



## The Arctic as a Global Common

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### *Summary*

The Arctic deserves to be treated as a global common and a common heritage of mankind. The current discourse on the Arctic is dominated by the Arctic Five countries and the Arctic Council. This is clearly insufficient. These countries are moreover militarising the Arctic in pursuit of their narrow national interests. Their focus is limited to issues such as claiming Exclusive Economic Zones so that resources can be exploited, rights and resources for sea passage and the like. Protecting the ecology is low in their priority. Their business as usual attitude towards global warming combined with the prospects of the pollution of the Arctic due to increased shipping is likely to further degrade the ecology of the region. Instead of leaving the issue of the Arctic's future to the developed countries, developing countries like India must begin to play an active role, as they are doing in negotiations over space and climate change. It is time that a policy on this issue is debated and evolved in India. The first step in this regard will be for India to become an ad hoc observer to the Arctic Council. At the same time, India's 'strategic community' needs to take the lead in articulating the debating the idea of including the Arctic in the discourse on global commons.

## Introduction

Global warming is now on the top of the international, regional, national and local security agendas. Much of the focus has been on its impact in the form of disasters, droughts, floods, reduced food production, water stress, mass migration due to the rise of sea level and spread of vector borne diseases. International climate change negotiators are struggling to mitigate its future impact by reducing emissions of carbon and other green house gases.

The Arctic sea ice has receded by about 40 per cent since 1979.<sup>1</sup> “We are confronted by a new ocean” was the comment made in the Arctic Environmental Assessment of the US Navy released in August 2011.<sup>2</sup> The Arctic region is experiencing rising air and water temperatures, loss of volume in ice sheets and glaciers, melting of permafrost, and the pole ward migration of ecosystems and fishing stocks from warmer regions.<sup>3</sup> The Indian summer expedition contingent of 2011 to the Arctic has reported melting glaciers, receding snow levels, pollutants and changes in the life cycle of some organisms.<sup>4</sup>

Global warming will lead to the further melting of the Arctic in the near future. Once that happens, two geopolitical events will take place. The first will be a new recoverable source of oil and gas. The second will be new and shorter strategic sea routes that will change the pattern of energy flows on sea lanes of communications (SLOCs) with new security implications.

But what about the ecology of the Arctic Ocean? This is an international problem that needs the attention of the international community. This Issue Brief makes the case for an initiative to save the Arctic by declaring it as a global common.<sup>5</sup>

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<sup>1</sup> John Roach, “As Arctic Ice Melts, Rush Is on for Shipping Lanes, More”, *National Geographic News*, February 25, 2005.

<sup>2</sup> Bob Freeman, Office of the Oceanographer of the Navy, Press Release, “Navy Completes Arctic Environment Assessment”, August 16, 2011 at [http://www.navy.mil/search/display.asp?story\\_id=62199](http://www.navy.mil/search/display.asp?story_id=62199)

<sup>3</sup> Ibid.

<sup>4</sup> K.S. Sudhi, “Climate Change Impact is visible in the Arctic”, *The Hindu*, August 15, 2011.

<sup>5</sup> In the latter part of the 20<sup>th</sup> century, the term “commons” has expanded to include intangible resources such as the internet, open-source software, and many aspects of culture. The term “global commons” is more recent and has several meanings: those resources that are shared by all of humanity, such as the sky, the oceans, or even the planet itself; the sum of various local and regional commons across the world; and a philosophical position suggesting that humankind has both a right and a responsibility to steward the wise use of the earth for all living species, as well as for future generations. See, United Nations Institute of Training and Research, Introductory e-Course on Global Common at <http://www.unitar.org/event/introductory-e-course-on-global-commons>.

