STØTTET AF

Promilleafgiftsfonden for landbrug

Mid-term report and review – May 31, 2020
Case Areas level (CA)

CA Leaders

No.	Name	Leader
1.	Kutno County case area, Poland	Katarzyna Izydorczyk
2.	Zuvintas Reserve and agriculture case area, Lithuania	Elvyra Miksyte
2.	Gurjevsk case area, Kaliningrad, Russia	Irina Popova
3.	Jelgava case area, Latvia	Ingars Rozitis
4.	Pöltsamaa case area, Estonia	Kaja Peterson
5.	Ljuga River case area, Leningrad, Russia	Mikhail Ponomarev
6.	Southern Finland drainage case area, Finland	Mikko Ortamala
7.	Result-based payments scheme case area, Sweden	Emma Svensson
8.	Västervik case area, Sweden	Gun Lindberg
9.	Odense case area, Denmark	Frank Bondgaard

Name of CA and location

Southern Finland drainage case area, Finland

Name of CA leader and rapporteur:

Mikko Ortamala

Names of contributors to the mid-term review:

Mikko Ortamala, Olle Häggblom, Helena Äijö

Status of report

In working progress: Yes
Finalized/closed and date: No still open

Report:

1. What is the CA objective in bullet points? (max 2000)

Practical work • Have contacts with farmers and co-operate with municipalities, water protection associations, authorities and other representative bodies of the agricultural sector, including researchers and contractors

- Identifying the most problematic nutrient outflow areas ("hot-spots") as well as fields suffering from poor water management (spatial analysis)
- Identifying regional problem situations and finding solutions to improve water management with landowners (farmers)
- Coordination of drainage and water protection measures together with different cooperatives
- Provide knowledge and advice on practical structural mechanisms and construction techniques

Development work

- Develop, promote and implement an activity model for catchment area restoration in co-operation with stakeholders (i.a. landowners, planners, farmers, authority officials), a tool for practical implementation of the national strategy for water management.
- To act as a link between practical cultivation, agricultural measures, water management, national political work and BSR-co-operation in water related issues
- Produce information on water managements challenges as well as good methods and practices for catchment area restorations both nationally and at Baltic Sea Region (BSR) scale (compiling and distributing information from implemented projects)
- Develop and pilot new methods to mitigate environmental damage (fisheries, benthos) during construction phase of water management projects together with stakeholders
- Collaboration and sharing of knowledge with the educational institutions (universities, polytechnics and vocational schools)
- Promotion of water management and soil structure measures, as well as growth condition, to improve productivity and reduce load → water management as part of normal cultivation planning

2. Describe the key elements of your CA and progress of work until end of P3. (max 6000)

ProAgria Southern Finland (Drainage Center of Southern Finland) has improved and promoted a method for Catchment area based holistic water management together with stakeholders (local authorities, spatial planners, farmers and landowners, municipalities, water protection associations, ministries) in Southern Finland drainage case area.

Numerous co-operation meetings and workshops have been organized to develop national implementation of the catchment-based model on a regional basis. The project has been presented at several educational events for water management planners, farming advisors and farmers

Several reports have been prepared at the request of the WP leaders examining the current status of catchment-based water management in Finland for the project guidelines to the Baltic Sea Region. Reports have been prepared concerning policy recommendations (WP4), case area, success stories, action plan and project planning, improving of national water management, wetlands, working with focus groups, and new services in water management.

At local level the possibilities, good practices and challenges of holistic water management have been presented and investigated in the catchment areas of the River Porvoonjoki and Karjalaiskylä/ Gammelbacka brook. Co-operation meetings have been organized to develop implementation of catchment-based water management together with the local authorities, spatial planners, farmers, municipalities and water protection associations including River Porvoonjoki implementation committee and Drainage corporate bodies. Planned measures to be implemented at the site at Karjalaiskylä/Gammelbacka include holistic methods: normal basic drainage maintenance, two-step ditches, constructed wetlands for management of agricultural waters / urban runoff and biodiversity, down streams fisheries structures and city infrastructure are also taken into account.

The Finnish Field Drainage Association has observed water management and -protection projects (Raasepori river-project and the 4K-project) as sources of information for the Waterdrive project as well as for the development of the national water management strategy for agriculture and forestry. Farmers, landowners, officials and project coordinators have been interviewed in order to get a deeper understanding of systematical bottlenecks as well as good solutions and practices when it comes to implementing agricultural water management and protection measures.

The interviews and the observing of projects have focused particularly on measures that ensure a win-win situation for farmers and the environment. Wetlands are being implemented in both projects as a method of improving the ecological status of the waters in agricultural areas. The implementation of measures that benefit the environment and how they can be implemented alongside measures that benefit agricultural production have been of special interest in the interviews.

Due to the cross-sectoral nature of water as well as the multiple objectives related to water management in agricultural areas (agricultural production, drainage, biodiversity , landscape, recreation, climate change mitigation and adaptation), we need to develop processes, methods and practices where water management and -protection can be planned in a multisectoral and including manner. Only this way can we ensure that the multiple objectives are met in a sustainable way.

