

**CURRENT AFFAIRS: FEBRUARY 2023** 

#### **PARLIAMENTARY PRIVILEGES**

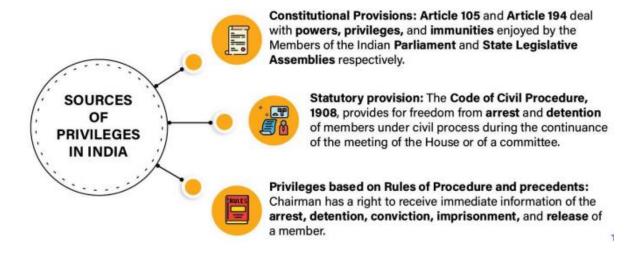
Recently parts of the leader of the opposition speech on the motion of thanks on the President's Address were expunged.

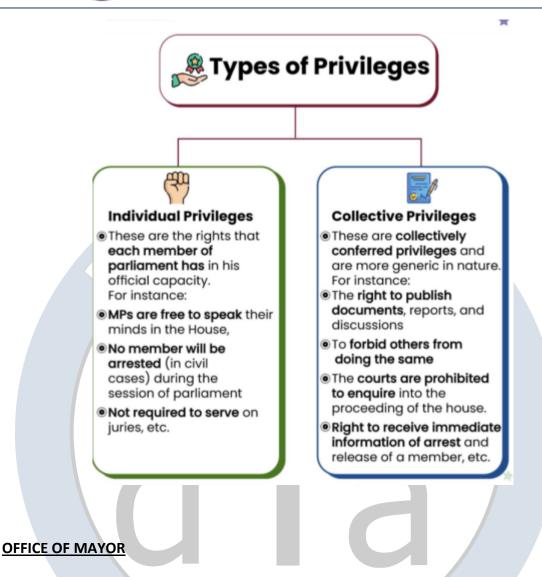
• Experts point out that this is against the Parliamentary Privileges of the MP enjoyed under Article 105 of the Constitution.

# **About Parliamentary Privileges**

- Parliamentary privileges are a legal immunity enjoyed by members of legislatures, in which legislators are granted protection against civil or criminal liability for certain actions done or statements made in the course of their legislative duties.
- Parliament is the sole authority to ascertain if there has been a breach of privilege or contempt of the House— no court is entrusted with this power.

o If the presiding officer gives consent, the Council can either consider the question and come to a decision or refer it to the Committee of Privileges — a 10-member panel in the Rajya Sabha and a 15-member panel in the Lok Sabha.





Recently, The Supreme Court said the Constitution does not allow nominated members of a municipality the right to vote for selecting the post of mayor.

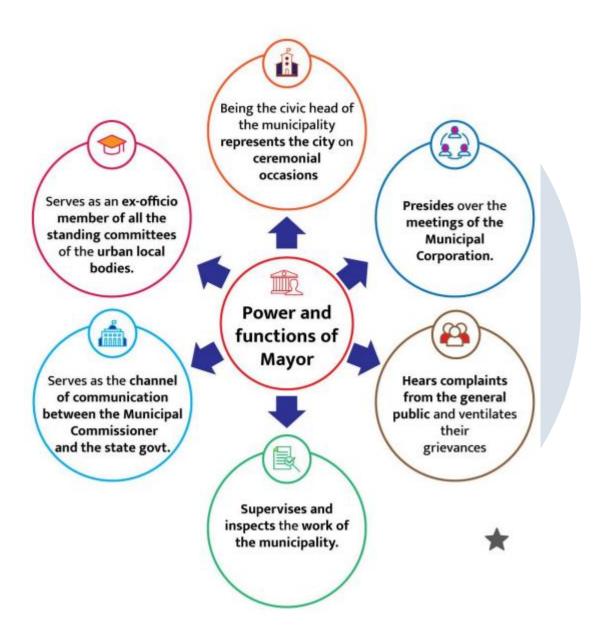
# **About Indian system for Mayor**

- The Mayor in the Municipal Corporation is usually chosen through indirect election by the councillors from among themselves.
- Councillors act by committee, the most powerful being the Standing Committee with its role of the steering committee exercising executive, supervisory, financial, and personnel powers.
- The Municipal Commissioner is the chief Executive Officer and head of the executive arm of the Municipal Corporation.



o All executive powers are vested in the Municipal Commissioner.

