# The Manaus Letter and our Community-Based Conservation and Monitoring experience

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# Manaus'imit Allagaq aamma sumiiffikkaanit uppernarsaanernik aqutsinernillu misilittakkat

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Aasiaat Greenland, 30 November 2022

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# Plan

- Madagascar as a biodiversity hotspot country
- Our experience in Community-based Conservation and Monitoring
- The 2015 Manaus Letter and current progress
- Conclusion

# Najoqqutaq

- Madagascar – nuna annertuumik uumassusillit assigiinngisitaarfigisaat
- Sumiiffikkaani uppernarsaasarnermik misilittakkagut
- 2015-imit ulloq mannamut Manaus'imit Allagaq
- Inerniliineq

# Biodiversity

*Biodiversity is the variety of life (plants, animals and other living organisms) on earth or in a particular area (Wikipedia)*

*All plant and animal species interact and they depend each other for food, shelter, oxygen and soil enrichment. No species is independent of other living organisms.*

# Pisuussutit uumassusillit

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*Pisuussutit uumassusillit ("uumassusillit assigiinngitaarneri") tassaapput Nunarsuarmi imaluunniit sumiiffimmi aalajangersimasumi uumasut aamma naasut.*

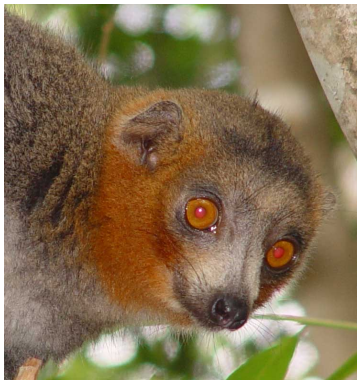
*Uumasut naasullu tamarmik imminnut sunniivigeqatigiipput. Tamarmik soorlu nerisassanik, oqquiffinnik, silaannarmik (iltimik) imermillu pisariaqartitsipput. Uumassusillit allat tamarmik aamma pisariaqartippaat.*

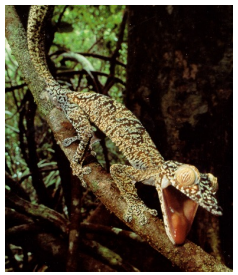
# Madagascar is one of the world biodiversity hotspot

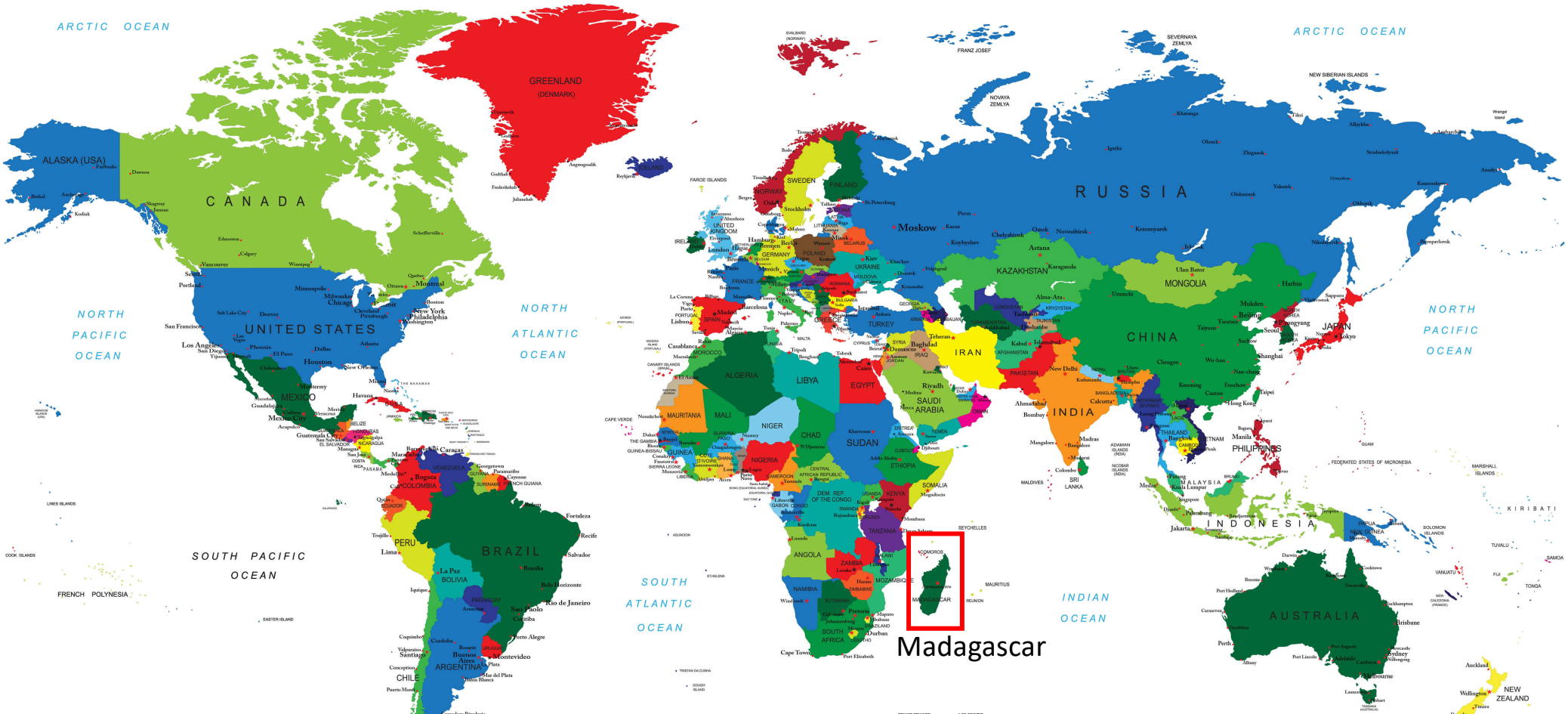
Exceptional rate of endemism mainly due to its long isolation

