



# Evolution of an Adaptive Management Regime?

## Forest Dispute in Muonio Northern Finland

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# Introduction

- Forest management is facing challenges of uncertainty, both ecological and social, local and global. For example:
  - Kemijärvi's pulp factory,
  - climate change-regeneration especially in the north.
  - Growth of tourism
- Flexibility is needed to adapt to changes



# Intro 2

- Traditionally natural resource / forest management has often been based on top-down approaches. The problem with such approaches is that they are usually not flexible to change and are not able to react fast to ongoing changes.
- One response to this rigidity is the emergence of social movements, also in the rural terrain.
- Rural social movements
  - Social movements engage in politics often outside institutionalised governance, for example, by building networks with other actors.
  - Social movements usually focus on promotion of autonomy and self-determination.
  - Social movements often defend rural way of life, economy or landscape against external threat. (Gorlach et al. 2008)

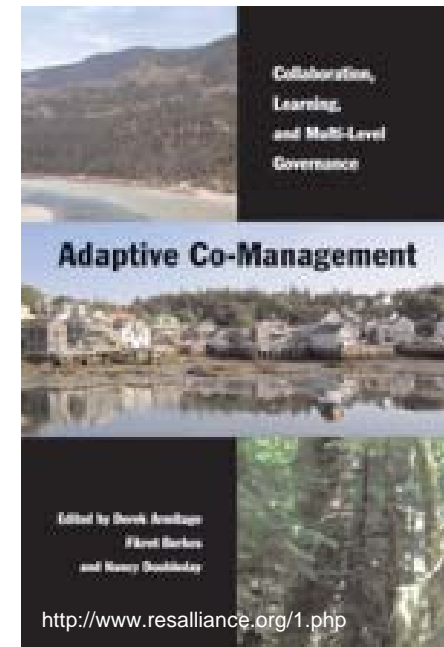


# Adaptive co-management

- Top-down or bottom-up approaches are not solely enough but combination is needed, in order to govern natural resources efficiently and with flexibility.
- The goal of adaptive co-management is to form a place-specific management system which is able to interpret and act on the social and ecological feedback received from the socio-ecological systems.
- Other goals of adaptive co-management are:
  - 1) to foster dialogue between various stakeholders,
  - 2) to integrate different knowledge systems,
  - 3) to encourage collaboration and power-sharing,
  - 4) to increase management flexibility,
  - 5) to improve the evaluation of the participatory processes and their outcomes, and
  - 6) to build social capital among various interest groups.(Resilience Alliance 2008: Folke et al. 2005; Olsson et al. 2004)

# Adaptive co-management 2

- Adaptive management is not possible when the stakeholders are too inflexible to try new approaches. Flexibility might be increased through novel assessments, small-scale experiments, or a management crisis that restructures power relationships among stakeholders. (Gunderson 1999)
- Adopting an adaptive management approach will require a shift in agency philosophy from trying to maintain systems in a single optimal state to maintaining an optimal management capacity by creating resilience in the managed system and flexibility in management institutions. (Johnson 1999)
- In the following i present the Muonio case, and then do some remarks on adaptive co-management in relation to Muonio



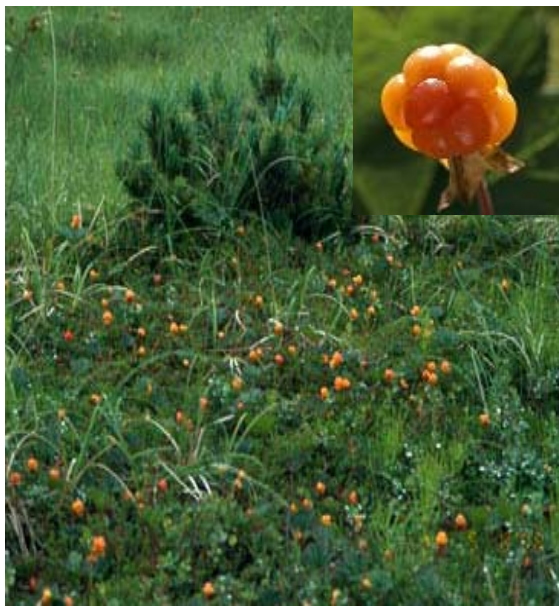
# Forest dispute in Muonio

- 15 thematic interviews during 2005 and 2007.
- Backgrounds:
  - Metsähallitus, forests, tourism, forestry, hunting and reindeer herding in Muonio.
- Disputes in the end of 1980's, 1999 and 2007.



# Dispute in the end of 1980's

- In the end of 1980's locals defended the forests on the basis of subsistence economies and recreational opportunities. Some loggings were made.



[http://www.iiseutu.fi/li\\_kunta/Ylaste/Hunting/Hunting.htm](http://www.iiseutu.fi/li_kunta/Ylaste/Hunting/Hunting.htm)

# Dispute in 1999

- In 1999, also tourism was part of the picture:
- Local coalition (2007): *“During the previous dispute [1999] the municipality had given a positive statement to the Metsähallitus that the loggings could begin, but then the issue was raised on the table. Then we went to the municipality and put it in plain Finnish what was the source of income in this region, how many jobs there were in tourism and in forestry, and in other livelihoods. After that the municipality has changed its course, and has since been behind the tourism entrepreneurs and other locals.”*
- And Metsähallitus, the municipality, and tourism entrepreneurs made a agreement that no loggings will take place in ten years.



