

Strategic Security Analysis

India's G20 Presidency: Opportunity to Resume Engagement in the Arctic

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The Geneva Centre for Security Policy

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Strategic Security Analyses

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Key points

- The Arctic lies at the intersection of several issues with global consequences such as climate change, increased accessibility to and availability of resources, and global strategic contestation that have made the region increasingly relevant to the world.
- Temperatures in the Arctic continue to rise at four times the global annual average, driving many of the changes under way there, most prominently sea-level rise and the thawing of permafrost, which impact both local ecosystems and the global climate system. International scientific cooperation and data monitoring and sharing are crucial to understanding the impact of climate change, counteracting its negative effects, and enhancing living conditions and economic activity.
- Apart from a few limited pockets of cooperation that still exist, cooperation between Russia and the West with regard to the Arctic has largely been put on hold since the start of the conflict in Ukraine. The current absence of research and data sharing among scientists is threatening to jeopardise scientists' understanding of the warming trends in the Arctic, exacerbating the environmental emergency the region in particular is facing.
- One of the few channels that still exists for constructive dialogue on a range of Arctic-related issues is the GCSP's "'High North Talks", through which discreet exchanges on various important issues continue.
- Among other things, the G20 agenda includes climate change, sustainable development and the environment, all of which are under threat due to the cessation of Artic-related scientific engagement. The G20 also represents a rare platform where engagement between Russia and the West has not yet ceased.
- The suspension of dialogue and scientific exchange vis-à-vis the Arctic is driven by a deep distrust that needs to be overcome by an interlocutor that is acceptable to all stakeholders. India's theme for its G20 presidency resonates strongly with the Arctic and its impact on the world. The resumption of Arctic-related scientific exchange is an easy deliverable with global benefits that India, which has the necessary legitimacy, credibility and relevance, should use its G20 presidency to strive for.

Much of the research and data sharing among scientists have been put on hold due to restrictions imposed by funding agencies in Europe and the United States.

Introduction

On 24 February 2022 Russia's president, Vladimir Putin, announced the launching of a "special military operation" in Ukraine. In protest against Russia's actions, on 3 March 2022 seven¹ of the eight members of the Arctic Council (AC) (known as the A7) announced a historic suspension of participation in all the AC's activities.² This unprecedented step, taken for the first time since the council's formation in 1996, came during Russia's 2021-2023 presidency of the AC.

Moreover, Finland and Sweden, both AC members, submitted applications for NATO membership in May 2022. If their applications are successful, this could lead to an eventual AC comprising Russia pitted against seven NATO members. The A7 issued a joint statement on 8 June 2022 on the limited resumption of AC cooperation activities "on projects that do not involve the participation of Russia". Lending support to an isolated Russia, on 15 October 2022 China refused to recognise the legitimacy of the limited resumption of the AC's activities and stated that it will continue to collaborate with Russia and other Arctic nations in pursuance of its interests. 4

Current status

Apart from cooperation between the US Coast Guard and the Russian Border Guard on maritime safety on either side of the Bering Strait⁵ and the enforcement of treaty-based commitments such as the ban on fishing in the central Arctic Ocean⁶ and aeronautical and maritime search and rescue in the Arctic, there is a complete lack of engagement between Russia and the West in and with regard to the region.8 Much of the research and data sharing among scientists have been put on hold due to restrictions imposed by funding agencies in Europe and the United States. Several field experiments originally planned for the region have shifted to the North American or European Arctic. The curbs have also led to the cutting off of Russian data on permafrost research, which is a key source of information for climate models that help researchers to predict future warming.9 The suspension is despite the existence (since 2018) of a legally binding Agreement on Enhancing International Arctic Scientific Cooperation among the eight AC members, 10 the sole purpose of which is to enhance cooperation in scientific activities to develop scientific knowledge about the Arctic. The agreement also has clauses on the entry/ exit of personnel, equipment and material into/from member states' territories, access to each other's research infrastructure and facilities, and the sharing of data."

The Ukraine conflict has resulted in the cessation of funding for dozens of international scientists at Russia's science station in Siberia, which has been studying climate change in the Arctic environment since 2000. These scientists maintain instruments that measure how quickly climate change is thawing the Arctic permafrost and how much carbon dioxide and methane are being released as a result. This is likely to lead to the interruption of the continuous measurements at the station since 2013 and will compromise scientists' understanding of the warming trend in the Arctic. Also, since two-thirds of the permafrost region is in Russia, the cessation of engagement will dramatically reduce our understanding of global changes to permafrost.¹²

A leading researcher specialising in climate change and greenhouse gases with vast experience in both the Arctic and Antarctic has noted that scientists' access to field sites has been cut, thereby preventing the As an unintended consequence of the suspension of scientific cooperation in the Arctic, the Arctic research of the five AC Asian observer countries – China, India, Japan, Singapore and South Korea – has also been affected.

