

Co-creation of knowledge in planning and decision-making



CAPARDUS workshop Longyearbyen, August 2022

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Building on the INTAROS project: T4.3 Pilot CBM networks Greenland & Svalbard

Dialogue: cruise operators, scientists, decision-makers



Longyearbyen, March 2019

Report available at:

<http://www.intaros.eu/media/1635/2019-report-aeco-workshop-v4.pdf>

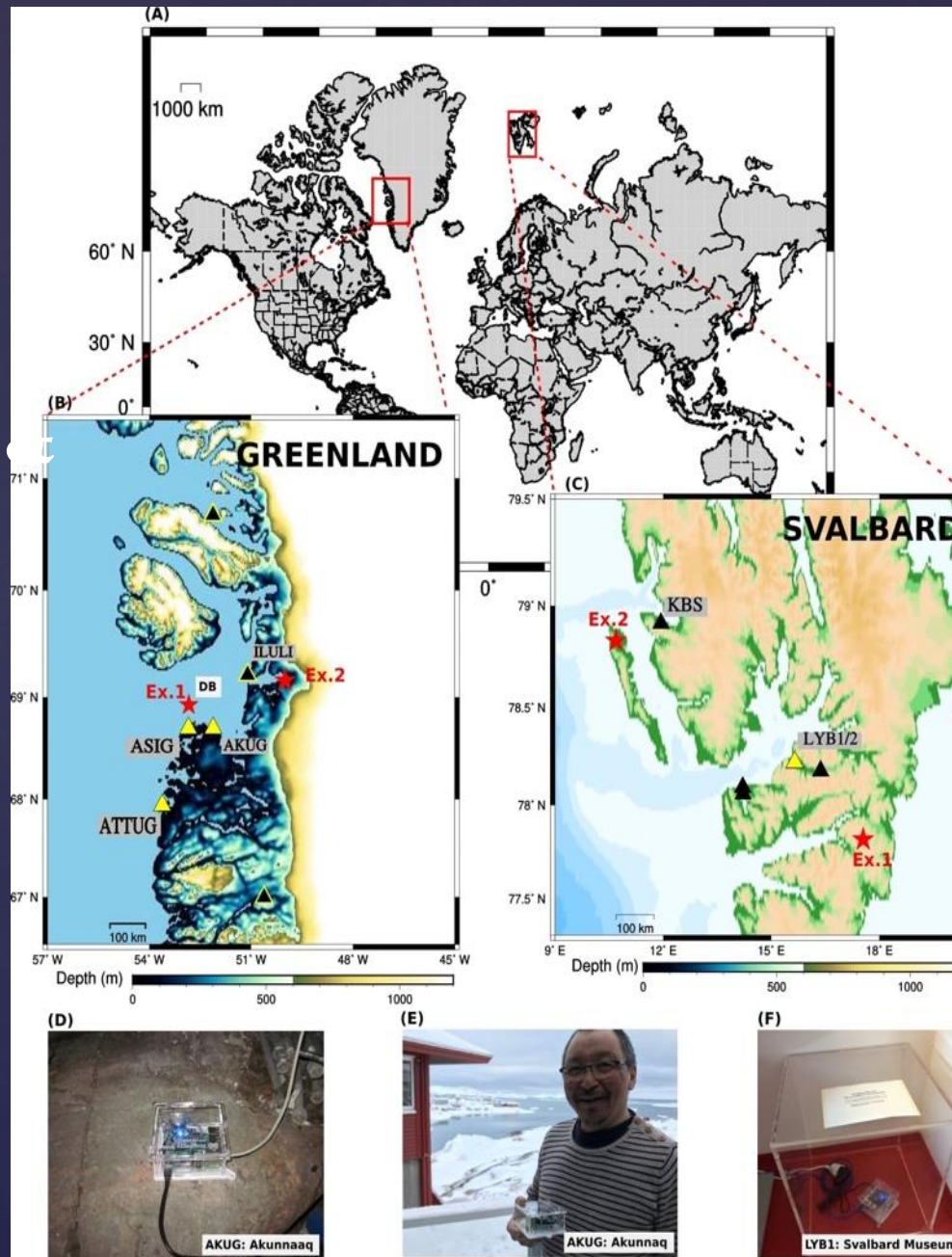


Building on the INTAROS project-WP 4; Community-based observing programmes (CBM) for participatory research and capacity building.

