Briefing Note
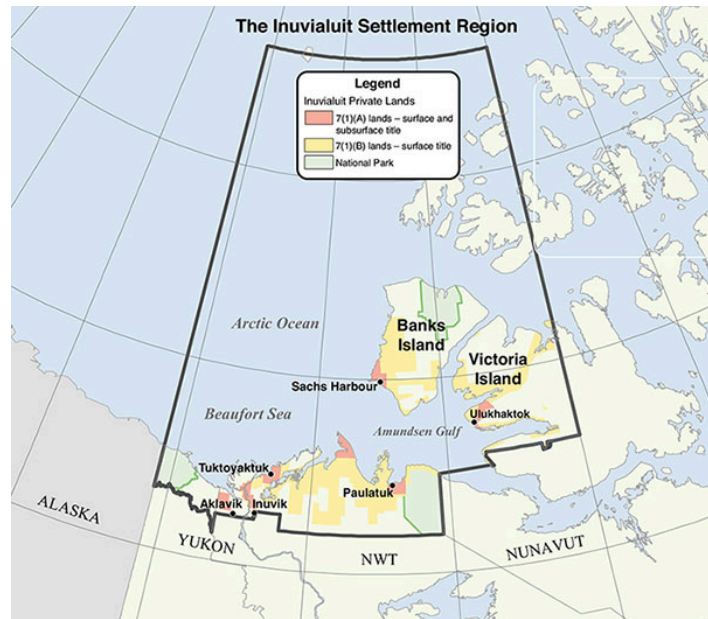
Sustainable development and notions of security

Justin Barnes

Introduction

Climate change is putting unique ecosystems and cultures at risk of severe consequences (IPCC, 2014: 12). Canada's communities in the Far North are typically more vulnerable to environmental pollutants and the impacts of climate change than their counterparts living in southern Canada (Stoddart & Smith, 2016). Climate change in the Canadian Arctic thus poses a challenging problem for policy makers and their constituents. Significant environmental changes in the Arctic region create new social issues, economic opportunities and challenges for all Arctic nations and their peoples. The creation of an 'Arctic Paradox' – the combined fear of climate change and the anticipation of resource development – raises questions about how the various levels of Canadian society will respond to the need for socially responsible policies that help northern communities adapt to the consequences of environmental changes as well as manage their new economic interests in the Arctic. This briefing note identifies and examines interlinkages between climate change and sustainable development, environmental security, and adaptive capacity through a case study in two communities in the Inuvialuit Settlement Region (ISR): Inuvik and Tuktoyaktuk. The ISR is located in Canada's western Arctic and includes significant portions of the Beaufort Sea coastline (Figure 1). It was established in 1984, following the Inuvialuit Final Agreement between the Inuvialuit and the Government of Canada. Inuvik, the largest community in the ISR, is located on the East Channel of the Mackenzie Delta. It is considered an administrative center in the region that is home to Indigenous, local, regional, territorial, and federal government offices. Tuktoyaktuk is a second, smaller Inuvialuit community located on the coastline of the Beaufort Sea (see Figure 1).

Both communities have experienced significant changes to the local climate and landscape. These changes have resulted in a variety of impacts on the people and ecosystems in the region. In

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addition to the challenges posed by climate change, both communities are also struggling with a number of other social problems including mental health challenges and food insecurity. Moreover, the region is expected to contain large oil and gas deposits both onshore, and under the Beaufort Sea. Both communities have experienced the economic boost oil and gas companies have provided during times of exploration and testing but the abandoned work camps on the outskirts of town are testament to the unstable nature of the resource economy in northern Canada.

This article provides an overview of the primary findings of a study that sought to understand how the

Figure 1: Map of The Inuvialuit Settlement Region
Source: Government of Canada, 2011 - https://www.rcaanc-cirnac.gc.ca/eng/1427987089269/1543249556315

communities of Inuvik and Tuktoyaktuk perceive climate change and define sustainable development in relation to oil and gas development. Key-informant interviews were held with leaders in both towns to discuss these issues during September and October of 2019. The primary question discussed in this paper is: how do the two communities hope to address the inevitable changes brought about by both the environmental challenges they are experiencing, and the economic demands of a growing Canadian political economy which is turning its attention to the resources of the North?

