

# FutureArcticLives

Future Arctic Livelihoods and Biodiversity in a Changing Climate

## Deliverable 5.2

Ethical guidelines and principles – An overview and synthesis of relevance for individual work packages

By

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**Abbreviations:**

American Anthropological Association	AAA
General Data Protection Regulation	GDPR
Data Management Plan	DMP
International Arctic Social Sciences Association	IASSA
Free, Prior and Informed Consent	FPIC
Interagency Arctic Research Policy Committee	IARPC
Inuit Circumpolar Council	ICC
Inuit Tapiriit Kanatami	ITK
Grønlands Statistik – Statistics Greenland	SG

## Introduction

Compliance with ethical standards is becoming increasingly important in scientific practice, and various parties within the scientific research community drive this development. Universities and individual scientists, associations and other institutes are establishing regulations and ethics advisory boards (American Anthropological Association, 2009; The University of Copenhagen, 2018). And today, most scientific journals require that submitted research has achieved ethical approval before an article can be accepted for publication (Costello et al., 2016). Also, the communities and indigenous groups that are the subjects of research are increasingly insisting on self-determination and sustainable research practices and issuing their own guidelines for researchers (Felt & Natcher, 2011; ITK, 2018). Examples of bodies that have developed ethics guides for different areas include international Arctic organisations described here and bodies focusing on vulnerable and low-resourced populations.

However, striving to conduct ethically correct research, it is important to recognise the large variation among communities and groups and not assume specific relations where these may not hold true. Instead, the objective must be to develop and uphold an appropriate and relevant ethical practice so that all groups and individuals, whatever denomination they may apply to themselves and whatever groups they may see themselves as part of or not, will be treated ethically and without having to pay allegiance to groups where they may not see themselves as part.

In particular, conducting research in what is termed the "arctic", it is important to be aware that the Arctic region is a political and relatively recent construct. At the same time, the situations and histories of countries and communities in this area vary considerably. What is currently conceived of as the Arctic region includes areas of eight states – the member states of the Arctic Council, i.e. US, Canada, Russia, and the five Nordic states – Denmark, Finland, Iceland, Norway and Sweden. However, historical conceptions of "Arctic" areas have regularly focused on more specific narrower boundaries or the Arctic rim states, i.e. the US, Canada, Russia, Denmark/Greenland, and Norway (Keskitalo 2004).

This means that Sweden, Finland and Iceland have not necessarily historically been conceived of as "arctic" states and may also, to a very differing extent, conceive of themselves or their own areas in such terms. The same applies to other states with "arctic" regions. It is also important to know that some use of the term "arctic" may have developed concerning international requirements or conceptions (such as the development of EU arctic oriented policy). This means that such a conception cannot be assumed to necessarily reflect the situation in these regions (Keskitalo 2014).

Areas, groups and individuals that today may become subject to "arctic" research can thus not be assumed to hold common characteristics. Countries represented in the Arctic Council include both rural and urban areas and wealthy and less wealthy areas and groups, all the way down to individual levels. The areas also encompass a considerable variation in population groups, and in particular, in northern mainland Europe, there have existed populations of multiple denominations for long periods. This also implies that the distinction between local and indigenous groups, and applying only those two distinctions, may not mirror on-the-ground realities and situations in the region (e.g. Keskitalo et al., 2013).

With that in mind, Part One of this document provides an overview of the ethical considerations, available guidelines, and official regulations relevant to the FutureArcticLives project ([www.futurearcticlives.eu](http://www.futurearcticlives.eu)). However, new research and guidelines are continuously developed, and the list contained in this document is not exhaustive. Readers are encouraged to seek further information.

Part Two of the document present the ethical considerations that will guide the research conducted by FutureArcticLives based on the guidelines outlined in Part One. Bringing this together, the aim is that this overview will be helpful to future projects in the same or related locations.

# **Part One**

## **1 European Union Standards**

### **1.1 General Data Protection Regulation (GDPR)**

The "General Data Protection Regulation (GDPR)" (European Union, 2016) sets out the rules for the processing of personal data within the European Union (EU). This regulation protects the fundamental rights and freedoms of natural persons and their rights concerning personal data by laying down rules relating to the processing and free movement of personal data. It further enables and regulates the free movement of personal data within EU member states. The GDPR applies to all data collection and management undertaken by FutureArcticLives, including activities carried out in the non-EU member state Norway and in Greenland because the project is financed by BiodivERsA through EU funding. A description of the operationalisation of the GDPR in FutureArcticLives can be found in the projects Data Management Plan (DMP).

## **2 Country-specific guidelines following partner university requirements**

### **2.1 Denmark**

Any research conducted at the University of Copenhagen must be approved by the Committee for Good Scientific Practice under consideration of the "Rules for good scientific practice" (University of Copenhagen, 2013a), the current Danish legislation (Ministry of Higher Education and Science, 2014), the guidelines of the University (The University of Copenhagen, 2018; University of Copenhagen, 2013b, 2016b, 2016a), and the most important general and international guidelines for good scientific practice.

The University of Aalborg complies with the same national and international rules and guidelines described by the "Academic Council guidelines on promoting good scientific practice" from the Technical Faculty of IT and Design (The University of Aalborg 2021).

The "Rules of good scientific practice" oblige scientists to adhere to several basic principles, including that 1) the research is conducted in a reliable manner 2) primary data is kept secure and, as far as possible, is made publicly available 3) the research results are presented openly and honestly 4) there is openness concerning possible conflicts of interest 5) everybody who takes part in the research process is fairly credited.

The relevant legislation in place includes the "Act no. 383 of April 26<sup>th</sup>, 2017 on research misconduct etc." (Danish Parliament, 2017), the "General Data Protection Regulation (GDPR)" (European Union, 2016), and "The act on supplementary provisions to the General Data Protection Regulation" (Justitsministeriet, 2018). General guidelines and international guidelines that must be considered as stipulated by the University of Copenhagen include the "Danish Code of Conduct for Research Integrity" to help secure trustworthiness, integrity and quality in Danish research (Ministry of Higher Education and Science, 2014), the "Vancouver protocol" (Journal, 2019) for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals, the "European Code of Conduct - European Science Foundation" (ALL European Academies, 2017) and the "Singapore Statement on Research Integrity" (Lucas, 2010) as a common frame of reference for what researchers around the world understand as good research practices. This includes honesty in all aspects of research,

accountability in the conduct of research, professional courtesy and fairness in working with others, and good stewardship of research on behalf of others (Lucas, 2010).

The Government of Greenland has issued various requirements for field activities in Greenland, depending on the location and type of fieldwork or expedition being conducted (Government of Greenland, 2017). Standard research permits are issued by the Government of Greenland (Government of Greenland, 2017, 2021c; Naalakkersuisut, 2021). Scientific research involving marine mammals, the country's cultural and natural heritage, and permits for vessels and expeditions to World heritage sites or remote areas require special research permits from multiple ministries and institutions (Government of Greenland, 2017; Naalakkersuisut, 2021), such as Greenland National Museum (Greenland National Museum, 2021), Ministry of Fisheries, Hunting and Agriculture (Government of Greenland, 2021b) or the Expedition Office of the Ministry of Independence, Nature, Environment and Agriculture (Government of Greenland, 2021a). For fieldwork involving human subjects, neither the Self-rule Government nor any research body in Greenland has so far formulated a national-specific set of ethical guidelines or guidelines for responsible research conduct (Holm et al., 2012). However, the National Science Foundation has developed "A toolkit for Community-Based Participatory Research in Greenland", funded by the Arctic Social Sciences Program (Rink & Adler Reimer, 2019).

## **2.2 Sweden**

Sweden has strong transparency requirements. All data that is received at an authority (including also a university or university college) is, as a rule, considered public (cf. Prop. 1994/95:19, p. 461).

Restrictions to public data availability included grounds for confidentiality (political and ethnic belonging), and now also GDPR grounds for confidentiality. There are also general confidentiality requirements that limit potential harm to those providing data. However, in Sweden, confidentiality is not only assessed based on the research itself, but also on whom is requesting to see or use it, and for what purpose (e.g. OSL 24 ch. 8 § third para).

For such reasons, it has been noted that GDPR regulations in Sweden do not necessarily prevent data from being made available or even allow the person from which the data originated to retract data, as Swedish public access requirements supersede GDPR (Swedish legislation decision 2018-10-02 dnr 327/18, decision 2019-02-13 in court case 5437-18). Court decisions have, in some cases, determined that research data had to be provided upon a specific request, in contradiction of researcher assessment (cf. Swedish National Agency for Higher Education 2005). Thus, it has been concluded that a researcher cannot guarantee confidentiality to data in Sweden (e.g. Swedish Research Agency 2017).

According to the ethical guidelines of Umeå University, the researcher is obliged to provide information about the research and to obtain consent from each research participant for research involving human subjects. Furthermore, research may only be carried out if the research participant has consented to the research that concerns them. A consent only applies if the research participant has received the following information about the research:

- the overall plan for the research.
- the purpose of the research.
- the methods that will be used.
- the consequences and risks that the research may entail.
- the entity principally responsible for the research.
- that participation is voluntary
- and that the research participant has the right to discontinue his or her participation at any time

The Ethical Approval Authority (Etikprövningsmyndigheten) is the government authority that since 2019 oversees research projects that collect and treat personal and sensitive data. The authority oversees that research projects follow the ethical requirements for treating personal and sensitive data and also archives metadata and research data.