## Current Situation

According to the US Geological Survey, the Arctic contains 10 per cent of the world's known petroleum reserves and 25 per cent of undiscovered reserves.<sup>6</sup> These percentages are equal to 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas and 44 billion barrels of natural gas liquids.<sup>7</sup> Within the exclusive economic zone (EEZ) fossil fuel extraction is legitimate, but it needs to be environmentally friendly. Russia is expected to benefit the most since most fossil fuel reserves are within its jurisdiction in the Arctic region. In September 2010, Russia and Norway signed an Arctic border pact, ending the 40 year dispute over the Barents Sea and the Arctic coastline.<sup>8</sup> According to figures published by Institute of Oil and Gas Problems, Russia will be extracting up to 30 million tons of oil and 130 billion metric cubes of natural gas on its Arctic shelf by 2030.<sup>9</sup>

The present discourse on the Arctic is dominated by the Arctic Five countries who share a coast. These five countries are Russia, Norway, Canada, Denmark (Greenland) and the United States. Then there is the Arctic Council which includes three more countries that lie in the Arctic Circle – Sweden, Finland and Iceland.<sup>10</sup> The issues that exercise the five coastal countries are mostly related to resources and the associated national interests. All of them have recently released new and updated Arctic strategies and policies.<sup>11</sup> Although ideas on cooperation abound, in reality ecology is given low priority. There is an urge and a rush to lay claim to areas which are beyond the 200 nautical mile (nm) EEZ and the 350 nm extended continental shelf. A demonstration of sovereignty was seen in the Russian underwater expedition to the Lomonosov Ridge during which its national flag was planted under the North Pole in August 2007. What is being missed out is that above the ridge is the Arctic area which is a common heritage. However, narrow national perspectives have chosen to ignore long term ecological impacts. Canada is attempting to prove that the north west passage is in its territorial waters. Russia is focused on claiming the shelf

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<sup>6</sup> Rear Admiral David W. Titley and Courtney C. St John, "Arctic Security Considerations and the US Navy's Roadmap for Arctic", *Naval War College Review*, Vol. 63, No. 2, Spring 2010, p. 38.

<sup>7</sup> Charles K. Ebinger and Evie Zambetakis, "The Geopolitics of Arctic Melt", *International Affairs*, Vol. 5, No. 6, November 2009, p. 1216.

<sup>8</sup> Vladimir Radyuhin, "Russia, Norway Sign Arctic Border Pact", *The Hindu*, September 16, 2010.