"ground truthing" of data, increasing the inability to maintain data quality (protocols), and resulting in the loss of data sharing, all of which are leading to an "environmental emergency". 13

As an unintended consequence of the suspension of scientific cooperation in the Arctic, the Arctic research of the five AC Asian observer countries – China, India, Japan, Singapore and South Korea – has also been affected. This is because according to the rules governing their activities, observer countries' engagement in the council is primarily at the level of working groups and they can only propose projects through an Arctic state (i.e. the eight permanent members) or a permanent participant. With the freeze in AC affairs, these countries will have to significantly scale down their Arctic research through AC working groups and rely solely on bilateral partnerships with Arctic countries. It is therefore evident that while the climate agenda is unrelated to political controversies over Ukraine, the non-Arctic states have become hostages to the deterioration of relations between Russia and the West.

The suspension of scientific collaboration in the Arctic has also given rise to accusations of duplicity on the part of the West and of the hollowness of its commitments to mitigating global warming. For what some analysts, strategists, and opinion makers claim to be narrow and parochial gains, research and scientific collaboration in the Arctic have been abandoned, with global repercussions. This dichotomy is also apparent in the views of those who question India's legal purchase of oil and gas from Russia in its national interests while remaining tight-lipped about the unilateral stoppage of scientific exchange vis-à-vis the Arctic.

The Arctic and climate change

In 2013 then UN Secretary-General Ban Ki-moon warned that the "the Arctic is a bellwether. The risks there should warn our whole world". In a seminar in Svalbard, Norway on 9-10 May 2017 the Norwegian minister of climate and the environment cautioned that "What happens in the Arctic, does not stay in the Arctic", while flagging the process of Arctic warming, which is likely to have disastrous consequences worldwide.

Although it has been known for some time that the Arctic is warming faster than the rest of the world, new studies show that the region is heating up four times faster than other parts of the Earth.¹⁷ The two direct fallouts of accelerated Arctic warming are sea-level rise and the thawing of permafrost.

Sea-level rise

From 1971 to 2019 the Arctic snow cover and the extent of Arctic Sea ice shrank by 21% and 43%, respectively, and all regions of the Arctic experienced a net loss of land ice. This is a major contributor to global sea-level rise. Greenland is the largest regional source of land-ice loss, accounting for 51% of the Arctic's total. Total ice loss from the Greenland and Antarctic ice sheets during the period 1992-2011 is equivalent to 11.7 mm of sea-level rise. According to the latest estimates, the Arctic will be largely ice free by the late 2030s, thereby profoundly weakening its function as a global cooling system.

A *National Geographic* report states that rising sea levels can have devastating effects on coastal habitats, causing destructive erosion; wetland flooding; aquifer and agricultural soil contamination with salt; and lost habitat for fish, birds and plants.²¹ It further states that flooding in low-lying coastal areas is forcing people to migrate to higher ground, and millions more are vulnerable to flood risk and other climate-change

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effects. Since 40% of the world's population lives within 100 km of the coastline,²² the rising sea levels are expected to flood hundreds of cities worldwide.

Cognisant of the increasing and "unthinkable" risks of rising seas to billions around the world, with profound implications for security, international law, human rights and the very fabric of societies, on 14 February 2023 the UN Security Council held its first-ever debate on the phenomenon's global implications.²³ Speaking in the debate, António Guterres, the UN Secretary-General, described sea-level rise as a threat multiplier that is "creating new sources of instability and conflict" and warned that "in the coming decades, low-lying communities - and entire countries - could disappear forever", with the world witnessing "a mass exodus of entire populations on a biblical scale".24 He stated that this would occur in any temperature rise scenario, and even if global warming is "miraculously" limited to 1.5 degrees Celsius, "countries from Bangladesh to China, India and the Netherlands will all be at risk" and "Mega-cities on every continent will face serious impacts, including Lagos, Bangkok, Mumbai, Shanghai, London, Buenos Aires and New York". 25 He further warned that "The danger is especially acute for some 900 million people living in coastal zones at low elevations - one out of every ten people on earth".26