Madagascar tassaavoq “uumassusillit assigiinngisitaarneri”-nut nunarsuarmi sumiiffiit pingaarnerpaat ilaat

Uumasuni artit amerlasuut tamaani allanngoriartuaarsimapput. Taakkulu taamaallaat tamaani nassaassaapput








Madagascar broke away from Africa about 165 million years ago, and came off from India about 88 millions years ago

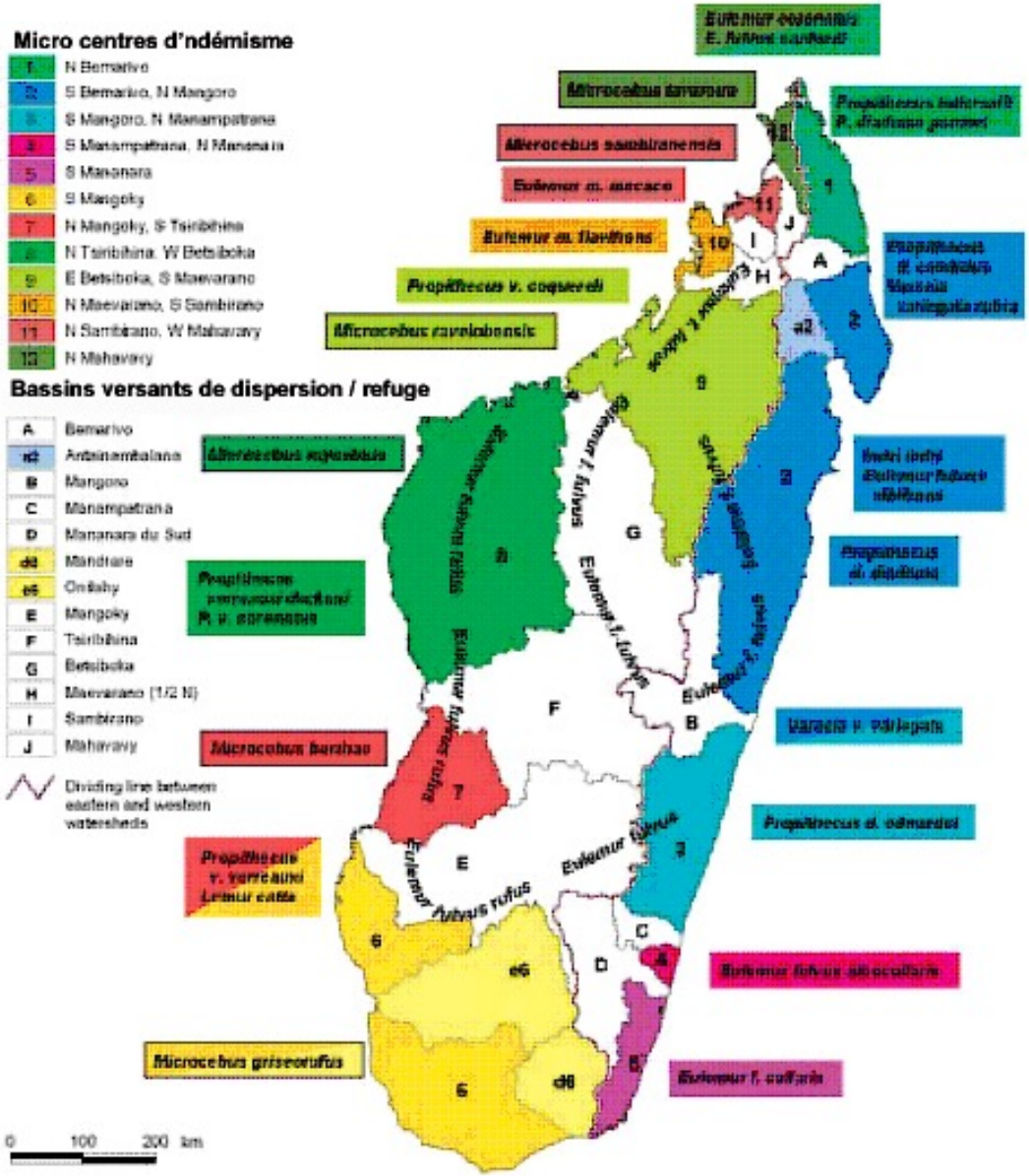
Ukiut 165 millionit matuma siorna Madagascar Afrikamit avissaarpoq