We have:

- ⌘ Analyzed community-based observing programs in the Arctic and identified capabilities, “good” practice and challenges.
- ⌘ Developed tools to cross-fertilize local knowledge with scientific knowledge.
- ⌘ Established a web library with examples of Arctic CBM manuals and CBM program organizers’ reflections of key lessons learnt (Link: <https://mkp28.wixsite.com/cbm-best-practice>)
- ⌘ At the invitation of the United Nations Environment Programme, we helped co-found the Global Citizen Science Partnership. This is a one-stop entry point for governments and other partners seeking to collaborate with, and use tools from, the global citizen science community.
- ⌘ In collaboration with NERSC, we obtained funds from the EU for the three-year project CAPARDUS (<https://capardus.nerisc.no/tab1>), aimed at strengthening capacity-building in support of good CBM practice and sustainable development in the region, which is giving the possibility to be together here in Longyearbyen today.
- ⌘ Initiated community-based observing networks to support local and national decision-making processes in Greenland and Svalbard, and in collaboration with CULTCOAST initiated a dialogue on the possibility to use citizen science for documentation of cultural heritage sites in Svalbard.
- ⌘ Established dialogues with decision-makers and local actors in Svalbard on environmental observing so as to build trust and long-term collaboration while addressing ethical, democratic and cultural dimensions.

T4.3 Pilot CBM networks Greenland Svalbard



Improved
detection and
data support
for
understanding
seismic events

With fishermen
and hunters

Led by
GEUS
and UiB



We have published a peer-reviewed monograph

“Community-Based Monitoring in the Arctic” (University Alaska Press 2021), the first of its kind

The book is based on dialogue and experience exchange with 30 CBM programs, including 40 workshops with 600+ people and representatives from five Indigenous Peoples (Inuit, Sami, Evenk, Gwi'chin and Komi Izhma).

““a major contribution to turning CBM from a politically correct afterthought to ‘real’ science, into a rigorous and respected practice in its own right”.



Some key messages from the INTAROS project

Community Based Monitoring and Citizen science enables valuable data and information to be generated from local and outside sources of knowledge.

Environmental monitoring pilots by Arctic expedition cruises have revealed the potential this kind of environmental monitoring may have and to identify suitable approaches for enhancing data collection, management, and knowledge sharing.

Observations are more likely to be used by decision-makers in the Arctic if records are analyzed and interpreted with a view to informing decision-making processes and if the findings are communicated to decision-makers in appropriate formats.

Mobilizing visitors, staff, and local communities can make a significant contribution to better environmental decision-making

Impact of CBM and Citizen Science

Through the INTAROS project we have demonstrated that mobilizing all relevant knowledge, observations and data on the Arctic environment has great potential and can be transformational.

It will bring about a better understanding that will be able to transform natural and social science research and natural resource management in the Arctic.

This has great potential to impact the lives of Arctic peoples.

Challenges and recommendations

There is a number of barriers at the level of the individual CBM and citizen science program in the Arctic.

We have previously described their extent, causes, effects and possible interventions (Danielsen et al. 2020, pg. 59-76; Eicken et al. 2021; D7.14).

Key challenges

- Insufficient respect among scientists for the knowledge and observations of community members.
- Incomplete understanding of how to obtain and use data from different people (with varying beliefs, epistemologies, rationalities and cosmologies) and different knowledge systems in mutually beneficial ways.
- Lack of shared protocols enabling cross-weaving, and insufficient dialogue on how to ensure knowledge synthesis.
- Lack of government policies in support of cross-weaving knowledge.
- Asymmetric power relationships (and financial resources).
- Digital divide.

