

India's Draft Arctic Policy

Why in News

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.

Key Points

- About the Policy:
 - Nodal Body: India has designated Goa-based <u>National Centre for Polar and Ocean</u>
 <u>Research</u> to lead scientific research and act as a nodal body to coordinate among various scientific bodies to promote domestic scientific research capacities in the Arctic.
 - Objectives:
 - **Promoting Scientific Study of Arctic:** Orient the curriculum on earth sciences, biological sciences, geosciences, climate change and space related programmes with Arctic imperatives in Indian Universities.
 - **Planning Explorations:** Formulating effective plans for Arctic related programmes for mineral/oil and gas exploration in petroleum research institutes
 - **Promoting Arctic Tourism:** Encouraging tourism and hospitality sectors by building specialised capacities and awareness by engaging with Arctic enterprises.
- About Arctic:
 - The Arctic is a **polar region** located at the northernmost part of Earth.
 - The Arctic consists of the Arctic Ocean, adjacent seas, and parts of Alaska (United States),
 Canada, Finland, Greenland (Denmark), Iceland, Norway, Russia, and Sweden.
 - Land within the Arctic region has seasonally varying snow and ice cover.



• Ecological Impact of Warming on Arctic:

- **Rising Sea Levels:** The loss of ice and the warming waters affects sea levels, salinity levels, and current and precipitation patterns.
- Deterioration of Tundra: The Tundra is returning to swamp, the <u>permafrost</u> is thawing, sudden storms are ravaging coastlines and <u>wildfires</u> are devastating interior Canada and Russia.
 - **Tundra:** Found in regions north of the Arctic Circle and south of the Antarctic Circle. These are **treeless regions**.
- Threat to Biodiversity: The phenomenally rich biodiversity of the Arctic region is under serious threat.
 - The absence of year-long ice and higher temperatures are making the survival of Arctic marine life, plants and birds difficult while encouraging species from lower latitudes to move north.
- Extinction of Indegenous Cultures: The Arctic is also home to about 40 different indigenous groups, whose culture, economy and way of life is in danger of being swept away.
 - Increasing human encroachment with its attendant stresses will only aggravate this impact and upset a fragile balance.

Commercial Importance of Arctic:

- **Abundant Resources:** The opening of the Arctic presents huge commercial and economic opportunities, particularly in shipping, energy, fisheries and mineral resources.
- Commercial Navigation:

- The Northern Sea Route (NSR): It is a shipping lane connecting the North Atlantic to the North Pacific through a short polar arc which could revolutionise the prospects of trade in Russia and Scandinavian countries.
- It is approx 40% shorter than via the Suez Canal or 60% shorter via the Cape of Good Hope.
- It would cause substantial reductions in transportation time, fuel consumption, limit environmental emission and eliminate piracy risk.

Oil and Natural Gas Deposits:

• Estimated to be 22% of the world's unexplored resources, mostly in the Arctic ocean, will be open to access along with mineral deposits including 25% of the global reserves of rare earths, buried in Greenland.

Issues Involved:

- Navigation conditions are dangerous and restricted to the summer.
- Lack of deep-water ports, a need for ice-breakers, shortage of workers trained for polar conditions, and high insurance costs add to the difficulties.
- Mining and deep-sea drilling carry massive costs and environmental risks.
- Unlike <u>Antarctica</u>, the Arctic is not a global common and there is no overarching treaty that governs it.

Conflict over Arctic:

- Russia, Canada, Norway and Denmark have put in overlapping claims for extended continental shelves, and the right to sea-bed resources.
- Russia is the dominant power, with the longest Arctic coastline, half the Arctic population, and a full-fledged strategic policy.
 - Claiming that the NSR falls within its territorial waters, Russia anticipates huge dividends from commercial traffic including through the use of its ports, pilots and ice-breakers.
 - Russia has also activated its northern military bases, refurbished its nuclear armed submarine fleet and demonstrated its capabilities, including through an exercise with China in the eastern Arctic.
- China, playing for economic advantage, has moved in fast, projecting the Polar Silk Road
 as an extension of the <u>Belt and Road Initiatives</u>, and has invested heavily in ports,
 energy, undersea infrastructure and mining projects.

India's Interests in Arctic:

Environmental Interest:

- India's extensive coastline makes it vulnerable to the impact of Arctic warming on ocean currents, weather patterns, fisheries and most importantly, the monsoon.
- Arctic research will help India's scientific community to study melting rates of the Himalayan glaciers, which are endowed with the largest freshwater reserves in the world outside the geographic poles.

Scientific Interest:

- **Research Stations:** India launched its first scientific expedition to the Arctic in 2007 and set up a research station **'Himadri'** in the international Arctic research base at Ny-Ålesund in Spitsbergen, Svalbard, Norway.
 - India has two other observatories in **Kongsforden and Gruvebadet** in Norway.
- **Studying Himalayan Glaciers:** Scientific research in Arctic developments, in which India has a good record, will contribute to its understanding of climatic changes in the third Pole, the Himalayas.

Strategic Interest:

- **Countering Chinese Influence:** The strategic implications of an active China in the Arctic and its growing economic and strategic relationship with Russia are self-evident and need close monitoring.
- **Arctic Council Membership:** Since 2013, India has had observer status in the **Arctic Council**, which is the predominant inter-governmental forum for cooperation on the environmental and development aspects of the Arctic.

Way Forward

It is high time that India's presence in the Arctic expands from the dimension of scientific exploration to strategic, economic, environmental and political aspects. Thus, drafting of New Arctic policy suits the need of the hour.

