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# The Arctic policy of India

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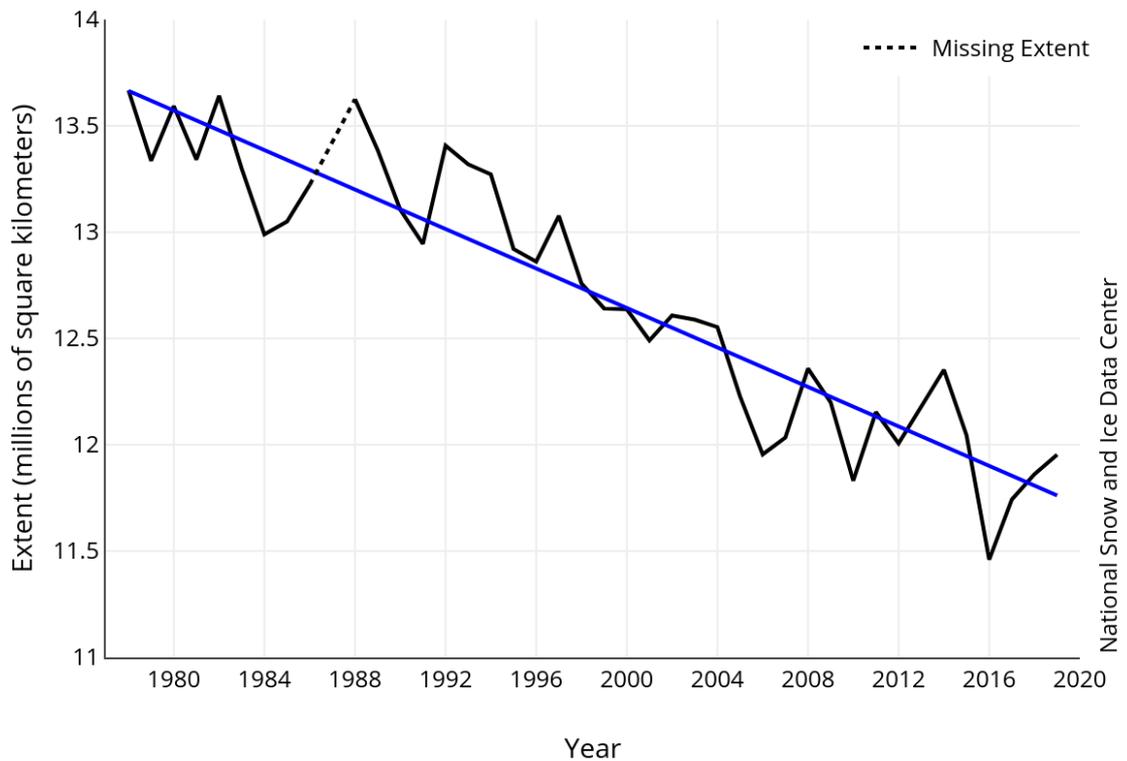
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**Abstract.** The article is devoted to the Indian Arctic policy. The author examines the history of Delhi's presence in the region from the time of colonial dependence until the moment the country received the status of the permanent observer of the Arctic Council in 2013. Much attention is paid to the analysis of two opposed opinions on the role of India in the region. One group of scientists, referring to the lack of domestic energy resources, need to diversify energy flows and prevent China's undivided dominance on the Arctic shelf, insists on India's comprehensive (scientific, economic, and strategic) participation in the Arctic agenda. Another group, based on alarmist environmental rhetoric, advocates limiting interference into the region's affairs. Analysis of external and internal conditions leads to the conclusion that none of the lines can be implemented completely. An uncertainty of India's Arctic strategy, however, makes it possible to identify some trends and make a forecast on the future actions of the Asian giant in the region.