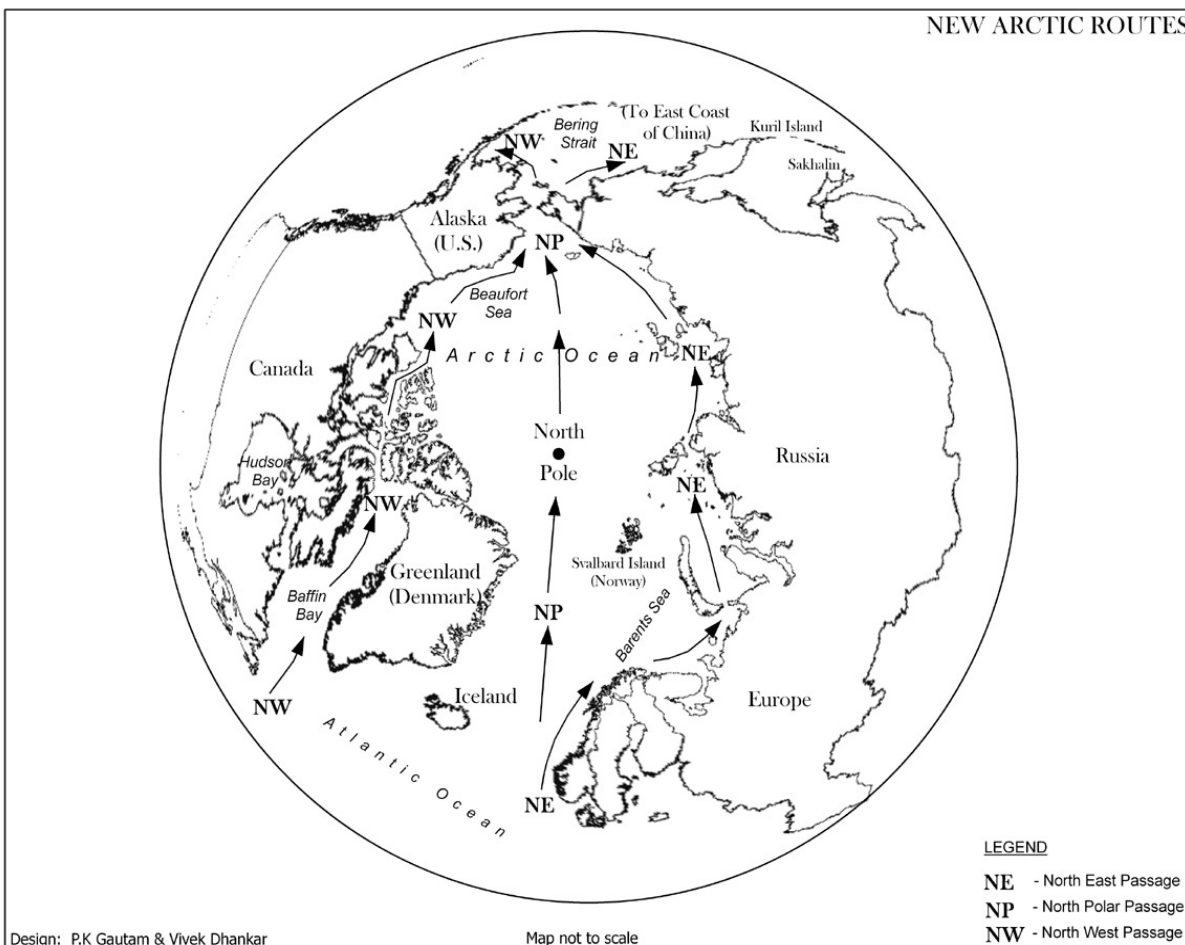
<sup>9</sup> Maj. Gen. V.I. Sosnin (Res), "The Arctic: A Complex Knot of Interstate Differences", *Military Thought*, Vol. 19, No. 3, 2010, p. 3.

<sup>10</sup> In 1991 eight Arctic countries signed the Arctic Environmental Protection Strategy (AEPS). The Ottawa Declaration of 1996 formally established the Arctic Council as a high level intergovernmental forum for promoting cooperation, coordination and interaction among the Arctic states, with the involvement of the Arctic indigenous communities and other inhabitants on common issues, in particular issues of sustainable development and environmental protection in the Arctic.

<sup>11</sup> Ian G. Brosnan, Thomas M. Leschine and Edward L. Miles, "Cooperation or Conflict in a Changing Arctic?", *Ocean Development & International Law*, Vol. 42, Nos. 1-2, January 2011, p. 175.

under the North Pole as its territory. Since it has not ratified the United Nations Convention on the Law of the Seas (UNCLOS), the United States is unable to stake its claim before the Continental Shelf Commission, but is taking all measures to control the resources and routes.<sup>12</sup>

The second impact of Arctic melt down will be opening up of new sea routes via the Arctic to the east coast of Asia and the west coast of North America (see map). It must be



kept in mind that the region is extremely cold and dark for half the winter. There is also a view that the route will remain closed in winter. Even in summer the going is difficult because floating ice poses a threat to shipping. Highly capable, motivated and trained personnel with appropriate equipment will be required to navigate the new strategic Arctic sea. Coastal infrastructure in the region is comparatively underdeveloped. Search and rescue operations will be very difficult. Though no match for the traditional warm water routes such as the Indian Ocean, sea faring powers are not going to be deterred by adverse weather.

<sup>12</sup> In 2008 the United States affirmed its commitment to the law of the sea in the Ilulissat Declaration and generally abides by the framework. See Brosnan et. al., p. 175.