Currently, there are several pilot projects in Finland where a catchment-based, holistic approach to solving water related issues is being tested. However, the pilot projects are often short-lived and implemented all over the country without more precise targeting in order to achieve the best results. We need to learn from the projects currently being implemented (Waterdrive being one of them) in order to improve the established processes on a national level, in order to gain the geographical extent and effectiveness needed in order to solve water related issues on a larger, national and BSR-scale.

Both ProAgria Southern Finland (Drainage Center of Southern Finland) and the Finnish Field

Drainage Association have participated in the development of a national strategy for water management in agriculture and forestry (published on May 4th, in Finnish (English translation will be published in July): https://julkaisut.valtioneuvosto.fi/handle/10024/162211) Bottlenecks and development proposals gathered from several water management projects has been contributed to the development of the national water management strategy.

3. Describe the final CA outputs like (focus groups, implementation plans, investment plans and other). (max 6000)

The project has stimulated the start of catchment-based renovation in the area of various regional ELY- centers (regional authorities: Centre for economic development transport and the environment). The targeted systematic approach has been found interesting and necessary by participating members. Work to determine the target areas ("hot-spot" risk areas) has begun in Häme region. The project provides information on holistic water management at various levels to farmers, drainage corporate bodies, voluntary organizations, municipalities, ELY-centers and the ministries. The goal of the project is announced in various cooperation groups.

The project has improved activities in various problem areas and provided farmers with information concerning problems related to unworkable water management, poor soil structure and growing conditions. Farmers have been aware of the problems but have not been able to solve the problems by themselves. The planning has been done separate from the project work and the funding is organized through various funding possibilities and existing support schemes.

The Waterdrive project has created a number of other local projects that are being implemented on the principles of holistic water management.
One aim is to investigate possibilities to create new funding for regional and local holistic catchment area renovations. The goal is to improve and implement the measures of holistic water management in problem areas in a more effective and systematic way.

The Waterdrive projects has also influenced the development of the national strategy for water management in agriculture and forestry through the contact to other BSR countries and discussions related to water management with both international as well as national project partners. The publication will work as a guideline for further development work, aiming to affect processes such as the national CAP-plan, national water management-related subsidies as well as the implementation of the government programme 2020-2023.

Agricultural water management in different BSR-countries differ to a certain extent

from each other, but are still connected through the EU, the BSR community as well as history in some cases. The climatological and environmental challenges that the agriculture face in the different BSR countries are still to a high degree similar, which makes dialogue and learning from each other a very important aspect of the Waterdrive-project.

4. Please, list the five most <u>important experiences</u> from your work in the CA that you would like to share with the Waterdrive target groups. (max 3000)

1. Häme ELY-center's way to start targeted holistic catchment area renovations
2. Create local holistic water management projects
3. Activation of farmers and landowners with local projects
4. Combining the objectives of urban waters, agricultural waters, runoff from forestry areas and fisheries in the catchment area
5. Combining the expertise of different parties and developing co-operation
6. Learning about how water management processes work in different BSR countries as well as meeting representatives from all BSR countries
7.
8.
9.
10.

5. What makes your CA unique in relation to the other CAs we have in Waterdrive?

Improving a holistic approach at different levels from governance to practice. Meeting multiple water-related objectives: the needs of the agricultural production while at the same time improving the conditions for biodiversity and climate change adaption and mitigation. The Finnish context.

6. Please, list what you consider the five most important <u>innovations</u> (technological or methodological) that can bring added value to water management in agricultural landscapes of the Baltic Sea Region.

1. Holistic catchment area renovation
2. Activity model for improving the implementation of holistic catchment area renovation
3. Catchment officers
4. Improving the objectives of urban waters, agricultural waters and fisheries in

regional and local level
5. Methods of identifying the risk areas for targeting the measures of holistic water and soil management
6. Water management technologies that enables win-win situations, such as two-step ditches, controlled drainage, structural lime. The farmers and landowners, who are arguably the most important stakeholders, wants to implement measures that benefit them also economically.
7.
8.
9.
10.

7. List some unexpected outcomes from the Waterdrive cooperation so far. (max 3000)

1.
2.
3.

