

Indigenous Peoples and Climate Justice in the Arctic

Arctic regions are experiencing transformative climate change impacts. This article examines the justice implications of these changes for Indigenous Peoples, arguing that it is the intersection of climate change with pronounced inequalities, land dispossession, and colonization that creates climate injustice in many instances.

Introduction

The Arctic is warming considerably faster than the rest of the world and will witness the most climate change globally this century. Approximately ten percent of the Arctic's four million inhabitants who identify as Indigenous experience disproportionate risks to these impacts, as they generally live in remote regions and maintain strong links to the environment through subsistence-oriented hunting, herding, foraging, and fishing. The justice implications of climate change have not been widely examined in the Arctic, however, aside from some studies examining the framing of "dangerous climate change" from a human rights perspective for Inuit communities^{1,2}.

This piece provides a high-level examination of key climate justice considerations as they pertain to Arctic Indigenous Peoples. To do this, we draw upon a *rights-based interpretation* of justice which encompasses the right "not to suffer" or be adversely impacted by the effects of climate change and thereby achieves climatic justice by ensuring that these rights are protected. Here, we identify and characterize fundamental rights and key issues of distribution, recognition, procedural justice, and capabilities affecting Arctic Indigenous Peoples. Consistent with UNDRIP, we consider Indigenous rights to include: the right to be "free from discrimination," the right to fully participate in fair decision-making processes, the right to physical and mental health and well-being, the "right to self-determination," the right to historically owned lands and resources, and the right to maintain cultural traditions (Table 1).

Table 1: Components of climate justice pertaining to the rights of Arctic Indigenous Peoples.

Component of Justice	Definition in a climate change context	Aspects relating to Indigenous Peoples and their rights in the Arctic	Rights of Indigenous Peoples (as outlined in UNDRIP ³)
Distributional Approaches			
Distributional Justice	Encompasses the distribution of impacts and vulnerabilities as well as the distribution of assistance to adapt to these impacts ⁴ .	Indigenous Peoples being disproportionately impacted by climate change despite contributing little to the phenomena ⁵ .	<ul style="list-style-type: none"> • The “right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired.” (10)
Capabilities Approach	How distributions impact peoples’ ‘well-being,’ their freedom and ability to ‘function’ as they choose ^{6–12} .	Climate change impacts on physical and mental health, and well-being. Includes affecting Indigenous People’s ability to access land and traditional foods and partake in cultural activities.	<ul style="list-style-type: none"> • The “right to self-determination.” (4) • The right to physical and mental health and well-being alongside the protection and restoration of these rights by the State. • The right to maintain Indigenous health practices including the protection of plants, animals, and other resources used for medicinal purposes. • The right for Indigenous Peoples to continue their customs and cultural traditions.
Recognition	Issues of injustice relating to the lack of recognition or misrecognition of individuals or cultures by institutions, practices, and social structures or values. For example, individuals or groups experiencing disrespect, degradation, devaluation, or oppression ^{12–17} .	Socioeconomic inequity, marginalization, oppression, land dispossession, and colonial histories exacerbating vulnerabilities to climate change.	<ul style="list-style-type: none"> • The right to be “free and equal to all other peoples.” (4) • The right to not be subjected to discrimination.
Procedural Justice	The ability to participate equally in fair institutional and decision-making processes ¹² .	Extent to which Indigenous Peoples participate in fair processes and have an influence over the decisions that impact them.	<ul style="list-style-type: none"> • The right to participate in equitable and transparent processes of the State to the fullest extent. • “Free, prior, and informed consent” must be obtained from Indigenous Peoples by the State before implementing legislation or approving projects that will impact them or their lands and resources. (8) • The “right to determine and develop priorities and strategies for exercising their right to development.” (9)

Distributional justice concerns the distribution of climate change impacts and vulnerabilities, and the distributions of adaptation assistance to respond to these impacts. This is particularly relevant in the Arctic where the effects of climate change are already pronounced, as seen in increased warm temperature anomalies, record low sea ice coverage, reduction in sea ice thickness, increase of land ice melting seasons, reduced snow cover, and thawing permafrost^{18–20}. Here, distributional justice encompasses the injustice of socio-economically and/or geographically vulnerable Arctic Indigenous Peoples who experience disproportionate climate change impacts to their health, livelihoods, and well-being^{21–23}.

Many of these impacts threaten or violate the rights of Indigenous Peoples to their traditional or inhabited lands, territories and resources, their right to sustain cultural and spiritual relationships with the land, and their right to preserve and access cultural sites. For instance, coastal erosion and thawing permafrost are destroying or threatening culturally significant archaeological sites across the Arctic. In Alaska, this includes the erosion of an Ipiutak cemetery, while in northwestern Canada, the most significant Inuvialuit archaeological sites are at high risk of deterioration. Climate change is also affecting culturally important wildlife populations and access to subsistence harvests by impeding safe access and travel across the land, water, and ice for hunters and fishers in Alaska, Greenland, Siberia, and Canada²⁴⁻²⁹. The injustice of these impacts is exacerbated by socio-economic stresses, marginalization, land dispossession and inequity, and rapid resource extraction that many Arctic Indigenous Peoples already face, further increasing vulnerability to climate change.

