

# INDO-RUSSIAN ECONOMIC COLLABORATION IN THE ARCTIC REGION

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**Abstract.** India is undergoing the most unprecedented transformation in human history of the free world. The scale and pace of this transformation are truly remarkable. Maintaining such a steep, ascending growth trajectory will require additional resources, make new alliances, and revitalised existing partnerships. Russia, a time-tested strategic partner with its resource-rich Arctic region, can play a pivotal role in India's continued growth. With vast reserves of hydrocarbons, rare earth metals, and strategic minerals becoming accessible due to the melting ice in the Arctic region, and with Russia being a key player in that region, the need for India to collaborate with Russia in the Arctic region is greater than ever before. Although India (as British India) is the original signatory of the Svalbard Treaty and has a research station, Himadri, in Svalbard, its focus on the region has increased only recently and has expended well beyond the traditional interest in scientific exploration. Indo-Russian collaboration in the Arctic is progressing in many fields. In addition to the ongoing collaborations scientific research, development of the Northern Sea Route, oil exploration, India's energy security needs, increased connectivity, training of Indian seafarers for Arctic navigation, and enhanced trade, there are multiple areas, such as green energy initiatives, hydrographic surveys, polar research vessel construction, focused research on the effects of changing Arctic conditions on the monsoon weather system, and many more, that have the potential for collaboration between India and Russia.

**Keywords:** Arctic, Indian Economy, China, Northern Sea Route, Polar Research Vessel, Energy Security, Non-Arctic States.

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## Introduction

It is the aim of every nation to bring prosperity, happiness, and well-being to its people. Nations strive to achieve this stated or understood aim through various means. These means may vary depending on the ideological leanings of each nation. Some nations may be more capitalist in their approach, while others may be socialist. Some may look for well-being through spiritual pathways, while others may consider a mix of all these approaches. However, the lowest common denominator in all approaches is the economic development of the country, and through that, the well-being of its citizens. In this regard, India is no different.

### *Indian Economy - Growth Trajectory*

During medieval period, when Western Europe combined owned 10-15% of global GDP, India held about 25% of global GDP<sup>1</sup> for over one thousand years, until the eighteenth century prior to colonisation of the country. Unfortunately, India came under the control of the East India Company in the 18<sup>th</sup> century and thereafter became a British colony. From then until we attained independence from the British in 1947, our share of world GDP fell to 2%, making India one of the poorest countries in the world<sup>2</sup>. Although our economy has grown over the years, it has done so at a slow pace. Even in 1991, the Indian economy was smaller than that of cities like London and Paris. However, today India's economy is larger than that of the UK and France. This has been possible mainly because, over the last decade or so, the Indian economy has grown at over 7% annually, becoming the fastest-growing major economy in the world. India has moved up from the 10<sup>th</sup> largest to the 5<sup>th</sup> largest economy in the world, valued at 4.15 trillion dollars<sup>3</sup>. This economic growth has led to India undergoing the most unprecedented transformation in the history of the free world. With a sharp focus on improving connectivity, India is spending a mammoth 1.5 trillion dollars<sup>4</sup> (more than the economy of most countries) on infrastructure development from 2019 to 2025 and has the largest number of mega projects under construction in the world. Apart from having a demographic advantage, India is among the five most industrialised countries, with an industrial production of almost 750 billion dollars<sup>5</sup> in 2023. We are the largest producers of hardware and software and have recently overtaken the US to become the second most attractive manufacturing destination<sup>6</sup>. In short, today India is the fastest-growing major economy, fastest-growing real estate market, fastest-growing start up ecosystem, and fastest-growing stock market in the world. Such a steep growth trajectory is difficult to maintain without access to additional resources, making new alliances, and revitalising existing ones. Russia, a time-tested strategic partner with its resource-rich Arctic region, can play a pivotal role in India's continued growth.

<sup>1</sup> History of Indian Economy. Consulate General of India. URL: [https://cgijeddah.gov.in/web\\_files/267622636-History-of-Indian-Economy.pdf](https://cgijeddah.gov.in/web_files/267622636-History-of-Indian-Economy.pdf) (accessed 13 August 2024).

<sup>2</sup> 1947: India in Numbers - What Was the Country's GDP, Population, Per-Capita Income? Etnownews.com. URL: <https://www.timesnownews.com/business-economy/economy/article/1947-india-in-numbers-what-was-the-country-s-gdp-population-per-capita-income/636908#:~:text=under%20British%20rule-,When%20India%20declared%20its%20independence%20in%201947%2C%20its%20GDP%20was,of%20the%20world%27s%20total%20GDP.> (accessed 13 August 2024).

<sup>3</sup> India: Gross Domestic Product (GDP) in Current Prices from 1987 to 2029. Statista. URL: <https://www.statista.com/statistics/263771/gross-domestic-product-gdp-in-india/> (accessed 13 August 2024).

<sup>4</sup> Estimated Investments within the National Infrastructure Pipeline (NIP) scheme in India from financial year 2020 to 2025, by sector. Statista. URL: <https://www.statista.com/statistics/1232624/india-estimated-value-of-nip-investments-by-sector/> (accessed 13 August 2024).

<sup>5</sup> India-Industrial Production, Constant US\$. Trading Economics. URL: [https://tradingeconomics.com/india/industrial-production-constant-us\\$-wb-data.html](https://tradingeconomics.com/india/industrial-production-constant-us$-wb-data.html) (accessed 13 August 2024).

<sup>6</sup> India Overtakes US to Become Second-Most Sought-After Manufacturing Destination. Business Today. URL: <https://www.businesstoday.in/latest/economy/story/india-overtakes-us-to-become-second-most-sought-after-manufacturing-destination-305048-2021-08-24> (accessed 13 August 2024).

### ***India and the Arctic***

India's first connection to the Arctic can be traced back to the 1903 book *The Arctic Home in the Vedas*, written by Bal Gangadhar Tilak, a prominent leader in India's Independence Movement. In this work, Tilak proposed that the ancestors of India's ancient Vedic civilisation once lived in the Arctic region [6]. Though his theory of Aryan migration was later contested, with a shift towards the idea that Indian civilisation originated in India and moved westward, Tilak's Arctic research provides a historical legacy that should be celebrated as part of our knowledge heritage.

