THINK ARCTIC

ОТВЕТСТВЕННОЕ УПРАВЛЕНИЕ ДЛЯ УСТОЙЧИВОЙ АРКТИКИ

2021–2023
АРКТИЧЕСКИЙ СОВЕТ
ПРЕДСЕДАТЕЛЬСТВО РОССИИ

THE GLOBAL IMPACT OF THE RUSSIAN ARCTIC: OPPORTUNITIES FOR SOUTH ASIA

ROSCONGRESS
Building Trust

HSE UNIVERSITY

1. India's Arctic Policy: Key Goals and Formats of Cooperation in the Region

1.1 Priorities and Goals of India's Arctic Policy

India has long been interested in the Arctic and its development. Despite the geographical distance from the region, the changes taking place in the Arctic have a direct impact on India's security. India covers most of the Himalayas, commonly referred to as the "Third Pole". The rapid melting of glaciers, flooding of plains and coastal cities due to climate change are forcing scientists and politicians in India to pay more and more attention to changes in the Arctic region as well.

In recent years, India has been actively conducting research and expeditions in the Arctic and participates in the work of international Arctic organizations. Since 2013 India is an observer of the Arctic Council, the leading intergovernmental forum to promote cooperation on environmental protection and sustainable development of circumpolar areas. In March 2022, India published the document[1] named India's Arctic Policy: Building a partnership for sustainable development[2]. This policy document was published by the Ministry of Earth Sciences of the Indian government and attracted considerable attention from around the world. The draft document was open for public discussion from December 2020 to January 2021, and after receiving suggestions from scientists and strategic analytical centers of the country was finalized and presented to the public. The published strategy presents the main directions of India's state policy in the Arctic or, as the document itself states, "India's Arctic mission": strengthening India's cooperation with the Arctic region; harmonizing polar research between the two poles and the third pole - the Himalayas; the role of humans in the Arctic; international cooperation on climate change and environmental protection; and promoting research by Indian scientists in the Arctic region.

The priority areas of India's Arctic strategy are[3]:

1. **Science and Research**
2. **Climate and Environmental Protection**
3. **Economic and Human Development**
4. **Transport and Connectivity**
5. **Governance and International Cooperation**
6. **National capacity building in the Arctic region**

---

1 Here and below, this document refers to India's Arctic Strategy.

2 Full text: India's Arctic Policy: Building a partnership for sustainable development. URL: https://www.moes.gov.in/sites/default/files/2022-05/India_Arctic_Policy_2022.pdf (accessed 20.07.2022).

3 Full text: India's Arctic Policy: Building a partnership for sustainable development. URL: https://www.moes.gov.in/sites/default/files/2022-05/India_Arctic_Policy_2022.pdf (accessed: 20.07.2022).

2. Research and Climate Change

India emphasizes in its Arctic strategy the direct impact of climate change on its economy and well-being (SDG 13 – climate action, SDG 14 – life below water, SDG 15 – life on land). Yields of spring crops such as rice, pulses, and soybeans, which make up almost 50% of India's food production, depend entirely on the monsoon and glacial water cycle that feeds the country's river system. Therefore, India, with a population of 1.3 billion people, "cannot afford to risk its food, water and economic security"[4] in a rapidly changing climate.

The paper emphasizes the need to study the effects of Arctic melting on Himalayan glaciers, as the link between Arctic glaciers and the Third Pole (Himalayas) is clearly stated in the IPCC Special Report on the Ocean and Cryosphere (IPCC Special Report on the Ocean and Cryosphere in the Changing Climate)[5]. To better understand the climate situation in the Arctic region, India plans to build capacity in interdisciplinary scientific research. The National Centre for Polar and Ocean Research[6] (NCPOR) of India is a key body operating under the Ministry of Earth Sciences that conducts research activities and various scientific expeditions both at the poles and in the Himalayas. India describes itself as a " tripolar state" with its presence both at the poles through its research facilities and in the Himalayas. This positioning gives India an advantage because the country can effectively contribute to scientific and environmental research, especially on climate change, by harmonizing research carried out in both the polar regions and the Himalayas.

India, as an active participant in Arctic research, is interested in collaborating with the various working groups of the Arctic Council to contribute to the conservation of Arctic flora and fauna, protection of the marine environment, environmental emergencies, search and rescue efforts and more. The Arctic Strategy aims to further strengthen India's scientific research through cooperation with Arctic states and other partners. To increase its capabilities, India plans to organize special institutional financial support for Arctic research at the national level.

Space research has an especially important place in the strategy. The Indian Space Research Organization (ISRO) is known for its cost-effective satellite launches, and India plans to share its experience in providing effective satellite communications and digital communications in remote areas of the Arctic. The Strategy also discusses the U.S.-India NISAR (NASA-ISRO Synthetic Aperture Radar) mission.[7]

Overall, the published Arctic strategy prepares the ground for a much stronger and more active role for India in Arctic research and economic development in the region. The document

4 Ibid.
5 IPCC, 2019. Special Report on the Ocean and Cryosphere in a Changing Climate. URL: https://www.ipcc.ch/srocc/ (accessed on 20.07.2022)
6 The National Centre for Polar and Ocean Research (NCPOR) is India's leading polar and Southern Ocean research institution. URL: https://ncpor.res.in/ (accessed on 29.07.2022)
7 The U.S.-India InSAR Special Mission, in partnership with ISRO, is designed to study global environmental change. URL: https://nisar.jpl.nasa.gov/ (accessed on 29.07.2022)

stresses that India's Arctic policy will be implemented in accordance with the United Nations Sustainable Development Goals (SDG 17 – partnerships for the goals), as the development of the Arctic depends critically on them.

3. Economic development and human capital

India's Arctic Strategy also aims at strengthening institutional and human resource capacity for polar research involving various stakeholders. The strategy is designed as a comprehensive policy matrix to help formulate "analysis, forecasting, and coordinated policies regarding the implications of Arctic ice melting for India's economic, military, and strategic interests related to sea lanes, energy security, and exploitation of natural resources"[8]. Certainly, a country with a population of more than 1 billion people must balance its energy needs with concern for the environment. India is the world's third largest energy consumer. But according to commitments the country made at the 26th United Nations Climate Change Conference 2021 in Glasgow in November 2021, it plans to reduce its dependence on coal (SDG 7 – affordable and clean energy). India plans to reduce its carbon dioxide emissions to zero by 2070.

The strategy notes that the Arctic region is rich in various mineral resources. At the same time, the document does not provide specific examples of future joint resource projects, but only indicates that potential joint exploration projects should be identified and mapped. India plans to develop a responsible strategy for forging alliances with Arctic states for sustainable resource extraction, given its global commitments, serious environmental impacts, and indigenous interests. India is also interested in working with the Arctic states to create low-cost digital solutions for education, food supply and health, and to work with indigenous communities in both the Arctic and the Himalayas, to facilitate their sharing of traditional knowledge.

India's plans also include seed storage projects in the Arctic. This is primarily for those types of seeds that are used for food and that are important for sustainable farming. This is particularly important for developing countries such as India, where food security is an important goal for the country (SDG 2 – zero hunger).

India emphasizes the importance of cooperation with the Arctic states while respecting the rights of the indigenous peoples of the Arctic (SDG 17 – partnerships for the goals). India's policy in the Arctic also seeks to partner with the Arctic states in producing clean energy and creating cleaner businesses (SDG 7 – affordable and clean energy). Currently, there is not much investment in the Arctic region by private companies in India, in this context, the strategy notes that it is necessary to increase private investment in the Arctic, including through public-private partnerships. However,

[8] Full text: India's Arctic Policy: Building a partnership for sustainable development.
URL: https://www.moes.gov.in/sites/default/files/2022-05/India_Arctic_Policy_2022.pdf (accessed 20.07.2022)

India encourages its companies to seek membership in the Arctic Economic Council and to participate in the Council's five working groups. The Arctic Economic Council[9], an independent forum that promotes business relations in the Arctic region, currently has no representatives from the India.

4. Transport and Communication

Increased use of the Northern Sea Route (NSR) provides opportunities for India to cooperate with the Arctic states in shipbuilding, shipping, hydrography, oceanography, collection of meteorological data, etc. India's Arctic strategy mentions Russia's forecast for shipments along the NSR by 2024, which should amount to at least 80 million tons of cargo. Moreover, the strategy emphasizes that India's human resource potential in maritime transportation can contribute to Arctic maritime research. India plans to actively participate in projects to adapt maritime transport to the new low-carbon requirements of the International Maritime Organization (IMO) (SDG 7 0 affordable and clean energy). India is ready to share its experience with the Arctic countries in projects for training ships and converting them to cleaner fuels.

