

Paths and Implications of Indo-Russian Arctic Cooperation from the Perspective of India's Arctic Policy

Jinshan Yang¹

¹ Wuhan University China Institute of Boundary and Ocean Studies, Wuhan University, Wuhan, China

Correspondence: Jinshan Yang, Wuhan University China Institute of Boundary and Ocean Studies, Wuhan University, Wuhan, China.

doi:10.56397/SLJ.2024.03.08

Abstract

India's earliest involvement in the Arctic was influenced by the Antarctic, driven primarily by the need for scientific research on the environment and climate change. Later, the importance of Arctic energy and geo-strategic factors became more and more prominent, and these three factors are now the core drivers of India's involvement in the Arctic. Depending on the degree of importance and involvement of the Indian government in Arctic affairs at different times, India's Arctic policy can be categorized into three stages: the unformed stage (before 2007), the embryonic stage (2007-2012), and the initial stage (2012-present). With the gradual molding of India's Arctic strategy, Indo-Russian Arctic cooperation has gradually become a hot topic. Specific cooperation paths include energy, scientific research, transportation and other fields. The driving force of Indo-Russian Arctic cooperation includes historical cooperation foundation, objective cooperation needs, geopolitical strategy and other factors, but at the same time, India's domestic disagreement on Arctic policy, its own economic level, the complex situation in South Asia, the international political situation, economic risks, technical difficulties, and the U.S.-Russian rivalry also limit the deepening of Indo-Russian Arctic cooperation. For China, India-Russia Arctic cooperation in Arctic affairs and geopolitics in the short term will not pose too much of a threat, but from the point of view of prevention, should still be India and Russia to join forces to maintain appropriate vigilance, in order to better safeguard national interests.

Keywords: Indian arctic policy, Indo-Russian relations, Indo-Russian arctic cooperation

1. Introduction

In recent years, the importance and strategic position of the Arctic has become more prominent, and issues related to the Arctic region have attracted the attention of many countries. Although India is situated in South Asia and is geographically far removed from the Arctic, it has not remained completely aloof from it for various reasons.

Since being granted observer status in the Arctic Council in 2013, India has become increasingly active in Arctic affairs. However, as a non-Arctic

country, India's involvement in the Arctic can only be realized through cooperation with Arctic countries. As India and Russia have always been friendly, the latter is the largest Arctic country, holding a large amount of Arctic resources, objectively also need to cooperate with other countries to jointly develop the Arctic. In this context, India-Russia Arctic cooperation is gradually put on the agenda. Scholars have begun to enthusiastically discuss the specific areas and future prospects of Indo-Russian Arctic cooperation, and the governments of the two sides have also continued to release signals of willingness to strengthen cooperation. Although the Indo-Russian Arctic cooperation is still in its infancy, it is foreseeable that the Arctic cooperation will play an increasingly important role in the future Indo-Russian relations.

Indo-Russian cooperation in Arctic affairs has economic but also strategic not only considerations. India and Russia are both world powers and China's neighbors, and their cooperation naturally has an impact on China. Clarifying India's Arctic policy, analyzing the path of Indo-Russian Arctic cooperation, and analyzing the dynamics and constraints of its cooperation can not only provide a reference to deepen China's understanding of the Arctic and deepen its participation in Arctic affairs, but also provide a warning to deepen the understanding of China-Russia-India geopolitical relations, and to stay alert to the Indo-Russian alliance.

This paper is divided into three parts to discuss India's Arctic policy and Indo-Russian Arctic cooperation. The second part introduces India's Arctic policy by dividing it into three stages according to the degree of importance and involvement of the Indian government in Arctic affairs at different times. The third part explores the path of Indo-Russian Arctic cooperation from the perspective of specific areas of cooperation. The fourth part attempts to evaluate and analyze the dynamics and limitations of Indo-Russian Arctic cooperation, and the implications for China.

2. India's Arctic Policy

India's earliest involvement in the Arctic was influenced by the Antarctic, and was mainly driven by the need for scientific research on the environment and climate change. Later, the importance of energy issues became more and more prominent, and the strategic needs of geopolitical games also became more and more prominent, and the three have now become the core driving force of India's involvement in Arctic affairs. In recent years, India has become increasingly active in Arctic affairs, and its Arctic policy is becoming clearer with the issuance of two Arctic-related documents. This chapter categorizes India's Arctic policy into three phases based on the degree of importance and involvement of the Indian government in Arctic affairs at different times.

2.1 Unformed Phase: Before 2007

India believes that its presence in the Arctic region can be traced back to the Svalbard Treaty of 1920. Concluded by Norway, Sweden, Denmark, the Netherlands, France, Italy, the United States, Japan, the United Kingdom and the British Overseas Territories (including British India), the treaty provided for free access to the Svalbard archipelago by citizens of each of the contracting parties to engage in legitimate productive and commercial activities, subject to Norwegian law. Notwithstanding this, until 2007, and for several decades after the signing of the Treaty, India's primary focus on polar affairs was on the Antarctic and there was no involvement in Arctic affairs under the Treaty.¹

India's activities in the Antarctic have resulted in a wealth of experience and research in polar research, as well as a model for India's participation in international affairs, which has informed India's subsequent participation in Arctic affairs and the formulation of its Arctic policy. However, due to the differences between the North and South Poles, this experience has had a negative impact on India's Arctic policy to some extent.

