

**Sekretariatet for Konventionen om Biologisk Mangfoldighedimi (Uumassusillit Assigiinngisitaarneri pillugit Isumaqatigiissutip Allattoqarfiani) pisortamut**

Workshopeqartitsineq "Pinngortitami tunngassutilinnut ingerlatsinermi najugaqartut ilisimatuullu ilisimasaasa atorineqartarnerini 'periutsit pitsaasut' pillugit suliniuteqarneq," Aasianni Kalaallit Nunaanni ingerlanneqarpoq 2022-mi novembarip 29-annit decembarip aallaqqaataata tungaanut (Aasianni workshopeqarneq). Workshopeqartitsineq Issittup Ilisimatusarfianit (The University of the Arctic), Uddannelses og Forskningsministeriet (Ilinniartitaanermut Ilisimatusarnermullu Naalakkersuisoqarfik) aamma EU-p Horizon 2020 programianit CAPARDUS pillugu suliniut aqutigalugu aningaasalersorneqarsimavoq.

Pinngortitami pisuussutsit najugaqartunit nakkutigineqartarnerat (Community-based monitoring of natural resources (CBM)) aamma Innuttaasut suleqatigalugit ilisimatusartarneq (Citizen Science (CS)) sakkussatut pilersinneqarsimapput pinngortitami tunngassutilinnut nakkutiginnittarneq tunngavigalugu sukumiinerusumik aalajangiisarnissaq siunertaralugu, taamatullu naleqqussartumik ingerlatseriaaseq (tilpasningsorienteret forvaltning - adaptive management) aqutissiorneqarsinnaaqqullugu. Periutsit taakku atorlugit silap allanngoriartornerata kingunerisaanik ilungersunartorsiorititsisarnerit pinasuartumik aalajangiiffigalugit qisuariarfigineqarsinnaapput. Piujuartitsineq, inuussutissaqarneq taakkuninngalu naammattunik sillimmateqarnissaq pillugu qulakkeerinissamik aqutissiuussisunut ilaapput (Ilaliussat 1-3 takukkit).

"Manausimit Allagaq: Uumassusillit assigiinngisitaarneri pillugit suleqatigiilluni nakkutiginninnissaq pillugu innersuutit" (The "Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity" (ML)) aqutigalugu CBM-ip aamma CB-p iluani aqqissuussillutik ineriartortitsilluunniit ingerlatsisut malittarisassiorneqarput. Taanna pilersinneqarsimavoq 2014-imi CBD-p allaffeqarfiata qaaqusaattut peqataasut 220-t nunanit assigiinngitsuni 18-ineersut aalajangiinerisigut. ML pilersinneqarmalli nunarsuaq tamakkerlugu ML-ip innersuussutaasa atorluarneqarsimanerini arlalinnik assersuutissaqarpoq. Aasianni workshopeqartitsineq misilittakkanit taakkunannga aallaaveqarpoq.

**Aasianni workshopeqartitsinermit qitiusumik inerniliinerit. Peqataasut:**

1. Nunat inoqqaavisa nunanilu pineqartuni najugaqartut ilisimasaasa pingaaruteqassusii naleqassusiilu pingaartitalugit unnerput, taamatullu nunat inoqqaavisa najugaqartullu (IPLC-t) ilisimasaat pinngortitap pisuussutai pillugit ingerlatsinerup iluani naligiissumik atorluarneqartassasut.
2. Isumaqatigiipput CBM aamma CS pinngortitami avatangiisit pillugit ilisimasaniq pissarsiaqarnissamut, taakkulu pinngortitami pisuussutsit pillugit ingerlatsisunut paasissutissiissutissatut atussallugit pingaaruteqartuusut.
3. Uppernarsaapput nunat inoqqaavisa ilisimasaat nunarsuattalu kitaani ilisimatusariaatsit nalinginnaasut, IPLC-llu ilisimasaat, peqatigiisillugit tapertariittut pinngortitami tunngassutilinnut ingerlatsinermi aalajangiinissamut ilisimasat annertusaataassasut.
4. Manusimit Allakkamit innersuutigineqarsimasut nalilersorpaat, paasineqarporlu CBM aamma CS eqqarsaatigalugit siunertarisanik pilersitsinissamut iluatsittumik najoqqutarineqartarsimasut.
5. Pinngortitami tunngassutilinnut ingerlatsinermi ilisimasat pillugit paasissutissanik avitseqatigiittarnermi, isumasioqatigiittarnermi attaveqatigiillunilu oqaloqatigiittarnermi periutsit atortulersuutillu pisariaqartumik ataavartumillu pitsanngorsaavigineqarnissaasa pisariaqassusiat erseqqissarpaat.
6. Aalajangiisoqassatillugu nunat inoqqaavisa najugaqartullu ilisimasaat (IPLC-t) nunanilu killerni ilisimatuut ilisimasaat tapertariisittarnissaannut periutsit

- kinguneqarluartitsisussat sulii misilittarlugillu pilersinneqartariaqartut pisariaqartoq paasineqarpoq. Kinguartheqqinneqassanngilaq.
7. Siunnersuutigaat naalakkersuisut assigiinngitsut ukioq 2020-p kingorna nunarsuaq tamakkerlugu uumassusillit assigiinngissitaarnerat pillugu sinaakkutissiat pillugit atuutilersitsinissaat pilersinnagu, nunat inoqqaavisa (ILPC-t) innuttaasullu pinngortitap allanngoriartorneranut tunngassuteqartut qanorlu uumassusillit assigiinngissitaartut aarlerinartorsiortigineranut tunngasut pillugit ilisimasaat katersorlugit akuuteqqaartassagaat, taamatullu avatangiisit pillugit innuttaasut politikikkullu aalajangiisartut akornanni qaammarsaanissaq sulissutigissagaat.
  8. Pinngortitami tunngassutilinnut ingerlatsinermi alisinnerusoq isigalugu naatsorsuutigineqarsinnaasumik aningaasaliisarnissaq taamatullu CBM IPLC-lu eqqarsaatigalugit ilusilersukkamik toqqammaveqartumik inatsisitigut tunngavissat qulakkeerneqarnissaat pisariaqartoq naqissuserpaat.
  9. Isumaqatigiipput Manusimit Allakkap innersuussutaasa timitalersorneqarnissaat sulii pisariaqartoq.

**Ilaliussaq 1:** Peqataasut allattorsimaffiat.

**Ilaliussaq 2:** Oqaluuserisassat.

**Ilaliussaq 3:** Manusimit Allagaq: Uumassusillit assigiinngissitaarneri pillugit suleqatigiilluni nakkutiginninnissaq pillugu innersuutit.

## To The Director, the Secretariat of the Convention on Biological Diversity

The workshop “Towards ‘good practice’ in the use of local and scientific knowledge for informing natural resource management” was held in Aasiaat, Kalaallit Nunaat, 29 November to 1 December 2022 (the Aasiaat Workshop). The workshop was funded by the University of the Arctic, The Danish Agency for Science and Higher Education, and the EU’s Horizon 2020 programme through the CAPARDUS project.

Community-based monitoring of natural resources (CBM) and Citizen Science (CS) are tools that can broaden the basis for management decisions and support adaptive management. They can lead to fast decision-making processes that are able to react to changing climate and pressures. They contribute to sustainability, livelihoods, and food security (see Annex 1-3).

The “Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity” (ML) provides guidelines for practitioners who organize, or develop capacity in CBM and CS. It was developed by 220 participants from 18 countries by invitation of the CBD Secretariat in 2014. Since the ML was developed, there have been several examples of utilization of the ML recommendations around the world. The Aasiaat Workshop draws on these experiences.

**Key outcomes of the Aasiaat Workshop.** The participants:

1. Stress the importance of recognizing the value of indigenous knowledge, and the equitable use of it, in natural resource management.
2. Agree on the importance of CBM and CS to obtain knowledge on the natural environment to inform management of natural resources.
3. Acknowledge that knowledge of Indigenous Peoples and Local Communities and conventional science together complement and increase the collective knowledge for decision-making in natural resource management.
4. Evaluate the Manaus Letter recommendations and find that they have contributed successfully to establishing programs on CBM and CS.
5. Highlight the necessity of a continuous focus on improving the structures and systems for information-sharing, communication and dialogue related to knowledge on natural resource management.
6. Identify a need for further testing, and establishing, effective processes for integrating knowledge of Indigenous Peoples and Local Communities and conventional science in decision-making. Do not delay the process.
7. Propose that governments implementing the post-2020 global biodiversity framework must involve Indigenous Peoples and Local Communities to include their knowledge on how nature is changing, and the responses that are being taken to address the biodiversity crisis, while also raising environmental awareness among the general public and policy makers.
8. Stress the need for securing reliable long-term funding and an enabling policy and legal basis for structured CBM and involvement of Indigenous Peoples and Local Communities in natural resource management.
9. Agree on the need to continue to put the Manaus Letter recommendations into practice.

