DAILY CURRENT AFFAIRS ANALYSIS

14 AUGUST 2023

1 - The inter-services organisation bill:

GS II

Parliament related issues

• The Rajya Sabha recently approved a measure that gives the commander in chief and the officer in command of those organisations disciplinary and administrative jurisdiction over soldiers from the other services who are serving in inter-services groups.

• Important details:

- The Inter-Services Organisation (Command, Control & Discipline) Bill 2023 was introduced in the Upper House.
- The bill proposes to grant the commander in chief and officer in command of inter-services groups full disciplinary and administrative rights so they can make judgements regarding the troops working for or associated with those organisations.
- Currently, all members of the Army, Navy, and IAF are governed by the service-specific laws that are applicable to each.
- Service members who are assigned to or serving in an Inter-Services Organisation are nonetheless subject to the various Service Acts.
- Once the enabling law is passed, heads of Inter-Services Organisations will be able to exercise all disciplinary and administrative powers under the current service statutes and associated rules and regulations, regardless of the service they are in.
- It also grants the federal government the power to create an Inter-Services Organisation, paving the way for integrated theatre commands, a substantial military reform that is now under development.
- The introduction of theatre commands, a fundamental military reform, attempts to merge the three services' existing autonomous commands into tri-services institutions with a common military goal.

• There are currently three theatrical commands that will be created:

- ahead of Pakistan,
- China and the other, and
- a naval theatre command with a focus on the Indian peninsula.
- This is accurate because each integrated theatre command will have personnel from all three services and will be under the leadership of a theatre commander from one of them.

- Any disciplinary or administrative action taken against employees connected to these groups must be notified to the appropriate services because the heads of the current inter-services organisations do not currently possess these powers.
- Only a few inter-services bodies include the Strategic Forces Command, the Andaman and Nicobar Command, and joint training centres like the National Defence College.
- Passage of the Bill will guarantee:
- effective discipline is upheld in inter-services facilities by their leaders,
- there is no duty to refer employees facing disciplinary action to their parent services,
- quicker resolution of indiscipline or misdemeanour cases.
- Source \rightarrow The Hindu

2 - The Assam Rifles:



- The Assam Rifles (AR) are charged in a FIR filed by Manipur police for obstructing the performance of their duties.
- Regarding Assam Rifles:
- A centrally located armed police force is the Assam Rifles.
- The AR is one of the six central armed police forces (CAPFs) that the Ministry of Home Affairs (MHA) has administrative jurisdiction over.
- Other five forces include:
- CRPF, or Central Reserve Police Force
- BSF, the Border Security Force
- the Indo-Tibetan Border Police
- SSB, or Sashastra Seema Bal.

- Role:
- Together with the Indian Army, the AR is in charge of upholding peace and order in the Northeast.
- Additionally, it controls the border between India and Myanmar.
- The only paramilitary organisation with a dual control structure is this one.
- The Indian Army, which is part of the Ministry of Defence (MoD), has operational control over the force while the MHA has administrative control over it.
- This indicates that while the MHA provides the force's infrastructure and wages, the Army makes the decisions on the deployment, posting, transfers, and deputation of AR troops.
- Origin and history:
- The AR was founded in 1835, making it the country of India's paramilitary force.
- Since then, it has participated in both World Wars, the Sino-Indian War of 1962, and operations against militant organisations in the Northeast.
- The AR was organised as the Cachar Levy, a militia to defend British colonies and tea fields from incursions by Northeastern tribal groups.
- Later, the force was reorganised as the Assam Frontier Force, and its mandate was enlarged to include conducting punitive actions outside of Assam's borders.
- In the conflict of 1962, the AR participated in conventional battle, and in 1987, it went to Sri Lanka as a member of the Indian Peace Keeping Force (IPKF).
- With numerous Shaurya Chakras, Kirti Chakras, Vir Chakras, Ashok Chakras, and Sena Medals to its name, it continues to be the paramilitary force that has received the most recognition in both pre- and post-Independence India.
- Source \rightarrow The Hindu

3 – Kerala to be renamed:

GS II

Constitution related issues

• The Kerala Assembly adopted a motion requesting that the state's name be changed to "Keralam" in the Constitution and all official documents.

• Key information:

• Keralan origin:

- It is thought that the name "Keralam" may have sprung from the word "Cheram."
- Keralam is referred to as Cheram, the area between Gokarnam and Kanyakumari. The term "keram" is the Canarese (Kannada) version of cheram.
- It's possible that the word's meaning derives from the root "cher," which means to unite.
- The compound word "Cheralam," where "alam" stands for "region or land," clearly conveys this concept.

