



Third Arctic Science Ministerial

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Why in News

Recently, India participated in the **3rd Arctic Science Ministerial (ASM)** and shared plans for research and long-term cooperation in the **Arctic Region**.

The first two meetings—**ASM1 and ASM2**—were held in the **USA in 2016** and **Germany in 2018**, respectively.

Arctic Region

- The Arctic region comprises the **Arctic Ocean** and parts of countries such as **Canada, Denmark (Greenland), Norway, Russia, USA (Alaska), Finland, Sweden and Iceland**.
- These countries together form the **core of the Arctic Council**, an intergovernmental forum.

HQ: Norway



Key Points

- **Third Arctic Science Ministerial Conference:**
 - **Host Countries:** It was jointly organised by **Iceland and Japan**.
It was the **first Ministerial meeting** being held in **Asia (Tokyo in Japan)**.
 - **Objective:** It provides **opportunities to various stakeholders**, including academia, indigenous communities, governments and policymakers, to enhance collective understanding of the Arctic region, emphasize and engage in constant monitoring, and strengthen observations.
 - **Theme:** 'Knowledge for a Sustainable Arctic'.
- **India's Stand:**
 - To **contribute observing systems in the Arctic**, both in-situ and by remote sensing.
 - Would **deploy open ocean mooring in the Arctic** for long-term monitoring of upper ocean variables and marine meteorological parameters.
 - The launch of **NISAR (NASA-ISRO Synthetic Aperture Radar)** satellite mission, in collaboration with the USA, is underway.
 - Contributions to the **Sustained Arctic Observational Network (SAON)** would continue.

NASA-ISRO Synthetic Aperture Radar

- **NISAR** will scan the globe every 12 days over the course of its three-year mission of imaging the Earth's land, ice sheets and sea ice to give an unprecedented view of the planet.
- It aims to conduct **global measurements** of the **cause and consequences** of land surface changes using advanced **radar imaging**.

Sustaining Arctic Observing Network

- It is a joint activity of the **International Arctic Science Committee (IASC)** and the **Arctic Council**.
 - **IASC is a non-governmental, international scientific organization.**
- The purpose is to support and strengthen the development of multinational engagement for sustained and coordinated pan-Arctic observing and data sharing systems.
- **India's Engagement in the Arctic:**
 - India's engagement with the Arctic dates back to **1920** with the **signing of the Svalbard Treaty in Paris**.
 - Since July 2008, India has had a **permanent research station** in the Arctic called **Himadri** at NyAlesund, Svalbard Area in **Norway**.
 - India received the '**Observer**' country status in the **Arctic Council** in **2013** and is one among the 13 countries across the world, including China, to have that position which was again **renewed in 2018**.
 - It has also deployed a **multi-sensor moored observatory** called **IndARC** in the **Kongsfjorden fjord** since July 2014.
 - The research in the Arctic region from India is coordinated, conducted, and promoted by the **National Centre for Polar and Ocean Research (NCPOR)**, Goa, under the Ministry of Earth Sciences, Government of India.
 - Recently, India drafted a **new Arctic policy** that aims at expanding scientific research, sustainable tourism and exploration of mineral oil and gas in the Arctic region.
- **Significance of Arctic Study for India:**
 - Though none of India's territory directly falls in the Arctic region, it is a crucial area as the **Arctic influences atmospheric, oceanographic and biogeochemical cycles of the earth's ecosystem**.
 - **Arctic warming and its ice melt are global concerns** as they play a pivotal role in regulating climate, sea levels, and maintaining biodiversity.
 - There is **growing evidence of connection between the Arctic and the Indian Ocean** (which modulates the Indian monsoon). Hence, improving the understanding of physical processes and quantifying the impact of **Arctic ice melt** on the **Indian summer monsoon** is very important.

Source: PIB