The concept of micro centres of endemism partly explains the exceptional geographical diversity of Madagascar

Wilmé et al 2012

Madagascarimiipput sumiiffippassuit nunataata ilusaat assigiinngisitaartut, namminneq pisuussutinik uumassusilinnik artinik pillit

Wilmé et al 2012



Madagascar natural forests are fragmented due to anthropogenic threats

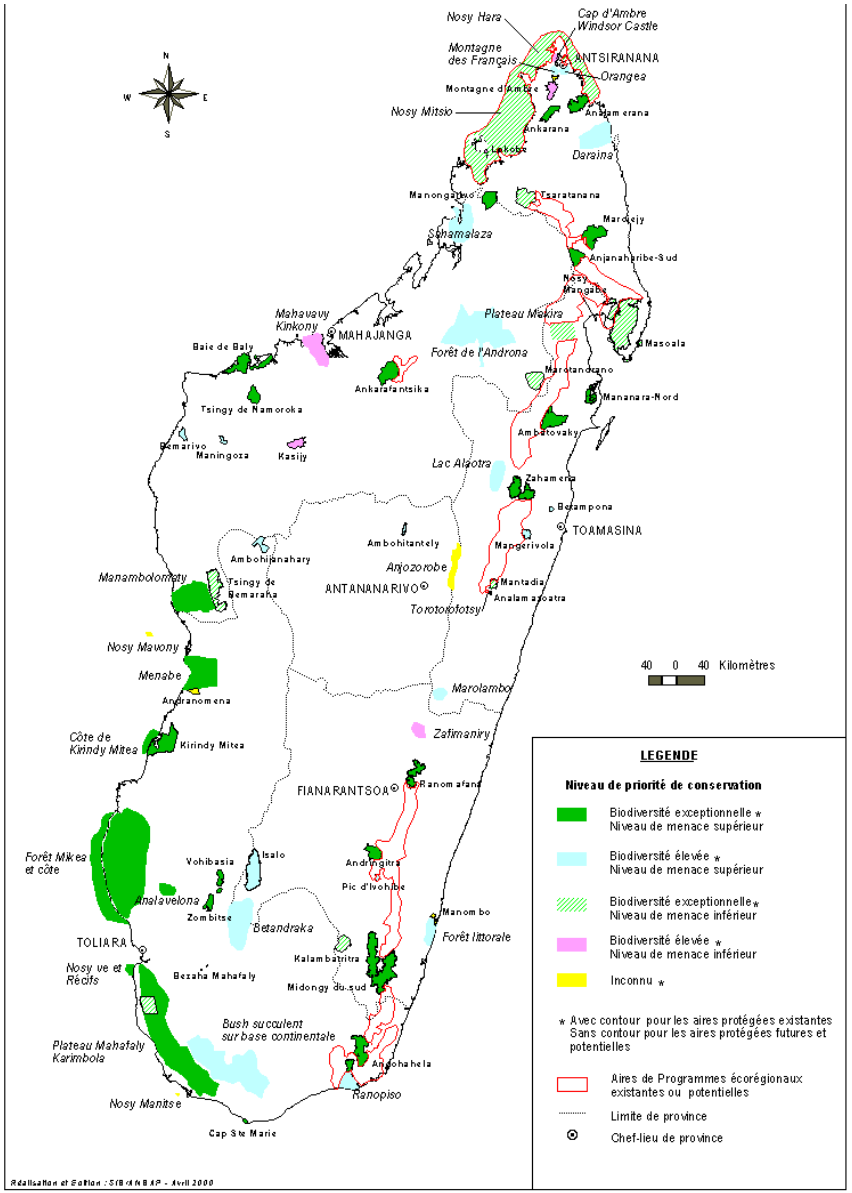
Inuit suliaasa Madagascarip orpippassuaqarfii immikkoortitilersimavaat

