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Sangram Singh
Ph.D. Scholar, Cnetre for
Russian And Central Asian
Studies, School of
International Studies,
Jawaharlal Nehru
University, New Delhi,
110067

Russian Policy towards the Geo-Economic and Environmental Issues of Arctic Region

Sangram Singh

Abstract

The climate change has thrown many challenges to world both at domestic and global level. It has large scale economic, social geo-economic and geopolitical ramifications. Arctic sea is no exception. The melting of ice and recent discovery of huge oil and natural gas has brought the region at center stage. The region is also become new seal lane of communication. The arctic route is will reduce the distance between Europe and Asia. These changes have also environmental impacts. The pristine and fragile arctic ecology is under threat. Russia occupy almost half of arctic region therefore this region hold prime importance to it. Russia has asserted itself bringing America into scene. The continental shelf still undefined. The future of arctic for Russia will depend on proper implementation of its environmental policy along with diplomatic maneuvering with other stake holders. A multilateral institutional framework will hold the key to future.

Keywords: Geo-economics, geopolitics, climate change , environmental degradation, Arctic sea, arctic council

Introduction

The Arctic Ocean has a unique location which makes it a region of strategic significance. It is encircled by five major countries – the United States, Russia, Canada, Denmark and Norway. The Arctic region has great potential because of its significant geo-economics issues which includes energy resources and locational benefits as future alternative communication route, both air route and waterway. The Arctic has immense potential for the littoral countries since it opens up multifarious resources and development opportunities to them. At the same time increased economic activity and global warming has made its ecology fragile. The region has not been the focus of territorial conflict since it was considered an impregnable ocean with permanent ice sheet. Until a few years ago, the Arctic attracted little international attention due to its harsh and inhospitable climatic conditions. With extremely sparse population and inaccessibility, the Arctic remained a geopolitical backwater for long. As no claims to the Arctic Ocean territories have been officially recognized, all coastal states make statements, asserting their unique position in ensuring environmental protection in their respective area, as cover for their territorial claims. It is important to remember that the Arctic environment is made up of unique ecological systems and resources that are highly expendable and need special protection that can currently be provided only by the Arctic states.

The rich energy resource underneath the arctic is the main attraction. The ownership of these resources is a bone of contention between the arctic countries. During late 1980s, Gorbachev came up with the famous “Murmansk initiative” or “Murmansk principle”. In five principles pertaining to the Arctic Sea, he declared the region as a Zone of Peace and Cooperation.

Global climate change has been another catalyst behind the resurgent interest in the region, bringing the Arctic back to the centre of geopolitics. The Intergovernmental Panel on Climate Change in its second report predicted melting of the Arctic, claiming that the North Pole will become a navigable ocean by the end of 21st century. This opened the possibility of unhindered access to the open seas and the related issue of control of these very important sea routes. This made the region economically very lucrative leading to increased anthropogenic activity in the region. The arctic ecology has come under enormous pressure. Environmental pollution and degradation, waste accumulation, high risks and costs of natural resources extraction, influence on the permafrost territory, and development of dangerous hydro-meteorological ice are the major problems which have emerged as threat to arctic environment. It has also been estimated that the Arctic region harbours more than 20 percent energy resource of the world.

The Arctic melt has thrown numerous challenges to Arctic countries in general and Russia in particular. The melting of the ice mass in the Arctic will open two important communication

Correspondence
Sangram Singh
Ph.D. Scholar, Cnetre for
Russian And Central Asian
Studies, School of
International Studies,
Jawaharlal Nehru
University, New Delhi,
110067

lanes — the North Sea route and North-western sea route. The former touches Russia's northern boundary. Both routes have the potential to transform Russia's fate since they could change the trade patterns, the way the Suez Canal did in the 19th century. The Northern passage will open first, connecting the emerging Asian market to developed Europe. The other important passage is the North-West passage. It traverses from west coast of America to northwest Europe via Canada. This passage will divert the traffic from Panama Canal. It shortens the distance between east coast of America to eastern Asia and west coast of America to northern Europe and therefore has strategic significance. In order to exercise the sovereign rights, the Arctic players have increased military activities in the region. New ports are being established and army facilities are being developed in and around the Arctic. A deep sea port at Nanisivik is developed by Canada and an airbase at Thule (Greenland) has been expanded. Canada has started a military training centre at Resolute Bay. Russia has also increased its military presence in the Arctic region. The non-Arctic countries such as India, China, Japan and South Korea also have interests and are attempting to mark their presence in the region. They have established their research stations in the Arctic as it will help them secure their future involvement. They cannot be indifferent towards the geopolitics of the Arctic since developments in this region will also impact their future.

