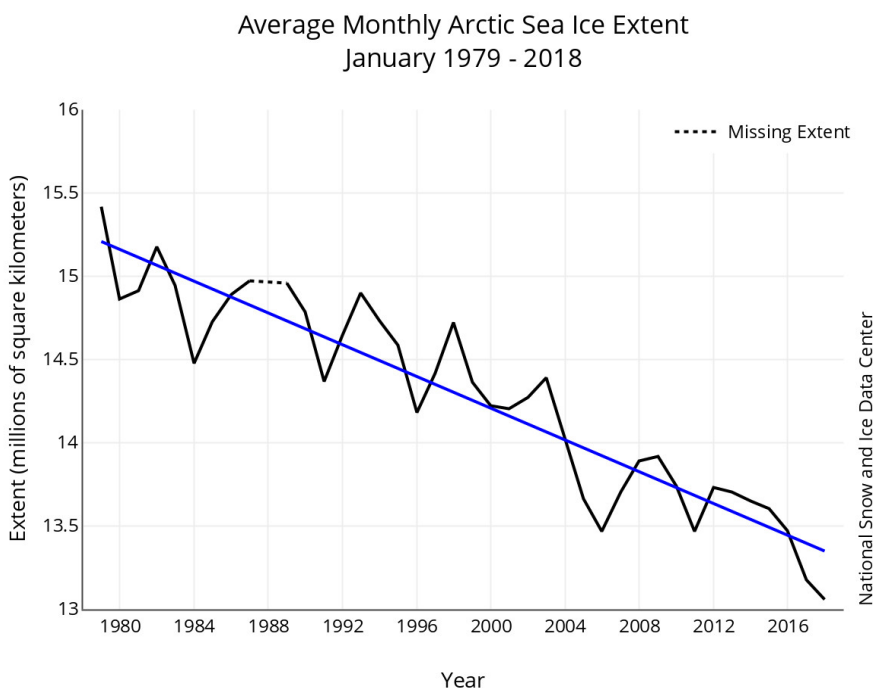


India's Arctic Policy- Building a Partnership with Sustainable Development

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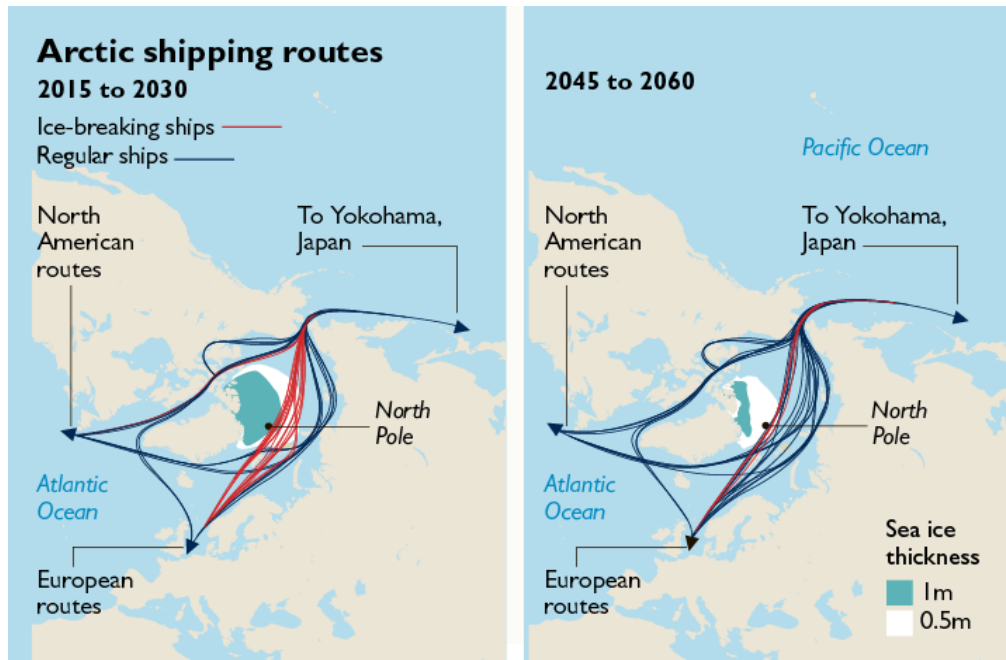
Introduction