*This means that a relatively large number of small parks and reserves are needed to conserve and represent this unique natural heritage*

*Pinngortitap suussusaanni amerlasuuni taakkunani pinngortitamut assissa-qanngitsumut assersuutit isumannaarniarlugit eqqissisimatitsiveeqqat amerlasuut pisariaqartinneqarput.*

144 protected areas in total, ~10% of the country)

Madagascarimiipput eqqissisimatitsiviit 144-t – nunataata 10 %-ia



# Example of Menabe Protected area: a sanctuary of nature

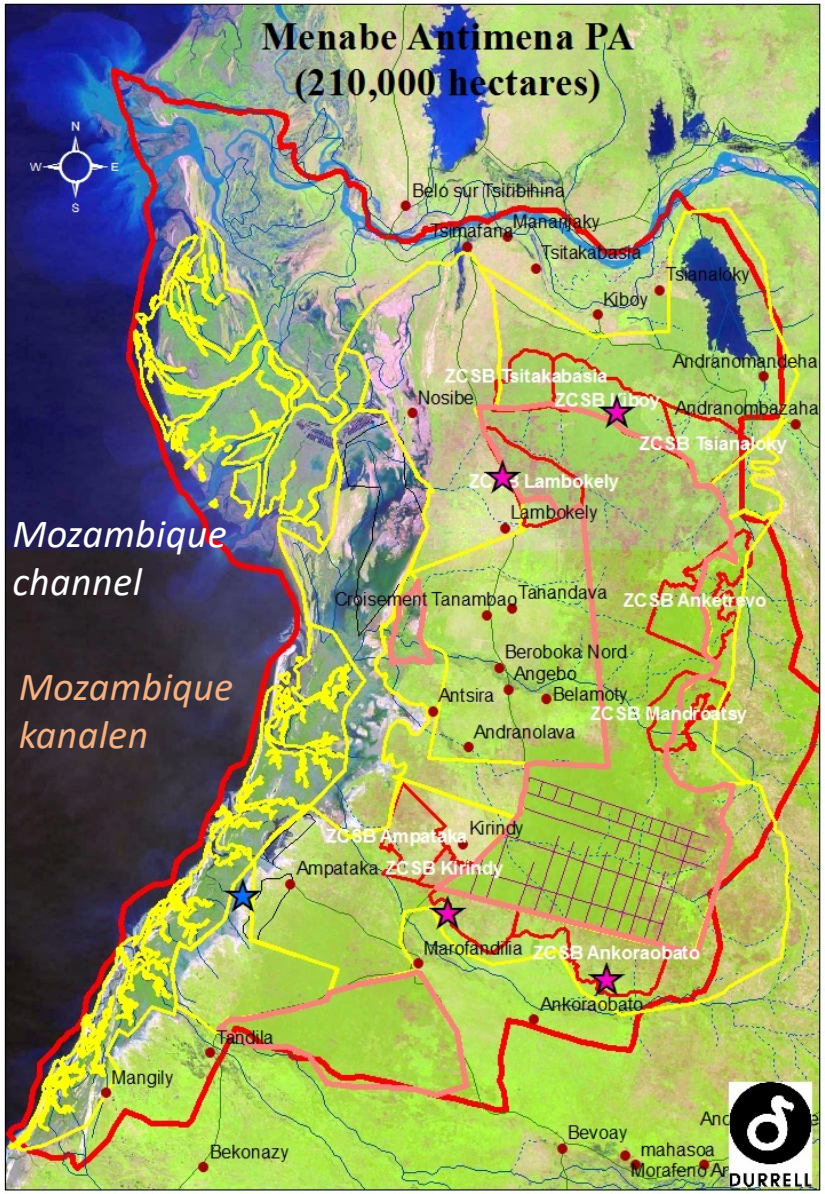
# Assersuut tassaavoq eqqissisimatitaq Menabe


*Microcebus berthae*


*Hypogeomys antimena*


*Pyxis planicauda*


*Adansonia grandidieri*



# Some evidence of species interdependence

# Uumasut artii pinngortitami avatangiisiminniittut

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Camera trap photos by Dr Samuel Merson in Menabe dry forest, Western Madagascar

Menabemi Dr. Samuel Marsonip assiliissutit imminnik assiliisartut atorlugit assilisai. Madagascarip Kitaani orpippassuit masarsoqarfiunngitsut