• The 1992 Act provides for elected and nominated councillors. Nominated councillors are to be chosen by the elected councillors for their special knowledge or experience in municipal administration.





# A SNAPSHOT OF URBAN LOCAL BODIES (ULB)



The passing of the 74th constitutional amendments, provided for establishing urban local governments. It also established mechanisms to fund them, and to carry out local elections every five years.



ULBS are taking responsibility of the 18 items listed as municipal responsibilities in the Twelfth Schedule of the Constitution, the Legislature of a State, by law, can assign any tasks relating to

the preparation of plans for

 the preparation of plans for economic development and social justice; and

Power

 the implementation of schemes as may be entrusted to them.



Financial paucity, unplanned urbanization, excessive state control, low effectiveness, the multiplicity of agencies, substandard personnel, and low level of people's participation.



Greater
autonomy,
more
devolution of
taxes,
Encouraging
public-private
partnership,
and urban
planning in a
holistic manner.

### JUDICIAL MAJORITARIANISM

Recently the Constitution bench of the Supreme Court in a majority opinion (4-1) upheld the Government's demonetization order.

- Experts have pointed out that some of the most important legal questions have been decided by a bare majority 5–4 vote of the Supreme Court Judges.
  - o Such cases include legal status of same sex marriage (Supriyo v. Union of India, 2022), electoral finance (ADR vs Union of India, 2021), etc.
- In judicial terms this way of majority decision making is known as Judicial Majoritarianism.

#### **About Judicial Majoritarianism (JM)**

- Constitutional Basis: The requirement for a majority consensus flows from Article 145(5) of the Constitution.
  - o Numerical majorities are of particular importance to cases, which involve a substantial interpretation of constitutional provisions.
  - o In such cases, Constitutional Benches, consisting of five or more judges, are set up in consonance with Article 145(3) of the Constitution.



# **APPOINTMENT OF JUDGES TO SUPREME COURT**

- Accepting the recommendations made by Supreme Court (SC) collegium, President appointed 5 new Judges to SC.
  - o With these appointments, working strength of SC will rise to 32 against sanctioned strength of 34.
  - o Sanctioned strength is prescribed by law made by Parliament (Article 124 (1)).
- Chief Justice of India (CJI) and Judges of SC are appointed by President under Article 124 (2) of Constitution with the help of collegium system.
- Collegium system is the way by which judges of SC and HC are appointed and transferred.
  - o SC collegium is a five-member body, which is headed by incumbent CJI and comprises four other senior-most judges of the court at that time.
  - o HC collegium is led by incumbent Chief Justice and two other senior-most judges of that court.
- Collegium system has evolved with Three Judges case
  - o **First Judges Case**, 1981 (S P Gupta Case): SC ruled that recommendation made by CJI to President can be refused for "cogent reasons", thereby giving greater say to executive.
  - o **Second Judges Case**, 1993 (SC Advocates on Record Association (SCARA) vs Union of India): CJI only need to consult two senior-most judges over judicial appointments and transfers.
  - o **Third Judges Case**, 1998: CJIs should consult with four senior-most SC judges to form his opinion on judicial appointments and transfers.

# **DISASTER RELIEF DIPLOMACY**

India launched Operation Dost for life-saving Humanitarian Assistance and Disaster Relief (HADR) operations in earthquake hit Türkiye and Syria.

• The region was hit initially by a magnitude 7.8 earthquake, dozens of aftershocks followed the initial quake.



- Region where earthquake has struck lies along a seismic fault line called Anatolia tectonic block that runs through northern, central, and eastern Turkey.
  - o Seismicity in this region is a result of interactions between African, Eurasian, and Arabian plates.
- One of the largest strike-slip earthquakes to occur in recent times, it struck along East Anatolian Fault Zone.
  - o Strike-slip faults are vertical (or nearly vertical) fractures where blocks have mostly moved horizontally.
  - o In these faults, two plates move parallel but in opposite direction from one another.