The next step in our journey was the Svalbard Treaty, when India, as a dominion nation under the British, was one of its 14 original signatories in 1920<sup>7</sup>. This gave India rights to undertake scientific exploration and economic activities in the region. Unfortunately, no much happened until the first Indian scientific expedition in 1991. This first expedition is not very well known and was conducted in collaboration with the Soviet Army, focusing on the effect of extreme cold and long hours of darkness on Indian soldiers. The next scientific expedition came in 2007, which was followed by the setting up of Himadri<sup>8</sup>, India's scientific research station at Svalbard, in 2008.

In 2012, India was elected to the Council of the International Arctic Science Committee (IASC)<sup>9</sup>, and in May 2013, India was granted observer status in the Arctic Council<sup>10</sup>. India marked another milestone in its Arctic engagement in March 2018 with the arrival of its first shipment of LNG from the Russian Arctic via the Northern Sea Route. In 2019, India was re-elected as an observer to the Arctic Council. As an observer, India has made important contributions, including to the Arctic Migratory Birds Initiative (AMBI), which led to the Gandhinagar Declaration.

Today, India has even more to offer the Arctic Council. Its *Arctic Policy - Building a Partnership for Sustainable Development*, published in 2022<sup>11</sup>, outlines India's growing role in the region. Under its G20 Presidency, India has promoted the idea of setting aside differences among Arctic Council countries to collaborate on the sustainable development of the fragile Arctic ecosystem, as they did during the Cold War era.

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<sup>7</sup> India's Arctic Engagement: Shifting from Scientific to Strategic Interests. South Asian Voices. URL: <https://southasianvoices.org/indias-arctic-engagement-shifting-from-scientific-to-strategic-interests/> (accessed 08 August 2024).

<sup>8</sup> Himadri Station. NCPOR. URL: <https://ncpor.res.in/app/webroot/pages/view/340-himadri-station> (accessed 08 August 2024).

<sup>9</sup> India. Facts & Figures. The Arctic Institute. Center for Circumpolar Security Studies. URL: <https://www.thearcticinstitute.org/country-backgrounders/india/> (accessed 08 August 2024).

<sup>10</sup> India and Asian Observers: Need for Coordination in the Arctic Council. Manohar Parrikar Institute for Defence Studies and Analyses. URL: <https://demo.idsa.in/publisher/india-and-asian-observers-need-for-coordination-in-the-arctic-council/> (accessed 08 August 2024).

<sup>11</sup> India's Arctic Policy. Government of India. URL: [https://library.arcticportal.org/2015/1/Indias\\_Actic\\_Policy.pdf](https://library.arcticportal.org/2015/1/Indias_Actic_Policy.pdf) (accessed 08 August 2024).

## Research

### *Emerging geopolitical landscape of the Arctic region*

*Multipolar world order.* Following the end of the Cold War, the United States emerged as the world's sole superpower, a position it held for about a decade. However, Russian President Vladimir Putin's speech at the Munich Security Conference in March 2007 made it clear that, fifteen years after the collapse of the Soviet Union, Russia was once again seeking great-power status on the global stage<sup>12</sup>. Meanwhile, China's economic rise was gaining momentum. Although China began its economic reforms in 1979, their full impact became apparent to the world at the turn of the century. Between 1979 and 2018, China's economy doubled in size in real terms every eight years<sup>13</sup>. In the more recent past, India has shown great resilience to global challenges, including reduced economic growth in other major economies, and has emerged as yet another power centre as the undeclared leader of the Global South. As a result, the global geopolitical landscape has undergone a dramatic transformation, shifting from a unipolar world to a multipolar one. This shift has introduced new dynamics, particularly in the Arctic region and the Arctic Ocean.

The Arctic was a region of great power rivalry post-World War II through the Cold War. However, in October 1987, President Mikhail Gorbachev launched a series of policy changes that marked the beginning of the end of the Cold War era in the Arctic. The Norwegian slogan "High North, Low Tension" also gained traction in the 1990s. These developments transformed the Arctic from being a sensitive military theatre to a "zone of peace". President Gorbachev proposed the establishment of a nuclear weapons-free zone in Northern Europe, restrictions on naval activities in Arctic seas, and the development of transborder cooperation in resource development, scientific exploration, indigenous people's affairs, environmental protection, and marine transportation [1].

*Major Players in the Arctic.* The Arctic is often compared with the Antarctic. While the Antarctic is a proverbial "no man's land", most of the area in the Arctic region is claimed by some country or another [6]. The dynamics of the region are therefore very different. The region has eight countries that have a part of their landmass within the Arctic Circle, and six of these have a coastline in the Arctic Ocean. Although all of them are part of the Arctic Council, the major players in the region are enumerated in the succeeding paragraphs.

<sup>12</sup> Overview: Moscow Flexes Political Muscle. NPR. URL: <https://www.npr.org/2007/03/05/7697684/overview-moscow-flexes-political-muscle> (accessed 26 August) 2024.

<sup>13</sup> China's Economic Rise: History, Trends, Challenges, and Implications for the United States. EveryCRSReport.com. URL: [https://www.everycrsreport.com/reports/RL33534.html#\\_Toc12530866](https://www.everycrsreport.com/reports/RL33534.html#_Toc12530866) (accessed 26 August 2024).

**Russia.** While Russian (later Soviet) interest in the Arctic goes back many centuries, its focus on the region has increased manifold post discovery of natural gas and oil in 1953 and 1960, respectively<sup>14</sup>. However, Russia has given greater impetus and strategic thought to the Arctic under the able leadership of President Putin. Sustained and concerted efforts have ensured that Russia is far ahead of all other Arctic nations in almost all domains of development in the region. These include marine infrastructure along the Northern Sea Route, oil and natural gas exploration in the region, the number of icebreakers, scientific research, and collaboration with non-Arctic countries.

**USA.** It is surprising that, over the years, the United States has not paid sufficient attention to the polar regions. This concern was highlighted by Rear Admiral R.H. Cruzen of the U.S. Navy in a 1948 address at the U.S. Naval War College in Newport, Rhode Island, where he remarked, “Before the war, little or no consideration was given to the strategic potential of the Polar Regions, either north or south. As a result, our pre-war strategic thinking and military and naval training were largely focused on the tropic and temperate zones” [2]. More than seven decades later, the U.S. still lacks adequate strategic focus on the Arctic.

