Recommendations from
"The Working Group for Action on Involving User Knowledge in Resource Management in Greenland"

To
The Naalakkersuisoq for Fisheries and Hunting
The Naalakkersuisoq for Agriculture, Self-Suffiency, Energy and Environment
The Budget and Tax Committee
The Committee for Fisheries, Hunting and Agriculture
The Secretariat for the Convention on Biological Diversity

December 2023

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Summary

This report presents the results and recommendations of a working group aimed at enhancing action on involving user knowledge in the management of living resources in Greenland. The Working Group concludes that, if user knowledge is to be further used for decision-making, it will require a commitment from central government, municipalities and civil society. The Working Group's recommendations include a call to government to try out ways of incorporating user knowledge into decision-making in practice for different species in one or two municipalities. The government should ensure that decision-makers and staff know how to make use of user knowledge in practice, and how to report back to communities. A further recommendation is that the government should enable the delegation of management responsibility for certain resources and areas to local and municipal entities. Moreover, the government should encourage public and private actors to earmark financial resources for communities in order to document and report on user knowledge to inform decision-making.

Activities undertaken and results obtained

1. Introduction. At the workshop on using local and scientific knowledge to inform resource management in Aasiaat[1] from 29 Nov. to 1 Dec. 2022 (proceedings available, see footnote 1), the participants agreed to set up an extra-governmental working group to support involving user knowledge in resource management in Greenland ("The Working Group for Action on Involving User Knowledge in Resource Management in Greenland"). After six months, the Working Group was to report on its achievements to the Naalakkersuisoq, the Aasiaat Workshop participants, and the Secretariat for the Convention on Biological Diversity. This

[1] https://capardus.nersc.no/system/files/2023-05/AasiaatWorkshopNov-Dec2022_Proceedings.pdf

report describes the activities undertaken and the results obtained[2]. The preliminary results were presented and discussed at a conference in Nuuk on 20 May 2023.

2. Terminology. The Working Group addressed the knowledge held by users, local communities and Indigenous Peoples in Greenland. During the meetings and workshops, the various participants used different terms to describe this. The most commonly used term was "user knowledge". While other terms may be used, they are generally considered to cover the same type of knowledge.

3. Policy support for involving user knowledge in resource management. A new law on hunting in Greenland was approved by Inatsitartut on 13 June 2023[3], and an associated executive order is being developed. New national strategies in Greenland (Greenland Biodiversity Strategy 2030[4] Greenland's Research Strategy 2022-2030[5]) and a new international environmental agreement (the Kunming-Montreal Global Biodiversity Framework Agreement, GBF[6]) all call for enhanced use of both scientific and user knowledge in decision-making and research. The GBF was adopted by the Kingdom of Denmark and 194 other countries at the UN Biodiversity Conference in Montreal.

4. Composition of the Working Group. Between Dec. 2022 and Aug. 2023, the Working Group and its five sub-groups (Task Forces) held 23 meetings. The Working Group comprised: Nuunoq Per Ole Frederiksen (chair), Nikkulaat Jeremiassen (vice-chair), Søren Stach Nielsen (project manager), Jessica Lefevre, Parnuna Egede Dahl, PâviâraK Jakobsen, and Finn Danielsen. The Task Forces comprised: Liv Larsen, Aviaja Lyberth Hauptmann, Nette Levermann, Birger Poppel, Michael K. Poulsen, and Elmer Topp-Jørgensen.

