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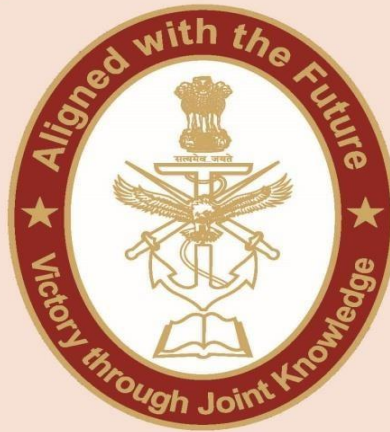
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INDIA'S ROLE IN ARCTIC GEOPOLITICS

MS NIDHI TANEJA

CENTRE FOR JOINT WARFARE STUDIES



CENJOWS

India's role in Arctic Geopolitics



Ms. Nidhi Taneja is a Research Intern at CENJOWS, New Delhi

ABSTRACT

Due to the melting of ice and the uncovering of potential resources in the region, Arctic region has now become an area of dynamic activity. The Arctic region mainly comprises of the territories of the eight countries- Iceland, Canada, Finland, Kingdom of Denmark, Sweden, Norway, Russia, and USA.ⁱ Together they formed the Arctic Council in the year 1996.ⁱⁱ At the center of the Arctic lies the North Pole. The oceanographic and atmospheric cycles of the earth's ecological system are greatly impacted by the Arctic. Out of scientific curiosity and vested economic benefits, though India is a non-Arctic state, it has expanded its efforts in the Arctic. Throughout the past century, India's engagement has transformed from mere being a country that had scientific interests in the region to a country following a comprehensive approach. This

approach covers securing energy supply, cooperation in developing shipping routes, and enhancing India's image at the global stage. This paper will cover the deep analysis of India's participation in the Arctic region. It will also shed light on the challenges India faces and the possible solutions which will enhance its position in the ice-cold region of earth.

INTRODUCTION

Huge stockpile of minerals and hydrocarbons has been uncovered in the Arctic region due to region becoming ice-free. Climate change is transforming the Arctic as the new trade routes like the Northwest Passage (NWP) and Northern Sea Route (NSR) can be developed.

Along with some critical minerals, 13% of the world's hidden oil resources lies in the Arctic and also 30% of natural gas.ⁱⁱⁱ All this has an estimated value of around \$ 1 trillion.^{iv} The potential abundance of resources here, has attracted attention not only from Arctic countries like Finland, Canada, Iceland, Norway, Russia, Finland, Denmark, Sweden, and the United States but also the countries like China and India which are non-Arctic powers.

India's role is very significant as the events like Russia-Ukraine crisis unfold. China's "Polar Silk Road" initiative also needs to be tackled. This issue brief covers India's engagement with the Arctic, its current policy and how it impacts India's position at the global level.

BACKGROUND

India was under the rule of Britain, when the Svalbard Treaty was signed in 1920.^v This gave India right to carry out scientific research in the island of Svalbard, which is in Norway. It also provided Indian citizens with visa-free entry to the Arctic.^{vi} After independence, for some time, India's outlook focused on internal matters. It was only in the later part of 20th century when India

started to formulate policy regarding exploring Arctic region.

In the year 1981, with the formation of Department of Ocean Development, Polar research became an area of focus, but its primary area of engagement was the Antarctic region.^{vii} Study of glaciology, microbiology, and atmospheric sciences was done when the first scientific mission was sent to Ny-Ålesund, Svalbard in the year 2017.^{viii}

India has a research station in the Arctic by the name “Himadri”, it was established in 2008.^{ix} With this, India became one of the few developing nations to have a research base in the Arctic. The scientific research is carried ahead by the IndAc observatory which was established in 2014.^x After two years i.e., 2016 an atmospheric laboratory was also inaugurated.^{xi} It focuses on changes in the climatic conditions, and the dynamics of sea ice and its influence on the Indian monsoon.