Permafrost thaw

As permafrost melts or degrades it emits methane and carbon dioxide, and "methane's impact on climate change has been found to be 25 times greater" than carbon dioxide "over a 100-year period". Furthermore, "While the Arctic was previously considered a carbon sink, it has now emerged that the region is emitting more carbon than it is absorbing, largely due to permafrost thaw". It has been estimated that "the world's permafrost contains up to 1,700 billion tonnes of carbon, which is almost double the amount of carbon in the Earth's atmosphere". Its complete degradation would lead to catastrophic consequences all over the world.²⁷

Impact of the suspension of Arctic-related scientific engagement

An article in *High North News* lamenting the stoppage of scientific collaboration vis-à-vis the Arctic remarked that "the people in the North are living with climate changes that do not take breaks, even though the cooperation with Russian scientists has done so". The breakdown in such scientific engagement also presents a practical problem, given that Russia stretches over 53% of the Arctic Ocean coastline and its Arctic population accounts for nearly half of the population living in the Arctic region. Even in terms of the region's natural resources and hydrocarbon reserves, Russia accounts for more than the rest of the Arctic states put together. In 2007, for example, Russian reserves of natural gas made up about 81% of the total reserves of the Arctic states. Russia, therefore, is a major stakeholder in the Arctic and difficult to ignore.

According to a leading expert on the Arctic, ³¹ it is essential to accumulate data regularly from sensors distributed throughout the region for the study of the:

- · conditions, dynamics and consequences of permafrost thawing;
- · dynamics of ice melting in the Arctic seas;
- · acidification of the Arctic Ocean and its consequences;

- · region's weather conditions and weather forecasting;
- · loss of biodiversity in the Arctic; and
- · degradation of environmental conditions for indigenous peoples.

He avers that without continuously updated data from all across the Arctic, it is impossible to create climate change mathematical models that predict the consequences for the environment. The data is also needed to study the mechanism of the unpredictable consequences of climate change in the Arctic for distant lands, especially non-Arctic states.

This expert also considers international Arctic-related scientific cooperation to be necessary for the development of geoengineering methods to reflect solar energy ("solar geoengineering") and to reduce the concentration of carbon dioxide and other greenhouse gases in the atmosphere in order to counteract negative climate change and enhance living conditions and economic activity. He states that it is fundamentally impossible to achieve this without a coordinated policy among states in the region, without which climate change could lead to catastrophic outcomes. Reiterating that the exclusion of Russia from Arctic-related scientific research is irrational and not in the long-term interests of both Arctic and non-Arctic states, he calls for joint international efforts to strive for the resumption of scientific exchange vis-à-vis the region.

The study of the Arctic is therefore critical to Indian scientists and it is for this reason that India is the only developing country apart from China to have a permanent research station in the Arctic, which was established in 2008.

India and the Arctic

The relevance of the Arctic for India can be broadly explained in terms of four categories: scientific research, climate change and the environment, economic and human resources, and geopolitical and strategic factors.

The Arctic and the Himalayas, although geographically distant, are interconnected and share similar concerns. The Arctic meltdown is helping the Indian scientific community to better understand the glacial melt in the Himalayas, which have often been referred to as the "third pole" and have the largest freshwater reserves after the North and South Poles. They are also the source of the main rivers in India, including the Ganga and Brahmaputra, the basins of which support a population of about 600 million and 177 million, respectively,³² and generate over 40% of India's gross domestic product (GDP).³³ The study of the Arctic is therefore critical to Indian scientists and it is for this reason that India is the only developing country apart from China to have a permanent research station in the Arctic, which was established in 2008.³⁴ India has undertaken 13 scientific expeditions to the Arctic since 2007.³⁵

The changes occurring in the Arctic are yet to be fully understood, but apart from affecting global weather, climate and ecosystems, they also influence the monsoons in India.³⁶ During the south-west monsoon season from June to September India receives nearly 80% of its annual precipitation. India's agriculture, which is the primary source of livelihood for about 58% of the country's population and contributes around 20% of GDP,³⁷ is directly dependent on the monsoons. Therefore, a deficient monsoon can have a significant negative impact on both India's economy and other human and development indices.

The rising sea levels can have a significant impact not only on India's 1,300 island territories and maritime features and the welfare of India's 1.4 billion people, but also in the country's immediate neighbourhood.³⁸ It has been estimated that by 2100, if sea levels rise by the projected 80 cm or higher, up to 30 million people in countries like Bangladesh would have to

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be relocated.³⁹ To put this in perspective, this is three times the 10 million refugees that fled to India before the 1971 India-Pakistan war. The most obvious country of refuge would be India. The burden on India because of such a large-scale influx of refugees caused by rising sea levels would be nothing short of catastrophic. The underwater meeting held by the Maldivian cabinet in 2009 to flag the existential threat facing the island nation stemming from rising sea levels is all too vivid in the collective public memory.⁴⁰ India would be the first port of call for Maldivians fleeing from such a catastrophe.