At the same time Russia is facing many environmental problems in the arctic region. The melting of permafrost ice, increasing toxic content in arctic sea, biodiversity loss, shifting of lichen and tundra zone etc are the major ones. Arctic is facing quality degradation in fish, vegetation, fauna and mammal population. The timing of the melting of sea ice in the spring and the summer affects algae growth at the ice edge and the population of krill, important food supplies for many animals, including the Arctic cod, which is prey for belugas, narwhals, and seals. The Arctic is a breeding ground for many migratory birds. Habitat loss and changes in food availability affect some of these species. It is predicted that reduction in the extent and amount of sea ice will alter the seasonal distributions, geographic ranges, migration patterns, nutritional status and reproductive success of many arctic mammals.

Of the five coastal countries, Russia attaches major strategic importance to the Arctic. The Arctic Circle is believed to hold vast deposits of mineral resources. Huge deposits of natural gas and petroleum are found in Yamal Peninsula and East Siberian Sea. More deposits are expected in Chukchi Sea and Kara Sea. This will expand more, if Russia gets success in expanding its Exclusive Economic Zone (EEZ) jurisdiction. In future, this region will become a major source of Russia's energy. The Northern Passage can bring windfall revenue earnings for it.

In 21st century, the Arctic Ocean will hold the key to supremacy in global arena. It is beyond doubt that Russia is most likely to emerge as the biggest and most powerful player in the Arctic geopolitics due to its locational advantage. Due to the depletion of West Asian oil resources and ever increasing oil prices, the Arctic Ocean is a beacon of hope. The future economic and political pattern will be shaped by developments in the Arctic Circle and Russia will play a pivotal role in it. But at the same time Russia has to face environmental challenges due to depletion of the arctic ecology. It will be tough task to strike a balance between its energy requirement and sustaining the ecology. The climate change has opened new avenues, but at the same time, it is

bringing drastic changes in the arctic environment which has long lasting effects. Russia has to work hard to safeguard its Arctic environment to help its people live a better life. It also has to engage other arctic countries for developing a better cooperative mechanism for sustainable and pollution free Arctic environment. Russia has actively engaged itself in regional and international forums to safeguard Arctic. It is actively engaged in forums like UNFCCC, Kyoto Protocol, Arctic Council, Declaration on the Protection of Arctic Environment, Arctic Environment Protection Strategy, Sami Council, The Northern Forum, The North Atlantic Marine Mammal Commission, The Council for Barents Euro-Arctic Region etc.

In this context the study becomes very important. The region is not only important for Russia and Arctic countries but for world as a whole. Opening of Arctic sea routes and huge deposits of energy resources can accelerate the economic development of this region. This makes the arctic ecology more vulnerable and fragile. Thus, it becomes important to have a better and nuanced understanding of the geopolitics of this region. Depending on different perceptions, the region may become "a zone of conflict" or "zone of cooperation".

The Arctic Environment

The arctic is one of the pristine ecological regions of the world. It is dominated by extreme climate with snow and temperature remaining at sub zero level throughout the year. The territorial region of the arctic is permafrost with little or no vegetation. The tundra and boreal forest is found in the Russia's Siberian region. The short summer is the only time when any economic activity can be taken. In addition to species themselves, the Arctic also harbours a diversity of marine, freshwater and terrestrial habitats, such as vast expanses of lowland tundra, wetlands, mountains, extensive shallow ocean shelves, millennia-old ice shelves, pack ice and huge seabird coastal cliffs. The marine biodiversity of the arctic represent unique association of aquatic flora and fauna. The climate change has been the game changer in the Arctic region. The rise in average temperature led to the melting of the permanent arctic ice. The IPCC second assessment report predicted that the Arctic will become ice free by the end of 21st century. This has deeper ramifications both in economic and ecological terms. As per the findings of R.B. Mackane surface air temperature in arctic regions has increased manifold since pre-industrial times. which has raised the concerns about warming and possibly drier conditions that have increased soil de-composition rates, thereby stimulating the release to the atmosphere of the large stores of carbon in arctic soils" (Mckane R.B. and *et al.*,1997) ^[14]