### **2.3 Norway**

Research conducted in Norway must follow the national requirement and general principles and guidelines for good scientific practice given by the National Research Ethic Committees. The National Research Ethic Committees were established in 1980 based on the Proposition to Parliament No. 28 (1988-1989). The Research Ethics Act of 2007 (replaced by the research ethics act of 2017) provides a legal mandate for the committees. The principles given by the committees include 1) That people who participate in research, as informants or otherwise, shall be treated with respect, 2) that researchers shall seek to ensure that their activities produce good consequences and that any adverse consequences are within the limits of acceptability, 3) that research projects shall be designed and implemented fairly, and 4) that researchers shall comply with recognised norms and to behave responsibly, openly and honestly towards their colleagues and the public.

The Norwegian Centre for Research Data (NSD) is the Data Protection Officer who oversees research projects that collect and treat personal and sensitive data. NSD is also the national service provider for the European Research Infrastructure CEESDA. The institution both approves research projects, oversees that they follow the ethical requirements for the treatment of personal and sensitive data, and also archives metadata and research data from Norwegian research projects. It is also a certified repository for research data under the CoreTrustSeal. Research projects need to be notified and approved by the NSD before data collection can commence. The NSD provides templates for information and consent forms that adhere to the ethical standards required by the Norwegian data protection legislation. The Act on Personal Data (Lov om behandling av personopplysninger, Justis- og beredskapsdepartementet, 2018) implements the GDPR regulations in addition to regulating national standards on protection of personal data. The Act and its implementations give a person protection such as the right to withdraw their consent to participate in research and to know about what data is stored and to get access to the personal data that the research project has stored. The research project is obliged to inform the individuals of how their data are being collected, processed and stored and how they can gain access to their data. The consent to participate in the research only applies if the research participant has received information about the overall plan, the purpose, methods, risks of participation, who is responsible, that participation is voluntary, and what the person is actually consenting to. The latter point is important since it requires the researcher to specify what the person will participate in, such as an interview, video, or online survey. The researcher also needs to provide information on how long the data will be stored and its degree of anonymity. In most cases, the NSD will not accept a project that discloses the names or other personal information about the participants, as full anonymity is the standard for collecting personal data.

## **3 Guidelines by Scientific Associations**

### **3.1 Code of Ethics of the American Anthropological Association (AAA):**

The American Anthropological Association's "AAA Statement On Ethics" (American Anthropological Association, 2012) constitutes a recognised standard when working with human subjects. Research involving others can encompass complex interdependencies and obligations and must be sensitive to



the power differentials, constraints, interests and expectations and characteristics of all relationships. Anything less can lead to misunderstandings, conflicts, and the need for the researcher to make decisions that reconcile seemingly incompatible values. The "AAA Statement on Ethics" provides detailed principles and guidelines for researchers, particularly anthropologists, to resolve these difficulties and adhere to anthropology's methodological and ethical best practices. The association's "Principles of Professional Responsibility" includes the following core principles shared across subfields and contexts of practice: 1) Do no harm, 2) Be open and honest regarding your work, 3) Obtain informed consent and necessary permissions, 4) Weigh competing ethical obligations due collaborators and affected parties, 5) Make your results accessible, 6) Protect and preserve your records, 7) Maintain respectful and ethical professional relationships. These principles are more fully defined in the full AAA "Statement On Ethics" (American Anthropological Association, 2012). Research that involves methods and practices from Anthropology should adhere to these guidelines and core principles outlined by the AAA.

#### **4 Context-specific regulations/recommendations/guidelines**

Some contextual circumstances require additional attention, vigilance, and specific considerations. This includes circumstances in which the research will occur in locations defined as resource-poor settings. In some countries, local populations in arctic areas fall below their country's poverty line (Rasmussen, 2005). And some socio-economic indicators in some Inuit regions are statistically similar to those found in the Global South (Ford, 2009; Hotez, 2010; ITK, 2018). Any imbalance in research partnerships between high-income and low-income or resource-poor settings may risk exporting unethical research practices to lower-income settings, also known as ethics dumping (TRUST Equitable Research Partnerships, 2018).

Fieldwork and research collaborations with indigenous and local peoples of different denominations in their homelands/territories also require ethical considerations. In many communities, research may still be associated with memories of colonialism, racism, imperialism, exploitative practices, stigmatising and ethnocentric representations of indigenous peoples, and the loss of cultural properties and self-determination (Hall & Smith, 2000; ITK, 2018). Research approaches that prevent participants from making decisions about research activities in their homeland, such as setting the research agenda, monitoring compliance with ethical research guidelines, and determining how data and information about their people, wildlife, and environment are collected, stored, used, and shared, are still common (ITK, 2018). This historical background requires heightened sensitivity in all aspects of research planning and implementation and with all groups (Felt & Natcher, 2011; ITK, 2018).

Finally, the beneficiaries of research are still often mainly the researchers themselves, while many communities and groups may remain largely marginalised from research governing bodies (ITK, 2018; ITK & NRI, 2006). However, guidelines and recommendations are available to avoid unethical and harmful practices at any research stage, as described below.

##### **4.1 Working in different resource settings**

To ensure long-term equitable research relationships between partners in different settings (e.g. lower and higher resource settings), fairness, respect, care, and honesty must be ensured. Researchers from high-resource settings need to be aware of the power and resource differentials in benefit-sharing discussions and exhibit sustained efforts to bring lower-capacity parties into the dialogue. However,

resource settings and sensitivities differ between cases. Northern Europe also includes large urbanities, well-resourced or wealthy areas, and relatively wealthy populations in all denominations with a large internal variation. People who work in resource sectors, employed in mining in rural areas, for instance, may be well paid. It is also important to recognise the variation in "local". Many people maintain both primary and secondary residences, where the secondary residence, perhaps a family residence, may be situated in more rural areas. And they may, due to this, conceive of themselves as "local" in this area. This means that those who may be seen as "local" are not given. It also means that "locals" and indigenous actors may hold very different use conceptions and wildly varying socio-economic backgrounds and values (e.g. Back and Marjavaara 2019).

The Global Code of Conduct for Research in Resource-Poor Settings (TRUST Equitable Research Partnerships, 2018) is particularly relevant for research in resource-poor settings. The code was drafted by the TRUST project building on existing guidelines and is recommended by the Ethics and Research Integrity Sector, Directorate-General for Research and Innovation, European Commission. Basic guidelines for working in resource-poor settings, where a discrepancy in resources are assumed between researchers and research subjects, include the below, but these may be seen as more specific versions of general ethical guidelines that may be relevant everywhere:

- 1) Fairness: Researchers must ensure that research is locally relevant; local communities, research participants, and perspectives are involved in all processes (good participatory practice); feedback on results is provided; and local researchers are involved wherever possible. For researcher access to biological or agricultural resources, human biological materials, traditional knowledge, cultural artefacts, or non-renewable resources such as minerals, the free and informed consent of the owners or custodians is required, and participants must be informed of the potential monetary and nonmonetary benefits. Research support systems, for instance, translators, interpreters or local coordinators, should be fairly compensated for their contribution to research projects.
- 2) Respect: Researchers must ensure that potential cultural sensitivities are respected, that, where possible, community consent is obtained through recognised local structures, and that the host country ethics committee will conduct a local ethics review. Researchers must ensure clear procedures and appropriate access for feedback, complaints, or misconduct allegations regarding the research process. Special measures to ensure the safety and wellbeing of research participants must be agreed upon if the research involves the risk of reprisals, stigmatisation, discrimination, or unspecified personal risk for participants. In advance of the research, it should be clarified whether local resources are adequate for the new project. Risk management plans encompassing the research team, local partners, and employers must be jointly agreed upon if the research involves potential health, safety, or security risks.
- 3) Honesty: Researchers must ensure a clear understanding among collaborators about their roles, responsibilities, and conduct throughout the research cycle; information must always be presented honestly, clearly, and in a non-patronising style and, if needed, in plain language and the appropriate local languages. Corruption and bribery of any kind by researchers cannot be accepted. Avoidance of privacy violations must also be ensured, including in environments with lower local privacy standards or compliance. Special attention must be paid to research participants at risk of stigmatisation, discrimination, or incrimination because of participating in the research.

(This is a shortened version, please refer to the original Settings (TRUST Equitable Research Partnerships, 2018)).

## 4.2 International Arctic organisations guidelines for working in Arctic environments

International Arctic organisations have also developed specific guidelines for research in the Arctic, to some extent mirroring the historical focus on more low-populated, rural areas assumed in this type of research (cf. Keskitalo 2004). The "Statement of Principles and Guidelines for Conducting Ethical Research" (IASSA, 2020) in the Arctic has been formulated in accordance with the Bylaws of the International Arctic Social Sciences Association (IASSA) adopted by the IASSA General Assembly on October 29<sup>th</sup>, 1992 and amended by the IASSA Council on March 16<sup>th</sup>, 2020. The 2018 "Principles for Conducting Research in the Arctic" (IARPC, 2018) were articulated by the U.S. Interagency Arctic Research Policy Committee and aligned with U.S. Arctic policy. Both guidelines are to be understood as guidelines for conducting responsible and ethical research and promoting mutual respect communication and partnerships.

However, as noted above, it must be made clear that the "Arctic" region, to the extent it is defined today, is a political construct that does not speak to any given similarity amongst all areas in all the relevant aspects. The focus on the community level that these documents apply will thus not be unproblematic or even able to identify all cases. Important to note is also that neither of the relevant organisation statements supersedes any international, national, professional, indigenous, or local guidelines. Researchers still have to follow federal, state, and local regulations, policies, and guidelines, and the guidelines apply broadly to both indigenous and local groups and participants.

