

Project information

Project title

Contaminants, food- and health security in the border region of Norway, Russia and Finland

Year

2013/2014

Project leader

Eldbjørg S. Heimstad, NILU

Participants

Project leader: Eldbjørg S. Heimstad (NILU)

Participants:

- NILU/UiT: Torkjel Sandanger
- University of Tromsø (Gunhild Hoogensen, Erik Anda)
- Akvaplan-niva (Anita Evenset and Guttorm Christensen)
- NORUT (Eirik Mikkelsen, Anne Normann)
- Statens strålevern (Anna Nalbandyan, Inger Eikermann)
- County governor Finnmark
- University of Oulu, Northern and environmental issues, Finland
- Finnish Meteorological Institute, Finland
- The Northwest Public Health Researcher Center, St Petersburg, Russia
- Murmansk Country Birth Registry (MCBR), Murmansk, Russia
- Institute of the Industrial Ecology Problems of the North KSC RAS, Apatity, Russia

Flagship

Hazardous substances, Theme: Risk communication

Funding Source

Fram Centre, Kolarctic, Troms fylkeskommune, Ministry for climate and environment

Summary of Results

The flagship financing is a partial financing of own contribution for the Norwegian participation in the Kolarctic ENPI project “KO467-Food and health security”.

Partners have during the first half year worked with a literature report (Deliverable 1) on the knowledge status of food safety and health in the border region of Norway, Russia and Finland. In addition, partners have developed and produced a common questionnaire survey (Deliverable 2) for all three countries. During late summer and autumn 2013 comprehensive sampling of local harvested food items were carried out for contaminant analyses. Huma samples are arranged as part of Birth registries in all three countries. In addition the questionnaire survey and interviews was initiated and accomplished during autumn 2013 in all three countries.

For the Management

We hope that the expected results next year of the survey questionnaires on risk perception of pollution and food safety in the local communities will give valuable information to managers and research communities in all three countries about how people perceives pollution risk in the areas near local/regional industries. Further the investigation of pollutants in important locally harvested food will give managers, politicians, researchers and people important knowledge on food safety, for instance if the contaminant levels are below or exceeding existing maximum limit for specific pollutants in food items.

We want to answer the following:

- Is the local food contaminated? – game, fish, berries
- If so - in what regions is this the case?
- To what extent do people actually eat this food?
- Who are they?
- Are people concerned about this, and has this influenced their use of local food?
- Social and physical aspects, using the nature

- What contaminants are people exposed to through local food?
- What is the levels of contaminants in people?
- Identify potential health effects for future studies

Published Results/Planned Publications

Literature review reports.

- NILU report OR 40/2013: "Health and environmental impacts in the Norwegian border area related to local Russian industrial emissions. Knowledge status". Torkjel M. Sandanger (UiT/NILU), Erik Anda (UiT), Tore F. Berglen (NILU), Anita Evenset (Akvaplan-niva), Guttorm Christensen (Akvaplan-niva) and Eldbjørg S. Heimstad (NILU)
- Kolarctic-ENPI: Food and human security in the Norwegian, Russian and Finnish border regions: linking local industries, communities and socio-economic impacts." Literature review: Environmental contaminants in Inari region." Päivi Myllynen and Arja Rautio. Center for Arctic Medicine, Thule Institute, University of Oulu, PO Box 7300, 90014 Oulu, Finland
- In progress: the risk of radioactivity exposure of the population in the border region due to consumption of local food items such as berries, mushrooms, freshwater fish and reindeer meat.

Communicated Results

- Project "KO467- Food and health security" presented By Tore F. Berglen, Workshop at Bioforsk Svanhovd on 'Air pollution – Terrestrial effects' May 6-8th 2013: Information and publicity from the meeting and the project in local newspaper "Sør Varanger avis"
- Project "KO467- Food and health security" presented by Eirik Mikkelsen at the Calotte academy, arranged by Gunhild Hoogensen, Tromsø May 20 2013.
- Project "KO467- Food and health security" presented by Eldbjørg Sofie Heimstad at the Barents Health conference, Kirkenes, September 12 2013.

Newspaper "Sør-Varanger avis":

[Nå skal multebæra granskes](#)

08.05.13

Det forskes stadig på de biologiske forholdene i grenseområdene. Nå skal også maten, deriblant multebæra, under lupen.

[Undersøker fisk, krabbe, vilt og bær](#)

27.08.13

Det er ikke bare hobbyfisking og -jakt som foregår i Pasvik-området. Det fiskes og plukkes også i forskningsøyemed. På alle sidene av grensa prøver man å finne ut hvordan mat- og naturtilstanden er.

Interdisciplinary Cooperation

The project is a true inter-disciplinary cooperation with the following disciplines:

- Epidemiology (human biomonitoring, birth registries)
- Ecotoxicology
- Ecology
- Environmental Chemistry
- Social sciences
- Human security, risk communication
- Socio-economic sciences

Budget in accordance to results

The Fram Centre funding helped the project with national Norwegian co-financing to external funding from Kolarctic and Troms fylkeskommune. This specific own financing was necessary in order to get the project approved.

Could results from the project be subject for any commercial utilization

No

Conclusions

2013:

- Common questionnaire for risk perception of pollution to be used in the border region of Norway, Russia and Finland
- Joint sampling of game, fish, berries and mushrooms and humans, contaminant analysis in food items and humans (birth registries) in the border region

Expected impact after 2014:

- Communication and dissemination of information and results from the project to stakeholders, decision makers and the general public.

Recommendations and joint actions towards future environmental and health projects, monitoring and regulations.