The three routes in order of the possibility of being opened up are the northeast passage (also known as the northern passage), the northwest passage and the north polar passage that cuts straight across - when all the ice is melted. The northwest passage shortens the shipping route between Asia and the US east coast by 5,000 miles. The northeast sea route over Eurasia shortens shipping routes between Europe and North East Asia by 40 per cent, compared to the Suez or the Panama canals.<sup>13</sup>

The northeast passage is expected to be the first to open up in summer. If there is rapid ice melt then the direct route via the North Pole may be the preferred option. In 2008, one think tank predicted that the northeast passage will be navigable in 5-10 years time and the north polar route in 30-40 years time.<sup>14</sup> Importantly, special ship hulls to withstand the cold and ice conditions will need to be built and icebreakers will also be required. Russia has 20 nuclear powered ice breakers, Canada 12 and the United States one. It takes 8 to 10 years to build one at a cost of about \$1 billion. South Korea is the major builder of ice-capable ships.<sup>15</sup> Russia intends to build more powerful icebreakers, both diesel powered and three more nuclear powered icebreakers by 2020.<sup>16</sup> The private sector is investing in a fleet of Arctic tankers. In 2005, there were 262 ice-class ships in service worldwide and 234 more on order. The concept of double-acting tankers (which can steam bow first through open water and then turn around and proceed stern first to smash through ice) is a recent development. More such ships will be operating in these waters in the future. These new ships can sail unhindered to the Arctic's burgeoning oil and gas fields without the aid of ice breakers. Such breakthroughs are revolutionising Arctic shipping and turning what were once commercially unavailable projects into booming businesses.<sup>17</sup> The Russians similarly have ice breaking oil tankers which shuttle oil from the Siberian coast to ice free ports for transfer to conventional tankers for outward journey.<sup>18</sup> (In future, these could transport oil pumped offshore as well.) In August 2010, the first such tanker of 114,564 tonnes (SCF *Baltica*) escorted by two powerful nuclear icebreakers successfully delivered gas condensates to China skirting the Arctic coastline. The icebreakers cleared the way through 4,000 kms before reaching the Russian port of Pevek in Chukotsky Sea, from where the tanker continued the journey on its own. The route, it is claimed, is twice as fast

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<sup>13</sup> Ebinger and Zambetakis, p. 1221.

<sup>14</sup> "Strategic Geography, Global Issues, Arctic Resources and Shipping Routes", *Strategic Survey 2008*, International Institute for Strategic Studies, London, Routledge, 2008, p. II.

<sup>15</sup> Ebinger and Zambetakis, p. 1220.

<sup>16</sup> Alun Anderson, "The Great Melt: The Coming Transformation of Arctic", *World Policy Journal*, Vol. XXVI, No. 4, Winter 2009/10, p. 63.

<sup>17</sup> Scott G. Borgerson, "Arctic Meltdown: the Economic and Security Implications of Global Warming", *Foreign Affairs*, Vol. 87, No. 2, March/April 2008, p. 71; and Caitlyn L. Antrim, "The Next Geographic Pivot", *Naval War College Review*, Vol. 63, No. 3, Summer 2010, p. 25.

<sup>18</sup> Anderson, "The Great Melt," p. 58; and Antrim, "The Next Geographic Pivot", pp. 24-25.

as the Suez Canal route and about 15 per cent cheaper. The distance from the Russian port of Murmansk to Shanghai through the Arctic route is 10,600 km while it is 17,700 km via the Suez Canal.<sup>19</sup> Russia intends to carry out further trials that include shipping crude along this route.<sup>20</sup> China too has been investing more in conducting scientific research at the North Pole by setting up a research base and beginning expeditions north of the Bering Strait since 2000.<sup>21</sup>