India's commitment to developing maritime transport corridors in the Arctic is also motivated by its desire to complete an expanded version of the International North-South Transport Corridor (INSTC), which will be used to transport Arctic resources to India (SDG 9 – industry, innovation and infrastructure). The route runs from the Indian port of Nhava Sheva, south of Mumbai, to St. Petersburg via Iran. Sea, river and rail transport will be used for transportation. The North-South Corridor itself is important to India because it represents an alternative to China's Belt and Road Initiative and, therefore, allows India to more effectively pursue its policy aimed at competing with China's project. In a broader sense, the International North South Transport Corridor is geopolitically important because it serves as "India's great corridor not only to the largest Arctic nation, but also to the Northern and Baltic regions"[10]. The corridor will cut in half the time it takes to deliver goods from India to Russia. For example, the passage of goods from Mumbai to St. Petersburg along the traditional route through the Suez Canal now takes from 30 to 45 days, while the "North-South" corridor shortens the journey to 15–24 days. India understands that to achieve sustainable development, it is crucial to invest in infrastructure and transport routes that provide new development opportunities for the country (SDG 17 – partnerships for the goals).

5. Governance and International Cooperation

India participates in numerous forums and organizations dealing with Arctic issues. Since joining the Arctic Council as an observer in 2013, India has actively participated in the Arctic Senior Officials' Meetings and contributed to the six working groups of the Arctic Council.

[9] Participants of the Arctic Economic Council. URL: https://arcticeconomiccouncil.com/members/ (accessed 29.07.2022)

[10] Full text: India's Arctic Policy: Building a partnership for sustainable development. URL: https://www.moes.gov.in/sites/default/files/2022-05/India_Arctic_Policy_2022.pdf (accessed 20.07.2022)

Given today's conditions, the landscape of Arctic cooperation is likely to change as seven Arctic states (Canada, the Kingdom of Denmark, Finland, Iceland, Norway, Sweden and the United States) have suspended their participation in the Arctic Council, yet India states in its strategy that it will "continue international cooperation and partnerships with all stakeholders in the Arctic region" (SDG 17 – partnerships for the goals). India considers partnerships for sustainable development and the promotion of multilateral governance of the region to be a particularly important priority in the Arctic.

India stresses that it will continue to cooperate with all Arctic states and actively participate in the projects of the International Maritime Organization and the International Hydrographic Organization (IHO).

6. National capacity building in the Arctic region

One of the key factors determining India's interest in the Arctic is climate change and this is why the strategy puts emphasis on scientific cooperation. India's plans include increasing its national presence in expeditions and international Arctic projects, as well as increasing the capacity of educational programs in universities, primarily in geology, biology, earth sciences and space research (SDG 4 – quality education). Among India's goals is also mentioned the expansion of expertise in the blue economy, tourism in the Arctic.

To date, India has conducted 13 Arctic expeditions and 41 Antarctic expeditions. In October 2014, the Cabinet Committee on Economic Affairs approved the purchase of an icebreaker, but due to rising costs, the project was not released[11]. Nevertheless, India plans to acquire ice-class polar research vessels and strengthen India's domestic capacity to build such vessels through the Atmanirbhar Bharat ("Independent India") and "Make in India" initiatives[12]. This will put India on a par with other Asian observer states such as China and Japan.

1.2 Conformity of India's Arctic Policy with the UN Sustainable Development Goals

Overall, the published Arctic strategy sets the stage for a much stronger and more active role for India in Arctic research and economic development in the region. The document emphasizes that India's Arctic policy will be implemented in accordance with the United Nations Sustainable Development Goals (see Table 1), as the development of the Arctic depends critically on them.

11 https://www.thearcticinstitute.org/india-russia-cooperation-arctic-rising-prospect-polarization-arctic-governance/ (accessed 20.07.2022)

12 Full text: India's Arctic Policy: Building Partnerships for Sustainable Development.
URL: https://www.moes.gov.in/sites/default/files/2022-05/India_Arctic_Policy_2022.pdf (accessed 20.07.2022)

Table 1. Conformity of India's Arctic Policy with the UN Sustainable Development Goals

India's Policy Directions in the Arctic Region	UN Sustainable Development Goals
1.Strengthening India's research in the Arctic. - Conducting interdisciplinary research, including international; - Monitoring and assessment of climate change in the Arctic; - Carrying out arctic expeditions.	SDG 13 - climate action Addressing climate change SDG 14 - life below water SDG 15 - life on land SDG 17 - partnerships for the goals
2. Climate and environmental protection - Strengthening of control of marine ecosystems and land ecosystems pollution; - Protecting Arctic flora and fauna; - Conserving biodiversity of the Arctic region; - Meeting international commitments for emission reductions; - Raising global awareness of the impact of climate change on the Arctic region.	SDG 13 - climate action SDG 14 - life below water SDG 15 - life on land SDG 17 - partnerships for the goals
3. economic development and human capital - Expansion of expertise in blue economy issues in the Arctic; - Sustainable development of the region's resources with other Arctic states; - Development of renewable energy sources in the Arctic; - Analyzing, predicting, and creating coordinated policies regarding the effects of Arctic ice melting on the Himalayas. - Development of seed storage projects in the Arctic.	SDG 2 - zero hunger SDG 7 - affordable and clean energy SDG 13 - climate action SDG 14 - life below water SDG 15 - life on land SDG 17 - partnerships for the goals
4. Development of transport routes in the Arctic - Development of Arctic shipping lanes and route infrastructure, in particular the North-South international transport corridor; - Participation in projects to adapt maritime transportation to the new low-carbon requirements of the International Maritime Organization.	SDG 7 - affordable and clean energy SDG 9 - industry, innovation and infrastructure SDG 17 - partnerships for the goals

5. Active participation in Arctic governance and international cooperation - Respect for international law; - Partnership for sustainable development and promotion of multilateral governance of the region; - Coordination of Arctic policies and strategies by all states interested in the region; - India's active participation in projects of international Arctic organizations and increasing the number of Indian participants in these projects; - Including the traditional knowledge of the indigenous peoples of the Arctic in The inclusion of traditional knowledge of indigenous peoples of the Arctic in their cooperation in the Arctic; - Intensification of cooperation within the framework of international platforms.	SDG 13 - climate action SDG 17 - partnerships for the goals
6. National capacity building in the Arctic region - Developing scientific cooperation in the Arctic region for educational purposes; - Strengthening the role of Indian research institutes and universities in Arctic science and research on climate change.	SDG 4 - quality education SDG 13 - climate action SDG 17 - partnerships for the goals

2. India's International Cooperation in the Arctic

2.1 India's Cooperation with Arctic Countries

India's Multilateral Formats of Cooperation with the Arctic Countries

The main platform for India's international cooperation in the Arctic region, as well as for other states, is the **Arctic Council**. India gained observer status in the organization in 2013. Thanks to this status, India can gain access to unique information about the region's management, as well as participate in the Arctic Council meetings, comment on issues addressed there, and participate in the projects and initiatives of the Council's working groups. Today India has a number of agreements as well as a range of joint projects with the Arctic states. In the Arctic India is a member of several expert groups along with the Ny-Ålesund Science Managers Committee, the University of Arctic (UArctic), and the Asian Forum for Polar Science.

- **Conservation of Arctic Flora and Fauna, CAFF**

India actively participates in the projects of **the Arctic Council's working group on Conservation of Arctic Flora and Fauna** (CAFF)[13]. The CAFF working group's activity is aimed at preserving the biodiversity of the Arctic. For example, India is a participant in two projects under the CAFF working group: the Arctic Migratory Birds Initiative (AMBI)[14] and the Actions for Arctic Biodiversity project[15]. The aim of the Arctic Migratory Birds Initiative is to study the regularity of Arctic bird migration and to improve their habitat (SDG 15 – life on land). CAFF's second project for Arctic biodiversity (Actions for Arctic biodiversity) is aimed at assessing and developing recommendations for climate and environmental risks, including oil spills, and identifying drivers of animal migration (SDG 13 – climate action; SDG 14 – life below water; SDG 15 – life on land). One of the objectives of the project is also to raise public awareness of the problem of environmental degradation and changes in Arctic ecosystems.