5. Activities undertaken by the Working Group. The Working Group undertook the following activities:
   - Investigated how, in practice, information can be handled from both scientific knowledge and user knowledge to inform natural resource management decisions
   - Reviewed practice-based experiences in Alaska
   - Assessed the draft Hunting Law for user knowledge inclusion
   - Discussed barriers to government's use of user knowledge in decision-making, and met with many organizations and people to explore solutions
   - Initiated dialogue with Naalakkersuisoq (Minister of Fisheries and Hunting), members of Folketinget (the Danish Parliament), and other politicians to discuss support for user knowledge, and the inclusion of funding in the Greenland Government Budget 2024

[2] Financial support was received from the EC projects CAPARDUS and ECS (grants 869673 and 101058509) and the Danish Agency for Science and Higher Education through the UArctic (grant 5228-00001B).
[3] https://nalunaarutit.gl/Groenlandsk-lovgivning/2023/Inatsisartutlov-nr-34-af-13_06_2023?sc_lang=da
[4] https://naalakkersuisut.gl/-/media/publikationer/miljoe/2021/groenlands_biodiversitetsstrategi_2030.pdf?la=da; Goal 4, Sub-Goal 3: "We must ensure that local and user knowledge is documented and integrated in knowledge building and used in the decision-making process"; pp. 52-53.
[5] https://nis.gl/wp-content/uploads/2023/01/english-book.pdf; Goal 1, Initiative 1.4: "Naalakkersuisut aims to support work to identify and expand the use of indigenous and local knowledge in local and international research", pp. 31-33.
[6] https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf; https://www.cbd.int/doc/c/179e/aecb/592f67904bf07dca7d0971da/cop-15-l-26-en.pdf; "6. Invites Parties and relevant organizations to support community-based monitoring and information systems and citizen science and their contributions to the implementation of the monitoring framework for the Kunming-Montreal global biodiversity framework", p. 1.

- Held discussions with Kanunupe (the National Association of Greenlandic Settlements) about Greenlandic communities that might document user knowledge for resource management

These activities, and the results obtained, are described in more detail below.

6. How do you handle information from different forms of knowledge? The Working Group explored how, in practice, information can be handled from both scientific knowledge and user knowledge when managing living resources, even when the information points in opposite directions.

   The Working Group proposes five steps to be used when assessing if a species in an area can be managed with the use of both scientific and user knowledge. The intention when using these steps is to focus on one species (population) at a time, and to take the same steps species by species. These are the steps:

   Step 1 Is there a need for knowledge-based management of the species as a resource?
   Step 2 How many regularly collected forms of knowledge provide information on the status of the species (zero, one, two or more)?
   Step 3 Are the different forms of knowledge about the same population?
   Step 4 Is the population shared with another country/region/area?
   Step 5 Develop a management framework for sustainable management of the species using both user and scientific knowledge. Make decisions about adapting the species management within this framework.

   The Working Group carried out a desk exercise following these steps. It was found that one barrier to current efforts to include user knowledge in decision-making is that the government does not receive user knowledge from a representative set of communities.

   If there were user knowledge available, then it would be necessary to develop a management framework for how to manage the species with the use of both user and scientific knowledge. The Working Group developed examples of three potential scenarios of management frameworks, for A) red-listed species, B) species that are not red-listed and that are harvested by people from many areas, and C) species that are not red-listed and that are harvested mainly by nearby settlements:

   Species Management Framework Scenarios

   A. The Working Group proposes that, for red-listed species a framework for sustainable management could be administered by central government. Biological advice sets quotas every 4-10 years, depending on the species. During those periods without biological advice, APN (the Department of Fishing and Hunting) could make annual adjustments to the quota (e.g., up to 5% up or down), based on user knowledge.

   B. The Working Group proposes that, for species that are not red-listed and that are harvested by people from many areas, for example Greenland Halibut, Cod, Lumpsucker, and Common Eider, a framework for sustainable management could be administered by central government. Central government could set quotas based on

user knowledge and biological advice[7]. Further work is needed on how to do this in practice.

C. The Working Group proposes that, for species that are not red-listed and that are harvested mainly by nearby settlements, for example Trout and Muskox, a framework for sustainable management could be administered by a local council of representatives of the settlements that are regularly harvesting the species in the area, based on user knowledge (through a municipal bylaw; "kommunalvedtægt"). Greenland Institute of Natural Resources could act as an advisor training locals in population census[8] and answering any biological management-related questions from the local councils.

