

# Working with, and knowledge exchange, among types of experts and representatives from the Longyearbyen community

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Thursday 06 December 2018

Topic: Community-based observing and communication









# INTAROS Specific objectives

**Knowledge-based planning** of the future is required

*To strengthen the societal and economic role of the Arctic region, and to support the EU strategy for the Arctic and related maritime and environmental policies.*

*Enhance **community-based observing** programs by further developing the capacity of scientists and community members*

*Improve the cost-effectiveness of data collection in support of economic and societal activities.*

*Contribute to **enhance the livelihoods** of the indigenous and local communities.*

# WP4

## Enhance community-based observing

Finn Danielsen, NORDECO (lead) & Lisbeth Iversen,NERSC (co-lead)



# NORDECO

Nordic Agency for  
Development and Ecology





# Enhance community-based observing for participatory research and capacity-building



Overall objective

# WP 4 Specific objectives:

**Task 1.** Survey and analyze existing community-based observing programs

**Task 2.** Advance tools for cross-fertilizing indigenous and local knowledge with scientific knowledge

**Task 3.** Pilot community-based observing to support decision-making processes

**Task 4.** Develop model of how community-based observing can cross-fertilize w/ scientist-executed observing and demonstrate use of the model



# Task 1. Survey and analyze existing community-based observing programs in the Arctic

Building on Report of SAON Task 9, identify:

1. Capabilities
2. 'Best' practices, and
3. Challenges

in current Community-Based Monitoring Programs in the Arctic



## **Task 2.** Advance tools for cross-fertilizing indigenous and local knowledge with scientific knowledge



**Make examples of Arctic CBM  
manuals broadly available**



## Task 3. Pilot community-based observing to support local and national decision-making processes in Svalbard and Greenland



Pilot existing and new CBM tools and enter data into existing databases

## Task 4. Develop model of how community-based observing can cross-fertilize w/ scientist-executed observing and demonstrate use of the model



- Develop model
- Discuss and validate the model
- Entry data from pilot areas into international databases, using the model in practice



# Cooperation with:

ELOKA

Yukon River Inter Tribal Watershed Council

Center for Support of Indigenous Peoples of the North

REGIMES

NUNATARYUK

others to be listed.....

# Deliverables on community-based observing

D4.1 Report from survey of CBM programs

D4.2 Web library with CBM tools

2018

D4.3/D6.6 Lessons learned report on CBM tool-testing and appropriateness for informing decisionmakers (Disko Bay & Svalbard); policy briefs