Sustainable development and environmental security

Policy approaches concerning development have been refocused by the rise of 'sustainable development' as a legitimate response to environmental and social concerns on the international and domestic level. Sustainable development has been deemed by many experts as a multifaceted approach to balancing the environmental concerns of human activities and the socio-political concerns regarding human development issues. While sustainable development has become a globally recognized term for 'responsible growth', opinion about what sustainable development means, and how it should be measured, remains diverse and often complex.

Dalby (2013) has acknowledged the link between sustainable development and environmental security and recognized the parallel international discussions surrounding resource management, environmental degradation, and development that led to the institutionalization of sustainable development in the United Nations' World Commission on Environment and Development report *Our Common Future* (1987). The World Bank (1995) once tied the concept of environmental security to the concepts of intergenerational and intragenerational equity by arguing that environmental sustainability is closely connected with both these generational concepts of equity. According to the World Bank (1995), when the wealthy consume more resources overall, the poor

tend to rely on the direct exploitation of natural resources and may have no choice but to engage in unsustainable uses of environmental resources.

As Buzan, Wæver and de Wilde (1998) have noted from a security perspective, the concept of sustainability is the ultimate form of environmental security, as it stages environmental and social issues as existential, and which are presented by some actors as issues of supreme priority to society's survival. This can be seen in the fact that the term sustainability is often used in reference to the future. The definitions of sustainability and sustainable development lead to only two outcomes: that either society changes to a system that provides current and future generations with the ability to survive, or that human society as we know it will be impaired by its destructive actions to the point of no return. By combining multiple existential threats and focusing on minimal future outcomes, whether or not society can shift to become more sustainable could be perceived as an existential issue in the environmental sector.

Climate change is having a noticeable impact on the Arctic environment and its communities. Various stakeholders in the region are working to overcome the challenges being presented to them by climate change by increasing their capacity to adapt to changes to both the Arctic's natural environment and contemporary global environmental politics. Both the impacts of climate change and the recognition of it as a global issue (see Dalby, 2013) have not only altered the opportunities and threats to communities in the Arctic, they have also changed global and domestic environmental politics (see the UN SDGs and Paris Agreement on climate change). According to the findings of Huebert et al (2012), many policy statements by Arctic states in the past have underlined the need to "maintain environmental security and sustainable development" with both Canada and the United States making it clear that "the sustainable development of the region within their national control" was a priority (17).

Sustainable development and environmental security are twin pillars of concern in a number of more recent policy and strategy documents orienting the Canadian government's approach to the Arctic. These documents include the federal government's former *2009 Northern Strategy*, the more recent *Arctic & Northern Policy Framework*, and the Department of National Defence's (DND) defence policy: *Strong, Secure, Engaged*. These documents have addressed the various ways in which the federal government has viewed security in the Canadian Arctic. Security in the human context is what underlines these policies. Canada's 2009 Arctic policy - *Northern Strategy*, positioned sustainable development as the basis for all decision-making, while economic development in the North is framed in relation to promoting Canadian sovereignty, and the environment is positioned as factor influencing national security. The more recent *Arctic & Northern Policy Framework* underlined the need for sustainable development, but took a step further, recognizing the importance of the environment in traditional lifestyles in the North, framing its protection as existentially important, and identifying the threats climate change poses for northern communities. From another perspective, the DND's policy, *Strong, Secure, Engaged*, approached environmental security by analyzing the threats that climate change poses for Canada's national security in the region in relation to its allies, partners, and Canada's northern communities.

Issues may begin to arise, however, when understandings of what sustainable development means differs across distinctive geopolitical regions and between levels of society. This has the potential to create significant issues for Arctic communities because experiences of climate change in the Arctic and what constitutes 'sustainable development' may vary at the local, regional and state

levels of governance. As Dalby (2013) notes, framing environmental issues as a security issue that legitimates the use of emergency measures "may be completely counterproductive in dealing with rebuilding economies in a sustainable way or expanding citizenship rights and effective participation in the necessary decision making" (Dalby, 2013: 164). By placing potential environmental degradation and climate change as issues above normal politics and as a matter of environmental security, it is possible that the ability of local Indigenous communities to adapt to climate change in their own way and sustainably develop their communities in the way that they perceive 'sustainability' could be interfered with by climate change policies and strategies taking place on the state level. As Happaerts (2012) identifies, challenges arise when attempting to implement sustainable development policies across multiple levels of governance in Canada. A co-ordinated effort across all levels of governance is needed in order to for sustainable development policies to be successful (Happaerts, 2012). Thus, problems may emerge when understandings of what constitutes a threat and what sustainable development means differs across distinctive geopolitical regions and between levels of society.

