 November,2020

Fiscal deficit reaches 120% of annual target:.

The Union Government's fiscal deficit further widened to ?9.53 lakh crore, or close to 120% of the annual budget estimate, at the end of October of the current fiscal.

Reasons behind this:

- The deficit widened mainly due to poor revenue realisation.
- The lockdown imposed to curb spreading of coronavirus infections had significantly impacted business activities and in turn contributed to sluggish revenue realisation.

What is the fiscal deficit?

- It is the difference between the Revenue Receipts + Non-debt Capital Receipts (NDCR) and the total expenditure.
- In other words, fiscal deficit is "reflective of the total borrowing requirements of Government".

Impact of high fiscal deficit:

- In the economy, there is a limited pool of investible savings. These savings are used by financial institutions like banks to lend to private businesses (both big and small) and the governments (Centre and state).
- If the fiscal deficit ratio is too high, it implies that there is a lesser amount of money left in the market for private entrepreneurs and businesses to borrow.
- Lesser amount of this money, in turn, leads to higher rates of interest charged on such lending.
- A high fiscal deficit and higher interest rates would also mean that the efforts of the Reserve Bank of India to reduce interest rates are undone.

What is the acceptable level of fiscal deficit for a developing economy?

- For a developing economy, where private enterprises may be weak and governments may be in a better state to invest, fiscal deficit could be higher than in a developed economy.
- Here, governments also have to invest in both social and physical infrastructure upfront without having adequate avenues for raising revenues.
- In India, the FRBM Act suggests bringing the fiscal deficit down to about 3 percent of the GDP is the ideal target. Unfortunately, successive governments have not been able to achieve this target.

ASPIRE IAS

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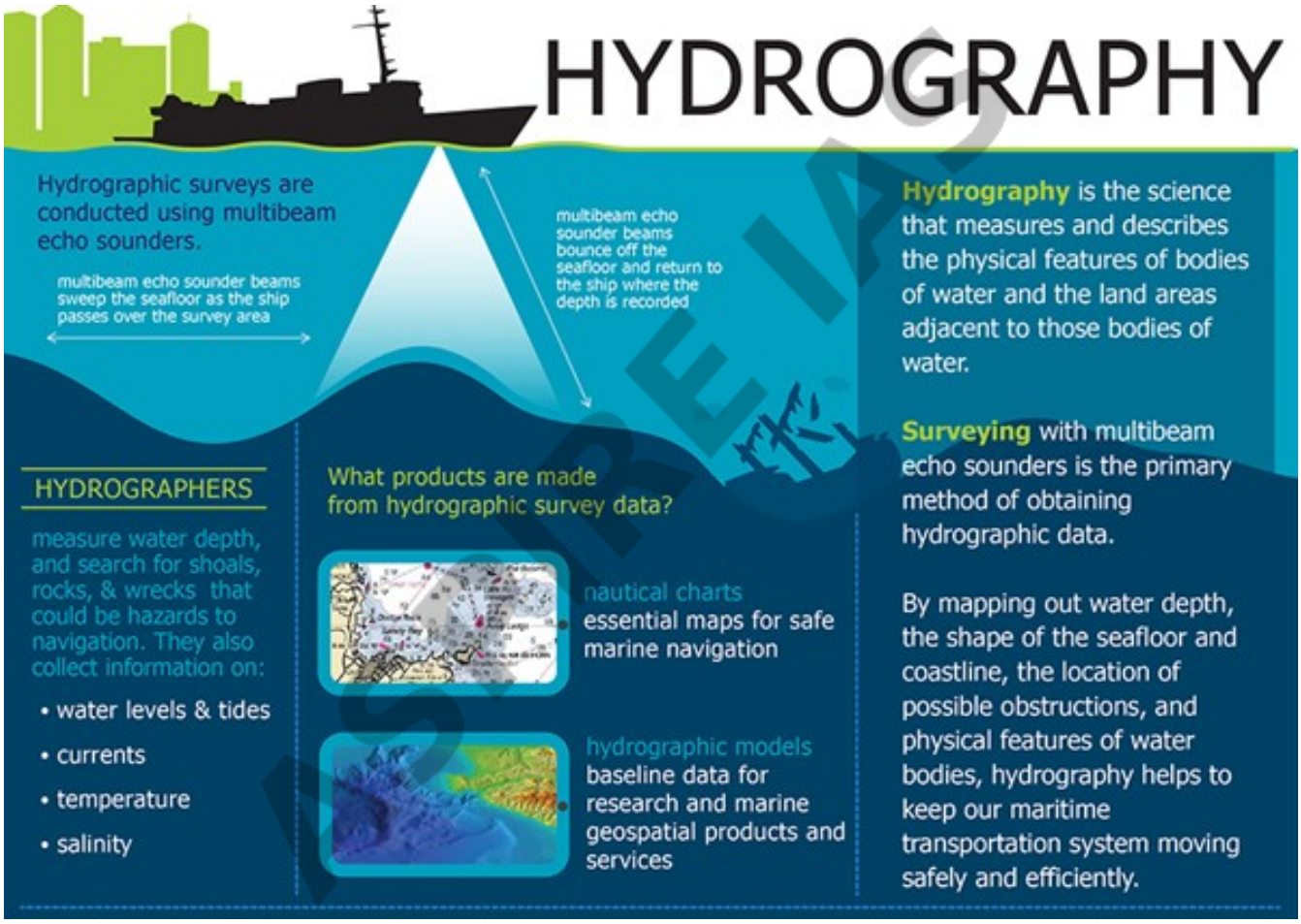

