**Nordic Resource Management: Finnish Component**

**September Work Report 1**

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**1. Introduction**

*Nordic Resource Management* is a new project across the Fennoscandian and Greenlandic areas to investigate, develop and strengthen the role of local knowledge and ‘citizen knowledge’ in decision making about the use of nature and natural resources. The actual project activities vary across the region, but in general the aims are, in brief:

*(i) Further development and testing of standards for the involvement of citizen knowledge in decision-making about the use of resources*. The project will benefit from existing initiatives involving civil society and natural resource users in decision-making on natural resources, and it will further develop standard templates for the collection and use of citizens’ observations. An example of a possible standard template is the quarterly form used by the PISUNA project in Greenland (see http://www.pisuna.org/documents/Kvartalsumskema\_DK.jpg). The templates will be adapted to the local context and field-tested in selected communities in the Arctic.

*(ii) Strengthened capacity to use citizen knowledge.* The project will enhance the opportunities for municipalities, other local and national authorities and civil society organizations in the Arctic to specifically involve citizen knowledge in their decision making about the use of nature and natural resources. The project will develop and provide training and 'exchange visits', which will strengthen the capacity of volunteers and decision makers at various levels of authorities and civil society in public participation in decision-making about the use of natural resources.

*(iii) Communication of the experience.* The project will convey the experience of the use of standards for the involvement of citizen knowledge in decision-making about natural resources through information activities and workshops. Information activities will include a policy brief and a technical report. The project will also publicize experience on websites/blogs and as far as possible in high-profile international scientific journals. The policy brief and technical report will be prepared in English with summary in a Scandinavian language and Russian. The technical report is envisaged to be published as a TemaNord series publication.

Snowchange Cooperative, a non-profit cultural and science organisation receiving public funds, coordinates the Finnish and Northwest Russian components of the work and all activities. Snowchange has an outstanding track record in the work areas of the project for over past 15 years – including the establishment of the first collaborative management plans in the Sámi region as well as the UN-recognized habitat restoration activities in the boreal zone of North Karelia in Jukajoki river watershed.

This September work report documents the first results of the uses of forms in the target regions and other developments. Before the field season began in the watersheds, the Nordic model of the form was adjusted to work better in in-land fisheries and in the Finnish-Sámi context.

Then, in Jukajoki and in Näätämö rivers the forms were given out to hand-picked, trusted fishermen, who utilized them. Forms have been collected and continue to be collected in some cases until November. Then final analysis and user comments will be made available.

**2. Preliminary results with the use of the forms for collecting, interpreting and communicating locals' information and observations on natural resources so far**

**A. Jukajoki**

This south boreal watershed located in the villages of Selkie and Alavi is heavily damaged, and at the same time home to one of the largest habitat restoration activities in Finland, with a total budget of 2,7 million € between 2010-2015, combining local knowledge of Finnish-Karelian peoples, latest science and internationally recognized ways of collaborative management. UNEP recognized Jukajoki as a best practice in July 2014. Natural resource management bodies in Finland who participate in the local interaction are Center for the Environment, Transport and Economy, Municipalities of Joensuu and Kontiolahti, and the Regional Administrative Agency – AVI.

In mid-May the forms were given out to three fishermen active on the river:

1. One professional fisherman in late 30s
2. One subsistence fisherman at 60 years of age, who has been harvesting on the river since 1960s.
3. One subsistence fisherman at roughly 50 years of age, who has been harvesting on the river since 1970s.

Two sets of forms have been returned by 15th September. One fisherman, b, continues to harvest until November on the river and the forms will be collected then.

The main activity with the forms focused on the seasonal harvest of Common Bream[[1]](#footnote-1) and Ide[[2]](#footnote-2), using small to middle-sized fish traps for river fisheries. The small traps have half-meter guiding net and are stationary, made from ‘chicken wire’. The middle-sized fish traps having 20 meter long guiding net with a nest of two openings and five meter long total main body.

* Person a harvested from 5th June to 28th, June, 2015. Average catch, every two-three days, was seven kilos.
* Person c harvested from 25th May to 18th, June, 2015. Average catch, every two-three days, was around kilos.
* Person b statistics are yet to arrive.