D4.4 CBM data made accessible for iAOS

D7.16 Proceedings from capacity-building workshops

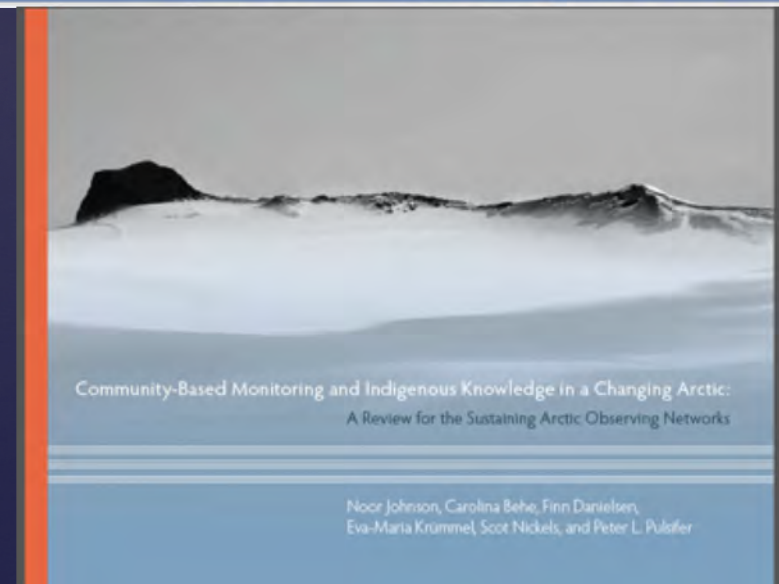
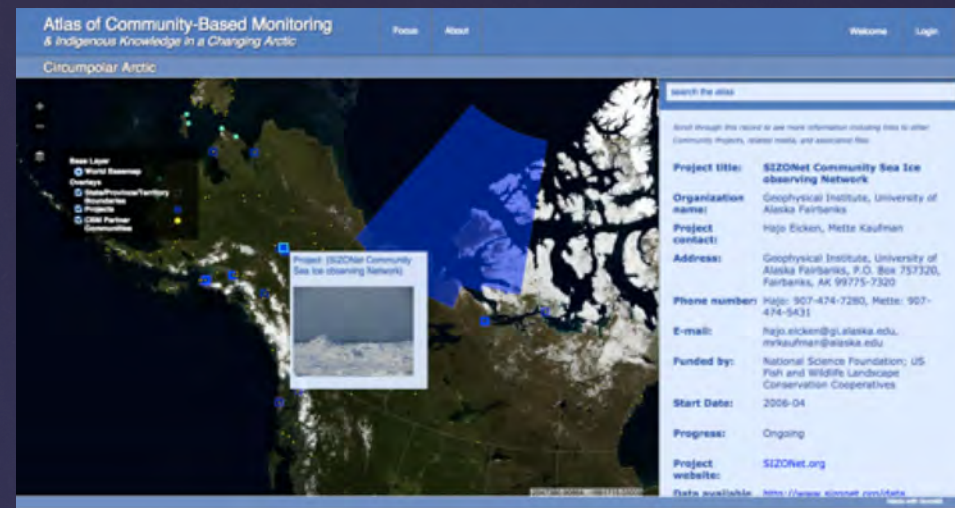


# D4.1 Survey of existing CBM programs

- Started with CBM Atlas
- Analyzed results to build on Atlas and extended result of Johnson et al. 2016
- Extended Atlas survey method for this project

