

## Prelim Bits 23-01-2024 | UPSC Daily Current Affairs

### VijayRaghavan Panel Report

A 9-member panel headed by the former principal scientific advisor to the government Prof. Vijay Raghavan have submitted its report.

- **Aim of the committee** - To review the functioning of the Defence Research and Development Organisation (DRDO).
- **Reasons** - Several projects of DRDO suffer from *huge delays and cost overruns*.
- According to the Parliamentary Standing Committee on Defence, 23 of DRDO's 55 mission mode projects could not be completed in time.
- According to CAG report, 67% of the 178 projects scrutinised by it had failed to adhere to their initially proposed timelines.

*Ministry of Defence (MoD) has set an ambitious defence exports target of Rs 35,000 crore by 2025.*

### Recommendations of the committee

- **Focus on research** - The DRDO should focus on its original goal of *research and development* for defence.
- It should refrain from involving itself in productization, production cycles, and product management, tasks that are more suitable for the private sector.
- **Defence Technology Council** - The committee has also suggested a Defence Technology Council (DTC) chaired by the **Prime Minister**, with the defence minister and the National Security Advisor as its Vice Presidents.
- It will also have an executive committee chaired by the Chief of Defence Staff (CoDS).
- It will include representation from academia and industry, with two members from each sector.
- The Council will determine the country's defence technology roadmap and decide on major projects and their execution.

The Defence Acquisition Council (DAC) is an apex body for clearing major capital acquisitions for defence and it has been headed by the Union Defence Minister.

- **Separate Department** - The panel has also suggested the creation of the ***Department of Defence Science, Technology, and Innovation*** under the Defence Ministry.
- This department will be headed by a technocrat and it will serve as the secretariat for

the Defence Tech Council (DTC).

- **Centralized Laboratory** - The committee has recommended the setting up of close to 10 national-level laboratory facilities instead of the existing 40 or more DRDO labs across the nation.

*Earlier in 2008, **Dr P Rama Rao Committee** was constituted to review the functioning of the DRDO and all the recommendations by the Committee were accepted by the DRDO except the creation of a Board of Research for Advanced Defence Sciences (BRADS).*

## References

1. [The Indian Express | K Vijay Raghavan committee](#)
2. [PIB | Dr. P. Rama Rao Committee](#)

## Statue for Marudhu Brothers

*A Bhumi Puja has been performed recently to install the statues of the Marudhu Pandiyar Brothers of the Sivagangai region of Tamil Nadu in Chittoor, Andhra Pradesh.*

## The Marudhu Brothers

- They are the generals of Muthu Vadugar of the Sivagangai region of Tamil Nadu.
  - Periya Marudhu or Vella Marudhu (1748-1801)
  - Chinna Marudhu (1753-1801)
- Seeing the atrocities of the British Raj, the duo brothers started the unification of the anti-British forces from the coastal belt from Tamil Nadu to West Bengal.
- The rebellion of the Marudhu brothers is called the **South Indian Rebellion**.
- After a series of struggles, the brothers were captured in 1801 and hanged by the British rulers near Siva Gangai.

*Marudhu brothers issued the famous "**Tiruchirappalli Proclamation**" in 1801 which calls for the unification of Indians against the British.*

## References

1. [The Hindu | Statues for Marudhu brothers](#)
2. [TN Government | Eminent Personalities](#)

## Copper Reserves

*India to send industry delegation for copper mining opportunities in Zambia.*

- The Mines Ministry has proposed sending an Indian industry delegation to copper-rich Zambia to discuss potential copper exploration and mining projects in the southern African country.