- **Expert Group in support of implementation of the Framework for Action on Black Carbon and Methane**

India, together with Russia, Iceland, France, Germany, Italy, Japan, Poland, Spain, Switzerland, and the United Kingdom, has participated in **the Expert Group in support of implementation of the Framework for Action on Black Carbon and Methane** (EGBCM)[16] since 2015. In 2017, the group published its first joint report with recommendations to work directly with major emitters, as well as broader policy recommendations on approaches to transforming some of the key industries needed to transition to a low-carbon economy, as well as the more substantial reductions required in the long term, consistent with the Paris Agreement goals[17]. All eight Arctic states and five observer states (France, India, Italy, Spain and the United Kingdom) have prepared and submitted black carbon and methane emission inventories and methane projections (SDG 17 – partnerships for the goals).

The report says that Arctic countries should lead by example at the national level by continuing to reduce their emissions. However, it is important to note that black carbon and methane emissions from non-Arctic states contribute significantly to warming in the Arctic. Therefore, the Expert Group suggests that the observer states in the Arctic Council consider adopting these recommendations or similar measures, given the urgency of the long-term goal of holding the temperature rise set by the Paris Agreement.

---

13 Arctic Council Working Group on the Conservation of Arctic Flora and Fauna. URL: https://www.caff.is/ (accessed 30.07.2022).

14 Arctic Migratory Birds Initiative. URL: https://www.arctic-council.org/ru/projects/arctic-migratory-birds-initiative-ambi/ (accessed on July 29, 2022)

15 URL: https://www.arctic-council.org/projects/actions-for-arctic-biodiversity/ (accessed 30.07.2022)

16 Expert Group on Black Carbon and Methane (EGBCM). URL: https://www.arctic-council.org/ru/projects/expert-group-in-support-of-implementation-of-the-framework-for-action-on-black-carbon-and-methane-egbcm/ (accessed 30.07.2022).

17 Full version of the report of the Expert Group on Black Carbon and Methane. URL: https://oaarchive.arctic-council.org/bitstream/handle/11374/1936/EGBCM_Executive_Summary_RU.pdf?sequence=10&isAllowed=y (accessed 30.07.2022)

- **Ny-Ålesund Science Managers Committee**

India's first permanent Arctic research station, the Indian Arctic Base Himadri, was opened on July 1, 2008 on Spitsbergen, Norway. It is located at the International Arctic Research Base Ny-Ålesund. The station was established during India's second Arctic expedition in June 2008 (SDG 17 – partnerships for the goals) **The Himadri station** conducts research in disciplines such as glaciology, atmospheric sciences, biological sciences, etc. The National Centre for Polar and Ocean Research of India is the lead agency to ensure that the necessary facilities are available at Himadri.

- **University of Arctic (UArctic)**

In September 2019, in Stockholm, Sweden, the Council of UArctic accepted the Indian National Center for Polar and Ocean Research (NCPOR) as a permanent member. NCPOR is the first and only Indian member of UArctic. UArctic is a network of universities, colleges, research institutes, and other organizations that collaborate in the fields of Arctic and northern research, and hosts various scientific conferences and meetings each year. An important event is the Congress of the Arctic University, which usually takes place at universities and colleges in the country of the Chair of the Arctic Council.

As India plans to increase the capacity of educational programs at universities in Arctic geology, biology and space research (SDG 4 – quality education), membership in the UArctic will allow the country to participate in exchange programs, invite scientists and teachers from Arctic countries and much more (SDG 13 – climate action; SDG 17 – partnerships for the goals).

- **Asian Forum for Polar Science**

India is a member of the Asian Forum for Polar Science, a non-governmental organization that was set up to promote cooperation for polar science among countries in the Asian region (SDG 17 – partnerships for the goals).

It is also important for India to participate in various scientific conferences and forums dedicated to the Arctic region and its development. Indian representatives are active in such forums as the Arctic: Territory of Dialogue, Arctic Circle, Arctic Frontiers, Arctic Science Summit Week, and others.

India's bilateral cooperation formats with Arctic countries

India seeks to establish a dialogue with Arctic countries through joint projects in gas, oil, infrastructure, telecommunications, and renewable energy.

India and Norway

India's first Arctic research station is located at the International Research Base at NyyÅlesund in Norway. It is located 1,200 kilometers from the North Pole. The Himadri station was inaugu-

rated on July 1, 2008, Himadri provides extensive field and practical support necessary for research in the Arctic.

India is also a member of the International Svalbard Integrated Arctic Earth Observing System (SIOS) (SDG 14 – life below water; SDG 15 – life on land) in the Norwegian Spitsbergen Archipelago.

India and the United States

India pays important attention to space research. The Indian Space Research Organization (ISRO) is developing a joint project with NASA (National Aeronautics and Space Administration) called NISAR[18] (NASA-ISRO Synthetic Aperture Radar). The NASA-ISRO SAR mission is the development and launch of a dual-frequency synthetic aperture radar on the Earth observation satellite. The satellite will be used for remote sensing to observe and understand natural processes on the Earth. It will study the Earth's changing ecosystems, ice masses, sea level rise due to climate change, and more (SDG 13 – climate action; SDG 17 – partnerships for the goals).

India and Denmark

In 2020, India and Denmark entered into the Green Strategic Partnership[19] for cooperation on green technology, renewable energy, pollution control and waste management (SDG 13 – climate action, SDG 17 – partnerships for the goals).

India and Denmark have ambitious goals for the climate agenda. India is the world's third largest emitter of CO_2 emissions, and it is projected that the country could double its CO_2 emissions by 2030. The Danish government has set a goal of reducing CO_2 emissions by 70% by 2030 and advancing UN SDG 7 on affordable and clean energy. On September 28, 2020, Danish Prime Minister H.E. Mette Frederiksen and Indian Prime Minister H.E. Narendra Modi addressed a bilateral summit where the prime ministers agreed to take India-Danish relations to the next level on climate issues. At the summit, the Green Strategic Partnership was signed.

The Green Strategic Partnership builds on the existing agreement to establish a Joint Commission for Cooperation between India and Denmark. A joint action plan was also established through the mechanism of the Joint Commission and its working groups, which will work to expand green economic relations, create jobs and strengthen cooperation on global environmental issues, as well as to implement the Paris Agreement and the UN Sustainable Development Goals.

---

18 The U.S.–India InSAR Special Mission in partnership with ISRO is established to study global environmental change. URL: https://nisar.jpl.nasa.gov/ (accessed: 30.07.2022).

19 The Green Strategic partnership builds on and consolidates the existing agreement establishing a Joint Commission for Cooperation between India and Denmark. https://indien.um.dk/en/denmark-in-india/green-strategic-partnership (accessed: 30.07.2022).

2.2 Bilateral cooperation between India and Russia in the Arctic

Russia and India have a long-standing diplomatic relationship in various fields: in space, in the nuclear industry, and in the defense, oil and gas, and steel industries. India's current increased attention to the Arctic opens up even more opportunities for cooperation between the two countries.

In December 2021, several important documents, agreements and memorandums were signed at a meeting between Russian President Vladimir Putin and Indian Prime Minister N. Modi[20]. The main ones are:

- Agreement between the Government of the Russian Federation and the Government of the Republic of India on technology protection measures in connection with cooperation in the exploration and use of outer space for peaceful purposes and in the creation and operation of launch vehicles and ground-based space infrastructure.
- Memorandum of cooperation in the field of intellectual property between the Federal Service for Intellectual Property (Russian Federation) and the Department of Industrial Policy, Ministry of Commerce and Industry, Government of the Republic of India.
- Agreement on cooperation between the Central Bank of the Russian Federation (Bank of Russia) and the Reserve Bank of India in the field of countermeasures against computer attacks.
- Protocol between the Department of State Support for Art and Folk Art of the Ministry of Culture of the Russian Federation and the Indian Council for Cultural Relations under the Ministry of External Affairs of the Republic of India on the organization of Cultural Festivals between the Russian Federation and the Republic of India in 2022-2023.
- Protocol between the Government of the Russian Federation and the Government of the Republic of India on the granting of land plots for consular offices of the Republic of India in the Russian Federation and on the conditions of placement of the Consulate General of the Republic of India in Vladivostok.
- Memorandum of Understanding between JSC "Rosgeologiya" ("Rosgeo") and the Geological Survey of India, Ministry of Mines, Government of the Republic of India, on cooperation in the field of geological research.
- Agreement between the Government of the Russian Federation and the Government of the Republic of India on the Program of Military and Technical Cooperation from 2021 to 2031.
- Contract for the supply of Russian oil for the period from 01.01.2022 to 31.12.2022 between Rosneft and Indian Oil Corporation Limited.

[20] Russian-Indian documents signed for the meeting of the President of the Russian Federation V.V. Putin with the Prime Minister of the Republic of India N. Modi. URL: http://kremlin.ru/supplement/5746 (accessed: 30.07.2022)

- Agreement for the development of cooperation in education and training between Rosneft and ONGC Videsh Limited.