Along with this it also studies its impact on “Third Pole” of the world which is the glaciers of the Himalayan region. Arctic Council is a multilateral organization which includes eight Arctic states and the native leaders of this area. India became an observer nation in the Arctic Council in 2013.^{xii} Though India is not having voting rights in the Council, but it has access to negotiations and talks regarding the governance of the Arctic. India’s participation in the Arctic might seem symbolic but now things have changed. India’s Arctic Policy of 2022 is a major development and signals the increasing importance of India’s interest in the Arctic.^{xiii}

WHY ARCTIC IS IMPORTANT FOR INDIA?

- The melting of ice in the arctic region affects every country around the world. Any changes in the climate of the polar region, has an impact on the pattern of rainfall in India. It also affects the melting of glacier in the Himalayas. Thus, there lie climatic and scientific interests. Indian

agriculture still heavily is dependent on monsoon, and it has been found that there is a connection between loss of ice at the arctic and the changes in monsoon cycle. It has been proved by research at Himadri research station in the arctic. India was able to improve its knowledge on areas like ocean circulation, and the weather of space through its first winter expedition which was sent in 2023.^{xiv}

- As per some estimates, there is 90 billion barrels of oil in the arctic area, along with huge reserves of natural gas and rare earth elements.^{xv} It presents India with a potential to expand its resource base for energy imports. Arctic hydrocarbon is a good alternative for India to stop its energy dependence on the Middle East countries. In Russian oil projects, till now India has made investments which are worth over \$15 billion.^{xvi} This also involves Russian projects in the arctic. ONGC Videsh- (an Indian oil company) is looking forward to increasing its stakes here. The distance between Europe and Asia will be reduced by 40% by the Northern Sea Route (NSR) agreement.^{xvii} It will be beneficial for Indian exporters, as it will cut down costs and time which is usually taken. International North-South Transport Corridor (INSTC) is also under planning stage and will boost trade route linkage of India with both Central Asia and Europe.
- Many countries are trying to establish their control over the Arctic. This has given a boost to Arctic's importance in the geopolitical arena. Tensions have been increased by Russia's defence buildup in the territories of the Arctic. Specifically in the Kola Peninsula which lies in the Arctic Circle. Though China is not situated in the arctic region, it calls itself as a "Near-Arctic State". India is trying its best to counter growing Chinese influence as since 2014, it has also invested \$90 billion in Arctic projects of Russia. As India has good relations with both western countries and Russia, it gives India an advantage to act as a

future peacemaker in case of any conflicts related to Arctic. It will ultimately help India to enhance its presence at the global level.

PILLARS OF INDIA'S ARCTIC POLICY

After a long wait and a continued discussions over the years, India finally came up with its Arctic Policy in 2022.^{xviii} It was titled “India and the Arctic: Building a Partnership for Sustainable Development”. It comprises of 23 pages and mentions six pillars which provides directions on how India should engage with the Arctic.^{xix} Following are the Six pillars-

❖ Science and Research

It aims to establish more research stations in the Arctic while improving the existing one which is Himadri. Indigenous building of Ice class polar research vessels is also emphasised upon. It also looks for giving more push to private public sector joint projects. India aims to work with other Arctic nations to conserve the arctic biodiversity by methods like monitoring and surveillance.

Arctic region can be very well studied by ISRO's RISAT group of satellites.^{xx} The radar imaging of these satellites may be used for advancement of the Arctic region. There is insufficient digital connectivity in the region; India's expertise in providing satellite-based communication can be of help.

❖ Climate and Environmental Protection

Climate change is impacting every country today. Thus, it forms an important part of India's research here. Scientists have discovered correlation between the climate change of Himalayas and the Arctic.^{xxi} But a deeper study is required to arrive at a concrete conclusion. Indian firms which are looking to invest in the region shall follow strict environmental protocols. India should engage more with the working

groups on Arctic flora and fauna and should strive for its protection.

❖ **Economic and Human Development**

Indigenous people of the Arctic are impacted by the ongoing development activities. India's experience with ecologically sensitive area like the Himalayas can be useful in solving the issues native people of the Arctic face. India follows the UN sustainable development goals while involving with the resources of the Arctic. Arctic states can be helped by India in mapping the territory. India's expertise in making cost friendly technologies can help the residents of the Arctic in providing services like education and health. India is committed to promote Arctic marine tourism while following the sustainability guidelines. India is keen on facilitating cultural exchanges between the communities of the ice regions of Himalayas and the Arctic.