# **Disaster Relief Diplomacy: Meaning and its Guiding Principles**

- Disaster Relief Diplomacy, also known as HADR Diplomacy, refers to 'a country's efforts to provide aid and support to other countries affected by natural disasters or conflicts'.
  - It includes sharing of expertise and resources or deployment of human resources as assistance to those in need due to sudden accident or a natural catastrophe.
- HADR has emerged as a sophisticated diplomatic tool for strategic competition. E.g.
  - o In the Bosnia crisis (1990s), only 16 donor governments officially pledged support.
  - O Whereas during the Indian Ocean Tsunami (2004), 92 countries pledged their support.

#### **MUNICIPAL BONDS**

NSE Indices Ltd., an NSE (National Stock Exchange) arm has introduced the country's first ever municipal bond index.

## **About Nifty India Municipal Bond Index**



- Role of the index: The new Nifty India Municipal Bond Index will track the performance of municipal bonds issued by Indian Municipal Corporations (MCs) across maturities and having investment grade credit rating.
- Index constituents: Presently, the index has 28 municipal bonds issued by 10 issuers all having credit rating in the AA category.
  - o The index constituents are assigned weights based on their outstanding amount.
- Base for Index: The index has a base date of January 1, 2021, and a base value of 1,000.
- Review: The index will be reviewed quarterly.

### **Municipal Bonds**

- Municipal bonds are issued by local government bodies, and do not carry any government guarantee.
- Structured payment mechanism: The interests and principal repayment for these bonds is done via an escrow account.
  - o The municipal corporation has to periodically move a fixed sum of money (for these payments) from its revenues into the escrow account. This provides some assurance on the bonds being serviced on time.

# **SOCIAL STOCK EXCHANGE**

National Stock Exchange (NSE) has got the final approval from the Securities and Exchange Board of India (SEBI) to launch a Social Stock Exchange.

## **About Social Stock Exchange (SSE)**

- SSE is a separate segment of the existing Stock Exchange that can help Social Enterprise(s) to raise funds from public through the stock exchange mechanism.
  - o SSE identifies social enterprises as the ones engaged in creating positive impact in the society. These are the following two forms of social enterprises:
    - ✓ Not-for-profit organization



✓ For profit social enterprise

# VIBRANT VILLAGES PROGRAMME (VVP) SCHEME

- Cabinet approved Vibrant Villages Programme (VVP) Scheme.
- VVP, a Centrally Sponsored Scheme, will provide funds for development of essential infrastructure and creation of livelihood opportunities along the northern land border.
  - o VVP (approved for 2022-23 to 2025-26) will cover Himachal Pradesh (HP), Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh.
  - o Scheme will help in improving quality of life of people and reversing outmigration adding to improved security of border.

# • Key Features of the Scheme

- o Vibrant Village Action Plans will be created by district administration with the help of Gram Panchayats.
- o Development of growth centres on Hub and Spoke Model through promotion of social entrepreneurship, youth and women empowerment etc.
- o Out of financial allocation of Rs. 4800 Crore, 2500 crore rupees will be used for roads.

## **EXERCISES IN NEWS**

#### TARKASH:

- o It is joint Indo-US exercise between National Security Guard (NSG)- and US Special Operations Forces.
- o For the first time, this exercised simulated a validation exercise for Chemical, Biological, Radiological and Nuclear (CBRN) terror response mission.
- DHARMA GUARDIAN: It is a joint military exercise between India and Japan.
- **<u>Dustlik</u>**: It is a joint military exercise between India and Uzbekistan.



• Exercise Desert Flag VIII: It is an annual international multilateral air exercise with participation from UAE, India, France, Kuwait, Australia, UK, Bahrain, Morocco, Spain, Republic of Korea, and USA.

# **ETHANOL BLENDING**

Recently, Petrol blended with 20 percent ethanol was rolled out at select petrol pumps in 11 states and union territories.

- At present, 10% ethanol is blended in petrol (10%ethanol, 90% petrol) and the government is looking to double this quantity by 2025.
  - o In June 2022, India achieved an average blending rate of 10% ethanol in petrol.
- In the first phase, 15 cities will be covered and in the next two years it will be expanded throughout the country.