• Demands for the creation of the modern state:

- The Aikya (united) Kerala movement gained traction and the need for a distinct state for Malayalam-speaking people emerged in the 1920s.
- It was intended to unite the lands of Malabar, Kochi, and Travancore.
- The two states of Travancore and Kochi were united on July 1, 1949, becoming the Travancore-Cochin State.
- Kerala was suggested as a state's creation by the Union Government's State Reorganisation Commission.
- The district of Malabar and the taluk of Kasargod were suggested for inclusion in the Malayalamspeaking people's state by the Commission headed by Syed Fazl Ali.

• Additionally, it suggested that the four Southern taluks of:

- Tovala viz Travancore
- Agastheeswaram,
- & Kalkulam
- All of these taluks are currently a part of Tamil Nadu, including Vilayankode and some areas of Shenkottai.
- Kerala became a separate state on November 1, 1956.
- The state was referred to as Keralam in Malayalam and as Kerala in English.

• What steps are involved in renaming a state?

- The Ministry of Home Affairs (MHA) of the Centre must give its consent before a state's name can be changed.
- As a result, a constitutional amendment is required to bring about this change.
- The state government must first make the suggestion.

- As soon as the Union Ministry of Home Affairs (MHA) gets No Objection Certificates (NOCs) from several organisations, including:
- the Department of Railways
- Information Bureau
- Ministry of Posts
- analysis of India and •
- Indian Registrar General.
- If the proposal is approved, the resolution, which was presented to the Parliament as a Bill, becomes a law, and the state's name is then changed.
- Source \rightarrow The Hindu

4 - Small nuclear modular reactors:



- **Context:**
- India may find small modular reactors, a particular form of nuclear reactor, useful in meeting its net zero goals.

Key information:

- The UN Sustainable Development Goal 7 to guarantee that all people have access to cheap, dependable, sustainable, and modern energy – serves as a major compass for the global effort to decarbonize itself.
- Decarbonizing the electricity industry is essential because 82% of the world's energy supply still comes from fossil fuels.
- By 2050, the proportion of electricity in total energy consumption will likewise rise, by 80% to 150%.
- To ensure grid stability, energy security, and a comprehensive decarbonization of power generation, it is essential to have access to reliable, low-carbon electrical resources around-theclock.
- India can benefit from small modular reactors in this way.

• Decarbonization is what?

- Decarbonization is the process of lowering greenhouse gas emissions by reducing carbon dioxide emissions from power sources with low carbon content.
- When we talk about "decarbonization," we typically mean the process of lowering "carbon intensity," or the volume of greenhouse gas emissions brought on by the burning of fossil fuels.
- In order to do this, the CO2 output per unit of electricity must be reduced.

• Difficulties with decarbonisation:

- Renewable energy sources won't be enough:
- It will be impossible to meet everyone's needs for inexpensive energy using only solar and wind power.
- The adoption of at least one firm power-generating technology can increase grid stability and lower costs in decarbonized electrical networks with a considerable proportion of renewable energy.
- A rise in the demand for essential minerals:
- By 2030, there will likely be a 3.5-fold rise in demand for rare earth elements, lithium, nickel, [©] cobalt, and other vital minerals needed for sustainable energy production.
- The development of new mines and processing facilities would require significant financial investments, which will present a number of worldwide difficulties.

• Impacts on the environment and society:

• The construction of several new mines and processing facilities in China, Indonesia, Africa, and South America over a short period of time will have an adverse environmental and social impact. Additionally, the top three countries that produce and process minerals currently control 50–100% of the world's extraction and processing capacity.

• Benefits of nuclear energy:

- It results in less pollution:
- 10% of the world's electricity is produced by nuclear power plants (NPPs), which also reduce annual natural gas demand by 180 billion cubic metres and CO2 emissions by 1.5 billion tonnes.
- Any reduction in nuclear power could make the global transition to net-zero more difficult and expensive.

• Efficiency:

- NPPs utilise land effectively and have less expensive grid integration costs than sources of variable renewable energy (VRE).
- It is because NPPs produce electricity year-round in all types of weather.
- Co-Benefits:
- High-skill jobs in technology, manufacturing, and operations are among the useful side advantages of nuclear power.