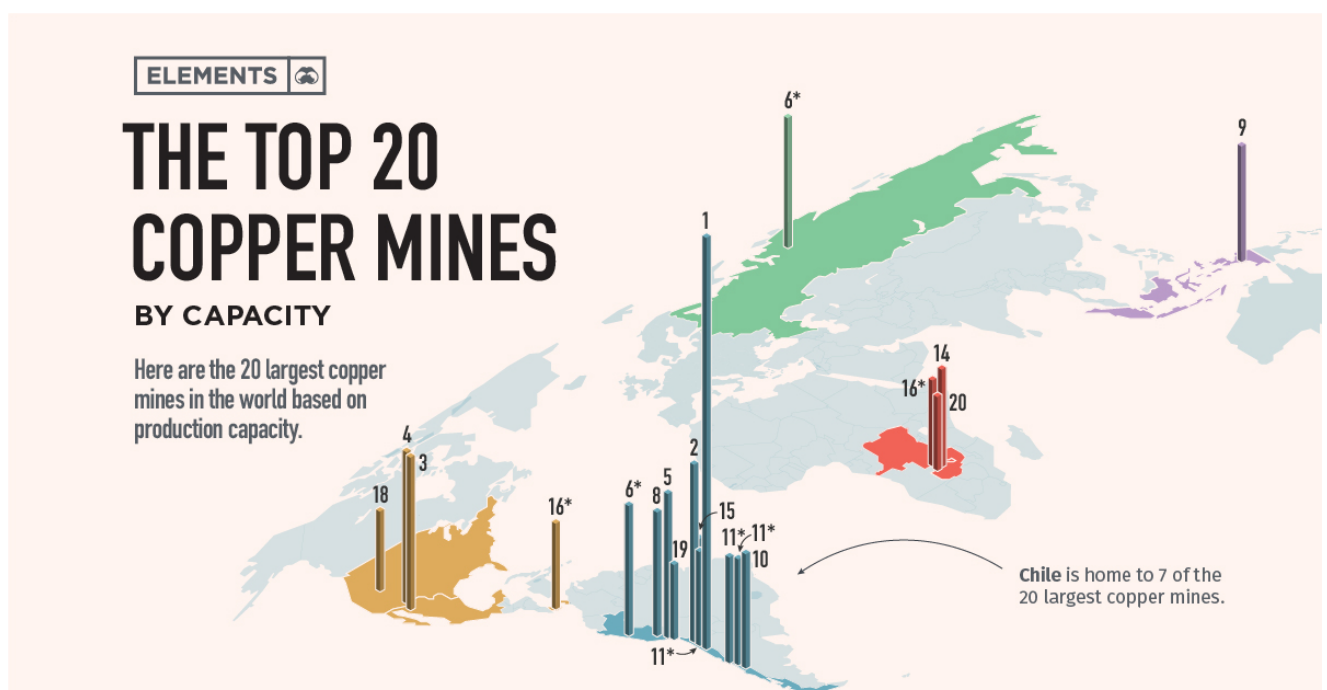
China Nonferrous Mining Corporation (CNMC) is among the largest producers of copper in Zambia.

## Copper

- Copper is a good conductor of electricity and is ductile.
- **Alloys** - Alloyed with iron and nickel to make stainless steel.
  - Alloyed with nickel to make 'invar metal'.
  - Alloyed with aluminium to make 'duralumin'.
  - Alloyed with zinc it is known as 'brass' and with tin as 'bronze'.
- Copper is widely used in sectors like construction, consumer durables, transportation, and industrial manufacturing.
- It is also used in clean energy technologies including solar panels, EVs, and energy efficient motors.
- **Reserves in India** - 46 million tones; Rajasthan (50%); Madhya Pradesh (24%); Jharkhand (19%); 7% in AP, Gujarat, Haryana, Karnataka etc.

As per International Copper Association India, domestic copper demand grew by 16% in FY2022-2023, while demand for copper in clean energy technologies grew by 32%.

- **Reserves across globe** - Chile has the world's largest copper reserves of any country by far, with 190 million metric tons as of 2022.
- It is also the world's largest copper producer, having produced some 5.2 million metric tons of copper from mines in 2022.



## Zambia

- It got its name from the Zambezi River.

- The country is located in southern Africa.
- Zambia is a landlocked country of rugged terrain and diverse wildlife, with many parks and safari areas.
- On its border with Zimbabwe is the famed Victoria Falls, plunging into the narrow Batoka Gorge.

*Zambia has about 6 per cent of the world's copper reserves and was the eighth-largest producer of copper in 2022.*



## Reference

[The Indian Express - Copper mining opportunities in Zambia](#)

## Batadrava Than

*Rahul Gandhi prevented from visiting Batadrava Than.*

- **Located in** - Nagaon district, Assam.
- **Significance** - The Batadrava Than, or Bordowa Than, is a temple complex at the birthplace of revered Vaishnavite reformer-saint Srimanta Sankardeva (1449-1568).
- It is considered the most sacred sites for Assamese Vaishnavites.
- **Sankardeva** - He founded the first-ever Kirtan Ghar at Bordowa in 1494 AD.
- **Kirtan Ghar** - It intended to practice and preach the neo Vaishnavite faith during the fifteenth century in Assam, and propagated the Ek Saran Naam Dharma.
- **Ek Saran Naam Dharma** - It focussed on worship in the form of bhakti (devotion) to Lord Krishna, through singing and congregational listening of His name and deeds.
- Sankardeva espoused a society based on equality and fraternity, free from caste differences, orthodox Brahmanical rituals and sacrifices.
- His teaching focused on prayer and chanting (naam) instead of idol worship.
- His dharma was based on the four components of deva (god), naam (prayers), bhakats (devotees), and guru (teacher).
- The Neo-Vaishnavite reformist movement that Sankardeva started is behind the

monastic institutions called Thans/Sattras that dot Assam.

