UN75

Recently, a commemorative declaration marking the 75th anniversary of the signing of the United Nations (UN) Charter was delayed as member states could not reach an agreement on phraseology.

- The Five Eyes (FVEY)— Australia, Canada, New Zealand, the United Kingdom and the United States— along with India, objected to the use of a phrase "shared vision of a common future", which is associated with China.
- The Five Eyes (FVEY) network is an intelligence sharing alliance between these five countries.
- The 'silence' process was broken at the request of the U.K's Ambassador to the UN, who wrote
 a letter on behalf of the six countries to the President of the 74th General Assembly,
 suggesting alternative wording.
- Silence process is a procedure by which a resolution passes if no formal objections are raised within a stipulated time.
- However, China, on behalf of itself and Russia, Syria and Pakistan raised objections to the silence being broken.
- The current impasse comes at a time when China's relationships with a number of countries, including India, Australia and the U.S.A, are strained.
- Given the impasse, the UN General Assembly President has suggested an alternatively phrased declaration, which he has placed under the silence procedure.

75th United Nations Day

- The United Nations (UN) will celebrate its 75th anniversary on 24 October 2020.
- To mark its 75th anniversary in 2020, the UN is igniting a people's debate: UN75.
- Through UN75, the UN will encourage people to put their opinions together to define how enhanced international cooperation can help realize a better world by 2045.
- Each year on 24th October, the UN celebrates its anniversary. UN Day marks the anniversary of the entry into force of the UN Charter and the founding of the Organization in 1945.
- The name "United Nations" was coined by United States President Franklin D. Roosevelt.
- The main organs of the UN are:

the General Assembly,

the Security Council,

the Economic and Social Council,

the Trusteeship Council,

the International Court of Justice,

the UN Secretariat.

Demand of Reforms at United Nations

Security Council Reforms: In UNSC, the permanent member countries (P5) have made the UN

defunct in maintaining peace and order. Therefore, veto powers of P5 and composition of UNSC must be made more representative of the current world order.

- The P5 countries include China, France, Russia, the United Kingdom, and the United States.
- Multilateralism: International relations today are characterized by the power relationships of the United States, China, Russia, India and Europe.
- A new model of the UN must be formulated, as current world order has changed from bipolar to unipolar to multi polar today.
- Democratisation of UN: Developing countries like India are proposing reforms that seek to democratize the UN, such as UNSC reforms, UN peacekeeping reforms.
- Financial Reforms: This holds the key to the future of the UN. Without sufficient resources, the UN's activities and role would suffer.

UNCTAD AND BATTERY

Recently, the United Nations Conference on Trade and Development (UNCTAD) released a report 'Commodities at a glance: Special issue on strategic battery and minerals'.

- The report facilitated research into battery technologies that depended less on critical raw materials and had the potential to provide higher energy density.
- Energy density is the amount of energy that can be stored in a given mass of a substance or system, i.e. a measure of storage of energy.

Uncertain Supply: The report highlighted that the supply of raw materials to produce rechargeable batteries is uncertain.

Lithium, natural graphite and manganese are critical raw materials for the manufacture of rechargeable batteries.

Rising Demand:

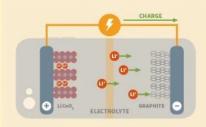
- Integration of EVs: There has been a rapid growth in demand for rechargeable batteries due to the gradual integration of electric vehicles (EVs) in global transportation.
- The sales of electric cars have increased by 65% in 2018 from 2017 to 5.1 million vehicles and it will reach 23 million in 2030.
- Increased Use of Raw Material: With the increasing number of EVs, the demand for rechargeable batteries and the raw materials used in them have also increased.
- The worldwide market for cathodes for lithium—ion batteries was estimated at \$7 billion in 2018 and is expected to reach \$58.8 billion by 2024.
- The demand for raw materials used to manufacture rechargeable batteries will grow rapidly as other sources of energy lose their importance.

Concerns:

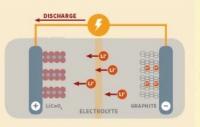
- Limited Suppliers: The security of supplies is a concern for all stakeholders because the production of the raw materials is concentrated in a few countries.
- Over 60% of the world's Cobalt is mined in the Democratic Republic of the Congo while over 75% of global Lithium is mined in Australia and Chile.
- Prone of Volatility: Any disruption to supply might lead to tighter markets, higher prices and increased costs of rechargeable batteries.
- In 2018, the demand for cobalt surged by 25% from 2017 to 125,000 tonnes, of which 9% accounted for the EV battery sector.
- Cobalt demand would reach 185,000 tonnes by 2023, with about 35% accounting for the EV battery sector, the report said.
- Growth in demand for lithium had been significant since 2015, increasing by 13% per year.