**China.** Although not an Arctic country, there are a number of reasons why China is showing keen interest in the region. The biggest beneficiary of the Northern Sea Route will be China. The time taken to traverse the sea route from Rotterdam to Dalian via Suez is 48 days, while it is only 35 days via the Northwest Passage [4]. Using the Northern Sea Route enables China to avoid major choke points like Gibraltar, the Suez Canal, Bab-el-Mandab, and Malacca. Investing in the Arctic will bolster China’s claim exploration and extraction of abundant natural resources in the region, as well as support its acceptance as a “near Arctic nation”. These reasons, coupled with the void created by the lack of interest shown by the U.S., have spurred China to focus on the Arctic over the last decade or so.

Although Russia and the U.S. have long competed in the Arctic, China’s involvement has introduced a new dynamic. China’s significant investments in resource exploration and extraction, the development of marine infrastructure along the Northern Sea Route (NSR)<sup>15</sup>, and its growing icebreaker fleet, along with joint military exercises with Russia in the Arctic Ocean, have raised major concerns, particularly for the U.S. In response, the U.S. administration is considering a “polar pivot” in its policy, strategy, and military capabilities to counter or deter potential malign actions by both China and Russia in the Arctic<sup>16</sup>. As a result, the region has become a focal point in the global power struggle between the U.S., Russia, and China<sup>17</sup>.

<sup>14</sup> The Formation and Evolution of the Soviet Union’s Oil and Gas Dependence. Carnegie Endowment for International Peace. URL: <https://carnegieendowment.org/posts/2017/03/the-formation-and-evolution-of-the-soviet-unions-oil-and-gas-dependence?lang=en>

<sup>15</sup> China and Russia Establish Feeder Line on the North Sea Route. Safty4Sea. URL: <https://safty4sea.com/china-and-russia-establish-feeder-line-on-the-northern-sea-route/> (accessed 29 August 2024).

<sup>16</sup> China and Russia Establish Feeder Line on the North Sea Route. Safty4Sea. URL: <https://safty4sea.com/china-and-russia-establish-feeder-line-on-the-northern-sea-route/> (accessed 29 August 2024).

<sup>17</sup> Deepening Competition in Arctic Region: US-China-Russia. ANKASAM. URL: <https://www.ankasam.org/anka-analyzer/deepening-competition-in-arctic-region-us-china-russia/?lang=en> (accessed 26 August 2024).

**Other Non-Arctic Countries.** In a landmark decision, the Arctic Council awarded Observer Status to six countries in 2013. It is noteworthy that five out of these six countries are in the Indo-Pacific region, geographically well displaced from the Arctic. These are China, India, Japan, South Korea, and Singapore, with Italy being the only non-Indo-Pacific nation. The move marked a turning point in the ongoing internationalisation of Arctic affairs, as more governments, including in Asia, formally recognised the emerging economic, scientific, and strategic value of the region. Each of the Asian countries have displayed keen interest in the Arctic through their intended involvement in governance, resource extraction, shipping, scientific research, and sustainable development in the Arctic [3]. All the Asian members of the Arctic Council have published white papers and policy documents on the Arctic.

#### *Ongoing Indo-Russian collaboration in the Arctic*

With 53% of the Arctic coastline<sup>18</sup>, 1.2 million sq km of Arctic EEZ, 41% of the Arctic oil, 70% of natural gas, large deposits of rare earth and strategic minerals, the largest chunk of Arctic landmass, and 50% of the Arctic human population<sup>19</sup>, Russia is undoubtedly the biggest player in the region. In addition, a significant portion of its own land (28% - 4.8 million sq km) and EEZ (15.8% - 1.2 million sq km) is in the Arctic region. This, combined with the farsightedness and strategic outlook of its leadership, has made Russia to give the required attention and focus to the region. As a result, numerous actions have been taken by the Russian government to develop the area. Initiatives include making the region more accessible by increasing connectivity, developing the area in terms of marine infrastructure, undertake sustainable resource extraction, constructing an adequate number of icebreakers, and encourage more people to settle in the region. It is well known that the other Arctic nations have not given the required attention to the region, which has given Russia greater importance in the Arctic.

Indo-Russian collaboration has been a long-standing, multifaceted, and mutually beneficial relationship, encompassing a wide range of areas such as political and strategic ties, military and security cooperation, trade and investment, energy, science and technology, nuclear power, space exploration, as well as cultural, educational, and humanitarian exchanges<sup>20</sup>. Since India was granted Observer Status in the Arctic Council in 2013, the Indo-Russian partnership has gradually and steadily expanded into this new area of cooperation. The Arctic holds the potential for a truly mutually beneficial partnership, offering a win-win opportunity for both countries, as will be discussed in more detail later in the paper.

<sup>18</sup> Arctic Council Report. The Russian Federation. Arctic Council. URL: <https://arctic-council.org/about/states/russian-federation/#:~:text=Russia%20stretches%20over%2053%20percent%20of%20the%20Arctic%20Ocean%20coastline.> (accessed 26 August 2024).

<sup>19</sup> Projected Population Trends in the Arctic. European Environment Agency. URL: [https://www.eea.europa.eu/en/analysis/maps-and-charts/projected-population-trends-in-the-arctic#tab-chart\\_1](https://www.eea.europa.eu/en/analysis/maps-and-charts/projected-population-trends-in-the-arctic#tab-chart_1) (accessed 14 August 2024).

<sup>20</sup> Joint Statement following the 22nd India-Russia Annual Summit India-Russia: Enduring and Expanding Partnership. President of Russia. URL: <http://en.kremlin.ru/supplement/6168/print> (accessed 14 August 2024).



Russia's Arctic strategy for 2020-2035, which was amended on 21 February 2023, emphasises on the "development of relations with foreign states on a bilateral basis... taking into account its national interests in the Arctic". This indicates Russia's pursuit of the "Easternization" of the Arctic and the opening of new ways for investments coming from Asian countries, including India. Considering this, the areas of collaboration that are being progressed include, but are not limited to, scientific research, India's energy security, policy formulations, infrastructure development, the Northern Sea Route, the Chennai-Vladivostok Corridor, the Russian Far East, oil exploration, and resource extraction. Let us discuss some of the salient aspects of these ongoing collaborative initiatives.