2.2 Emerging Phase: 2007-2012

During this period, India became involved in Arctic affairs, but mainly in the scientific field. While there was official support for Arctic research activities, no official Arctic-related documents were issued. Nor did the government take a clear official position on the dispute between the two factions with different views on Arctic affairs.

India's Arctic research activities in the early days

¹ In 1981, the Government of India launched a classified Antarctic Research Program on the initiative of the then Prime Minister of India, Indira Gandi. Under this plan, the Indian government organized several Antarctic expeditions and, on August 1, 1983, formally joined the Antarctic Treaty System. See: Chaturvedi, S. (1986). India and the Antarctic treaty system: Realities and prospects. *India Quarterly*, 42(4), pp. 351-380.



were mainly through cooperation with Norway, and Arctic research was identified as a priority area for cooperation between the two countries after senior officials of the two countries exchanged visits to each other's Arctic scientific research institutes in 2006 and 2007. A five-member scientific committee under the leadership of Rasika Ravindra, Director of National Centre for Antarctic and Ocean Research (NCAOR, later renamed as National Polar and Ocean Research Center), was set up on 3 August 2007 to discuss the Arctic and its implications for India's research activities. Antarctic and Ocean Research (NCAOR), later renamed as National Center for Polar and Ocean Research (NCPOR), a five-member scientific mission was undertaken on August 3, 2007 to conduct India's first Arctic scientific expedition. The official announcement of the launch of the Arctic research was made in view of the paucity of knowledge about the Arctic and climate change, especially the link between the polar regions and the intensity of the monsoon, which is critical to India's agriculture and economy.1

In July 2008, India opened a scientific research station named "Himadri" at the International Arctic Research Base (IARB) at Ny-Alesund, Svalbard, Norway, operated by the National Center for Antarctic and Ocean Research (NCAOR), to carry out research in the disciplines of glaciology, atmospheric sciences and biological sciences. Research. Since then, the country has been sending a three to five-member scientific mission to the Arctic Research Station every year for on-site research and two expeditions for hydrochemical, glaciological, atmospheric and microbiological investigations. The Government of India has also signed a Memorandum of Understanding (MoU) for scientific cooperation with the Norwegian Polar Institute and a MoU with KingsBay, a Norwegian state-owned enterprise located in Nova Oresund, to provide logistics and infrastructure for conducting Arctic research and maintaining Indian research bases in the Arctic region, and was elected a member of the Board of Governors of the International Arctic Science Committee (IASC) in 2012.²

As the Indian scientific community's involvement in Arctic research deepens, the Government's Arctic policy is also on the agenda. Several think tanks, such as the Indian Council of World Affairs, the Institute for Defense Studies and Analyses, and the National Maritime Foundation, have begun to study Arctic geopolitics, governance, and Asian policy issues in the Arctic. Differences between the two factions of dissenters began to emerge.

Even before joining the Arctic Council, there was opposition in India. Shyam Saran, former Foreign Secretary of India, urged India to carefully consider joining the Arctic Council in an article in which he argued that India should "vigorously pursue the Antarctic Treaty model and set aside the territorial claims of all countries". ³According to this argument, the Arctic is a global commons and the common heritage of mankind, but this is contrary to the claims of the Arctic Council members and would be difficult for Arctic states to support.

Another school of thought emphasizes that the Indian government should strategically consider the threats and opportunities that Arctic development may present to India, and that joining the Arctic Council would be beneficial for India to remain engaged in sensitive areas of the Arctic.⁴ In 2012, India's defense minister noted that the development of the Arctic shipping lanes would likely make the Indian Ocean's maritime domains less important, weakening India's ability to provide a strategic deterrent to China. 5He argued that the Arctic would affect the strategic position of the Indian Ocean. Since China relies heavily on the Indian Ocean route for energy and overseas trade, effective Indian control of the Indian Ocean could suppress China's drive to create military

¹ Nadezhda Filimonova. (2015). Prospects for Russian-Indian Cooperation in the High North: Actors, Interests, Obstacles, Maritime Affairs. *Journal of the National Maritime Foundation of India*, 11, 1, 99-115, DOI: 10.1080/09733159.2015.1025537

² Ministry of External Affairs (MEA). (2013). "India and the Arctic," at https://www.mea.gov.in/ in-focus-article.htm?

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³ Aditya Ramanathan. (2020). Seeking a Seat at the Table: India Turns to the Arctic. *Handbook on Geopolitics and Security in the Arctic, Frontiers in International Relations*, pp. 147-159. *Relations*, pp. 147-158. https://doi.org/10.1007/978-3-030-45005-2_9.

⁴ Qu Jiwen and Dai Yonghong. (2021). Energy Development under India's New Arctic Policy: Transformations, Limitations and Implications. *Indian Ocean Economic and Political Review*, 4, p. 132.

⁵ Ajai Shukla. (2012). Antony Sees Chinese Shipping Bypassing Indian Blockade, Business Standard, February 28, 2012, https://www.business-standard.com/ article/economy-policy/antony-sees-chinese-shipping-b ypassing-indian-blockade-112022800029_1.html.

threats in border issues. ¹However, the opening of a navigable Arctic route would reduce China's dependence on the Straits of Malacca and Sunda.²

Although membership in the Arctic Council implies recognition of the sovereign rights of the Arctic States over the Arctic Ocean, the Government of India submitted its application to become an observer State in the Arctic Council in November 2012, despite domestic opposition. This laid the initial groundwork for subsequent Arctic policy.