Some positive consequences are also projected to arise from the global warming-induced changes in the Arctic. The warming Arctic is leading to the increased availability of and accessibility to the region's resources, which have the potential to mitigate India's energy and rare earth mineral deficiencies.

Geopolitically, the Arctic is of special significance for India, because its two most significant strategic partners, the United States and Russia, and its principal adversary, China, are locked in an ever-increasing direct strategic contestation. While India has adroitly balanced the geopolitical and geo-economic ramifications of the Russia-Ukraine conflict, it also needs to remain engaged in the Arctic to secure its increasing national interests.

The policy document *India's Arctic Policy: Building a Partnership for Sustainable Development* was released on 17 March 2022, and is based on six pillars, three of which are science and research, climate and environmental protection, and governance and international cooperation. These pillars effectively impel India to strive for the resumption of Arctic-related scientific research and exchange. The country's focus on cryosphere research has assisted in increasing the understanding of the Arctic, and its Arctic research includes atmospheric, biological, marine and glaciological studies. Over 25 institutes and universities in India are currently involved in such research.

Possible role for the G20 and India as a mediator

The resumption of Arctic-related scientific exchange is an imperative that can be ignored only at the cost of collective detriment to the world. Since there is a deep trust deficit among stakeholders, the resumption of scientific exchanges on developments in the region will need a mediator with legitimacy and credibility that is acceptable to all such stakeholders. It will also require the platform of a multilateral mechanism that has representation from not only the Arctic states, but the world at large. No other country and organisation other than India and the G20, respectively, fit this bill.

India

Among other things, the promotion of security and stability in the Arctic and the pursuit of international cooperation and partnerships with all stakeholders in the region are listed as objectives in India's official Arctic Policy. Most importantly, in keeping with India's civilisational ethos of "Vasudhaiva Kutumbakam – the world is but one family", India offers its readiness to "play its part and contribute to the global good of in its engagement with the Arctic. The resumption of scientific cooperation vis-à-vis the region is one such global good that India could strive for by bringing together the conflicting protagonists.

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The theme of India's G20 presidency, "Vasudhaiva Kutumbakam" or "One Earth One Family One Future" encapsulates the idea that the world is one family and "affirms the value of all life – human, animal, plant, and microorganisms – and their interconnectedness on the planet Earth and in the wider universe".46

"The theme also spotlights LiFE (Lifestyle for Environment), with its associated, environmentally sustainable, and responsible choices, both at the level of individual lifestyles as well as national development, leading to globally transformative actions resulting in a cleaner, greener and bluer future." Speaking on the occasion of India's assumption of the G20 presidency, Prime Minister Narendra Modi emphasised that the greatest challenges we face – among others, climate change – "can be solved not by fighting each other, but only by acting together". He also stated that India's priority during the presidency would focus on healing our "One Earth", creating harmony within our "One Family" and giving hope for our "One Future". The themes of India's Arctic Policy and G20 presidency, therefore, are closely aligned.

Climate change is a key priority for India's G20 presidency.⁵⁰ Because the Arctic is the bellwether for global climate change and is undergoing accelerated warming, it is therefore a perfect fit for India to strive towards the resumption of scientific exchanges vis-à-vis the region. India's G20 priority is also to press for *reformed multilateralism* towards creating a more accountable, inclusive, just, equitable and representative multipolar international system fit for addressing 21st century challenges. The resumption of engagement on Arctic-related cooperation and research would be the perfect low-hanging fruit that India's leadership of the multilateral G20 mechanism could achieve.

G20

The G20, set up in 1999, is the premier intergovernmental forum for international economic cooperation that plays an important role in shaping and strengthening the global architecture and governance. The G20 members represent around 85% of global GDP, over 75% of global trade and about two-thirds of the world's population.⁵¹

Even though G20 members mainly discuss economic and financial matters and coordinate policy on issues of mutual interest, they have also invariably deliberated on other key issues, such as the Iranian nuclear plant at the 2009 summit, the civil war in Syria at the 2017 summit and the Russia-Ukraine conflict at the 2022 summit.⁵²

As far as the Arctic is concerned, the G20 is extremely relevant. Eleven of the 19 G20 member countries, representing a majority 60% of the forum, have an Arctic stake, with three of them – Canada, Russia and the United States – being permanent members of the AC. Eight G20 countries (China, France, Germany, India, Italy, Japan, South Korea and the United Kingdom) are AC observers. Furthermore, three other AC members (Denmark, Finland and Sweden) and two observers (Spain and Poland) are also represented at the G20 by virtue of their European Union (EU) membership (the EU is a G20 member). Thus, six of the eight permanent AC members and 12 of the 13 observers are represented at the G20 (see Table 1).