**Northern Sea Route.** Compared to other Arctic shipping routes, this route is expected to become ice-free first, making it the most commercially promising. This route also happens to be the shortest, reducing the distance between East Asia and Western Europe by 8.200 km (21.000 km via the Suez Canal and 12.800 km via the NSR) and transit time by 10-15 days.<sup>21</sup> It is not surprise, therefore, that Russia is actively developing the Northern Sea Route (NSR), with trade along the route projected to rise by more than four times to 150 million tonnes in the future, as mentioned by Russian President Vladimir Putin on 07 June 2024, at the plenary session of St. Petersburg International Economic Forum (SPIEF)<sup>22</sup>. Russia and India have agreed to cooperate in this domain and have included this in their Joint Statement on completion of the 22<sup>nd</sup> Indo-Russian Annual Summit, which stated that, "The Sides support cooperation in developing shipping between Russia and India via the Northern Sea Route"<sup>23</sup>.

**Scientific Research.** India has an annual budget of about 100 million rupees earmarked for Arctic research<sup>24</sup> and has a research station at Himadri in Svalbard. Research at this station is centred on studying Arctic ice systems and glaciers, as well as the impact of Arctic melting on the Himalayas and the Indian monsoon. Additionally, scientists from National Centre for Polar and Ocean Research (NCPOR) in Goa and the Arctic and Antarctic Research Institute (AARI) in St. Petersburg regularly collaborate on potential scientific partnerships between the two nations. Russian experts are also working with colleagues from Arctic Council observer members, including China, India, and Brazil, to establish the Snezhinka Arctic station - an autonomous, year-round

<sup>21</sup> Polar Shipping Routes. The Geography of Transport Systems. URL: <https://transportgeography.org/contents/chapter1/transportation-and-space/polar-shipping-routes/#:~:text=The%20Northern%20Sea%20Route%20%28NSR%29%20along%20the%20Arctic,12%2C800%20km%2C%20cutting%20transit%20time%20by%2010-15%20days.> (accessed 08 August 2024).

<sup>22</sup> Northern Sea Route Could be a Game-changer for Russia-India Ties. Sputnik India. URL: <https://sputniknews.in/20240607/northern-sea-route-could-be-a-game-changer-for-russia-india-ties-7564012.html> (accessed 06 August 2024).

<sup>23</sup> Joint Statement following the 22nd India-Russia Annual Summit. Ministry of External Affairs. URL: <https://www.mea.gov.in/bilateral-documents.htm?dtl/37940/Joint+Statement+following+the+22nd+IndiaRussia+Annual+Summit> (accessed 08 August 2024).

<sup>24</sup> Time to Redraw India's Arctic Investments. The Sunday Guardian. URL: <https://sundayguardianlive.com/investigation/time-to-redraw-indias-arctic-investments#:~:text=However%2C%20with%20an%20annual%20expenditure,Indian%20investments%20need%20a%20revisit.> (accessed 12 August 2024).

facility that will be powered by renewable energy sources and hydrogen energy in the Yamal-Nenets Autonomous Area (YNAA)<sup>25</sup>. Russian scientists are working with the support of a unique vessel - an ice-resistant platform, which has the most modern equipment and technology for scientific work in high latitudes<sup>26</sup> - and they have invited India to undertake joint research. India has shown great interest in this project.

**Training of Indian Seafarers.** During the meeting in September 2023 in Vladivostok, Shri Sarbananda Sonowal (Minister of Shipping) and A.O. Chekunkov (Minister of the Far East and Arctic) agreed to get Indian sailors trained in operations in Polar and Arctic waters at the Russian Maritime Training Institute in Vladivostok<sup>27</sup>. This initiative will help improve the availability of skilled manpower for operations through the NSR and provide meaningful employment to Indian youth.

**Connectivity.** The key to economic development and free flow of goods is connectivity. India and Russia have taken concrete steps to enhance connectivity between the two countries. This has opened multiple routes for a seamless and unhindered flow of trade between India and Russia in particular, and the Eurasian space in general. In the Joint Statement following the 22nd India-Russia Annual Summit, Prime Minister Modi and President Putin specifically shared a vision for collaboration on three projects - the International North-South Transport Corridor (INSTC), the Chennai-Vladivostok Corridor, and the Northern Sea Route (NSR), also known as the Polar Route<sup>28</sup>. The two sides also agreed to establish a joint working group as part of Indo-Russian Inter-Governmental Commission on Trade, Economic, Scientific, and Technological Cooperation (IRIGC-TEC) for cooperation in the NSR.

**Increased Trade.** India and Russia have seen a marked increase in bilateral trade<sup>29</sup>. This trade has involved commodities as well as services. India has traditionally imported timber and wood from countries such as Malaysia, Myanmar, Ghana, Ecuador, Costa Rica, Côte d'Ivoire, the Solomon Islands, and Papua New Guinea. However, securing raw materials has become challenging for the industry, especially as supplies of teak from Myanmar - a major supplier - have dwindled due to log export restrictions. This shortage could be offset by imports from Russia, which holds vast timber resources. Russian forests cover over 20% of the world's total forest area, far exceeding that of leading timber-exporting countries like the U.S., Canada, China, Sweden, and

<sup>25</sup> The Arctic project "Snezhinka" Is Being Implemented in Any Case. RIA Novosti. URL: <https://ria.ru/20220615/arktika-1795372600.html?in=t> (accessed 08 August 2024).

<sup>26</sup> India, Russia in Talks for Arctic Project Comparable to International Space Station: Scientist. Sputnik India. URL: <https://sputniknews.in/20240428/india-russia-in-talks-for-arctic-project-comparable-to-international-space-station-scientist-7238069.html> (accessed 12 August 2024).

<sup>27</sup> Russia to Train Indian Seafarers for Polar and Arctic Waters. The Economic Times. URL: <https://economictimes.indiatimes.com/industry/transportation/shipping/-transport/russia-to-train-indian-seafarers-for-polar-and-arctic-waters/articleshow/103676639.cms?from=mdr> (accessed 12 August 2024).

<sup>28</sup> Modi's Visit to Boost India-Russia Cooperation in Far East, Indian Ocean: Experts. Sputnik India. URL: <https://sputniknews.in/20240710/modis-visit-to-boost-india-russia-cooperation-in-far-east-indian-ocean-experts-7817713.html> (accessed 06 August 2024).