### 4.2.1 IASSA Principles and Guidelines for Conducting Ethical Research in the Arctic

In summary, the IASSA "Principles and Guidelines for Conducting Ethical Research in the Arctic" (IASSA, 2020) states the following principles:

- 1) The researcher should consult with all relevant regional, local, and/or indigenous institutions about the proposed research. Seeking approval from these entities and informed consent from participants requires a description of the research in plain and local language that discloses methods, sponsors, purposes, and objectives, describes the treatment of data, data ownership, and privacy rights, and indicates support for the research by relevant communities, organisations, and/or representatives. Ethical protocols should be pre-approved.
- 2) The researcher should consult with local residents and indigenous peoples and provide them with sufficient information and opportunities to participate in project planning and implementation. The organisation should consider parallel research projects in the communities and the overall research burden over time.
- 3) Research results should be presented to local communities in plain and, if possible, the local language. Research participants should have the right to review all products before publicly disseminating them. Researchers should inform how they are used and share all products with participants.
- 4) Publications should refer to the informed consent of participants and utilise local and indigenous expertise and knowledge. Publication restrictions apply as negotiated with the community, including embargoes on results or non-publication of some or all results. Co-authorship is an appropriate way to acknowledge the contributions of local and indigenous knowledge holders.

- 5) The researcher must respect local cultural traditions, languages, and values, incorporate local and indigenous/traditional knowledge and experiences, and recognise the principle of cultural ownership.
- 6) As part of the research process, efforts should be made to provide meaningful learning experiences, training, and economic opportunities for local communities and indigenous peoples.
- 7) Research involving human subjects must respect the participant's privacy and dignity, including providing anonymity unless they have consented to be identified. If anonymity cannot be guaranteed, subjects must be informed of the possible consequences and allowed to refrain from participating.
- 8) All research involving children must be fully justified and never conducted without the children's consent and the consent of their parents or guardians.
- 9) Sacred sites, cultural materials and human remains must not be disturbed or removed without appropriate local consent and in accordance with international, national, local, indigenous, and tribal laws and regulations.
- 10) Researchers should inform communities and participants of these ethical principles.
- 11) Research should benefit local communities and policymakers through appropriate knowledge sharing.

(This is a shortened version, please refer to the original (IASSA, 2020))

#### 4.2.2 IARPC Principles for Conducting Research in the Arctic

In brief, the "Principles for Conducting Research in the Arctic" (IARPC, 2018) include the following five principles:

Be accountable.

- 1) Promote a safe, harassment-free, and inclusive work environment and be, as investigators and co-investigators, responsible for all decisions and actions made.
- 2) Act with integrity, and honour verbal and written commitments. Participation in research must be voluntary and cause no harm. When required, participants' informed consent must be obtained. Research methodology, sponsors, and how the information or images will be used and published should be disclosed and understandable to all involved. Provide reasonable opportunities to individuals who share information or images to review and agree or withdraw their contributions before publication.
- 3) Consider the physical and socio-economic wellbeing of all indigenous and non-indigenous Arctic residents. Credit all research collaborators' contributions in publications and presentations with their consent, including indigenous knowledge holders'. Discuss expectations for compensation with all collaborators and individuals providing information or services for the project.
- 4) Provide reasonable opportunities to individuals who share information or images to review and agree or withdraw their contributions before publication.

Establish effective communication

- 1) Communicate expectations, objectives, and potential outcomes at all stages of the project. Provide reasonable opportunities to local collaborators to participate in planning, data collection, analysis,

interpretation of results, and development of conclusions. Researchers should identify all sponsors and collaborators, sources of financial support and receive guidance from the community about the most effective and preferred methods of communication.

- 2) Where possible, inquire about ongoing community research and priorities, and collaborate appropriately. Be aware and respectful of indigenous peoples' practices and protocols for accountability.
- 3) Coordinate visits or fieldwork to avoid disrupting peak subsistence periods, traditional activities, religious events, and health services. Coordinate activities such as research vessel tracks or aircraft flights to minimise the impact on residents.
- 4) Identify potentially sensitive data and observations with individuals and/or the community and establish measures to reduce the likelihood of any harm to individuals or the community. Researchers should share research results, preferably in person, with communities before broader release and make the following publications accessible to local communities and repositories.

#### Respect indigenous knowledge and cultures

- 1) Researchers are encouraged to learn about the region's history, cultures, languages, community perceptions of past and current research conducted in the region, and organisational structures, practices, values, and institutions.
- 2) Respect all hunting, fishing, harvesting, and gathering practices and use areas. Avoid disturbing cultural resources such as sacred sites, archaeological sites, cultural materials and markers, and cultural property. Adhere to local and Indigenous traditions, customs, and locally adopted research guidelines, permitting requirements, or specific protocols.
- 3) Be open to new viewpoints and be aware of and acknowledge differences and biases. Arctic Indigenous Peoples hold unique knowledge and understanding of their homelands and offer valuable collaborative partnerships with scientists. Inclusion of indigenous knowledge in research is encouraged.

#### Build and sustain relationships

- 1) Build meaningful relationships based on good faith and partnership with communities and their representatives. Develop a community engagement plan in collaboration and cooperation with Arctic indigenous peoples and other residents.
- 2) Researchers and interested communities should determine their level of collaboration. Not all research will be of direct interest to Arctic residents, nor may all communities have the capacity to participate.
- 3) Determine in advance with Arctic indigenous residents, research collaborators, or study participants who collect, owns, manages, evaluates, and disseminate the data to allow projects to proceed with a shared understanding of data governance and ownership. Work closely with community leaders or representatives to resolve conflicts.
- 4) Potential outcomes of a research project for the community and the environment should be addressed and discussed. Researchers are encouraged to work with local liaisons and research assistants and engage residents in research design, planning, data collection, storage, analysis, interpretation, and reporting.

Pursue responsible environmental stewardship

- 1) Scientific research and local and indigenous knowledge contribute to the stewardship of the Arctic environment. Researchers should limit the impact of their research on the environment and obtain appropriate permits.
- 2) Avoid disturbing flora and fauna that are not the subject of the research and minimise disturbance to flora and fauna that are the subject of the research. Researchers need to be aware of federal, state, and local regulations and coordinate with applicable land managers and experts to avoid causing unnecessary stress on individuals, herds, or populations of animals.
- 3) Avoid and minimise impacts to terrestrial, aquatic, and marine habitats, including but not limited to: noise, vegetation trampling, and other environmental impacts.

(This is a shortened version, please refer to the original (IARPC, 2018))

### **4.3 Work that affects indigenous and local peoples or their territories and resources**

As seen above, research guidelines regularly refer to both indigenous and local groups. In specifying any group, it must be noted that the differences between who may be defined as indigenous and local may not be great in many places. The definition indigenous and/or local also hides a considerable variation between groups, including numerous groups not defined as indigenous but hold long legacies in specific areas. These may in northernmost mainland Europe include persons or families who were previously (at some point in history) Saami or Inuit but are not defined that way at present, groups of mixed origin, and Kven and Torne Valley Finn groups with long legacies in certain areas (e.g. Keskitalo et al. 2013).

As indigenous groups have often been the specific focus of international work, international and national guidelines that focus on indigenous groups in general and specific indigenous groups are described below. However, this does not imply that less care should be taken when working with local groups or groups or individuals which are not acknowledged as belonging to a specific denomination but only that clear and specific communities may not be possible to identify in the particular case (which may also be the case for some organised indigenous groups as well).

#### **4.3.1 Indigenous lands/territories and natural resources**

In 2007, the United Nations General Assembly adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The UNDRIP recognised indigenous peoples rights and highlighted Free, Prior, and Informed Consent (FPIC) as a prerequisite for any activity affecting their lands, territories, and natural resources. FPIC thereby guarantees core human rights principles of individual autonomy and self-determination as part of basic human dignity. FPIC is a specific right that applies to indigenous peoples and allows them to give or withhold their consent to a project that affects their territory.

The FPIC is also used to negotiate the conditions under which the project will be planned, implemented, monitored, and evaluated. The consent can be withdrawn at any time. The process of obtaining FPIC includes six steps in the "Free, Prior, and Informed Consent Manual" (FAO, 2016):

- 1) Identify the indigenous peoples' concerns and their representatives.
- 2) Document geographic and demographic information through participatory mapping.

- 3) Design a participatory communication plan and carry out iterative discussions to disclose project information transparently.
- 4) Reach consent, document indigenous peoples' needs to be included in the project, and agree on a feedback and complaints mechanism.
- 5) Conduct participatory monitoring and evaluation of the agreement during project implementation,
- 6) Document lessons learned and disclose information about project achievements during project closure.

(This is a shortened version, please refer to the original (FAO, 2016))

#### 4.3.2 Working with Inuit communities

The Inuit Tapiriit Kanatami (ITK) and the Nunavut Research Institute has developed the document "Negotiating Research Relationships with Inuit Communities: A Guide for Researchers" (ITK & NRI, 2006). The guide provides detailed and practical advice to maintain a meaningful relationship with community members. It encompasses a range of information regarding communication and relationship-building that apply to natural, physical, biological, and social scientists. To summarise, it is recommended that researchers:

- 1) Consider and address community concerns and expectations when developing a research project in or around a particular northern community.
- 2) Consider feasible opportunities for local involvement in a research project.
- 3) Initiate community contact as early as possible, and keep local contacts informed about research progress and results throughout the research.
- 4) Incorporate relevant key elements when negotiating a research relationship with a community.
- 5) Determine the appropriate level of community involvement (for both the community and the researcher) in various research stages – project design, fieldwork, data analysis, and interpretation.
- 6) Start early in identifying and applying for all relevant research licenses or permits required for your project under various jurisdictions.
- 7) Choose appropriate and effective means of communicating research results to communities.