In 2021, India invited Russian companies to participate in 13 key sectors of the Indian government's initiative to stimulate manufacturing under the "Self-Sufficient India" and "Do in India" programs. India has also invited Russia to continue thinking about joint construction of manufacturing facilities in industrial cities under the Indian Government's Industrial Corridor Program (SDG 9 – industry, innovation and infrastructure; SDG 17 – partnerships for the goals). This program aims to integrate India into global value chains, build a manufacturing base and attract foreign investment. Examples of industrial corridors: Delhi-Mumbai, Chennai-Bangalore, Bangalore-Mumbai, etc[21].

Today, Russia and India also recognize the need to speed up customs procedures and streamline border-crossing clearance processes. Earlier, Russia and India signed a protocol on the creation of a "Green Corridor" to address these issues. The project was aimed at information interaction between exporters, importers and customs services of the two countries in order to simplify cargo transportation. At present, Russia and India have abandoned the Green Corridor project in favor of the Agreement on Mutual Recognition of Authorized Economic Operators and the Memorandum of Understanding on Exchange and Pre-Sending of Customs Data[22].

We should also note the cooperation between India and Russia in the financial sector. At present, the parties are increasing the volume of settlements in national currencies. The use of Mir and RuPay cards in the national payment infrastructures and in organizing interaction between the Unified Payment Interface system and the Bank of Russia's Rapid Payments System are being discussed. The Russian side has also invited credit institutions in India to connect to the Bank of Russia's Financial Message Transmission System to ensure smooth interbank transactions[23]. Bilateral cooperation in the interbank and insurance sectors is gradually strengthening. Commercial Indo Bank LLC, the only Indian bank operating in the Russian Federation, has significantly improved its rating over the last year. The Indian side expressed the hope that this would allow the bank to enter the retail segment after obtaining the necessary permits. Thus, GIC Reinsurance LLC, a wholly owned subsidiary of General Insurance Corporation of India, commenced operations in September 2020 and now offers reinsurance services to all major players in the general insurance market in the Russian Federation[24].

---

21 Kuydina. E. Russian-Indian negotiations at the highest level: the results for economic cooperation between the two countries. RIAC analytics. URL: https://russiancouncil.ru/analytics-and-comments/columns/sandbox/rossiysko-indiyskie-peregovory-na-vysshem-urovne-itogi-dlya-ekonomicheskogo-sotrudnichestva-dvukh-st/ (accessed: 02.08.2022)

22 Russia and India agreed to simplify customs procedures. URL: https://tass.ru/ekonomika/13125015?utm_source=google.com&utm_medium=organic&utm_campaign=google.com&utm_referrer=google.com (accessed: 02.08.2022)

23 Russia and India will increase the volume of settlements in national currencies. URL: https://rg.ru/2022/01/26/rossiia-i-indiia-uvelichat-obemy-raschetov-v-nacionalnyh-valiutah.html (accessed: 02.08.2022)

24 Joint Statement on the Results of the 21st Russia-India Summit "Russia-India: Partnership for Peace, Progress and Prosperity". URL: http://kremlin.ru/supplement/5745 (accessed: 31.07.2022)

In addition, Indian state-owned companies and Russian fertilizer producers have signed an agreement of intent to supply fertilizers to India. For instance, in 2021 a letter of intent was signed between Indian state-owned companies and Russia's PhosAgro to supply fertilizers to India in 2021-2022.

Similarly, trade in pharmaceutical products remains one of the main components of India's exports to Russia. Today, Russia and India see a constant demand for this group of products, as well as the participation of Indian companies in Russia's localization program under the Pharma 2020 and Pharma 2030 schemes (SDG 3 – good health and well-being).

Exploration and production of oil and gas resources, energy cooperation

For a long time, India has been expanding energy cooperation with Russia. Today, the Indian company Oil and National Gas Corporation operates in the Russian Sakhalin-1 project, where its share is 20%. In 2014, the Russian state oil company Rosneft signed a memorandum of understanding with India's OVL (a subsidiary of state oil and gas corporation ONGC) on cooperation on the Arctic shelf[25]. Later in 2017, oil company Gazprom Neft also signed a memorandum on cooperation with Indian oil and gas companies. Under these agreements, Russia and India want to exchange best technical, production and commercial practices regarding the development of fields in the Arctic and Sakhalin Island (SDG 17 – partnerships for the goals).

Experts estimate that the total volume of Indian investments in Russia's oil and gas sector at the beginning of 2021 was $15 billion, but this year that amount could rise significantly[26]. Negotiations have also resumed with the Russian side on the participation of Indian companies in the Vostok Oil megaproject in the Arctic. This project involves the development of oil and gas fields located in the north of Krasnoyarsk Krai: Vankor group of fields, Zapadno-Irkinskiy area, Payakhskoye field, Vostochno-Taimyrsky area. According to Rosneft estimates, the total recoverable reserves of all Vostok Oil fields reach 6 billion tons (more than 44 billion barrels) of oil.

Coal

In addition to oil and gas, India is interested in supplying high-grade coal – coking coal and anthracite – from Russia's northern regions. India is the second largest steel producer in the world, second only to China. Due to rising steel production, India's demand for coking coal is growing faster than the demand for oil and gas resources. It is planned to export coal from the Arctic of Russia through the ports of Primorsky Krai. Then the coal is planned to be transported to Chennai, the larg-

[25] Today the issue of OVL participation in the development of hydrocarbons in the Arctic is being actively studied. This May Rosneft signed with this company the Memorandum of Understanding on cooperation on the Arctic shelf of Russia in the course of St. Petersburg International Economic Forum. URL: https://ria.ru/20141209/1037415731.html (accessed: 01.08.2022)

[26] Another contender for Arctic resources appeared in the world. URL: https://1prime.ru/energy/20210211/833022883.html (accessed: 31.07.2022)

est port on India's east coast. New Delhi is considering the possibility of organizing shuttle voyages of large-capacity vessels along the route from Chennai to Russian Far Eastern ports.

Transport routes in the Arctic

India is interested in exploiting the commercial advantages of the shorter Northern Sea Route and supplying its economy with Arctic oil and gas as it seeks to diversify its supply routes. India's active involvement in the Arctic is motivated by its desire to secure a Russian commitment to transport Arctic resources to India through an expanded version of the International North-South Transport Corridor (INSTC) (SDG 9 – industry, innovation and infrastructure; SDG 17 – partnerships for the goals).

Cooperation in education and science

Several important documents in education and science were signed in December 2021 at the XXI Russia-India Summit "Russia – India: Partnership for Peace, Progress and Prosperity" with the participation of leaders of both countries:

- A Roadmap for Cooperation in Science, Technology and Innovation between the Ministry of Science and Higher Education of the Russian Federation and the Ministry of Science and Technology of the Government of the Republic of India;
- Cultural Exchange Program between the Ministry of Culture of the Russian Federation and the Ministry of Culture of the Government of the Republic of India for 2021-2024;
- Cooperation Agreement between the Federal State Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University) and the University of Delhi, India;
- Agreement of Intent between the Skolkovo Institute of Science and Technology, an autonomous nonprofit educational institution of higher education, and the University of Delhi[27] (SDG 17 – partnerships for the goals).

Russia and India have a multifaceted relationship in science and education, which covers various areas of cooperation, including new technologies, medicine, international relations, culture and humanities (SDG 4 – quality education).

[27] Russian-Indian documents signed for the meeting between Russian President Vladimir Putin and Indian Prime Minister N. Modi. URL: http://kremlin.ru/supplement/5746

3. Prospects for Russian-Indian relations in the Arctic

Despite the current political situation in the world, India clearly states that it will continue international cooperation and partnership with all stakeholders in the Arctic region, highlighting the cooperation with Russia (SDG 17 – partnerships for the goals).