#### **About Ethanol Blending**

- Ethanol-blended petrol primarily is a biofuel that is obtained from an organic source like sugarcane, maize, wheat, etc.
  - o Since it is plant-based, it is considered to be a renewable fuel.
- The 'National Policy on Biofuels' notified by the Government in 2018 envisaged an indicative target of 20% ethanol blending in petrol by year 2030.
  - o However, the target of 20% ethanol blending (E20) was advanced from 2030 to 2025-26.
- The Oil Marketing Companies are to procure ethanol from domestic sources and blends ethanol at its terminals.
  - o Government has notified administered price of ethanol since 2014.
  - o Department of Food and Public Distribution (DFPD) is the nodal department for promotion of fuel grade ethanol producing distilleries in the country.



# **HEAT DOME**

- Heat-spewing anticyclone over North-West India has led to unusual heat in February.
  - o India Meteorological Department (IMD) predicts that it is likely to recede from land and back off into Central Arabian Sea soon, making way for moisture-laden western disturbance and associated cloud cover with rain or snow in Western Himalayas and adjoining plains.
- Heat dome is a high-pressure circulation in atmosphere which acts like a dome or cap, trapping heat at surface and favoring heatwave formation.
  - o It occurs when hot ocean air is trapped over a large area.
- Typically, heat domes are tied to the pattern of jet stream (fast winds high in atmosphere that generally runs west to east).
  - o Normally, jet stream has a wavelike pattern, meandering north and then south and then north again.
  - o When these meanders in jet stream become bigger, they move slower and can become stationary and resulting into heat domes.
  - o Hot air typically rises into atmosphere, but dome's lid causes air to sink. As air sinks, it compresses and becomes warmer that causes temperature in dome to rise continually.
- Impact of heat dome: Affect sessional agricultural products; Increased risk of wildfire, heat-related illnesses such as heat rash, heat stroke, heat exhaustion etc.

# PARTICULARLY VULNERABLE TRIBAL GROUPS (PVTG'S)

In the 2023-24 Union Budget, Pradhan Mantri PVTG (Particularly Vulnerable Tribal Groups) Development Mission (PMPDM) was announced for the socioeconomic development of the group.

# **About PMPDM Mission**

• It has been launched as part of 'Reaching the Last Mile', one of the seven Saptarishi priorities enlisted in the Budget.



o ₹15,000 crore will be made available to implement the Mission in the next three years under the Development Action Plan for the Scheduled Tribes.

• It will empower the particularly vulnerable tribal groups with safe housing, clean drinking water, education, nutrition, road and telecom connection and livelihood.

## About Particularly Vulnerable Tribal Groups (PVTGs)

- PVTG (earlier known as Primitive Tribal Groups) is the category with in Scheduled Tribes created on the recommendation of **Dhebar commission (1973)**.
- In 1975, Government of India declared 52 tribal group as PVTG's. While in 1993 an additional 23 groups were added to the category, making it a total of 75 PVTGs out of 705 Scheduled Tribes.
- PVTGs reside in 17 States and UT of Andaman & Nicobar Islands.
- The highest number of PVTGs are found in Odisha (13) followed by Andhra Pradesh (12)).

#### Criteria and Identification of PVTG's

- Government of India follows the following criteria for identification of PVTGs.
  - Pre-agricultural level of technology
  - Low level of literacy
  - Economic backwardness
  - A declining or stagnant population.
- States/UTs submit proposals to the Union Ministry of Tribal Welfare to declare certain tribal communities as PVTG's.
- If any tribal group fulfil the afore-mentioned criteria, then it is declared as the PVTG by the Ministry.

# YUVA SANGAM PORTAL

- Yuva Sangam registration portal was launched.
- It is an initiative of Government of India to strengthen people to people connect especially between youth belonging to North Eastern India and other States.
- It will focus on conducting exposure tours of youth between 8 North Eastern States and other States.
- It is conceptualized under Ek Bharat Shreshtha Bharat (EBSB) in collaboration with various other ministries and departments such as Culture, Tourism, Railways etc.