# Dispute in 2007

- Metsähallitus started to plan loggings to northern Muonio, but a consensus was not achieved in natural resource planning.
- Local coalition found out of the plans and arranged a protest in Muonio.

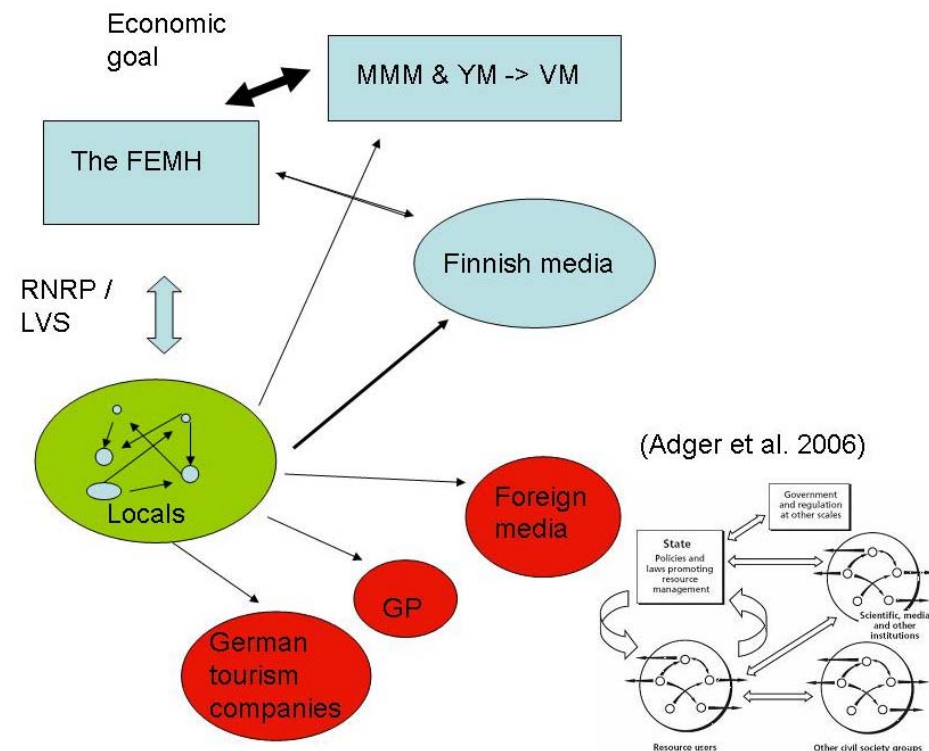
Under pressure Metsähallitus choosed to negotiate with local coalition, and it was finally decided that Metsähallitus rents the areas for ten years to the municipality and tourism entrepreneurs for undisclosed amount of money.



■ Muoniolaisen mielenilmauksen osallistui viidesne kunnan väestöstä. Toimintajohtaja Kyösti Pietikäinen (oik), konsensinjohtaja Perttu Yliniemi, kunnanjohtaja Aulikki Heino ja metsähallituksen vt. toimintajohtaja Hannu Jokinen kuuntelevat väkärinä eri tahojen lyhyitä mielipiteitä metsähallituksen hakemuksista.

# Strategies of local coalition in 2007

- "I send hundreds of Emails during the dispute."
  - "Everyone utilised their connections to Finnish politicians"
  - "We gave a unified picture from the local point of view. Unified opinion was ensured by the FEMH's decision to drive the machines to the frontiers"
- "We didn't want to involve GP"
  - "There were German tourism companies ready to pay to save the forests in Northern Muonio."
  - "Some media from middle Europe were also keen to take the issue up, but we refused as we didn't want any boycotts for Finnish forest industry."



# Evolution of adaptive management regime in Muonio

- What features of adaptive management does the Muonio case have?
  - Place specific solution
  - Experimental regime
  - Dialogue
- Although Metsähallitus did not take initiative to leave the northern Muonio outside loggings it was flexible enough to do so under pressure by local coalition and media.
- Top-down and bottom-up approaches were integrated during the negotiations of Metsähallitus and local coalition, and flexibility enhanced and decisions made according to altered livelihood structure.
- Metsähallitus gave up its usual emphasis on optimal state of forests and sustainability of wood production in order to resolve the conflict and at the same time it increased the resilience of forest management system.
- Management crises (dispute) resulted in new assessment and experiment in forest management, namely the rent.
- Negative about experimental regime is that it poses continuing uncertainty to the stakeholders.

# Role of local coalition in creating adaptive management regime

- Members of the local coalition were able to turn the head of municipality to prefer tourism over forestry in land-use decisions.
- Local coalitions self mobilisation outside deliberative governance pressured Metsähallitus to integrate local needs more strongly in the forest management decisions.



# Conclusions

Disputes emerged because participatory planning processes failed to create consensus, but disputes worked as triggers towards more adaptive governance.



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