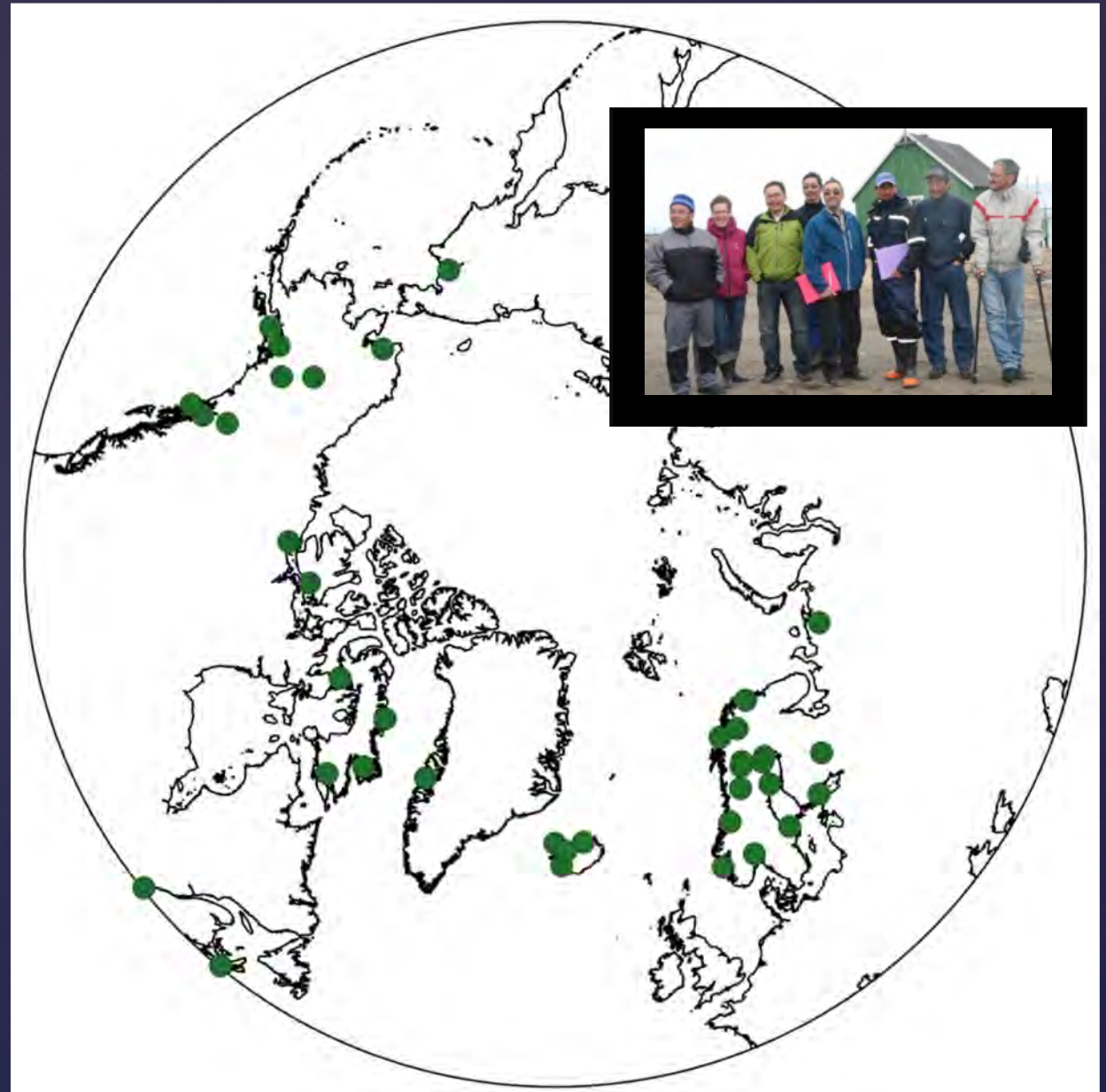
Report 2018 contents:

- Capabilities of CBM programs
- Good practices
- Challenges




With ELOKA, Yukon River Inter-Tribal Watershed Council, Univ. Alaska, NUIM and CSI

# Existing known CBM programs



Johnson *et al.* 2016

  $n = 81$







D4.3, D4.4 and D6.6 (Task 7.7: c/o WP7)

## Disko Bay, Greenland

**Plans** (NORDECO, NERSC, UiB/GEUS, ELOKA-model, local partners)

**April 2018:** Workshop Ilulissat, Disko Bay, discuss and agree on test strategy

**June 2018 onwards:** Field testing of CBM/citizen science tools in 2-3 communities, details to be worked out

**2019:** Workshop



**Livelihoods**



## Workshops on Community Based Observing in Alaska, Canada and Russia 2017 – Part of Task 7.7 and in Quebec in December 2017( Side-event at the 2017 *Arctic Net* Conference)

With local indigenous and civil society organisations  
Contributed to experience-exchange and further capacity-building in community  
based observing. Agreements on "*keeping in touch*"



# Fairbanks Workshop May 2017



Hosted by University Alaska Fairbanks. Ten CBM programs represented, mostly from Alaska

Led by Yukon River Inter-Tribal Watershed Council consisting of 73 Canadian First Nations and Alaska Native Tribes. Follow-up telemeeting on "*ways to stay in touch*"



Proceedings  
published.

Part of  
Deliverable  
7.16 INTAROS  
Download from  
Intaros website



# Arctic Russian Workshops

Two workshops in Izhma (Komi) and Zhigansk (Yakutia), September 2017

Led by Russian Centre for Support of Indigenous People in the North

Follow-up meeting scheduled 2018





# Side-event at the 2017 Arctic Net Conference



Led by ELOKA (Exchange of Local Observations and Knowledge for the Arctic) with partners.





