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ARCTIC OFFICE



## **About this publication**

This collaborative project between the Saami Council and the German Arctic Office depicts the ways of life Indigenous Peoples lead in the Arctic. As resilient cultures, Arctic Indigenous Peoples hold distinct knowledge on how to respectfully use the environment to co-exist within the ecosystems. Even though resilience is enclosed within these cultures, the challenge of coping with both environmental changes and domestic regulations affects the practice and development of Indigenous Knowledge.

This text describes how Arctic Indigenous Peoples use Indigenous Knowledge as a generationally refined way of knowing to ensure the vivid development of cultures and livelihoods. It further illustrates how Indigenous Peoples have traditionally developed circular governance systems that sustainably care for the environment instead of dominating it. Indigenous Knowledge, as the foundation of these ways of life, is therefore central for Arctic Indigenous Peoples cultures and how they collectively preserve the stability of Arctic and sub-Arctic environments.





In recent decades, the growing political, economic, and social interests in the circumpolar North have transformed the Arctic into a much-demanded region. Regional and global stakeholders are expressing high degrees of interest in how to engage in development1. However, the Arctic is not new. For thousands of years, it has been the home of Indigenous Peoples with distinguished and adaptive ways of living. Indigenous Peoples are distinct from national minority groups by their intrinsic link to identifiable territory and ways of life<sup>2</sup>. The foundations of indigenous identities are directly related to the relationship the people have with the land. Indigenous territory symbolises the connection among a variety of cultures and languages, but also embodies the common history of colonisation, assimilation, and adaptation these cultures share. Arctic Indigenous Peoples use and nurture distinguished knowledge to exist, survive, thrive, and prosper in areas that display some of the harshest living conditions on earth.

Climatic and environmental changes are the biggest long-term challenges the Arctic and its Peoples face today. Ultimately, these changes have consequences for a variety of indigenous practices developed around hunting, fishing, gathering and more<sup>3</sup>. External endeavours, such as a higher significance attributed to national and multilateral economic access regimes, pose further obstacles to indigenous societies and their ways of life through encroachment of indigenous lands<sup>4,5</sup>. The exploitation of nature plays a major role in the alteration of Arctic and sub-Arctic territories. It is globally recognised that nature and biodiversity is generally declining less rapidly in areas managed by Indigenous Peoples than in others. However, Indigenous Knowledge and ways of life existing resiliently within ecosystems are still under threat of facing rapid demands of adaptation<sup>4</sup>. Apart from industrial investments on national and regional levels, governmental regulations on resource management are often applied to singular parts of the ecosystem which makes it challenging for Indigenous Peoples to use their traditional holistic approach to the Arctic environment<sup>6</sup>. Indigenous Knowledge, built upon empirical observations and practice over millennia, has developed by sustainably utilising nature while merging understandings of seasonality, food security, biodiversity, and land-use<sup>7</sup>.

## **Arctic Indigenous Peoples**

Under the auspices of the Arctic Council, cooperation on Arctic issues is conducted in a multi-stakeholder format. While not only facilitating governmental exchange, the Arctic Council's negotiations and decisions are conducted upon consultation with Indigenous Peoples voices from the six Permanent Participant organisations: Aleut International Association, Arctic Athabaskan Council, Gwich'in Council International, Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North, Siberia, and Far East, and the Saami Council<sup>8</sup>. As the variation between Arctic societies is large and communities are far from homogenous, not all Arctic Indigenous Peoples are accurately represented in the Arctic Council.