The opening of Arctic will facilitate short commercial shipping route but at the cost of pollution and ecological imbalance. The recent discovery of huge deposits of oil and natural gas in Arctic is proving to be another threat to its ecology. Due to its strategic importance the Arctic region has been militarized. Russia has created a full-fledged arctic force. Canada, America Denmark have also built their army bases, naval stations and deep water ports. The human settlement has also increased in the region. Construction activities are increasing on a massive scale in Siberian region. The oil exploration in the Yamal peninsula has led to the deforestation and land degradation. The infrastructure development has lead to the modification in the topography. The development of the infrastructure is going to further increase the activity in the region. There are many projects in the pipeline. Russia has the largest icebreaker fleet. It has long term plan to increase its

fleet and develop North Sea route as an alternate route to gain windfall revenue. In this context Neretin has suggested that Russia have to embrace the concept of environmental security defined as an integrated approach for assessing and responding to the risks as well as the opportunities generated by an environmental state-change (Neretin L., 2006)

Russia is not ignorant of environmental issues. It is working to develop a sustainable model of development on the Arctic. It has identified following major environmental threats in the Russian Arctic Sector

- Environmental pollution and degradation, caused by the increasing human pressure;
- Waste accumulation;
- High risks and costs of natural resource extraction;
- Global climate change and its influence on the permafrost territory
- Development of dangerous hydro-meteorological, ice and other natural processes, creating high risks and causing much damage.

Russia has committed itself to develop a safe and sustainable model. It has actively participated in almost all the forums which work for preserving the pristine environment of Arctic. It includes Arctic council, Kyoto protocol, International Union for Conservation of Nature (IUCN), National Snow and Ice Data Center (NSIDC), Arctic Institute of North America (AINA), Arctic Centre etc.

Arctic Sea and Russia

The melting of Arctic Ocean constitutes a major opportunity for Russia since it occupies the central position in the region. It has more than 2500 km of coast line circumscribing the Arctic which itself makes it a dominant player in the Arctic. The most fundamental geopolitical issue concerning the Arctic is that of sovereignty and is being taken up very seriously by the Russian think tanks. Arctic has also emerged as an environmental challenge for Russia. Against this background, Russia has dedicated a full-fledged "Arctic policy" to deal with the upcoming challenges. In late March 2009, the Kremlin publicly released the full text of its new Arctic strategy. That document, first issued on September 2008, lays out a dramatic expansion of official Russian sovereign interests in what was previously agreed-upon as part of the so-called "global commons". (Government of Russian Federation, (2008)

Russia has many benefits from the Arctic sea. The rich hydrocarbons in Arctic shelf can provide the future energy security. The Arctic will enhance Russia's position as a major energy supplier. Arild Moe asserts that the major resources of the Arctic are still undiscovered. It has the potential to carry more than 40 percent of trade in future. The route will shorten the distance between Europe and Asia by about one-third. Russia can control world's most important trade passage connecting the biggest markets. Also, the region is important for Russia to gain strategic advantage vis-a-vis other countries. So from Russia's perspective, the Arctic region has a very special characteristic. Russia is the only country in the world with a nuclear icebreaker fleet. It has 20 icebreaker shipping fleet as compared to 13 of Canada and 1 of United States of America. One icebreaker costs around \$1 billion which is a big amount to invest. This gives it an advantage in shipping market. Also 80 percent of Arctic population is Russian. This has an importance in any effort to settle the sovereignty issue. Canada has started to settle its people in the northern islands to claim the territory. The internationalization of the Arctic has prompted Russia to have very strong Arctic

policy to safeguard its sovereign rights. The importance of the Arctic to Russia on the one hand, and growing international interest on the other, has fueled Russia's determination to make its role as a central Arctic nation eminently clear by political, economic, and military means (P. Barbora, 2013). In all respects, the Arctic region for Russia is the rediscovery of heartland of Halford Mackinder. Russia has realized the Arctic as the land of future power highlighted by the development of new technology. The Arctic is the land of promises for Russia.