## 1. Introduction

In the last two decades the topic of the Arctic exploration began to appear on the international agenda more frequently, drawing attention of politicians, businessmen, and analysts all over the world. The most pressing issues for the Arctic region and the countries that are located in it are the problems of ecology [1], strategic development [2] (including uneven) territories [3] and assessment of their potential (economic [4], resource [5], tourism [6], etc.), as well as equally important issues of migration [7], [8], attracting labor resources to the region [9] and digital transformation of the region [10]. In the world, as of 2020, there are only 8 Arctic States that are members of the Arctic Council, while there are 1.5 times as many observer countries in it as there are participants themselves. What is the reason for such a high interest in the region? According to the Independent statistics and analysis agency «U.S. Energy Information Administration», the Arctic contains 13% of the world's undiscovered oil resources (at about 90 billion barrels) and 30% of world's undiscovered natural gas resources [11]. Moreover, deposits of strategic metals (gold, silver, copper, titanium, iron, graphite, lead, nickel, coal, uranium etc.) have been discovered in the Arctic zone. If earlier exploration of the Northern riches was significantly difficult because of the severe climatic conditions, nowadays due to the arctic ice cap melting (according to the National Snow and Ice Data Center, ice extent declines per 3,6% every decade starting from 1978 (Figure 1)) the facilitates of navigation in the Arctic Ocean becomes significantly wider and a possibility of developing Arctic deposits is opened up [12].



**Figure 1:** Average Monthly Arctic Sea Ice Extent December 1978-2019

Under these circumstances, each Arctic Council member state seeks to grab a tasty piece of the "economic pie". It inevitably leads to territorial disputes (between Russia and Norway over the Svalbard archipelago, between Denmark and Canada over Hans island) and attempts to expand the limits of continental shelves established in 1982. The most notorious territorial dispute is over the Lomonosov Ridge. In 2001 with reference to the UN Convention on the Law of the Sea Russia applied to the Commission on the Limits of the Continental Shelf for recognizing the right of the Russian continental shelf extension with

the Lomonosov Ridge (more specifically, with the part connecting North America and Eurasia) and with Mendeleev Ridge as well. In 2014 Denmark similarly applied to the CLCS for the Lomonosov Ridge to be a part of Greenland. Last but not least, in 2019 Canada demanded the Ridge to be admitted as an extension of the American continent. For the moment none of the disputing parties has initiated negotiations and the Commission has not make any decision on the case.

Another controversial point concerns the legal regime of the northern shipping lanes, specifically, the Northern Sea Route and the Northwest Passage. Russia and Canada consider these lanes as their inland waters (according to their domestic legislation) [13]. Other Arctic Council member-states, referring to the "four freedoms" (freedom of movement of goods, persons, services and capital) proclaimed at the Conference of the European Communities in Luxembourg in 1985, on the contrary, claim that the right of free passage should be applied in the areas [14]. New US "Arctic Strategy", Washington's plans to expand the strength of the Navy and increase the number of military bases in the Arctic ocean (including ensuring freedom of navigation along the Northern sea route and the Northwest passage), contradict the national doctrines of Russia and Canada. The current situation demonstrates that military conflict is still possible in the region.

The situation is aggravated by the fact that there is no international regime for the Arctic region, what prevents it from becoming one of the world's largest logistics intersections, the Arctic corridor [15], and the Arctic States, like Iceland, Russia and Norway [16] – its beneficiaries [17]. Predominantly it comes from special characteristics of the area itself and partly from the Cold War, when the Arctic was a landfill for arms race. The only step towards managing the circumpolar north was made in 1996 in Ottawa with the establishment of the Arctic Council. The international body is seeks to protect indigenous communities, their cultural and economic well-being as well as the virgin northern nature. It is significant to clarify that non-regional actors (non-littoral states, non-governmental organizations, Inter-Parliamentary and Intergovernmental organizations) along with regional ones can take part in the work process in the status of observers [18].

Circumpolar states` debates, overlapping, lack of clarity in laws trigger non-regional actors` ambitions in the Arctic. First and foremost, it pertains to Asian «emerging powers». In the past five years, all Arctic Council observer States have adopted Arctic strategies for the first time or updated the existing ones. Obviously, behavior of non-regional actors is inspired by change of the established order and by fervor to obtain a part of Arctic countries` exclusive economic zones in the Arctic Ocean. One of the active participants of the race is the Republic of India.

The aim of the paper is to study India`s behavior in the Arctic Region. The goal will be reached by investigating India`s historical background in the region from its colonial dependence to modern times. Great attention would be paid to analysis of various opinions on India`s role in the High North, national scientific, economic and geopolitics interests in the region as well as the Indian projects and treaties that are currently in effect. On the analytical basis possible Indian perspectives in the circumpolar north is to be outlined.