Key research recommendations:

- Develop a holistic data 'ecosystem': bridging conceptual, political and geographic distances.
- Establish an understanding of how to obtain and use data from different people and different knowledge systems.
- Develop ways to enable knowledge production and monitoring across scales..
- Explore appropriate ways for combining Indigenous and local knowledge, CBM and citizen science data, and science data for improved 'real-world' decision-making.
- Improve coordination of research efforts (related to cross-weaving knowledge) and mobilize all research results for operational contexts.
- Further develop observing-logistics and research infrastructures, including cyber infrastructure for cross-weaving knowledge.

CAPARDUS activities in Longyearbyen

Longyearbyen as a case-study:

Field trips

Field testing

Mapping pictures of infrastructure and cultural heritage

Action research connected to local public meetings, local council meetings.

Workshops with a broad group of stakeholder-Workshop-reports

Digital dialogues

Network building: Svalbard Social Science Initiative, SSSI

SSSI and NERSC workshop in Longyearbyen in October 2021

A workshop project was funded by the Svalbard Strategic Grant 2019 based on an application from NERSC and SSSI. Then Covid 19 arrived...

We started with a digital seminar in Svalbard Social Science Initiative in December 2020, followed up with monthly digital meetings in 2021, and planning for the workshop to be arranged physically in Longyearbyen in October 2021



SSSI and NERSC workshop in Longyearbyen in October 2021

Outreach
activities
and panel
discussion
at the library

Longyearbyen,
October 2021



CAPARDUS-CULT COAST workshop March 2021

The CAPARDUS project represented by the project leader Stein Sandven, Nersc, Lisbeth Iversen, NERSC, and Michael Køie Poulsen, NORDECO, and the CULTCOAST project represented by the project leader Vibeke Vandrup Martens invited to a digital workshop in March 2021.

Invited partners were Tom Dawson from the SHARP project, St. Andrew University, AECO, Hurtigruten and other local stakeholders from Svalbard.

A decision was made to follow up with a collaboration with SSSI with an application to SSG for a side-meeting to the SCC 2021

SSSI, NERSC and partners workshop as a side-event to Svalbard Science Conference November 2021

Presentation of projects: CAPARDUS, CULTCOAST, SVALUR, BalancingAct, Tipping+, Face-It, SSSI, Nunataryuk and PRISMA etc.

Invited speakers:

Grete K. Hovelsrud, Research Professor, Nordland Research institute.

Eugene Guribye, NORCE Keynote on co-creation in research.

Hilde Fålnun Strøm, Hearts in the ice on Citizen Science.

Roundtable discussions on synergies and future research proposals on relations between society and the cryosphere based on the thematic approaches in the proposal to Svalbard Strategic Grant, and discussions on best practice, data sharing and coordination of projects and activities.



CAPARDUS

Case Longyearbyen- Adventsdalen

Collaboration with the local council, Visit Svalbard, AECO and the inhabitants on Capacity building?

The Governor has started working on a protection plan for Adventsdalen, and area that is used by the local community and the tourist industry.

Participation and co-creation on mapping areas of public interest, worries, identifying need for knowledge and data for decision-making are important topics.



Land-use management



Economic activities in Svalbard are as a main rule located in the planning areas around the main settlements.

Land-use is controlled through management plans. The Governor is the land-use authority.