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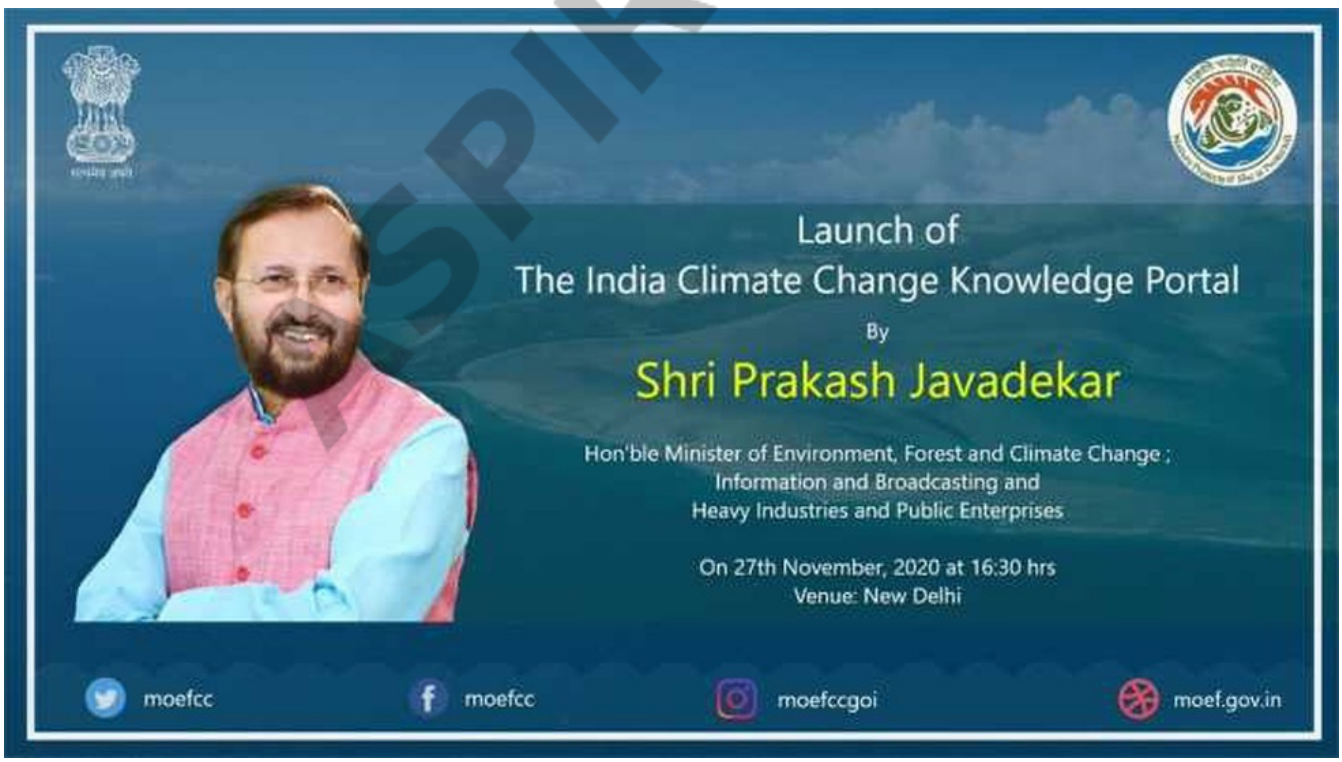

