1. Deep Sea Mining

Why in News?

- According to recent study, commercial-scale Deep seabed mining operations can potentially harm the oceans and endangered species, such as cetaceans including blue whales and several dolphin species.

Highlights

- It is the process of retrieving mineral deposits from the deep seabed the ocean below 200 metres and covers two-thirds of the total seafloor.
- According to International Seabed Authority (ISA), an agency under the United Nations Convention on the Law of the Sea (UNCLOS) for monitoring all activities related to mineral resources in the deep sea, the international seabed is the area that lies beyond the limits of national jurisdiction and represents around 50% of the total area of the world's oceans.
- ISA has issued 32 contracts to explore deep sea mineral deposits. More than 1.5 million square kilometres of the international seabed have been set aside for mineral exploration.
- ISA is required by UNCLOS to put in place the governance infrastructure including rules, regulations and procedures governing the contours of deep-sea mining within 2 years.
- In case of failure, the ISA must at least evaluate the mining proposal by the end of two years.
- The 11th Annual Deep Sea Mining Summit 2023 is to be held in London, United Kingdom. Agenda includes the "economic landscape and growth for deep sea mining and technological developments associated with commercialising".
- Commercial-scale mining is expected to operate 24 hours a day, causing noise pollution.
- It can overlap with the frequencies at which cetaceans communicate, which can cause auditory masking and behaviour change in marine mammals.
- Settlement of sediment plumes generated by mining vehicles could harm/kill the species at the bottom of the ocean (benthic species) in the vicinity.
- Sediment discharged from processing vessels can also increase turbidity in the water column. Also, far from sight impacts could go largely unquantified.