35 participants: 10 CBM programs  
represented - from Arctic Canada





# Challenges

- ⌘ Identify the key existing global data repositories
- ⌘ Develop criteria for which repositories are relevant for CBM-derived data
- ⌘ Identify key discovery services for CBM programs

Already several CBM programs contributing to global repositories!





## INTAROS D4.3, D4.4 and D6.6

### Svalbard

Plans (NERSC, UNIS, UiB/GEUS, NORDECO, ELOKA-model)

Dec. UAK/ INTAROS 2018: Research school and workshop

- ✎ 2018 onwards: Dialogue Safety Center/UNIS, local authorities and community members. Deciding possible collaboration on field testing of CBM and citizen science tools. Field testing of citizen seismometers from august 2018. Possible workshop with AECO and IASC.
- ✎ 2019: Workshop with local government authorities and representatives of civil society organisation
- ✎ Two outputs
  1. Technical report on lessons learnt
  2. Policy briefs for both areas



**Hazards:  
Citizen seismometer**

# CBM Library- Reports- and Workshop Proceedings

CBM Survey Report;

<https://intaros.nersc.no/node/657>

CBM "Library":

<https://intaros.nersc.no/node/740>

Proceedings CBM workshop Quebec City:

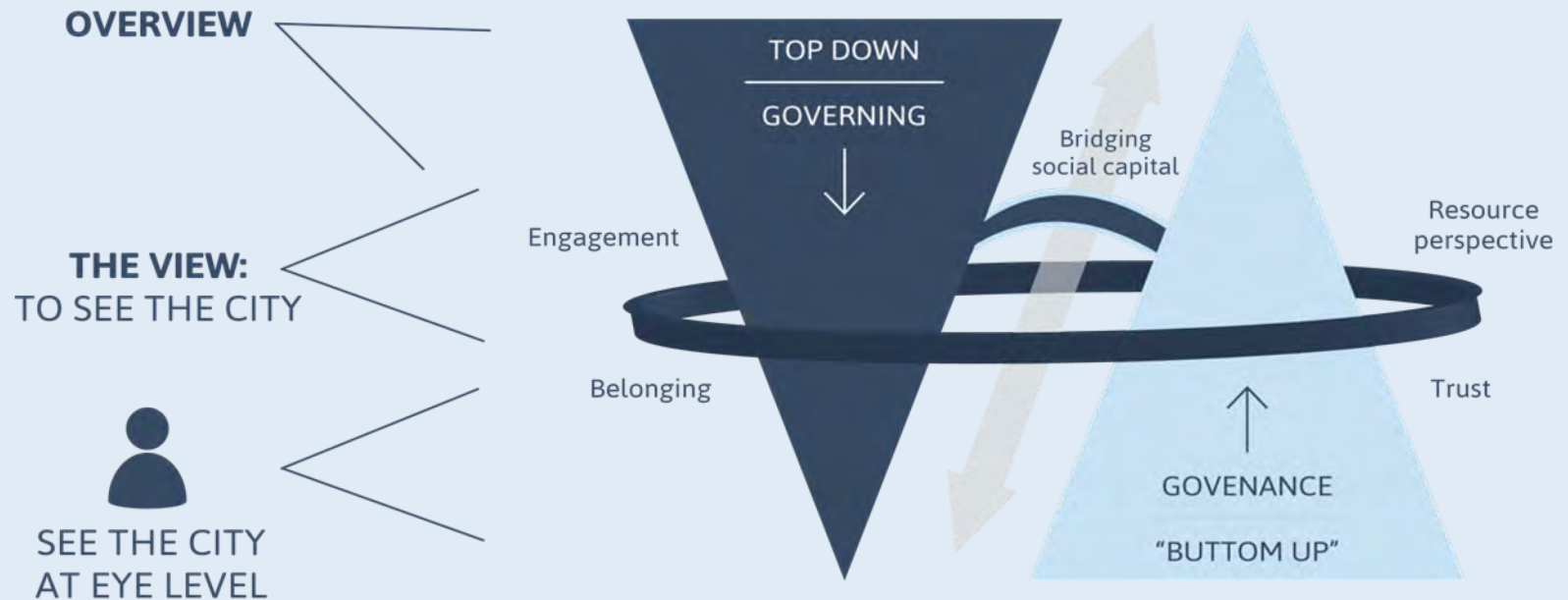
<http://www.intaros.eu/news/recent-news/cbm-workshop-quebec/>