## Militarisation

While the US Congress may question the science of climate change, the Pentagon thinks otherwise. A 2009 study of the security implications of climate change concluded that the Arctic is the key challenge for the US Navy.<sup>22</sup> Admiral James G. Stavridis, NATO's Supreme Allied Commander for Europe, in a foreword to Prof. Paul Berkman's *Environmental Security in the Arctic Ocean: Promoting Cooperation and Preventing Conflict*, warns that global warming and a race for resources could lead to conflict in the Arctic.<sup>23</sup> Writing about it in the *Naval War College Review*, the former US admiral and his co-author see the role of the US navy to include the US navy's Arctic road map and the setting up of a Task Force on Climate Change (TFCC) with a five year action plan. The authors even support ratification of the UN Convention on the Law of the Sea (UNCLOS) by the United States.<sup>24</sup> In September 2008 the 'Principles of State Policy of the Russian Federation in the Arctic until 2020 and Beyond' were approved. They call for creating a force capable of maintaining military security in various military and political situations.<sup>25</sup> Canada has beefed up its coastguard with four armed icebreakers. It is setting up military bases and a deep water port on the shore of the northwest passage with military facilities 595 kilometres from the North Pole. It is also raising a force made up indigenous and Inuit Indians to patrol the northern borders.<sup>26</sup>

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<sup>19</sup> Vladimir Radyuhin, "Russia opens short-cut Asia sea route", *The Hindu*, August 27, 2010.

<sup>20</sup> *Petroleum Intelligence Weekly*, Vol. XLIV, No. 41, October 11, 2010, p. 7.

<sup>21</sup> Jonathan Holslag, "The Persistent Military Security Dilemma between China and India", *The Journal of Strategic Studies*, Vol. 32, No. 6, December 2009, p. 833.

<sup>22</sup> Jeff Hecht, "US Navy Faces up to a new enemy- climate change", *New Scientist*, 10 March 2011, at <http://www.newscientist.com/article/dn20228>.

<sup>23</sup> Terry Macalister, "Climate Change Could Lead to Arctic Conflict", October 11, 2010, at <http://www.guardian.co.uk/environment/2010/oct/11/nato-conflict-arctic-resources?INTCMP=ILCNETTXT3487>.

<sup>24</sup> Titley and St. John, "Arctic Security Considerations," pp. 40, 42-46.

<sup>25</sup> Sosnin, "The Arctic: A Complex Knot of Interstate Differences", pp. 4-5.

<sup>26</sup> *ibid*, p. 5.

## Collapse of the Meridional Overturning Circulation

There is another aspect to this Arctic thaw, though it runs in a contrary direction. The Intergovernmental Panel on Climate Change has concluded that any abrupt change in the Meridional Overturning Circulation (MOC) in the North Atlantic is unlikely in the 21<sup>st</sup> century.<sup>27</sup> When this happens the thermohaline circulation of ocean currents called the North Atlantic conveyor, the system of ocean currents that brings warmth to Europe, may end. This will lead to the freezing up of Northern Europe.<sup>28</sup> One study commissioned by the Pentagon in 2003 painted such a futuristic scenario where the warm current or ocean conveyor collapsed as in the past 8,200 years ago, leading to severe winters in Europe.<sup>29</sup> In such a situation of a harsher winter in much of Europe and North America, the Arctic passage will also freeze and become impossible to use. Such predictions are typically 'wild card' scenarios and are therefore not worrying countries; and the rush for the Arctic continues. However, in the long-term such scenarios cannot be wished away and if they do unfold the result would be a global disaster.

## India's Presence in the South and North Poles

India is a consultative member of the Antarctic Treaty of 1961. The treaty makes the continent an area of peace and prohibits any activity of a military nature and bans nuclear weapons or radioactive waste disposal. The consultative status is given to states that demonstrate their interest by conducting substantial research such as establishing scientific stations or despatching scientific expeditions.<sup>30</sup> The over four decade old scientific expeditions mounted by India in the Antarctic are now taken to be routine. However, there is one major difference between the Arctic and the Antarctic. Unlike the Antarctic which is a continent, the Arctic is an ocean. The Arctic according to non-Arctic Asian countries is rightly called the "common heritage of mankind". In that spirit, South Korea, China, Japan, and India have sent scientific expeditions to the Arctic.<sup>31</sup> The first Indian scientific expedition was launched in 2007 to study climate change in the Svalbard archipelago of Norway.<sup>32</sup>

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<sup>27</sup> *Climate Change 2007: Impacts, Adaptation and Vulnerability, Summary for Policy Makers*, Part of Working Group II contribution to the Fourth Assessment Report of the IPCC, 2007, p. 17.