Local perspectives of threat in the Inuvialuit Settlement Region

The key-informant interviews identified that climate change is having an observable impact on Inuvik and Tuktoyaktuk in a variety of ways, including changes in migratory patterns, permafrost melt, and coastal erosion. The towns have also, however, experienced significant societal and economic changes throughout their history which have proven to be significantly challenging. Adaptation has been necessary to respond to these other changes as well, including political adaptation to a changing relationship with the South in order to establish the Inuvialuit Final Agreement. The need for adaptation has also influenced a change in perspective regarding the value of the region's resources in the context of growing integration with the Canadian political and economic system.

These adaptations matter because they contribute to the communities' general responses to climate change. As the interviews with local community leaders demonstrated, in Inuvik and Tuktoyaktuk, climate change was viewed as both a threat by some leaders and as a practical issue by others. The ways in which climate change issues were characterized as threats were often related to the ability of the community to respond to the issue. But this raised questions about whether climate change itself should be considered a threat to the community or if the threat exists due to the inhibited ability to adapt to the issues produced by climate change. Various participants pointed to underlying concerns, such as their community's inhibited ability to participate in the Canadian economy and the high costs of adaptation. These types of perspectives, related to community perceptions about capacity and threat, are important because they effectively shift the focus onto the other societal and economic changes currently being experienced. In other words, they broaden the discussion from its singular focus on the environment.

For some leaders, the recognition that climate change is something they have *always* been dealing with in the Arctic is the basis for the argument that the overarching challenge is the way communities are *currently* experiencing climate change in the context of other economic and societal changes. While climate change may 'threaten' certain aspects of life in the North, it is possible that a changing relationship with the land is prompting a different perception of what constitutes a threat to the community. For example, the protection and growth of a permanent community is relatively new in Inuvialuit history and brings additional demands, including that of economic

growth, in order to finance adaptation costs, to the forefront of adapting to climate change. Therefore, as many leaders noted in their comments on the issue of adapting to climate change and sustainability, a pragmatic response is needed – one that helps to increase the adaptive capacity of the communities and that is also framed by the demands of Canada's political economy.

Local perspectives on sustainable development

The general definitions put forward by leaders in Inuvik and Tuktoyaktuk fall in line with that of the Brundtland Commission's definition: sustainable development is considered by leaders in Inuvik and Tuktoyaktuk to be a *balance* between environmental protection and economic growth that promotes community prosperity and ensures a future for the next generation. Notably, for them, key to that prosperity is economic growth, as it is believed that it is needed to address the socio-economic challenges the communities are experiencing and to help finance adaptation to a changing climate.

The general consensus on economic growth as a solution to the various issues facing Inuvik and Tuktoyaktuk emphasizes the limited options available to the communities. While the communities are working hard to diversify their economic opportunities, resource development remains a significant factor in planning for the future. As previously discussed, the region is expected to have large oil and gas reserves that could provide useful energy to the communities in the form of natural gas as well as large profits that could be put towards resolving socio-economic issues and climate change adaptation. This expectation is clearly seen in the text of the Inuvialuit Final Agreement, which provides the Inuvialuit with specific surface and subsurface rights within their region and a promise to negotiate future rights over marine areas, including the Beaufort Sea.

A number of contradictions inherent in accessing these resources were discussed with the participants, such as the risk oil and gas extraction poses to the natural environment that many community members rely on. Nonetheless, developing an economic base is seen as necessary for sustaining the community while also adapting to change. As a former mayor of Inuvik noted, "that's the future for the next generation, I mean they need something to look forward to or keep the generation in the North." This desire for economic growth reflects a corresponding desire to increase the capacity of communities to adapt. In the context of the Canadian political economy, however, it focuses the options available to the communities for adaptation on undertaking potentially risky resource extraction. Although this type of activity may be considered part of a sustainable development plan for the communities, the nature of the activity and its potential impact on the environment of the Arctic make it more than just a local concern.