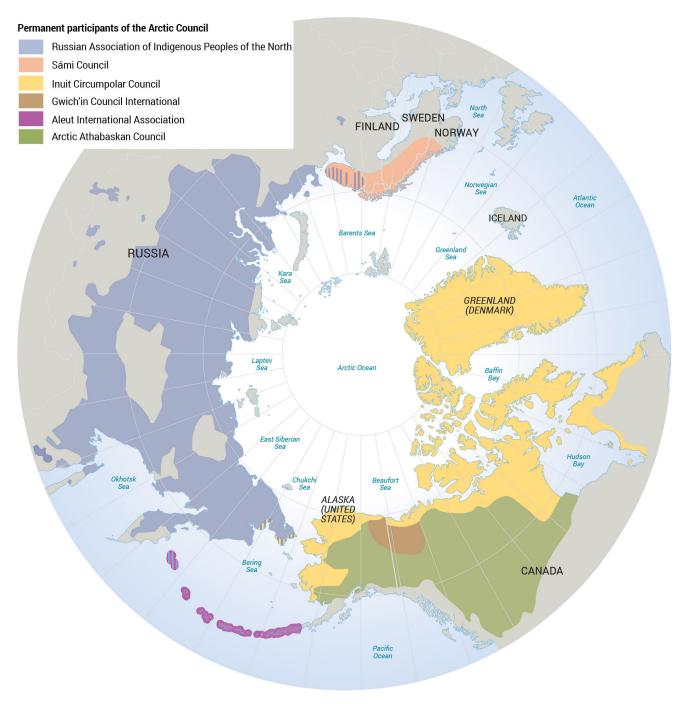
The distinct cultures and territories of Arctic Indigenous Peoples extend over 30 million square kilometres in seven countries and three continents9. In Fennoscandia, Arctic Indigenous Peoples include the Saami in northern territories of Finland, Sweden, Norway and Northwest Russia, an area also named Sápmi. The land of Inuit, Inuit Nunaat, stretches over Chukotka (Russia), Alaska (USA), Canada, and Kalaallit Nunaat (Greenland). Some examples of Arctic Indigenous Peoples in the North American region are Aleuts, Yup'ik, Alutiiq, Dene, Gwich'in and Athabaskans. Just like the Saami and Inuit, Gwich'in and Athabaskans are cross border people. In the vast territories of the Russian Federation, a few examples of Arctic Indigenous Peoples are Nenets, Khanty, Mansi, Even, Evenk, Yukaghir and Chukchi, residing all the way from the Kola Peninsula, through Siberia and to the Far East<sup>10</sup>.

Although demographic statistics on Arctic Indigenous Peoples exist, it is widely acknowledged that there are no definite numbers of Indigenous Peoples living in the Arctic. The actual population numbers of Arctic Indigenous Peoples are believed to be much higher than estimated due to both the lack of reliable statistics as well as varying national definitions on 'indigenousness'. While the United Nations have stressed self-identification as a central right, the eight Arctic states, among others, play the key role in defining criteria for an in- and exclusion to their respective definitions of Indigenous Peoples<sup>11,12</sup>.

**NOTE:** This piece is intended to be a contemporary snapshot of Arctic Indigenous cultures and their ways of life. As Arctic Indigenous societies are living in extensive territories within the Arctic and sub-Arctic and practice diverse ways of life, this text cannot be viewed as a comprehensive account of what Arctic Indigenous lives encompass. The individual perspectives included in the text should be viewed as testimonies of experiences within their respective societies; and are not to be taken as collective representations of all Arctic Indigenous cultures.







The Arctic's environment greatly differs in its composition and Arctic Indigenous Peoples and their ways of life encompass a wide variety of territory, languages, history, and culture<sup>9</sup>. However, the holistic view and understanding of the complexity of ecosystems as well as a common history of colonisation and assimilation is something that connects all Arctic Indigenous Peoples. By passing on ways of doing through traditional activities and practices stemming from multi-generational observations and knowledge, Indigenous Peoples are resiliently shaping their cultures.