7. Practice-based experiences from Alaska. In Alaska, in 1977, there were long discussions about the hunting of bowhead whales[9] (Lefevre J., 2013, see footnote 9). The hunters hired their own wildlife biologists and a lawyer. A process was developed that incorporates hunter observations into research design, data interpretation, and reporting of research findings. The biologists hired by the hunters took information from the hunters and translated it into a "Western scientific" language. The research design was based on user knowledge. The interpretation of the research results included user knowledge. The lawyer's role was to create the process that brings research from the hunters and their biologists into government decisions. In this process, the hunters and government staff communicate as equals.

   Greenland is further down the path than Alaska was in 1977 because Greenland has PISUNA (Piniakkanik Sumiiffinni Nalaunaarsuineq; https://pisuna.org/; https://eloka-arctic.org/pisuna-net/en), which is an organized process for documenting user knowledge and for involving fishers and hunters in management decisions. But Greenland is now facing a long-term challenge. Telling the government to make use of user knowledge and supplying it with observations and management proposals from fishers and hunters are not enough. A communication process must be built that systematically brings user knowledge into government decisions. This process must be used in practice on a continued basis. And at scale. And it must be fully institutionalized.

8. Assessment of the new Hunting Law. The Working Group assessed the draft Hunting Law (2023) and the provisions therein for including user knowledge in decision-making on hunting. The law says, on an objective level, that the inclusion of user knowledge in the administration of hunting is a priority. It says that user knowledge can come, for instance, from the associations of hunters or through the Hunters' Committee ("Fangstrådet"). The law also says that the government can develop further provisions for the inclusion, reporting and use of user knowledge. The law was passed by Inatsitartut on 13 June 2023.

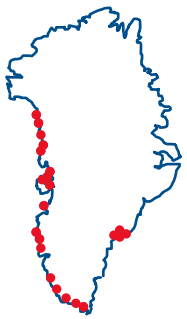
9. Dialogue with politicians. The Working Group met with former Naalakkersuisoq (Minister of Fisheries and Hunting) Karl Tobiassen and with members of the Budget and Tax Committee (Finans- og Skatteudvalget) and the Committee for Fisheries, Hunting and Agriculture (Fiskeri-, Fangst- og Landbrugsudvalget) as well as with Member of Folketinget (the Danish Parliament) Aaja Chemnitz.

[7] See also: https://www.uarctic.org/media/1601946/policybrieflokalvidenfiskeriforvaltning_final_8june2021.pdf
[8] Example from Ivittuut: https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/csp2.159
[9] https://www.eli.org/sites/default/files/eli-pubs/elr-article-4.pdf

Naalakkersuisoq Karl Tobiassen expressed his support for further involving both user and scientific knowledge in decision-making (short interview on YouTube: https://www.youtube.com/watch?v=ocdkIbDYvGU). He also stated that it would be good if users and scientists were to cooperate more now that there is greater awareness of the importance of user knowledge, both among users and scientists and within the government. Food security is a high priority, and the use of user knowledge is important for securing food in the long term. He said there are plans to expand the government agencies' administrative capacity "where we see more biologists working with user knowledge". He noted that there would be "major changes".

Member of Folketinget Aaja Chemnitz expressed concern that the Government of Denmark's current criteria for environmental support in the Arctic only give low priority to Greenland-based initiatives. She subsequently asked Minister of the Environment, Magnus Heunicke (19 April 2023): "With regards to the budget and environmental support for the Arctic (...) does the minister think that research and environmental support efforts in the Arctic should not be anchored in Greenland? Will the minister consider ensuring greater priority for Greenlandic involvement (…) when allocating funds in the future?" The minister responded that the Ministry of Environment "continuously evaluates the prioritization model for the grants and is in dialogue with the Department for Agriculture, Self-Sufficiency, Energy and Environment about the grant program and that the Department is also consulted in connection with incoming project applications." (https://www.ft.dk/samling/20222/almdel/gru/spm/35/svar/1959301/index.htm). A new Dancea call with a deadline of September 2023 again gave minimal priority to project-anchoring in Greenland.