Different perspectives within a geopolitical region

Inuvik and Tuktoyaktuk have an added challenge as coastal communities in the Arctic: the economic desires of the community do not necessarily align with a current geopolitical narrative that often presents the region as a pristine environment in need of heightened environmental protection. The frustration that many of the participants expressed is a result of a lack of support from the federal government as well as the constraints that have been imposed by other levels of governance. 'Outside' perspectives are seen to have had a significant influence on the communities and the region in general by the leaders interviewed. Local communities, such as Inuvik and Tuktoyaktuk, not only have to contend with subnational and national governments, but with the circumpolar community as a whole, due to the interdependence that exists between Arctic states

and stakeholders. Recent actions at other levels of governance, particularly by the federal government, indicate the high levels of interdependence that exist both within Canada and within the circumpolar community. This interdependence has an influence on communities and how competing notions of environmental security and sustainable development are impacting the adaptive capacity of Inuvik and Tuktoyaktuk.

Competing notions of security

Competing notions of security can also be seen to be contributing to the opportunities and constraints for communities within the geopolitical region. According to Starr (2013), geopolitical factors in regions generate a structure of opportunities and constraints and this structure has an influence on the decisions and behaviours of actors. This is important because it shapes the opportunities and constraints within a region and can fundamentally change what the physical environment means to decision-makers in terms of risks, threats, and opportunities (Starr, 2013). If the Arctic is understood as a regional security complex (Exner-Pirot, 2013), it can be seen how geopolitical opportunities and constraints shape what the Arctic's natural environment means for decision-makers, informing their choices, strategies, and decisions in all aspects of Arctic sustainable development policy.

It also points to the impacts of environmental securitization on the global level and the dichotomy that exists between concepts of environmental security and human security. Like sustainable development, environmental security is a complex concept that has emerged in response to global environmental issues and their current and future impacts on human society. By observing the Arctic as a geopolitical region influenced by the security interdependence characteristics of a regional security complex, it can be seen that the natural environment has been a primary factor in influencing the overall security paradigm, and therefore, the political environment of the Arctic (Exner-Pirot, 2013). We have already discussed the different perspectives concerning environmental security and sustainable development advanced by the Canadian government's suite of Arctic policy documents. It is possible to better understand the resulting disconnect on a more specific level, however, using the Canadian federal government's oil and gas moratorium as a prominent example of one level of government unilaterally framing an issue to be existentially threatening and shaping policy around it that may not consider related socioeconomic concerns on the local level.

Actions including the Beaufort Sea oil and gas moratorium point to the different perspectives of the issues facing the North and their influence on policy. The moratorium, which will be discussed further, is an example of a constraint on local communities that arises from competing notions of sustainable development and environmental security. These different perspectives and perceptions of the region maintained by the South have been in contrast to the views of those who live in the North. It has been a point of frustration that was raised by many leaders interviewed, including a current Inuvik Town Councillor:

> I think we need to dispel the romantic myth of the North. It drives you crazy after a while. It's not that romantic. It's usually quite cold… no place in the world stays stagnant and static so don't expect the North to do it either. Don't expect people to just stop and we always get the question you get in the South: why don't they just move everybody out of the North and move them down South? Well, guess what? People living here are key to Canada having sovereignty in the Arctic and

the resources in the Arctic are immense. Whether it's oil and gas or minerals. People don't realize this is the last place on the planet where they haven't gone and extracted them.

Much like the tensions that exist on the international level in environmental and climate debates between developed and developing countries, the idea that everyone else has been able to grow their economies with these types of activities raises the question: why can't we?