❖ **Transportation and Connectivity**

As the Arctic is becoming ice-free, new shipping routes are getting surfaced. As India provides for about ten percent of global demand of maritime workforce.^{xxii} Marine human resources of India can be utilised to meet the requirements in the Arctic. Mapping and surveying of Arctic can be very well done by India's marine cartography technologies. In the future, Polar class ships are going to be used in this region, India look forward to taking part in studies for tracking the possible emissions of these ships. Building of shipping safety systems is another area India looks forward to playing a role in. Also, the vessels which will be used in these areas need to be tracked by the satellites. Ship building can be explored with firms which already have experience in making Ice-class vessels.

❖ Governance and International Cooperation

Traditional laws of the natives, bilateral pacts, and global agreements are the things which govern the Arctic territory. India is willing to cooperate with all the key partners in the region and go by the international laws especially United Nations Convention on the Law of the Sea (UNCLOS). India to deepen the understanding of legislations related to the Arctic.

❖ National Capacity Building

Taking forward the idea of *Atmanirbhar Bharat*, India will improve its skills to grab the new opportunities coming up in the Arctic region. Academic institutions in India to be brought together for collaboration. Themes like geosciences, earth sciences, and space related programmes related to Arctic need to be explored in Indian Universities. For easy transit in the Arctic, training institutions to provide training to maritime crew for navigation in the polar region.

India doesn't want to remain just an observer in the Arctic Council. India is looking forward to playing an active role in the sustainable development of the region. As the region is becoming militarized by big powers around the world, India could integrate a seventh pillar which will cover the geopolitical framework, so that India effectively deals with other rival countries in the region. China's growing influence is another reason as to why India should focus on to incorporate this seventh pillar

PRESENT STATUS OF INDIA'S INVOLVEMENT IN THE ARCTIC

Areas like atmosphere, microbiology, oceanography, and pollution are being studied by India. Studies and analyses about Arctic are being done by more than 25 universities and institutes. This reflects India's growing interest in the region. Since 2008, India has also been part of various committees on Arctic research like- the International Arctic Science Committee and Ny-Ålesund Science Managers Committee. A MoU has been signed between Indian universities and the Arctic University of Norway on the theme "polar knowledge". Arctic strategy of India focuses on its association with important countries in the region, especially like Russia, Nordic countries and the US.

❖ Collaboration between Russia and India

Russia is India's important partner, as Russia is governing 53% of the Arctic Ocean coastline.^{xxiii} It is also managing Arctic's 80% oil and gas reserves of the region.^{xxiv} To tackle Chinese influence over the Northern Sea Route (NSR), India is focusing on maritime trade route from Chennai to Vladivostok. Annual summits have helped to strengthen the strategic partnership between India and Russia. India has committed a \$1 billion credit line for the projects in the Far East region of Russia.^{xxv} This includes Arctic projects as well. There is ongoing discussion for an agreement on the NSR, which will deepen the collaboration between the two countries.

❖ Cooperation with Nordic Countries

Sectors like green technology and sustainability are the main areas of focus between India and Nordic countries like Sweden, Denmark, Norway, and Finland. India's research station in the Arctic is hosted by Norway. It offers India knowledge about the sustainable ways to extract

resources. The collaboration of India with Denmark and Finland covers domains like waste management and renewable energy. India's partnerships here bring India closer to its environmental commitments and gives India diplomatic advantage in the Arctic Council.