• Benefits of SMRs:

- Lower frequency of damage.
- In comparison to traditional NPPs, SMRs are built with decreased core damage frequencies (the probability that an accident may damage the nuclear fuel) and source terms (a measure of radioactive contamination).
- For added safety, they also feature improved seismic isolation.

• Simpler styles:

- The possibility for the uncontrolled release of radioactive elements into the environment is reduced by the fact that SMR designs are more straightforward than those of traditional NPPs and incorporate a number of passive safety mechanisms.
- Less nuclear fuel that has been used:
- Additionally, less spent nuclear fuel will be stored in an SMR plant than in a traditional NPP.

• Installable on brownfield locations:

- SMRs can be erected and operated safely at a number of brownfield locations that might not satisfy the stricter zoning regulations for traditional NPPs.
- The organisation running the power plant may also engage in community service, as the Nuclear Power Corporation did in Kudankulam, Tamil Nadu, prior to the construction of the first unit.
- Taking aim at Net-Zero:
- Because uranium supplies are not as concentrated as deposits of key minerals, accelerating the deployment of SMRs under international safeguards by implementing a coal-to-nuclear transition at existing thermal power-plant sites will bring India closer to net-zero and enhance energy security.

• All nations that have uranium mines and facilities for such enrichment can provide the lowenriched uranium that is needed for the majority of land-based SMR designs, provided that the recipient facility is compliant with international norms.

• Low time and cost escalation:

- SMRs have a decreased chance of time and cost overruns because they are typically produced in a factory and assembled on site.
- Additionally, the production of SMRs in serial quantities can lower costs by streamlining the design of the facility to enable quicker regulatory approvals and hands-on experience with serial production.
- The levelized cost of power is \$60-90 per MWh because SMRs are made to last more than 40 years.
- When reputable businesses produce SMRs, India will see the greatest cost reductions.
- Need for a productive regulatory system:
- If SMRs are to contribute significantly to the decarbonization of the power industry, an effective regulatory framework akin to that in the civil aviation sector is required.
- This is feasible if all nations that approve of nuclear energy:
- Encourage cooperation between their respective regulators and the International Atomic Energy Agency
- Harmonise their legal specifications
- Accelerate the regulatory approval process for SMRs using uniform, standardised designs.
- What is the best way to integrate SMRs into the national grid?
- It is necessary to boost the generating capacity of VRE sources while also increasing the generation capacity of India's coal-based thermal power plants (TPPs).
- Additional energy storage from batteries and hydroelectric facilities will be needed in order to integrate this power from VRE sources with the national grid.
- By 2031–2022, TPPs will produce more than half of the country's electricity, with VRE sources and NPPs contributing 35% and 4.4%, respectively.
- Given that India has pledged to become net-zero by 2070, the nation's nuclear power output must significantly increase.
- To decarbonize India's energy industry, it is crucial to attract investments from the private sector (in PPP mode), as the government cannot afford to make the sizeable investments needed for NPP expansion on its own.

• Moving ahead:

- To permit the establishment of SMRs by the private sector, the Atomic Energy Act must be changed.
- Control of nuclear fuel and radioactive waste must continue to reside with the Government of India in order to maintain safety, security, and safeguards.
- While privately owned SMRs can be operated by the Nuclear Power Corporation during the hand-holding procedure, the security around SMRs must remain under government supervision.

• Changing the public's perception:

- By more effectively sharing thorough environmental and public health data of the Indian civilian reactors, which are operating under international safeguards, the Department of Atomic Energy must improve public opinion of nuclear power in India.
- Source \rightarrow The Hindu

5 - Indian Web Browser Development Challenge:

Parliament related issues

GSII (FDFV)

- The recent introduction of the Indian Web Browser Development Challenge (IWBDC) by the Ministry of Electronics & Information Technology (MeitY) provides context.
- Key information:
- It is an Open Challenge Competition called the IWBDC.
- Aim:
- to encourage and enable technology enthusiasts, creators, and developers from throughout the nation to develop a native web browser with a trust store and improved security and data privacy features.
- Important characteristics:
- both usability and accessibility,
- integrated support for people of different abilities

- the capacity to use a crypto token to digitally sign documents,
- enhancing digital interactions and secure transactions.
- Significance:
- India has relied on certificates issued by foreign businesses with foreign roots.
- Overcoming this difficulty will require starting to design its own browser with an integrated India Root Certificate.
- India has made progress towards becoming a "Internet Resilient" nation, which refers to a nation's capacity to endure and bounce back from numerous disruptions and threats that may affect its connectivity and infrastructure for the internet.
- Source \rightarrow The Hindu