## **2. Historical background**

According to the information published on the Ministry`s of External Affairs of India website [19], India`s presence in the region dates back to 1920 when the «Svalbard Treaty» was signed. The document was concluded by Norway, Sweden, Denmark, the Netherlands, France, Italy, US, Japan, the United Kingdom and the British overseas Dominions (including British India) and determined juridical status of Spitsbergen, which is the only permanently populated island of the Svalbard archipelago.

After accession to independence and development of national capitalism India proceeded its activity in the region. Ministry of Ocean Development was established. In 1981 the ministry organized the first expedition to the High North.

From this moment up to 2013 India`s activity in the region focused predominantly on scientific interest. At the beginning of the 20<sup>th</sup> century Ministry of Ocean Development was merged with the National Centre for Medium Range Weather Forecasting, India Metrological Department, the Earth Risk Evaluation Centre and the Indian Institute of Tropical Meteorology. New body was named the Ministry of Earth Sciences (MoES). The ministry is focused on Earth System Science for improving forecasting of weather, monsoon,

climate and hazards, exploration of polar regions, seas around India and develop technology for exploration and exploitation of ocean resources (living and non-living), ensuring their sustainable utilization [20].

Polar Research occupies a prominent place in the MoES work. In 2007 MoES initiated the first scientific northern expedition. The main purpose was to investigate bacterial life and climate changes in the High North. The second point appears to be highly significant for the Indian scientists within the context of hypothesized connection between climate change and the Indian monsoon. Monsoon precipitation influences Indian economy (specifically its agricultural sector) significantly. Agriculture accounts for about 15% of Indian Gross Domestic Product (GDP) [21], so rainfall's reduction and resultant crops fail harms the economy. The 2007 expedition and the subsequent establishment of research base «Himadri» was supported by Norwegian Polar Research Institute of Norway and a Norwegian State Company «Kings Bay». Since that time India annually send two expeditions for carrying out hydrochemistry, glaciology, atmospheric and microbiology investigations.

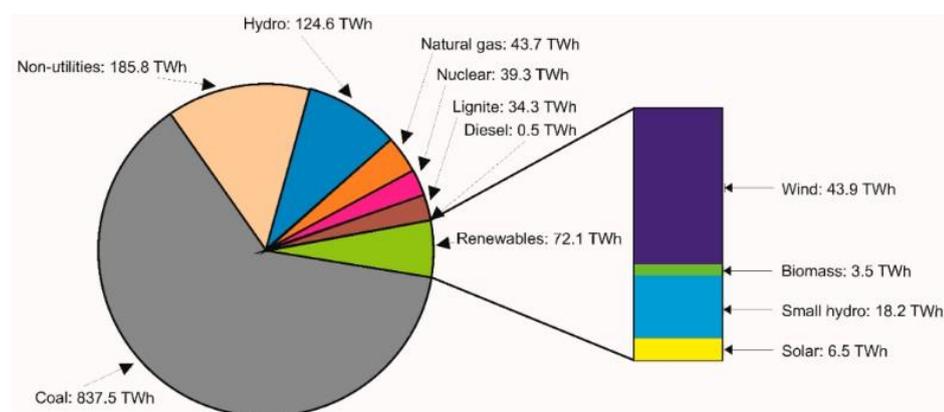
Indian Arctic Program engaged scientists from numerous research institutions all over the world. For the next 5 years Indian Government invested \$12 million to the Arctic Studies. In 2012 in recognition of India's input in exploration of the High North India has been elected into the Council of the International Arctic Science Committee (IASC) which is a nongovernmental organization bringing together all countries (despite of their location) conducting Arctic Research.

Kiruna Ministerial Meeting of the Arctic Council in 2013 was a landmark in the Indian Arctic Strategy. The Republic of India along with other non-arctic states (China, Republic of Korea, Japan, Singapore and Italy) gained permanent Observer status [22]. In Indian scientific society the event was considered to be a real diplomatic victory [23].

### 3. Pros and cons

Nevertheless, far from everybody was so enthusiastic about involvement of India into the Arctic Affairs. Long before accession to the observer status there were heated debates over Indian role in the region.