OBSTACLES FACED BY INDIA IN THE ARCTIC

- ❖ India is not having voting rights in the Arctic Council, as it is only an observer. Thus, it cannot frame policies and plays a limited role in governing the Arctic area. India doesn't have land claims in the region of Arctic like the other nations like Norway, Russia etc. Thus, it restricts India's involvement in the decision-making process of key Arctic forums.
- ❖ China has an edge as it started on with investing in Arctic projects quite early. Yamal LNG and Arctic LNG 2, LNG projects in the Arctic have received immense Chinese funding.^{xxvi} Also, China has the Polar Silk Road (PSR) initiative, which is the expansion of its Belt and Road Initiative (BRI).^{xxvii} Its objective is to build infrastructure in in the Arctic region. All this complicates the situation for India.
- ❖ There exist tensions at the geopolitical level. After the Ukraine war, Russia has been isolated by various countries, and as a result, Russia is moving closer China. India's Arctic energy projects with Russia are facing delays due to the ongoing Ukraine-Russia conflict.
- ❖ Activities like research, building infrastructure projects, require a great deal of investment. For mega projects in the Arctic area, India has not allocated adequate budget. There is also lack of important equipment like the icebreakers. This brings hurdles for India to maintain its visibility in the Arctic.

RECOMMENDATIONS

- ❖ India could modify its Arctic Policy and add another pillar which will emphasize on the strategy to deal with geopolitical issues in the region. And for coordinating this, Ministry of External Affairs (MEA) might be given the responsibility to oversee the further functioning of this pillar.
- ❖ India should operate its research base-Himadri (in Norway) throughout the year. Learning from its experience of winter expedition of 2023-2024,^{xxviii} India should send more research teams for covering diverse range of topics like atmospheric sciences, glaciology. All this will enhance India's presence in the region.
- ❖ India should improve its cooperation with the working groups of Arctic Council. India can share its expertise on renewable energy and biodiversity with these working groups, thus strengthening India's stand as an observer.
- ❖ India could increase its funding for Arctic projects specifically which are in collaboration with Russia. But it should also strive for engaging with other countries so that it doesn't become over dependent on it. India should finally sign the Northern Sea Route (NSR) agreement with Russia.^{xxix}
- ❖ India should find ways to increase its cooperation with the Nordic countries. It should specifically be done on the development of eco-friendly technologies which will be used in the arctic region. A more active role in the Arctic Council, will make Indian concerns heard and seen by the other countries.
- ❖ India should raise its voice for addressing the concerns of indigenous communities. The right of natives of the Arctic to have a clean and

environmentally safe arctic should be fulfilled. As India has successfully led the International Solar Alliance, India can suggest “Asian clean energy plan for the Arctic”. It may focus on Hydrogen and solar energy to lessen the dependence on the usage of fossil fuels.^{xxx}

- ❖ For efficient execution of Arctic policy, India can appoint someone in the role of an ambassador. This ambassador will be responsible for representing India in the Arctic Council. It might also lead discussions for further collaboration with other observer countries like Japan, South Korea etc. This step will showcase India’s sincere interest in the region.
- ❖ India can utilize its space capabilities for its research in the Arctic. With the help of ISRO, India can share its findings about the melting ice, the changes in sea level with the Arctic Council.^{xxxi} India’s advanced space capabilities will help understand the impact of climate change in the Arctic region.
- ❖ India must increase its financial funding for arctic research purposes. It should also invest in procuring advanced technology items. For example- icebreakers and ships which can sustain in low temperatures.^{xxxii} This will help in further exploration of the region.
- ❖ India can conduct meetings of experts and industrialists to foster developments in the Arctic area. India must support Indian businesses to become a part of Arctic Economic Council. So that they can work on developing infrastructure that is sustainable and doesn’t harm the environment. This may involve renewable energy projects like green shipping etc.

- ❖ To counter Chinese initiatives in the Arctic, India can form an alliance with U.S. and Japan. These three countries can collaborate on a wide variety of projects in the Arctic. By promoting Intergovernmental coordination, India should call for Arctic to be open to all countries.
- ❖ India should try to generate interest in the general public about the Arctic region and its importance. Public awareness campaigns must be conducted, like organizing seminars and talks at the school and the university level. Young scientists should be trained properly so that India has its own lot of expertise in this area.