The influence of environmental security on local concepts of sustainable development

The key-informant interview process illustrated the general perspectives of some local leaders in the region on a variety of challenges including climate, societal, economic change, and notions of sustainable development. The interviews suggested that while climate change is considered a threat to the communities, a pragmatic response that recognizes the larger context of change in northern society is needed: one that also addresses the societal, economic, and political changes the communities have been experiencing. Climate change is not considered to be the only challenge the communities are facing and a multi-faceted approach is needed. In relation to this, the concept of sustainable development was defined as a *balance* between environmental protection and economic growth that promotes community prosperity and ensures a future for the next generation. This definition is important because it frames how issues related to climate change and other societal changes are approached and, ultimately, how 'sustainable development' as a globally emerging concept fits into northern society. On the other hand, framing climate change or environmental damage as a security threat has the potential to limit the ability of communities to sustain themselves within the demands of a growth-driven and increasingly neoliberal society and that this may be having an impact on the adaptive capacity of Inuvik and Tuktoyaktuk. It identified the constraints placed upon communities that prevent them from benefitting to the full extent from emerging economic opportunities and addressing other societal concerns, due to a positioning of sustainable development in opposition to environmental security at different levels of governance. Thus, these constraints inhibit these communities from benefitting from emerging opportunities because of competing notions of sustainable development and environmental security.

Environmental security dynamics on the state and local levels: The Beaufort Sea oil and gas moratorium

The relationships and agreements made between and amongst Arctic states can be seen in the variety of environmental policies that have emerged in Canada. While it is contradictory to the actions of the federal government regarding oil and gas production elsewhere in Canada, the Beaufort Sea oil and gas moratorium is an example of the Canadian government leading by example under the narrative being encouraged within the environmental agenda in the Arctic region. The Beaufort Sea oil and gas moratorium was established in partnership with the United States and was outlined in the United States-Canada Joint Arctic Leaders Statement on December 20, 2016 and states:

> In March, the United States (U.S.) and Canada committed that commercial activities will occur only if the highest safety and environmental standards are met, and if they are consistent with national and global climate and environmental

goals. Today – due to the important, irreplaceable values of its Arctic waters for Indigenous, Alaska Native and local communities' subsistence and cultures, wildlife and wildlife habitat, and scientific research; the vulnerability of these ecosystems to an oil spill; and the unique logistical, operational, safety, and scientific challenges and risks of oil extraction and spill response in Arctic waters – the U.S. is designating the vast majority of U.S. waters in the Chukchi and Beaufort Seas as indefinitely off limits to offshore oil and gas leasing, and Canada is designating all Arctic Canadian waters as indefinitely off limits to future offshore Arctic oil and gas licensing, to be reviewed every 5 years through a climate and marine science-based life-cycle assessment.

The statement links global climate and environmental goals with the values of local communities, attempting to cross many levels of society and address multi-level issues. For the federal government, the management of its territorial seas is an international issue in the Arctic. Prevention of an environmental disaster brought on by an oil spill is an obligation the federal government has to the environmental epistemic community of the Arctic Council, but also to the world, through its commitment to other international frameworks regarding pollution mitigation. Therefore, the causes of environmental securitization in relation to the oil and gas moratorium can be seen at the global level. The political environment at the global level has had an influence on this policy and the reasons for it, including ecosystem and climate concerns. While an oil spill would have both local and international consequences, the consequences would be experienced differently.

The conflict that has arisen around the oil and gas moratorium between the local and federal level is a result of wider contexts involving environmental protection and economic development. Although there is local opposition to the moratorium due to its socioeconomic impacts, there is support for these types of actions that can be found at the national and global levels. The fear of negative effects on the circumpolar and global level has motivated the moratorium but the local level is the main level of implementation and, therefore, conflict. The issues are localized due to the fact that many of the effects of a possible environmental disaster would take place at the local level but also because limiting oil and gas development is seen as limiting economic development, and therefore, sustainable development.

While the oil and gas moratorium may be a small part of a larger environmental (and political) context, securitization of the Arctic environment, from the perspective of local leaders, is seen to be having a negative effect on the sociopolitical-economic life of Inuvik and Tuktoyaktuk. On the local level, this move is not being perceived as a way to preserve achieved levels of civilization. The key-informant interviews suggest that it is being perceived as an action that is denying the local communities the ability to sustain and develop their communities. Additionally, although many local groups may or may not agree with the reasoning behind the moratorium, much of the opposition lies with the fact that the communities were not consulted beforehand and that their potential economic growth is being limited by outside perceptions of "the greater good."

