

### RARE EARTH MINERALS

Union Minister of State (Independent Charge) Science & Technology recently said that India is not reliant on China for accessing rare earth minerals.



#### About Rare Earth Minerals:

- Rare Earth Elements or Rare Earth Metals are a set of 17 elements in the periodic table — the 15 lanthanides, plus scandium and yttrium, which tend to occur in the same ore deposits as the lanthanides, and **have similar chemical properties**.
- They used in production in a huge number of sectors, including renewable energy technology, oil refinery, electronics, and the glass industry.
- Rare Earth elements are used in space shuttle components, jet engine turbines, and drones.
- **Cerium**, the most abundant Rare Earth element, is essential to NASA's Space Shuttle Programme.
- **Although called "rare", they are actually found relatively abundantly in the Earth's crust.**
- However, they are hazardous to extract, and there are relatively few places in the world that mine or produce them.
- According to the Rare Earth Technology Alliance (RETA), the estimated size of the Rare Earth sector is between \$10 billion and \$15 billion. About 100,000-110,000 tonnes of Rare Earth elements are produced annually around the world.

#### Reserves of rare-earth minerals:

- China has the largest reserve (37 percent), followed by Brazil and Vietnam (18 percent each), Russia (15 percent), and the remaining countries (12 percent).
- India has the world's fifth-largest reserves of rare earth elements (contributing a total value of nearly \$200 billion to the Indian economy), nearly twice as much as Australia.

### AERONOMY

Union Minister of State (Independent Charge) Science & Technology recently informed that ISRO has taken initiatives for feasibility studies on missions to Venus as well as Aeronomy studies.



### About Aeronomy:

- The term “aeronomy,” coined and introduced about 60 years ago.
- It refers to the scientific study of the upper atmospheric regions of the Earth and other solar system bodies.
- It includes the distribution of temperature, density, and chemical constituents, and the chemical reactions that occur.
- It also includes the studies of aurora, airglow, the ionosphere, Van Allen radiation belts, cosmic rays, and radiative and photochemical phenomena.
- It covers the chemistry, dynamics and energy balance of both neutral and charged particles.

## NATIONAL ENERGY CONSERVATION DAY 2022

The National Energy Conservation Day is celebrated every year on 14th December 2022.



### About National Energy Conservation Day 2022:

- The purpose is to showcase the achievements of the nation in energy efficiency and conservation.

### National Energy Conservation Award 2022:

- To raise awareness about energy efficiency and its conservation, the BEE, under the guidance of Ministry of Power, recognizes and encourages endeavours of industrial units, institutions, and establishments in reducing energy consumption by felicitating them with **Energy Conservation Awards** on the occasion of National Energy Conservation Day, celebrated on 14th December every year.

### National Energy Efficiency Innovation Awards (NEEIA) 2022:

- To recognize outstanding work and innovative minds of India in the area of Energy Efficiency, NEEIA awards were started in the year 2021.

- The awards are evaluated based on Replicability, Affordability, Reliability, Impact on Energy Savings and Impact on Environment & Sustainability.

### **National Painting Competition 2022:**

- To continually bring change in society towards conservation and efficient use of energy, the Ministry of Power has been organizing the National Painting Competition on Energy Conservation since **2005**.
- The competition is held in three stages, namely, **School, State and National Level**.

### **EV-YATRA PORTAL:**

- Bureau of Energy Efficiency has developed a Mobile Application to facilitate in-vehicle navigation to the nearest public EV charger, a website to disseminate information on various central and state-level initiatives to promote e-mobility in the country, and a web-portal to enable CPOs to register their charging details securely into the National Online Database.
- The Mobile application titled “**EV Yatra**” has been designed and developed to facilitate in-vehicle navigation to the nearest public EV charger.

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## **EVEN AS BORDER CHILL DEEPENS, RECORD SURGE IN IMPORTS FROM CHINA**

### **In News:**

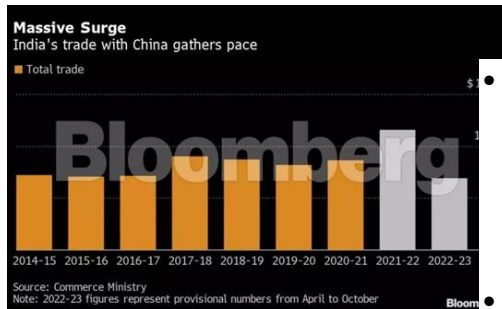
- China’s latest transgression on the Line of Actual Control (LAC) in Arunachal Pradesh led to calls for snapping trade ties.
- However, official data show that India’s imports from China have jumped to a record high over the last 30 months.