**Annex 1:** List of participants.

**Annex 2:** Agenda.

**Annex 3:** The Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity.

**Annex 1: List of participants.** Workshop “Towards ‘good practice’ in the use of local and scientific knowledge for informing natural resource management”, Asiaat, Kalaallit Nunaat, 29 Nov. - 1 Dec. 2022

Pauline L.	Abelsen	Qeqertalik Municipality / Communication
Herizo	Andrianandrasana	Institute Global Sust. Development, Univ. of Warwick
Denis	Bidstrup	Qeqertalik Municipality / Byggesagsbehandler
Inuuteq	Bidstrup	Qeqertalik Municipality / Fagkoordinator
Caroline	Bouchard	Greenland Climate Research Centre
Joachim	Christensen	Ministry of Agriculture ... Environment / NIPNAN
Steen	Christensen	The Environmental Agency for Mineral Resource Activities
Rannvá	Clementsén	Mineral License and Safety Authority / Råstofstyrelsen
Pedro	Constantino	US Forest Service International Programs
Henning	Dalager	Greenland Association of Fishermen and Hunters / KNAPK
Finn	Danielsen	NORDECO
Braulio F. S.	Dias	Universidade de Brasília
Parnuna E.	Dahl	Oceans North Kalaallit Nunaat
Martin	Enghoff	NORDECO
Per Ole	Frederiksen	Fisherman and Hunter, Coordinator of PISUNA Attu
Hannah-Marie	Garcia	Indigenous Sentinels Network, Alaska
Roberta	Glenn	University of Alaska Fairbanks
Ane	Hansen	Mayor, Qeqertalik Municipality
Rikke G.	Hansen	Greenland Institute of Natural Resources, Dept. Mammals & Birds
Donna	Hauser	University of Alaska Fairbanks
Rasmus	Hedeholm	Sustainable Fisheries Greenland
Robin	Holmvang	Ministry of Fisheries and Hunting / APN-Fiskeri
Hans	Inûsugtoq	Qeqertalik Municipality
Paviarak	Jakobsen	Qeqertalik Municipality, Coordinator of PISUNA in Qeqertalik
Nikkulaat	Jeremiassen	Greenland Association of Fishermen and Hunters / KNAPK
Amalie	Jessen	Ministry of Fisheries and Hunting / APN-Fangst
Siri Jodha	Khalsa	University of Colorado, Boulder
Jessica	Lefevre	Resource person, Alaska
Rasmus J. F.	Lindholm	Mineral License and Safety Authority / Råstofstyrelsen
Karl S.	Marcussen	Fisherman and Hunter, PISUNA Attu
Roel	May	Norwegian Institute for Nature Research (NINA)
Vivianne	Mazzocco	PhD student, University of Copenhagen
Søren S.	Nielsen	CAPARDUS
Gerth	Nielsen	Part-time Fisherman and Hunter, Akunnaaq
Johan	Nielsen	Fisherman and Hunter, PISUNA Attu
Palle S.	Nielsen	Ministry of Agriculture ... Environment / NIPNAN
Rasmus	Nygård	Greenland Institute of Natural Resources, Dept. Fish & Shellfish
Yuka	Oishi	Rural Sociologist, Kobe University
Gerth P.	Olsen	Qeqertalik Business Council
Jørgen Isak	Olsen	Departementchef, Ministry of Fisheries and Hunting / APN
Ina Elisabeth	Olsen	Interpreter
Birger	Poppel	Ilisimatusarfik - University of Greenland
Michael K.	Poulsen	NORDECO
Tida	Ravn	Interpreter
Ane J.	Siegstad	Head of Secretariat, Qeqertalik Municipality
Kirsten	Silvius	US Forest Service International Programs
Nivi	Strunz	Municipal Director, Qeqertalik Municipality
Karl	Tobiassen	Naalakkersuisoq / Minister for Fisheries and Hunting
Elmer	Topp-Jørgensen	Knowledge Co-Production Project & INTERACT, University of Aarhus
Erneeraq	Ugpernangitsoq	Fisherman and Hunter, PISUNA Attu

**Annex 2: Agenda.** Workshop “Towards ‘good practice’ in the use of local and scientific knowledge for informing natural resource management”, Asiaat, Kalaallit Nunaat, 29 Nov. - 1 Dec. 2022

(ENGLISH VERSION BELOW)



## **Pinngortitami isumalluutini ingerlatsiviit ilisimatinniarlugit sumiiffimmi ilisimatusarnikkullu ilisimasat atorneranni 'pitsaasumik periuseqarnissap' tungaanut**

CAPARDUS-imik suliniummit aqqissuunneqartutut isumasioqatigiinneq

Asiaat, Kalaallit Nunaat

29. novembari – 1. decembari 2022 (ullut pingasut)

Oqaatsit: kalaallisut / tuluttut (toqqaannartumik nutserineq)

### **CAPARDUS-imik uteqqiineq**

CAPARDUS tassaavoq Issittumi ilisimatusarnerup, isumalluutini iluaquteqarlunilu aqutsinerup, umiarsuit angallannerisa, takornariartitsinerup inuiaqatigiinnilu pilersaarusiornerup iluini malittarisassianik najoqqutassianillu ineriartortitsinissamik sammisaqartutut EU-mit tapiissuteqarfigisatut suliniut. Pitsaasumik periuseqarnerup ineriartortinneranik, takussusiarineranik siammarterneranillu suliniut ilalersuteqarpoq. Suliniut ilisimatusartut, aningaasaqarnermi suliallit, sumiiffikkaani inuiaqatigiit, ingerlatsisuusut oqartussaasullu ilanngussorpai. Issittumi inuiaqatigiinnik taakkuninnga inooqatigiiffimmi avatangiisinullu tunngasutut pissutsit qanoq ilillutik allannguuteqartitsisarnerinik isumasioqatigiinnerit oqaloqatigiillunilu ataatsimiittarnerni atornerartarput. Issittumi silap pissusaata allanngorneri, taakkulu kingunerisaat ilisimatusarnermi aningaasaqarnermilu paasissutissanik, nalilersuutiniq siulittuutinillu tunngavilinnik pilersaarusiornermut aalajangiisarnernullu piumasaqaatinik nutaanik nassataqartitsipput. Pitsaasumik pilersaarusiornissamut tunngavigisaq tassaavoq Issittumi inunnut najugaqarlutillu sulisuusunut attuumassutilinnik paasissutissanut ilisimatitsissutinullu attaveqarnerit. Issittumi killeqarfinnik qaangiillutik Community-Based Monitoring (CBM) (Inuiaqatigiinnik Tunngaveqartumik Nakkutilliisarneq) aamma Citizen Science (CS)-mit (Inunni Ilisimatusarnermit) pilersitat ineriartortuupput, ilisimatusarnermilu nakkutilliisarnermut aqqissuussiffinnut ilassutinik paasissutissanik tunniussaqaartarlutik. CBM/CS-imik aqqissuussiffiit isumalluutit aqunnissaannik, sumiiffinni aalajangiussisarnernik, aammalu inuit suliaannut isumannaallisaanermik aqutsinissamik tapersersuiniartunut inunnit immikkut ittunik avatangiisinik, silallu pissusaanik ilisimatitsissutinik pisariaqartitsisunit atugaalersinneqarput. Assersuut tassaavoq PISUNA-programmi (*Piniakkanik Sumiiffinni Nalunaarsuineq*; <https://www.pisuna.org/>, <https://eloka-arctic.org/pisuna-net/en>). Issittumi CBM-imik CS-imillu programminut ajugaaffigisassat pingarnerutillugit tassaapput (1) piujuartitsisutut nakkutilliinermik aqqiissutinut *siunertanut aalajangersimasanut* pilersitanit CBM/CS-imik aqqiissutit inissinnissaat, (2) CBM/CS-ip aamma ilisimatusarnikkut nakkutilliissutit attavilernissaat, (3) CBM/CS-imit paasissutissat aalajangiussisarfinni atugaanissaat, aamma (4) atajuartumik aningaasaliisoqartarnerup pilersitaanissaa.

### **Isumasioqatigiinnermi anguniakkat**

- Pinngortitami isumalluutit pillugit aalajangiussisarfiup ilisimatinnissaanut sumiiffinni ilisimasat qanoq ilanngussuisinnaanerisa, CBM-imi programminik aningaasaqarnikkut aaqqissuussaanikkullu piujuartitsinerup qanoq isumannaarneqarsinnaanerisa, aamma CBM-ip ilisimatusarnikkullu nakkutilliissutit qanoq attavilersinneraanerisa siunissaannik oqallinneq
- Pinngortitami isumalluutit sumiiffikkaani uppersaaviginerisa ingerlatsiviunerisalu iluini 'pitsaasumik periuseqarnissamut' nunarsuarmi malittarisassiat ineriartortinnissaasa tungaannut suliaqarneq
- Ilisimatusarnermi killilinnik paasissutissalini, taamaattorli sumiiffimmi annertuumik ilisimasaqarfiusuni aaqqissuussiffinni katititaaffilinni aalajangiisarfimmik ilitsersuisinnaasumik qarasaasiakkut sakkussamik misileraaneq
- CBM/CS-imik aaqqissuussiffinnik 'Arctic Practice System'-ip ('Issittumi Periuseqarnermut Aaqqiissut'-ip) qanoq attavilersinnaanerani oqallissut – aammalu suut iluaqutaassaneri pillugit.