The Energy Politics of the Arctic

The opening of the Arctic Ocean has brought up an entire new region where the geopolitics has to be recalibrated and rearranged. The countries have to reset their political ambitions, search for new partners and face the challenges from new foes. Many new issues, which were on the backburner for long, need urgent solutions now. C. Archer notices that militarization of the area is the most important political development that has affected the Arctic region over the last decade (Archer C., 1998). The peripheral countries have started increasing their military presence. Canada has started developing an army base in Resolute Bay besides developing a deep water port in Nanisivik (Baffin Island). It also has deployed 8 Arctic control vessels. The US on the other hand has started coast guard station to control the Bering Sea. Alaska region is already militarized by the United States since the Cold War days. The high profile and long-term presence of the U.S. military had such a dramatic affect on the course of Alaska that the result was tantamount to a "militarized landscape" (Hummel L.J, 2005) ^[10]. But now the focus is more towards the north. Russia has also created a separate force dedicated to the Arctic. There is possibility of conflict between NATO and Russia. The US is trying to internationalize the Arctic and dominate it through its NATO allies. This is antagonistic to Russian interest in the Arctic in any case. P. Barbora highlights that any foreign interest in the area, government, commercial or environmental, is seen as hostile intent (Babora P., 2013). W. Lorenz says that Russia has to be very cautious as lack of trust and transparency could easily lead to tensions and a militarization of the region, making it less attractive for investments. To avoid such a scenario, Russia and NATO should use existing forms of cooperation and extend them to the Arctic (Lorenz W., 2013) ^[12]. Besides militarization, other geopolitical issues are dealt under following sub headings.

Sea Lanes of Communication

This is yet another issue which holds much weight in the Arctic politics. The melting of the Arctic ice will provide an alternative route for shipping. The North Pole provides the shortest route to travel from west Europe to East Asia and from eastern coast of America to East Asia. These paths follow the great circle, traversing least distance. However, the Arctic melt is going to open two main passages - the Northern passage and the Northwestern passage. The Northern passage shortens the distance between west Asia and East Asia by 5000 miles. Given the rising global oil prices, these routes become more lucrative. These passages can become bone of contention between the countries (Wolf R.I., 1996). Russia, in any case is going to gain the most as the Northern passage mostly passes through its internal waters (within 200 nautical miles limit). It gives Russia an undisputed revenue collection right on this passage. The importance of the passage increases as it connects the biggest markets of the world. In 2000, president Vladimir Putin brought renewed attention to the

NSR, as part of a national economic strategy that marked the end of the decline and a new vision of the Northern Sea Route as a core component of Russia's economic development strategy (Antrim C.L. 2010) [2]. The Northwestern passage is the most disputed one. The US contests that it is an international passage, therefore it has the right to have free movement. On the contrary Canada considers it as an internal passage. The North passage became navigable for first time in summer of 2007. The passage which is so important can never be politically free in the future.

Territorial Disputes

Many territorial disputes have cropped up due to the shrinking of the Arctic sea ice. The conflict has accelerated due to the potential presence of energy resources. The ice melting has brought Barents Sea, Beaufort Sea, and North Bearing Sea into the focus. These seas are thought to possess large deposits of oil and natural gas but the proper delimitation has not yet been done. Thus, the dispute is inevitable. Canada and USA have disputes in Beaufort Sea, Russia and Norway has yet to delineate their respective boundaries in the Arctic Ocean. The southern boundary of Bearing Sea is delimited but the North Bearing (Chukchi Sea) does not have proper demarcation between Russia and America. These disputes are mainly due to the energy resources that Arctic is supposed to have. As much as one quarter of the world's hydrocarbon reserves are believed to be in the Arctic. This has resulted in conflicting territorial claims by five countries: Canada, Denmark, Norway, Russia and United States (Magraw D. *et al.*, 2008) [13]. In near future these disputes are unlikely to be resolved easily. The potential geopolitical battlefield for gaining strategic supremacy and economic gains is getting ready. Also, the local ethnic groups residing in the Arctic region are also claiming for the resources of the Arctic. This has made the issue more complex. The Inuit Circumpolar Council, which represents the Inuit of Denmark, Canada, the US and Russia, launched its Circumpolar Inuit Declaration on Arctic Sovereignty on 28 April 2009, stating "*It is our right to freely determine our political status, freely pursue our economic, social, cultural and linguistic development, and freely dispose of our natural wealth and resources.*" (Ebinger C.K and Zambetakis E., 2009) [8]. Also, a few new islands have emerged which are being claimed by the bordering countries. There are no legal fora to resolve disputes. The Arctic Council has been unable to resolve these issues since it is not a legal framework and is rather an intergovernmental forum. These issues need more deliberations and negotiations to evolve a common legal framework.