10. Settlements where community members might document user knowledge for resource management. Discussions were held with Kanunupe (the National Association of Greenlandic settlements). The purpose was to identify settlements where it would be particularly useful that community members document user knowledge for resource management. This may be helpful for potential donors interested in supporting the use of user knowledge. There is a need to establish documentation of user knowledge in a 'critical' mass of settlements. We used four criteria for the settlements: a minimum size (>60 inhabitants, 2020); stable or increasing human population (2013 and 2020); active in fishing and hunting (Piniarneq database); and geographical dispersal (coastal/fiords, all 5 municipalities). A total of 22 settlements, shown on the inserted map, fulfil these criteria.



11. Manaus Letter on Guidelines for Participatory Monitoring of Biodiversity. The Manaus Letter comprises forty recommendations for participatory monitoring of biodiversity, developed by 220 participants from 18 countries, including Greenland (http://dx.doi.org/10.25607/OBP-965). The Working Group has received updates and comments on the guidelines from 11 organizations. The revised guidelines have the potential to become an "official" Convention on Biological Diversity guideline on Community-Based Monitoring. It need a country to propose this to the "Open-ended Working Group on Article 8j (Traditional Knowledge)" of the Convention on Biological Diversity. In Greenland, the responsible government agency is PAN (the Department for Agriculture, Self-Sufficiency, Energy and Environment).

12. The conference in Nuuk, May 2023. The preliminary findings of the Working Group were discussed at a conference at Ilimmarfik (Ilisimatusarfik/University of Greenland) in Nuuk on 20 May 2023. The program and participant list can be found in Annex 1. Based on the discussions at the conference, the Working Group has agreed on a set of conclusions and recommendations, as summarized below.

13. Conclusions and recommendations. The use of user knowledge in decision-making is not spreading like wildfire. It needs further commitment from the central government, municipalities and civil society to ensure that user knowledge is used in management decision-making. Further, management frameworks need to be developed to handle user knowledge. We can only learn how to do this through trial and error. A pilot testing activity is needed to attempt this in practice and to learn from experience.

Recommendations

The Working Group for Action on Involving User Knowledge in Resource Management in Greenland recommends:

Recommendation 1: That APN (the Department of Fishing and Hunting) investigate possibilities for establishing the long-term funding of a system for collecting user knowledge in all inhabited areas of Greenland. In addition to contributing to decision-making, the user knowledge could also contribute to the Arctic Council's Circumpolar Biodiversity Monitoring Program (CBMP). The Working Group would be keen to contribute to this process.

Recommendation 2: That APN (the Department of Fishing and Hunting) develop a framework for applying user knowledge in the management of living resources. The framework should enable the potential delegation of management responsibility for certain resources and areas to local and municipal entities. Several scenarios should be developed (see Rec. 3), according to the characteristics and distribution of the species. The framework for some species may require agreements with other countries, possibly under the auspices of NAMMCO or the Canada-Greenland Joint Commission on Beluga and Narwhal (JCNB) or other international marine resource and environmental management entities.

Recommendation 3: That APN (the Department of Fishing and Hunting) tests management framework scenarios A, B and C in practice through concrete pilot initiatives with one or two municipalities. The pilot initiatives should demonstrate how to manage selected species and populations by means of both user knowledge and scientific knowledge. The recommended focus is on A) red-listed species, B) species that are not red-listed and that are harvested by people from many areas, and C) species that are not red-listed and that are harvested mainly by nearby settlements.

Recommendation 4: That APN (the Department of Fishing and Hunting) further clarify perceived barriers to involving user knowledge in decision-making and finds solutions. The Department should further ensure that decision-makers and staff know how to make use of user knowledge in practice, and how to report back to communities. It is also recommended that the Department mobilize financial support to communities that are documenting user knowledge. This should

include the Department making partners/donors aware of opportunities for supporting fishers' and hunters' documentation of user knowledge.