### **Pisussanut allaqqaagaq, 15. nov. 2022-meersoq**

#### **Ataasinngorneq 28. novembari:** Aasiannut angalaneq

Peqataasut nunat tamalaaneersut: Air Greenlandikkut Københavnimi mittarfimmit timmisartog nal. 09.00 aallassaaq, Aasiannut nal. 12.10 tikissalluni (sivissusua 7 t 10 min.)

Hotel Sømandshjemmet'imi inissinneq, Aasiaat, oq. +299 892711, aasiaat@soemandshjem.gl

#### **Marlungorneq 29. novembari 0900-16.00: Pinngortitami isumalluutit pillugit aalajangiisarfii ilisimatinnissaannut sumiiffinni ilisimasani atugaqarnermut siunissaq qanoq ippa – Qassi, Aasiaat**

Pinngortitami isumalluutit pillugit aalajangiisarfii tunngavissaannik pilersitsinissamut sumiiffinni ilisimasat qanoq ilalersuisinnaanissaannut siunissaq oqallissutigissavarput. Aamma CBM-imi programminik aningaasaqarnikkut aaqqissuussaanikkullu piujuartitsinerup qanoq isumannaarneqarsinnaanera, aammalu tamatuma attuumassuteqarfigisaani piuviusutigut CBM-ip aamma ilisimatusarnikkut paasissutissat qanoq attavilersinnaaneri oqalligissavavut.

9:00-9:20 Tikilluaqqusineq (siunnersuut):

Borgmesteri Ane Hansen, Kommune Qeqertalik

Naalackersuisoq Karl Tobiassen (Aalisarnermut Piniarnermullu Naalackersuisoq)

9:20-9:30

Aallaqqaasiisut: Finn Danielsen, Martin Enghoff, Michael K. Poulsen

9:30-11:00

Kalaallit Nunaanni pinngortitami isumalluutit pillugit aalajangiisarfii ilisimatinniarlugit sumiiffimmi ilisimasat atornissaannut siunissaq qanoq isigaajuk: Aalajangiisarfii ilisimatinniarlugit sumiiffinni ilisimasat sulii annermik atornerqassappat? Qanoq?

Oqartussaasoqarfinnut akisussaasunut sinniisuutitat:

1. Naalackersuisoq Karl Tobiassen (Aalisarnermut Piniarnermullu Naalackersuisoq, min. 15-it)
2. APN Piniarnermut aamma Aallaaniarnermut, Amalie Jessen
3. APN Aalisarnermut, Robin Holmvang
4. Aatsitassanut Aqutsisoqarfik, Rannvá Clementsen / Rasmus Lindholm
5. Aatsitassanut Tunngasuni Avatangiisunik Aqutsisoqarfik, Steen Christensen
6. Kommune Qeqertalik, Hans Inûsugtoq (Tamarmik minutsit qulit).

11:00-11:15

Kaffepause

11:15-12:00 Kattuffinnit siunissamut takorluukkat:  
1. KNAPK, Nikkulaat Jeremiassen / Henning Dalager  
2. Piniakkanik Sumiiffinni Nalunaarsuineq (PISUNA), Attu, Nuunoq (Per Ole) Frederiksen  
3. Pinngortitaleriffik, Aalisakkanut Qalerualinnullu Immikkoortoqarfik, Rasmus Nygaard  
4. Oceans North Kalaallit Nunaat, Parnuna Egede Dahl  
(Tamarmik minutsit qulit).

12:00-13:00 Ullo'qeqqasiorneq

13:00-14:00 CBM-imi programmini aningaasaqarnikkut aaqqissuussinikkullu piujuartitsinerit qanoq isumannaarneqarsinnaappat? Piviusunit assersuutininik saqqummiussinerit, kingulerlugit tamakkerluni oqallinnerit

Inunnik isumalluutaasunik ilisaritsinerit

1. Beringip Imartaa, 'Indigenous Sentinels Network', Hannah-Marie Garcia (min. 15-it)
2. Kalaallit Nunaat, Sustainable Fisheries Greenland, Rasmus Hedeholm (min. tallimat)
3. Alaska, 'Arctic Observatory & Knowledge Hub', Donna Hauser / Roberta Glenn (video, min. tallimat)
4. Brasilia, Kirsten Silvius / Pedro Constantino (video, min. tallimat)

Tamakkerluni: Pingaarnerutitanik/siunissami suliassanik pisariaqartunik oqallissutit

14:00-14:15 Kaffepause

14:15-16:00 Tamanna attuumassuteqartillugu piviusuni CBM aamma ilisimatusarnikkut paasissutissat qanoq attavilerneqarsinnaappat? Piviusunit assersuutininik saqqummiussineq, kingulerlugit tamakkerluni oqallinnerit

Inunnik isumalluutaasunik ilisaritsinerit:

1. Pinngortitaleriffik, Uumasunut miluumasunut Timmissanullu Immikkoortoqarfik, Rikke G. Hansen (min. qulit)
2. Brasiliap Ilisimatusarfia, Brasilia, aamma Konventionen om Biologisk Mangfoldighed'imut allattoqarfik, Braulio de Souza Diaz (min. qulit)
3. Alaska, Jessica Lefevre (min. 20-t)

Tamakkerluni: Pingaarnerutitanik/siunissami suliassanik pisariaqartunik oqallissutit

19:00 Neriniartarfimmi nereqatigiinneq, Nanoq, Fr. Lyngesvej 12 (illoqarfiup qeqqani, kommunip allaffiata aamma Butikshusip akornanni 1. salimi)

**Pingasunngorneq 30. novembari 0900-16.00: Pinngortitami isumalluutit sumiiffikkaani uppennarsaaviginerinut ingerlatsiviunerinullu 'pitsaasumik periuseqarnissamut' nunarsuarmi malittarisassiat ineriartortinnissaasa tungaannut**

2015-imi "Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity" tamanut saqqummiunneqarpoq (Linki: <http://dx.doi.org/10.25607/OBP-965>) <http://dx.doi.org/10.25607/OBP-965>). Tassaavoq iltersuut, pinngortitami isumalluutininik avatangiisinillu sumiiffikkaani uppennarsaaviginninnerup ingerlatsinerullu iluini piginnaasanik aaqqissuussisunut imaluunniit ineriartortitsisunut sulialinnut inassutininik 40-nik imaqartoq. Iltersuut nunanit 18-init, ilanngullugit Kalaallit Nunaannit aamma Alaskamit peqataasunit 220-nit suliarineqarpoq. 22.-26. septembari 2014-imi Manaus'imi, Brasiliami "Internationale

Seminar om Participatorisk Dokumentation af Biodiversitet til Forvaltning af Naturressourcer"-imi ("Uumassusillit assigiinngiaarnerinit Pinngortitami isumalluutininik Aqutsinermut Peqataaffigisatut Uppernarsaassuteqartarneq pillugu Nunat Tamalaat Isumasioqatigiinnerat")-ni Konventionen om Biologisk Mangfoldighedimut (Uumassusillit Amerlassusaat pillugit Isumaqatigiisummut) allattoqarfiup aggeqqusissutaatigut suliarineqarpoq. Nunap immikkoortuinit arfinilinnit piviusunit misissuinernik tunngaveqartillugu ilitersuutip taassuma nutarsarnissaa naleqqunnersoq, aammalu Issittumi killeqarfiit qaangerlugit nunarsuarmilu siamasissumik atugarinera siuarsassanersoq oqallisigissavarput.

9:00-9:10 Aallaqqaasiisut: Finn Danielsen, Martin Enghoff, Michael K. Poulsen

9:10-9:25 Manaus Letterimik ingerlassaq, tamatumalu kingornatigut susoqarsimanersoq (Herizo Andrianandrasana)

9:25-9:40 Konventionen om Biologisk Mangfoldighedimi (Uumassusillit Amerlassusaat pillugit Isumaqatigiisummi nunat tamalaani ingerlassani CBM – aamma siunissami pisinnaasut (Braulio de Souza Diaz, siusinnerusukkut Konventionen om Biologisk Mangfoldighedimi allattoqarfimmut pisortaq)

9:40-9:55 Kaffepause

9:55-12:00 Manaus Letter'imi inassutit 40-t suli attuumassuteqartuuppat, imaluunniit taakku ilaat iluaqutaajunnaarpat? Nutaanik aamma pingaaruteqartunik inassuteqarpa?