Energy Resource

Much of the importance of the Arctic Ocean is due to its energy resources. "*The potential hydrocarbon bonanza of the Arctic holds much potential economic Benefit*" (Ebinger C.L. and E. Zambetakis, 2009) [8]. The interest in the Arctic is fuelled by the availability of abundant natural resources. The speculation about large mineral resources is attracting growing number of countries towards the Arctic. Geological survey shows that the Arctic mainland holds vast deposits of natural resources especially natural gas and petroleum. The Arctic is emerging as the world's next hotspot for oil and gas development. The U.S. Geological Survey has estimated that the Arctic seabed could contain 20 percent of the world's oil and gas resources and Russia's Ministry of Natural Resources says the Arctic territory claimed by Russia could be home to twice the volume of Saudi Arabia's oil reserves. (Trenin D.

and Pavel K. Baev, 2010) [18]. The biggest issue is the utilization of the resources. The full potential of the resource is still not known. Siberian continental shelf, Beaufort continental shelf, area near Svaldberg island definitely has abundant resources. Russia has in fact started commercial exploitation at Yamal peninsula. The resource division is going to be critical in the Arctic Ocean geopolitics. Looking at the new changing global dynamics, Russia has decided to develop its own expertise in resource exploitation. It has developed the largest fleet of icebreaker ships capable of traversing the Arctic sea without interruption. Russia is developing nuclear powered ship for the Arctic Sea. The main problem is that the sea floor of the Arctic is not yet properly explored and its geological nature still remains undefined. This has given countries to claim the Lomonosov and Mendeleev ridge, an extension of their continental shelf and thus extend their EEZ boundary. Russia and the United States have taken different position in dealing with the delimitation of the Arctic Ocean. The United States, which did not sign the UN convention, supports the idea of "internationalizing" the Arctic as "humanity's common heritage." Russia, for its part, told the UN Commission on the Continental Shelf in 2001 that the underwater Lomonosov and Mendeleev ridges, which reach the North Pole, are continuation of its continental shelf. (Trenin D. and Pavel K.Baev, 2010) [18]. The resource division of the Arctic is going to have deeper geopolitical repercussion than any other aspect. Only future will tell whether the resource division will turn the Arctic Ocean into "Zone of Conflict" or "Zone of Cooperation".

Impediments

The Arctic Ocean is the ocean of opportunities and challenges. Countries have to face certain impediments in order to get the desired benefits. The harsh climatic conditions and inaccessibility make the Arctic a risky region to work. This brings in the strong governance and regulatory issues. Governance particularly in risky activities such as offshore oil exploration and offshore gas production is a task that requires a strong regulatory state, that is, a strong regulatory presence. Safeguarding arctic environment is another challenge. The countries have to ensure that the pristine ecology and biodiversity of the arctic is not disturbed. It cannot be dealt by any country alone. A strong collective effort is required which in itself a challenge. (Magraw D. and *et al.*, 2008) [13]. Secondly the Arctic route will always remain a seasonal route as complete opening of the sea-route will only take place in summers. It will thus act as an impediment for companies to invest in such uncertain venture. D. Marget in his article claims that shipping routes will be used for only a few months of the year, not the entire year. That is an approach that not every industry will want to undertake, and moreover, there will be transition periods from ice-free to ice that will increase the risks of their use. Likewise, the anticipated expansion of offshore oil and gas activities must be seen in terms of the ability of such structures to withstand the structural demands of the winter (Magraw D. and *et.al*, 2008) [13]. The other important impediment is the expensive technology required to extract minerals from the Arctic. An icebreaker ship cost more than \$1 billion. The countries will invest only when the opportunity cost is more. The future oil prices will determine the nature of investment in the Arctic. It will not be easy to define the EEZ boundaries. This is one of the highly contentious issues. The demilitarization of the Arctic is another challenge before the Arctic players. The most important question is whether the Arctic melt is going to take

place and if yes, then how long will it take. These are the questions which will be critical in defining the nature and trajectory of the geopolitics of the Arctic Ocean.