# **LITHIUM DEPOSITS IN INDIA**

Geological Survey of India has for the first-time established Lithium inferred resources (G3) of 5.9 million tonnes in Salal-Haimana area of Reasi District of Jammu & Kashmir.

- The discovery is 'inferred' or preliminary, the lowest of the three levels of estimations of a mineral deposit and the second of the four stages of exploration, as per the UNFC 1997.
- This may be the seventh largest deposit of the rare element, accounting for roughly 5.7% of all the reserves in the world.
- Previously, in India, lithium reserves have been reported from Karnataka's Mandya district.

# **Global Distribution of Lithium**

- The United States Geological Survey (USGS) said in 2022 that total lithium resources globally stand at 80 million tonnes although the reserves from which it can be accessed were pegged at just over 22 mn tonnes.
- Though found on each of the six inhabited continents, Chile, Argentina, and Bolivia together referred to as the "Lithium Triangle" hold more than 75% of the world's supply.

# **WORLD'S FIRST 3D-PRINTED ROCKET ENGINE**

- Agnikul-Cosmos, a space-tech startup incubated in IITMadras, has successfully conducted the flight acceptance test for its 3D printed rocket engine "Agnilet".
- Unlike other rocket engines, Agnilet was built in a single step, eliminating thousands of parts that are typically assembled in a conventional rocket engine.
  - o It is a semi-cryogenic engine, which uses a mixture of liquid kerosene at room temperature and super cold liquid oxygen as fuel.
  - o During the test, it generated sea level thrust of 6 kilo Newton.
- Agnilet Engine will power the company's launch vehicle, Agnibaan, which is capable of carrying payloads of up to 300kg to a low-earth orbit.



o Launch of Agnibaan will be the second by a private firm -- after Hyderabad-based Skyroot Aerospace's Vikram-S, which took place in November 2022.

# **MANUAL SCAVENGING**

Kerala became the first state in the country to use robotic technology to clean all its commissioned manholes.

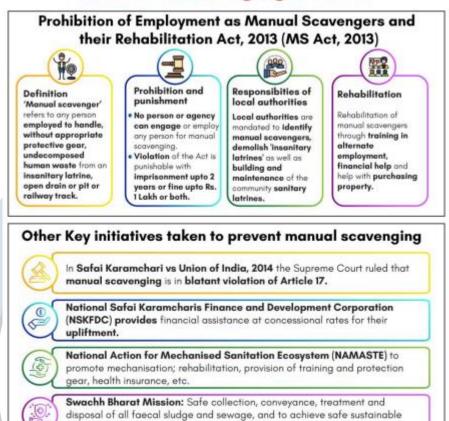
- The robotic scavenger 'Bandicoot' to clean sewages functions in a similar way such as a person.
- It enters the manhole, removes sewage using robotic hands, and releases it at the designated site.
- Also, it has features of being waterproof, HD vision cameras, and sensors that can detect harmful gases inside the manholes.

#### **About Manual scavenging**

- Manual scavenging is the dehumanising practice of manually cleaning and handling of human excreta from dry latrines, sewers, septic tanks, railway lines, etc. with basic tools like brooms.
- It is a primarily caste-based-forced occupation in India.
- There are at present approximately 58,098 "eligible manual scavengers" across the country.
- Eradication of manual scavenging is a very crucial factor for attaining various Sustainable development Goals (SDGs).



# Manual Scavenging In India



Swachhata Abhiyaan App to capture the data of insanitary latrines still existing and manual scavengers associated with their cleaning.

Prohibiting use of the word 'manhole' anymore and instead using only 'machine-hole' to support the government's decision to eradicate manual scavenging.

Jan Sahas founded in 2000, started the Rashtriya Garima Abhiyan the National Campaign for Dignity and Eradication of Manual Scavenging.

#### **CHANDRAYAAN 3**

Several critical steps that are necessary for the successful launch of the India's 3rd lunar exploration expedition were successfully conducted recently.

• Indian Space Research Organization (ISRO) have achieved a significant

sanitation for all.



milestone in their efforts to safely land a spacecraft on the Moon.