Piviusunit assersuutit arfinillit (kinguleralugit apeqquutit/akissutit)

1. Kalaallit Nunaat, Caroline Bouchard, Silap Pissusianik Ilisimatusarfik (min. tallimat)
2. Ruslandip Issittoqarfia, Yuka Oishi, Kobemi Ilisimatusarfik, Japani (min. 15-it)
3. Beringip Imartaa, 'Indigenous Sentinels Network', Hannah-Marie Garcia (min. tallimat)
4. Brasilia, Kirsten Silvius / Pedro Constantino (video, min. tallimat)
5. Alaska, 'Arctic Observatory & Knowledge Hub', Donna Hauser / Roberta Glenn (video, min. tallimat)
6. Alaska, Jessica Lefevre (min. tallimat)

12.00-13.00 Ullo'qeqqasiorneq

13.00-14.00 Suleqatigiikkuutaani sulineq. Apeqquut: Manaus Letter nutartigaq qanoq suliarineqarlunilu siamasinnerusumik siammartissinnaava? CBM-imi programminik attassiniarnissamut, aningaasaqarnikkullu isumannaarinissamut tunngatillugit suut assersuutitut inassutigineqarsinnaappat? CBM-imut "najoqqutassatut" ilitersuummut nunat tamalaani sullissisarfik "ingerlatsisarfiussappat" tamanna iluaqutaassava?

14:30-15:00 Kaffepause

15.00-16.00 Tamakkerluni. Suleqatigiikkuutaat inerniliaannik saqqummiussineq. Pingaarnerutitanik / siunissami suliassanik pingaarutilinnik oqallinneq

### **Sisamangorneq 1. decembari 9.00-12.00: Angalaatsiarneq.**

Qeqertarsuup Tunuani angallammik angalaneq. Allatut qinigassatut Aasiaat illoqarfiani nassuiaasulerluni pisuttuarneq, sila apeqquutaalluni

12.00-12.30 Ullo'qeqqasiorneq



**12:30-15:00: Aalajangiiffiusunik najoqqutassiuisinnaasumik qarasaasiamik saku pillugu ataatsimiinneq** (aqutsisoralugit Roel May, Birger Poppel, Vivianne Mazzocco) – Qassi, Aasiaat  
Sumiiffinni ilisimatusarnikkut annikitsunik paasissutissaatilinni, annertuumillu sumiiffimmi ilisimasaqarfilinni aalajangiisarnernik naatsorsueqqissaarinikkut iluserisat ilitsersuisinnaapput.

- 12:30-12:45 Isumalluutininik uumassusilinnik aqutsinerni Bayesianske (BBN) modelinik atugaqarnerit CBM-imilu programminik aallaqqaasiineq: Roel May
- 12:45-13:00 "surBayes"-imik sakkumik takussutissiineq: Roel May
- 13:00-13:30 Tamakkerluni oqallinneq: Isumalluutininik uumassusilinnik aqutsinerup aamma CBM-imi programmit iluini Issittumi pisunut sorlernet BBN-imi modelit pisoqarfissanik nalilersuinerut atorreqarsinnaappat?
- 13:30-14:30 Suleqatigiikkuutaani sulineq: "surBayes"-app'imik ikiorteqarlutit nammineq pigisassanik BBN-imi modelimik sananeq.
- 14:30-15:00 Tamakkerluni oqallinneq: BBN-imi modelini nukittoqutit sanngeequtillu. Sutigut iluaqutaappat, aalajangiisarfirmillu qanoq ilitsersuisinnaappat? Kaffe/the takanna.

**15:00-16:30: 'Arctic Practice System' ('Issittumi Periuseqarnermut Aaqqiissut') pillugu ataatsimiinneq** (aqutsisut Siri Jodha Khalsa, Stein Sandven)

'Arctic Practice System' ('Issittumi Periuseqarnermut Aaqqiissut') (APS-ip) suua? APS tassaavoq sunik arlaannik qanoq iliuuseqartarnerit pillugit ilisimasat toqqorlugillu, allallu peqatigalugit pigisarilernissaannut aaqqiissuussaq. Soorlu qanoq ililluni pisuussutit uumassusillit aqutarisarneri pillugit. Atortuutininik qanoq iluarsaassisarnerit pillugit. Qanoq isumannaallisaanermik pitsanngorsaasarnermut tunngatillugu, allamiilluunniit allat qanoq iliussalluni inassutigisaannik ilisimasaqarusunnermut tunngatillugu. 'Periuseq'-mik pisaq assersuutigalugu immikkut ittutut imartami pisoqarnermik nakkutilliinermi pisut qanoq iliuuseqarfiusarneri pillugit digitaalikkut ilutsimi uppernarsaassuteqarnermik isumaqarpoq. Siunissami APS-imik aaqqiissummi peqataasut sunik kissaateqarnerat oqalusererusupparput. APS-imut assersuut uani nassaassaavoq, <https://repository.oceanbestpractices.org/handle/11329/1291>" <https://repository.oceanbestpractices.org/handle/11329/1291>, tassani oqaatsit najoqqutassat toorukkit toqqorsiviup allagaatit, oqaatsinik najoqqutassanik taakkuninnga imallit nassaarissavai.

- 15:00-15:10 'Arctic Practice System'-ip ('Issittumi Periuseqarnermut Aaqqiissut'-ip) (APS-ip) najoqqutassanut aallarniissut
- 15:10-15:30 Ocean Best Practice Systemit (Imarpimmi Pitsaanerpaamik Periuseqarnermut Aaqqiissutit) (OPBS-itut) pilersinneqareersumi APS-imik issittumi periusaasut 100-t sinnillit toqqortarineqarsimaffianik takussutissiineq.
- 15:30-16:30 APS-imut piginnaasassat kissaatigisat? Pingaarnersiukkanik suliaqarnerni siullertut misileraaneq.  
Oqallinnermut aqutsisut Siri Jodha aamma Stein Sandven. Kaffe/the takanna.
- 16:30-17:00 Ulluni pingasuni isumasioqatigiinnerup naggasernera, tulliatullu alloriarnissaq, Finn Danielsen, Martin Enghoff, Michael K. Poulsen

## Tallimangorneq 2. decembari: Aallarnek

Peqataasut nunat tamalaaneersut: Air Greenlandikkut Aasianni mittarfimmit timmisarteq nal. 10.30 aallassaaq, Københavnimut nal. 20.00 tikissalluni (sivisussusia 5 t 30 min.)

CAPARDUS suliniut no. 869673 aqqutigalugu, aamma UArctic aqqutigalugu Uddannelses- og Forskningsstyrelsenimit (Ilinniartitaanermut Ilisimatusarnermullu Aqutsisoqarfimmit) EU-p Horizon 2020-mi ilisimatusarnermut pilersitaqarnermullu programmimit tapiiffiqeqarpoq.



## Towards 'good practice' in the use of local and scientific knowledge for informing natural resource management

A workshop organised by the CAPARDUS H2020 project

Aasiaat, Greenland

29 November – 1 December 2022 (3 days)

Language: Greenlandic/English (simultaneous interpretation)

### Summary of CAPARDUS

CAPARDUS is a H2020 project with focus on developing guidelines and standards in research, resource exploitation and management, shipping, tourism and community planning in the Arctic. The project contributes to develop, demonstrate, and widely circulate good practices. The project involves scientists, economic actors, local communities, managers and regulators. Workshops and dialogue meetings are used to discuss how the social-environmental systems are changing Arctic communities. The climate change and its consequences in the Arctic leads to new requirements for planning and decision-making based on scientific and economic data, assessments and predictions. A prerequisite for good planning is access to data and information of relevance to people living and working in the Arctic. Community-Based Monitoring (CBM) and Citizen Science (CS) initiatives are evolving across the Arctic, providing complementary data to the scientific observing systems. CBM/CS systems are initiated by people who need specific environmental and climate information to support management of resources, local decision-making and safety of human activities. An example is the PISUNA programme (*Piniakkanik Sumiiffinni Nalunaarsuineq*; <https://www.pisuna.org/>, <https://eloka-arctic.org/pisuna-net/en>). Challenges for CBM and CS projects in the Arctic are mainly to (1) bring CBM/CS systems from *ad hoc* initiatives to sustainable observing systems, (2) connect CBM/CS and scientific observations, (3) make use of CBM/CS data in decision-making, and (4) establish sustained funding.