Conclusion

The answers to many key questions pertaining to the Arctic's energy and environment politics are buried deep inside the Arctic Ocean. Only time will tell how the geo-economics of Arctic will take shape. One thing which is very clear is that it is of utmost importance to Russia. D. Magraw reiterates that the Russian leadership has clearly emphasized the strategic importance of the Arctic "*to the country's wealth and competitiveness in global markets*" as a major source of revenue, mainly in energy production (Magraw D. and *et al.*, 2008) [13]. Another significant aspect that emerges after going through the literature is that Russia is not going to be at a loser in the geo-economic of arctic. It will get the largest share in the Arctic resource due to its large area. According H.J.D. Blij Russia will be winner irrespective of the way the territorial and resource ownership issue is settled. Whether it is the resource division or the strategic advantage, Russia will dominate the Arctic Ocean due to its unique geographic position. The climate change and the deteriorating fragile environment of the Arctic is a matter of concern not only for Russia but for the other arctic countries as well. Russian initiatives in this context is commendable. The recent vision document for 2030 on conservation of environment has explicitly emphasized on protection of the ecology of arctic region.

References

1. Anderson, A. (2009), *After the Ice: Life, Death, and Geopolitics in the New Arctic*, New York: Harper Collins Publishers.
2. Antrim C.L. (2010), "The Next Geographic Pivot: The Russian Arctic in 21st Century", *Naval War College Review*, 63(3):15-37.
3. B. A. Revich (1995), "Public health and ambient air pollution in Arctic and Subarctic cities of Russia", *The Science of the Total Environment*, 160 (161): 585-592.
4. Benitah, M. (2007), "Russia's Claim in the Arctic and the Vexing Issue of Ridges in UNCLOS", *American Society of International Law*, 11(27): 1-25.
5. Blunden, M. (2009). "The new problem of Arctic stability". *Survival*, 51(5), 121-142.
6. Blunden, Margaret (2012), "Geopolitics and the Northern Sea Route", *International Affairs* (Royal Institute of International Affairs), 88(1):115-129.
7. Chaturvedi, S. (1996), *The Polar Regions: A Political Geography*, Virginia: Wiley and sons.
8. Ebinger, C.K and Zambetakis E. (2009), "the geopolitics of Arctic melt" *International Affairs*, 85(1): 1215–1232.
9. Emmersion, C. (2011), "Russia's Arctic opening" [Online: web] accessed on 10 march 2012 URL: http://www.foreignpolicy.com/articles/2011/03/30/russias_Arctic_opening
10. Hummel L.J. (2005), "The U.S. Military as Geographical Agent: The Case of Cold War Alaska", *Geographical Review*, 95(1), 47-88.
11. Keskitalo, E.C.H. (2004), *Negotiating the Arctic: The Construction of an International Region*, New York: Routledge.
12. Lorenz, W. (2013), "Could the Arctic Warm up NATO–Russia Relations", *PISM Policy Paper Series*, 4(52):1-6.

13. Magraw, D. et.al (2008), "Polar Politics: Change in the Arctic", *American Society of International Law*, 102(5):151-160.
14. McKane R. B. *et al.* (1997), "Reconstruction and Analysis of Historical Changes in Carbon Storage in Arctic Tundra", *Ecology*, 78(4):1188-1198.
15. Robinson, P. J. and P. L. Finkelstein, (1991), "The development of impact-oriented climate scenarios." *Bull. Amer. Meteor. Soc.*, 72, 481–490
16. Sharma, R. (2012), "Arctic: chess board of global game", [Online: web] accessed on 10 April 2013 URL: Caluniv.ac.in
17. Smith, L. (2011), *The New North: The World in 2050*, London: Profile Books Ltd.
18. Trenin, D. and Pavel K. B., (2010), "The Arctic: a view from Moscow" *Carnegie Endowment for International Peace*, 21(3):1-26.
19. Zellen, B.S. (2009), *Arctic Doom, Arctic Boom: The Geopolitics of Climate Change in the Arctic*, California: ABC-CLIO