Unequal distributions are also evident in adaptation policy support. While studies examining adaptation in the Arctic are in their infancy, emerging evidence indicates that—except for the North American Arctic—there is little prioritization of Indigenous Peoples in adaptation policy development or adaptation support to respond to climate change and prepare for future impacts, despite their susceptibility to these impacts and limited contribution to greenhouse gas emissions^{5,30}.

The *capabilities approach* examines how the distribution of climate-related impacts affect the “well-being,” freedom, and ability of individuals to “function” as they choose, and aligns with their rights to self-determination, physical and mental health and well-being, as well as their ability to practice and maintain customs and cultural traditions. Arctic Indigenous Peoples face some of the highest rates of food insecurity in high-income nations, rates of morbidity and mortality that significantly exceed non-Indigenous Arctic inhabitants, and high levels of water insecurity. These stresses create unique vulnerability pathways and constrain the ability to manage climate change.

Climate change impacts are undermining the rights to health, well-being, and self-determination of Arctic Indigenous Peoples by affecting their ability to “function” and live as they would

choose^{3,12,31}. For the Saami in Europe and Russia, some of the most significant health impacts stem from the adverse effects on mental health arising from stress and navigating pressures to change their traditional way of life. Other health impacts of concern for the Saami include: forced changes in diet, increased risks of disease outbreaks and mold exposure, health risks to reindeer and Saami reindeer herders through greater threat of accidents from changes to ice and snow stability, and risks to physical health and cultural well-being through shifts in livelihoods. Health risks related to water quality have also been documented across the Arctic, including increased chemical and microbial contaminants, as well as observations of climatic changes impacting water quantity^{32,33}. Among Inuit communities, ecological grief (felt as a result of “experienced or anticipated ecological losses”) and identity loss have been linked to a diminished ability to engage in traditional activities that contribute to food security and culture, such as travel on the land and subsistence activities, that result from physical changes to the land due to climate change.

The *recognition* aspect of justice addresses the social structures, institutions, practices, and social and cultural values that prevent the recognition of individuals, communities, and their cultural identities^{3,12}. Many challenges facing Arctic Indigenous Peoples stem from underlying socio-economic inequities which heighten vulnerability and reduce the capacity for adaptation to climate change^{34,35}. These commonly have historical antecedents including marginalization, forced sedentarization, land dispossession, and displacement, which are rooted in colonization^{36,37}. The persistent effects of this historical context have increasingly been acknowledged in the North American context but less so in other regions of the Arctic. However, it has been argued that historic injustices must be considered if we are to address the multifaceted nature of climate change impacts affecting Arctic Indigenous Peoples^{36,38}. Here, justice also encompasses the need to protect and uphold factors that support resilience and adaptive capacity. For instance, maintaining connections to place, agency, and choice with respect to responding to environmental changes, recognizing Indigenous rights and their ability to hold decision-making power in institutions; and acknowledging Indigenous Knowledge in resource and land-management practices.

Procedural justice concerns the extent to which individuals have influence over the decisions that affect them in accordance with their rights to participate completely and effectively in equitable decision-making processes as well as implement their own strategies and priorities^{3,12}. Fair consultation for activities that will affect—or have the potential to affect—Arctic Indigenous Peoples requires not only their participation in decision-making processes but also underpins the need to reach consensus on issues that have competing interests and give “free, prior and informed consent”^{3,39}. It is common practice for governments across the Arctic to consult with, and provide information to, Indigenous Peoples before undertaking developments or initiatives. However, these practices are insufficient as socio-political institutions and decisions relating to land and resource management often oppose and undermine the agency and self-determination of Indigenous Peoples by failing to include them as partners, acknowledge them as holding positions of leadership, or recognize Indigenous worldviews in decision-making processes^{36,39}. Further complexity can arise from the disadvantageous power dynamics they often face^{36,39}. For example, Inuit in Nunatsiavut, Canada, have expressed the devastating impacts of being excluded from wildlife management decisions surrounding the woodland caribou, which is a culturally significant species that is at risk due to climatic changes and human activities. When faced with decisions that violate their rights, the agency of Indigenous Peoples has been shown to be strengthened through demonstrations of resistance—education initiatives, legal and policy action, as well as other resistance strategies—which often defend their rights to just processes and outcomes.

Conclusion

The rapid and transformative climate changes occurring in the Arctic give rise to complex, interconnected, and rapidly evolving justice issues. Climate *injustice* is pronounced for many Arctic Indigenous Peoples, created by the interaction of climate impacts with inequities, land dispossession, and sedentarization arising from colonial histories, which create vulnerability and undermine resilience. Additional complexities emerge when considering how climate change might affect future resource development, infrastructure investment, shipping, and migration patterns, the climate justice implications of which need examining in greater depth. Understanding and addressing these “root causes” of climate change injustice is central to

research and policy that seeks to promote climate justice and equity—alongside global efforts to reduce emissions—and must underpin broader sustainable development goals in the Arctic.

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Funded by ArcticNet, a Network of Centres of Excellence Canada. The funding did not play a role in the writing of this manuscript or the decision to submit it for publication.

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