It is also worth mentioning a number of events that are taking place today as part of Russia's chairmanship of the Arctic Council, in which representatives from India also take an active part. For example, on July 20, 2022 there was a round table on "The Arctic Council: scenarios for the future of the international platform" as part of the Gorchakov Public Diplomacy Foundation project. Gorchakov Public Diplomacy Foundation project "Arctic Sessions", where scientists and experts from Russia, Finland, China and India were invited. The expert from India, K.M. Sithi, scientific head of the International Center for Polar Research at Mahatma Gandhi University, took part in the discussion. In his remarks, he emphasized: "What is happening in the Arctic does not stay there but goes far beyond the region and can approach our borders at any moment. That is why India is now seeking to intensify its efforts in the Arctic[28]. As the scientist pointed out, India views itself as the "third pole" of the globe, so participation in Arctic affairs is an important geopolitical issue for the country. Also at the St. Petersburg Economic Forum there was a discussion on "International Cooperation as a Guarantee of Sustainable Development in the Arctic," which was attended by representatives from India: former Ambassador Extraordinary and Plenipotentiary of India to Russia Venkatesh Varma Datla Bala and Vice-Admiral and retired Indian Navy officer Satish Soni.[29]

Cooperation at the level of regions of Russia and India

At their meeting in December 2021, Russian President Vladimir Putin and Indian Prime Minister N. Modi noted the significant intensification of inter-regional dialogue on economic cooperation between the subjects of the Russian Federation and the states of the Republic of India. Thus, the summit noted the online meeting of the Governor of the Republic of Sakha (Yakutia) and the Chief Minister of Gujarat in September 2021. The leaders approved of the recent contacts between Russian regions and Indian companies at the level of business, state companies, private businesses and government agencies. They welcomed the signing of nine twinning agreements between Indian cities/states and Russian regions[30] (including the Arctic regions) for cooperation in various fields (SDG 17 – partnerships for the goals).

The Russian President also welcomed Prime Minister N. Modi's commitment to "act in the Far East" policy, under which India can become a reliable partner in the development of the Russian Far

[28] Arctic Sessions: pluses of cooperation in Arctic are more important than its costs. URL: https://goarctic.ru/politics/arctic-sessions-plyusy-sotrudnichestva-v-arktike-vazhnee-ego-izderzhek/ (accessed: 01.08.2022)

[29] International cooperation as the key to sustainable development of the Arctic. "The Arctic – Territory of Dialogue" at SPIEF 2022. URL: https://forumspb.com/programme/arctic/99935/

[30] Joint Statement on the Results of the 21st Russia-India Summit "Russia-India: Partnership for Peace, Progress and Prosperity". URL: http://kremlin.ru/supplement/5745 (accessed: 31.07.2022)

East. He supported N. Modi's "Sangam" concept as a tool for the development of the region. Today Indian companies are interested in cooperation in the Far East. In December 2021 at the XXI Russian-Indian summit the Indian side reiterated its commitment to increasing trade and investment in the Russian Far East. Thus, the implementation of a $1 billion credit line for development projects in the Russian Far East, announced by Prime Minister N. Modi in 2019[31], is being discussed. Energy, transport, maritime communications, diamond processing, pharmaceuticals and health care, tourism and humanitarian areas have been identified as priority areas for investment.

Cooperation in education and science

Interaction and cooperation between polar research and Himalayan studies remain important projects for India. India expects that future Arctic research, as well as the results already available from Arctic scientists in Russia, will support the Indian scientific community in analyzing the rate of melting of the third pole – the Himalayan glaciers (SDG 13 – climate action, SDG 17 – partnerships for the goals). The National Centre for Polar and Ocean Research has repeatedly noted that glacial retreat has increased significantly in the region, and Indian scientists are therefore planning to promote comparative research projects between the Arctic and the Himalayas. India's scientific and technological cooperation interests in the Arctic include meteorological and atmospheric measurements, climate change studies, sea ice and ice shelf dynamics, glaciological studies, topographic mapping, geophysical and geological studies, reconstruction of past climate from lake sediments, environmental and wildlife monitoring, paleoclimate, biology, oceanography, cryosphere studies, hydrographic survey, earth system modeling and climate modelling. As noted earlier, these interests have much to do with the fact that climate change will have a major impact on agricultural production in India in the coming decades. Therefore India has placed great emphasis on promoting cooperation in the scientific and educational fields. Given the number of agreements signed between India and Russia, research projects in the Arctic, as well as student exchange programs between Indian and Russian Arctic universities are promising areas for strengthening cooperation between the two countries (SDG 4 – quality education).

Collaboration on Arctic Indigenous Traditional Knowledge

India has outlined an important goal in its Arctic strategy to include the traditional knowledge of Arctic indigenous peoples in its cooperation with the Arctic states in the region. Sustainable development of the Arctic region cannot be achieved today without the traditional knowledge of indigenous peoples and residents of the Arctic. India emphasizes that in order to better understand the changes that are taking place in the region, the participation of the indigenous community is extremely important today (SDG 13 – climate action, SDG 17 – partnerships for the goals). There-

[31] URL: http://kremlin.ru/supplement/5745 (accessed: 01.08.2022)

fore, it is important for India to cooperate with Russia and the indigenous communities of the Russian Arctic in facilitating the sharing of traditional knowledge of the peoples of the Russian Arctic region and the Himalayas. Moreover, India's interest in the traditional knowledge of Arctic indigenous peoples can be explained partly by a desire to legitimize the actions of the Indian state in the Arctic, when the priority of traditional knowledge in the Arctic region is emphasized. In the discourse of many non-Arctic states, Arctic indigenous issues are always highlighted along with climate change issues in the region. India stresses that Arctic States must involve indigenous peoples as well as their traditional knowledge in Arctic decision-making, including the disposition of rights to use future resources, and improve intercultural communication methods to ensure indigenous peoples' full participation. India already has rich experience in dealing with many issues related to the Himalayan indigenous peoples, and therefore India wants to cooperate with Russia and the indigenous communities of the Russian Arctic, and share its practices accumulated over a long period.

Energy cooperation

Energy is one of the key areas of cooperation between Russia and India. Today, the implementation of the Roadmap for Hydrocarbon Exploration and Production Cooperation for 2019 – 2024 has been resumed to enhance bilateral cooperation in the field of energy. The creation of the so-called "energy bridge" between the two countries is one of the large-scale cooperation projects under the Roadmap. The Indian Energy Center with the participation of five Indian oil and gas state-owned companies has already been opened in Moscow. The main objective of the center is to strengthen ties with Russian companies in the energy sector.

There is ongoing successful multifaceted cooperation between Indian and Russian oil and gas companies, including Rosneft's cooperation with a consortium of Indian state-owned oil and gas companies in the Vankorneft, Sakhalin-1 and Taas-Yuryakh Neftegazodobycha projects in Russia and operation of the Nayara Energy Limited's refining complex in India. Discussions are ongoing on promising bilateral energy investments in both countries. Following the last summit, Russia and India reaffirmed their commitment to increase Russian crude oil production under long-term contracts at preferential prices.

Today, India's dependence on Russian oil is not great, but the situation is rapidly changing due to the current world situation. Thus, according to the end of May 2022, Russia became the second largest supplier of oil to India in May, pushing Saudi Arabia into the third place. In May, Indian refineries received about 819 thousand barrels per day of Russian oil, which is the highest figure in all previous months. In April, for example, this indicator was at the level of 277[32] thousand barrels per day. In May, Russia accounted for about 16.5% of the total volume of oil imported to India. Iraq still remains the biggest oil exporter to India. In May, the Indian Oil and Natural Gas Ministry urged

[32] Russia has surpassed Saudi Arabia in the volume of oil supplies to India. URL: https://www.rbc.ru/economics/14/06/2022/62a854e-39a7947b6b246bf51 (accessed: 31.07.2022)

not to politicize the purchase of oil by Indian companies abroad, including Russia. Indian energy companies have been buying oil from Russia on a regular basis for the last several years. Despite attempts to portray the situation differently, energy imports from Russia remain incomparably small compared to India's total consumption. Nevertheless, India is now negotiating to increase its imports of Russian oil through supplies from Rosneft in order to diversify its imports.

India sees Russia as a strategic partner when it comes to increasing imports of liquefied natural gas (SDG 7 – affordable and clean energy). India plans to increase LNG imports with possible use of the Northern Sea Route for supplies (SDG 9 – industry, innovation and infrastructure). India and Russia agreed to further expand cooperation in the gas sector and initiated a Gas Task Force to identify areas of mutually beneficial cooperation, including the development of investment in gas infrastructure projects and distribution systems, the use of natural gas in transportation and emerging fuels, including hydrogen[33].

Promising transport routes

The geographical position of India and Russia allows them to control both land and water routes in different parts of the world: Russia controls the routes of Northern Eurasia, while India is a key force in controlling the routes of South Asia. Without Russia's participation, it is impossible to take advantage of the resources of the Arctic shelf; without India, it is impossible to gain access to the resources of East Africa[34]. Two main routes stand out in both mega-regions: the trade route from Asia to Europe, and the energy route from the hydrocarbon production centers in these very regions to emerging Asian economies. Thus, the two countries do not compete for trade routes, but complement each other, being interested in increasing trade turnover between Europe and Asia. Therefore, cooperation in the development of transport routes and infrastructure projects is mutually beneficial for India and Russia both economically and strategically (SDG 9 – industry, innovation and infrastructure; SDG 17 – partnerships for the goals).