(This is a shortened version, please refer to the original ((ITK & NRI, 2006)).

A set of guidelines specifically relevant for community-based participatory research is the "Toolkit for Community Based Participatory Research in Greenland" (CBPR), developed by Rink & Adler Reimer (2019). This list includes recommendations pertaining to particular aspects of the participatory research process:

The project proposal

- 1) Includes the latest literature regarding the topic identified and the existing barriers to change and exhibits a clear and up-to-date understanding of CBPR literature and principles.
- 2) Includes a realistic understanding of the potential limitations of CBPR, recognising potential limitations of the CBPR approach and taking steps to address those limitations.

- 3) Address problems significant to community participants and provide evidence, such as letters of support.

#### The research design

- 1) Builds on identified community strengths, such as existing organisations and networks, cultural beliefs, and political will and includes community input into the plan for data collection approaches that is acceptable to participants and respectful of their culture, time, and resources.

#### A collaborative approach

- 2) Includes community involvement in all phases of the research effort and provides structures for shared decision making – including efforts to provide research collaborators and participants with information to make informed choices regarding their involvement and contribution to research (e.g., training, materials written in lay language).
- 3) Builds on the knowledge and strengths of community collaborators for research activities such as participant recruitment, intervention development, and data collection (e.g., hiring community research assistants, involving local practitioners).
- 4) Includes assessment of feasibility for long-term sustainability within the community.
- 5) Presents study results to members of the community (following rules of confidentiality) for their input regarding the interpretation, presentation, and dissemination of the data.
- 6) Builds capacity that will remain with the community after the researchers are gone (for example, hiring for research jobs, leadership roles, presentation of findings, infrastructure building, proposal writing).
- 7) Disseminates research findings while respecting confidentiality and designs dissemination strategies involving community partners for both academic and community-level distribution (newsletters, videos, lay publications, TV, and radio).

#### Research environment

- 1) Describes the political environment as either a support or challenge related to sensitive research topics such as sexual health, smoking, or domestic violence and describes which resources obtained for the proposal are used to enhance the research environment within the community.

#### Budget and timeline

- 1) Includes the resources and the time needed to develop or enhance community partnerships.
- 2) Provides resources for recruitment, retention, and partnership building while respecting the cost of research to participants and community partners (e.g., food, travel, lodging, meeting room rental, office supplies for community-based research staff, reimbursement or incentives for lay health advisors).
- 3) Plans for the cost of training and materials to initiate efforts by the community to address policy and environmental change as a result of research findings.

(This is a shortened version, please refer to the original (Rink & Adler Reimer, 2019).

Another relevant document is the "Inuit National Research Strategy for Canada" published by the Inuit Tapiriit Kanatami. This document brings together a shared understanding of Inuit Nunangat research heritage with current research practices, defines Inuit expectations for the role of research in their regions and communities, and identifies areas for involvement and action across the Inuit and the research community (ITK, 2018). Since 2018, the Inuit Circumpolar Council (ICC) has facilitated



discussions between Inuit from Nuunat - Chukotka, Alaska, Canada, and Greenland - about the development of Circumpolar Inuit principles/protocols for equitable, ethical engagement and involvement of indigenous knowledge and communities (Arctic Science Ministerial, 2018; ITK, 2018). These circumpolar standards will be proposed to the Arctic Council and will likely become available in spring 2022 (ICC, 2021).

Despite these available standards/recommendations, researchers must be aware of site-specific regulations/recommendations in place or develop their own protocols/agreements in collaboration with the local communities.

#### 4.3.3 Working with Saami communities

Research on the Saami has been ongoing for a very long time. The Saami were mentioned as early as the 5th century in ethnographic descriptions of Lapland. During the 20th century, research on the Saami was significantly intensified from different research perspectives, including everything from genetics to anthropology to language and recently, climate research. In much of the older research, it is clear that the Saami population has been regarded as an object, which goes hand in hand with the view that prevailed at that time.

In Sweden, the Swedish Sami Parliament has issued a research strategy (2021) where the principles of self-determination, decolonizing research, responsibility, and economic resources and infrastructure for research are central.

The Sámiid Riikkasearvi (Svenska Samernes Riksförbund - SSR) has set out a set of guidelines whose primary focus is to get a mandate for the research and projects carried out on Saami, their culture, industry, language, etc. For SSR, it is important to have an active role and be able to influence which research and which projects are carried out so that the projects are relevant to the organisation and its members. A summary of the guidelines is available here:

- 1) SSR's primary standpoint is that research theories and methods shall not be offensive/insulting either to Sámi society, individuals or the reindeer.
- 2) The research participants should be accredited in publications, lectures etc.
- 3) Anonymity shall be guaranteed if the knowledge holder wishes to be anonymous – the researcher should be aware that it is more difficult in Sámi society.
- 3) In conjunction with field work, the researcher often receives sensitive information. When analysing the data, the researcher must determine what have negative implications for the individual if published.
- 4) The knowledge holders who participate in the project have the right to access the data collected prior to publication to ensure that they have been represented correctly.
- 5) The researchers shall cover the costs that project participation incurs for Sámiid Riikkasearvi unless something else has been agreed on in the FPIC document.
- 6) Participating knowledge holders that give up their time to share information should be reimbursed for loss of salary/work hours by the researchers, and the researchers shall cover hidden costs relating to field work

- 7) An agreement relating to project participation should be made between researchers and knowledge holders to determine what language they use in interviews.
- 8) Sámi concepts or words should be written in publications with explanations in other languages. Sámi orthography should be used, and Swedish place names should be placed in footnotes or in brackets
- 9) Summaries in publications shall also be available in Sámi.
- 10) Information about the project should be disseminated to the research participants and a well-defined plan shall be created for how this shall be implemented.
- 11) Publications resulting from the project shall be sent to all participants of the research project.

(This is a shortened version, please refer to the original (SSR, 2019))

The Sami Parliament of Norway has not developed particular guidelines for research in Saami communities in Norway except for ethical guidelines on research that collects medicinal and personal health data. Starting from 2022, the Parliament will produce general guidelines as part of developing a new strategy for Saami research in Norway.

The Finnish Saami Parliament has issued its own procedures for seeking consent for research projects dealing with cultural heritage and traditional knowledge based on the principles of FPIC and the Akwé:Kon Guidelines on traditional knowledge under the Convention on Biological Diversity (CBD, 2004). At the pan-Sami level, the Saami Council is developing ethical research guidelines for research in Saami areas in general, which will probably be released during 2022. At the international level, the Ottawa Traditional Knowledge Principles from 2015 also contains general guidelines for research in Arctic areas formulated by the Permanent Participants of the Arctic Council.

#### **4.4 Other guidelines**

Several other guidelines are available. However, addressing each of these is beyond the scope of this document. Here we will only highlight the special issue in BioScience focusing on participatory monitoring (Community-Based monitoring collection 2021) and the book "Community-based monitoring in the Arctic" (Danielsen et al. 2021). Both of these highlight various ethical considerations concerning research collaboration with local and indigenous populations in relation to traditional and local ecological knowledge and about data sharing and management, with a particular focus on environmental observations collected using various mobile platforms.

## **Part Two**

### **5 Ethical guidelines for FutureArcticLives**

The above-listed guidelines can be considered the optimal standards. However, in practice, research and funding acquisition processes may prevent projects such as FutureArcticLives from adhering to all standards. Involving communities in co-designing research projects, for instance, would be ideal. However, this constitutes a challenge for third-party funded projects, including FutureArcticLives, as research grants and funding are typically only awarded to projects that are already fully developed and elaborated. Extra funds to plan and co-design the project from the inception phase or co-write the proposal with communities or their representatives are rarely available within the current funding structures. In addition, specific communities may not be possible to identify in all cases during the inception phase. In other cases, projects such as FutureArcticLives may work with historical or register data at a central level or at a scale where it is not immediately clear what community or local stakeholders to include.

Moreover, funding agencies typically allow only representatives backed by recognised research institutions as partners in projects barring less organised community representatives and, in some cases, also NGOs and public non-research institutions from being project partners. Finally, not all aspects listed in the guidelines outlined in part 1 are equally relevant for every project and every Work Package (WP). FutureArcticLives includes four research WP's taking different approaches and using different methods. The following section highlights the guidelines that will be followed in each WP in FutureArcticLives and explain how they will be met.

#### **5.1 WP1 - Climate change implications for biodiversity and the welfare of Greenland's traditional hunters and fishers**

WP1 will investigate the effects of climate change on the welfare of hunters and inshore fishermen in Greenland using mainly secondary data obtained from Statistics Greenland (SG), Greenland Fisheries Control (GFLK) and the Ministry of Hunting, Fisheries, and Agriculture, Government of Greenland. Permission in the form of "researcher access" will be obtained specified in a contract with SG. The data contain sensitive personal information such as information on the income of individuals and families, information on hunting licenses from the Greenlandic hunting license register (Piniarneq) and catch from the catch database (LULI).