Map showing the circumpolar North and representative regions of Permanent Participants (https://www.grida.no/resources/13341, Levi Westerveld and Philippe Rekacewicz)

#### Indigenous Knowledge

Indigenous Knowledge is empirically validated knowledge that, through observation, practice and refinement over millennia has provided holistic skills to survive and adapt to changing conditions over and between generations<sup>13</sup>. It not only refers to the interaction with the environment, but also encompasses





language, values, spiritual systems and food systems<sup>7</sup>. To make profound and informed decisions, including Indigenous Knowledge in decision-making provides valuable input about environments and on how to effectively manage natural resources.

"Indigenous Knowledge is a systematic way of thinking and knowing that is elaborated and applied to phenomena across biological, physical, cultural, and linguistic systems. Indigenous Knowledge is owned by the holders of that knowledge, often collectively, and is uniquely expressed and transmitted through indigenous languages. It is a body of knowledge generated through cultural practices, lived experiences including extensive and multigenerational observations, lessons, and skills. It has been developed and verified over millennia and is still developing in a living process, including knowledge acquired today and in the future, and it is passed on from generation to generation." Ottawa Indigenous Knowledge Principles14

Within e.g. the Saami language, there are over 300 terms for describing snow and snow conditions alone<sup>3</sup>. Inuit languages also have extensive descriptions of things elemental to their ways of life. Whereas the English language describes a beluga merely as a 'beluga whale', Inuvialuit, for example, differentiate whales by gender, age, colour, specific features, and can even describe one individual in multiple terms<sup>15</sup>. Since the Arctic and sub-Arctic environment offers scarce resources, food not only provides nutritional needs but represents a reciprocal aspect for Arctic Indigenous Peoples. Herding, hunting, fishing, and gathering, as practices of Indigenous Knowledge, therefore signify more than just survival - they are elemental components of indigenous ways of life.

# Indigenous Ways of Life - A Holistic Understanding

## Reindeer herding

As an inherent component of Arctic ecosystems, reindeer are an essential part of Arctic Indigenous culture. All year round, reindeer need extensive pastures that are far from intrusions of any kind. There are about 24 indigenous reindeer herding peoples in the world and the majority are found within Fennoscandia and Siberia and the Russian Far East. Reindeer herders generally hold different main types of reindeer: tundra, mountain, and forest reindeer. While those types

still belong to the same species, tundra reindeer, for instance, migrate between summer and winter pastures in the Arctic tundra while forest reindeer graze in the taiga woodlands throughout the whole year<sup>16</sup>. Today Motorcycles, snowmobiles and even helicopters are tools of assistance for some reindeer herders but there are also areas where innovative aid is scarcely available and herding is practised much like it has been for centuries<sup>17</sup>. This involves using reindeer sledges and also riding reindeer in some areas<sup>16</sup>. However, the value of the reindeer expands beyond being a source of subsistence. As a way of life and original civilization<sup>18</sup>, reindeer herding provides both a connection to ancestral roots as well as a communitarian relation to other reindeer herders across the Arctic. It has shaped original Arctic societies and constitutes the identity of many Arctic Indigenous Peoples.



Autumn gathering in a forest reindeer herding community in Sápmi, Sweden (Photo: Susanna Israelsson)

The elemental relationship between human and animal established in reindeer herding represents generationally refined ways of life. The practice of reindeer herding also encircles traditional elements of livelihoods such as fishing, hunting, and craftsmanship and is practised identically almost wherever it is found. All of the approximately 100.000 reindeer herders within the Arctic are dependent on the migration routes and pasture lands of the herd to maintain food security. The mobility required to follow the migrating reindeer demands a nomadic lifestyle<sup>19</sup>.

"Only using terms like livelihood and culture do not do justice to the concept of reindeer herding. The reindeer makes the decisions. We follow the animals, not the other way around, just the way it's always been." Anders Oskal / Director at International Centre for Reindeer Husbandry





As the Saami and Arctic Indigenous Peoples in the Russian Federation exercise reindeer herding, Gwich'in, Athabaskan, and Inuit in Canada's Arctic regions, and Alaska hunt caribou, which also represent reindeer subspecies. For local economies, caribou is an important terrestrial resource to maintain livelihoods since they provide a sustainable source for food and other products<sup>21</sup>.