A feral cat attacking a lemur in Menabe

Menabemi eqqissisimatitsivimmi qitsuup lemuri pisarigaa


Many people detected by the camera traps in Menabe

Assiliiviit imminnik assiliisartut aamma Menabemi inuit assilisarpaat

Protected areas e.g. Menabe Antimena, Western Madagascar are facing high anthropogenic threats

Menabetut eqqissisimatitat inuit suliaannit aarlerinartorsiorput

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**Plantation of maize and peanuts in Menabe Protected Area**

**Menabemi eqqissisimatitami majsinik jordnøddinillu naggorissaasoqarpoq**

A well of 20m deep to search water

Migrants squat in the protected area, they bring their families

Puilasumut qillikkami imeq 20 meterinik itititigisumiippoq Angerlarsimaffe-qanngitsut eqqissisimatitami najugassittarput

The natural habitat is degraded due to human actions

Orpippassuit inuit suliaasa aserorterpaat

## Biodiversity provides people with a lot of services

- Wood
- Medicinal products
- Food (e.g. tubercule, fish)
- Plants for handicraft
- Sacred sites, grave, sacred species
- Emblematic species, local pride, …

## Pisuussutit uumassusillit inunnut pingaartuupput

- Orpiit
- Naasut nakorsaatitut atukkat
- Nerisat (sorlaat aalisakkallu)
- Naasut assassorluni suliarisanut
- Sumiiffiit illernartitat anersaallu silarsuaat
- Artit asseqanngitsuusut sumiiffiusuni tulluusimaarutaapput

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We really need to involve local people in the conservation and monitoring process

Pisuussutit uumassusillit nakkutiginissaannut illersugarinissaannullu inuit sumiiffikkaaneersut pisariaqartippagut


We built the capacity of locals to lead ecological monitoring

Inuit sumiiffikkaaneersut pisuussutinik uumassusilinnik nakkutiginninnermik aqutsisuutippagut

We invited government officials to go to the field and meet with local people

Naalagaaffiup aaqqissuussiffianeersut inunnik sumiiffikkaaneersunik naapitsinissaat periarfissipparput

# Key achievements

Trained 461 local monitors in total collecting biodiversity and resource use data in a weekly basis

Using data for creation and zoning of 5 PAs (350 $km^2$)

Data helped understand the decline of key species

Shared knowledge with government officials, technicians and local people

# Suliat pingaarutillit

Sumiiffikkaaneersunik 461-inik sap. akunnikkaartumik pisuussutit uumassusillit pillugit ilinniagaqartitsisarsimaneq

Pisuussutit uumassusillit pillugit paasissutissanik tunngaveqartumik eqqissisimatitanik tallimanik killeqarfiliineq

Artit pingaarutillit ikiliartuaarnerinik paasisaqarniarnermik paasissutissat ikiuisimapput

Pisortaqarfiit, ilisimatusartut aamma sumiiffikkaani innuttaasut ilisimasanik agguaasseqatigiipput


Claridge's London
2014

# The 2014 Manaus Symposium gathered 220 participants from 20 countries

2014-imi Manaus'imi ataatsimiinneq nunanit 20-neersunit inunnik 220-nik peqataaffigineqarpoq

Community participation in monitoring initiatives

Design of monitoring initiatives

Data quality and management

Capacity building

Recognition of community involvement

Institutional arrangements and partnerships

Systematization, dissemination and communication

Institutional and community strengthening

Relationship between monitoring initiatives and public policy

Pisuussutinik uumassusilinnik nakkutilliinerni sumiiffikkaanit peqataaneq

Nakkutilliinerit aalajangersimasumik pisartut pilersaarusiorneri

Paasissutissat pitsaassusii paasissutissallu suliarineri

Ilinniarneq

Sumiiffikkaani inuiaqatigiiusut pimoorussaannik akuerinninneq

Ileqquliussatut ingerlatsiviusutigut suleqatigiinneq

Paasissutissanik attaveqaqatigiinnernillu agguataarinermut aaqqissuussiffiit

Sumiiffikkaani inuiaqatigiit sullissisarfiinik nukittorsaaneq

Pisortat aqutsisoqarfiisa sumiiffikkaanilu nakkutilliisartut akornanni ataqatigiinnerit

Constantino, P.A.L; Silvius, K.M.; Kleine Büning, J.; Arroyo, P.; Danielsen, F.; Durigan, C.C.; Estupinan, G.; Hvalkof, S.; Poulsen, M.K. and Ribeiro, K.T. 2015. ***Participatory Monitoring and Management Partnership (PMMP). Manaus Letter: Recommendations for the Participatory Monitoring of Biodiversity.*** International Seminar on Participatory Monitoring of Biodiversity for the Management of Natural Resources 2014. Manaus, Brazil. *www.pmmpartnership.com or https://repository.oceanbestpractices.org/handle/11329/1463*