<sup>29</sup> India-Russia Trade. Drishti. URL: <https://www.drishtii.com/daily-updates/daily-news-analysis/india-russia-trade> (accessed 28 November 2024).



Finland<sup>30</sup>. In the diamond sector, Russia accounts for 32% of global production<sup>31</sup>, with nearly half of its diamonds mined in the Yakut Arctic. Specifically, the Anabar National ulus (region) in the Arctic zone of the Republic of Sakha (Yakutia) holds over 64% of Russia's explored and ready-for-industrial-development alluvial diamond deposits. In January 2020, India's Minister of oil, natural gas, and steel, Dharmendra Pradhan, confirmed that India would participate in the Vostok Oil project, with Russian Foreign Minister Sergey Lavrov highlighting that India would become "the first non-Arctic state to engage in mineral extraction in the Arctic" through this collaboration.

**Oil Exploration.** There is a lot of potential in this domain of collaboration, and some steps have already been taken towards this. India's involvement with oil exploration in the Arctic and the Russian Far East started in 2001, when ONGC Videsh Ltd (OVL) collaborated with Rosneft and acquired a 20% stake in the Sakhalin-I oil and gas project. Later, OVL also acquired 11% stake in Vankorneft, which is a subsidiary of Rosneft and produces hydrocarbons in Siberia (Vankor cluster). This will increase OVL's stake in Vankorneft to 26%, and once the deals are completed, the combined Indian holding in the production company will be 49.9%<sup>33</sup>. India's involvement in oil exploration in the Russian Arctic is summarised in the table below (Table 1).

**Table 1. India's participation in oil exploration in the Russian Arctic?, %**

Name of the Project in Russia	Participating Companies and Their Share
Sakhalin-I, Offshore	ONGC, Videsh - 20% Exxon Mobil - 30% (Operator) Sodeco - 30% Rosneft subsidiaries - 20%
Imperial Energy, Russia	ONGC Videsh - 100%
Vankorneft	Rosneft - 50.1% ONGC Videsh Vankorneft Pvt. Ltd. - 26% Vankor India Pvt Ltd. - 23.9% each
Tass-Yuryakh	Rosneft - 50.1% British Petroleum - 20.0% Tass India Pvt Ltd. - 29.9%
License 61	OIL - 50%, Petroneft - 50%

Source: Overseas Alliance and JVs. Oil India. URL: <https://www.oil-india.com/overseas-alliance> (accessed 07 August 2024).

<sup>30</sup> Using Timber to Bridge India and the Russian Far East. Invest India. URL: <https://www.investindia.gov.in/team-india-blogs/using-timber-bridge-india-and-russian-far-east> (accessed 12 August 2024).

<sup>31</sup> Diamond production in Russia and major projects. Mining Technology. URL: <https://www.mining-technology.com/data-insights/diamond-in-russia/> (accessed 12 August 2024).

<sup>32</sup> New Delhi Confirms Indian Stake in Rosneft's New Arctic Oil Project. The Barents Observer. URL: <https://www.thebarentsobserver.com/climate-crisis/new-delhi-confirms-indian-stake-in-rosnefts-new-arctic-oil-project/132246> (accessed 07 August 2024).

<sup>33</sup> New Delhi Confirms Indian Stake in Rosneft's New Arctic Oil Project. The Barents Observer. URL: <https://www.thebarentsobserver.com/climate-crisis/new-delhi-confirms-indian-stake-in-rosnefts-new-arctic-oil-project/132246> (accessed 07 August 2024).

**India's Energy Security.** The rapidly growing Indian economy will witness a growing demand for energy needed to fuel its expansion. Such needs will have to come from reliable and diverse sources, including those in the Russian Arctic.

**Crude Oil.** India is heavily dependent on imports for its energy requirements. Of its total consumption, India imports 85% of crude oil<sup>34</sup>, 45% of LNG<sup>35</sup>, and 21% of coal<sup>36</sup>. It is, therefore, important that India diversifies its sources and ensures that the sources chosen are located in geographical areas that are conflict-free and reliable. It is also important that we import at the lowest cost per barrel. Keeping all these factors in mind, India has increased its imports from Russia. In 2021-2022 (fiscal year), the Russian share of oil imports by India was a mere 2%, with Iraq as the top supplier, followed by Saudi Arabia and the UAE. However, in 2023, Russia became the biggest supplier of crude to India, accounting for more than 30% of imports. This has benefited both countries. Russia has been able to sell crude at a price that is higher than stipulated by the West and is trading in Indian Rupee and Rubles. On the other hand, India is not only getting cheaper oil, but it has also been able to increase its export of refined oil to Europe<sup>37</sup>, as depicted in the graph. Russia will continue to be the largest crude supplier to India in 2024, despite the crisis in West Asia and the Red Sea.

Consequently, supplies from other countries, like Saudi Arabia, have reduced to 31.3%, amounting to 1.55 billion dollars in January 2024. Among the top five suppliers, although the United Arab Emirates saw a 6.7% rise, all the others registered a decline, and U.S. supplies of crude oil to India slumped by 91% in January 2024<sup>38</sup>. The good part is that Russia is also investing in the Indian oil industry. The Vadinar refinery has received the highest FDI of nearly 13 billion dollars in the oil and gas sector in India from Rosneft. This was also Russia's highest FDI to date. No other country has made such a significant investment in this vital sector in India.

**Coal Imports from the Arctic.** As far as coal is concerned, although India imports about 60% of its coal from Indonesia, a good chunk (about 10%) also comes from Russia<sup>39</sup>. India's imports of coking coal from Russia were at 14% of total coking coal imports last year. In a historic event, coal from Kuzbass in Siberia was dispatched

<sup>34</sup> India's crude oil import bill falls, but import dependency hits new high. The Hindu. URL: <https://www.thehindu.com/business/Economy/indias-crude-oil-import-bill-falls-but-import-dependency-hits-new-high/article68075642.ece> (accessed 14 August 2024).

<sup>35</sup> India LNG Scenario. Petronetlng. URL: <https://petronetlng.in/india-lng-scenario> (accessed 14 August 2024).