The Governor
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27.09.2016

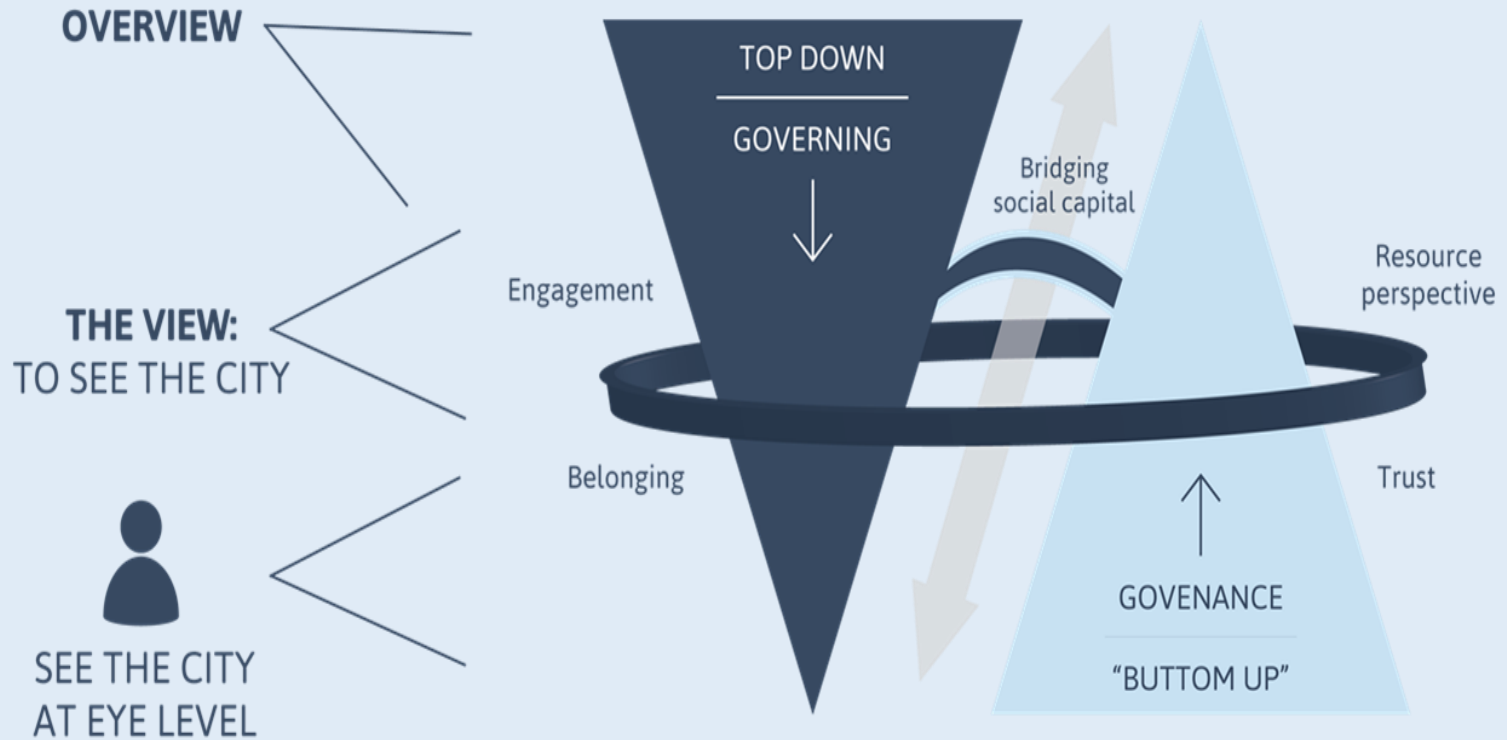
What is next? Addressing the Precautionary Principle.....or co-creation of knowledge for sustainable environmental monitoring, value creation and place management?

The CAPARDUS project is hosting this workshop in Longyearbyen in August, together with many partners, to move forward and take actions.