Constantino, P.A.L; Silvius, K.M.; Kleine Büning, J.; Arroyo, P.; Danielsen, F.; Durigan, C.C.; Estupinan, G.; Hvalkof, S.; Poulsen, M.K. and Ribeiro, K.T. 2015.
Manaus'imit Allagaq (Manaus Letter)

*www.pmmpartnership.com* imaluunniit
https://repository.oceanbestpractices.org/handle/11329/1463

# ❶ Design of monitoring initiatives

New initiatives should build on existing local initiatives

Adopt a bottom-up approach

Monitoring targets should be chosen with local communities

## ❶ Pisuussutinik uumassusilinnik aalajangersimasutut pisartutut nakkutilliinerit pilersaarusiugaaneri

Sulianik atugaareersunik suliat nutaat tunngaveqartariaqarput

Atuisartut kissaataannik aallaaveqarneq

Piniagaq/sunniut nakkutigineqartussaq atuisartunit toqqarneqassaaq

# 2 Community participation in monitoring initiatives

# 2 Pisuussutinik uumassusilinnik nakkutilliinerni sumiiffikkaanit peqataaneq

Local monitors should be selected by the communities themselves

Regular meetings should be organised to disseminate and value the results of the local monitoring

Sumiiffikkaani nakkutilliisartut sumiiffikkaani innuttaasunit toqqarneqartariaqarput

Aalajangersimasutut pisartussanik ataatsimiittoqartariaqarpoq, pisuussutit uumassusillit nakkutiginerinit inernerisat agguaqatigiissutaasarlutillu oqaluuserineqartassallutik

# ❸ Institutional arrangements and partnerships

# 3 Ileqquliussatut ingerlatsiviusutigut suleqatigiinneq

Participation of diverse social actors is important, and mutual trust is a key

Soqutigisaqaqatigiit assigiinngitsut peqataanerat pingaartuuvoq. Illua'tungeriilluni tatiginninneq aalajangiisuuvoq

# 4 Data quality and management

# 4 Paasissutissat pitsaassusii paasissutissallu suliarineri

Data collection should be standardized at a necessary scales

Local communities should have access to data

Locals should participate in data interpretation

Paasissutissanik katersuineq assigiiaartoq

Paasissutissanik sumiiffikkaani innuttaasut pissarsiaqarsinnaasaria-qarput

Paasissutissanik paasiniaanermi sumiiffikkaani innuttaasut ilanngunneqartariaqarput

# 5 Relationship between monitoring initiatives and public policy

Use monitoring results in decision making and local management

Respect the information generated by local communities

Sumiiffikkaani aqutsinissamut sumiiffikkaani paasissutissanik atuinerit

Pisuussutinik uumassusilinnik sumiiffikkaaneersut nakkutilliinerisa inerniliussaat ataqqineqarlik

# 5 Pisortat aqutsisoqarfiisa sumiiffikkaanilu nakkutilliisartut akornanni ataqatigiinnerit


# 6 Recognition of community involvement

# 6 Sumiiffikkaani inuiaqatigiiusut pimoorussaannik akuerinninneq

Community agents must be formally compensated (financially or not)
Their intellectual property must be recognised (e.g. co-authorship of publication)

Sumiiffikkaaneersut akilerneqartassapput (aningaasatigut allatulluunniit)
Eqqarsariartaatsikkut pisinnaatitaaffiit akuerineqassapput (soorlu saqqummersitanut allaqataaffeqarnermut)

# 7 Institutional and community strengthening

Promote the involvement of women, youth and marginalised groups in the monitoring process

Local monitoring should lead to stronger social cohesion

Arnanik, inuusuttunik ingerlatsiviillu avataanni eqimattunik ilanngussuineq nukittorsarli.

Pisuussutinik uumassusilinnik sumiiffikkaani nakkutilliinerit sumiiffikkaani inuiaqatigiinnut nukittunerusunut aqqutissiuisariaqarput.