Despite varying national regulations on reindeer herding among Arctic states, it is usually conducted by individuals within families, districts, villages, or even collective farms since the time of the Russian revolution<sup>16</sup>. As a way of life, it is an originally highly resilient form of a human-coupled ecosystem where humans are dependent on the reindeer and vice versa<sup>22</sup>. However, having to find new ways to cope with unprecedented climatic changes and human-endorsed development can be costly<sup>23</sup>. The loss of pasture lands in particular threatens the adaptive flexibility of Arctic Indigenous Peoples by increasing the vulnerability of the herd<sup>24,25</sup>.

#### Reindeer herding in today's society

The loss of pasture lands to encroachment is one of the main challenges reindeer herders face today. In Siberia, as an example, the numbers of domesticated reindeer are decreasing due to the loss of winter pastures. Being subject to industrial developments in mining, oil, and gas, grazing areas of the tundra suffer and expose fragility in the ecosystems<sup>26</sup>. Nenets, as one of the Indigenous Peoples of that region, follow the reindeer herds since they supply diet, clothing, and other needs while they use the land for fishing and hunting. The growing inflow of industrial development hereby leads to the decimation of both freshwater ecosystems and game species. As a result of imbalanced human activity, grazing areas become fragmented and important knowledge connections to biodiversity are at risk of being lost<sup>27,28</sup>. Particularly in Fennoscandia, the impact of cumulative encroachment of reindeer pastures is severe.

"Our geographical area for adaptation is shrinking, which means we also lose our capability to adapt to Arctic change." Anders Oskal<sup>20</sup>

In the North American Arctic, hunters are obliged to concede to varying caribou populations and the predictability of seasonal migration routes. Gwich'in, who identify as "caribou people", consider hunting a livelihood that connects communities to their culture and ancestry. Climatic and developmental influences affecting caribou and migration routes therefore automatically have a significant impact on tradition, food security, and well-being of communities<sup>21,29</sup>.

It is a fact that humans are an integral part of most ecosystems in the Arctic and that there are scarcely remote areas in which human activity cannot be felt<sup>30</sup>. Reindeer herding requires humans to become an integrative part of the ecosystem while ensuring adaptive capacities for the land in the future. Food culture around reindeer herding plays a major role in upholding both communitarian values and holistically understanding the environment. Today, reindeer products are in great demand and herding creates much employment as a commodity resource of the northern economies.

Through increased youth engagement with indigenous food systems and knowledge, Arctic Indigenous Peoples have become internationally awarded and recognised for their rich culinary practices and knowledge<sup>31</sup>.

## Hunting, Fishing, and Harvesting

For Arctic Indigenous Peoples, being part of the environment through sustainable hunting, fishing, reindeer herding, and harvesting has elemental cultural, social, and spiritual value. It is the understanding that ecosystems provide more than a connection to livelihoods. In many societies, terrestrial and marine mammals alongside humans are considered interdependent parts of the ecosystem. This holistic composition has a substantial impact on the adaptive capacities of Indigenous Knowledge. However, the single-species approach to resource management applied by dominant cultures is many times described as interfering with the balance Arctic Indigenous Peoples seek within the ecosystem. Some examples of this are the regulations on salmon fishing in the Deatnu river<sup>32</sup>, or the local quotas on beluga within Inuit Nunaat.



Kayak rack in Ilulissat, Greenland (Photo: Volker Rachold)





An observation from the North of Greenland describes how variances in hunting regulations in combination with a changing environment force its inhabitants to deal with potential inapplicability of policies. Hunting quotas, sought by central government authorities, are often not designed for local circumstances and the people that rely upon the practice of hunting financially, socially, and spiritually. Varying natural conditions such as, for example, unpredictable levels of sea-ice thickness make it harder for some hunters to reach the desired resources while also acknowledging determined hunting periods.