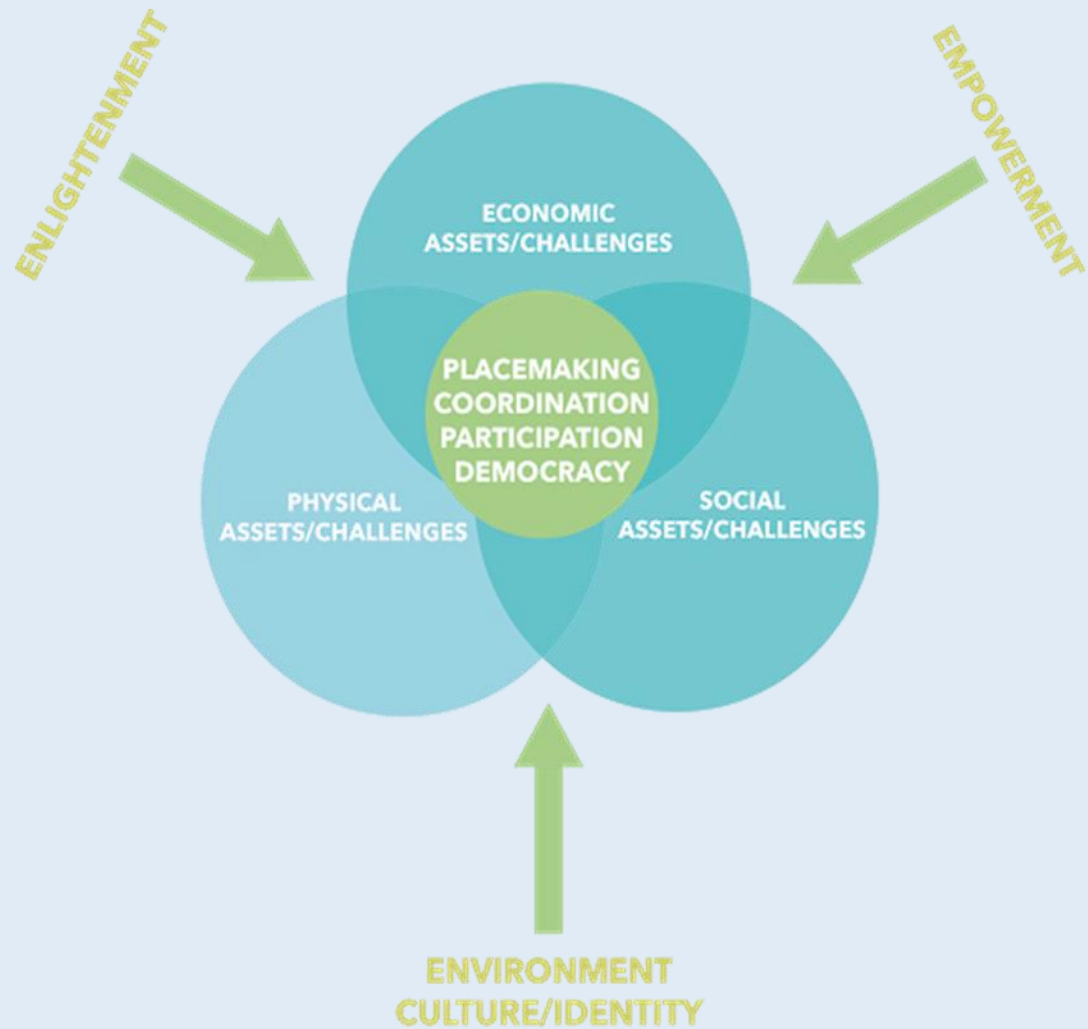
We are planning a follow-up workshop with many local stakeholders most likely in November 2022.

HOW TO CO-
CREATE AND
COORDINATE?

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



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



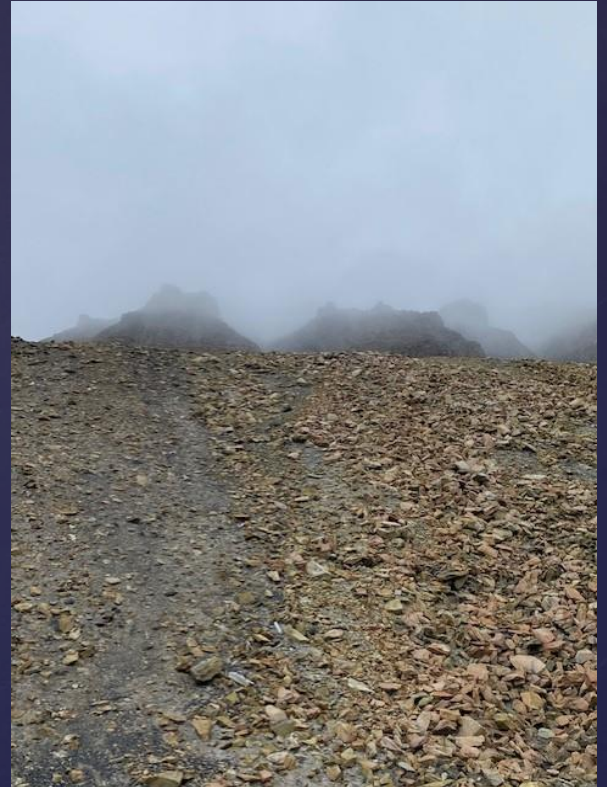


Svalbard: People, nature, wildlife, culture, the built environment and infrastructure, as well as sustainable and regenerative value creation, must be seen as a holistic eco-system