Two potential transport routes should be highlighted here: the Vladivostok-Chennai maritime transport corridor, a waterway through the Strait of Malacca to the Russian Far East, and the North-South International Transport Corridor, a 7,200-kilometer transport network connecting Nhava Sheva in India with Bender Abbas in Iran by sea and further linking Amirabad in Iran by road. The last section connects Amirabad and Astrakhan in Russia by sea.

33 Joint Statement on the Results of the 21st Russia-India Summit "Russia-India: Partnership for Peace, Progress and Prosperity". URL: http://kremlin.ru/supplement/5745 (accessed: 31.07.2022)

34 Eurasian chord, oceanic ring. Russia and India as the Third Force of New World Order. URL: https://ru.valdaiclub.com/a/reports/evraziyskaya-khorda-okeanskoe-koltso/ (accessed: 31.07.2022)

Vladivostok-Chennai Sea Corridor

In 2019, during the Eastern Economic Forum, Russian-Indian negotiations resulted in a landmark agreement for the Far East to establish a direct maritime link between Vladivostok and the Indian city of Chennai[35]. The main objective of the sea corridor "Vladivostok – Chennai", also called "Eastern Sea Corridor", is to reduce the transportation of goods from Russia to India. Russia is making great efforts to develop its Far East region, and Indian investments in transport infrastructure could significantly help[36]. According to experts, this corridor will make it possible to deliver cargo from Vladivostok to Chennai in just 24 days. The usual route from India to the Far East, which goes through Europe, takes more than 40 days. Moreover, the Vladivostok-Chennai corridor will deepen cooperation between the two countries in the Far East region, which is currently underway in areas such as energy, forestry and pharmaceuticals. At the same time, India today seeks to diversify its hydrocarbon supplies, so the active promotion of this project is potentially beneficial for both countries. According to the latest information from India: the study of the cost-effectiveness of the Vladivostok-Chennai Eastern Maritime Corridor has been completed[37]. Thus, the studies conducted so far by Indian experts indicate a number of opportunities to increase traffic in accordance with the recommendations of the study of this issue. At the last summit, India and Russia noted that implementation of the recommendations would additionally stimulate bilateral trade.

North-South International Transport Corridor

The route of the International North-South Transport Corridor (INSTC) today makes it possible to reduce the duration of cargo transportation by 10–15 days compared with the traditional sea route through the Suez Canal (lasting up to 40 days). The legal basis of the North-South project is the "Intergovernmental Agreement on the International North-South Transport Corridor," which Russia, India and Iran signed in St. Petersburg on September 12, 2000, during the II International Euro-Asian Transport Conference[38]. The main idea of the North-South project was to connect the Indian Ocean and the Persian Gulf with the Caspian Sea through Iran and lay a route through Russian territory to Northern European countries. Subsequently, Armenia, Azerbaijan, Belarus, Bulgaria (as an observer), Kazakhstan, Oman, Tajikistan, Syria, Kyrgyzstan and Turkey joined the agreement. Over several years of the project's existence, many agreements were reached between the participants. In particular, "Russian Railways Logistics" and the Container Corporation of India "CONCOR" signed a service agreement for joint development of multimodal cargo transportation services along

35 There will be a sea connection between Vladivostok and the Indian city of Chennai.
URL: https://www.newsvl.ru/eef/2019/09/04/183597/ (accessed: 31.07.2022)

36 Eurasian chord, oceanic ring. Russia and India as third force of New World Order.
URL: https://ru.valdaiclub.com/a/reports/evraziyskaya-khorda-okeanskoe-koltso/ (accessed: 31.07.2022)

37 Joint Statement on the Results of the 21st Russia-India Summit "Russia-India: Partnership for Peace, Progress and Prosperity".
URL: http://kremlin.ru/supplement/5745 (accessed: 31.07.2022)

38 Transport corridors will bring cooperation between Russia and India to a new level.
URL: https://rg.ru/2022/01/25/transportnye-koridory-vyvedut-sotrudnichestvo-rf-i-indii-na-novyj-uroven.html (accessed: 31.07.2022)

the international transport corridor. Currently, the work on the project is ongoing. As Russian Deputy Prime Minister Marat Khusnullin said earlier on the platform of the Second Eurasian Congress organized by the Eurasian Development Bank, the corridor should be completely ready by 2024[39].

It is important for Russia and India that this transport connectivity initiative will be based on the principles of transparency, broad participation, consideration of local priorities, financial sustainability and respect for the sovereignty and territorial integrity of all participating states (SDG 17 – partnerships for the goals). Moreover, as mentioned earlier, India's long-term plans include the construction of an expanded version of the North-South transport corridor, which in the future will be used to transport Arctic resources to India.

Cooperation in the space industry

Cooperation between India and Russia is expanding in the space industry. For example, Roscosmos State Corporation and Indian Space Research Organization have Memorandum of Understanding on manned space programs and satellite navigation, as well as agreements to further explore the prospects for mutually beneficial cooperation in the development of launch vehicles and the use of outer space for peaceful purposes, including planetary exploration.

In order to further promote cooperation in the space sphere, agreements between the Government of the Russian Federation and the Government of the Republic of India on technology protection measures in connection with cooperation in the exploration and use of outer space for peaceful purposes and in the creation and operation of launch vehicles and ground-based space infrastructure have been signed. The countries intend to increase cooperation within the framework of the UN Committee on the Peaceful Uses of Outer Space, including long-term sustainability of space activities (SDG 17 – partnerships for the goals).

Ship building cooperation

India is interested in the inflow of Russian investments in various spheres, such as shipbuilding and inland waterway development projects, civil shipbuilding and training of personnel for it. At the bilateral summit in September 2021, a letter of intent was signed between the Zvezda Shipyard and Mazagon Dock Limited of India regarding commercial shipbuilding (SDG 9 – industry, innovation and infrastructure; SDG 17 – partnerships for the goals). In September 2021, for example, Hardeep Singh Puri, India's Minister of Petroleum and Natural Gas and Minister of Construction and Urban Development, visited the Zvezda Shipyard. The Zvezda shipyard is being built by a consortium of investors headed by Rosneft on behalf of the President of the Russian Federation. The product line of Zvezda includes tankers, gas carriers, drilling platforms, ice class ships, including the most powerful atomic ice breakers Lider in the world. The Indian side has invited the Russian side to take part in shipbuilding projects that will enhance cooperation and training of specialists, scientific research,

[39] Ibid

development of intelligent transport and navigation systems and international transport corridors. Thus, the ship building industry was added to the long list of joint projects between Russia and India. "Rosneft and Indian companies have been partners for many years, developing an integrated format of cooperation in the energy sector (from production to refining and sales of petroleum products). As mentioned earlier, among the joint projects of India and Russia in the oil and gas sector are the production projects Vankorneft, Taas-Yuryakh Neftegazodobycha and Sakhalin-1. "Rosneft also supplies hydrocarbons to India and is a shareholder of Indian company Nayara Energy. These production projects allowed Rosneft to become a leader among all Russian companies in terms of investment cooperation between Russia and India. As of today, the volume of mutual investments into projects with participation of "Rosneft" and Indian partners exceeds 17 billion dollars. This is more than half of the total volume of accumulated Russian-Indian investments to date[40].

Following the December 6, 2021 summit, Russia and India fixed a new target of increasing mutual trade and reaching $30 billion by 2025. In this regard, in addition to the above-mentioned areas of cooperation between India and Russia, we would like to single out the following as promising:

- development and extraction of Arctic resources on land and on the continental shelf;
- development of Arctic sustainable tourism;
- environmental protection, climate risk management;
- green technologies;
- exchange of information and scientific data.

According to Russia's Federal Customs Service, Russian-Indian trade turnover in 2020 was about $9.26 billion, down 17% from 2019 (the drop came amid the COVID-19 pandemic). Russian exports fell 20.7% to $5.8 billion and imports fell 11.8% to $3.46 billion. Russian surplus decreased 30.9% to $2.3 billion. India's share of Russian foreign trade turnover in 2020 was 1.63% (16th place; in 2019, 1.68%, 16th place)[41].