2.3 Initial Formation: 2013-Present

In 2013, India became a permanent observer State in the Arctic Council. Joining the Arctic Council means that recognizing the sovereign rights of Arctic States over the Arctic Ocean becomes India's international obligation as an observer State. In addition, as other Asian countries such as China, Japan and South Korea become involved in the Arctic have development process, some Indian scholars have begun to suggest that the Indian government should gradually abandon its insistence on defining the Arctic Ocean as a "global commons". Against this backdrop, the idea of analyzing the Arctic from a strategic perspective has been further developed in India. However, the idea of globalizing the Arctic Ocean as a global commons also continues to have wide influence in Indian political and academic circles.

Following its admission as an official observer to the Arctic Council, the Ministry of External Affairs of India released a document entitled "India and the Arctic" on June 10, 2013, outlining the country's scientific, environmental, commercial and strategic interests in the Arctic. The document emphasizes that "the Government of India is closely following the problems posed by global warming in the Arctic region, which presents a range of new opportunities and challenges to the international community. Currently India has four main interests in the Arctic - scientific research, environmental protection, commercial and geo-strategic."³

According to the document, India's scientific research in the Arctic focuses on four main areas. One is to study the relationship between Arctic climate change and the Indian Ocean monsoon. The second is to assess the impact of global warming on the Arctic. The third is to study the impact of melting Arctic glaciers on sea level rise. The fourth is to assess the response of Arctic flora and fauna to human activities. ⁴As for the other areas, the document mentions them, but does not provide a clear definition of the interests of each area, nor are their related policy instruments described.

Although the document is relatively short and not very detailed, it still played a catalytic role in shaping India's Arctic policy and participation in Arctic affairs. After the promulgation of the document, Arctic affairs have been mentioned in the joint statements issued by the Indian and Russian governments every year, which was not the case before. On the other hand, India has also been increasing its investment in the Arctic and strengthening its cooperation with Arctic countries.

After China released a white paper on Arctic policy in 2018, India was not far behind, with Indian scholars vigorously calling for the government to expand its Arctic engagement efforts and to develop an Arctic strategy as soon as possible. In January 2021, the Indian government released a draft version of India's Arctic Policy ⁵ for public comment. ⁶ The published version of the policy document for public consultation clearly indicates that India's Arctic policy consists of five pillars: scientific research, economic and human development cooperation, transportation and connectivity, international governance and cooperation, and

¹ Qu Jiwen and Dai Yonghong. (2021). Energy Development under India's New Arctic Policy: Transformations, Limitations and Implications. *Indian Ocean Economic and Political Review*, 4, p. 141.

² Nadezhda Filimonova. (2015). Prospects for Russian-Indian Cooperation in the High North: Actors, Interests, Obstacles, Maritime Affairs. *Journal of the National Maritime Foundation of India*, 11, 1, p. 115, DOI: 10.1080/09733159.2015.1025537

³ Ministry of External Affairs (MEA). (2013). India and the Arctic, at https://www.mea.gov.in/ in-focus-article.htm? 21812/India&.

⁴ Ministry of External Affairs (MEA). (2013). India and the Arctic, at https://www.mea.gov.in/ in-focus-article.htm? 21812/India&.

⁵ Indian's Arctic Policy, Ministry of External Affairs of India. (2021). https://arcticpolicyindia.nic.in/.

⁶ Note: While the Government of India published a draft of the Indian Arctic Policy on January 5, 2021, as of this date (February 16, 2022), the official version has not yet been published. In addition, since the time span is not very large and India's involvement in the Arctic, though new, has evolved since the promulgation of the draft, is less substantial, this part is still categorized under Phase III and no longer classified as Phase IV.

national capacity building. With the exception of the scientific research area, all four of these sections have been elaborated in detail for the first time and provide a degree of clarity on India's linkages, objectives and means of realization in the corresponding areas of the Arctic.

3. Path Analysis of India-Russia Arctic Cooperation

As a non-Arctic country, India's involvement in the Arctic can only be realized through cooperation with Arctic countries. Russia and India have always been good friends, but also the largest Arctic countries, holding a large number of Arctic resources, objectively also need to cooperate with other countries to jointly develop the Arctic, is a very suitable object of cooperation. Although the India-Russia Arctic cooperation is still in the initial stage. But it can be predicted that the Arctic cooperation in the future of India-Russia relations will play an important role. In terms of the specific areas of India-Russia Arctic cooperation, there are mainly the following cooperation paths.

3.1 Energy

According to data released in the bp Statistical Yearbook of World Energy (2021), India has emerged as the third largest global energy consumer after China and the US, with its energy consumption accounting for a whopping 5.7% of global consumption in 2020. ¹According to India's Ministry of Petroleum and Natural Gas, India's oil and gas demand is expected to continue its upward trend compared to the rest of the world and is projected to double by 2040.²

India has limited domestic oil and gas reserves and is heavily dependent on imports for energy. According to the Indian Ministry of Petroleum and Natural Gas, India relies on imports for 85% of its crude oil and 52.74% of its natural gas. ³The Middle East and North Africa supply 60% of India's oil needs, and conflicts and political instability in these places can have a negative impact on India's domestic energy market. The Government of India has therefore been making efforts to diversify its energy suppliers.⁴

Russia is rich in oil and natural gas in the Arctic and, according to assessments, has a higher share of unexploited oil and gas resources in the Arctic than any other Arctic country, especially natural gas, which accounts for more than 70 per cent (see Table 1). ⁵Russia's national economy is heavily dependent on the export of energy, and every sharp fluctuation in energy prices can have a serious impact on the Russian economy.