<sup>28</sup> Richard B. Alley, "Abrupt Climate Change", *Scientific American*, November 2004, p. 67.

<sup>29</sup> Peter Schwartz and Doug Randall, "An Abrupt Climate Change Scenario and Its Implications for United States National Security", October 2003, at <http://www.mapcruzin.com/climate-collapse-news/pentagon-report-abrupt-climate-change.htm>.

<sup>30</sup> *SIPRI Year Book 2010*, Stockholm International Peace Research Institute, 2010, p. 481.

<sup>31</sup> Ebinger and Zambetakis, "The Geopolitics of Arctic melt", p. 1223.

<sup>32</sup> P. Sunderarajan, "Foray into Arctic to Study Climate Change", *The Hindu*, August 4, 2007. Norway has a sovereign right over Svalbard region, which is governed by the Svalbard Treaty of 1920. The treaty has 40 member countries. India signed the treaty in 1923 which gives it the right to establish research stations there. See R. Ramachandran, "India, Norway for Joint Polar Research", *The Hindu*, February 7, 2011.

## Enlarging the Concept of Common Heritage of Mankind

The concept of the common heritage of mankind was first articulated in 1970, when the UN General Assembly adopted a Declaration of Principles governing the seabed and ocean floor. Now this concept includes outer space, the legal status of lunar minerals, the geostationary orbit, radio-frequencies used in space communication, solar energy, low earth orbits and La Grange points, internet etc.<sup>33</sup> Although policy makers frequently articulate the idea of global commons,<sup>34</sup> they have so far failed to address specific issues. One such issue is the preservation of the Arctic. Here, it is important to keep in mind the differences in the definitions of Area and High Sea. The Area is defined as the sea bed and ocean floor beyond the limits of national jurisdiction. The water surface above the Area is High Sea. While the latter is governed by principles of the freedom of seas, the Area has been declared as the common heritage of mankind.<sup>35</sup> The ecology of both the Area and the High Sea is integrated, and therefore, the issue needs to be approached both via the route of climate security and as an issue of preserving mankind's heritage.

With respect to climate security, it has been rightly argued that the historic stocks of green house gases have been contributed by developed countries during their industrialisation and that therefore they must accept the principal responsibility for global warming and for mitigating it. Capping emissions by the industrialised countries is important to arrest climate change. The second commitment period of the Kyoto protocol needs to be put in place as the current or the first commitment period expires in 2012. Ongoing negotiations indicate that the developed countries are not keen or willing to adhere to their mandated emission reduction targets. Instead they want the developing countries also to contribute towards mitigation. This is not climate justice. Agreement by developed countries to a just second commitment period emission reduction target will remain a key for protecting the Arctic from the perils of rising temperature. India, for its part, has demonstrated its willingness to undertake voluntary carbon emission cuts as an off shoot of its National Action Plan for Climate Change. However, the bulk of the mitigation has to be undertaken by the developed countries.

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<sup>33</sup> Review Essay, Daniel C. Turack, "The Concept of the Common Heritage of Mankind in International Law", of Baslar Kernel's *The Concept of the Common Heritage of Mankind in International Law* (The Hague/Boston/London: Martinus Nijhoff Publishers, 1998), *Journal of Third World Studies*, Fall 2002, at [http://findarticles.com/p/articles/mi\\_qa3821/is\\_200210/ai\\_n9115940/?tag=content;col1](http://findarticles.com/p/articles/mi_qa3821/is_200210/ai_n9115940/?tag=content;col1).