Among other issues, the G20 agenda includes climate change, sustainable development and the environment,⁵³ all of which are under threat due to the cessation of Arctic-related scientific engagement. The G20 also represents a rare platform where engagement between Russia and the West has not yet ceased.

Table 1: Overlapping Arctic Council and G20 representation

AC members	G20 representation
United States	Member
Russia	Member
Canada	Member
Denmark	
Finland	Represented through the EU
Sweden	
Norway	-
Iceland	-

AC observers	G20 representation
India	Member
France	Member
Germany	Member
Italy	Member
Japan	Member
China	Member
South Korea	Member
United Kingdom	Member
Poland	EU member
Netherlands	EU member & guest country
Spain	EU member & guest country
Singapore	Guest country
Switzerland	-

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The G20 presidency guides the forum's agenda for one year and hosts its summits. The mechanism consists of two parallel tracks: the Finance Track and the Sherpa Track. Within the two tracks there are thematically oriented working groups (WGs) in which representatives from the relevant ministries of the member countries, as well as from invited/guest countries and various international organisations, participate. The "Sherpas" of member countries are personal emissaries of the leaders of their respective member states. Under the Sherpa Track there are 13 WGs and two "initiatives" to discuss priorities and provide recommendations. Tenvironment" and "Climate Sustainability" are two such WGs that focus on environmental and climate issues and ways to mitigate and adapt to climate change.

Additionally, G20 engagement groups (EGs) bring together countries' civil society organisations, parliamentarians, think tanks, women, youth, labour, businesses and researchers. These groups, comprising non-governmental participants, provide recommendations to the G20 leaders and contribute to the forum's policymaking processes. Among others, the 11 EGs include Science (S20), which presents policymakers with consensus-based science-driven recommendations formulated through task forces comprising international experts; and Think (T20), which serves as an "ideas bank" for the G20 by bringing together think tanks and high-level experts to discuss relevant international socio-economic issues. T20 recommendations are synthesised into policy briefs and presented to G20 WGs, ministerial meetings and leaders' summits to help the G20 deliver concrete policy measures.

Since the immediate resumption of scientific engagement vis-à-vis the Arctic is one of the crying needs of the hour, it is recommended that the Sherpa Track should be used to expeditiously revive such engagement. The S20 and T20 EGs could be used for driving a longer-term reconciliation process among AC members.

INDIA'S G20 PRESIDENCY: OPPORTUNITY TO RESUME ENGAGEMENT IN THE ARCTI

The resumption of Artic-related scientific exchange is an easy deliverable with global benefits that India, which has the necessary legitimacy, credibility and relevance, should use its G20 presidency to strive for.

Conclusion

The Arctic is no longer the distant and cold region that it was once considered. It stands at the crossroads of several issues with global consequences such as climate change and the increased accessibility and availability of resources that have made the region increasingly relevant to the world, while it is also an arena of global strategic contestation. As such, the stakes of a large portion of humanity cannot be decided by a select few. The suspension of Arctic-related dialogue and scientific exchange is driven by a deep distrust that needs to be overcome by an interlocutor acceptable to all stakeholders. India's theme for its G20 presidency resonates strongly with the issues affecting the Arctic and the region's impact on the world. The resumption of Artic-related scientific exchange is an easy deliverable with global benefits that India, which has the necessary legitimacy, credibility and relevance, should use its G20 presidency to strive for.

The Geneva Centre for Security Policy endorses this call for resumed dialogue on Arctic-related issues. Since 2022 the GCSP has convened the "High North Talks" at an informal level, which is an unofficial dialogue platform that aspires to promote peace and international collaboration visà-vis the Arctic. The talks are held in Geneva, Switzerland, which enables the hosts to utilise relevant UN and diplomatic networks to further this cause. In the spirit of International Geneva, the GCSP convenes the process as an inclusive and multi-regional dialogue that addresses a range of urgent and interconnected issues that arise in the Arctic setting, including security, the environment and economic development. The GCSP also hosts the GlobalArctic project, comprising a network of practically minded people, mostly from all disciplines of academia, and from around the world. They share a profound concern about what is happening in the Arctic, as well as about what this means for the planet, especially ecologically and geopolitically. Through these practical measures the GCSP supports efforts to restart dialogue focusing on the region and is ready to act in an advisory capacity for related initiatives at the Track 1 level.

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