Special rules are set out for the data provided by SG (Grønlands Statistik, 2021). GS authorises access to statistical data for specific research and analytical tasks and sets out rules to ensure that data is handled to ensure data security and data confidentiality. All datasets accessed through a research agreement are confidential, according to §27 of the Landstingslov nr. 8. of June 13th 1994 on case processing in the public administration and §50 of the criminal law of Greenland of April 30th 2008. Researchers have to sign a contract with SG to comply with several rules in handling data. The researcher has access to microdata only on the SG server using the Citrix application. Data can be processed and summarised on the server, tables and figures can be made, and various statistical information calculated. These general results can then be sent to the researcher's e-mail, with a copy to SG for checking that the handling of microdata is in order. Only analytical results, aggregated tables, or figures where it is impossible to identify individual units can be sent from the research machines at SG. Personal data or data on individual units, i.e., persons, households, families, enterprises, or other

units that are de-identified, even if the unique sequence number is removed, may be returned. It is allowed to work further with the retrieved aggregated material, e.g., form figures or further statistical software analysis. Aggregated data should be in a form that can be used immediately in a publication. Figures and tables are only allowed if they do not contain identifiable information, which also requires special attention to so-called outliers/extreme values, which may be identifiable. Any merging of data from SG registers with other sources requires prior approval by the Danish Data Protection Agency (Grønlands Statistik, 2021). Martin Reinhardt Nielsen will be the only researcher with access to these data but can extend access to co-workers.

Particular importance for WP1 working with personal data from SG is requirements related to the European Union's General Data Protection Regulation (GDPR) (see paragraph 1.1), and specific considerations are outlined in FutureArcticLives data management plan (Nielsen et al. 2021). However, since SG handles anonymisation and all concerns concerning GDPR these issues are less concern. Other guidelines that apply here are the requirements of the University of Copenhagen, including the Standards of Good Scientific Practice (see paragraph 2.1) and the regulations for obtaining a Research Permit for Greenland (see paragraph 2.1). Since this project does not involve fieldwork or work directly with or on the territory of indigenous or low-resource communities, guidelines outlined in section 4 are not relevant to WP1.

Data on biodiversity in the form of wildlife density surveys are provided by the Greenland Institute of Natural Resources (GINR) (Greenland Institute of Natural Resources, 2021). The climate data used in WP1 are available from the Danish Meteorological Institute (DMI) (DMI, 2021). In both cases, it is mainly data that has already been published or is openly accessible. Hence, no ethical guidelines for engaging with primary respondents is required (but see Data Management Plan – Nielsen et al. 2021).

Another data source is primary interviews with scientists and other experts to develop future scenarios for wildlife trends and ranges in Greenland under different CO<sup>2</sup> emission pathways. Following guidelines from the University of Copenhagen and standards for good scientific practice, WP1 researchers will obtain written informed consent before each interview. The consent form clarifies to the interviewee the project objectives, further use of the data, data storage, and ownership of the data (see Appendix 6.5 for the draft FPIC form for this purpose). As the respondents in these interviews are scientists mainly employed at the Greenland Institute of Natural Resources, the guidelines outlined in section 4 only applies to a minimal extent. To ensure scientific transparency, interviews should ideally not be anonymous but will depend on the level of consent given by the respondent in the FPIC. The Vancouver protocol may be relevant for participating experts depending on their intellectual contribution to publications in terms of conception, design, analysis and writing, which will be evaluated on a case by case basis.

To ensure that the activities and output from WP1 is as relevant as possible to the people of Greenland WP1 as suggested by the IASSA Principles and Guidelines for Conducting Ethical Research in the Arctic (point 11, section 4.2.1), and given the scale and nature of the data collection (i.e. statistical data covering all of Greenland), WP1 is soliciting members of an advisory board as the most feasible level of involvement (i.e. following the guidelines of IASSA (point 1 and 2), IARPC (ad 2, point 1 and ad 3, point 4), and the Inuit Tapiriit Kanatami and Nunavut Research Institute (point 2) (see section 4). Several institutions and organisations have been approached, including representatives from relevant Greenland government departments, the Greenland Institute for Natural Resources, the hunters and fishers organisation – KNAPK, Oceans North, WWF Greenland, and the fisheries industry, including Royal Greenland. Some has already accepted participation, while the response of others is still awaited.

All output will be sent to the institutions and the individual members of the advisory boards before publication to verify results (following IASSA, point 3). Furthermore, a workshop will facilitate the joint development of recommendations, following recommendations by IASSA (section 4.2.1) and IARPC (4.2.2). As far as possible, all publications will have a summary in Greenlandic.

#### 5.1.1 Approvals

WP1 will seek approval from the "Research Ethics Committee" for SCIENCE and SUND that reviews research projects involving human subjects and projects including data from human subjects and archaeological materials and issues ethical approvals. WP1 will apply for ethical approval of the WP1 activities following the guidelines of the Horizon 2020 document (European Commission & Directorate-General for Research & Innovation, 2019). The application will include the form provided by the University of Copenhagen and the informed consent sheets used for interviews (cf above, see Appendix 1).

A contract is being developed with Greenland Statistics for researcher access to data and thus ensure that the project complies with Greenland legislation on anonymity, confidentiality and generally on the protection of individual's data.

The investigator will submit and, where necessary, obtain approval from the above parties for all substantial amendments to the original approved documents.

## **5.2 WP2 - Biodiversity and welfare implications of climate change for reindeer herding Saami in northern Sweden and Norway**

WP2 will assess climate change's biodiversity and welfare implications for reindeer herding Saami in Northern Sweden and Norway. WP2 has five specific objectives, of which the second and third objective involves conducting a household survey to reveal the optimal adaption strategy as seen by the individual herder and quantify market and non-market values of reindeer husbandry and how these differ between geographical areas. The survey will be implemented in reindeer herding areas covering productive and non-productive environments and less and more carnivore dense areas. Hence, the survey will involve indigenous territories, populations and include personal data.

Following outlined guidelines (see section 4), the survey will be developed in collaboration with Sámiid Riikkasearvi (SSR) in Sweden and the Sami Reindeer Herders' Association of Norway (Norske Reindriftssamers Landsforbund - NRL). In this way, the project will strive to develop research relevant to Saami communities, ensure relevant stakeholders' involvement and address Saami communities' concerns when developing research questions as highlighted by the guidelines of IASSA (see section 4.2.1 1)-2)).

In Norway, representatives from the NRL will be invited to discuss challenges they see as important for reindeer herding with the project's researchers. Also, the International Centre for Reindeer Husbandry will be invited to participate in the project. All these stakeholders will participate in the survey design, as highlighted by IASSA (section 4.2.1 1)). And, following IASSA (section 4.2.1 3)), a plan will be developed in collaboration with NRL to disseminate results to Saami communities.

In Sweden, a so-called Free and Prior Informed Consent (FPIC) document will be developed for the work in WP2 following the requirements of the Swedish Sami Parliament and the SSR. The document will address and describe the following points: 1) Financing of the project, 2) who is responsible for the project and who will work in it, 3) any needs for knowledge carriers, guides and interpreters for the

implementation of the project, 4) which theories and methods, and 5) languages will be used in the project, 6) which positive and negative effects possible participation in the project has for SSR and its members as well as for the research institution, 7) the feedback requirements, 8) how source material is handled now and in the future, 9) statement of respect the Saami culture with its values and customs and 10) how agreements with individual knowledge carriers should be made.

WP2 will strictly follow and adhere to relevant ethical principles and guidelines for conducting research in the arctic when conducting household surveys and interviews. This includes respecting local cultural traditions, customs, languages, and values, permitting requirements and recognising the principle of cultural ownership as described by IASSA (section 4.2.1) and IARPC (4.2.2) as well as SRS (section 4.3.2.2). WP2 researchers will obtain written informed consent before each interview. The consent form will clarify to the interviewee the project objectives, further use of the data, data storage, and ownership of the data. The information will be kept in a language, making sure that the person who is asked to participate understand what participation involves, what they are consenting to, and which consequences involvement in the research may have. The participant will be informed that they can withdraw their consent at any stage in the research process.

When reindeer herders or other private individuals participate as respondents in the projects and have waived anonymity, it will be clearly stated that they have participated. An advantage of this is that the knowledge provided can be linked to a specific area. This area affiliation can be valuable to SSR and others on later occasions. All other data will only be available anonymised, and published results should not allow conclusions to be drawn about individuals. I.e., persons, households, families, enterprises, or other units will be managed and de-identified following the regulations on the treatment of personal data from the Norwegian Centre for Research Data (NSD) and the Ethical Approval Authority (Etikprövningsmyndigheten) in Sweden on data protection in research (see section 2.3) as well as EU GDPR regulations (see section 1.1.). Aggregated data should be in a form that can be used immediately in a publication. Figures and tables will only be allowed if they do not contain identifiable information, which also requires special attention to so-called outliers/extreme values, which may be identifiable. Concerning feedback, the final results will be sent to SSR, NRL and the informants who participated in the project, and one or more presentations will be held for the local communities. The feedback requirement will be more explicitly regulated in the FPIC. Publications will have a summary in a Saami language.

WP2 will also collect and structure publicly available data on reindeer production and losses to carnivores over time and compare trends across villages and countries for its first objective. WP2 will also obtain and organise climate variables describing environmental conditions and vegetation productivity in reindeer herding areas. These include the North Atlantic Oscillation index, local weather data from the Norwegian Meteorological Institute, the Swedish Meteorological and Hydrological Institute and satellite-based observations of vegetation. In addition, WP2 will use publicly available data on reindeer production, income and costs in reindeer herding, and losses of reindeer to carnivores. These data are published annually by the Directorate of Agriculture and the Norwegian Environment Agency and are available on the reindeer herding district level. Hence, since data are already anonymised and publically available, no additional ethical guidelines are required.