On the one hand, expanding India's influence in the Arctic is indispensable. Delhi must take part in Arctic governance matters in pursuit of providing energy safety and reaching national prosperity. The key argument in favor is huge Arctic resources. The main fuel for Indian thermal power plants is coal. It is available in abundance and meets 70% of the total power sector demand (Figure 2). The problem is that the fossil cannot be of predominantly used because of its low calorific value and high ash generation [24]. Progressive generation of fly ash and its devastating ecological impact forces authorities to conduct fly ash utilization program (Figure 3), which demands huge allocation. Meanwhile, so far the initiative has failed to carry out the plan of 100% fly ash utilization by December, 2017 [25].



**Figure 2.** India's domestic energy sources [26]

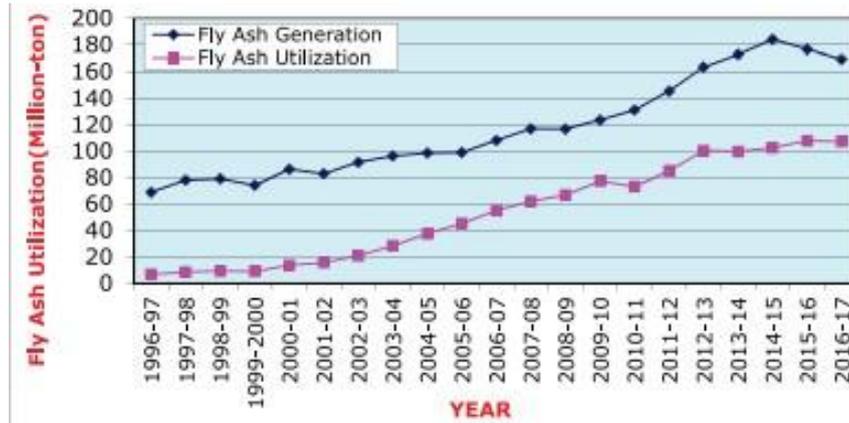


Figure 3. Progressive Generation and Utilization on Fly Ash during the period from 1996 to 2017 [27]

Moreover, we should take into account the fact of inevitable increase of electricity consumption within following decades. First of all, it stems from the growing economy and resultant increasing of Gross Domestic Product (GDP) per capita. The second reason is implementation of 100% electrification plan intended to include rural areas into electrical circuit (Figure 4).



Figure 4. Number of Villages Electrified Planwise [28]

Diversification of electricity sources for account of other domestic energy resources is to be problematic as well. Hydropower, nuclear, oil, natural gas contribute 125 TWh, 38 TWh, 34 TWh, 500 GWh respectively, which in comparison with coal-fired electricity is apparently extremely scarce. In addition, quality of indigenous sources is significantly lower than of imported ones. For one, uranium ores` characteristics left to be desired, though its price is 2-3 times higher compared to the world market [26].

In this context India has nothing to do but adhere to the Chinese energy security scheme and diversify power flows by importing energy from Africa, Latin America, the Middle East. Exploiting northern resources fits into announced scheme harmoniously and responds to the Indian national interests [29].

The second argument for India active participating in arctic issues is about geopolitics. To date Delhi has a leverage for constrain Chinese hegemony in the Asia-Pacific region. In any case of aggression from China India can block Malacca Strait and thus cut off energy supply routes to China. Malacca Strait with 80% of China imported oil going through it has great strategic importance for Beijing [30]. However, with the melting of the polar ice caps, Beijing gets access to the vast energy resources of the North, as well as the ability to use the Northern sea route for transporting them. China's dependence on the Malaccaroute is consequently decreasing. The factor accelerating Beijing expansion on the Northern Sea Route is a possibility to use it in Sino-European trade. The way from East Asia to Northern Europe by NSR is about 3,9 thousand miles shorter than through the Suez Canal [31]. Under these circumstances, it becomes clear that it will be a fatal mistake for India to let China be the only Asian player in the circumpolar North [32].