Li-ion Batteries

- A lithium-ion battery or Li-ion battery is a type of rechargeable battery.
- Li-ion batteries use an intercalated (Intercalation is the reversible inclusion or insertion of a
 molecule into materials with layered structures) lithium compound as one electrode material,
 compared to the metallic lithium used in a non-rechargeable lithium battery.
- The battery consists of electrolyte, which allows for ionic movement and the two electrodes are the constituent components of a lithium-ion battery cell.
- Lithium ions move from the negative electrode to the positive electrode during discharge and back when charging.
- They are one of the most popular types of rechargeable batteries used for military, EVs and aerospace applications.



Lithium-ion batteries power many of our electronic devices. When lithiumion batteries charge, lithium ions and electrons move from the positive electrode to the negative electrode. When the battery is discharging, the opposite happens and the flow of electrons powers the device.



Way Forward

- Alternative sources of energy such as electric batteries are becoming more important as investors become sceptical of the future of the oil industry.
- There is a need to make a strategy for dynamic monitoring of the raw material cycles, from mining through processing, refining and manufacturing to recycling.
- It will facilitate early detection of supply risks and also enable the development of mitigation strategies at either company or national level.

Maareech

The Indian Navy has inducted an Advanced Torpedo Defence System (ATDS) called 'Maareech' that is capable of being fired from all frontline ships.

Torpedoes are self propelled weapons with a warhead and can be used under or on the water surface. They are one of the mainstay of sea-warfare attack systems.

Description:

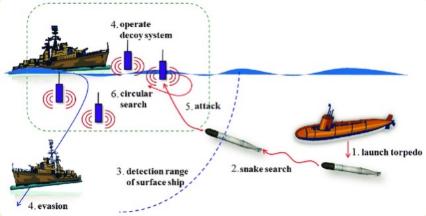
- 'Maareech' has been designed and developed indigenously by the Defence Research and Development Organization (DRDO) and it is capable of detecting, locating and neutralizing incoming torpedoes.
- Bharat Electronics Limited, a Defence PSU, would undertake the production of this decoy system.

Working:

- Maareech detects and locate the incoming torpedo and applies countermeasures to protect the naval platform against attack.
- It first detects and then confuses and divert the torpedo attacks on ships from under the water
- By diverting the torpedoes' original course, it forces it to lose its energy thus preventing it from being effective on target.

Significance:

This induction not only stands testimony to the joint resolve of the Indian Navy and DRDO towards indigenous development of defence technology, but has also given a major fillip to the government's 'Make in India' initiative and the country's resolve to become 'Atmanirbhar' in niche technology.



ANTHROPAUSE

Recently, researchers have coined the term 'anthropause' to refer to the Covid-19 induced lockdown period and they will study its impact on other species.

Etymology:

- The shortened form of prefix 'anthropo-' (for 'human') and 'pause'.
- It is a more precise term for the lockdown period which is also being referred to as the 'Great Pause'.
- It refers specifically to a considerable global slowing of modern human activities and notably travel.

Impact:

- As a result of the lockdown, nature appears to have changed especially in urban environments.
- The unprecedented curbs led to reports of unusual animal behaviour and unexpected animals are being spotted more frequently.
- For example, reported sightings of pumas in downtown Santiago, Chile, of dolphins in untypically calm waters in the harbour of Trieste, Italy, and of jackals in broad daylight in urban parks in Tel Aviv, Israel.
- Hidden from human view, animals may also start roaming more freely across the world's oceans, following reductions in vessel traffic and noise-pollution levels.
- On the other hand, lockdown may have been more difficult and challenging for various urbandwelling animals such as rats, gulls and monkeys who depend on food provided or discarded by humans.

Significance of the Study:

- Studying this period will provide valuable insights into the relationship between human-wildlife interactions in the 21st century.
- Expanding human populations continue to transform their environments at unprecedented rates.
- The linkages of human and animal behaviour can help provide invaluable information, useful in preserving global biodiversity, maintaining the integrity of ecosystems and predicting global zoonoses and environmental changes.
- Further, the reduction in human activity during the lockdown on both land and sea has been unparalleled in recent history and the effects have been 'drastic, sudden and widespread', making this period more important.

Way Forward

- The pandemic affords an opportunity to build a global picture of animal responses by pooling large numbers of datasets.
- Such collaborative projects can integrate the spatial and temporal approaches outlined above, in an attempt to uncover causal relationships.