### 5.2.1 Approvals

In Sweden, WP2 will seek approval from SSR through the FPIC document described above and the Ethical Approval Authority (Etikprövningsmyndigheten)

In Norway, the research project will be notified to the Norwegian Centre for Research Data (NSD) for ethical approval, which offers templates for FPIC forms and a tool for data management that meets the requirements of Science Europe.

### **5.3 WP3: Biodiversity and wellbeing implications of climate change for coastal Saami in Northern Norway**

WP3 aims to provide input to develop an adaptive ecosystem-based approach for indigenous and small scale marine resource management in northern Norway. The WP has four tasks, of which task 2 involves collecting personal and collective narratives through mapping and visual ethnography techniques to identify local and indigenous conceptions of ecosystem health and indicators of wellbeing for the coastal communities in Porsanger Fjord. Existing interview and survey data will be utilised, and new personal and collective narratives on local ecological knowledge will be collected from participants in Porsanger Fjord communities. The population in these areas see themselves as both Saami, Kven and Norwegians. And according to the Planning and Building Act (2009), the municipality and regional governments are obliged to take Sami interests and rights into account in their planning for future livelihoods in the region and local communities. Hence, the survey will involve both indigenous territories, populations and include personal data.

Although WP3 operates in a frame of indigenous knowledge, the populations interviewed will not be asked about ethnic background, which is considered sensitive information in the Norwegian Centre for Research Data (NSD) framework. Furthermore, no sensitive data (political and sexual preferences, health information, criminal actions violating the law) will be asked for. Participants will be requested to sign a free prior informed consent form before interviews, which will clarify project objectives to the interviewee, describe further use of the data, data storage, and ownership of the data. Information will be kept in a language making sure that the person who is asked to participate fully understands what participation involves, what they are consenting to, and which consequences involvement in the research may have. The participant will be informed that they can withdraw their consent at any stage in the research process.

The research design, methodology and survey tools will be developed in collaboration with the local partner Mearrasiida (Coastal Sami Resource Centre) and an advisory board following recommendations of the IASSA (section 4.2.1, points 1 to 11)). Other relevant organisations pertaining to coastal Saami interests, such as Bivdu (Saami fishing organisation) and the Sami Parliament, will be invited to join the WPs advisory board. Mearrasiida and the advisory board will participate in developing the research design and the development of videos. Mearrasiida will participate in the analysis and development of publications from the project. The local municipalities will also be invited to meetings and workshops as part of the relevant work package tasks.

WP3 will strictly follow and adhere to relevant ethical principles and guidelines for conducting research in the Arctic when conducting video taping and map-based interviews. This includes respecting local cultural traditions, customs, languages, and values, permitting requirements and recognising the principle of cultural ownership as described by IASSA (section 4.2.1, point 5) and IARPC (section 4.2.2, especially point 4).

The use of visual ethnography techniques will be reported to the NSD. The video material will be stored at Mearrasiida and kept by the institution after the project has finished. Only data and edited video and images where persons can be recognized as approved and consented to by Mearrasiida and the participants will be shared publically. The protagonist will screen the selected footage used for public

purposes to secure their consent through a two-phase consent procedure. The raw material will only be available for the research team.

Since the research task will be performed in close collaboration with local communities, we expect many participants to prefer to be identified. If not, the data will be anonymous, and the identifier will be stored safely on offline solutions. All data will be shared and processed/analysed through safe IT management of personal data and stored after the project end as described in the DMP (Nielsen et al. 2021).

All output will be sent to the institutions and the individual members of the advisory boards before publication to verify results. A workshop will be held to jointly develop recommendations as feasible to accommodate recommendations to involve local stakeholders by IASSA (section 4.2.1, points 1 to 11) and IARPC (4.2.2, build and sustain relationships). Similarly, following these recommendations, all publications will, as far as possible, have a summary in a Saami language.

### 5.3.1 Approvals

WP3 will seek ethical approval from NSD. The application will include an information sheet about the whole project, an information sheet on task WP3.2, an FPIC form and a thematic interview template.

## **5.4 WP4 - Assessing policy synergy and tradeoff implications for adaptation**

WP4 aims to study the legislative and policy context to WP1-3 and conduct case studies contextualising some of the results in WP1-3 without necessarily building on those. WP4 is a cross-cutting WP involving activities at different administrative levels from the local to the EU and operating on the ground in Greenland, Sweden, and Norway. The WP has two tasks where task 2 will evaluate the extent to which policy or legal change and Nature-Based Solutions (NBS) for mitigating and adapting to climate change may be undertaken, and the role for "agents of change" at local, regional and national levels. This will involve conducting interviews at the local, regional, national and potentially EU levels to evaluate how actors at the different levels can implement NBS.

WP4 will strictly follow and adhere to relevant ethical principles and guidelines for conducting research in the arctic when interacting with community members. This includes respecting local cultural traditions, customs, languages, and values, permitting requirements and recognising the principle of cultural ownership as described by IASSA (section 4.2.1), IARPC (4.2.2) and guidelines of the Inuit Tapiriit Kanatami (ITK) and the Nunavut Research Institute (4.3.2.1).

Further, the WP4 research in Greenland will adhere to relevant principles for community-based participatory research from the "Toolkit for Community Based Participatory Research in Greenland" (Rink & Adler Reimer, 2019) (see section 4.3.1), emphasising local voices to initiate systemic changes that benefit and serve the needs of Greenlandic communities. Hence we will focus on:

- Contextualizing data and providing a deeper understanding of specific issues
- Levering local knowledge to shape policy making
- Presenting study results to members of the community (following rules of confidentiality) for their input regarding the interpretation, presentation, and dissemination of the data
- Including efforts to provide research collaborators and participants with information so they can make informed choices regarding their involvement and contribution to research
- Building on the knowledge and strengths of community collaborators for research activities such as participant recruitment, intervention development, and data collection by involving local practitioners.



In Greenland, the research highlights local practices, including local knowledge and perspectives concerning the 'modern/technical' types of knowledge dominating policy. Hence, WP4 will, through field studies in Greenland, try to map and discuss different forms of knowledge and perceptions of the local governance structures such as frames for decisions processes and case management as well as infrastructure provision such as water, transport, first sales, housing and the community experiences with this including personal and collective storylines. This will also address different settlements' existing business and employment profiles and the community perspectives on the potential development of the livelihood and the settlement. Finally, WP4 will assess experience with climate change and local NBS and how the local community evaluate the potentials and challenges to exploit this. This makes field studies where researchers are present in local communities a central strategy. Hence, activities will involve both indigenous territories and populations.

The activities will include individual/group interviews with persons in formal positions at regional, national and EU levels. The field studies include 1-2 local communities with community meetings and workshops, participant observation and unstructured conversations, and a few individual and/or group interviews with actors at the local level in case study areas to assess the potentials for NBS. The research will also address contexts of particular historical and cultural dimensions, influencing the ways institutional processes are interpreted and reacted to locally. Field studies will be conducted exploring and mapping local practices, concerns and conceptions of climate change and of NBS.

To ensure that the activities and output from WP4 is as relevant as possible to the people of Greenland, WP4 as suggested by the IASSA "Principles and Guidelines for Conducting Ethical Research in the Arctic" (point 11, section 4.2.1), as well as "Toolkit for Community Based Participatory Research in Greenland" (Rink & Adler Reimer, 2019) (see section 4.3.1) plans for the field studies will be discussed and developed with local key collaborators such as 'Tasiilaq Touch stone', local settlement councils and local branches of KNAPK. An information sheet about the whole project will be developed in simple language in Greenlandic and Danish. Local communities will be invited to introductory meetings about the project to facilitate that the project includes local inputs, concerns and objectives as recommended by IASSA (section 4.2.1) and IARPC (4.2.2). At the end of fieldwork, the intention is to invite the communities to a presentation of preliminary findings to comment on and suggest solutions.

When relevant, the Greenlandic part of WP4 will collaborate with the advisory board related to WP1 regarding discussing and using the research results and producing recommendations.

A consent statement form will be developed to clarify for the participants the project objectives, further use of the data, data storage, and ownership of the data. Information will be kept in a language to enable that persons who are asked to participate fully understand what participation involves, what they are consenting to, and which consequences involvement in the research may have. The participants will be informed that they can withdraw their consent at any stage in the research process. No sensitive data (e.g. political and sexual preferences, health information, ethnicity, criminal actions violating the law) will be asked.

The research focuses on contextual community practices and not individual responses at the local level. Our experiences along the lines of Butz (2008) are that an individual written consent sheet is often not just difficult and inconvenient to apply in the local setting. It also may not fit the community's local practices and relational understandings. Hence, individual written consent will, in some cases, be replaced by collective and negotiated, and oral processes (Butz 2008). Alongside, we will critically reflect on our practices to contribute to the need to develop good ethical research practices.

All data will be collected, stored, and used according to the ethical guidelines for Danish university research (see section 2.1) and as described in the Data Management Plan (Nielsen et al., 2021). WP4, working in Greenland, will seek to de-identify individual persons and households, including

interviewees, in presenting data and results. If this is not possible - e.g. because of formal positions in the community - or desirable, we will work together with the interviewees to present the data in ways that ensure no harm.

WP4 will furthermore collect and structure public assessable data to analyse policy frameworks and legislation, including sectoral plans on the international, national, regional and local level and municipal planning and business development. The research will focus on policy and legislation and use secondary data or already gathered material in some cases. Hence, since data involves no person sensitive information and is already publicly available, no ethical guidelines are required.