### Workshop objectives

- Review the future for how local knowledge can contribute to inform decision-making on natural resources, and explore how the financial and organizational sustainability of CBM programs can be assured, and how CBM and scientific observations can be connected
- Work towards development of global 'good practice' guidelines in community-based monitoring and management of natural resources
- Test a software tool that can guide decision-making in complex social-ecological systems with limited scientific data but substantial local knowledge
- Discuss how an Arctic Practice System should be connected to CBM/CS systems – and what would be the benefit

## Programme

### **Monday 28 November:** Travel to Aasiaat

International participants: Flights from Copenhagen airport at 09.00 by Air Greenland, arrival Aasiaat 12.10 (duration 7 h 10 min)

Check-in at Hotel Sømandshjemmet, Aasiaat, tel. +299 892711, [aasiaat@soemandshjem.gl](mailto:aasiaat@soemandshjem.gl)

### **Tuesday 29 November 0900-16.00: How is the future for the use of local knowledge to inform decision-making on natural resources** – Forsamlingshuset Aasiaat

We will together undertake a review of the future for how local knowledge can contribute to inform decision-making on natural resources. Moreover, we will explore how the financial and organizational sustainability of CBM programs can be assured, and how CBM and scientific data can be connected in practice when this is relevant

- 9:00-9:20 Welcome (proposed)  
Mayor Ane Hansen, Qeqertalik Municipality  
Naalakkersuisoq Karl Tobiassen (Minister of Fisheries and Hunting)
- 9:20-9:30 Intro: Finn Danielsen, Martin Enghoff, Michael K. Poulsen
- 9:30-11:00 How do you see the future for local knowledge to inform decision-making on natural resources in Greenland: Should local knowledge be further used for informing decision-making? How?
- Representatives of the responsible authorities:
1. Naalakkersuisoq Karl Tobiassen (Minister of Fisheries and Hunting, proposed, 15 min.)
  2. APN Hunting, Amalie Jessen
  3. APN Fisheries, Robin Holmvang
  4. Råstofstyrelsen, Rannvá Clementsen / Rasmus Lindholm
  5. Miljøstyrelsen for Råstofområdet, Steen Christensen
  6. Qeqertalik Municipality, Hans Inûsugtoq (10 minutes each).
- 11:00-11:15 Coffee break
- 11:15-12:00 Perspectives from organizations and institutions:
1. KNAPK (Association of Fishers and Hunters), Nikkulaat Jeremiassen / Henning Dalager
  2. Piniakkanik Sumiiffinni Nalunaarsuineq (PISUNA) in Attu, Nuunoq (Per Ole) Frederiksen
  3. Greenland Institute of Natural Resources, Dept. Fish & Shellfish, Rasmus Nygaard
  4. Oceans North Kalaallit Nunaat, Parnuna Egede Dahl (10 minutes each).
- 12:00-13:00 Lunch
- 13:00-14:00 How can the financial and organizational sustainability of CBM programs be assured? Lessons from case examples, followed by discussion in plenum  
Presentations by resource persons:
1. Bering Sea, Indigenous Sentinels Network, Hannah-Marie Garcia (15 minutes)
  2. Greenland, Sustainable Fisheries Greenland, Rasmus Hedeholm (5 minutes)
  3. Alaska, Arctic Observatory & Knowledge Hub, Donna Hauser & Roberta Glenn (video, 5 minutes)

4. Brazil, Kirsten Silvius & Pedro Constantino (video, 5 minutes)

Plenum: Discussion of priorities / necessary tasks ahead

14:00-14:15 Coffee break

14:15-16:00 How can CBM and scientific data be connected in practice for management decision-making when this is relevant? Lessons from case example, followed by discussion in plenum

Presentation by resource persons:

4. Greenland Institute of Natural Resources, Dept. Mammals & Birds, Rikke G. Hansen (10 minutes)
5. Universidade de Brasília, Braulio de Souza Diaz (10 minutes)
6. Jessica Lefevre (20 minutes)

Plenum: Discussion of priorities / necessary tasks ahead

19:00 Dinner at restaurant (hosted): Restaurant Nanoq, Fr. Lyngesvej 12

### **Wednesday 30 November 0900-16.00: Towards the development of global ‘good practice’ guidelines in community-based monitoring and management of natural resources**

In 2015, the “Manaus Letter: recommendations for the Participatory Monitoring of Biodiversity” was published (Link: <http://dx.doi.org/10.25607/OBP-965>). This is a guideline comprising 40 recommendations for practitioners who organize, or develop capacity in, community monitoring of natural resource systems and the environment. The guideline was developed by 220 participants from 18 countries, inc. Greenland and Alaska. It was prepared by invitation of the Convention on Biological Diversity Secretariat at the “International Seminar on Participatory Monitoring of Biodiversity for the Management of Natural Resources” in Manaus, Brazil, Sep. 22–26, 2014. Based on case studies from different regions, we will discuss if it is meaningful to update this guideline and promote its broader use across the Arctic and globally.

9:00-9:10 Intro: Finn Danielsen, Martin Enghoff, Michael K. Poulsen

9:10-9:25 The Manaus Letter process (Herizo Andrianandrasana, University of Warwick, UK) (15 minutes)

9:25-9:40 CBM in international processes of the Convention on Biological Diversity - and future perspectives (Braulio de Souza Diaz, former Head of Secretariat, CBD & Professor, Universidade de Brasília, Brazil) (15 minutes)

9:40-9:55 Coffee break

9:55-12:00 Are the 40 recommendations in the Manaus Letter still relevant, or are some of them no longer helpful? Are there new recommendations that are also important?

Case examples (followed by questions/answers)

7. Greenland, Caroline Bouchard (3 slides, 5 minutes)
8. Arctic Russia, Kobe University, Japan, Yuka Oishi (15 minutes)
9. Bering Sea, Indigenous Sentinels Network, Hannah-Marie Garcia (5 minutes)
10. Brazil, Kirsten Silvius & Pedro Constantino (video, 5 minutes)
11. Alaska Arctic Observatory & Knowledge Hub, Donna Hauser & Roberta Glenn (video, 5 minutes)
12. Alaska, Jessica Lefevre (5 minutes)

12:00-13:00 Lunch

13:00-14:30 Group work. Questions: How can an updated Manaus Letter be completed and more widely disseminated? For example, what can be recommended with regards to sustaining and financially securing CBM programs? Would it be helpful if an international institution would 'host' the guidelines as a 'standard' on CBM?

14:30-15:00 Coffee break

15:00-16:00 Plenum. Presentation of group findings. Discussion of priorities / necessary tasks ahead

**Thursday 1 December 9:00-12:00: Excursion.**

Boat trip to Disko Bugt. Alternatively, guided walking tour in Aasiaat town, dependent on the weather

12:00-12:30 Lunch

**12:30-15:00: Session about a software tool that can guide decision-making in complex social-environmental systems** (led by Roel May, Birger Poppel, Vivianne Mazzocco) – Forsamlingshuset Aasiaat  
Statistical models have considerable potential to guide decision-making in areas characterized by limited scientific data and substantial local knowledge.

12:30-12:45 Introduction to the use of Bayesian (BBN) models in natural resource management and CBM-programmes: Roel May

12:45-13:00 Demo of the surBayes tool: Roel May

13:00-13:30 Plenum discussion: In which natural resource management contexts and CBM situations in the Arctic could BBN models be used for scenario assessments?

13:30-14:30 Group work: Build your own BBN model using the surBayes app.

14:30-15:00 Plenum discussion: Strengths and weaknesses of BBN models. What is their usefulness and how can they guide decision-making? Coffee/tea available

**15:00-16:30: Session on Arctic Practice System** (led by Siri Jodha Khalsa, Stein Sandven)

An Arctic Practices System (APS) is envisioned to be a sustained repository for practices related to environmental observations, resource exploitation and other activities in the Arctic. A 'practice' means a documentation in digital form of how things are done for example in observation of a specific ocean phenomenon. What an APS should do will be identified in dialogue with people living or working in the Arctic with knowledge about practices in their daily work. An example of Arctic practices is found at <https://repository.oceanbestpractices.org/handle/11329/1291>, where you can give keywords and the repository will identify documents containing those keywords.

15:00-15:10 Introduction to the concept of an Arctic Practice System (APS)

15:10-15:30 Demo of Arctic Community in the established Ocean Best Practice System (OPBS), where more than 100 Arctic Practices documents are stored

15:30-16:30 Desirable characteristics for the APS? First cut at priorities.  
Discussion led by Siri Jodha and Stein Sandven. Coffee/tea available

16:30-17:00 Wrap-up of the three-day workshop and next steps, by Finn Danielsen, Martin Enghoff, Michael K. Poulsen

**Friday 2 December:** Departure

International participants: Flights from Aasiaat airport at 10.30 by Air Greenland, arrival Copenhagen 20.00 (duration 5 h 30 min).

Funded by the European Union's Horizon 2020 research and innovation programme through the CAPARDUS project under grant agreement No 869673, and by the Danish Agency for Science and Higher Education through the UArctic Thematic Network on Collaborative Resource Management

## Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity

(ENGLISH VERSION, BELOW)

### Manaus'imit allagaq: Pisuussutiniq uumassusilinnik sumiiffikkaani uppersaasarnermut aqutsinermullu inassutigisat

Sumiiffikkaani uppersaasarnermik aqutsinermillu misilittakkanik oqaluuserinninniarlutik agguassiniarlutillu ulluni 22.-26. septembari 2014-imi Brasiliami Manaus'imi nunanit 18-init nunap inoqqaavisa, inuiaqatigiit, ilisimatusartut naalagaaffinnilu aalajangiisartut sinniisaat katersuussimapput. Kalaallit Nunaannit aamma Alaskamit inunnik peqataasoqarpoq. Peqataasut tamarmik pisuussutiniq uumassusilinnik sumiiffikkaani uppersaasarnermik aqutsinermullu nukittorsarnissaa pillugu ataatsimoorussaminnik kissaateqarput. Sumiiffikkaani uppersaasarnermik aqutsinermillu atugaqartarneq oqartussaasoqarfiit, ilisimatusartut aamma inuiaqatigiit akornanni siuarsarniarpaat.

