### CAPARDUS: Capacity-building in Arctic Standardisation Development

A Coordination and Support Action 2020-2022

Coordinator

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The CAPARDUS project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 869673.



### Objectives

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- Establish a framework for development, understanding and implementation of Arctic standards
- Identify and document standards, guidelines and practices within resource management, local community planning, and selected economic activities
- Engage researchers, service providers, local communities, commercial operators and governance bodies to design an Arctic Practice System, building on the Ocean Best Practice System



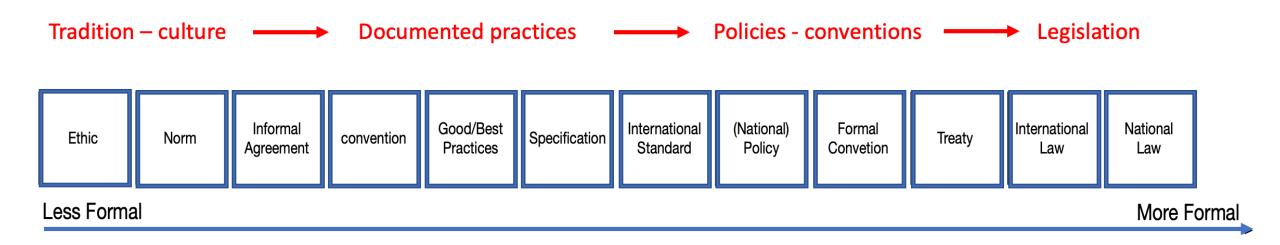
Fisheries is the most important economic activitiy and food source for local communities in Greenland. Photo by Gerth Nielsen



Buildings in Longyearbyen threatened by thawing permafrost. Photo: L. Iversen, NERSC



#### Standardization continuum



CAPARDUS reviews documents related to standardisation in selected Arctic regions in Greenland, Alaska, Russia and Svalbard





## CAPARDUS themes

- Observing system and data system
- Community planning & decision making
- Natural resource management
- Shipping, tourism, safety
- Ethics, norms, responsible research
- Other issues such as health, clean food and water

Community-based monitoring and Citizen Science

> Developing an Arctic Practice System

Socio-ecological system: Developing BBN for fisheries management





# Community-based monitoring in Greenland: marine resources



 Community-based monitoring (CBM) is a method where indigenous and local communities are directly involved in environmenta data collection.
Example above is from North-West Greenland

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# Community-based monitoring in Alaska: coastal risks and hazards

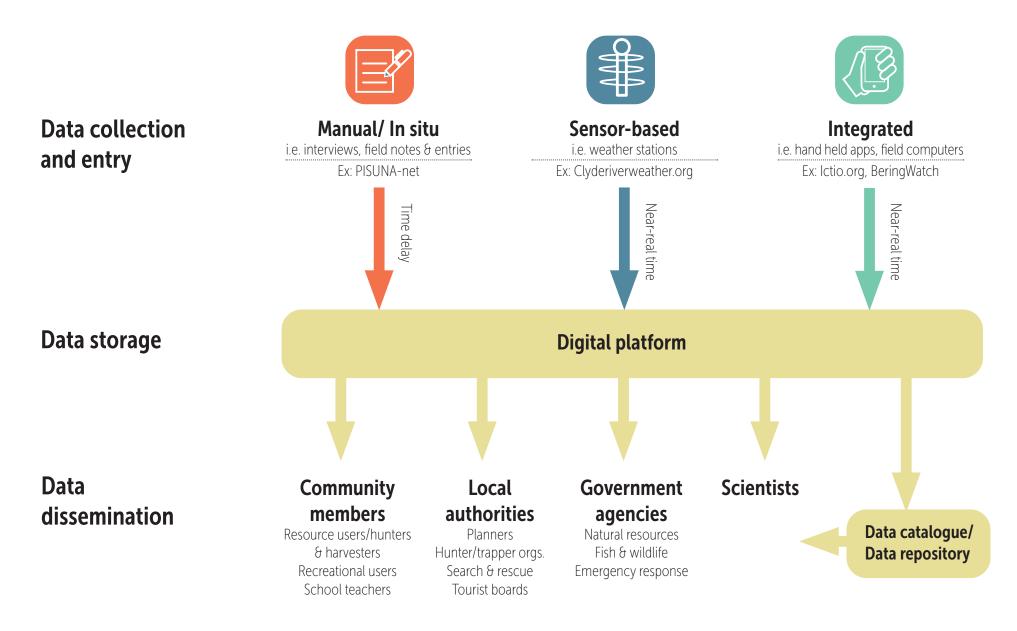
Noor Johnson, Olivia Lee, Nathan Kettle

- Identify the types of information used in short and long-term decisions and planning for coastal risks and hazards;
- Identify how existing community-based monitoring programs are situated within other information used in risk and hazard mitigation;
- Understand the role of standardization in connecting community observations with decision processes and the benefits and drawbacks of greater standardization for different actors.





#### Digital platforms in CBM programs, flow of data and intended users

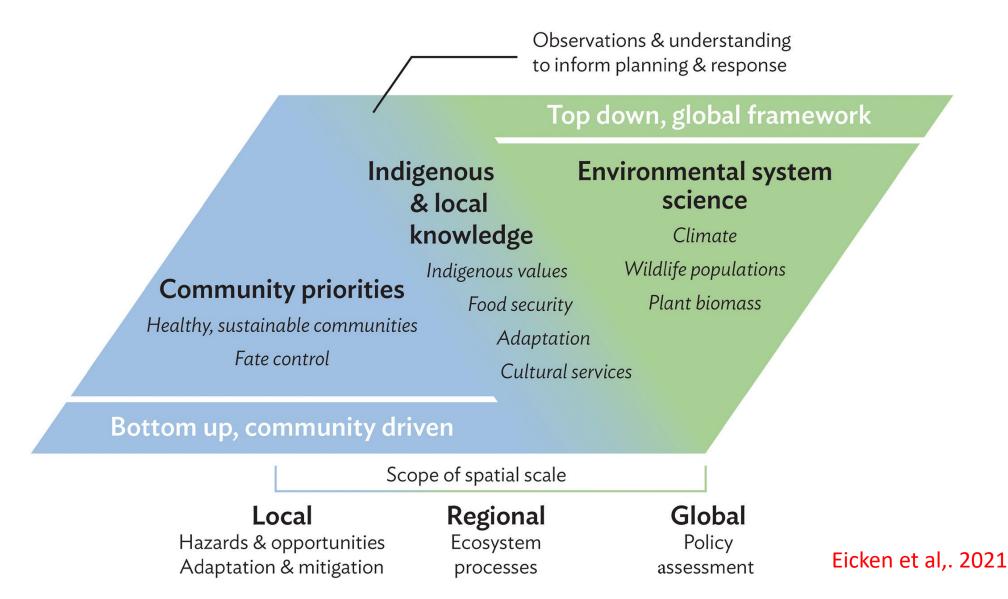




(Ref. Johnson et al. 2021, https://academic.oup.com/bioscience/article/71/5/452/6236037?login=true)

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### Connecting Top-Down and Bottom-Up approaches in environmental observing



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# Workshop objectives

- Review status of Community-based monitoring and Citizen Science (CBM-CS) systems in Svalbard and other Arctic areas
- Plan and identify CBM-CS activities in support of cultural heritage research in Svalbard
- Review guidelines, practices, standards and regulations which are relevant for CBM-CS activities in Svalbard and Arctic in general
- Discuss how an Arctic Practice System should be designed to be a useful digital resource for people living and working in Svalbard.