CONCLUSION

India is facing a dilemma, regarding its role in the geopolitics of Arctic. All the countries of the world are highly interested in this region; thus, it has led to a competitive environment here. Not only countries but also non-state players like NGOs, and various international organizations have come forward with their own goals and objectives for this region. India can tackle this complex situation by formulating a balanced and sustainable Arctic policy, which will serve as a blueprint for others to follow. Majorly, India's Arctic policy is science-centric; thus, it is not adequate to deal with the situation here. There is a need for India to carefully analyse its policy towards Arctic so that it can safeguard its interests in strategic, energy and economic domains. India can surely play a more active part here. India can counter the Chinese influence in the region by engaging with other countries here. Other than Russia and US, India should work on to improve its relations with other powers like Norway, Denmark etc. A lot of progress has been made already from being a mere observer nation to participating in key Arctic forums. With its Arctic policy in place, the coming years will see more participation from India in this part of the planet.

DISCLAIMER

The paper is author's individual scholastic articulation and does not necessarily reflect the views of CENJOWS. The author certifies that the article is original in content, unpublished and it has not been submitted for publication/ web upload elsewhere and that the facts and figures quoted are duly referenced, as needed and are believed to be correct.

References

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- ⁱ National Geographic Society, *Arctic*, National Geographic, accessed April 7, 2025, <https://education.nationalgeographic.org/resource/arctic/>.
- ⁱⁱ John Mason, "Russia's Arctic Ambitions Are Backfiring," *Foreign Policy*, May 31, 2023, <https://foreignpolicy.com/2023/05/31/arctic-council-russia-norway/>.
- ⁱⁱⁱ Keir Giles, "The Arctic Is Becoming a Hotbed of Competition," *Foreign Policy*, October 13, 2020, <https://foreignpolicy.com/2020/10/13/arctic-competition-resources-governance-critical-minerals-shipping-climate-change-power-map/>.
- ^{iv} Ibid.
- ^v Kanti Bajpai, "India's Arctic Imperative," *The Hindu*, August 7, 2023, <https://www.thehindu.com/opinion/op-ed/indias-arctic-imperative/article68067583.ece>.
- ^{vi} Ibid.
- ^{vii} Shubhendra Sengupta, "Introducing the Arctic as a Strategic Geopolitical Pillar for India," *Observer Research Foundation*, March 22, 2021, <https://www.orfonline.org/research/introducing-the-arctic-as-a-strategic-geopolitical-pillar-for-india/>.
- ^{viii} Ibid.
- ^{ix} Ibid.
- ^x Jacob Koshy, "India's Arctic Observatory to Aid Climate Change Studies," *The Hindu*, September 18, 2014, <https://www.thehindu.com/sci-tech/energy-and-environment/indias-arctic-observatory-to-aid-climate-change-studies/article6405727.ece>.
- ^{xi} Ibid.
- ^{xii} Bhavna Mehta, "India at the Arctic," *Gateway House*, February 17, 2020, <https://www.gatewayhouse.in/india-at-the-arctic/>.
- ^{xiii} Ministry of Earth Sciences, *India's Arctic Policy* (Government of India, 2022), <https://www.moes.gov.in/sites/default/files/2022-03/compressed-SINGLE-PAGE-ENGLISH.pdf>.
- ^{xiv} Government of India, "The Honourable Union Minister, Ministry of Information and Broadcasting, Shri Anurag Singh Thakur, Addressed the First World News Conference in New Delhi," Press Information Bureau, December 18, 2023, <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1987724#:~:text=The%20Honourable%20Union%20Minister%2C%20Ministry,Delhi%20on%20December%2018%2C%202023>.