Table 1. Distribution of undeveloped oil and gasreserves in the Arctic (%)

| nations | petrochemical | petroleum |
|---------------------------|---------------|-----------|
| Georgia | 41 | 70 |
| United States (Alaska) | 28 | 14 |
| Denmark (Greenland) | 18 | 8 |
| Canadian | 9 | 4 |
| Norway | 4 | 4 |

Source: Lindholt, Lars and Solveig Glomsrød. The role of the Arctic in future global petroleum supply, p. 8, 2011.

The natural complementarity of energy sources between India and Russia makes each an ideal partner for the other. Therefore, energy has always been an important area of cooperation between the governments of India and Russia. After the collapse of the Soviet Union, India and Russia in the late 1990s began negotiations on cooperation in the field of energy, and in the early 21st century the two countries formally opened the process of energy cooperation.

Energy cooperation in the Arctic region was not within the scope of cooperation between the two

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¹ bp world energy statistics yearbook. (2021). p. 10, https://www.bp.com/content/dam/bp/country-sites/zh_c n/china/home/reports/statistical-review-of-worldenergy/2021/BP_Stats_2021.pdf

² Ministry of Petroleum and Natural Gas. (2019). Annual Report 2018-19. New Delhi: Ministry of Petroleum and Natural Gas, 2019, p82. as cited in Bhagwat J. (2020). Cooperation between Russia and India in the Arctic: Apipe dream or a strategic necessity. vestnik of Saint Petersburg University. *International Relations*, 13(4), p. 497.

³ Ministry of Petroleum and Natural Gas Government of India. (2020). Annual Report 2020-21, p.24. https://mopng.gov.in/files/ TableManagements/MoPNG-Annual-Report-combined.

⁴ Ministry of Petroleum and Natural Gas. (2019). Annual Report 2018-19. New Delhi: Ministry of Petroleum and Natural Gas, p. 82. as cited in Bhagwat J. (2020). Cooperation between Russia and India in the Arctic: Apipe dream or a strategic necessity. Vestnik of Saint Petersburg University. *International Relations*, 13(4), p. 475.

⁵Lindholt, Lars and Solveig Glomsrød. (2011). The role of the Arctic in future global petroleum supply. p. 8.

countries in the early days, but as Russia shifted its energy development focus to the Arctic, energy cooperation between the two sides has gradually expanded to the Arctic region. In the 2011 and previous joint declarations of the Indian and Russian governments, although both governments identified energy cooperation as one of the important areas of cooperation, but did not involve cooperation in Arctic energy development. In 2012, the Indian government in the joint declaration of the Indian and Russian governments expressed the reasons for participation in Russia's Siberia, the Far East and the Arctic region of the oil and gas projects.¹ In 2013, the Indian government in the joint declaration of the section of energy cooperation expressed its desire to participate in Russia's Arctic energy development.² In 2016, Russia expressed interest in attracting Indian oil companies to participate in a joint project in the Russian Federation's offshore-Arctic oilfields.³ In 2017, India and Russia expressed interest in launching a joint project on the exploration and development of hydrocarbons in the Russian Federation's Arctic continental shelf.⁴

Currently, India and Russia have already

- ² Ministry of External Affairs (MEA). (2013). Joint Statement on the 14th India-Russia Annual Summit: Deepening the Strategic Partnership for Global Peace and Stability, October 21. +Statement+on+the+14th+IndiaRussia+Annual+Summit. Stability, October 21, 2013. https://mea.gov.in/bilateral-documents.htm?dtl/22361/Jo int+Statement+on+the+14th+IndiaRussia+Annual+Summ it+Deepening+the+Strategic+Partnership+for+Global+Pe ace+and+Stability Summit+Deepening+the+Strategic+Partnership+for+Glo bal+Peace+and+Stability
- ³ Ministry of External Affairs (MEA). (2016). India-Russia Joint Statement during the Visit of President of the Russia to India: Partnership for Global Peace and Stability, October 15, https://mea.gov.in/bilateral-documents.htm?dtl/27482/In diaRussia+Joint+Statement+during+the+Visit+of+the+Ru ssia+to+India+Partnership. President+of+the+Russia+to+India+Partnership+for+Glo bal+Peace+and+Stability
- ⁴ Ministry of External Affairs (MEA). (2017). Saint Petersburg Declaration by the Russian Federation and the Republic of India: a vision for the 21st century, June 01,

http://www.mea.gov.in/bilateral-documents.htm?dtl/285 07/saint+petersburg+declaration+by+the+russian+federa tion+and+the+

republic+of+india+a+vision+for+the+21st+century

achieved some of the successes in Arctic energy cooperation. The Yamal Peninsula, located in the Arctic, is a major source of oil and gas extraction, especially natural gas, for Russia. In March 2018, Gazprom shipped the first shipment of liquefied natural gas (LNG) from the Yamal project to India under a long-term LNG sales agreement with India. India's Ministry of Petroleum and Natural Gas annual report shows that Russia is India's largest oil and gas investment destination, and as of March 2020, India has invested in five oil and gas projects in Russia amounting to more than \$15 billion.⁵ In September 2019, Russia's Novatek (Novatek) signed two Memorandums of Understanding (MoUs) on cooperation in the supply and production of liquefied natural gas (LNG) with two Indian companies. 6 In September 2021, India and Russia signed 15 memorandums of understanding (MoUs) and 35 commercial documents at the time of the summit, with investments in the energy sector in the Far East and the Arctic taking up most of the content.