Although the federal government has framed the well-being of Arctic communities and their environment as referent objects that are existentially threatened in the *Joint Arctic Leaders Statement*, it highlights the issues that arise for communities attempting to adapt and respond to complex changes to their climate and socioeconomic structures in the context of Canada's political economy. As can be seen in this case study, it is impossible to not have an impact on local

communities. Although issues such as a lack of infrastructure and an inhibited ability to respond to an environmental disaster are primary concerns of the federal government, it is also a discussion about risk and whose risk it is to take. Ultimately, the decision to put the moratorium in place was a state level decision that has had local consequences and underlines the argument that security is experienced differently at the local and state levels.

Securitization on the local level?

While Buzan, Waever and de Wilde (1998) might consider the federal government's actions to be characteristic of environmental regime formation in the international system and not considered to be securitization at the international level, it could in fact be perceived as a securitizing move at the local level. This scenario effectively highlights the fact that there are differences as to what constitutes a threat between the local and the global level. These differences frame both the reactions and the policy approaches of groups on both levels of governance. The federal government has effectively framed oil and gas extraction as existentially threatening to both the fragile environment of the Arctic and to the local communities who call the region home. In the context of the environmental epistemic community that is formalized by the Arctic Council, the bilateral actions of the United States and Canada frame the federal government as a veto actor at the domestic level. The declaration that the federal government must take measures in order to protect the well-being of vulnerable communities, even if the communities do not recognize it as being in their best interest, has been perceived to be extreme by the local leaders who were interviewed. The federal government, however, clearly determined that at some level the nature of the threat demanded this response.

While it is difficult to do so on the international level according to Buzan, Waever and de Wilde (1998), two factors characterize this action as a security move on the local level: (1) multiple participants suggested during the interviews that there was no immediate threat to Canada's portion of the Beaufort Sea due to the limited amount of exploration and extraction taking place in the region and (2) according to various participants, the federal government went beyond the appropriate spectrum of response by violating the spirit of domestic federal-Indigenous agreements and co-management procedures. While the federal government has jurisdiction over Canada's internal waters of the Beaufort Sea, the political constellation of mutual security concerns is different, or at least viewed differently, by the local and global level of governance in the Arctic.

The differences in environmental security concerns at the two levels can be seen in the way leaders in Inuvik and Tuktoyakuk discuss oil and gas activities in their region. Although all of the community leaders interviewed acknowledged the deep importance of the environment to their communities, as discussed, they also noted that economic stimulus from oil and gas activities could help address various socioeconomic issues. While the possible impacts of an oil spill or environmental disaster on socioeconomic aspects of their communities are known, they were generally discussed in relation to their land claim agreement and their right to lay out the rules and procedures for companies operating in the Inuvialuit Settlement Region. This may explain why many of those interviewed reconcile the inherent risks in oil and gas extraction by pointing to socioeconomic challenges their communities face. Buzan, Waever and de Wilde (1998: 86) provide some insight when they note, "securitization always involves political choice; thus, actors might choose to ignore major causes for political and pragmatic reasons and therefore may form a

security constellation that is different from what one would expect based on one's knowledge of effects and causes."

Issues such as climate change adaptation are seen to require a pragmatic response that recognize the other changes the communities are experiencing. The demands of society require economic development to sustain their communities and these demands (and desires) play a part in reconciling the risk on the local level.

Impacts on adaptive capacity

By placing potential environmental degradation and climate change as issues above normal politics and as a matter of environmental security, policies and strategies taking place on the state level are impacting their adaptive capacity. While it may be in line with the current geopolitical narrative in the Arctic, from the community's perspective, the federal government's moratorium is consequently preventing the communities from implementing their understanding of sustainable development. It prevents them from accessing what many leaders in the community see as a possible way to sustain the communities by providing jobs, infrastructure, and the financial capacity to respond to climate change and other challenges. Therefore, framing issues as security issues, or issues that require emergency measures, is impacting the adaptive capacity of Inuvik and Tuktoyaktuk because (1) the communities have undergone significant societal, economic and political changes in the last century; (2) integration with the Canadian political economy presents the demand for economic growth; (3) economic growth is seen as critical for financing adaptation measures and sustaining northern communities; and (4) due to the fact that oil and gas extraction is one of only a small number of options for economic growth in the region, the moratorium is removing a significant option for economic growth.