[40] Rosneft's Eastern Partnership. Shipbuilding was added to the list of strategic joint projects between Russia and India. URL: https://www.trud.ru/article/10-09-2021/1407184_vostochnoe_partnerstvo_rosnefti.html (accessed: 02.08.2022)

[41] Russia and India agree to simplify customs procedures. URL: https://tass.ru/ekonomika/13125015?utm_source=google.com&utm_medium=organic&utm_campaign=google.com&utm_referrer=google.com (accessed: 02.08.2022)

The areas of India's Arctic strategy

The priority areas of India's Arctic strategy:

Strengthening India's research in the Arctic

- Conducting interdisciplinary research, including international;
- Monitoring and assessment of climate change in the Arctic;
- Carrying out arctic expeditions.

Climate and environmental protection

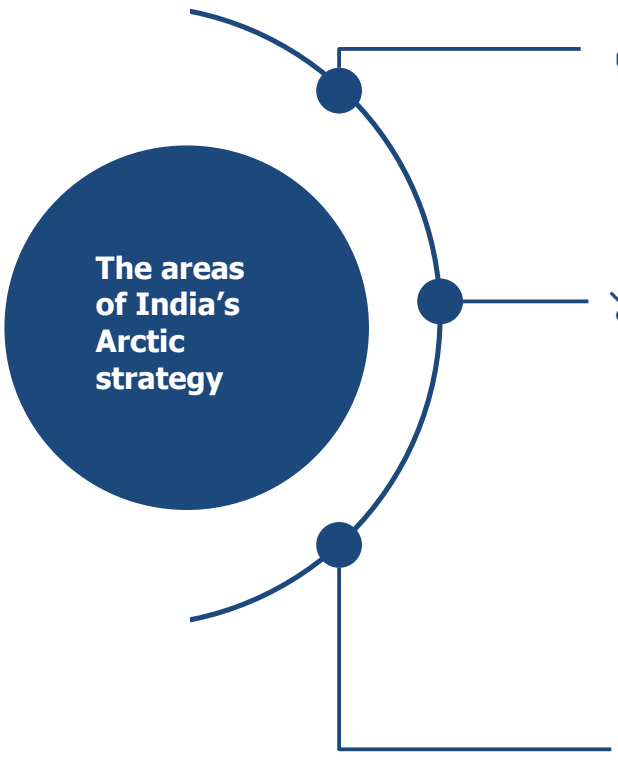
- Strengthening of control of marine ecosystems and land ecosystems pollution;
- Protecting Arctic flora and fauna;
- Conserving biodiversity of the Arctic region ;
- Meeting international commitments for emission reductions;
- Raising global awareness of the impact of climate change on the Arctic region.

Economic development and human capital

- Expansion of expertise in blue economy issues in the Arctic;
- Sustainable development of the region's resources with other Arctic states;
- Development of renewable energy sources in the Arctic;
- Analyzing, predicting, and creating coordinated policies regarding the effects of Arctic ice melting on the Himalayas;
- Development of seed storage projects in the Arctic.

The areas of India's Arctic strategy

The priority areas of India's Arctic strategy:



Development of transport routes in the Arctic

- Development of Arctic shipping routes and route infrastructure, in particular the North-South international transport corridor;
- Participation in projects to adapt maritime transportation to the new low-carbon requirements of the International Maritime Organization.

Active participation in Arctic governance and international cooperation

- Respect for international law;
- Partnership for sustainable development and promotion of multilateral governance of the region;
- Coordination of Arctic policies and strategies by all states interested in the region;
- India's active participation in projects of international Arctic organizations and increasing the number of Indian participants in these projects;
- Inclusion of the traditional knowledge of the indigenous peoples of the Arctic in the scope of their cooperation in the Arctic;
- Intensification of cooperation within the framework of international platforms.

National capacity building in the Arctic region

- Developing scientific cooperation in the Arctic region for educational purposes;
- Strengthening the role of Indian research institutes and universities in Arctic science and research on climate change.

The areas of India's Arctic strategy

Strengthening India's research in the Arctic

- **SDG 13** climate action
- **SDG 14** life below water
- **SDG 15** life on land
- **SDG 17** partnerships for the goals

Climate and environmental protection

- **SDG 13** climate action
- **SDG 14** life below water
- **SDG 15** life on land
- **SDG 17** partnerships for the goals

Economic development and human capital

- **SDG 2** zero hunger
- **SDG 7** affordable and clean energy
- **SDG 13** climate action
- **SDG 14** life below water
- **SDG 15** life on land
- **SDG 17** partnerships for the goals

Development of transport routes in the Arctic

- **SDG 7** affordable and clean energy
- **SDG 9** industry, innovation and infrastructure
- **SDG 17** partnerships for the goals

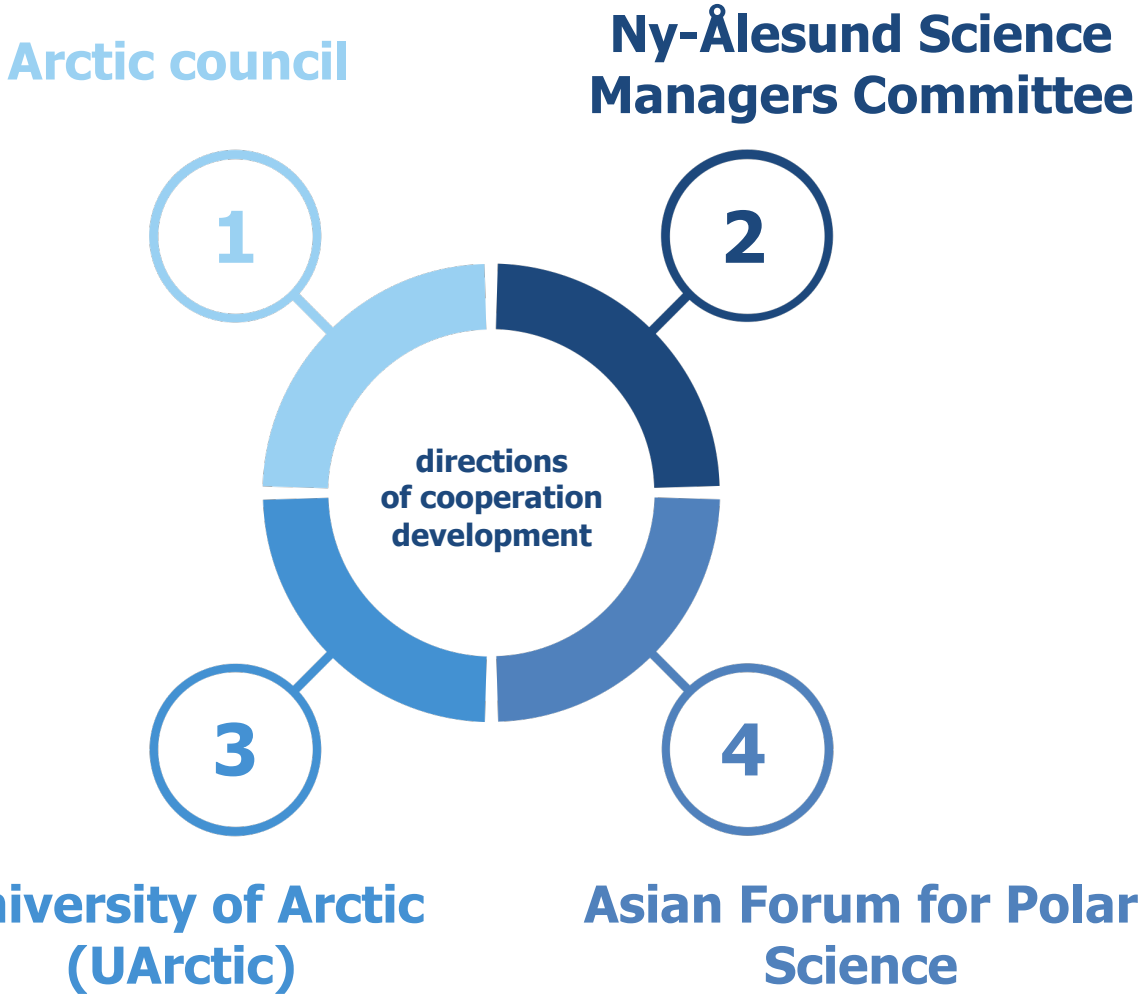
National capacity building in the Arctic region

- **SDG 4** quality education
- **SDG 13** climate action
- **SDG 17** partnerships for the goals