- o The Chandrayaan-3 spacecraft has successfully passed the "essential tests" that validate its ability to endure the severe vibration and acoustic conditions it would experience during its launch.
- The three possible landing sites for the mission is also finalized between Manzius U and Boguslawsky M craters in the South Polar Region of the moon.
- The proposed lander has successfully completed the crucial Electro Magnetic Interference and compatibility test.
- The Flight acceptance hot test, for the Cryogenic engine to be used in the mission was also successfully conducted.

#### **Previous Lunar Missions of India**

	CHANDRAYAAN 1 (2009)	CHANDRAYAAN 2 (2019)
Objective	To prepare a three-dimensional atlas of both near and far side of the moon and chemical, mineralogical and photo-geological mapping of moon	To <b>demonstrate the ability to soft-land</b> on the lunar surface and operate a robotic rover on the surface.
Modules	Contained <b>only Orbiter</b> , which was <b>successfully placed at 100kms</b> from Lunar surface.	Contained <b>Orbiter, Lander (VIKRAM)</b> and <b>Rover (PRAGYAN)</b> , the orbiter was successfully placed, but the lander lost connection while landing.
Findings	The detection of Water (H2O) and Hydroxyl (OH) on the surface of the moon.  It confirmed the Ocean Magma Hypothesis i.e. the moon was once completely in molten state.  Detection of new spinel-rich rock type on lunar surface.  It confirmed the presence of magnesium, aluminium, silicon and calcium on lunar surface, through x-ray signals.	<ul> <li>Identified the presence of variable         Argon-40 at the middle and higher         latitudes of the Moon.</li> <li>Detected the presence of Chromium and         Manganese on the lunar surface.</li> <li>Detected signatures of the sub-surface         water-ice, and achieved high resolution         mapping of the lunar morphological         features in the polar regions.</li> <li>Micro solar flares, were observed outside         the active region of the sun for the first         time, which will help to understand the         mechanism behind heating of the solar         corona.</li> </ul>

#### **AADHAAR MITRA**

- Unique Identification Authority of India (UIDAI) launched its chatbot 'Aadhaar Mitra'.
  - o Chatbot is software that simulates human-like conversations with users via chat.



• Artificial Intelligence/Machine Learning (AI/ML)-based chatbot can answer queries related to Aadhaar.

o It can provide information about most Aadhaar services such as Aadhaar Centers, Aadhaar Enrolment/Update status, PVC i.e., plastic card order status, Complaint status etc.

# **JUPITER MOONS**

- Jupiter, with 92 moons, beats Saturn to become planet with most moons.
- Jupiter is home to first moons discovered in our solar system, functions like a mini solar system.
- Jupiter's four largest moons are called Galilean satellites: Lo, Europa, Ganymede, and Callisto.
  - o Lo is most volcanically active body in solar system.
  - o Europa's surface is mostly water ice.
  - o Ganymede is largest moon in solar system and is only moon known to have its own internally generated magnetic field.
  - o Callisto's surface is extremely heavily cratered and ancient.

## STEM CELL TRANSPLANT (SCT)

- Third Patient has been cured of HIV (Human Immunodeficiency Virus) after Stem Cell Transplant (SCT).
- This was achieved with a bone-marrow transplant (also called SCT) from people carrying a specific HIVresistant genetic mutation called CCR5-delta 32 genetic mutation.
- A bone marrow transplant is a procedure that infuses healthy blood-forming stem cells into body to replace bone marrow that's not producing enough healthy blood cells.
  - o Bone marrow transplants may use cells from your own body (autologous transplant) or from a donor (allogeneic transplant).



- HIV mainly attacks CD4 immune cells (type of white blood cell) in human body, thereby reducing a person's ability to fight off secondary infections.
  - o CCR5 receptors on surface of CD4 immune cells act as a doorway for HIV virus.
- However, CCR5-delta 32 mutation prevents these receptors used by HIV virus from forming on the surface, effectively removing the doorway.