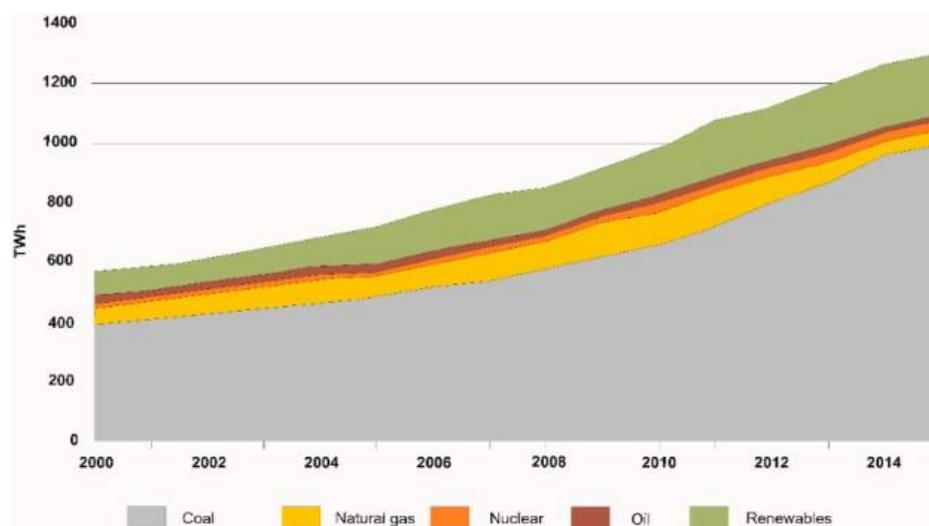
One more advantage of counterweighing China in the Arctic Region is an availability to navigate northern routes by India itself. Northern Sea Route enables shipping companies to reduce time and fuel and security costs for transiting goods.

Supporters of the announced point of view call for formulation of circumpolar resource exploiting and for active participation in the Arctic affairs by means of bilateral cooperation with the permanent Arctic Council member-states.

On the other hand, their opponents speak out against Indian active participation in the Arctic agenda. Consultant of New Delhi Institute for Defense Studies and Analyses P.Gautam stressed on the fatal ecological consequences of glaciers' volume loss. Consequently, Arctic must be treated as «global commons». The world community should concentrate on preserving pristine ecosystem of the Northern Ocean by eliminating greenhouse effect. The global warming problem is particularly significant for India, taking into account connectivity between ice caps melting in the Arctic and on the Tibetan plateau, where most of Indian rivers rise from. Increase of their mean level will lead to serious floods, and the whole Indo-Gangetic valley may be under water [33].

One of the clue points of ecological security is complete demilitarization and declaring Arctic nuclear weapons-free zone. India has to postpone its economic and geopolitical ambitions and narrow down its activity to scientific research (annually expeditions, scientific bases etc.) [34]. Such an approach rejects India's membership in the Arctic Council, because participation means tacit acceptance of Arctic states sovereignty over the circumpolar north [35].

According to this let us say «ecological line» India may address energy security problems by means of green energy. Alternative electricity sources (wind, biomass, hydropower plants) since the beginning of the millennium has increased two folds [Figure 5]. If such a progress is stable, in long run Indian experience can be an exemplar for the Arctic States [36].



**Figure 5.** Electricity Production from different sources in India [37]

#### 4. The current situation

Announces disputes lingered in Indian scientific and political groups and found their second wind after Kiruna Meeting. Nonetheless, in 2013 circumstances changed dramatically.

First of all, having received the status of the Arctic Council permanent observer India made some commitments. It must recognize sovereign rights of littoral states (permanent members of AC) on the Arctic territory. Observers do not have veto right, are not entitled to participate in all the discussions (only in those concerning climate change mitigation, environmental pollution, conservation of flora and fauna, emergency cases and economic cooperation). If an observer brakes the prescriptions, its actions contradict the main AC working principles, its status may be prorogued by Arctic Ministers' decision [18]. Consequently, Gautam's line perceiving Arctic as «global commons» diverges from the AC Declaration [38] and therefore cannot be supported by the Indian Government and expressed in official doctrine.

Gautam's wish for eliminating Cold War remnants through demilitarization (specifically denuclearization) of the Arctic Sea inevitably faces protests from both Moscow and Washington sides. In the context of INF Treaty denunciation, unclear future of START-III Treaty and non-proliferation regime as a whole, the balance is far more fragile than ever before.

Secondly, at the moment it seems impossible to realize line of Gautam's opponents` to the fullest extent as well.

On the one hand, Delhi does it best to widen diplomatic contacts with the Arctic States. President P. Mukherjee visited Finland and Norway in 2014, Russia and Sweden in 2015. In 2013 he met Iceland president O. Grimson who was on an official visit in India. Prime Minister N.Modi has been in the United States, Canada and Russia. In attempts to increase diplomatic interaction Indian experts offered to establish special Ministry of External Affairs Department responsible for Arctic policy and appoint Arctic ambassador.