### **Background:**

- Indian and Chinese soldiers clashed in the Tawang sector of **Arunachal Pradesh** last week.
- Both the countries had been working to de-escalate tensions since the major clash which took place in Galwan valley in 2020.
- The incident took place on December 9 after 300-400 soldiers from the People’s Liberation Army (PLA) intruded across the Line of Actual Control.

- The intrusion was resisted by Indian soldiers deployed there in a firm and resolute manner, forcing the Chinese to retreat.

## India – China Trade Relationship:



- According to data from the data from the Commerce Ministry, the total merchandise trade between India and China rose 34% to **\$115.83 billion** in the 12 months to March 2022.
- Trade between the two nations so far this year — between April and October — stood at **\$69.04 billion**.

## Major Imports/Exports from/to China:

- China is **India's largest trade partner for the year 2022**.
- India's major imports from China are –
  - Electronic goods (\$35.4 billion), engineering goods (\$24.9 billion), chemicals and related products worth \$19.6 billion, other manufactured goods (\$8.3 billion), and textiles (\$2.8 billion).
- India's major exports to China include –
  - Engineering goods (\$5.4 billion), agricultural and allied products (\$3.8 billion), ores and minerals (\$2.9 billion), chemicals and related products (\$2.9 billion), and petroleum and crude products (\$1.9 billion).
- Traditionally, India imports more from China than it exports, **thus India's trade balance in 2021 stood at negative \$65.05 billion**.

## Reasons behind high Trade Deficit:

- The reason behind India's extremely high and continuously widening import-export trade deficit is that **it imports goods to fill the gap** between domestic production and supply as well as consumer and demand preferences for various products.
- More specifically, the growth of the trade deficit can be attributed to two factors –
  - A narrow basket of commodities, mostly primary, that India exports to China.

- Market access impediments for most Indian agricultural products and competitive markets, such as pharmaceuticals, IT/ITES, etc.
- The raw material-based commodities that India exports have been overshadowed by Chinese exports over time.
- Many industries in India, **especially the medical industry, are heavily reliant on Chinese products.**
- For example, India's \$42 billion pharmaceutical industry imports about 68% of its active pharmaceutical ingredients (APIs) APIs from China.

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## DRAFT CYBERSECURITY STRATEGY HAS BEEN FORMULATED: CENTRE

### **In News:**

- According to the central government, the National Security Council Secretariat (NSCS) has formulated a **draft National Cyber Security Strategy**, which holistically looks at addressing the issue of security of national cyberspace.

### **The National Security Council Secretariat (NSCS):**

- **Background:**
  - The National Security Council (NSC) of India is an executive government agency established in 1998 and tasked with advising the Prime Minister's Office on matters of national security and strategic interest.
  - The NSC is the **apex body of the 3-tiered structure** of the national security management system in India.
  - The 3-tiers are the Strategic Policy Group, the National Security Advisory Board and a **secretariat from the Joint Intelligence Committee (JIC).**
- **About National Security Council Secretariat (NSCS) –**
  - NSCS is the apex agency looking into the political, economic, energy and strategic security concerns of India.

- National Cyber Security Coordinator (NCSC) works under NSCS and coordinates with different agencies at the national level for cyber security matters.

## Draft National Cyber Security Strategy:

### Guiding Principles:

- **Risk-based approach:** To be adopted by the private sector, the government, academia and civil society in assessing and responding to cyber-related threats or issues.
- **Multi-stakeholder approach:** To enhance the effectiveness of all key stakeholders in improving the cybersecurity posture by recognizing the various roles and responsibilities of different stakeholders.
- **External Co-operation:** The Strategy will also promote bilateral, regional and international cooperation, recognizing the borderless nature of cyberspace.
- **Respect for the rule of law and human rights:** To promote, protect fundamental human rights and freedoms of citizens.
- **Capacity development:** To address fast changing cybersecurity issues and developments.
- **Socio-economic development:** To ensure cyberspace is fully leveraged by broader socio-economic development, facilitate sustainable socio-economic development across the entire nation.
- **Addressing Cybercrime:** To promote and facilitate both individual and collective action in tackling cybercrime.