Pisuussutiniq uumassusilinnik sumiiffikkaani uppersaasarnermik aqutsinermullu iluini 'pitsaasumik periuseqarnissamut' inassutiniq arlalinnik Manaus'imit allagaq imaqarpoq. Inassutigisat tassaapput Manaus'imi ataatsimiinnerup inernerisai. Inassutigisat tamatigoortuupput, taakkulu attuumassutaat pilersitanut ataasiakkaanut tamakkununga siunertamit, aammalu sumiiffinni ataasiakkaani pissusaasunit immikkut ittunit aalajangerneqarput.

### Manaus'imit allakkamit inassutigisat

#### Pisuussutiniq uumassusilinnik uppersaasarneq pillugu ingerlatassamik ilusilersuinerit

- 1 Pisuussutiniq uumassusilinnik sumiiffikkaani uppersaasarneq aqutsinermullu pillugit pilersitat 'ataa'tungaaniit' aallartisartariaqarput. Sumiiffikkaani inuit ilisimatusartullu, aammalu taakku takorluugaat ilisimasaallu ilannguttariaqarput.
- 2 Nunaqarfiit peqatigalugit oqaloqatigiinnikkut inissisimaffiit akisussaaffiillu nassuiartariaqarput. Nunaqarfinni piginnaasat, pisariaqartit soqutigisallu sianigineqartariaqarput.
- 3 Sumiiffigisami isumalluutit uumassusillit taakku inuussutigalugit pingaaruteqartut, imaluunniit aningaasaqarnikkut naleqartut, allatulluunniit nunaqarfinni innuttaasunut pingaaruteqartut pingaarnersiortariaqarput.
- 4 Pisuussutiniq uumassusilinnik sumiiffikkaani uppersaasarnermut aqutsinermullu atorneqartut periutsit sakkullu atornissaat pisariussangillat, aammalu sumiiffikkaani periusaasumut kultureqarnermullu naleqqiullugit naleqqutissapput.
- 5 Sumiiffikkaani uppersaasarnermut aqutsinermullu ingerlatassamik ilusilersuinerit ingerlatassap aallartinnera sioqqullugu ingerlatassap naammassinnaanut attuumassutilittut ilorraap aamma killup tungaanut kingunerisinnaasat isumaliutigineqassapput. Taamaalilluni suliamut pisariaqartitamut naleqqiullugu iluaqutissat anginerunissaat qularnaarneqassaaq.
- 6 Periarfissaqarfatiqut pilersitat nutaat taarsiiginnaratik sumiiffinni pilersitanik taakkunaneersunik tunngaveqartariaqarput.
- 7 Ilisimasat katersat ataatsimoorullugit isumaqatigiissutaareersunik isumalluutitut uumassusilinnut taakkununga aalajangiussinernut, allatulluunniit inuiaqatigiinnut attuumassutilittut avatangiisinut politikkerisanut anguniakkanullu ilalersuisariaqarput.
- 8 Periutsit, aqutsinerit, paasissutissat suliarisimasat, aammalu paasissutissanik atuinerit akuttoqatigiissaartumik nalilersortariaqarput. Taamaalilluni ajornangippat pisarialinnik iluarsiisoqarsinnaasoqartassaaq.

## **Sumiiffikkaani uppernarsaasarnermut aqutsinermullu piniartut aalisartullu, avatangiisimillu soqutigisallit allat peqataanerat**

- 9 Sumiiffikkaani kattuffinnit tapersorsorneqarlutik nunaqarfinnit namminersuutigisatut sumiiffikkaani uppernarsaasarnermut aqutsinermullu ilaasutut piniartut, aalisartut avatangiisimillu soqutigisallit allat toqqarneqartariaqarput. Inuit akisussaaffigisaat, piginnaasaat, pimoorussinerat misilittagarisaallu sianiginiarneqartariaqarput.
- 10 Isumalluutit uumassusillit pillugit aalajangiussinerni piniartut aalisartullu inissisimaffii sumiiffikkaani uppernarsaasarnermi aqutsinermilu sutigit tamatigit siamasissumik peqataatsitsinerup siuarsarneratigit nukittorsarneqarsinnaapput. Ilisimasanik pilersitanik, aqutsinermullu siunnersuutigisat tamakku paasisitsiniutiginiarlugit naliliiffiginiarlugillu akuttoqatigiinnik innuttaasut ataatsimisinneqartariaqarput.

## **Peqatigiiffigisaqarfiit**

- 11 Sumiiffikkaani uppernarsaasarneq aqutsinerlu iluatsissinnaassappat suliaqartut assigiinngitsut peqataanissaat pisariaqarpoq. Pilersitat aallartisarneri sioqqullugit suleqatigiinnerit najoqqutassalertariaqarput.
- 12 Sumiiffikkaani, nunap immikkoortuini nunarsuarmilu suleqatigiinni ilaasuni taakkunani soqutigisanik kajumissutsinillu sumiiffikkaani uppernarsaasarneq aqutsinerlu pillugit pilersitat kattussisariaqarlutillu oqimaaqatigiissitsisariaqarput. Illua'tungeriit akornanni tatigeqatigiinneq iluatsitsinerup angunissaanut aalajangiisuvoq. Illua'tungeriit akornanni attuumassuteqarnerit erseqqissuussapput. Illua'tungeriit tamarmik piviusorpalaartunik naatsorsuuteqartariaqarput. Pilersitanut anguniakkat erseqqissumik nassuiarsimasariaqarput, illua'tungerisallu tamarmik soqutigisarisaannik sianiginnissapput.

## **Paasissutissat pitsaassusaat**

- 13 Pisuussutinik uumassusilinnik taakkuninnga sumiiffikkaani uppernarsaallunilu aqutsinerit pillugit pilersitat anguniakkaminnik tikitaqassagunik paasissutissat pitsaassusaat tunngaviupput.
- 14 Paasissutissat pitsaassusaat arlalitsigut qulakkeerneqarsinnaapput. Soorlu 1) paasissutissanik katersuinermi ilaasunik inunnik akuttoqatigiissaakkamik sungiusaanikkut, 2) paasissutissat pitsaassusaannik ilisimatusartut innuttaasullu naliliuarternerisigut, 3 sumiiffikkaani uppernarsaasarnermi aqutsinermilu sutigit tamatigit innuttaasunik ilaatitsinikkut, aamma 4) inuiaqatigiit tungaannit ataatsimoorussamik paasinninnermik inooqatigiiffimilu nakkutillisarfirmik pilersitsisoqarsimaneratigit. Sumiiffikkaani siulersuisut, sumiiffikkaani uppernarsaasarnermik aqutsinermillu sulinermi peqatasut paasissutissat pitsaassusaannik uppernarsaasarnermi akisussaaffeqartuusariaqarput.
- 15 Periarfissaqarfatiqatigit databasini kukkussutit katersuutsinnaveersinniarlugit akuerisaasutut naatsorsueqqissaarinermik paasissutissanillu immikkoortiterinermik aaqqiissutit atorineqartariaqarput. Tamanna paasissutissat pitsaassusaannik kinaassusersiunnginnermik assigiissaarinermillu siuarsaassaaq.
- 16 Pisuussutinik uumassusilinnik sumiiffikkaani uppernarsaasarnermi aqutsinermillu paasissutissat aaqqiissuussaasutut ilusilimmi toqqortarisariaqarput. Paasissutissanik toqqortaqarnerup databasinut 'pitsaasumik periuseqarneq' malittariaqarpaa.
- 17 Sumiiffikkaani uppernarsaasarnermi aqutsinermillu paasissutissat sumiiffikkaani inuiaqatigiinnut tamatigit pissarsiarineqarsinnaasariaqarput.
- 18 Sumiiffikkaani uppernarsaasarnermi aqutsinermillu paasissutissanik atuinerit paasissutissaniittuni ilisarnaataasut killeqarfisallu tamakku ataqqisariaqarpaat.
- 19 Isumalluutit uumassusillit aquunnissaanut attuumassuteqartutut paasissutissanik paasinninnerit misissueqqissaarinerillu sapinngisamik piaarnerpaamik suliarineqartariaqarput. Tamatuma paasissutissanik atuinermit periarfissat annertusassavai, taamaalisukkullu aalajangiinermik ingerlattakkanik siuarsaassalluni.
- 20 Sumiiffikkaani uppernarsaasarneq aqutsinerlu pillugit pilersitat nunami namminermi imaluunniit nunarsuarmi atugassarilikkatut pilersinneqarpata pilersitat nunaqarfinnut peqataasunut tamakkununnga ilisimasanik inerniliissutinillu uterteqqittarnissaat qularnaartariaqarpoq.