Table 2. Russian oil and gas projects in whichIndia has invested

| Project name | India's share |
|-----------------|---------------|
| Sakhalin -1 | 20% |
| Vankorneft | 23.9 % |
| License-61 | 50% |
| Imperial Energy | 100% |
| Taas Yuryakh | 29.9% |

Source: Ministry of Petroleum and Natural Gas Annual Report 2020-21, pp. 73-74.

3.2 Scientific Research Areas

At present, India's scientific cooperation in the Arctic region is mainly with Norway, and cooperation with Russia has not yet started. However, in view of the two sides have had other aspects of scientific research cooperation

¹ Ministry of External Affairs (MEA). (2012). Joint Statement on the 13th India-Russia Annual Summit: Partnership for mutual benefit and a better world, December 24, 2012, documents.htm? 24, https://www.mea.gov.in/bilateraldocuments.htm?dtl/20993/Joint+Statement+on+the+13th +IndiaRussia+Annual+Summit: Partnership for mutual benefit and a better world, December 2012, https://www.mea.gov.in/bilateral-documents.htm?

⁵ Ministry of Petroleum and Natural Gas Government of India. (2020). Annual Report 2020-21, p. 62. https://mopng.gov.in/files/TableManagements /MoPNG-Annual-Report-combined.pdf

⁶ Rosemary Griffin. russian Novatek signs MOUs with two Indian companies on LNG, gas, https://www.spglobal.com/platts/en/market-insights/lat estnews/patural-gas/090/19-russian-novatek-signs-mous-w

news/natural-gas/090419-russian-novatek-signs-mous-w ith-two-indian-companies-on-lng-gas

experience, perfect cooperation mechanism, their respective advantages of cooperation, and a strong willingness to cooperate. It can be predicted that this area will be an important path for India-Russia Arctic cooperation in the future.

In terms of experience of cooperation, Indo-Russian scientific cooperation started in the Antarctic long before the Arctic, with scientists from both sides regularly visiting each other's polar stations and attending academic conferences organized by the other side. In terms of cooperation mechanisms, the Science and Technology Working Group (STWG), the Integrated Long-Term Program (ILP) and the Basic Science Cooperation Program (BSCP) under the India-Russia operating Inter-Governmental Commission-TEC (IRIGC-TEC) are the three main institutional mechanisms for bilateral cooperation in science and technology. The three main institutional mechanisms for bilateral cooperation in science and technology are the Integrated Long-Term Program (ILP) and the Basic Science Cooperation Program (BSCP), and there are regular academic exchanges between the Indian and Russian scientific communities. 1As for the advantages of cooperation, India has accumulated advanced technology and rich experience in polar research and climate change through its earlier research activities in Antarctica, while Russia has unparalleled geographic advantages and strong scientific research capabilities.

In terms of willingness to cooperate, the two sides have made several references to strengthening scientific cooperation in the Arctic in the India-Russia Joint Statements issued annually. In 2014, India and Russia said in their statement that they would advance scientific cooperation to study the challenges (such as melting ice, climate change, marine life, and biodiversity) faced by the fast-changing Arctic.² In 2015, the two sides emphasized in their statement the importance and potential of joint scientific research in the Arctic region's importance and potential for joint scientific research.³ In 2018, the Parties expressed their interest in developing mutually beneficial cooperation in the Arctic, particularly in the area of joint scientific research. The Parties note with satisfaction the long-standing cooperation between Indian and Russian scientists in the Antarctic.⁴

3.3 Transportation

Of the three Arctic routes, the Northern Route, which passes through the Russian coast, is gaining prominence. The Northern Route is the shortest route linking East Asia with ports in Western Europe. It is estimated that, compared with the Suez Canal route, it will reduce the sea distance from Shanghai to Rotterdam by 30% and the transportation distance from Yokohama to Rotterdam by 40%.

While the opening of this section of the route would weaken the strategic position of Indian ports in relation to the Indian Ocean, scholars have pointed out that the Russian Northern Sea Route could be connected to the Chennai-Vladivostok Maritime Corridor, making the latter an extension of the Northern Sea Route that would facilitate the development of trade and transportation between Russia and India. ⁵In addition, after the development of oil and gas in Russia's High North matures, this extended section of the Northern Sea Route will become an important transportation route for energy trade between the two sides. In the 2021 Russia-India Joint Declaration, the Indian side expressed interest in cooperating with Russia on the Northern Sea Route.