-
- ^{xv} R. Sharma, "Arctic Holds 90 BN Barrels of Oil: Report," *The Economic Times*, July 15, 2008, <https://economictimes.indiatimes.com/news/economy/indicators/arctic-holds-90-bn-barrels-of-oil-report/articleshow/3276608.cms?from=mdr>.
- ^{xvi} R. Sharma, "India Explores Major Investments in Hydrocarbons, Renewables in Russian Arctic Region," *The Economic Times*, December 28, 2020, <https://economictimes.indiatimes.com/industry/energy/oil-gas/india-explores-major-investments-in-hydrocarbons-renewables-in-russian-arctic-region/articleshow/80491769.cms?from=mdr>.
- ^{xvii} Ananya Mukherjee, "Understanding the Potential of the Northern Sea Route," *Observer Research Foundation*, October 5, 2020, <https://www.orfonline.org/expert-speak/understanding-the-potential-of-the-northern-sea-route#:~:text=The%20NSR's%20appeal%20lies%20not,and%20Russia's%20Far%20East%20regions>.
- ^{xviii} Ministry of Earth Sciences, *Compressed SINGLE PAGE* (English), March 2022, <https://www.moes.gov.in/sites/default/files/2022-03/compressed-SINGLE-PAGE-ENGLISH.pdf>.
- ^{xix} Ibid.
- ^{xx} University of the Arctic, *International Workshop on Polar Region Policy*, 2021, <https://www.uarctic.org/media/vlnpmw3j/international-workshop-on-polar-region-policy.pdf>.
- ^{xxi} Arctic Circle, "The Arctic and Third Pole: Himalaya," *The Arctic Circle Journal*, April 7, 2025, <https://www.arcticcircle.org/journal/the-arctic-and-third-pole-himalaya>.
- ^{xxii} Economic Times, "How India Plays a Significant Role in Keeping the Global Shipping Industry Running," *The Economic Times*, March 25, 2025, <https://economictimes.indiatimes.com/jobs/fresher/how-india-plays-a-significant-role-in-keeping-global-shipping-industry-running/articleshow/108839868.cms?from=mdr>.
- ^{xxiii} J. Bhagwat, "Cooperation between Russia and India in the Arctic: A Pipedream or a Strategic Necessity," *Vestnik of Saint Petersburg University. International Relations* 13, no. 4 (2020): 488–506, <https://doi.org/10.21638/spbu06.2020.405>.
- ^{xxiv} Ibid.
- ^{xxv} The Times of India, "India Gives \$1 Billion Line of Credit to Russia's Far East," *The Times of India*, August 28, 2019, <https://timesofindia.indiatimes.com/india/india-gives-1-billion-line-of-credit-to-russia-far-east/articleshow/71001071.cms>.
- ^{xxvi} High North News, "China Acquires 20 Percent Stake in Novatek's Latest Arctic LNG Project," *High North News*, April 7, 2025,

<https://www.highnorthnews.com/en/china-acquires-20-percent-stake-novateks-latest-arctic-lng-project>.

^{xxvii} The Arctic Institute, "China's Polar Silk Road: The Long Game or a Failed Strategy?" *The Arctic Institute*, April 7, 2025, <https://www.thearcticinstitute.org/china-polar-silk-road-long-game-failed-strategy/>.

^{xxviii} Hindustan Times, "India Launches First Winter Mission to Arctic," *Hindustan Times*, April 7, 2025, <https://www.hindustantimes.com/india-news/india-launches-first-winter-mission-to-arctic-101702899801163.html>.

^{xxix} The Economic Times, "India, Russia Brainstorm to Operationalise Northern Sea Route to Full Optimum," *The Economic Times*, March 15, 2025, <https://economictimes.indiatimes.com/news/india/india-russia-brainstorm-to-operationalise-northern-sea-route-to-full-optimum/articleshow/119909650.cms?from=mdr>.

^{xxx} Government of India, "India's Green Growth Goals Supported by Global Leaders at COP26," *Press Information Bureau*, April 7, 2025, <https://pib.gov.in/PressReleasePage.aspx?PRID=1806993>.

^{xxxi} Government of India, "India Launches New Green Hydrogen Policy to Boost Renewable Energy," *Press Information Bureau*, April 7, 2025, <https://pib.gov.in/PressReleasePage.aspx?PRID=2102740>.

^{xxxii} Arctic Russia, "Indian Icebreakers in the Arctic: Cooperation for the Coming Decades," *Arctic Russia*, April 7, 2025, <https://arctic-russia.ru/en/article/indian-icebreakers-in-the-arctic-cooperation-for-the-coming-decades/>.