In summary, a + c fishermen found the forms useful. They reported the following relevant observations:

* Early June very strong winds, up to 25 ms and cold weather had not been seen in 50-60 years.
* Water levels were unusually high.
* 19th June rainbow trout[[3]](#footnote-3) filled with roe was caught in the larger fish trap – this introduced species is very much affected by acidity of water. The fishermen felt that this is a very good indicator of improving water quality, due to the fact that this trout cannot stand acidic waters. Also, the fact that it developed roe was seen as a good sign.
* Strong winds continued all the way to mid-Summer, to 24th June, unusual weather, which was later confirmed to be the coldest in 50 years.
* Perch, a good quality indicator fish was plentiful in the small traps from early June onwards, in some cases over 26 individuals.

The forms worked relatively well for a + c fishermen and the ‘blank space’ provided for unusual observations worked well. The fishermen felt their catch diaries and observations using the forms, conveyed locations and amounts as well as indicator species and weather events well.

However, they felt that their deeper knowledge of the river and relationship to it would need to be conveyed using interviews and mapping. Jukajoki has quite well-guaranteed process of including local traditional knowledge in management, so the forms provided an added tool to document the fishery on the river. Final results and more detailed survey of catches and weather will be available in December.

**B. Näätämö Watershed**

The region where the first collaborative management plan for Finland was published in 2013, the Näätämö watershed is a cross-border area between Finland and Norway, with majority of the territory located in Finland.

Being on the of the most relevant Atlantic Salmon spawning rivers in Europe, the watershed is home to the rich cultures of the Indigenous Skolt Sámi, a key stakeholder group in the collaborative management actions, as well as the Finnish-speaking national minority in Norway, the Kvens as well as local Norwegians and Finns.

Main natural resource management bodies in Finland who participate in the local interaction include Metsähallitus, Natural Resources Institute – Finland and the Ministries for salmon management as well as the municipality of Inari.

In late April the forms were given out to two Skolt Sámi fisherman teams active on the river:

1. First team led by an male Elder in mid-60s
2. Second team led by a reindeer herder-fisherman in mid-40s

Main fish for harvesting and observations included northern pike[[4]](#footnote-4), grayling[[5]](#footnote-5), Atlantic salmon[[6]](#footnote-6), white fish[[7]](#footnote-7), sea trout[[8]](#footnote-8) and burbot[[9]](#footnote-9). The season is still on. Forms will be collected when the sea trout fishery ends and ice arrives, by November.

Collected observations so far include:

* The early summer was extremely rainy and cold, this prevented net fishery along the river, and thus delayed the uses of forms.
* In Mid-July when the forms were in use, unusual grayling behaviour was reported as they had not disappeared from the usual salmon spawning pools, such as *Pyöreäsuvanto.* They were still persistent in these areas of Näätämö which means the male salmon had not driven them out like usual.
* Sea trout amounts may have increased this season, more information may be seen in November.
* Fishermen reported ‘dead salmon roe’ in the bottom of spawning areas, assessing that as the water levels were very low in Autumn 2014, the ice has wrecked parts of the hatching roe over winter.

Forms worked relatively well as a first review of catches and special observations. Full experience will reported in December.

**C. Tornio**

This cross-border river is the major home stream of Atlantic Salmon stocks from the Baltic. The catchment area cultures include North Sámi, Swedish, Finnish, Meä and other groups, languages and traditions. Main natural resource management bodies in Finland who participate in the local interaction Metsähallitus, Natural Resources Institute – Finland and the Ministries for salmon management as well as the various municipalities and Sámi Parliament along the river catchment area.

In 2015 authorities and most of the resources were aimed to determine and assess the major outbreak of lethal fungi *Saprolegnia* infection which affected salmon in the river. Therefore the use of forms was exchanged with Jukajoki and Näätämö as an experience, but not yet implemented.

Similarly, the documentary film from Jukajoki efforts will be disseminated in Autumn 2015 along the river communities of Torneo and this will be a forum to discuss the Nordic Resource Management issues, in preparation for 2016 season.