# 8 Capacity building

Social-environmental issues addressed by participatory monitoring should be included as crosscutting themes in local public schools

Atuarfimmi ilinniarnermi inooqatigiiffimmi avatangiisinullu tunngasutut apeqqutit suliat killeqarfii qaangerlugit sammisatut akulerutsitaasariaqarput

8 Ilinniarneq

# 9 Systematisation, dissemination and communication

## 9 Paasissutissanik attaveqaqatigiinnernillu agguataarinermut aaqqissuussiffiit

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Methodologies should be made broadly available

Results should be disseminated among communities

Periusaasut siamasissumik pisarsiarineqarsinnaalersitaassapput

Inernerisat sumiiffikkaani inuiaqatigiit akornanni paasisitsiuniutigineqassapput

**Nature Ecology & Evolution, 28Oct2022**

**Prospects for public involvement in monitoring the post-2020 global biodiversity framework**

Finn Danielsen[1*], Natasha Ali[2], Herizo T. Andrianandrasana[3], Andrea Baquero[2], Umai Basilius[4], Pedro Constantino[5], Per Ole Frederiksen[6], Max Isaac[7], PâviâraK Jakobsen[8], Helen Klimmek[2], Abisha Mapendembe[2], Han Meng[9], Katherine Moul[2], Maria Julia Oliva[2], Dietrich Schmidt-Vogt[10], Seak Sophat[11], Rodion Sulyandziga[12] and Neil D. Burgess[2,7]

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[5] RedeFauna – Rede de Pesquisa em Diversidade, Conservação e Uso da Fauna da Amazônia, Brasília, Brazil
[6] Attu, Greenland
[7] Centre for Macroecology, Evolution and Climate, University of Copenhagen, Denmark
[8] Qeqertalik Municipality, Aasiaat, Greenland
[9] UNEP and UNEP World Conservation Monitoring Centre, Beijing, P.R. China
[10] Faculty of Environment and Natural Resources, University of Freiburg, Germany
[11] Department of Natural Resource Management and Development, Faculty of Development Studies, Royal University of Phnom Penh, Phnom Penh, Kingdom of Cambodia
[12] Center for Support of Indigenous Peoples of the North, Moscow, Russia

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**Participatory Ecological Monitoring (PEM)**

Participatory research methods for sustainability – toolkit #4

*Participatory Ecological Monitoring (PEM) is a conservation methodology aiming to include local communities in the collection and analysis of biodiversity and threats data in a managed conservation zone. Often implemented annually, PEM optimises local knowledge to help understand ecological change which is an essential step towards assessing the success or failure of conservation activity and improving conservation effectiveness.*

*Herizo T. Andrianandrasana, Jessica Savage, Anselme Toto Volahy, Peter R. Long, Nikoleta Jones*

**Participatory Ecological Monitoring (PEM).** Participatory research methods for sustainability – toolkit #4
*GAIA* 31/4 (2022): 231–233 | **Keywords:** biodiversity, effectiveness, local communities, management, monitoring

# Progress so far

- The 2015 Manaus Letter has been very helpful
- Participatory Monitoring is increasingly used, from tropics to poles
- Citizen Science Global Partnership has been under way since 2017
- CSGP participated in the UN-Environment 4th general assembly, Nairobi 2019
- Great potential for Indigenous People and Local Community to be engaged in the new biodiversity agreement

# Ulloq manna tikillugu siuariarnerit

- 2015-imit Manaus'imit Allagaq assut iluaqutaasimavoq
- Sumiiffikkaaneersut nakkutilliineri annertusiartortumik atorneqarput, nunanit kiattunit issittoqarfinnut
- 2017-imiilli Citizen Science Global Partnership (CSGP) takkukkiartorsimavoq
- 2019-imi Nairobimi UN-Environmentip sisamassaannik ataatsimeersuarnerani CSGP peqataavoq
- Uumassusillit assigiinngisitaarneri pillugit isumaqatigiissummi nutaami nunap inoqqaavisa sumiiffikkaanilu inuiaqatigiit ilaatitaalersinnaanerannut annertuumik piukkunnaateqartoqarpoq.

# Building stronger trust between local communities and authorities

Sumiiffikkaani inuiaqatigiit aamma oqartussaasut akornanni nukittunerusumik tatiginninnerup tungaanut


Orpippassuarnik
naatitseqqinneq
Reinforcing restoration
actions

# Conclusion - Inerniliineq

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Maani Madagascarimi pisut sumiiffikkaaneersut pisuussutinik uumassusilinnik uppernarsaasarnermut aqutsinermullu akuulersitsinissamut isumassarsisissagaatit neriuutiginarpoq

'Manaus'imit Allagaq'-mit inassutitalinnik kapitalit qulingiluat taakku pisuussutinik uumassusilinnik sumiiffikkaani uppernarsaasarlunilu aqutsinerup siammarsimaneranik nukittorsaapput

Pisuussutinik uumassusilinnik sumiiffikkaani uppernarsaasarnerit aqutsinerillu Kalaallit Nunaanni, sumiiffimmi issittoqarfimmi nunarsuullu sinnerani annertunermik atorneqalernissaat neriuutiginarpoq

Pisuussutinik uumassusilinnik sumiiffikkaani uppernarsaasarnerit aqutsinerillu nunarsuarmi avatangiisini ajugaaffiginiakkat ilaannik iluarseeqataasinnaanerat isumaqarfigaarput