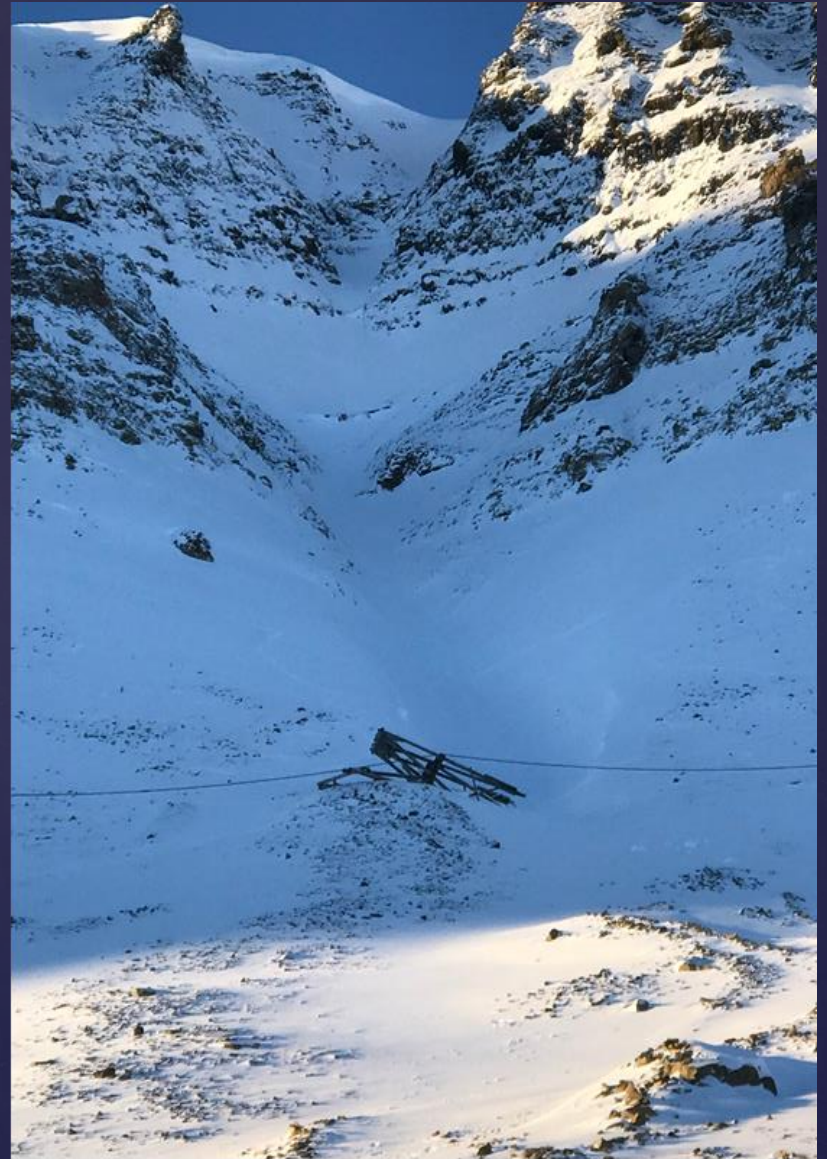
Nature



Nature and wildlife



Cultural Heritage



The built environment and safety



The built environment and infrastructure



Local infrastructure



So, what do co-creation of knowledge look like?
Meet, walk, talk, act... and build broad knowledge and capacity!



Thank you for your attention!