### **Sumiiffikkaani uppernarsaasernerup aamma pisortatigut politikkip akornanni ataqatigiiffiit**

- 21 Isumalluutit uumassusillit aqunnerinut, ilinniartitsinermut ilisimatusarnermullu pisortatigut politikki sumiiffikkaani uppernarsaasarnermit aqutsinermillu pinngortunik ilisimasanik ilanngussuinikkut pitsanngorsartariaqarpoq.
- 22 Sumiiffikkaani uppernarsaasernerup aqutsinerullu aamma pisortatigut politikkip akornanni kalerreqatigiittarnermik pissutsinik peqartariaqarpoq: Teknikkikkut politikikkullu aalajangiisarnermi sumiiffikkaanit uppernarsaassutinit ilisimasanik atuinermik sumiiffikkaani uppernarsaasarneq aqutsinerlu pillugit pilersitsiniutit kaammattuisariaqarlutillu siuarsaasariaqarput. Sumiiffikkaani uppernarsaasarneq aqutsinerlu pillugit ingerlatanik aalajangiisartut akuerinnittariaqarlutillu tapersersuisariaqarput.
- 23 Sumiiffikkaani inuiaqatigiit pilersitaattut ilisimasat tamakku sumiiffikkaani inuiaqatigiit avataanniillutik aalajangiisartut ataqqisariaqarlugillu atugariniartariaqarpaat. Taamatuttaaq sumiiffikkaani aalajangiinernut ilisimasanik taakkuninnga sumiiffikkaani inuiaqatigiit atuisarnerat ataqqisariaqarpaat.
- 24 Sumiiffikkaani uppernarsaasernermit aqutsinermillu periutsit inernerisallu namminersortutut immikkoortoqarfimmuut aamma inuiaqatigiinni immikkoortoqarfinnut allanut, soorlu suliffinnut mikisunut angisuunullu, aamma avatangiisini kingunerisinnaasanik nalilersuinerni peqataasutut kattuffinnut paasitsiniutigineqartariaqarput. Taamaallutik immikkoortoqarfinni taakkunani allani, pisuussutinik uumasusilinnik sunniisunik imaluunniit pisariaqartitsisunik paasissutissat annertussusaat, paasiuminassusaat inooqatigiiffinnilu nakkutigineqarnerat pitsanngorsarneqassapput.
- 25 Avatangiisinut aamma isumalluutitut uumassusilinnut attaveqartuusuni ingerlattakkani politikkinilu sumiiffikkaani uppernarsaasarneq aqutsinerlu siuarsarneqartariaqarlutillu atorineqartariaqarput.

### **Inuiaqatigiinni pimoorussinermik akuerinninneq**

- 26 Sumiiffikkaani uppernarsaasarnermi aqutsinermilu inuit ilaasut inernerisanik saqqummiussinermi piniartut aalisartullu ilalersuutaannik, isumaliortaatsikkullu piginnittuunerannik akuerinnittariaqarput. Assersuutigalugu sumiiffikkaani uppernarsaasarnermit aqutsinermillu inernerisanik tunngavilitut teknikkimut-ilisimatusarnermut saqqummersitani allattooqataatitsineq aqutugalugu.
- 27 Sumiiffikkaani uppernarsaasarnermut aqutsinermullu peqataasunut akissarsiaqartitsinissaq pillugu apeqqut siamasissumik oqaluserineqassaaq. Sumiiffikkaani inuiaqatigiiffimmik peqataasumik isumaqatigiissutigisaasumik sumiiffikkaani uppernarsaasarnermi aqutsinermilu peqataasut – aningaasaqarnikkut allatulluunniit – naapertuilluartumik naleqquttumillu najoqqutassialigaasumik akilerneqartassapput.
- 28 Sumiiffikkaani uppernarsaasarneq aqutsinerlu pillugit ingerlattakkanit peqqissaarussatut ineriartortitaasunit naammassineqarsimasutullu pilersitaasunik ilisimasanik tamakkuninnga naleqassuserisaq nunami namminermi, aamma nunani tamalaani ilisimatusarfiit akuerisariaqarpaat. Ingerlattakkanik taakkuninnga ilaqartitsilluni suleqatigiinnik ilisimatusarfiit pilersitsisariaqarlutillu siuarsaasariaqarput.
- 29 Kattuffiit aningaasaliisarnikkut pinngortitap allanngutsaaliornernik, ilisimatusarnermik, teknikikkut nutaaliornermik ilinniartitaanermillu tapersersuisut isumalluutit uumassusillit taakku atajuartinnissaannut pitsanngorsaanissamut, nunaqarfinnillu nukittorsaanissamut sumiiffikkaani uppernarsaasarneq aqutsinerlu siuarsartariaqarlugulu tapersersortariaqarpaat.

### **Sullissisarfinnik sumiiffikkaanilu inuiaqatigiinnik nukittorsanerit**

- 30 Sumiiffikkaani uppernarsaasarnerit aqutsinerillu tassaapput sumiiffinni inuiaqatigiit nukittorsarnissaannut sakkussat. Taamaattumik inooqatigiiffimmi naligiinngissutsimik annikillisaqataasariaqarput. Aamma sumiiffimmi kultureqassutsimut naleqqukkaangata, aammalu sumiiffinni inuiaqatigiinnit pingaarnersiugaappata arnat, inuusuttut, aammalu eqimattukkuutaat avataaniilertitaasut ilanngussornissaannik siuarsaasariaqarput.
- 31 Inuinnaat sunniiniartut peqataanissaat qularnaarniarlugu sumiiffikkaani uppernarsaasarnerit aqutsisarnerillu sumiiffimmi inuiaqatigiit ineriartortitaanerannik nukittorsarnerannillu

kammattuisuullunilu tapersersuisariaqarput. Aamma inooqatigiiffimmi ataqatigiissuseqassutsimik siuarsaaqataasariaqarput.

- 32 Sumiiffikkaani uppersaasarnermi aqutsinermillu inernerisanik tunngaveqartunik ilisimasat aalajangiussallu pillugit oqallinnermi inuit sumiiffikkaani uppersaasarnermi aqutsinermilu ilaasut nukittorsakkami inissisimaffeqalertariaqarput.

### **Sungiusarnek piginnaangorsarnerlu**

- 33 Sumiiffikkaani uppersaasarnermi aqutsinermilu sungiusarnek najoqqutassialikkatut ilinniagaqarnermik ingerlatat ilagisariaqarpaat. Sungiusarnek peqataasut kinaassusiinut assigiinngitsunut naleqquttariaqarpoq. Sumiiffikkaani uppersaasarnermi aqutsinermillu qanoq ililluni isumalluutit uumassusillit taakku nukittorsagaasumik aqutarinerinik siuarsaasannaanerat sammeneqartariaqarpoq.
- 34 Illua'tungerisat tamaasa akornanni sumiiffikkaani uppersaasarnermi aqutsinermilu ilaasuni isornartorsiusinnaassuseqarluni isumaliortaaseq sungiusarnerup siuarsartariaqarpoq. Isornartorsiusinnaassuseqarluni isumaliortaaseq ilisimasat pinngortinneqartut pitsaassusissaannik qularnaarinissamut pingaaruteqartuuvoq.
- 35 Inooqatigiiffimmut avatangiisinullu tunngasutut ajornartorsiutit sumiiffikkaani uppersaasarnermi aqutsinermillu ingerlateqqinniagai sumiiffikkaani meeqqat atuarfiini taakkunani aamma killeqarfiusut qaangerlugit sammeneqartussatut ilaasariaqarput.
- 36 Sumiiffikkaani uppersaasarneq aqutsinerlu pillugit suliarisassanut tapersersuinissamik pilersarusiortoqarneratigit nunaqarfii pisariaqartitaat sallerpaatillugit pingaarnersiortariaqarput. Siunissamut akunnattumik ungasissusilimmuut aamma ungasissuusumut sumiiffikkaani uppersaasarnermi aqutsinermillu tapersersuiartoqarnissamik pisariaqartitsisoqassasoq naatsorsuutigineqartariaqarpoq.
- 37 Sumiiffikkaani uppersaasarnermi aqutsinermillu aningaasatigit tapersersuisarneq sumiiffikkaani piviusuusunik sianiginnittariaqarpoq.