¹ Ministry of External Affairs (MEA). (2013). India-Russia Relations,

https://mea.gov.in/Portal/ForeignRelation/Russia_unclas sified_bilateral_brief _January_2013.pdf

² Ministry of External Affairs (MEA). (2014). A Vision for strengthening the Indian-Russian Partnership over the next decade' - Joint Statement during the visit of President of the Russian Federation to India, December 11, http://uruuumaa.gov/in/bilateral.documents.htm24tl/2014

http://www.mea.gov.in/bilateral-documents.htm?dtl/244 86/druzhbadosti+a+ vision=for=strengthening=the+indianrussian+nartnershi

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russian+federation+to+india

³ Ministry of External Affairs (MEA). (2015). Joint Statement between the Russian Federation and the Republic of India: Shared Trust, New Horizons, December 24, 2015, http://www.mea.gov.in/bilateral-documents.htm?dtl/262 43/joint+statement+between+the+russian+federation+an d+the+republic+of+

india+shared+trust+new+horizons+december+24+ 2015

⁴ Ministry of External Affairs (MEA). (2018). India-Russia Joint Statement during visit of President of Russia to India, October 05, 2018, http://www.mea.gov. in/bilateral-documents.htm?dtl/30469/indiarussia+joint+ statement+during+visit+of+president+of+russia+to+india +october+05+2018

⁵ Bipandeep Sharma, Uttam Kumar Sinha. (2021). Prospects for India-Russia Cooperation in the Arctic, October 29, 2021, https://www.idsa.in/ issuebrief/india-russia-in-arctic-bsharma-uksinha-29102 1

Indian scholars have also pointed out the strategic geopolitical significance of this section of the maritime corridor: the corridor provides Russia with an alternate strategic option that allows Russia to export energy to India and East Asian countries, diversify its exports, reduce its export dependence on China, and help Russia to participate in the Indo-Pacific region and to strengthen its influence in the region. ¹This view is sufficiently alarming.

3.4 Other Areas of Cooperation

In addition to energy, scientific research and shipping, Indian scholars also point out that India and Russia can cooperate in the areas of labor, tourism and military. In terms of labor force, India holds the third largest share of the world's seafarers at 9.35%. Nautical programs at Russian universities can help develop maritime skills among Indian youth. India also has a low average age of 29, the fifth youngest in the world. ² In terms of tourism, the beautiful scenery of the Arctic region and the magical Northern Lights can provide a unique experience for Indian tourists.³

On the military front, the Defense Ministers meet annually through the Indo-Russian Intergovernmental Commission on Military-Technical Cooperation (IRIGC-MTC). ⁴Initiatives such as the Reciprocal Exchange of Logistics Agreement (RELOS) and the proposed Navy-to-Navy Memorandum of Understanding (MoU) will allow India access to Russian naval port facilities in the Arctic. This could enhance the Indian Navy's reach and operational experience in polar waters, thereby adding to the overall strategic advantage of the service. Similarly, RELOS will benefit Russia in terms of access to Indian naval port facilities in the Indian

Ocean.⁵

4. Drivers, Limitations, and Impacts of Indo-Russian Arctic Cooperation

4.1 Dynamics of Indo-Russian Arctic Cooperation

After analyzing India's Arctic policy and the path of cooperation between India and Russia, it can be found that the two sides have complementarities and overlaps in the fields of energy and scientific research, and objectively need to cooperate in order to promote the development of Arctic affairs in their own countries, which constitutes the basis for the two sides to carry out cooperation in the Arctic. In addition, geopolitical strategic considerations and the history of cooperation between India and Russia have also pushed the two countries to expand the field of cooperation to the Arctic. This section attempts to analyze and summarize the dynamics of India-Russia Arctic cooperation.

First, there is an objective need for India and Russia to cooperate with other countries. India, as a non-Arctic country, can only be among the Arctic affairs through cooperation with Arctic countries. On the issue of energy, Russia and India's energy complementarity is a natural bond between Russia and India to strengthen energy cooperation. 6India is a large energy consumer and imports most of its energy, so it needs to cooperate with energy-exporting countries like Russia. While Russia has a large number of resources in the Arctic, but due to Western sanctions, foreign partners have withdrawn from cooperation projects one after another, resulting in Rosneft and Gazprom postponing or freezing oil and gas exploration projects in the Arctic continental shelf since 2014. In addition, Russia has not yet fully mastered the technology of Arctic continental shelf development, and the exploration and exploitation equipment also relies heavily on foreign imports. In the face of these difficulties, Russia hopes that more foreign companies will take stakes in Arctic projects to promote the development of Arctic energy.

Secondly, India and Russia have a relatively

¹ Bipandeep Sharma, Uttam Kumar Sinha. (2021). Prospects for India-Russia Cooperation in the Arctic, October 29, 2021, https://www.idsa.in/ issuebrief/india-russia-in-arctic-bsharma-uksinha-29102 1

² One of the Youngest Populations in the World-India's Most Valuable Asset, Economic Diplomacy Division, Ministry of External Affairs, Government of India, 13 June 2021, https://indbiz.gov.in/one-of-the-youngest-populations-in -the-world-indias-most- valuable-asset/

³ Bipandeep Sharma, Uttam Kumar Sinha. (2021). Prospects for India-Russia Cooperation in the Arctic, October 29, 2021, https://www.idsa.in/ issuebrief/india-russia-in-arctic-bsharma-uksinha-29102 1

⁴ India-Russia Relations. (2020). https://mea.gov.in/Portal/ForeignRelation/India_Russia_ June_2020.pdf

⁵ Dinakar Peri. Logistics agreement with Russia shortly, in final stages with U.K., and with U.K. https://www.thehindu.com/news/national/logistics-agre ement-with-russia-shortly-in-final-stages-with-uk/articl e36303672.ece

⁶ Chen Benchang. (2020). Analysis of the Progress, Motivation and Impact of Russia-India Energy Cooperation in the 21st Century, *Northeast Asia Forum*, (6), p. 118.