# **NUCLEAR ENERGY PROGRAM**

- Haryana's first nuclear power plant will be set up in Gorakhpur village.
- Upcoming Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP) will have two units of 700 MWe capacity each of Pressurised Heavy Water Reactor (PHWR).
- India's 3-stage nuclear energy program, envisioned by Homi Bhabha, is based on a closed nuclear fuel cycle.
  - o Stage-I: PHWRs fuelled by Natural uranium would produce plutonium-239. Heavy water (D2O) is used as moderator and coolant in PHWR.
  - o Stage-II: Fast Breeder Reactors utilising plutonium- 239 fuel from first stage and formed uranium-238.
  - o Stage-III: Advanced nuclear power systems for utilisation of thorium.
- India successfully reached the first stage in 2013 with over 22 nuclear reactors (18 PHWRs, and 4 Light Water Reactors) in 7 nuclear power plants.
- India is currently on second stage of program.
  - o India's current nuclear power capacity of 6,780 MW is expected to increase to 22,480 MW by 2031.
  - o Nuclear energy is fifth-largest source of electricity for India.
- Steps taken to increase nuclear power output
  - o Atomic Energy Amendment Act 2015 allow public sector companies to form joint ventures to build nuclear power plants.



o Resolution of issues relating to Civil Liability for Nuclear Damage (CLND) Act 2010 and establishment of an Indian Nuclear Insurance Pool.

# **Operational Nuclear Power Plants in India**



## MAHARISHI DAYANAND SARASWATI

The Prime Minister inaugurated the year-long celebrations commemorating the 200th birth anniversary of Maharishi Dayanand Saraswati.

- Born on 12th February 1824, in Tankara, Gujarat, Maharishi Dayanand Saraswati was a social reformer.
- His views on religion, politics and society were published in his famous work, Satyarth Prakash (1875).



# Philosophy of Maharishi Dayanand Saraswati

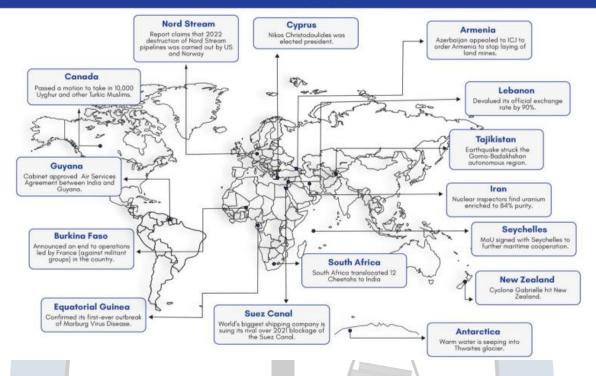
- Advocation of Dharma: He strongly advocated the concepts of Dharma which he believed to be free from any partiality and as an embodiment of truthfulness.
  - o To him, Adharma was anything that did not hold true, was not just or fair and was opposed to the teachings of the Vedas.
- Supremacy of Vedas: He believed in the Supremacy of the Vedas and dispelled the notion of any deficiency in the scriptures of India. But he pointed out that their real meaning is forgotten.
  - o His book Satyarth Prakash emphasised the "return to Vedic principles" that he believed had been lost over time. He gave the slogan 'Go back to Vedas'.
- Non-violence: He preached respect and reverence for other human beings, supported by the Vedic notion of the divine nature of the individual and condoned the practice of Ahimsa or non-violence.
- Prioritized Humanity: He advocated that all activities must be done for the benefit of humankind as a whole, rather than individuals or even idols and religious symbols (as a part of "10 founding principles of Arya Samaj").

## SANGEET NATAK AKADEMI AWARDS (SNAA)

- President conferred various artists Sangeet Natak Academe Fellowship and Sangeet Natak Awards for 2019.
- Sangeet Natak Akademi, apex body in field of performing arts in country, was set up in 1953 for preservation and promotion of intangible heritage of India's diverse culture.
- SNAA are national honours given by government to performing artists, teachers, and scholars in field of performing arts.
  - o Awards are given in five fields i.e., Music; Dance; Theatre; Other

Traditional/Folk/Tribal/Dance/Music/Theatre and Puppetry; and Overall contribution/ Scholarship to Performing Arts.

# Places in News: World



# Places in News: India