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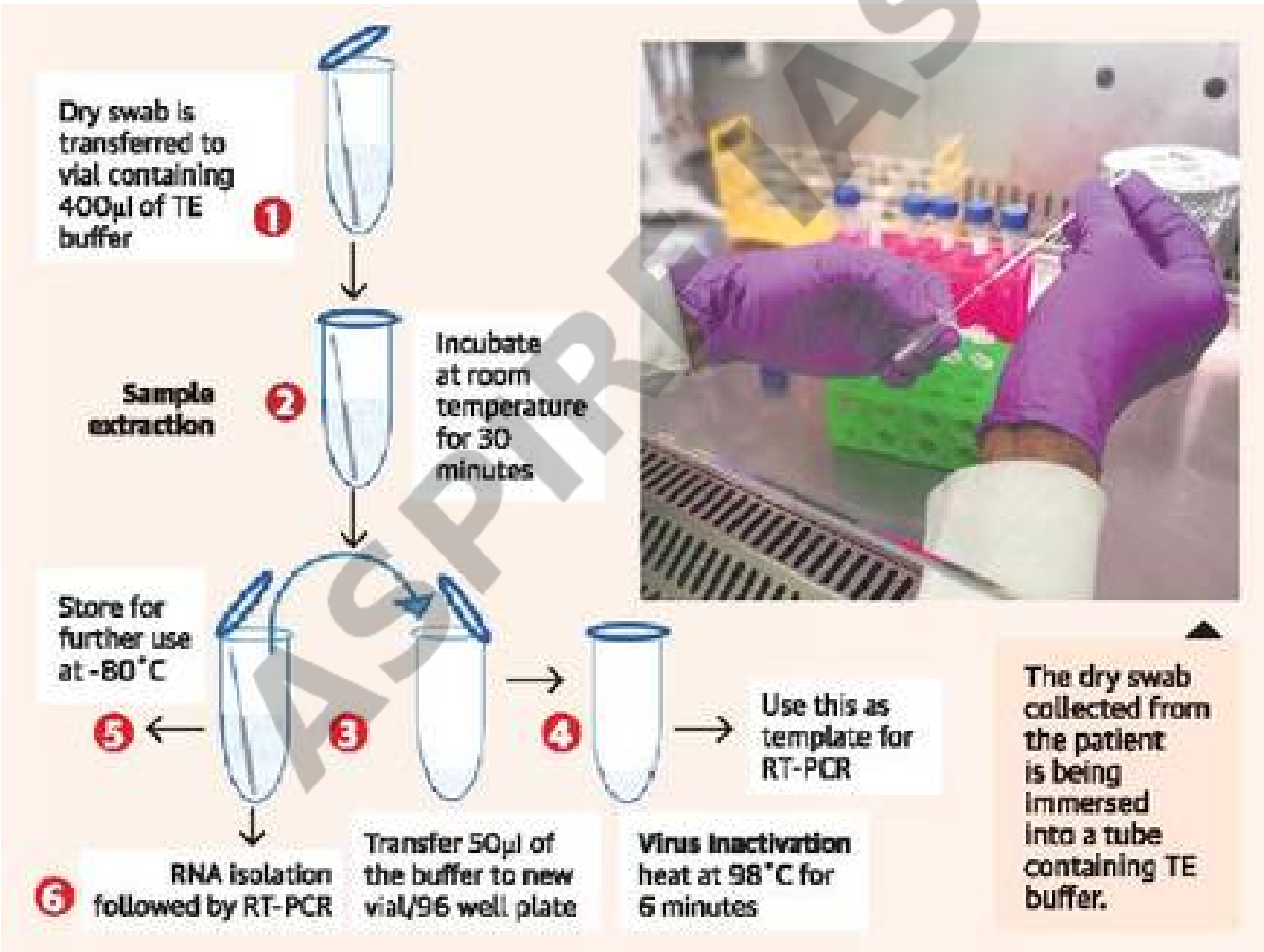

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Reasons behind this:

- The deficit widened mainly due to poor revenue realisation.
- The lockdown imposed to curb spreading of coronavirus infections had significantly impacted business activities and in turn contributed to sluggish revenue realisation.