<sup>36</sup> Decline in Share of Coal Import. Government of India. Press Information Bureau. URL: <https://pib.gov.in/Press-ReleasePage.aspx?PRID=2016108#:~:text=There%20has%20been%20a%20reduction,corresponding%20period%20of%20previous%20year.> (accessed 12 August 2024).

<sup>37</sup> India-Russia Oil Trade and Investments - an Evolving Facet of the Historical Bilateral. URL: <https://www.orfonline.org/expert-speak/india-russia-oil-trade-and-investments-an-evolving-facet-of-the-historic-bilateral> (accessed 28 November 2024).

<sup>38</sup> Russia Remains India's Top Crude Supplier, Imports Rise 14% in January. Mint. URL: <https://www.livemint.com/industry/energy/russia-remains-indias-top-crude-supplier-imports-rise-14-in-january-11710750138911.html> (accessed 07 August 2024).

<sup>39</sup> Distribution of Coal Imported into India in 2024, by Country of Origin. Statista. URL: <https://www.statista.com/statistics/1237506/coal-import-share-india-by-country/> (accessed 12 August 2024).

on 24 June 2024 by rail through the International North-South Transport Corridor<sup>40</sup> for India via Bandar Abbas in Iran.

**Import of LNG from the Arctic.** India is already importing LNG from the Russian Arctic and received the first shipment from Yamal in June 2021. The shipment travelled through the Northern Sea Route, the Pacific Ocean, and the Indian Ocean to reach the Dabhol terminal of Gas Authority of India Ltd.<sup>41</sup>

It is, therefore, evident that while exercising its strategic autonomy and placing its national interests above geopolitical compulsions, India is importing greater amounts of crude, LNG, and coal from Russia now than ever before. This is certainly in the larger interest of both India and Russia and presents a win-win situation for both countries.

### **Recommendations**

As has been mentioned earlier in the paper, India and Russia have been partnering in myriad fields for a long time. However, there are some additional areas that can be targeted. These new areas of collaboration are enumerated in the succeeding paragraphs as recommendations.

**Green Energy Initiative.** India and Russia can collaborate with observer nations Japan and South Korea to develop a strategic Asian Hydrogen Energy Technology Roadmap. This roadmap could emphasise the exchange of hydrogen fuel and energy technologies to support industries such as transportation, chemicals, fertilisers, electricity generation, and oil refining. Additionally, India's leadership in the International Solar Alliance positions it to help countries produce the cleanest "green" hydrogen using solar energy, reinforcing India's commitment to securing its energy and trade interests in the Arctic region while adhering to internationally accepted environmental safeguards.

**Hydrographic Survey.** India possesses significant expertise in conducting hydrographic surveys and preparing electronic charts. Although hydrography is typically a restricted field, India could potentially collaborate with Russia in developing electronic charts for the Northern Sea Route, where chart availability is currently limited.

**Polar Research Vessel.** India currently operates three research base stations in the polar regions, and continuous access to these stations is essential for conducting various research activities, especially those related to climate change. To support these stations, India is building its own Polar Research Vessel at an estimated cost of 310 million dollars<sup>42</sup>, which is likely to be commissioned by 2028. Since Russia owns the largest number of such vessels and has more experience in the Arctic than any other country in the world, India should collaborate with Russia on this project.

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<sup>40</sup> INSTC: In A Historic First, Russian Coal Reaches India Via Iran Using Int. North-South Transport Corridor. The Eurasian Times. URL: <https://www.eurasiantimes.com/in-a-historic-first-russian-coal-reaches/> (accessed 12 August 2024).

<sup>41</sup> India Receives First Direct Shipment of Russian LNG under Long-Term Contract. The Economic Times. URL: <https://economictimes.indiatimes.com/industry/energy/oil-gas/india-receives-first-direct-shipment-of-russian-lng-under-long-term-contract/articleshow/87287564.cms?from=mdr> (accessed 12 August 2024).

<sup>42</sup> India is Planning Its Own Polar Research Ship. Polar Journal. URL: <https://polarjournal.ch/en/2023/11/08/india-is-planning-its-own-polar-research-ship/> (accessed 13 August 2024).

**Skilled Manpower.** India has a demographic advantage over most countries in the world, including Russia. The Arctic is sparsely populated and does not have adequate skilled manpower required to develop the area at a fast pace. With Arctic-specific training, Indian youth could fill the void and, in the bargain, secure lucrative employment.

**Russian Presence in IOR.** To make Indo-Russian collaboration more mutually beneficial, India is keen and is already encouraging a Russian presence in the Indian Ocean Region (IOR) through multiple engagements, including the promotion of the Chennai-Vladivostok Corridor. Further engagement could involve the inclusion of Russia in Security and Growth for All in the Region (SAGAR), increased visits of Russian ships to Indian ports, and an enhanced number of naval exercises. As of now, Russia has participated in Exercise Indira since 2003, MILAN since 2022, and Indian Naval International Fleet Reviews. These naval interactions can be further increased by India and Russia conducting multilateral/trilateral exercises in the IOR/Indo-Pacific with other countries in the region, such as France, South Africa, Iran, Vietnam, Indonesia, Japan, etc. This will not only increase the Russian presence in the IOR but will also indicate India's commitment to its strategic relationship with Russia.

**Leadership Role in Observer Nations.** India is one of the 13 Observer Members of the Arctic Council<sup>43</sup>. India can take the lead in forming a consortium of Asian Arctic Observer nations to help develop the Northern Sea Route. This could be done through investment in creation of marine infrastructure, creating navigation aids along the route, creating a transshipment hub, etc.

**Ice Breaker LNG Carrier.** Geological surveys have indicated that about 30% of untapped natural gas and 90 billion barrels (13%) of crude oil reserves are in the Arctic<sup>44</sup>. These reserves translate into a supply of 10 % of oil and 25% of natural gas globally<sup>45</sup>. India has already started importing LNG from the Arctic. Since GAIL (India) Ltd. has a long-term (20-year) LNG contract with the Russian gas company Gazprom<sup>46</sup>, the supply of LNG from Russia will continue. It is, therefore, important to invest in an icebreaker LNG carrier, which will eliminate the need for both an icebreaker and an LNG carrier for movement through the NSR. Russian collaboration on this project would be extremely helpful.