#### 5.4.1 Approvals

There is currently no ethical review board nor any specific requirements for approval at Aalborg University beyond those guidelines that apply at the national level (see section 2.1).

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## **7. Appendix**

Draft informed consent sheet for expert interviews in WP1

Draft informed consent sheet for WP2 – Under development

Draft informed consent sheet for video recordings WP3

Draft informed consent sheet for interviews in Greenland WP4

## Appendix 1 – Draft consent form for expert interviews WP1

### DECLARATION OF CONSENT

PARTICIPATION IN INTERVIEW fro WP1 FutureArcticLives

No. \_\_\_\_\_

#### PURPOSE OF DATA COLLECTION

This interview will be used in the research project FutureArcticLives. The overall question of FutureArcticLivesProject is what are the likely future impacts and adaptation possibilities for small-scale hunters, fishers and reindeer herders in Greenland and Arctic Scandinavia in the face of climate and biodiversity change. The project objective is to provide biological and economic forecasts and scenario assessments to assess in collaboration with local and indigenous people the impacts of climate and biodiversity change on the welfare and wellbeing of Arctic communities. FutureArcticLives will also explore management options under global policies and trends and in contexts of national policies and other sectors constraining communities' adaptation possibilities. The project is financially supported by BiodivERSA and the Innovation Fond Denmark and is carried out by a research group consisting of Henrik Meilby ([heme@ifro.ku.dk](mailto:heme@ifro.ku.dk)), Birger Poppel ([bipo@uni.gl](mailto:bipo@uni.gl)), Mona Bachman ([mona.bachmann@ifro.ku.dk](mailto:mona.bachmann@ifro.ku.dk)) and Martin Reinhardt Nielsen ([mrni@ifro.ku.dk](mailto:mrni@ifro.ku.dk)) and is hosted by the Department of Food and Resource Economics at the University of Copenhagen.

#### METHOD AND FOCUS

In the interview, we will ask about your perception about the future likely development of wildlife stocks and/or industry sector developments under two climate change scenarios.

#### USE OF DATA

The interview may be referred to, quoted and used in the research project outputs (reports, PhD thesis and research articles) as well as in scientific (conference and teaching) and popular dissemination (lectures, industry communication, etc.).

When using interview data, the research team must (please tick):

- Not** use my and others' personal name(s), address(es) or name(s) of company(ies)/organization(s) mentioned in the interview. The research team may only use general job titles (commercial, leisure hunter, fisher, scientist, researcher, administrative manager etc.) and general organisation categories (research institution, management authority, retail company, etc.) to ensure anonymity



- Ok**, to use my name, job title and organisation name.

#### **DATA PROCESSING**

All information from the interview will be accessed with confidentiality and handled in accordance with the Data Protection Authority's data protection standards, the EU General Data Protection Regulation and the University of Copenhagen's data policy (<https://informationsikkerhed.ku.dk>) and in accordance with your consent form. This means that only the research team will have access to the raw interview data. Any student assistants assigned to the project will be trained in secure data processing. However, an exception is made for PhD review committees and journal and publishing editors, who may in rare cases require access to the raw interview data to ensure the scientific fairness of the research results. These individuals will not have the opportunity to link data with your name or organisation. Furthermore, they are subject to confidentiality obligations and are thus not allowed to use or share the raw interview data.

#### **STORAGE OF DATA**

The raw interview data will be securely digitally archived according to the applicable guidelines of the GDPR.

#### **FUTURE USE OF DATA**

Your consent implies that the raw interview data will not be deleted but archived after the end of the project so that it can still be used for research and dissemination activities. Only the scientists associated with Work Package 1 in FutureArcticLives will have access to and can use the interview data.

#### **ADVANTAGES AND DISADVANTAGES**

There are not expected to be any disadvantages or risks associated with participation in the research project. However, participants in the project can also not expect to receive any direct benefits from participation (e.g. financial compensation) beyond the possible awareness of partnerships and green transition that may result from the project's dissemination activities.

#### **CONSENT AND POSSIBILITY TO WITHDRAW CONSENT**

The interview is voluntary, and you may withdraw your consent to the interview at any time without giving any reason. If you choose to withdraw your consent, this will be effective from the day you inform the research team. All interview data will then be deleted and not used in the future.

#### **FOLLOW-UP CONTACT**

Your consent means that we may contact you again if there is anything we need to clarify further. You are also always welcome to contact us to view the project products, or if you have any further questions about the project and/or your participation: Martin Reinhardt Nielsen ([mrni@ifro.ku.dk](mailto:mrni@ifro.ku.dk)).

I hereby agree to participate in the research project *FutureArcticLives - Future Arctic livelihoods and biodiversity in a changing climate* (please use **BLOCK LETTERS**):

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

EMAIL: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

The undersigned has received a copy of the text of the declaration of consent.

## Appendix 3 – Draft consent form for video recordings WP 3

# Informasjonsskriv om prosjektet *FutureArcticLives* (FAL)

Du inviteres til å delta i forskningsprosjektet FutureArcticLives (FAL).

### Bakgrunn og formål

Prosjektet skal undersøke hvordan velferd (wellbeing), ressursbruk og næringsutøvelse påvirkes av endringer i klima og biodiversitet på kysten av Finnmark og særlig Porsangerfjorden. FAL prosjektet (2021-2024) vil samarbeide nært med Mearrasiida og andre lokale utøvere og forvaltningsaktører i området. Prosjektet er finansiert av Norges Forskningsråd og det internasjonale programmet BiodivERSA og arbeidspakke 3 ledes av UiT Norges Arktiske Universitet (UiT). Et av formålene er formidling av utfordringer for småskala næringsutøvelse og samfunnsliv (wellbeing) i Porsangerfjorden for et internasjonalt publikum.

### Hva innebærer deltakelse i studien

Deltakelse i studien kan innebære at vi ber deg delta i intervju eller gruppemøte, og/eller at en aktivitet du deltar i, blir filmet.

Intervjuet vil vanligvis ta en og en halv til to timer, og vi ønsker å gjøre lydopptak av intervjuet og/eller å filme samtalen/aktiviteten med deg. Vi spør ikke om etnisk bakgrunn, men etnisk identitet kan være tema dersom du ønsker det. Intervjuer vil enten være ansatt ved UiT eller Mearrasiida.

### Behandling av personopplysninger

Mearrasida og UiT har felles behandlingsansvar, og har i fellesskap fastsatt formålene med behandling.

Alle personopplysninger vil bli anonymisert, hvis ikke annet er samtykket. Kun utvalgte deltakere i prosjektgruppen vil ha tilgang til lydopptak fra intervjuene og til videomateriale. Opptak og video lagres på datamaskin hvor det kreves påloggingsinformasjon og passord for å få tilgang til data. Navneliste/ koblingsnøkkel lagres atskilt fra lydopptakene og video. Ditt navn vil ikke framgå i rapporter eller publikasjoner uten at du samtykker til dette.

Prosjektet skal etter planen avsluttes høsten 2023. Datamaterialet vil da bli lagret anonymisert. Lydopptak, navneliste og koblingsnøkkel vil slettes med mindre annen avtale er gjort. Når det gjelder bruken av videomaterialet av deg, vil du få redigerte klipp til gjennomsyn og godkjenning, og disse klippene vil kun blir brukt offentlig med ditt samtykke. Disse videoopptakene vil bli lagret hos Mearrasiida og på Future Arctic Lives server ved UiT Norges Arktiske Universitet etter prosjektslutt i henhold til datahåndteringsplan for FAL.

### **Frivillighet**

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn før prosjektet avsluttes. Dersom du trekker deg, vil alle opplysninger om deg bli slettet. Disse vil uansett bli slettet når prosjektet avsluttes. Du kan også reservere deg mot at vi tar lyd eller videoopptak av intervjuet.

Mearrasiida og UiT vil behandle opplysninger om deg basert på ditt samtykke. Prosjektet er meldt til Personvernombudet for forskning, NSD – Norsk senter for forskningsdata, og følger deres retningslinjer slik at behandlingen av personopplysninger i prosjektet er i samsvar med personvernreglene.

Du har rett til innsyn, retting og sletting av dine data, og adgang til å klage til Datatilsynet.

### **Hvis du har spørsmål ta kontakt med:**

Camilla Brattland leder for prosjektet UiT [camilla.brattland@uit.no](mailto:camilla.brattland@uit.no) / tlf. 91802188

Bente Sundsvold UiT [bente.sundsvold@uit.no](mailto:bente.sundsvold@uit.no) / tlf. 77 64 62 73

Joakim Bakkevold, personvernombud UiT [personvernombud@uit.no](mailto:personvernombud@uit.no)

NSD – Norsk senter for forskningsdata [personverntjenester@nsd.no](mailto:personverntjenester@nsd.no) / tlf. 55 58 21 17

### **Future Arctic Lives**

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#### **Samtykkeerklæring for videomateriale**

Jeg har mottatt og forstått informasjon om prosjektet FutureArcticLives og har fått anledning til å stille spørsmål.

Jeg har sett gjennom redigerte videoopptak av meg eller en nær slektning og samtykker til at de kan benyttes i offentlig formidling fra prosjektet

Beskrivelse av

videoklipp/dato:.....