On the other hand, Indian business community makes investments into the region quite reluctantly. The current situation might have played into the hands of India. Since crisis of 2014 Russia has been deprived of collaborative investigations possibility on the Arctic shelf. Taking into account weather conditions and lack of appropriate technologies, it is extremely unfeasible (if not impossible in some cases) for Russia to explore northern resources by itself. Under these circumstances, Russia is looking for cooperation with non-regional actors. Nevertheless, India is in no hurry to engage in Russia's initiatives. Indian investors are concerned about ecological issues, economic risks and lengthy period of payback. Though during the Eastern Economic Forum NOVATEK managed to reach agreement with Indian H-Energy Global Ltd and Petronet LNG on Russian liquefied natural gas deliveries, negotiations over India's investments into Yamal-LNG and Arctic-LNG are still prolonged.

Consequently, Delhi have not elaborated its Arctic strategy to date (though China, Japan, the Republic of Korea unveiled White Papers of their Strategies several years ago). Indian Arctic policy is quite a vague picture, still it seems possible to outline some tendencies and make predictions on the near future.

India foresees expanding of Chinese influence in the region. First of all, according to the Indian researchers, Beijing is highly interested in Northern Sea Route and One Belt One Road Initiative conjugation for the distance from Shanghai to Rotterdam through the North is substantially shorter and is free of Malacca and Aden pirates. Secondly, China seeks to the northern resources. The eloquent proof of the statement is numerous Sino-Russian treaties. The first one, between the Sovcomflot group and China National Petroleum Corporation (CNPC) concerned transit of gas and oil extracted from the Russian North deposits to China. As there is no vestiges of Chinese economy flagging, need of imported fuels will only increase [39]. What is more, India is feared that the further crisis in the non-proliferation regime will trigger the United States to move its main attention from the Asia-Pacific region to the circumpolar North. Without counterweight China inevitably will expand its power in both directions. Validity of such concerns is under question and may be a base for a whole thesis. Nonetheless, Indian politicians will be guided by these certain statements. So should we.

The current situation is quite similar to the Sino-Indian contest for the African energy markets. The only thing that exacerbates the Arctic Agenda is fight for transport corridors. Taking into account all aforementioned facts and comparisons we can approximately predict future India's behavior. As a reaction to Chinese successes in the Arctic Region, India will expand its influence in the North as well. Meanwhile,

realistically assessing country's budget, Indian Government will do it by a limited range of tools. The first pillar is partnership with the Arctic States. Due to the lack of money and business hesitations over north investments, India is to build bridges through diplomacy. It possibly will support Russia in Lomonosov Ridge debate and make attempts to deepen diplomatic cooperation with the Nordic States. India may even set a dialogue (concerning politically neutral Arctic topics like indigenous people conditions of life, protections of the North ecosystem etc.) with China within BRICS and SCO.

## 5. Major conclusions

1) Melting of the Arctic ice caps, resultant access to Arctic Ocean routes and fossil fuels, as well as deterioration of Arctic States relations encourages non-regional actors' activity. The process predominantly refers to the Asian players who face lack of inner recourses.

2) Since the beginning of the 21<sup>st</sup> century India makes its first steps in the area. Initial India's activity was limited to scientific research. Access to the Arctic Council permanent observer status in 2013 inspired Indian political and economic ambitious in the region.

3) Because of the division over climate change impact on Indian economy and on the whole world, necessity of the Arctic carbon fossils and risks connected with theirs mining taking place in the Indian political and scientific circles, the state has still failed to formulate clear Arctic strategy.

4) Indian activity in the Arctic is mainly a reaction to the Chinese extension in the Circumpolar North. India fears that without counterweight China will take over northern energy recourses and trade routes [40] thus will eliminate its dependence on the Malacca Strait, which is one of the main Indian leverage on the Chinese policy.

5) In the nearest future India will expand its influence in the Arctic Region. Nevertheless, it will be restricted to diplomatic and scientific activity and will not be comparable to the Beijing Arctic Policy.

The second pillar is scientific work. India will go on with train environmentalists, send expeditions and enlarge scientific centre. Due to such an activity Delhi kills two birds with one stone. First, thus India in the eyes of the world community presents itself as an active Arctic actor. Second, environmentally friendly scientific research satisfies both debating sides within Indian political circles.

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