**D. Deatnu and Ponoi as Comparative Views**

In the Deatnu watershed, the restoration and monitoring activities from Näätämö were discussed with those North Sámi who are involved in developing the river management. Spring 2015 saw major disruption of state-Sámi relations and this affected possibilities of officially proposing new innovations for local governance, and the situation will continue until early 2016 when the new Sámi Parliament will take office and on the other hand the Norwegian – Finnish river border treaty has been negotiated.

In Ponoi the international cooperation possibilities worsened over the 2015 summer as the geopolitical situation in the Arctic worsened. Small steps and discussions were taken to exchange salmon data and interestingly enough, the previous cycle of Snowchange work in Ponoi watershed had resulted in public discussions of re-establishing now-abandoned river communities such as Ponoi[[10]](#footnote-10).

**3. Results of the horizon scan of existing formats/forms being used in Finland if you have had time to undertake this already, and - a description of any progress you have had on**

During the summer a horizon scanning of existing templates/standards for the collection and communication of indigenous and local knowledge of resources was taken.

The results will be fully reported in December, but the only comparable view so far had to do with the catch statistics forms, collected by the LUKE[[11]](#footnote-11), natural resources center on fish and hunting statistics. Their collections do not affect governance or reforms.

**4. Proposed or actual management actions that have emanated from the use of the forms in the project areas**

Nordic Resource Management: Finnish Component was planned to flow into progressive, existing structures of governance to provide international experiences and survey of how they work.

In Jukajoki the Nordic cooperation enhanced the documentation of both professional and subsistence harvest of fish stocks and seems to allow deeper assessment of weather changes and limnological water quality. The management of the ecological restoration of the river has the hallmarks of a co-management regime, so the Nordic initiative complements this direction.

In Näätämö there is an existing, formal co-management project initiated by the Skolt Sámi and research NGOs. The overall aim is to reform and renew the watershed governance towards better reflecting Sámi land and water uses and cultural rights.

It has been in operation now for its fifth year. The Sámi involved welcomed the Nordic participation and cooperation to further document their observations and catches.Formal recognition to the co-management steps from Sámi side took place in May 2015 at the annual meeting of the Sevettijärvi Skolt Sámi village Council. The Council decided to “*start cooperation with the Näätämö Co-management project and thus advance the Skolt Sámi participation in issues of status of river Näätämö, culture, revitalisation of traditional fisheries and to reform the dialogue with the state authorities*.”

Problems of management in Näätämö are reflective of the overall situation of ‘local and Indigenous’ governance in Finland. It does not exist. Therefore state authorities, such as Metsähallitus and ELY will deny, and refuse all initiatives towards this direction.

A focal point of the Nordic cooperation will be in addition to the observations that have been documented on forms, the restoration attempts of the Vainosjoki sub-catchment area. The co-management project has submitted a request for small funds to restore a salmon spawning gravel sites along Vainosjoki. The application is in and decisions on it are expected towards November.

In summary it can be said that the Nordic initiative is seen locally very positively and the forms can produce a partial view of harvest / observations / governance flow. However, the fishermen involved strongly advocate for complementary methods, such as oral history documentation and mapping to further offer a better view of their self-governance and monitoring efforts along these rivers.

1. *Abramis brama* [↑](#footnote-ref-1)
2. *Leuciscus idus* [↑](#footnote-ref-2)
3. *Oncorhynchus mykiss* [↑](#footnote-ref-3)
4. *Esox lucius* [↑](#footnote-ref-4)
5. *Thymallus thymallus* [↑](#footnote-ref-5)
6. *Salmo salar* [↑](#footnote-ref-6)
7. *Coregonus lavaretus* [↑](#footnote-ref-7)
8. *Salmo trutta trutta* [↑](#footnote-ref-8)
9. *Lota lota* [↑](#footnote-ref-9)
10. See more at <http://www.snowchange.org/pages/wp-content/uploads/2015/02/Snowchange-Discussion-Paper-6-.pdf> [↑](#footnote-ref-10)
11. [www.luke.fi](http://www.luke.fi) [↑](#footnote-ref-11)