This article has thus presented flaws in the concept of sustainable development as well as our neoliberal paradigm in general: economic growth is seen as a fundamental pillar for success. This raises the question: but at what cost? The risks surrounding oil and gas development are immense and while many priorities and practices have changed in the communities over the last century, traditional practices are still important aspects of their culture, the protection of the environment is critical for global society as a whole, and the continued extraction and usage of fossil fuels presents one of the single greatest threats to humanity. But still, economic growth is needed and in places such as Inuvik and Tuktoyaktuk where potentially damaging practices are seen as almost the only option, the risk is worth the reward for many leaders who want to be able to provide a 'better' life for their people.

Conclusion

Sustainable development has been described by some as the rallying cry for environmental security – that if the development is not sustainable, then it is not secure. But if sustainable development is a human-centric concept, how consistent are the concepts of sustainable development and environmental security with one another? The environment may be securitized by an actor for a number of reasons. This could include preventing some kind of action that would push society past the carrying capacity of a regional environment, thus having an impact on the sustainability of society. It could also, however, include actions by an actor that frames the environment as something that is being existentially threatened by human activity, thus limiting a region to develop a resource to sustain their community. Both concepts are being applied subjectively and this makes

it difficult to employ them consistently across a range of situations. Different perceptions at different levels of society play a role in how these actions may be experienced. Therefore, securitizing the environment could serve the greater good and preserve the livability of our world. It might also, though, have implications for implementing sustainable development, a human-centric concept, at the community level. The federal government's oil and gas moratorium on the Beaufort Sea is an example of such a case and while the logic surrounding environmental protection is clear, it raises issues for community-specific sustainable development and therefore, their adaptive capacity and ability to sustain themselves in the region.

This article has shown ways in which competing notions of sustainable development and environmental security can place constraints on local communities because they mean different things at different levels of society through time and space. The local desire for oil and gas extraction as part of a sustainable development plan juxtaposed with the federal government's oil and gas moratorium is an example of how policy approaches that may not acknowledge what sustainability means to other levels of governance could have potentially negative impacts on local communities and create conflict. In the context of the societal and economic issues the communities are facing, the moratorium has potentially impacted the adaptive capacity and thus, from the perspectives of the leaders interviewed, the sustainability of the communities. While it addresses the risk for environmental disaster, it has an impact on the ability of local communities to meet their other societal and economic needs.

Environmental or human security?

Ultimately, the level of interdependence that exists between Arctic stakeholders is influencing sustainable development on the domestic level. By understanding the role of the natural environment within the integrated field of security studies, a deeper understanding of what sustainable development means can be uncovered. The security constellation that exists in the region makes it impossible to consider issues on a sector by sector basis because when viewing security from a local level and human-centric perspective, it is impossible to separate environmental issues from that of societal and economic aspects of northern life (particularly when considering the underlying context of Canada's political economy). As Buzan ,Waever and de Wilde (1998) note, one sector cannot be addressed in separation from the others and "the environmental sector provides a lens that enables us to highlight root causes of existential threats that become manifest in other sectors" (84).

Although the environmental sector has been used as a perceptual lens to observe and understand how the natural environment influences decision-makers' perceptions and decisions in the region, it is clear that the environment is only one aspect of security on the ground. As evidenced by the findings in Inuvik and Tuktoyaktuk, the issues they face are interconnected and are not solvable independently of one another. Therefore, when discussing security from a local perspective, a more encapsulating and wholistic approach, *human security,* more appropriately acknowledges the interconnectedness of the issues that communities face, particularly in the Arctic. The concepts of sustainable development and environmental security are inherently tied, but because they are both human-centric concepts, a human security lens is important for understanding the constraints that might be arising for local communities.