Jeg samtykker til (kryss av det som passer):

**Videoopptak**

- At videoopptak hvor jeg eller en nær slektning kan gjenkjennes, gjennomsyn dato som over, kan benyttes til forskning og formidling med undertekster på norsk og samisk for Mearrasiida og UiT – Norges Arktiske Universitet
- At videoopptak hvor jeg eller en nær slektning kan gjenkjennes, gjennomsyn som dato over, kan benyttes til forskning og formidling med engelske undertekster for Mearrasiida og UiT – Norges Arktiske Universitet

Sted/ dato

Signatur

.....

.....

## **Informasjonsskriv om prosjektet *FutureArcticLives* (FAL)**

Du inviteres til å delta i forskningsprosjektet FutureArcticLives (FAL).

### **Bakgrunn og formål**

Prosjektet skal undersøke hvordan velferd (wellbeing), ressursbruk og næringsutøvelse påvirkes av endringer i klima og biodiversitet på kysten av Finnmark og særlig Porsangerfjorden. FAL prosjektet (2021-2024) vil samarbeide nært med Mearrasiida og andre lokale utøvere og forvaltningsaktører i området. Prosjektet er finansiert av Norges Forskningsråd og det internasjonale programmet BiodivERsA og arbeidspakke 3 ledes av UiT Norges Arktiske Universitet (UiT). Et av formålene er formidling av utfordringer for småskala næringsutøvelse og samfunnsliv (wellbeing) i Porsangerfjorden for et internasjonalt publikum.

### **Hva innebærer deltakelse i studien**

Deltakelse i studien kan innebære at vi ber deg delta i intervju eller gruppemøte, og/eller at en aktivitet du deltar i, blir filmet.

Intervjuet vil vanligvis ta en og en halv til to timer, og vi ønsker å gjøre lydopptak av intervjuet og/eller å filme samtalen/aktiviteten med deg. Vi spør ikke om etnisk bakgrunn, men etnisk identitet kan være tema dersom du ønsker det. Intervjuer vil enten være ansatt ved UiT eller Mearrasiida.

### **Behandling av personopplysninger**

Mearrasida og UiT har felles behandlingsansvar, og har i fellesskap fastsatt formålene med behandling.

Alle personopplysninger vil bli anonymisert, hvis ikke annet er samtykket. Kun utvalgte deltakere i prosjektgruppen vil ha tilgang til lydopptak fra intervjuene og til videomateriale. Opptak og video lagres på datamaskin hvor det kreves påloggingsinformasjon og passord for å få tilgang til data. Navneliste/ koblingsnøkkel lagres atskilt fra lydopptakene og video. Ditt navn vil ikke framgå i rapporter eller publikasjoner uten at du samtykker til dette.

Prosjektet skal etter planen avsluttes høsten 2023. Datamaterialet vil da bli lagret anonymisert. Lydopptak, navneliste og koblingsnøkkel vil slettes med mindre annen avtale er gjort. Når det gjelder bruken av videomaterialet av deg, vil du om disse velges ut til videre redigering og bruk i prosjektet, få redigerte klipp til gjennomsyn og godkjenning, og disse klippene vil kun blir brukt

offentlig med ditt samtykke. Disse videoopptakene vil bli lagret hos Mearrasiida og på Future Arctic Lives server ved UiT Norges Arktiske Universitet etter prosjektslutt i henhold til datahåndteringsplan for FAL.

### Frivillighet

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn før prosjektet avsluttes. Dersom du trekker deg, vil alle opplysninger om deg bli slettet. Disse vil uansett bli slettet når prosjektet avsluttes. Du kan også reservere deg mot at vi tar lyd eller videoopptak av intervjuet.

Mearrasiida og UiT vil behandle opplysninger om deg basert på ditt samtykke. Prosjektet er meldt til Personvernombudet for forskning, NSD – Norsk senter for forskningsdata, og følger deres retningslinjer slik at behandlingen av personopplysninger i prosjektet er i samsvar med personvernreglene.

Du har rett til innsyn, retting og sletting av dine data, og adgang til å klage til Datatilsynet.

### Hvis du har spørsmål ta kontakt med:

Camilla Brattland leder for prosjektet UiT [camilla.brattland@uit.no](mailto:camilla.brattland@uit.no) / tlf. 91802188

Bente Sundsvold UiT [bente.sundsvold@uit.no](mailto:bente.sundsvold@uit.no) / tlf. 77 64 62 73

Joakim Bakkevold, personvernombud UiT [personvernombud@uit.no](mailto:personvernombud@uit.no)

NSD – Norsk senter for forskningsdata [personverntjenester@nsd.no](mailto:personverntjenester@nsd.no) / tlf. 55 58 21 17

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### Samtykkeerklæring:

Jeg har mottatt og forstått informasjonen om prosjektet FutureArcticLives og har fått anledning til å stille spørsmål. Jeg samtykker til (kryss av det som passer):

### Intervju

- å delta i intervju og at det tas lydopptak fra intervjuet
- at opplysninger om meg publiseres slik at jeg kan gjenkjennes ved navn

### Videoopptak

- Å delta i filming av aktiviteter hvor jeg deltar

- At videoopptak hvor jeg eller en nær slektning kan gjenkjennes, gjennomsyn dato som under, kan benyttes til forskning og formidling med undertekster på norsk og samisk for Mearrasiida og UiT – Norges Arktiske Universitet
- At videoopptak hvor jeg eller en nær slektning kan gjenkjennes, gjennomsyn som dato under, kan benyttes til forskning og formidling med engelske undertekster for Mearrasiida og UiT – Norges Arktiske Universitet

Jeg samtykker til at mine opplysninger behandles frem til 2025, 2 år etter prosjektet er avsluttet,

Sted/ dato

Signatur

.....

.....



## Appendix 4 - Draft informed consent sheet for interviews in Greenland WP4

### DECLARATION OF CONSENT

#### INTERVIEW IN WP 4 IN GREENLAND

#### PURPOSE OF DATA COLLECTION

This interview will be used in the research project FutureArcticLives. The overall objective of **FutureArcticLives** is to provide biological and economic forecasts and scenario assessments to assess in collaboration with local and indigenous people the impacts of climate and biodiversity change on the welfare and wellbeing of Arctic communities. **FutureArcticLives** will also explore management options under global policies and trends and in contexts of national policies increasingly favouring large-scale operations and other sectors constraining communities' adaptation possibilities. Therefore, the project is guided by the overall question - what are the likely future impacts and adaptation possibilities for small-scale primary resource users in Greenland and Arctic Scandinavia in the face of climate and biodiversity change. The project is financially supported by BiodivERSA and the Innovation Fond Denmark and is carried out by a research group consisting of Kåre Hendriksen and Birgitte Hoffmann ([bhof@plan.aau.dk](mailto:bhof@plan.aau.dk)) and is hosted by Department of Planning at Aalborg University.

#### METHOD AND FOCUS

In the interview, we will ask about your perception about the regulation and future likely development of wildlife stocks and/or infrastructure and industry sector developments as well about different strategies for sustainable adaption.

#### USE OF DATA

The interview may be referred to, quoted and used in the research project outputs (reports, PhD thesis and research articles) as well as in scientific (conference and teaching) and popular dissemination (lectures, industry communication, etc.) as well as in teaching.

When using interview data, the research team must (please tick):

- Not** use my and others' personal name(s), address(es) or name(s) of company(ies)/organization(s) mentioned in the interview. The research team may only use general job titles (commercial, leisure hunter, fisher, scientist, researcher, administrative manager etc.) and general organisation categories (research institution, management authority, retail company, etc.) to ensure anonymity

**Ok**, to use my name, job title and organisation name.

#### **DATA PROCESSING**

All information from the interview will be accessed with confidentiality and handled in accordance with the Data Protection Authority's data protection standards, the EU General Data Protection Regulation and the University of Aalborg's data policy and in accordance with your consent form. This means that only the research team will have access to the raw interview data. Any student assistants assigned to the project will be trained in secure data processing. However, an exception is made for PhD review committees and journal and publishing editors, who may in rare cases require access to the raw interview data to ensure the scientific fairness of the research results. These individuals will not have the opportunity to link data with your name or organisation. Furthermore, they are subject to confidentiality obligations and are thus not allowed to use or share the raw interview data.

#### **STORAGE OF DATA**

Your consent implies that the raw data of the fieldwork will not be deleted but archived after the end of the project so that it can still be used for research and dissemination activities.

#### **FUTURE USE OF DATA**

Your consent implies that the raw data of the fieldwork will not be deleted but archived after the end of the project so that it can still be used for research and dissemination activities. Only ---- PLEASE FILL---- will have access to and can use the fieldwork data.

#### **ADVANTAGES AND DISADVANTAGES**

There are not expected to be any disadvantages or risks associated with participation in the research project. However, participants in the project can also not expect to receive any direct benefits from participation (e.g. financial compensation) beyond the possible awareness of partnerships and green transition that may result from the project's dissemination activities.

#### **CONSENT AND POSSIBILITY TO WITHDRAW CONSENT**

Consent is voluntary, and you may withdraw it at any time without giving reasons. If you choose to withdraw your consent, this will be effective from the day you inform the research team. All fieldwork data will then be deleted and not used in the future.

#### **FOLLOW-UP CONTACT**

Your consent means that we may contact you again if there is anything we need to clarify further. You are also always welcome to contact us to view the project products, or if you have any further questions about the project and/or your participation: Birgitte Hoffmann ([bhof@plan.aau.dk](mailto:bhof@plan.aau.dk))

I hereby agree to participate in the research project *FutureArcticLives - Future Arctic livelihoods and biodiversity in a changing climate* (please use **BLOCK LETTERS**):

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

EMAIL: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

The undersigned has received a copy of the consent form..