"National hunting regulations affect us in many ways. For example, we are only allowed to hunt the appa [Thick-billed Murre] in one and half months per year. In the Northern part of Greenland, there is already sea-ice by then. The appa returns in the summer, but we are not allowed to hunt it then. My generation has never tasted this bird."33,34 Tukumminnguaq Nykjaer Olsen / Office and Project Manager at Inuit Circumpolar Council (ICC)

The Inuit Circumpolar Council has underlined that it is essential to foster understanding on the importance of Indigenous Knowledge and holistic perspective to the environment within relevant national and international bodies in order to support, safeguard, and promote the overall social, cultural, economic, and political integrity of Inuit. The increasing need for understanding the changes in the Arctic therefore call for the co-production of knowledge, which means to employ Indigenous Knowledge and science together for better decisionmaking processes<sup>35</sup>. In comparison to dominant cultures, Indigenous Peoples have maintained ways of life that exist alongside Arctic ecosystems for thousands of years. Food, in particular, is an integrative part of the system surrounding Indigenous Knowledge and a source to socially and spiritually connect with culture<sup>36</sup>.



Hunters returning to Ilulissat, Greenland (Photo: Nina Döring)

#### **Food Security**

Arctic Indigenous Peoples have sustainably managed resources for many generations and view food as not just a means of nutrition, calorie-intake, and money. It is an indispensable source of security and reciprocity encircling all ways of life by shaping self-worth and identity<sup>37,38</sup>. The knowledge discerned from the seasonality of the ecosystems is supporting year-round food security<sup>39</sup> and it is the connection to this way of life that constitutes culture, identity, and ensures cultural survival<sup>40,37</sup>. For Arctic Indigenous Peoples, food security resembles being part of the ecosystem while exercising a respectful approach to the environment<sup>4</sup>.

"(Food security) means understanding that food is a lifeline and a connection between the past and today's self and cultural identity." Food Sovereignty and Self-Governance – Inuit Role in Arctic Marine Resource Management, ICC Alaska<sup>41</sup>

Food security in hunting and fishing extends further than just ensuring subsistence. Using all parts of the animal is a deeply rooted cultural value and anchored in the spiritual relationship Inuit, for example, have with the Arctic ecosystem. Despite the fact that national regulations affect local hunting habits, Inuit societies are based on egalitarian values, and hereby also share all parts of hunted animals within communities. There is an intrinsic relationship between human and animal which is displayed by the value the whole community attributes to hunting. Therefore, in practices surrounding food security, the role of Indigenous Knowledge is essential since the well-being of the community relies upon the usage of this knowledge.

"In order to learn about Indigenous Knowledge you have to use it. There is less and less opportunity for that." Tukumminnguaq Nykjaer Olsen 33,34

## Food security and climatic stresses

In Arctic water systems, climatic and environmental changes are challenging the food security of all the circumpolar peoples who rely upon them. Whereas rising winter temperatures are favourable regarding the harshness of Arctic environments, intensive industrial fishing for example creates an imbalance and decreasing reproduction rates of fish<sup>42</sup>.

The Arctic Bering river-systems have long provided Indigenous Peoples with nutritional needs and food security. Fishing, as a circumpolar way of life, is practised by, among others, Indigenous Peoples of the Aleutian Islands and Alaska who rely on the regularity of salmon populations. Along the Yukon River, which is the largest salmon bearing river flowing through Alaska and Canada,





Yup'ik, Athabaskan, and Gwich'in Peoples have harvested salmon for at least 11.500 years<sup>43</sup>. Salmon, for Gwich'in, is both a food source and a way to explain life cycles of ecosystems through recurring appearances of fish<sup>44</sup>. In the Federal Republic of Sakha (Yakutia) in Eastern Siberia, home to indigenous Eveny, Yukaghirs and Evenki, food security and ways of life are becoming increasingly vulnerable through not being able to use traditional fishing practices due to environmental changes related to climate change<sup>42</sup>. Traditional food consumption also becomes more difficult for Inuit in Canada and Alaska facing climatic stresses. Alongside external regulations, unpredictable conditions such as longer periods of ice-break up, thinner ice, and lack of pack ice during the summer are all reasons for making traditional food less available. This cyclical change does not only affect the ways of life ultimately sustaining indigenous livelihoods, but also connects to individual and collective well-being.