**Long Term Investment in the Arctic.** To ensure India's energy security, there is a need to commit greater resources in the exploration and extraction of hydrocarbons in the Arctic. In addition to the ongoing projects mentioned earlier, there is a need for ONGC and/or GAIL to make long-term investments in projects such as the Arctic LNG 2 project.

<sup>43</sup> List of Arctic Council Observers. Arctic Council. URL: <https://arctic-council.org/about/observers/> (accessed 13 August 2024).

<sup>44</sup> Arctic Oil and Natural Gas Resources. U.S. Energy Information Administration. URL: <https://www.eia.gov/todayinenergy/detail.php?id=4650> (accessed 13 August 2024).

<sup>45</sup> Oil and Gas. WWF. URL: <https://www.arcticwwf.org/threats/oil-and-gas/> (accessed 13 August 2024).

<sup>46</sup> India Received First Direct Shipment of Russian LNG Under Long Term Contract. The Economic Times. URL: <https://economictimes.indiatimes.com/industry/energy/oil-gas/india-receives-first-direct-shipment-of-russian-lng-under-long-term-contract/articleshow/87287564.cms?from=mdr> (accessed 13 August 2024).

**Addressing Russian Repatriation of Funds Problem.** A recent Bloomberg news report revealed that Russia is amassing up to 1 billion dollars each month in Indian rupees, which its companies are struggling to repatriate<sup>47</sup> due to currency restrictions resulting from the sanctions imposed by the U.S. and the EU following Russia's attack on Ukraine in February 2022. A potential solution could involve India partnering with Russia to develop Arctic resources, fostering bilateral economic benefits and advancing scientific progress for humanity.

**Scientific and Academic Research.** India has been involved in polar research at Himadri station in Svalbard. However, collaborative scientific research with Russia is not being conducted at the desired level. Indian universities, like Amity University, can partner with the Northern Arctic Federal University at Arkhangelsk to carry out joint research in this field. Organising joint seminars, exchanging research scholars, and sending Indian scholars onboard the Northern Arctic Federal Floating University<sup>48</sup> ship would greatly enhance cooperation in scientific research.

**Research Projects in Climate Change and Global Warming.** India, being a peninsular nation with 1.382 islands, out of which about 122 are inhabited<sup>49</sup>, needs to be concerned about the melting of the Arctic ice cap due to global warming, including the ice in Greenland, and the concomitant rise in sea levels. The effect that this has on the monsoon weather system is equally important. This highlights the need for a joint research project between India and Russia in the domain of climate change and global warming.

#### *Viability of future Indo-Russian collaboration in the Arctic*

India, especially in the last 10 years, has been exercising its strategic autonomy in favour of national interests and has not been cowed down by geopolitical compulsions. One therefore sees, on one hand, India importing S-400 Air Defence System<sup>50</sup> and Russian oil, and on the other hand, maintaining close ties with the U.S., converting its relationship into Major Defence Partnership; NASA providing Deep Space Network antenna support<sup>51</sup> for its Chandrayaan-1 mission, and training Indian Air Force pilots for manned space flight, etc. On the one hand, India signed a 10-year contract with Iran for operating Chabahar Port<sup>52</sup>, and on the other hand, the Adani Group, an Indian

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<sup>47</sup> Russia Doesn't Know What to Do with the \$1 Billion in Rupees it is Amassing in India Each Month. Business Insider. URL: <https://www.businessinsider.com/dedollarization-russia-dollar-yuan-billions-india-struggle-use-ru-ble-2023-6> (accessed 13 August 2024).

<sup>48</sup> Arctic Floating University. Russian Geographical Society. URL: <https://www.rgo.ru/en/projects/expeditions/arctic-floating-university> (accessed 13 August 2024).

<sup>49</sup> Gujarat Island Development Authority - Government of Gujarat. The Gujarat Infrastructure Development Board (GIDB). URL: <https://www.gidb.org/island/about.html> (accessed 13 August 2024).

<sup>50</sup> Russia to Deliver Remaining 2 S-400 Air Defence Missiles to India by Q3 of 2026: Sources. Business Today. URL: <https://www.businesstoday.in/india/story/russia-to-deliver-remaining-2-s-400-air-defence-missiles-to-india-by-q3-of-2026-sources-422331-2024-03-21> (accessed 23 August 2024).

<sup>51</sup> India-US Bilateral Relations. Ministry of External Affairs, Government of India. URL: [https://www.mea.gov.in/Portal/ForeignRelation/Bilateral\\_Brief\\_as\\_on\\_09.10.2023.pdf](https://www.mea.gov.in/Portal/ForeignRelation/Bilateral_Brief_as_on_09.10.2023.pdf) (accessed 23 August 2024).

<sup>52</sup> India, Iran sign 10-year contract for Chabahar port operation. The Hindu. URL: <https://www.thehindu.com/news/national/india-iran-sign-long-term-bilateral-contract-on-chabahar-port-operation/article68171624.ece> (accessed 23 August 2024).

multinational conglomerate, obtained two-third ownership of Haifa port in Israel<sup>53</sup>. On one hand, India is collaborating with Iran in the International North-South Transport Corridor (INSTC), and on the other, it is importing Rafael fighter jets from France<sup>54</sup>. India is part of QUARD and SCO at the same time. In the first half of 2024, while China remained India's largest import supplier, the U.S. became the largest trading partner of the country<sup>55</sup>. Therefore, it is evident that India is exercising its strategic autonomy in almost every sphere. However, that may not be possible always and every time.

With Sweden and Finland joining NATO<sup>56</sup> in 2024 and 2023, respectively, seven out of the eight members of the Arctic Council are now members of a military alliance that is allegedly (and with good reason) against Russia. In any case, for various reasons, the Arctic Council is as good as defunct<sup>57</sup>. Against the backdrop of this geopolitical realism, India will have to navigate through turbulent seas if it wishes to collaborate with Russia, especially in the Arctic region. The various areas of collaboration with Russia in the Arctic region proposed earlier in the paper may therefore need greater deliberation, as some of the proposals will not find favour with the West. Collaborating in benign areas like climate change, scientific research, and academics will be easier. However, cooperation in areas such as investment in development of the NSR or continued import of Russian oil and LNG from the Arctic region are contentious propositions, which are likely to encounter headwinds requiring deft handling at the diplomatic level, especially considering the emerging geopolitical landscape of the Arctic region discussed earlier in the paper.