Change is inevitable, but resistance can limit the consequences. Climate change has been a matter of concern all over the world for decades now. One of the most remote and inaccessible places on Earth, the Arctic is being brought to the world's attention as never before. The Arctic Council consists of 8 Arctic states as its members, while the observer nations are 1.5 times this number, indulged as participants of the Arctic study. According to the Independent statistics and analysis agency, the reason for high interest in the Arctic region is that the Arctic contains 13% of the world's undiscovered oil resources (at about 90 billion barrels) and 30% of natural gas resources. Moreover, discoveries of strategic metals (gold, silver, copper, titanium, iron, graphite, lead, nickel, coal, uranium, and others) have also been made in the Arctic.



*Figure shows the steep decline in the Arctic sea ice content from 1979 to 2018.

The Arctic is responsible for regulating the world's temperature. With Arctic temperatures rising thrice as fast as the rest of the world, it becomes concerning as the more the arctic ice melts, the warmer the rest of the world becomes, threatening the security of life. The ice-free arctic would open up new shipping routes, reducing costs and reshaping global trade. India's Arctic Policy aims to extend Indian cooperation with the Arctic region and use the country's technological expertise in the field to study climate change in the Arctic.



*Figure shows the possible opening of new shipping routes due to polar ice clearance.

India and the Arctic

Considering why Arctic study is significant for India, India's interests in the Arctic are economic, environmental, scientific, and strategic.

Climate change and the resultant rapid ice melting, rising sea levels, and warming up of oceans and atmosphere directly impact India's weather conditions. India being an agriculture-based economy (58% of the population depends on agriculture for their livelihood needs), is impacted by changes in the monsoon patterns due to climate change. India receives 70% of the annual precipitation during the monsoon season itself. Changes in the arctic can disrupt the sustainability of 1300 island territories and the welfare of around 1.3 billion Indians.

Arctic glacial melting opens up challenges and enormous opportunities like mining, energy exploration, food security, etc., not only for littoral states but also for the entire international community. This would allow India to exploit these opportunities sustainably to make the arctic more accessible.

The synergies between the polar and the Himalayan studies and India's significant expertise in this area from its association with the Antarctic Treaty System would enable it to play a constructive role in securing the stable Arctic.

Geopolitics: China and Russia's interference

Russia and China have collaborated in the Arctic geopolitics in their ways. While China is rapidly expanding its Arctic strategy, Russia is also reinforcing its military capability with its Northern Fleet in the region where its strategic submarines are maintained.

Russia used the vast expanses of sea ice and natural gulfs to create a defensive shield to hide their submarines beneath the ice sheets and patrol in the Barents and Sea of Okhotsk. This was done to protect Soviet SSBNs during conflict and launch their nuclear payloads in a first or second strike capacity. They are known as the Bastion Defense Doctrine. Nevertheless, due to the climatic conditions and global warming changes, the sea ice that connects with Russian Siberia has begun to recede, making hiding submarines difficult.

With much of Russian territory straddling the Arctic Circle, melting ice caps in the Arctic will open a new corridor for year-round travel from the North Sea to Barents Straits, making the route 30% faster and safer than the current sea lanes. The most critical aspect is that the entire route moves through Russian waters, giving them unparalleled control over the 'soon be a vital sea lane'. This will also provide unhindered access to both the Atlantic and Pacific oceans from Russian naval bases, port cities such as Murmansk and Vladivostok will become far more valuable for the trade than ever before, and access to earlier inaccessible fossil fuels will give Russia a decisive advantage against its competitors. Russia sees these opportunities and continues growing its Arctic Circle military power.