deep foundation of cooperation. There are no difficult issues such as borders and territories between India and Russia. For a long time, taking into account national security issues, ambivalent about Russia has been the participation of Northeast Asian countries in Arctic affairs. But cooperation with India has no such concerns, which is a unique advantage geopolitically endowed to India in Arctic affairs. The special Indo-Russian strategic relationship can be traced back to the Soviet Union's support for India during the Cold War era, including in the Sino-Indian border dispute and the Indo-Pakistani war. Between the 1960s and the early 1980s, the Soviet Union provided about \$4 billion in military assistance to India, the largest recipient of Soviet foreign military assistance. ¹In 1971 and 1978, the Soviet Union and India signed the Soviet-Indian Treaty of Peace, Friendship and Cooperation, a military alliance, "Soviet-Indian Special the which created Relationship". After the collapse of the Soviet Union, Russian-Indian relations experienced a brief period of uncertainty after the end of the Cold War, and faced problems such as a low level of trade and economic cooperation, and increased disagreements over the cost and quality of military purchases, but the main channels of strategic cooperation have not been disturbed. This is evidenced the bv establishment of the "strategic partnership" in 2000 and its upgrading to a "special and privileged strategic partnership" in 2010.

Finally, geopolitical influences are also one of the driving forces behind Russian-Indian Arctic cooperation. Neither India nor Russia actually wants to see the rise of China. From a geopolitical perspective, Indo-Russian Arctic cooperation has at least three strategic implications for India:

(1) Balance Sino-Indian relations, India can use the Arctic cooperation with Russia to deepen the cooperative relationship between the two sides, to avoid Russia in the Sino-Indian conflict in favor of China, to increase their own chips in the Sino-Indian game;

(2) Alleviating India's energy supply gap, optimizing India's energy consumption structure and diversifying imports;

(3) to avoid the Arctic to weaken India's strategic containment of China, many foreign hawkish views that the Indian Ocean is India's most effective strategic means to contain China's military threat. But the development of Arctic energy as well as shipping lanes may make India's containment of China loophole, and through the Arctic cooperation with Russia, on the one hand, can timely understand the Arctic situation development and the latest developments, adjust the strategy towards China, on the other hand, also helps India to seek Russia's help to contain China.

For Russia, Russian-Indian Arctic cooperation also has three strategic implications:

(1) Balancing Sino-Russian relations. Although China and Russia are currently cooperating closely, Russia's wariness of China has never died down, and the "threat theory" has always existed. India is an important part of maintaining the strategic balance, which can be seen from the fact that Russia pushed India to become a member of the Shanghai Cooperation Organization in 2017. Good relations with India can form a north-south pincer movement against China when necessary, so as to achieve the purpose of containing China.

(2) Diversification of energy exports to avoid overdependence on the Chinese market. At present, China has become Russia's largest oil export market and the second largest natural gas export market (the first largest natural gas export market is Germany). If India can become an important market for Russia's energy exports in Asia, it will certainly increase Russia's room for maneuver in Northeast Asian energy cooperation.

(3) Deepening relations with South Asian countries and increasing Russia's influence in South Asia. During the Cold War, the Soviet Union, with its strong military power, constructed an order of balance of power in South Asia in which the United States and the Soviet Union were evenly matched, which was also an important strategic symbol of the Soviet emergence as a global power. Union's Afterwards, the Soviet Union's global strategy contracted and it began to gradually reduce or even abandon its intervention in South Asia and the Indian Ocean. After Vladimir Putin came to power, he tried to restore Russia's influence in South Asia, and further intensified his "turn to the East" to construct a regional order that meets

¹ Robert Donaldson. (1985). *The Gains and Losses of the Soviet Union in the Third World, translated by Ren Quan and others,* World Knowledge Publishing House, pp. 211-212.

his national interests and revitalize his great power. India has great influence in South Asia, through cooperation with India, Russia can increase its presence in South Asia.

4.2 Limitations of Indo-Russian Arctic Cooperation

Although India and Russia have sufficient motivation to cooperate in the Arctic, and both sides have shown great enthusiasm for India-Russia Arctic cooperation, the process of cooperation is still in its infancy, and objective constraints hinder the deepening of India-Russia Arctic cooperation.

First, India's domestic perception of the Arctic has not yet been harmonized, and opposition to Arctic development still exists. In last year's draft Arctic strategy paper, the Indian government, on the one hand, pointed out the importance of participating in Arctic energy development, and at the same time emphasized in the concluding part of the paper that the Indian government regarded the Arctic as the "common heritage of mankind". This inconsistency reflects, on the one hand, that the document is a compromise between different positions and, on the other hand, that the Indian government is facing great difficulties in integrating the divergent positions on Arctic policy in the country. This opposition has, to some extent, hindered the deepening of Indo-Russian Arctic cooperation.

Second, India's economic level limits India's participation in Arctic affairs and hinders the deepening of Indo-Russian Arctic cooperation. Although India has developed rapidly in previous years (economic growth rate of 6% or more in each of 2013~2018), it is one of the fastest growing economies in the world. However, India's economic growth rate has declined in the last two years, with a GDP of \$2.94 trillion in the 2019-2020 fiscal year, a growth of only 5% over the previous fiscal year. India's GDP growth of -7.3% in the 2020-2021 fiscal year is India's fifth negative growth rate since Independence, and the most severe economic contraction in the country's history. In addition, while India's total economic level is among the highest in the world, its per capita GDP level lags far behind. As a developing economy, it also has relatively limited capacity for outward investment. The wealth gap, unemployment, inflation, government deficits, industrial structure and other issues have also been plagued by the Indian government. In such a financial situation, the Government of India's financial support for Arctic affairs is very limited.