8. Estimate how the workload in your CA is distributed over time by estimating workload in % by Period?

Period 1-3:	33 %
Period 4:	33 %
Period 5:	34 %
Total:	100 %

1. List and motivate any changes required in P4 and P5 compared to descriptions in the original application. (max 3000)

Change desired	Motiv

2. List the most important agri-environmental measures you work with in the case area.

1. Basic/Arterial drainage - Ensuring a deep enough drainage depth in order for the moisture content of the agricultural fields to be optimal for crop growth - A well-functioning basic drainage is prerequisite for a well-functioning local drainage (subsurface drainage).
2. Local drainage - Local drainage improves the growth conditions of the agricultural fields and improves the soil structure especially in clayey soils. - Improved growth conditions enable a more efficient nutrient utilization by the crops, possibly lowering the nutrient balance of the field, thus

minimizing the nutrient leaching to the waters.
3. Soil structure and growing conditions
4. Agri-environmental water management structures - Two-step ditches / artificial wetlands implemented as a part of the basic drainage helps with promoting the biodiversity while also ensuring a sufficient drainage depth. The two-step ditch / sedimentation bonds / wetlands can also according to some studies require less upkeep, which is a further motivation for farmers to invest in it.
5. Waterbody renovations
6. Habitat restorations

3. List Waterdrive partners/persons and their roles/responsibilities in completing the CA outputs.

Persons/Partners	Roles/Responsibilities
Olle Häggblom Helena Äijö	Participate in the development and implementation of the water management strategy for agriculture and forestry and host related meetings and workshops for stakeholders and contributors. Attend meetings related to the observed/monitored water management projects and repot on their progress and key findings relevant for the Waterdrive project.
Kaj Granholm	Activity 5.3 leader. A5.3 will convene all local investment cases and draw lessons for the report on financing and economic rationale of catchment investments. Follow case area activities and take part in public stakeholder meetings and events whenever possible. A5.3 may conduct further targeted interviews with case area actors. Finnish representative in the PCT.
Mikko Ortamala Janne Pulkka	Combines production economics and environmental management at different levels and acts as an expert in practice. To act as a link between practical cultivation, agricultural measures, environmental measures and national political work. Provide knowledge of practical structural mechanisms and construction techniques.
Sirkka Tattari Kati Martinmäki-Aulaskari Jari Koskiaho	Participate in joint meetings of Finnish partners to promote the project both nationally and internationally. Produce data and spread knowledge on good water management practices for catchment area restorations. Develop and pilot new methods to mitigate environmental nutrient and erosion losses. Assess the efficiency of the measures.

4. Up-date the CA workplan for P4 and P5 by completing the below table/workplan. You find the Waterdrive master workplan on the SharePoint site.

Activities, bench-marks, deliverables, outputs	Deadline

5. Perform a SWOT analysis for the CA process as a management support for P4 and P5. List at least five considerations for each category.

Category	Considerations
Strengths	- The Southern Finland CA encompasses a quite wide range of partners, stakeholders and projects on many levels (practical level, policy level, regional, national, local) giving a broad background to the findings and recommendations.
Weaknesses	- The broad background correspondingly demands recommendations and outputs that take into account the many different levels, making it a difficult and complex task.
Threats	- Coronavirus pandemic has inhibited a large part of CA work, as no physical meetings are possible
Opportunities	- The coronavirus has improved the capabilities of keeping meetings remotely as opposed to physical meetings face to face. This might make contact between stakeholders more flexible in the future, and might save transportation costs and valuable time, as a part of the meetings can be held remotely in the future as well.

6. List the most important cooperation initiatives with Waterdrive groups of activities and/or case areas. (max 3000)

Group of activities/case areas	Type of cooperation
	Cooperation with research institutes
	Cooperation with the administration
	Cooperation with local actors
	Cooperation with financiers
	Cooperation with authorities

7. List the target groups most relevant for your CA results communication. (max 1000)

Target groups
farmers, drainage corporate bodies, voluntary organizations, research institutes, municipalities, ELY centers and the ministries

8. List the five most important elements in a participatory toolbox to support strong local action. (max 2000)

1. Identifying the risk areas for targeting the measures of holistic water and soil management
2. The concept of holistic catchment area renovation
3. Operating model for improve the holistic catchment area renovation
4. Understanding the different steps of the operating model
5. Understanding the goals of different parties

9. List the five most important considerations when it comes to leadership and coordination to support strong local action. (max 2000)

1. Identifying the needs of different parties
2. Identification of environmental requirements
3. Identification of requirements for the implementation of possible measures
4. Knowledge of funding possibilities and existing support schemes
5. Knowledge of the need for permissions

10. List the five most important policy recommendations to support strong local action. (max 3000)

1. Identification of the risk areas and allocation of measures / funding
2. Funding for Catchment Officer / improvement of holistic catchment area renovation
3. Supporting the planning of holistic catchment area renovation
4. Supporting the implementation of holistic catchment area renovation
5. Supporting the maintenance after renovation

11. Any other comments or issues?

New Services catalog describes the implementation of the process of holistic catchment area renovation from administration to practice step by step. The process describes the problem, the solution model for issues of holistic water management, the structure for operating the model into practice and the different steps of

practical implementation. In Finland, the issue of improving the implementation of targeted holistic catchment area renovation must be resolved. What does the catchment officer concept mean in Finland?

Attachments:

a. Catchment area renovation _ Holistic water management planning (PPP)
b. Renovation of River Loviisanjoki Catchment Area - Sub-Catchment of Hardombäcken ditch (2018) https://www.youtube.com/watch?v=jnp31upnNyo