China's engagements in the arctic increased drastically. China believes it enjoys the right to scientific research, freedom of navigation, fishery, and resource development in the Arctic seas in line with international legal treaties like the Spitsbergen Treaty. China projected itself as a 'Near Arctic State' and its interest in the Polar Silk Road and collaborated with Russia on establishing a global transport corridor via the Northern Sea Route. It released its own Arctic Policy in 2018,

seeking to reinforce its regional geopolitical and geoeconomic posture. Hence, India had to decide to step into this geopolitical scenario at the right time with its sustainable engagement and SciTech power in the Arctic.

Historical Background

India's association with the Arctic was over 100 years old when it signed the 'Svalbard Treaty' in February 1920 in Paris under colonial rule. After independence and the development of national capitalism, the Ministry of Ocean Development was established, which was later merged with the National Centre for Medium-Range Weather Forecasting, India Meteorological Department, the Earth Risk Evaluation Centre, and the Indian Institute of Tropical Meteorology, which then came to be called as the Ministry of Earth Sciences (MoES). The ministry is focused on Earth System Science for improving forecasting of weather, monsoon, climate and hazards, exploration of polar regions and seas around India, and developing technology for exploration and exploitation of ocean resources, ensuring sustainable utilization. In 2007, MoES initiated the first scientific northern expedition to investigate the High North's bacterial life and climate changes.

India inaugurated its first research station, 'Himadri ', at the international arctic research base in Svalbard, Norway, in 2008, engaging numerous scientists from research institutions worldwide. India was recognized for its input in the exploration of the High North. It was elected as a member of the Council of the International Arctic Science Committee (IASC), a nongovernmental organization bringing together all countries (despite their location) conducting Arctic Research. Kiruna Ministerial Meeting of the Arctic Council in 2013 led to India becoming one of the permanent 'Observer' status at the Arctic Council and since then has been closely observing the Arctic region.

India has decided to revive its strategy and maintain the momentum through the Arctic.

Policy to be counted as a stakeholder in the Arctic.

The Arctic Policy

India's Arctic Policy was released by the Ministry of Earth Sciences on 17th March'22. A Hindi version has also been released to promote mass readability and awareness among the citizens.

The approach of 'Sustainable Engagement' is emphasized through the six central pillars in the policy, namely —

- Science and Research- The document calls on India to strengthen its existing research base—*Himadri*—in the Svalbard Archipelago in Norway and build partnerships with research institutions across the globe to align research activities with that of the Arctic Council and other international organizations dedicated to the Arctic.

Moreover, it mentions that India needs to “acquire a dedicated ice-class polar research vessel” to increase the depth of its scientific activities and “build indigenous capabilities for construction of such vehicles.” It also suggests deploying ISRO’s RISAT series of satellites to help study the Arctic.

- Climate and Environmental Protection- Contributing towards environmental management through international collaborations to protect arctic biodiversity and microbial diversity and support weather and climate predictions of the globe.
- Economic and Human Development- Guided by the United Nations Sustainable Development Goals, India seeks joint collaborative potential projects to explore natural resources in the Arctic and promote Indian participation in sustainable tourism in the Arctic.
- Transportation and Connectivity- Ice-Free conditions in the Arctic are opening new sea routes with the potential to change the global trade scenario. The policy states that India shall emphasize linking the transport corridors to lower shipping costs and participate in environmental monitoring, collecting hydrographic and oceanographic data, and creating maritime safety facilities.
- Governance and International Cooperation- The aim is to promote security and safety in the Arctic region through international cooperation and develop a deeper understanding of the arctic-related national and sub-national legislation.
- National Capacity Building- As new opportunities open up, India aims to enhance its capabilities. The Arctic engagement will be supported by developing a robust human, institutional and financial base keeping up with the Atma Nirbhar Bharat

philosophy. Capacity building would involve the promotion of research capacities in universities, strengthening the training of seafarers, building indigenous ships of ice-class standards, and expanding the expert workforce in sectors like mineral, oil and gas exploration, tourism, maritime insurance, arbitration, etc.

According to the MoES, “The policy will be implemented through an Action Plan, an effective governance and review mechanism consisting of an inter-ministerial Empowered Arctic Policy Group which will be based on timelines, prioritization of activities and allocation of requisite resources.”

