



# Arctic: Concerns & Opportunities

## Why in News

As per the [WWF-Arctic Programme](#), the Arctic region is **warming up twice as fast as the global average**. The ice cap has been shrinking fast since 1980 and the **volume of Arctic sea ice has declined by as much as 75%**.

- Since 1992, WWF's (**World Wide Fund for Nature**) **Arctic Programme** has been working with **its partners across the Arctic** to combat threats to the Arctic and to preserve **its rich biodiversity in a sustainable way**.

## Key Points

- **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:

- The loss of ice and the warming waters will affect **sea levels, salinity levels, and current and precipitation patterns.**
- The **Tundra** is returning to **swamp**, the **permafrost is thawing, sudden storms are ravaging coastlines** and **wildfires** 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.**
- 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.
- 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:

- 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)** which would connect the North Atlantic to the North Pacific through a short polar arc is the most tempting.
- **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 [Antarctica](#), 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 [Belt and Road Initiatives](#)**, 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](#)**.
  - **Scientific Interest:**
    - 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:**
    - 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**.
  - 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.
  - It is high time that its presence on the Arctic Council was underpinned by a strategic policy that encompassed **economic, environmental, scientific and political aspects**.

[Source:IE](#)