Hunting break campfire, Sápmi, Sweden (Photo: Susanna Israelsson)

## Circular Ways of Life

The changing life cycles around indigenous ways of life capture the vulnerability, but also the significance of practices surrounding Indigenous Knowledge. Berrypicking and gathering, as other important examples encompassing food security and communitarianism

among Arctic Indigenous Peoples, contribute to spiritual and personal relationships with the land. Berry-picking illustrates the sharing relationships within communities and preserves traditional habits while being one of the most affordable harvesting practices<sup>45</sup>. However, the practice of harvesting and gathering berries also presupposes that Arctic Indigenous Peoples can rely on patterns within the ecosystem. Declining biodiversity hereby not only affects the ecosystem but also the ability of berry-picking and gathering when one cannot predict seasonal occurrences. This involves not only the process of picking itself, but also the risks of insects not being able to hatch due to, for instance, early disappearances of snow.

Although resilience is inclined within Arctic Indigenous cultures due to the intrinsic connection to natural life cycles, rapidly changing ecosystems and rigid management regimes are harder to adapt to. Transforming seasonal conditions affect migration patterns of animals, fish returns, pollination, and birthing success through which Arctic Indigenous Peoples may lose abilities to anticipate natural occurrences and hereby their connection to the ecosystem4. However, even though biodiversity is decreasing on a global scale, recent research clearly illustrates that nature is declining less rapidly on Indigenous Peoples lands than elsewhere4. And while global economic and industrial communities are increasingly eyeing shifts towards a circular economy, the traditional economies of Arctic Indigenous Peoples have always been circular<sup>46</sup>.

#### Outlook

In today's society, where Arctic ecosystems face the two-folded challenge of climate change and industrial developments, Arctic Indigenous Peoples are threatened in maintaining ways of life. Traditional land-management, transmission of Indigenous Knowledge, and the ability to preserve biodiversity as significant parts of the holistic understanding of the Arctic ecosystem are all under pressure in different ways.

While the voices and knowledge of Arctic Indigenous Peoples are represented by the Permanent Participants at the Arctic Council, the development of traditional ways of life are often further complicated by national regulations and having to cope with climatic stresses simultaneously. However, Indigenous Knowledge is formally recognised, both within the work of the Arctic Council and in international fora, as a different way of knowing and as important to utilise regarding climate change adaptation and maintenance of biodiversity. For Arctic Indigenous Peoples, bridging knowledge systems between and beyond communities to broaden





mutual understanding is essential – not only for the further manifestation of Indigenous Knowledge in the Arctic's future, but also for the continuation of its vivid development and contributions to society<sup>1</sup>.

As the Arctic's significance for the global community grows steadily, its vulnerability to wasteful exploitation also becomes more noticeable. While global stakeholders often fail to recognise the complexity of Arctic ecosystems and its biodiversity, Arctic environmental politics increasingly acknowledge the value of Arctic Indigenous Peoples knowledge approaches. Hereby, Indigenous Knowledge is utilised within multilateral institutions and the contributions of Arctic Indigenous Peoples earn more recognition. This knowledge and ways of life regarding sustainable land-use, circular economies, and rich food cultures can be valuable assets in collectively preserving Arctic and sub-Arctic

territories in a stable manner. If Indigenous Knowledge continues to be recognized and utilised within policy making processes, the positive contributions of Arctic Indigenous Peoples to sustainability might become more relevant to a broader global society.

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https://www.arctic-office.de/de/publikationen/fact-sheets/

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