Human security

Many leaders described protecting the environment as a matter of human security based on their important ties to the land and sea. The survival of the community still very much depends on the natural resources that provide food for their tables and satisfy the cultural desires of the community. From this perspective, environmental security is inextricably part of a larger understanding of human security. Because discussions of security are inherently political, prioritization of certain issues on one level of society can begin to overshadow concerns at other levels. It seems that when one type of security becomes too dominant, it over-shadows the other types of security, or what other groups would consider to be existentially threatened, which exist within a constellation of security issues.

Speaking about security also immediately brings us to a discussion of power and politics. Those with the ability to shape the security discourse and prioritize certain perspectives and values hold the power to securitize and desecuritize issues. As was seen with the Beaufort Sea moratorium, it can be argued that the federal government effectively securitized the local environment and communities of the region, reminding the world of its sovereignty in the region as well as its ability to promote its jurisdictional authority in the region. While it was representing the geopolitical narrative being promoted in the Arctic Council and Canada's commitments to international environmental and climate agreements, the moratorium had a large impact on local communities, even if it was only symbolic. It's a reminder that the needs of the greater good are more than that of a single group. This does not, however, lessen the influence it has had on 'security' in the region and on the human security of the people of Tuktoyaktuk and Inuvik. In the context of Canada's political economy, the moratorium impacts the adaptive capacity of the communities to respond to the changes they are experiencing because it continues to limit the economic options available to them. There is an underlying expectation that if the people in these communities need to find jobs or are supposed to be able to live like the rest of Canadians, then they are going to need opportunities like the rest of Canadians. This is important because in the current political economic paradigm, it is perceived that these communities need an economic base to adapt, survive and flourish.

The intersection of sustainable development and security is thus an expression of a society's, and more specifically, a government's world view and goals for the future. The ways in which we describe security and discuss issues in relation to security point to the values that we hold. It points to the ideals that we want to protect. The fact that there is not just one 'right' way of doing something complicates the matter, but the fact that different values exist on multiple levels of society makes issues regarding economic development and environmental protection in the name of sustainable development, and therefore human security, difficult to balance and realize in real life.

Acknowledgement

Barnes

References

Buzan, B., Wæver, O., & de Wilde, J. (1998). *Security: A New Framework for Analysis*. Boulder, Colorado: Lynne Rienner Publishers, Ltd.

Dalby, S. (2013). Global Environmental Security. In R. Falkner (Eds.), *The Handbook of Global Climate and Environmental Policy*. Somerset, NJ: John Wiley & Sons Ltd.

Exner-Pirot, H. (2013). What is the Arctic a case of? The Arctic as a regional environmental security complex and the implications for policy. *The Polar Journal, 3*(1), 120 – 135.

Happaerts, S. (2012). Does Autonomy Matter? Subnational Governments and the Challenge of Vertical Policy Integration for Sustainable Development: A Comparative Analysis of Quebec, Flanders, North Rhine-Westphalia and North Holland. *Canadian Journal of Political Science / Revue canadienne de science politique, 45*(1), 141-161

Huebert, R., Exner-Pirot, H., Lajeunesse, A., & Gulledge, J. (2012). *Climate Change & International Security: The Arctic as a Bellwether*. Center for Climate and Energy Solutions.

International Panel on Climate Change (IPCC). (2014). Summary for policymakers. In C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, United Kingdom: Cambridge University Press, 1-32

Starr, H. (2013). On Geopolitics: Spaces and Places. *International Studies Quarterly, 57*, 433–439.

Stoddart, M. and Smith, J. (2016). "The Endangered Arctic, the Arctic as Resource Frontier: Canadian News Media Narratives of Climate Change and the North". *Canadian Review Of Sociology/Revue Canadienne De Sociologie, 53*(3), 316-336

United Nations. (1987). Report of the World Commission on Environment and Development: Our Common Future. Retrieved on 02/02/2018 from: https://www.are.admin.ch/dam/are/en/dokumente/nachhaltige_entwicklung/dokumente/bericht/our_common_futurebrundtlandreport1987.pdf.download.pdf/our_common_futurebrundtlandreport1987.pdf

World Bank. (1995). *Monitoring environmental progress: a report on work in progress (English)*. ESSD Environmentally & Socially Sustainable Development Work in Progress. Washington, D.C.: The World Bank.