Strategic Benefits

India's Arctic Policy has catered to various aspects of the Arctic like climate change, economic and human resources, and geopolitical aspects and has not just adopted a scientific approach making India's engagement with the Arctic more broad-based and holistic.

The scientific knowledge, logistical experience, and policy insights accumulated from India's engagement with the Southern Polar Region as a consultative member in the Antarctic Treaty System since the early 1980s can be used to achieve arctic sustainability.

India is the third largest energy-consuming country in the world, the third largest oil importer (83 per cent), and the fourth largest gas importer, which caters to 1/2 of the overall gas consumption. The gas mix in the energy basket amounts to only 6% compared to the world average of 24%. The energy needs and deficiency of strategic minerals and resources can be catered to through the arctic study.

India's neutral stand on the Russian invasion of Ukraine and the decision to import oil from Russia, which has been facing international sanctions, has caused agony among the major member countries of the Arctic Council. With NATO and Russia reasserting their positions in the Arctic region and China seeking to realize its long-drawn dream of the Polar Silk Road, India's Arctic Policy is a potential game-changer in geopolitics.

Moreover, the policy will raise awareness about the arctic within India through the conduct of programs and events in India and the Arctic.

Recommendations

- India's Arctic strategy should primarily focus on advanced scientific research in the Arctic and simultaneously build strong cooperation with the northern countries such as Norway and Russia. Norway will continue to be the principal partner in scientific endeavours, while Russia will be on the economic front.
- The policy implementation methodology should be more comprehensively illustrated to provide clarity to implementors and the public on how the agendas in the policy will be achieved in due course of time.
- The appointment of a representative for India's perspective on Arctic affairs and constituting an expert committee to review and implement the Arctic Policy can streamline India's approach and ensure proper execution.
- A multidisciplinary perspective is required for Arctic Study, given the gamut of intertwined problems the region faces today.

Conclusion

India's holistic approach towards the arctic issues is commendable. The Arctic Policy unveils that India aspires to place its identity in the Arctic by having a permanent presence in the region by establishing more research stations and satellite grounds. The policy's timeline is strategic and provides a direction for the country's future action plan. India believes any human activity should be sustainable, responsible, transparent, and based on respect for international laws. India's focus on the Arctic and climate change takes us to the roots of Indian culture wherein 'Vasudhaiva Kutumbakam,' i.e. 'The world is one family,' is preached. The policy will undoubtedly bring about positive changes in the Arctic framework only if the practical implementation is prioritised. It must be kept in mind that Arctic Sustainability is a global phenomenon, cooperation among the countries for the common Arctic cause can ensure the sustainability of each other's actions and speed up the Arctic recovery.

References

<https://www.moes.gov.in/sites/default/files/2022-03/compressed-SINGLE-PAGE-ENGLISH.pdf>

<https://ncpor.res.in/app/webroot/pages/view/340-himadri-station>

<https://www.thehindu.com/news/international/world//article60440272.ece>

<https://idsa.in/issuebrief/india-arctic-policy-abisen-170322>

https://www.business-standard.com/article/current-affairs/centre-releases-india-s-arctic-policy-for-sustainable-development-122031800437_1.html

<https://iopscience.iop.org/article/10.1088/1755-1315/539/1/012047/pdf>

<http://www.associationdiplomats.org/Publications/ifaj/Vol8/8.1/DEBATE.pdf>

<https://www.geospatialworld.net/blogs/indias-new-arctic-policy-document-aim-to-harmonize-polar-research-with-the-third-pole-the-himalayas/>

<https://polarconnection.org/third-pole-india-arctic-policy/>

<https://www.epw.in/engage/article/contours-indias-arctic-policy>

<https://www.policycircle.org/environment/indias-arctic-policy-challenges/>

<https://carnegieendowment.org/2021/03/29/russia-in-arctic-critical-examination-pub-84181>

<https://scholarworks.arcadia.edu/cgi/viewcontent.cgi?article=1034&context=thecompass>