Recommendation 5: That, when consulted by the Government of Denmark regarding support for the environment in the Arctic, PAN (the Department for Agriculture, Self-Sufficiency, Energy and Environment) ensure that greater priority is given to (1) Greenlandic involvement and Greenland-based projects and (2) following up the recommendation by the GBF for support to "community-based monitoring and information systems and citizen science[10]". Moreover, it is recommended that the Department encourage public and private actors to earmark financial resources for communities to document and report user knowledge with which to inform decision-making.

Recommendation 6: That PAN (the Department for Agriculture, Self-Sufficiency, Energy and Environment) facilitate the preparation of a Greenland/Denmark proposal for establishing the revised Manaus Letter on Guidelines for Participatory Monitoring of Biodiversity as an 'official' Convention on Biological Diversity guideline. It is recommended that the Government of Greenland/Denmark submit this proposal to the "Open-ended Working Group on Article 8j (Traditional Knowledge)".

Recommendation 7: That the Working Group present this set of recommendations for (1) the Naalakkersuisoq for Fisheries and Hunting; (2) the Naalakkersuisoq for Agriculture, Self-Suffiency, Energy and Environment; (3) The Budget and Tax Committee; (4) The Committee for Fisheries, Hunting and Agriculture; and (5) the Secretariat for the Convention on Biological Diversity. Finally, it is recommended that the Working Group meet again after 12 and 24 months.

[10] https://www.cbd.int/doc/c/179e/aecb/592f67904bf07dca7d0971da/cop-15-l-26-en.pdf

Annex 1. Programme and participant list for the conference “Inclusion of local knowledge & user knowledge in resource management in Greenland” at Ilimmarfik in Nuuk, 20 May 2023

Background: The purpose of this conference was to summarize and evaluate the process that was initiated at the workshop in Aasiaat with the setting up of the working group that was to create concrete activities to include user knowledge in resource management in Greenland ('Working Group for action on user knowledge' in resource management in Greenland').

The Working Group presented achieved results, identified barriers and concrete proposals to achieve the goals of the working group. The conference also included discussion of the Manaus Letter Guidelines for Participatory Monitoring of Biodiversity.

Outcomes from the Convention on Biological Diversity conference in Montréal were also presented. The new biology education was discussed. Experiences with documenting local knowledge about fish and mammals in Ilulissat Icefjord were shared.

Responsible: Søren Stach Nielsen (Birger Poppel)

Programme:

09:00 Welcome. By Birger Poppel
09:15-09:30: The new global agreement on biological diversity and the role of Indigenous and local knowledge. By Finn Danielsen

09:30-10:00: Discussion
10:00 Coffee

10:30-11:00 Summary of what has been done since the Aasiaat Workshop by the 'Working Group for action on user knowledge' in resource management in Greenland’. By Søren Stach Nielsen
11:00-12:00 Discussion

12:00-13:00 Lunch

13:00-13:30 The significance of local knowledge about fish and marine mammals. By Sascha Schiøtt
13:30-14:30 Discussion
14:30-15:00 The new biology education at Ilisimatusarfik. By Aviaja L. Hauptmann, Liv Larsen, Vivi Vold
15:00-16:00 Discussion of tasks ahead

Participants:

Caroline	Bouchard
Joachim	Christensen
Rannvá	Clementsen
Finn	Danielsen
Per Ole	Frederiksen
Aviaja Lyberth	Hauptmann
PâviâraK	Jakobsen
Uffe	Jakobsen
Emilie	Jensen
Nikkulaat	Jeremiassen
Ivalo	Knudsen
Liv Mejer	Larsen
Ole	Larsen
Nette	Levermann
Kristine	Lynge-Pedersen
Gerth	Nielsen
Judith K.	Nielsen

Martin R.	Nielsen
Søren Stach	Nielsen
Francoise	Pearlman
Jay	Pearlman
Birger	Poppel
Marie Kathrine	Poppel
Tida	Ravn
Hanne	Sagen
Stein	Sandven
Sascha	Schiøtt
Atli Arnfinsson	Tomassen
Vivi	Vold
Sylvia	Weging.