## Conclusion

In the recent past, India has become more active on different matters connected to the Arctic. This proactiveness goes well beyond its traditional focus on scientific research. On the occasion of the release of India's Arctic Policy on 17 March 2022, Shri Jitendra Singh, India's Minister of Earth Sciences, said, *"India's Arctic policy will play an essential role in preparing the country for a future where humankind's biggest challenges,*

<sup>53</sup> India Controlling Israel's 'Strategic' Haifa Port Is A Part Of New Evolving Regional Strategy To Keep China At Bay. The Eurasian Times. URL: <https://www.eurasiantimes.com/edited-india-controlling-israels-haifa-port-is-a-part-of-evolving/> (accessed 23 August 2024).

<sup>54</sup> France Has Delivered All 36 Rafale Jets to India: French Envoy. The Hindu. URL: <https://www.thehindu.com/news/national/france-has-delivered-all-36-rafale-jets-to-india-french-envoy/article65643887.ece> (accessed 23 August 2024).

<sup>55</sup> India's Trade: US Top Partner, China Highest Deficit (Jan-June 2024). Rediff Moneywiz. URL: <https://money.rediff.com/news/market/india-s-trade-us-top-partner-china-highest-deficit-jan-june-2024/14677020240823> (accessed 23 August 2024).

<sup>56</sup> What Does Finland and Sweden's Membership to NATO Mean for Race to Arm the Arctic? Euronews. URL: <https://www.euronews.com/my-europe/2024/05/31/what-does-finland-and-swedens-membership-to-nato-mean-for-race-to-arm-the-arctic> (accessed 03 September 2024).

<sup>57</sup> The Arctic Council is Dead. Long Live the Arctic Council. High North News. URL: <https://www.highnorthnews.com/en/arctic-council-dead-long-live-arctic-council#:~:text=As%20a%20meeting%20place%20between,that%20the%20council%20will%20survive.> (accessed 03 September 2024).



such as climate change, can be addressed through collective will and effort”<sup>58</sup>. The focus of this policy is to strengthen India’s cooperation with the countries in the Arctic and combat climate change. Here, “strengthening cooperation” is not exclusively scientific collaboration but also fostering partnerships in the economic and investment areas with trusted partners like Russia.

At this point, there is a mutually beneficial opportunity for Russia and India to collaborate in the Arctic. India requires Russia’s help to access the vast energy resources in the Arctic, as Russia controls nearly 80% of the oil and gas reserves under the Arctic shelf<sup>59</sup> - essential to meeting the energy demands of India’s growing economy. Conversely, Russia needs a strategic partnership with India in the Arctic to leverage India’s strong political and business ties with Western countries, helping to mitigate the impact of the sanctions imposed against Russia<sup>60</sup>. This Indo-Arctic construct with Russia can be utilised to counterbalance the Indo-Pacific construct with the U.S. - yet another example of India exercising its strategic autonomy.

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<sup>58</sup> Union Minister Dr. Jitendra Singh Releases India’s Arctic Policy in New Delhi Today. Ministry of External Affairs. URL: [https://www.mea.gov.in/press-releases.htm?dtl/34983/Union\\_Minister\\_Dr\\_Jitendra\\_Singh\\_releases\\_Indias\\_Arctic\\_Policy\\_in\\_New\\_Delhi\\_today](https://www.mea.gov.in/press-releases.htm?dtl/34983/Union_Minister_Dr_Jitendra_Singh_releases_Indias_Arctic_Policy_in_New_Delhi_today) (accessed 02 September 2024).

<sup>59</sup> Mazagon Dock soars after partnership with Russia’s Zvezda for commercial ships. Business Standard. URL: [https://www.business-standard.com/article/news-cm/mazagon-dock-soars-after-partnership-with-russia-s-zvezda-for-commercial-ships-121090300803\\_1.html](https://www.business-standard.com/article/news-cm/mazagon-dock-soars-after-partnership-with-russia-s-zvezda-for-commercial-ships-121090300803_1.html) (accessed 03 September 2024).

<sup>60</sup> Arctic: An Emerging Region of India-Russia collaboration. Centre for Land Warfare Studies. URL: <https://www.claws.in/arctic-an-emerging-region-of-india-russia-collaboration/> (accessed 27 December 2023).

# ИНДО-РОССИЙСКАЯ ЭКОНОМИЧЕСКАЯ КОЛЛАБОРАЦИЯ В АРКТИЧЕСКОМ РЕГИОНЕ

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**Аннотация.** Индия переживает самую беспрецедентную трансформацию в истории свободного мира. Масштабы и темпы этих преобразований поистине поразительны. Для того чтобы поддерживать такую стремительную и восходящую траекторию роста, стране понадобятся дополнительные ресурсы, создание новых альянсов и активизация существующих партнерств. Россия как проверенный временем стратегический партнер, обладающий богатыми ресурсами Арктического региона, может сыграть ключевую роль в дальнейшем экономическом развитии Индии. С учетом того, что таяние ледников в Арктике открывает доступ к огромным запасам углеводородов, редкоземельных металлов и стратегических минералов, а Россия является ключевым игроком в этом регионе, необходимость сотрудничества Индии с Россией в Арктическом регионе велика как никогда. Хотя Индия (еще в качестве Британской Индии) изначально подписала договор о Шпицбергене и имеет там исследовательскую станцию «Химадри», ее внимание к этому региону усилилось лишь недавно и вышло далеко за рамки традиционного интереса к научным исследованиям. Индо-российское сотрудничество в Арктике развивается во многих областях. В дополнение к текущему сотрудничеству в области научных исследований, развития Северного морского пути, разведки нефти, обеспечения энергетической безопасности Индии, расширения коммуникаций, подготовки индийских моряков для арктической навигации и расширения торговли существует множество областей, таких как инициативы в области зеленой энергетики, гидрографические исследования, строительство полярных исследовательских судов, целенаправленные исследования влияния меняющихся арктических условий на муссонную погодную систему и многие другие, которые имеют потенциал для сотрудничества между Индией и Россией.

**Ключевые слова:** Арктика, индийская экономика, Китай, Северный морской путь, полярное исследовательское судно, энергетическая безопасность, неарктические государства.

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