Active participation in Arctic governance and international cooperation

- **SDG 13** climate action
- **SDG 17** partnerships for the goals

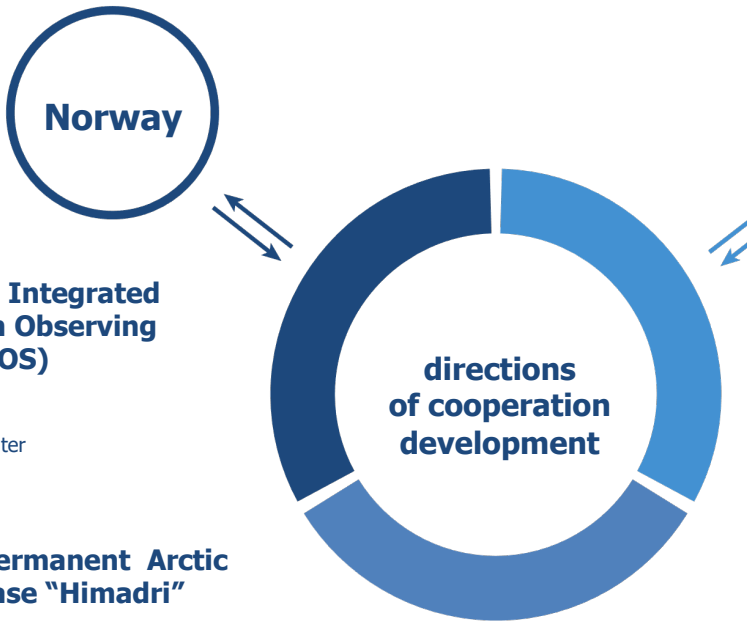
Cooperation with the participation of India



Projects with Indian participation

Institution	Projects with Indian participation	UN SDG
Conservation of Arctic Flora and Fauna, CAFF (Arctic council)	• Arctic Migratory Birds Initiative, AMBI) • Actions for Arctic Biodiversity	• **SDG 13** climate action • **SDG 14** life below water • **SDG 15** life on land
Expert Group in support of implementation of the Framework for Action on Black Carbon and Methane (Arctic council)		• **SDG 13** climate action • **SDG 17** partnerships for the goals
Ny-Ålesund Science Managers Committee	• Indian permanent Arctic research Base "Himadri"	• **SDG 17** partnerships for the goals
University of Arctic (UArctic)		• **SDG 4** quality education • **SDG 13** climate action • **SDG 17** partnerships for the goals
Asian Forum for Polar Science		• **SDG 17** partnerships for the goals
Conferences and Fourms dedicated to the Arctc region	• «Territory of Dialogue» • «Arctic Circle», • «Arctic Frontiers», • Arctic Science Summit Week • Etc.	

India's cooperation with Arctic countries



1. Svalbard Integrated Arctic Earth Observing System (SIOS)

- **SDG 14** life below water
- **SDG 15** life on land

2. Indian permanent Arctic research Base "Himadri"

- **SDG 14** life below water
- **SDG 15** life on land

NISAR (NASA-ISRO Synthetic Aperture Radar)

- **SDG 13** climate action
- **SDG 17** partnerships for the goals

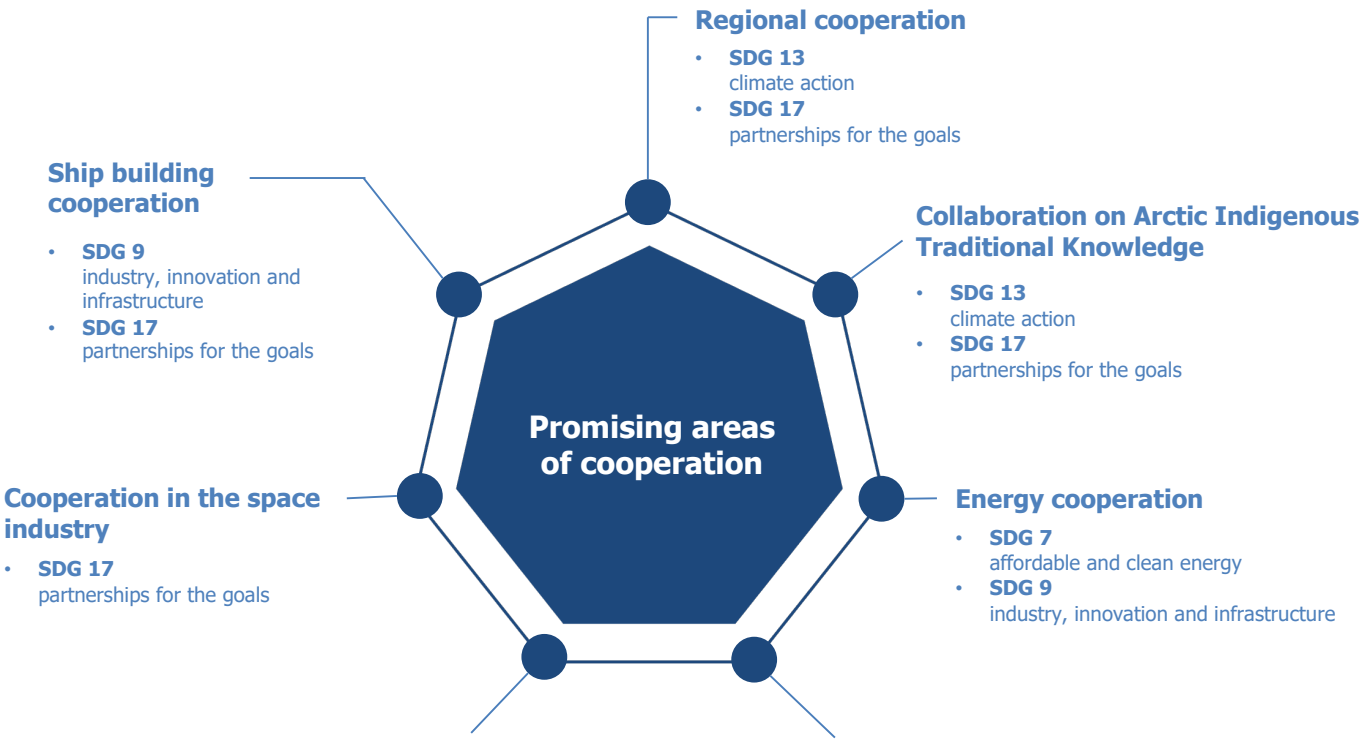
Green Strategic Partnership

- **SDG 13** climate action
- **SDG 17** partnerships for the goals

Legal framework of cooperation between Russia and India

- **Agreement** between the Government of the Russian Federation and the Government of the Republic of India on technology protection measures in connection with cooperation in the exploration and use of outer space for peaceful purposes and in the creation and operation of launch vehicles and ground-based space infrastructure.
- **Memorandum** of cooperation in the field of intellectual property between the Federal Service for Intellectual Property (Russian Federation) and the Department of Industrial Policy, Ministry of Commerce and Industry, Government of the Republic of India.
- **Agreement** on cooperation between the Central Bank of the Russian Federation (Bank of Russia) and the Reserve Bank of India in the field of countermeasures against computer attacks.
- **Protocol** between the Department of State Support for Art and Folk Art of the Ministry of Culture of the Russian Federation and the Indian Council for Cultural Relations under the Ministry of External Affairs of the Republic of India on the organization of Cultural Festivals between the Russian Federation and the Republic of India in 2022-2023.
- **Protocol** between the Government of the Russian Federation and the Government of the Republic of India on the granting of land plots for consular offices of the Republic of India in the Russian Federation and on the conditions of placement of the Consulate General of the Republic of India in Vladivostok.
- **Memorandum** of Understanding between JSC "Rosgeologiya" ("Rosgeo") and the Geological Survey of India, Ministry of Mines, Government of the Republic of India, on cooperation in the field of geological research.
- **Agreement** between the Government of the Russian Federation and the Government of the Republic of India on the Program of Military and Technical Cooperation from 2021 to 2031.
- **Contract** for the supply of Russian oil for the period from 01.01.2022 to 31.12.2022 between Rosneft and Indian Oil Corporation Limited.
- **Agreement** for the development of cooperation in education and training between Rosneft and ONGC Videsh Limited.

Promising areas of cooperation between Russia and India



Regional cooperation
- **SDG 13** climate action
- **SDG 17** partnerships for the goals

Ship building cooperation
- **SDG 9** industry, innovation and infrastructure
- **SDG 17** partnerships for the goals

Collaboration on Arctic Indigenous Traditional Knowledge
- **SDG 13** climate action
- **SDG 17** partnerships for the goals

Cooperation in the space industry
- **SDG 17** partnerships for the goals

Energy cooperation
- **SDG 7** affordable and clean energy
- **SDG 9** industry, innovation and infrastructure

Cooperation in education and science
- **SDG 4** quality education
- **SDG 13** climate action
- **SDG 17** partnerships for the goals

Promising transport routes
- **SDG 9** industry, innovation and infrastructure
- **SDG 17** partnerships for the goals