- As the saint travelled across Assam, spreading his teachings, these Sattras/Thans were established as centres of religious, social and cultural reforms in the 16th century.

## References

1. [The Indian Express - Rahul prevented from visiting Batadrava Than](#)
2. [Times of India - Rahul not allowed to visit Bordowa Satra](#)
3. [Hindustan Times - Batadrava shrine denies entry to Rahul Gandhi](#)

## Practice of Veli

*In a fishing village of Andhra Pradesh, the practice of social boycott among the Vaddi community has adverse social and economic consequences.*

- Veli is the practice of social boycott.
- Those subjected to social ostracisation are not allowed to speak to other villagers and in some cases, compelled to abandon their homes and seek refuge elsewhere.
- Many times, the veli is motivated by politics, caste, or economics.
- An informal grama peddalu (village elders), also called a kula (caste) panchayat, of six or seven members nominated for a year by the community (they are never re-installed), takes a call on veli.

*The age-old practice of veli has been followed to maintain social order within the community.*

- The grama peddalu may also enforce tappu (wrong), a monetary penalty against 'wrongdoers'.
- In a parallel government, they may impose both or just one, depending on how severe they feel the 'wrongdoing' is.
- The pedda (elder) Vaddi heads this informal panchayat that decides on several matters that the community considers important socially and economically, including marriage and extra-marital affairs.

## Reference

[The Hindu - Vitriol under the veil of veli](#)

## Other Important Topics

### **Parakram Diwas**

- PM to participate in programme marking Parakram Diwas (Day of Valor) at Red Fort.
- The programme will commemorate the legacy of **Netaji Subhas Chandra Bose and the Azad Hind Fauj.**
- **January 23, 2024** was commemorated as the **126<sup>th</sup> birth anniversary** of Netaji Subhas Chandra Bose.

### **EXERCISE 'CYCLONE'**

- Exercise Cyclone is a joint military exercise between **India and Egypt.**
- The exercise aims to strengthen the bond between the two armies and develop bilateral military cooperation.
- The exercise focuses on desert operations and includes 3 phases.

### **Pinanga Subterranea**

- Pinanga subterranea is a species of palm tree native to **Borneo.**
- It's the 1<sup>st</sup> known species of palm to flower and fruit almost exclusively underground.
- This rare phenomenon has only been recorded in one other plant group, the orchid **Rhizanthella.**

### **Peregrine Lunar Lander**

- The Peregrine Lunar Lander, also known as Peregrine Mission One, is a lunar lander built by **Astrobotic Technology, U.S.**
- It was launched recently carrying payloads for NASA's Commercial Lunar Payload Services program.

### **International Education Day**

- The **United Nations General Assembly (UNGA)** declared **January 24** as the International Day of Education in 2018.
- The day celebrates the role of education in peace and development and aims to raise awareness of the value and impact of quality education.
- In **2024**, UNESCO is focusing on promoting anti-racist guidelines and addressing racism in textbooks with the **theme - 'learning for lasting peace'**.

### **Religious processions**

- The Supreme Court ruled that the concentration of a religious community in a particular area is not a valid reason to deny permission to another religious community to hold events or prayer meetings.
- The court also ruled that religious processions cannot be rejected based on religious grounds.

### **Mukhyamantri Gramin Solar Street Light Scheme**

- The Mukhyamantri Gramin Solar Street Light Yojana is a scheme that aims to provide street lights in villages and cities in **Bihar**.
- The scheme is expected to be completed by March 2023 but not implemented in some areas till now.

### **Syndiniales & Coralicolids**

- The international team of researchers collected samples of corals from across the Mediterranean Sea and analysed the bacteria that live with the corals.
- The researchers found that the presence of a group of parasitic single-celled organisms called **Syndiniales** made it more likely that a coral could **survive** heat stress.
- The presence of Coralicolids, a group of single-celled organism related to the parasite that causes malaria, was more common in corals that **die** from heat stress.

### **India's stock market**

- India overtakes Hong Kong to become **4<sup>th</sup>-largest stock market** recently.
- India's stock market capitalization crossed USD 4 trillion for the first time, with about half of that reportedly coming in the past 4 years.
- The top 3 stock markets are the **U.S., China, and Japan**.

### **Naiyandi Melam**

- A naiyandi melam is a type of percussion instrument that is unique to **Tamil Nadu, Kerala and parts of South India**.
- It is performed by artistes of different communities. The word, naiyandi, means making **fun**.
- Naiyandi melam follows a set of tunes, beginning with '**thooku**'.