The Madagascar case study probably gave you a great inspiration about **'community-based conservation and monitoring'**

The nine chapters of recommendations from the **'Manaus letter'** have helped beefing-up local conservation and monitoring

Hopefully, the **'community-based conservation and monitoring'** will be more useful in Greenland, the arctic area and the rest of the world

We believe that **'community-based conservation and monitoring'** can help address some of the global environmental challenges

NORDECO

Nordic Agency for
Development and Ecology

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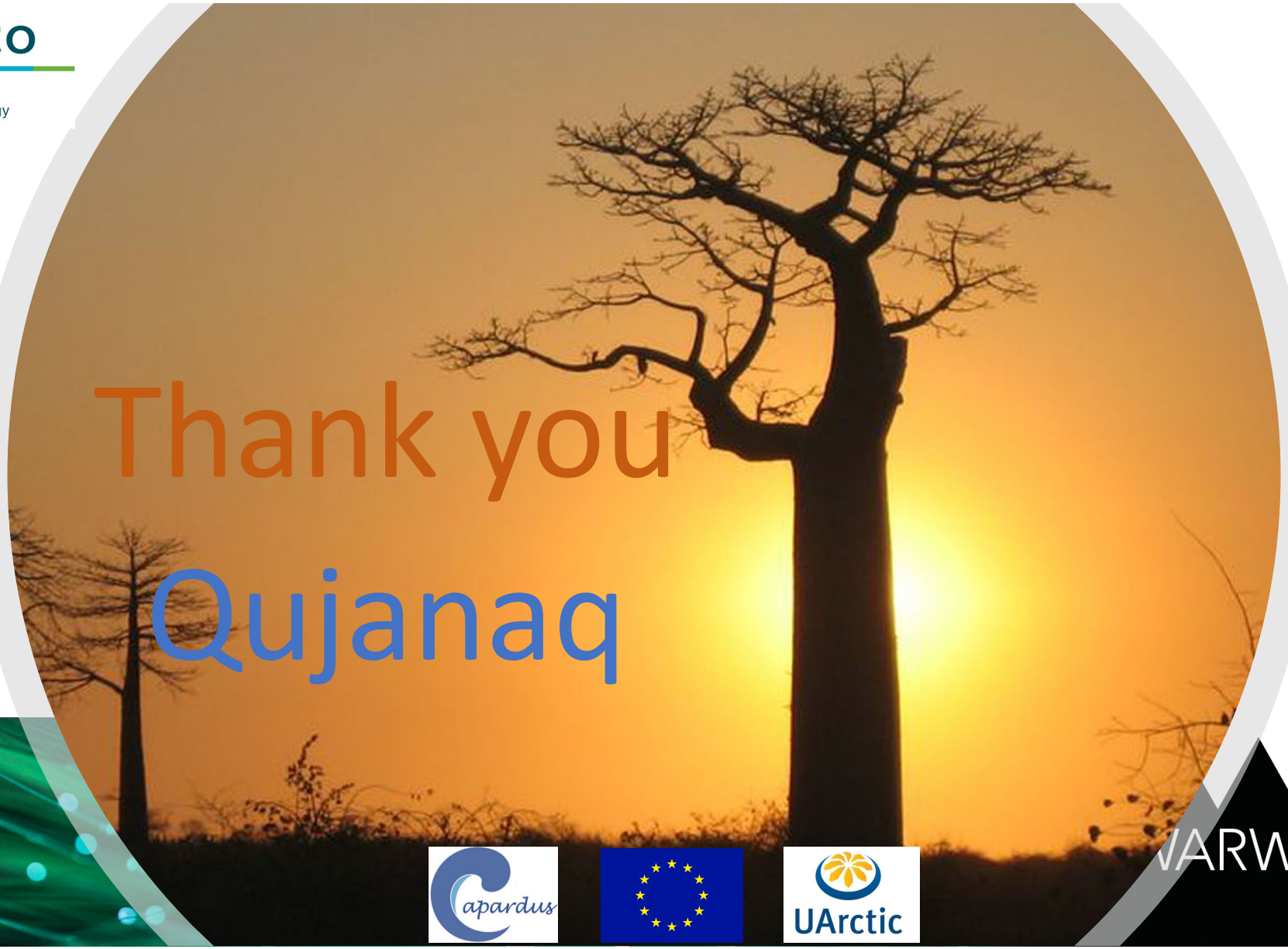
INSTITUTE FOR
GLOBAL SUSTAINABLE DEVELOPMENT



# Thank you

# Qujanaq

Capardus

UArctic

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