Proceedings CBM workshop Fairbanks:

<http://www.intaros.eu/news/recent-news/report-from-community-based-monitoring-workshop-in-fairbanks-alaska/>

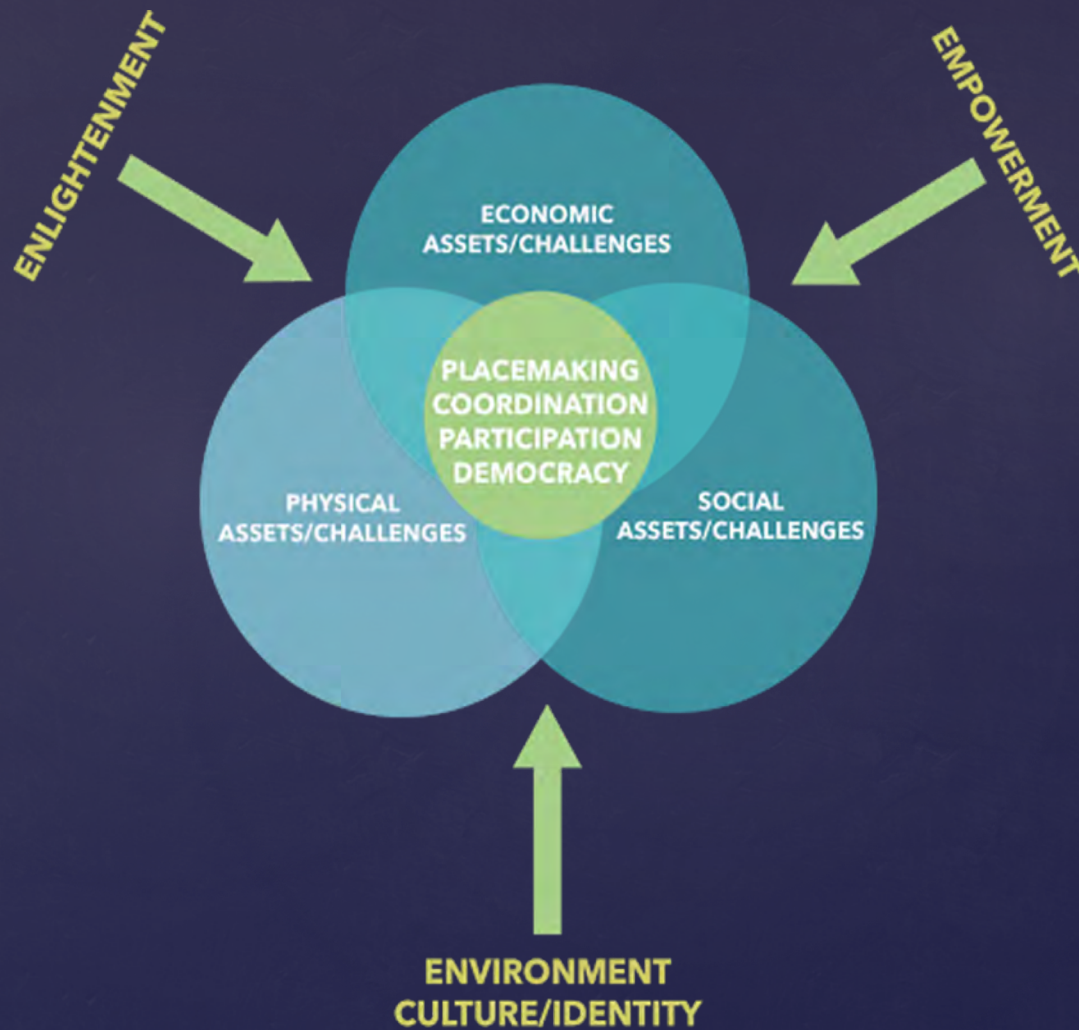


## A HOLISTIC AND OVERALL PERSPECTIVE- THE CONTEXT AND FRAMING-THE VISION



**PROXIMITY - THE WALK-GO OUTSIDE AND WALK AROUND -  
THE SPATIAL DIMENSION**

# Wholistic placemaking model





# Local planning and development

Framework- laws and actors:

Who is doing what?