What is the fiscal deficit?

- It is the difference between the Revenue Receipts + Non-debt Capital Receipts (NDCR) and the total expenditure.
- In other words, fiscal deficit is "reflective of the total borrowing requirements of Government".

Impact of high fiscal deficit:

- In the economy, there is a limited pool of investible savings. These savings are used by financial institutions like banks to lend to private businesses (both big and small) and the governments (Centre and state).
- If the fiscal deficit ratio is too high, it implies that there is a lesser amount of money left in the market for private entrepreneurs and businesses to borrow.
- Lesser amount of this money, in turn, leads to higher rates of interest charged on such lending.
- A high fiscal deficit and higher interest rates would also mean that the efforts of the Reserve Bank of India to reduce interest rates are undone.

What is the acceptable level of fiscal deficit for a developing economy?

- For a developing economy, where private enterprises may be weak and governments may be in a better state to invest, fiscal deficit could be higher than in a developed economy.
- Here, governments also have to invest in both social and physical infrastructure upfront without having adequate avenues for raising revenues.
- In India, the FRBM Act suggests bringing the fiscal deficit down to about 3 percent of the GDP is the ideal target. Unfortunately, successive governments have not been able to achieve this target.

ASPIRE IAS

Source: TH

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GLOBAL INNOVATION & TECHNOLOGY ALLIANCE

GS-III – S&T (PT-MAINS-I.V)

Context: 9th Foundation Day of GITA, Union Minister of Science & Technology underlined how Global Innovation and Technology Alliance (GITA) served as a catalyst for nurturing innovation and industrial R&D.

About:

- Global Innovation & Technology Alliance (GITA) is a "not–for–profit" Section-8 Public Private Partnership (PPP) company.
- It is promoted jointly by the Technology Development Board (TDB), Department of Science & Technology (DST), Government of India and the Confederation of Indian Industry (CII).
- The Prime Minister's Council on Trade & Industry had, in 2010, recommended incorporation of a Government's arm's length entity under PPP mode to professionally manage the Government's funds for providing flexibility to industry for undertaking R&D along with global partners.

The GITA platform encourages industrial investments in innovative technology solutions by

- Mapping technology gaps,
- Undertaking expert evaluation of technologies available across the globe,
- Facilitating techno–strategic collaborative partnerships appropriate for Indian economy,
- Connecting industrial and institutional partners for synergistic matchmaking and
- Providing soft funding for technology development / acquisition / deployment.

Historical perspective

Technology Development Board:

It is **a statutory body** established by **Technology Development Board Act, 1995.**

Objective: To promote development and commercialization of indigenous technology and adaptation of imported technology for much wider application.

Roles and functions of the board:

1. Encourage enterprises to take up technology-oriented products.
2. Provide equity capital or loans to industrial concerns and financial assistance to research and development institutions.

Global Innovation & Technology Alliance (GITA):

In order to stimulate private sector's investment in R&D, TDB has established **Global Innovation & Technology Alliance (GITA).**

It is **a joint venture between Confederation of Indian Industry (CII) and TDB with an equity contribution of 51:49 respectively.**

The GITA will assist Department of Science & Technology (DST) in implementing industrial research and development programme with different countries under bilateral and multilateral science and technology cooperation agreements.

Source: PIB

Strategic S&T ties- Science diplomacy

GS-III | 29 November,2020

Strategic S&T ties- Science diplomacy

GS-III – Climate chance and S&T (Mains-I.V)

What?

Science diplomacy is the use of **scientific** collaborations among nations to address common problems and to build constructive international partnerships.

It is **evident that international collaborations in S&T innovation is not merely cosmetic**. Today, it is a necessity. No nation alone has the capacity,

infrastructure and human resources to address the massive challenges that the earth and mankind faces, threatening our very existence.

Why?

