

Project information

Project title

Mapping cultural seascapes and changing environment in the Porsanger fjord

Year

2012/2013

Project leader

Einar Eythorsson and Camilla Brattland, NIKU

Participants

- Einar Eythorsson, NIKU (project leader until 1st of August 2012)
- Camilla Brattland, NIKU (project leader from 1st of August 2012)
- Jørn Weines, Centre for Sami Studies, University of Tromsø
- Sigvald Persen, Coastal Sami Resource Centre (CSRC), Porsanger

Flagship

Fjord and coast, Theme: Human dimensions of ecosystem response to climate change

Funding Source

Fram Centre

Summary of Results

Goal: combine existing and new data on the physical environment, ecology, human resource use, environmental change and cultural seascape of the Porsanger fjord as map layers; to develop interdisciplinary mapping of fjord environments as tool for analysis, planning, management and communication/education. Due to strong reduction in budget, the project in 2012 has focused on developing existing projects in which data could be organized. Work packages 1, 2, 4 and 5 have been prioritized, with an emphasis on WP 2.

Work package summaries/highlights as of November 2012:

WP 1: Develop a digital map presentation of the Porsanger fjord with data from NGU, IMR and NIKU. Since the project received less funding than applied for, there was little interdisciplinary collaboration with NGU and IMR. NIKU in collaboration with the Coastal Sami Resource Center (CSRC) is developing map layers on traditional land- and seascape use in Porsanger to be submitted to the local/traditional knowledge (T/LEK) database 'Mearrasapmi'. An interview- and literature study was followed up with a surveying of archaeological interview data at selected sites. The CSRC has received the complete digital datasets with the data derived from them. The Centre has moved their T/LEK database to a new platform, improving upon the software and technical solutions for managing the T/LEK database (MySQL, Sobipro) and putting up a web-based framework for public presentation of the database that are able to handle Sami language texts (Joomla).

WP 2: Web-based presentations based on the data from WP 1.

NIKU in collaboration with the Centre for Sami Studies have developed a GIS framework for web-based presentation of research on local ecological knowledge in general. Research results and data from the Fávllis project on socio-ecological changes in the Porsanger fjord were utilized to develop the framework, which is now presented at the Fávllis website <http://site.uit.no/favllis>. *Google maps was used as the main platform for collaboration between researchers and Wordpress as the platform for putting the research maps into context. The website was presented at the seminar 'The Future of Sami Fisheries Research' organized by the Center for Sami studies, University of Tromsø and as an example of geo-tagged cultural maritime landscapes at a workshop organized by the Coastal Culture Network (Kystkulturnettverket: Riksantikvaren, Fiskeridirektoratet, Kystverket and Kystmuseene) in Bergen, October 2012.*

WP 4: Master thesis scholarship. Jørn Weines at the Centre for Sami Studies was the developer and editor of the Fávllis website, and has gained substantial experience and skills at mediating research on ecological changes through the data layer mapping method employed in this project. Weines is working on his master thesis with the working title: "Local Ecological Knowledge as source material for historical research. Differences in the portrayals of the development of the Porsanger fjord" to be delivered in May 2013. Goals of the thesis is to explore how LEK sources can be utilized and combined with the traditional sources used for historical research, and how information on changes in eco-systems and local communities found through the use of these sources can be visualized on maps.

WP 5: Workshop on interdisciplinary research and traditional/local ecological knowledge. The project has organized the workshop in collaboration with the project 'Traditional indigenous knowledge in the 21st century' at the terrestrial flagship on the 15th of November 2012. Presentations were by researchers at UiT, NINA and NIKU. The outcome of the workshop will be a joint application for a larger Fram-centre project on interdisciplinary collaboration in research on traditional/local ecological knowledge.

Summary of results:

The project has successfully developed a model for putting research results and research data on social-ecological changes and LEK 'on the map'. The model consists of geo-tagging research products (narratives, videos, research articles) relative to the geographical location in which they are embedded. This is in accordance with the principle of *in situ* documentation and storage of traditional and local ecological knowledge (Convention on Biological Diversity article 8j). The website currently presents research results on LEK and changes in fjord ecology in Varanger, Porsanger, Tana and Lyngen, thus mapping and presenting them as 'cultural seascapes' assembled

through LEK research products.