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## 'ORUNODOI' SCHEME

10.54 In lakh, the additional number of people will benefit from Assam government's second edition of 'Orunodoi'. With this, the total number of beneficiaries will come to 27 lakh.



### About 'Orunodoi' Scheme:

- It is a scheme of the Government of Assam is launched on 2nd October 2020.

- Under ‘Orunodoi’, monetary benefits have been envisaged for more than 24 lac poor household in the state.
- Government of Assam will provide monthly financial assistance to the eligible beneficiaries for procuring medicines, pulses, and sugar.
- The schematic benefit has been enhanced from 830/- to Rs. 1000/ Women.
- Women being the primary caretakers of the family are kept as beneficiaries of the scheme.
- ‘Orunodoi’ scheme will provide Financial Assistance of Rs. 1000 per month through Direct Benefit Transfer (DBT) scheme.
- The financial outlay for Orunodoi is ₹4,142 crore per annum.

### **Beneficiaries:**

- The preliminary selection of the beneficiaries will be done at the level of **Gaon Panchayat (GP) Village Council Development Committee (VCDC) Urban Local Body (ULB)** based on eligibility/ineligibility conditions.

## BEYPORE URU

The District Tourism Promotion Council, Kozhikode has applied for a Geographical Indication (GI) tag for the famous Beypore Uru (boat).



### **About:**

- It is a wooden dhow (ship / sailing boat / sailing vessel) handcrafted by skilled artisans and carpenters in Beypore, Kerala.
- It is mainly made of Malabar teak, probably the biggest handicraft in the world.
- Beypore urus are purely made of wood, without using any modern techniques, and traditional methods are used to launch this ship into the water.
- The carpenters manually join each piece of wood to build the large boat.
- Uru making in Beypore is a centuries old tradition that was established since India began its maritime trade with Mesopotamia.
- Beypore is a town located on the banks of the Chaliyar River.

- According to records, Uru ships have been in high demand for around 2,000 years.

### **Khalasis:**

- The Khalasis are the traditional artisans responsible for the manufacture of the Uru.
- They are the ones who launch these urus into the water, setting them ready for travel.
- Arab traders were especially enamoured of them, and were among the first major patrons of these vessels.
- It takes at least four years and the effort of over forty Khalasis to build an Uru.

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### **UNITED NATIONS SECURITY COUNCIL (UNSC)**

**The UK, France, and UAE have extended their support for India's permanent membership at the United Nations Security Council (UNSC). India is holding the presidency of United Nations Security Council for the month of December 2022.**



### **About United Nations Security Council (UNSC):**

- The United Nations Charter established six main organs of the United Nations, including the UN Security Council (UNSC).
- UNSC has the primary responsibility for the maintenance of international peace and security.
- Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.
- The Security Council takes the lead in determining the existence of a threat to the peace or act of aggression.
- The Security Council has permanent residence at the **United Nations Headquarters in New York City.**

### **Powers:**

- Establishment of peacekeeping operations
- Establishment of international sanctions
- Authorization of military action through Security Council resolutions



## Members:

- The U.N. Charter provides for **15 members on the UNSC:**
    - 5 permanent members known as P5, including **United Kingdom, China, France, Russia and the US.**
    - They have **veto power** over decisions of UNSC.
  - **10 non-permanent members**
  - UNSC non-permanent membership:
    - Each year the **193-member General Assembly** elects five non-permanent members for a two-year term at the UNSC.
    - **The 10 non-permanent seats are distributed on a regional basis:**
      - 5 for African and Asian countries (3 are for Africa and 2 for Asia)
      - **Note:** There is an informal understanding between the Africa and Asia to reserve one for an Arab country. The Africa and Asia Pacific group takes turns every two years to put up an Arab candidate.
      - 1 for Eastern European countries
      - 2 for Latin American and Caribbean countries
      - 2 for Western European and other countries
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