Once again, the complex situation in South Asia has distracted India's attention from the Arctic. On the one hand, from within the South Asian region, interstate tensions and confrontations have emerged from time to time, making it necessary for India to be constantly alert to political changes in the neighborhood. On the other hand, the development of the international situation in South Asia also forced India to leave more diplomatic resources in the region. Indo-Russian Arctic cooperation is an important but not urgent matter for India and ranks low on the list of India's political priorities. 1Economic issues, relations with neighboring countries and world powers are much more important and urgent matters, which can lead to distraction of the Indian government's energies from sustained promotion of Indo-Russian Arctic cooperation.

Again, the international political situation, economic risks, and technical difficulties have also hindered the process of Indo-Russian Arctic cooperation. Russia's rich oil and gas resources in the Arctic are the focus of Indo-Russian Arctic cooperation. However, the exploration and exploitation of these resources cannot be developed without specialized technology and equipment, which is a common challenge for Russia and India. In addition, the development of the Arctic region is highly susceptible to the influence of the international political situation, coupled with the difficulty of polar operations, compared with other foreign investment business, the economic risk is obviously higher, so it can be imagined that India's enthusiasm.

Finally, the U.S.-Russia rivalry is another source of resistance to Indo-Russian Arctic cooperation. India's involvement in Arctic affairs by way of enhanced cooperation with Russia is severely constrained by US-Russian relations. The strengthening of military cooperation between the United States and India has had a knock-on effect on the development of Indo-Russian relations. In the context of India's continuous attempts to enhance its status as a great power through the Indo-Pacific strategy, India must rely on military cooperation with the United States. But at the same time India can not

¹ Nitin Agarwala. (2021). India's Evolving engagements in the Arctic, Maritime Affairs: Journal of the National Maritime Foundation of India, 17(1), pp. 10-25, DOI: 10.1080/09733159.2021.1934969

abandon the traditional friendly relations with Russia, so its future will continue to make difficult choices under the pressure of Russia and the U.S., and this kind of two ends of the stick will inevitably affect its discourse position in Arctic affairs.

4.3 Implications of Indo-Russian Arctic Cooperation for China

For China, in terms of Arctic affairs, as the Indo-Russian Arctic cooperation has just started at this stage, it does not pose a threat to China's interests in the short term. For India, its economic volume and influence in the Arctic are still far from China's at present. Unlike China, it is not in India's national interest to invest comparable energy in the Arctic as China. India's demand for Arctic energy is not very urgent, although it is also in demand, and the Arctic shipping lanes will even cut down the strategic position of the Indian Ocean. Therefore, India's current main purpose is to increase its bargaining chips by intervening in Arctic affairs to keep China in check, and at the same time to shape its own status as a great power in the international community, which in fact does not require too much practical input to achieve the above purposes.

Russia, with the current international situation, even if Russia is wary of China, do not want China to become a powerful country, do not want China's influence in the Arctic affairs more and more, but the Sino-Russian Arctic cooperation is in line with the interests of both sides, Russia can at most utilize the Japan-Russia, South Korea-Russia, India-Russia cooperation to try to weaken the Arctic cooperation with Russia and China and balance, and in fact, can not get rid of the dependence on China, the Arctic cooperation between China and Russia will still run high in a very long time. China-Russia Arctic cooperation will remain high for a long time.

Geopolitically, Indo-Russian Arctic cooperation will make the China-Russia-India triangle more complex. As an important part of Indo-Russian relations, Indo-Russian Arctic cooperation can expand the width and breadth of Indo-Russian cooperation, close the ties between the two sides, and strengthen the strategic partnership between the two sides. With the deepening of cooperation between the two countries, Russia and India also have more weighty bargaining chips when dealing with China. Although it will not happen in a short time that India and Russia will join hands in the north and south to suppress China, it may become a serious problem in the future.

In short, the impact of India-Russia Arctic cooperation on China in the short term is very limited, but China should not take it lightly and relax its vigilance. For India-Russia Arctic cooperation, China should formulate targeted measures, keep abreast of the cooperation trends of both sides, try to participate in it when necessary, and explore the possibilities of tripartite Arctic cooperation in order to weaken the unfavorable impact on itself. At the same time, China should understand Indo-Russian Arctic cooperations, and adjust its foreign strategy in time to better safeguard its national interests.

5. Conclusion

The remote Arctic has become a common interest of India and Russia. India-Russia Arctic cooperation is still in its infancy, and is mainly focused on the energy sector, there is still much room for deepening and broadening in the future. Russia and India are big countries, and China's neighbors, whether it is history or geopolitical point of view, the two countries in the action more or less will be some "China factor" considerations, the results of the action will have a greater or lesser impact on China. Examining Indo-Russian Arctic cooperation will not only provide reference for China's participation in Arctic affairs, but also help us to look at China-Russia-India tripartite relations more soberly. Due to the limitations of our academic capacity, we have only made a preliminary discussion of the relevant issues in this paper, and more in-depth and detailed research is expected to be followed by the efforts of scholars.

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