- Some of the most pressing issues and developmental challenges facing nations in contemporary times have a scientific and technological dimension.
- Science and Technology (S&T)-led innovation offers an opportunity to address these multifaceted challenges, which are now global in nature.
- For a diverse country such as India, S&T is expected to empower the common citizen, making his/her life easier.
- S&T interventions have to be able to address both national needs and aspirations — by being inclusive — and, at the same time, they have to meet the international obligations of a responsible country.
- Science diplomacy, thus, is a crucial policy dimension.

Impact of climate change can be depicted:

Hockey Stick Graph: It shows that the earth's temperature was relatively stable for 500 years. However, it spiked sharply in the 20th century. This rise was unprecedented across the last millennium. It was interpreted as coinciding with humanity's use of fossil fuels.

The planet's average surface temperature has risen about 0.90C since the late 19th century, a change driven largely by increased carbon dioxide and other human-made emissions into the atmosphere. Most of the warming occurred in the past 35 years, with the five warmest years on record taking place since 2010.

Melting Polar Caps: The Greenland and Antarctic ice sheets have decreased in mass. Data from NASA show Greenland lost an average of 286 billion tons of ice per year between 1993 and 2016, while Antarctica lost about 127 billion tons of ice per year during the same time period. The rate of Antarctica ice mass loss has tripled in the last decade.

Global sea level rose about 8 inches in the last century. The rate of rising of the sea is nearly double that of the last century and is accelerating slightly every year.

Ocean Acidification: Since the beginning of the Industrial Revolution, the acidity

of surface ocean waters has increased by about 30 percent. This increase is the result of humans emitting more carbon dioxide into the atmosphere and hence more being absorbed into the oceans. The amount of carbon dioxide absorbed by the upper layer of the oceans is increasing by about 2 billion tons per year.

Science diplomacy, thus, is a crucial policy dimension in tackling climate change and the world can learn from India on this front.

The Global Innovation and Technology Alliance (GITA) were launched by India a few years ago. It has provided an enabling platform for frontline techno-economic alliances.

Enterprises from India are tying up with their counterparts from partner countries including Canada, Finland, Italy, Sweden, Spain, and the UK. This industry-led collaboration, with the government as an equal partner, is aimed at supporting the last phase of technology-based high-end, affordable product development which can connect to both global and domestic markets.

The India-led International Solar Alliance (ISA), with more than 79 sunshine countries as signatories and nearly 121 prospective countries as partners, is another excellent example of modern-day science diplomacy. The vision and mission of the ISA is to provide a dedicated platform for cooperation among solar resource-rich countries. Such a platform can make a positive contribution towards achieving the common goals of increasing the use of solar energy in meeting the energy needs of member countries in a safe, affordable, equitable and sustainable manner.

The **Global Coalition for Disaster Resilient Infrastructure** (CDRI) was recently announced by Prime Minister Narendra Modi at the UN Climate Action Summit in New York.

The CDRI is yet another example of international partnership piloted by India in consultation with 35 countries that will support developed and developing nations in their efforts to build climate and disaster-resilient infrastructure, required to face the vagaries of climate change.

The CDRI will provide member countries with technical support and capacity

development, research and knowledge management, and advocacy and partnerships. It is aimed at risk identification and assessment, urban risk and planning, and disaster risk management.

Recently, **Madrid talks on climate change** have resulted in disappointment. Therefore, in order to design and develop effective tools for international engagement through S&T, the world requires the proactive engagement of the scientific and technological community with stakeholders including the polity, the diplomatic corps and the knowledge enterprises, etc.

Source: IE

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CHECK: WORLDâ€™S FIRST CRISPR BASED COVID TEST

GS-III | 30 November,2020

CHECK: WORLD'S FIRST CRISPR BASED COVID TEST

Tata Medical and Diagnostics Ltd have unveiled "TataMD CHECK"- world's first CRISPR CaS-9 based Covid-19 diagnostic tool and is powered by **FELUDA.**

Advantages of TataMD CHECK

- TataMD CHECK will be a simple **paper-strip test** that will give image-based visual results.
- This testing will be able to provide **high quality and quick results** and will not require highly trained staff.
- The simplicity of testing will make it available in the remote areas also.

Source: TH

ASPIRE IAS

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