<sup>34</sup> See, for instance, Foreign Secretary's Address at Delhi Policy Group/MIT Seminar on "Asian Security Challenges", New Delhi, January 11, 2011, *Strategic Digest*, Vol. 41, No. 2, February 2011, p. 115; and Speech by Foreign Secretary at National Defence College on "Challenges in India's Foreign Policy", New Delhi, November 18, 2010, *Strategic Digest*, Vol. 40, No. 12, December 2010, p. 1193.

<sup>35</sup> "Principles Governing the Area", *Bernaert's Guide to The 1982 UN Convention On The Law Of the Sea*, pp.1-2, at <http://bernaerts-sealaw.com/AREA.pdf>.



At the same time, not much has happened in the Arctic Ocean to protect it as a common heritage of mankind and indeed for all living creatures.<sup>36</sup> What has especially not been adequately focused upon is the adverse impact of increased shipping through the Arctic. Increased volumes of shipping traffic will accelerate warming in the Arctic. It has been estimated that black carbon or soot pollution from engine exhaust could increase warming in the region by 17 to 78 percent.<sup>37</sup> According to Greenpeace's Russian offshoot, ships would increase the risk of pollution from accidents and also increase exploitation of oil and gas which would in turn lead to more global warming.<sup>38</sup> Environmental groups fear devastating oil spill events, such as the 1989 Exxon Valdez tanker spill in Alaska. A large spill in the Arctic cannot be contained or mitigated.<sup>39</sup> Think tanks such as Pew, Oceana and WWF point out that the oil industry is not prepared for a major pollution incident.<sup>40</sup> Worldwide, the recent oil spills in the Gulf of Mexico in the US and Dalian on the north coast of China seem to have made no impression on environmental policy.

## Conclusion

The Arctic deserves to be treated as a global common and a common heritage of mankind. The current discourse on the Arctic is dominated by the Arctic Five countries and the Arctic Council. This is clearly insufficient. These countries are moreover militarising the Arctic in pursuit of their narrow national interests. Their focus is limited to issues such as claiming Exclusive Economic Zones so that resources can be exploited, rights and resources for sea passage and the like. Protecting the ecology is low in their priority. Their business as usual attitude towards global warming combined with the prospects of the pollution of the Arctic due to increased shipping is likely to further degrade the ecology of the region. Instead of leaving the issue of the Arctic's future to the developed countries, developing countries like India must begin to play an active role, as they are doing in negotiations over space and climate change. It is time that a policy on this issue is debated

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<sup>36</sup> The native groups such as the Inuit have formed the Inuit Circumpolar Council (ICC) in 1977. They also want to put an end to their exploitation and defend their right to their environment not being destroyed. See *The Economist*, March 5, 2011, p. 64.

<sup>37</sup> Matthew McDermott, "Increased Arctic Shipping Means Even More Warming and Less Ice", New York, *Science and Technology*(science), October 26, 2010 at <http://www.treehugger.com/files/2010/10/increased-arctic-shipping-means-even-more-warming-less-ice.php>. Also see *The Hindu*, October 28, 2010.

<sup>38</sup> Jonathan Leake, "Russia to smash Arctic icecap in search of oil", *The Times of India*, September 20, 2010.

<sup>39</sup> Jefferey Short's comment in *Nature* of April 2011, as quoted by John Vidal, "Why an oil spill in Arctic waters would be devastating", *Guardian Newspaper* as featured in *The Hindu*, April 24, 2011.

<sup>40</sup> John Vidal, "Activists Occupy oil rig in fight to prevent 'risky' Arctic drilling", *Guardian Newspaper* as reproduced in *The Hindu*, April 24, 2011.

and evolved in India. The first step in this regard will be for India to become an ad hoc observer to the Arctic Council.<sup>41</sup> At the same time, India's 'strategic community' needs to take the lead in articulating the debating the idea of including the Arctic in the discourse on global commons.

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<sup>41</sup> Six Non Arctic States with observer status are France, Germany, the Netherlands, Poland, Spain and the UK. China, the European Union, Italy, Japan and South Korea have Ad Hoc Observer Status. See <http://reference.findtarget.com/search/Arctic%20Council/>.