MATCHPOINTS SEMINAR

Fragility and resilience of Arctic Ecosystems, myths and reality - implications for Ecosystem-based Management

A whaler's *Catch-22*

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ARCTIC COASTAL LIVELIHOODS: *A DAY IN THE LIFE OF...*

METHODS

Disco Bay, and wider North-west coast (Qaanaaq, Uummannaq, Upernavik).

Participant-observer focus: *enskilment* (Pálsson 1994) on sea ice is composed of tasks that 'constitute everyday acts of dwelling' (Ingold 2000).

Interviews: Directed, semi-directed and open-end format. Life histories, hunting/fishing narratives.

FRAGILITY AND ROBUSTNESS OF ARCTIC ECOSYSTEMS:

- **Focus:** the **socio-economic** aspect of climate change and renewable resource harvests from a user-perspective

...with a view to:

The potential for **developing an ecosystem–based management** of human activities

CLIMATE CHANGE AND RENEWABLE RESOURCES HARVESTING

Add to the cocktail: hunting regulations (user/access rights), quota allocations, restrictions on hunting times, permits and equipment specs etc.

A WHALER'S *CATCH-22*!

Research results: indicate why the framework does not always work (despite all good intentions)!

The current framework implies a set of rights:

User rights: Occupational/non-occupational licences

Access rights: deep-sea trawler or coastal skiff

Disposition rights: household only! or also profit from catch

Catch-22! Local **user-rights dispute** over quota allocation

-> **compartmentalisation**

A WHALER'S *CATCH-22*!

From user perspective: resource debate informed by rhetoric of *environmental* sustainability (scientific-*come*-policy jargon)

-> marginalizes local resource user (-> acts of resistance)

Consider...inclusive *social* sustainability as complimentary aspect of environmental sustainability

Socio-environmental sustainability

Top-down *versus* bottom-up management

OK fine...but why?

COMMUNITY-BASED ENVIRONMENTAL MONITORING:

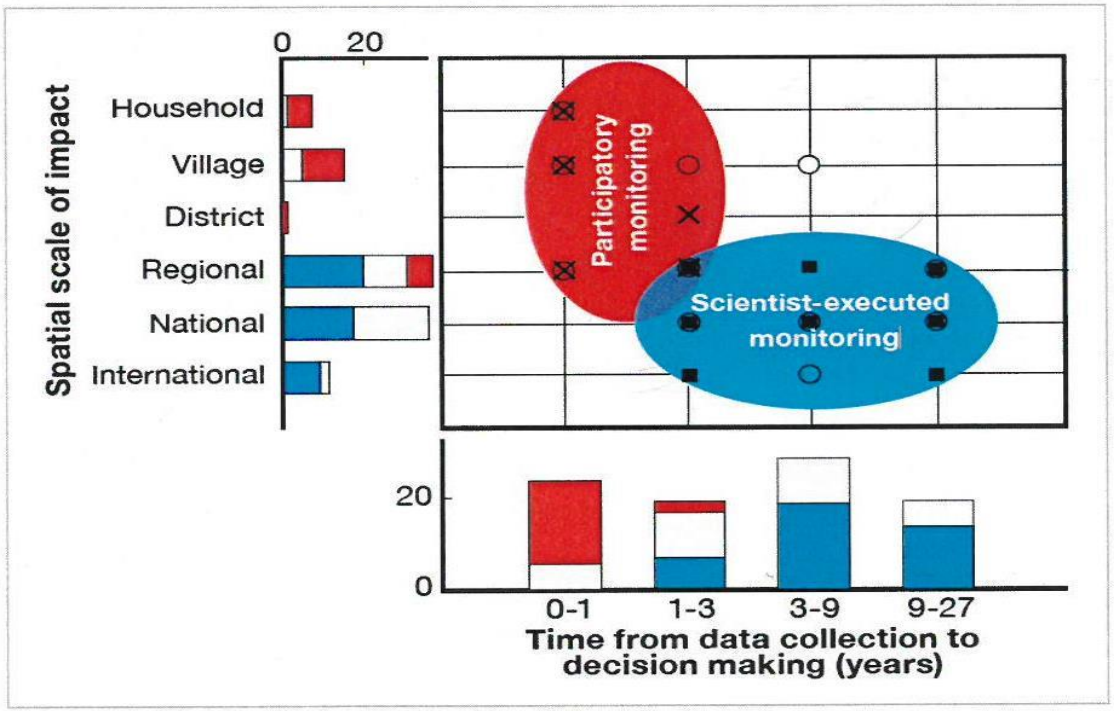
N = 104 published environmental monitoring schemes

Implementation: Scientist-based monitoring 3-9yrs Community-based monitoring 0-1yrs

Scientist-based monitoring has little impact at community level

Local stakeholder involvement enhances management responses at local scale and speed of decision-making at operational level

Decision-making from natural resource monitoring based on data from published natural resource monitoring systems 1989–2009



■: scientist-executed monitoring systems.
○: monitoring systems with local data collectors.
×: participatory monitoring systems.
The circles comprise all the scientist-executed (blue) and all the participatory monitoring (red) systems. The bar chart indicates the number of scientist-executed monitoring systems (blue bars), monitoring systems with local data collectors (white bars) and participatory monitoring systems (red bars) at each level of spatial scale and implementation time.

Source: *Journal of Applied Ecology* 47: 1166 (2010). Courtesy John Wiley and Sons.

Fragilities:	Robustness:
Climate/weather change	Cross-generational knowledge (*enskilment*)
Unpredictable winds/ice conditions	Access to meteorological services (technology)
Bio-diversity	Multi-species harvesting pattern socio-environmental flexibility
Regulations, rights conflicts	Traditional sharing practices and kin alliances (comm shared values)
National/central authority	Local resource councils
Environmental pollution	Alutiq case