### **Paasisitsiniaaneq aamma attaveqatigiinneq**

- 38 Sumiiffikkaani uppersaasarnermi aqutsinermillu ilitsersuutit atortussallu allat kikkunnit tamanit pissarsiarineqarsinnaasariaqarput.
- 39 Sumiiffikkaani uppersaasarnermi aqutsinermillu inernerisat tamarmik piniartunut aalisartunullu allanut, aamma avatangiisinik soqutigisalinnut, nunaqarfinnut allanut aamma tusagassiisarfinnut paasisitsiniutigisariaqarput. Aamma inernerisat ilisimatusartut ataatsimiinnerini aamma inooqatigiiffinni attaveqarfiusuni saqqummiunneqartariaqarput.
- 40 Sumiiffikkaani uppersaasarneq aqutsinerlu aqutugalugit ilisimasat sumiiffikkaaneersut, ileqqorisaauneersut aammalu nunap inoqqaavisa pigisaat atorneqartut, imaluunniit pilersinneqartut, kikkunnit tamanit pissarsiassangortinneqartariaqarput. Ilisimasanik tamakkuninnga piginnittut akornanni tamatumunnga akuersissuteqartarnissaq qularnaartariaqarpoq.

*Brasilia\*, 1. juuni 2015*

\*) 2022-mi kalaallisoortaa Kalaallit Nunaanni pissutsinut naleqqussagaavoq. Assersuutigalugu "participatory monitoring and management of biodiversity"-mut kalaallisoortaa taaguutigisaaq "pissusutit uumassusilinnik sumiiffikkaani uppersaasarneq aqutsinerlu" atugaavoq. "Community"-mut taarsiusaavoq "piniartut aamma aalisartut, avatangiisinillu soqutigisallit allat", imaluunniit "nunaqarfik", apequtaalluni ataqatigiiffiusoq.



(ENGLISH VERSION)

# Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity

Representatives of Indigenous Peoples, civil society, researchers and government decision-makers from 18 countries gathered in Manaus, Brazil, on 22-26 September 2014 to discuss and share experiences with community-based monitoring of natural resources. Among the participants were people from Greenland and Alaska. All shared a common desire to strengthen community-based monitoring of natural resources. They would like to accelerate the uptake of community-based monitoring of natural resources among practitioners, scientists and civil society.

The Manaus Letter contains a number of recommendations for 'good practice' in community-based monitoring of natural resources. The recommendations are a result of the meeting in Manaus. The recommendations are general, and their relevance depends on the purpose of the individual initiatives and the special circumstances that exist in the individual areas.

## Recommendations

### Design of monitoring initiatives

- 1 Initiatives should be constructed from the bottom up, incorporating local as well as academic visions and knowledge.
- 2 Roles, responsibilities and institutional arrangements should be carefully identified via a thorough dialogue with the communities prior to beginning the initiative, considering the communities' capacities, needs and interests.
- 3 Monitoring targets should prioritize resources that are of local subsistence or economic value or in other ways meaningful to local people.
- 4 The methods and instruments used for monitoring should be easy to use, suitable, and appropriate to local practices and culture.
- 5 The designers of a participatory monitoring initiative must evaluate the potential positive and negative impacts associated with its implementation before starting it, keeping in mind that the benefits may not compensate for the associated workload and governance issues and therefore implementation may not be desirable.
- 6 Whenever possible, new initiatives should build on existing local initiatives rather than replacing them.
- 7 Data gathered should contribute to decision making on resource use, territorial management, socio-environmental policies at different scales, or other objectives that are jointly agreed on.
- 8 The monitoring initiative's methods, governance structure, data produced, and use of information for management should be regularly reviewed in order to make any necessary adjustments.

### Community participation in monitoring initiatives

- 9 Community members involved in monitoring should be selected by the communities themselves supported by their partner organizations considering their responsibility, capacity, commitment and experience.
- 10 The role of community actors in decision making for territorial management and resource use can be enhanced through the promotion of broad community participation in all aspects of monitoring initiatives and implementation of regular community meetings to disseminate, review and value the information produced.

### Institutional arrangements and partnerships

- 11 The participation of diverse social actors is necessary for the success of participatory monitoring initiatives; partnerships and multi-institutional arrangements should be formalized before implementation of the initiatives.

12 Monitoring initiatives must reconcile and balance the interests and motivations of local, regional and global actors involved in the initiative; mutual trust among these actors is essential for success. Relationships must be transparent, initiative construction and design must include realistic expectations from all partners, and initiative objectives must be clear and consider the interests of all actors.

### **Data quality and management**

13 Data quality is fundamental if participatory monitoring of biodiversity is to achieve its objectives; it is therefore essential that data collection be standardized at the necessary scales (among monitors, among communities, and among initiatives if the scale of monitoring is regional or global).

14 Data quality can be ensured by several mechanisms, including continuous training of persons involved in data collection, data quality assessment by researchers and community members, effective community involvement in all aspects of monitoring, and collective understanding and social control by the community. Additionally, community leaders participating in the project should be responsible for verifying data integrity.

15 When feasible, recognized statistical analysis or data filtering systems should be used to prevent the accumulation of errors in monitoring databases and ensure objectivity and standardization in data quality.

16 Data from biodiversity monitoring should be stored in a systematic manner using best practices of data base management.

17 Participatory monitoring data should always be available to local communities

18 Use and application of monitoring data should respect the characteristics, limitations and restrictions inherent in the data.

19 Data interpretation and analysis that are relevant for local management should be carried out as quickly as possible, with the participation of local actors, in order to accelerate and facilitate data use in local decision-making.

20 When monitoring initiatives are designed for use at the regional or global scale, they should ensure the return of information and results to participating local communities. Communication mechanisms must be in place in these larger scale initiatives to guarantee community access to information and transference of knowledge, ensuring that information can and will be in fact returned.

### **Relationship between monitoring initiatives and public policy**

21 Public policies on natural resources management, education, and territorial management should be improved by incorporating information derived from participatory monitoring.

22 There should be a feedback relationship between participatory monitoring initiatives and public policies: the initiatives should stimulate and promote the use of monitoring results in technical and political decision making, and decision makers should recognize and support processes of participatory natural resource monitoring.

23 Non-community decision-makers should respect and use the information generated by communities and the way in which communities use this information for local management.

24 Participatory monitoring approaches and information should be disseminated to other enterprises and sectors of society that are not organized into community-based governance systems, such as small and large landowners, the private sector, and agencies involved with environmental impact assessments, thus bringing the benefits of scale, transparency and social control to these other sectors that impact and/or depend on biodiversity and natural resource use.

25 Participatory monitoring should be promoted by and applied in programs and policies linked to environmental services.

### **Recognition of community involvement**

26 The entities involved in participatory monitoring should recognize the contribution and intellectual property of the community in the publication of materials, for instance through co-authorship in technical-scientific works that are based on or include community efforts, when this is of interest to the community and appropriate for the publication, seeking when possible to shift current publication customs and practices of journals and publishing houses.

27 The issue of remuneration for participatory monitoring must be broadly discussed by all stakeholders; community agents involved in monitoring initiatives must be formally compensated – financially or not – in a fair and appropriate manner agreed to with the participating community.

28 National and international research institutions should recognize the current and potential value of information generated by well designed and implemented participatory monitoring and should more often establish and promote partnerships for participatory monitoring.

29 The funding agencies for conservation, research, technological innovation and education should promote and support participatory monitoring as a mechanism to enhance biodiversity conservation and community empowerment.

### **Institutional and community strengthening**

30 Recognizing that participatory monitoring is one mechanism for community strengthening, participatory monitoring initiatives should promote the reduction of local social inequalities, in particular stimulating the involvement of women and youth and other marginalized groups when appropriate to the local culture and when prioritized by the communities.

31 In order to guarantee grassroots participation, participatory monitoring initiatives should stimulate and support the development and strengthening of community and social organization, ensuring social cohesion and effective participation in the initiatives.

32 Local community monitoring groups should be strengthened to enhance their role in discussions of information and decision making based on participatory monitoring results.

### **Capacity building**

33 Capacity building for community involvement in participatory monitoring must be included in formal education programs. Such capacity building should address the needs of the diverse social actors that participate individually and collectively (including community organizations) in monitoring and management, emphasizing the relationship of monitoring to environmental and territorial management and to the development and social control of public policies.

34 Education processes should address improvements in critical thinking for all actors involved in participatory monitoring; such education is as important as technical training to ensure the quality of the information generated by participatory monitoring.

35 The social-environmental issues addressed by participatory monitoring initiatives should be included as crosscutting themes in local public schools.

36 When designing for support of monitoring activities, actions that respond to community concerns should be prioritized, foreseeing the need for continuous support to increase the sustainability of the initiatives in the medium and long term and enable adaptive management.

37 The financial support of participatory monitoring initiatives should consider financial arrangements and mechanisms of implementation appropriate to local realities of participatory monitoring activities.

### **Systematization, dissemination and communication**

38 Methodologies and materials for participatory monitoring, including species identification guides, information management systems and best practices in monitoring and management should be made broadly available.

39 All stages and results of monitoring initiatives should be disseminated among communities, in the press, in scientific meetings, and through social networks.

40 Local, traditional and indigenous knowledge used in and produced by biodiversity monitoring should be systematized and made publicly available, ensuring that there is consent among the knowledge holders.

*Brasília, 1st June 2015*