Who has the power or the knowledge?

( Privatisation of the planning processes )

From where do they get data, information and knowledge?

Participation- do the inhabitants have any impact?

Safety and Security

Requirements: map existing situation, facilitate workshops, interviews, take part in local activities and actions.

Key success criterias in order to get sustainable results:

TRUST and INVOLVEMENT

# Climate change- Impact on Society: change in weather, climate and society structures?

- ⌘ Climate change- what do we mean by that, and what is bad weather?
- ⌘ The understanding of these topics are uneven and changing.
- ⌘ Relies on place, political parties, press, people and time.
- ⌘ There is a competence and communication gap between researchers, decisionmakers and society- or a bottle neck between us?
- ⌘ Is research available, communicated, used and useful?



# Adaptation to climate change

- ⌘ Adaptation to climate change embraces both individuals and groups, nations and the international society.
- ⌘ This means that research in this field includes both studies of politics, instruments and actions, their effect on the climate system, nature and society, and analyses of societies ability and willingness to explore and execute changes.
- ⌘ Society needs , through research, to find new solutions to how we can use nature and local conditions as tools for change and adaptation to climate change, and bring forward research that can stop, or even reverse or slow down climate change.
- ⌘ «Research on adaptation to climate change also includes decisions , processes, actors and institutions. It is about variations in time and space, and includes research on principles and facts that can be the foundation for decisions, like cost efficiency, legitimacy, principles for allocation of resources, welfare consideration and power- and dependance relations» ( Klimaforsk)

Meld. St. 21 (2011-2012) *Norsk klimapolitikk*  
Meld. St. 33 (2012-2013) *Klimatilpasning i Norge.*

- ⌘ There is a clear need and demand for more knowledge to support and reach the national goals of our climate politics in Norway. There is also a need to find tools and solutions that can support a restructuring of society in an environmental friendly way according to the White Paper. Meld. St. 21 (2011-2012) Norsk klimapolitikk – Norwegian climate politics and the White Paper- Meld. St. 33 (2012-2013) Klimatilpasning i Norge- Adaptation to climate change in Norway.
- ⌘ Politically it is decided that Norway will be a low- emission society in the middle of this centennial.
- ⌘ Transport, petroleum, industry, building industry, farming and food production represent the largest contributors to CO2 emission. There will be a need for a substantial change in economy and technology to solve the challenges and adapt to climate change within these sectors Norway's ability to adapt to climate change is going to be strengthened in order to lower the vulnerability of society . Knowledge about what kind of challenges and possibilities that gives society is very important.



## Demands and criterias

- ⌘ Health, Demographic Change and Wellbeing
- ⌘ Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy
- ⌘ Secure, Clean and Efficient Energy
- ⌘ Smart, Green and Integrated Transport
- ⌘ Climate Action, Environment, Resource Efficiency and Raw Materials
- ⌘ Europe in a changing world - Inclusive, innovative and reflective societies
- ⌘ Secure societies – Protecting freedom and security of Europe and its citizens

# Who are the stakeholders ?

- ‡ Politicians
- ‡ Public sector
- ‡ The State
- ‡ Developers
- ‡ Planners
- ‡ Inhabitants: children, youth, grown-ups, elderly people, disabled people, immigrants
- ‡ Competence- clusters
- ‡ Business and Industry
- ‡ University-sector
- ‡ Researchers
- ‡ Financial Institutions



Thank you for the attention!