Published Results/Planned Publications

Eythorsson and Brattland (forthcoming): New challenges to Research on Local Ecological Knowledge: Cross-Disciplinarity and Partnership. In Carothers, C.L. et al: *Fishing People of the North; Cultures, Economies and Management Responding to Change*. Alaska Sea Grant/University of Alaska.

Brattland and Eythorsson (in review): Havet som samisk kulturlandskap? Forthcoming In an anthology edited by G. Swensen. NIKU.

Workshop presentations:

Eythorsson, E.: Perspectives on LEK-research and Local Partnership. Workshop on *The Future of Sami Fisheries Research*, University of Tromsø, Oct. 8. 2012.

Brattland, C., Weines, J., Andersen, S. and Seljevold, S.: Putting local ecological knowledge on the map. Workshop on *The Future of Sami Fisheries Research*, University of Tromsø, Oct. 8. 2012

Eythorsson, E.: Havet som samisk kulturlandskap? NIKU-symposium: *Å lage kulturminner; om hvordan kulturarv formes, forstås og forvaltes*. Oslo 19.-20 sept. 2012.

Brattland, C.: Forvaltning av samisk kulturarv. Vern av samisk kystkultur. Workshop Kystkultur og representativitet, Bergen 5. 10. 2012.

Eythorsson, E.: Lokal kunnskap og forskning på sjø- og landskapsbruk. Fram Centre-workshop *Flerfaglig forskning og tradisjonell/lokal kunnskap*. Framsenteret, Tromsø 15. november 2012.

Master thesis:

Weines, J.: *Local Ecological Knowledge as source material for historical research. Differences in the portrayals of the development of the Porsanger fjord*. Forthcoming in May 2013.

Communicated Results

Website: <http://site.uit.no/favllis>. Centre for Sami Studies, University of Tromsø, and NIKU.

Website: www.mearrasapmi.no/. Coastal Sami Resource Centre and NIKU.

Workshop: Interdisciplinary research and traditional/local ecological knowledge. Fram Centre, 15th of November 2012. NIKU, CICERO and Centre for Sami Studies, University of Tromsø.

Interdisciplinary Cooperation

The lack of scientific, long term data-series on the fjord environments was one of the drivers behind including local knowledge on environmental change in this kind of studies (See report from flagship project 3.1 for 2011). Little has been achieved in terms of integrating interdisciplinary data on the same fjord environment in the Porsanger fjord. This challenge has been problematized and discussed in the paper 'New challenges to LEK research' by Eythorsson and Brattland (forthcoming). To remediate the institutional boundaries in this field, the workshop 'Interdisciplinarity and research on traditional and local ecological knowledge' was organized on the 15th of November, with participation from researchers at the University of Tromsø, NINA, NIKU, and CICERO. The experiences from the project and the workshop so far indicate that collaboration between institutions is unrealistic unless institutions have substantial gains from the collaboration. Partnership between university and local institutions which was financed through the flagship was however instrumental in developing the 'putting local ecological knowledge on the map' framework in the Cultural seascapes project.

Disciplines currently involved: Anthropology, archaeology, history, sociology, biology (aquatic and herbivore).

Budget in accordance to results

The Fram Centre funding was instrumental in realizing the framework for presentation of research on ecological changes as done through the Fávllis website. The project benefited from the institutional infrastructure of the Centre for Sami Studies and NIKU, and financed the material participation and collaboration with the CSRC without which the project would not have succeeded.

Could results from the project be subject for any commercial utilization

No

Conclusions

1. Future research needs: greater efforts towards assembling data on fjord ecology and LEK on fjord ecology and collaboration across institutions to arrive at common platforms for research on fjord resources. There is a need to organize and coordinate local collections of T/LEK in systematic and organized ways in order to utilize it for research and management.
2. A new framework for easy and solid sharing of data and research results through geo-referencing research results was developed through the project. 'Putting research on the map' and 'putting local ecological knowledge on the map' are methodologies that can be employed by anyone with a minimum knowledge of and access to software. The methodological framework allows for presentation of multiple research results and sharing between local partners and research institutions alike.