

FINLAND

Main results of the focus groups in case area < Farmers / land owners, Water protection association, Municipality of Porvoo >

Summary (short description)

Introduction of different drainage management measures to the farmers is easy, when the problems can be addressed. Most of the farmers have a strong motivation to renovate their fields or local waterbodies. Quite often the farmers recognize the problems, but cannot spontaneously find their resolutions. Most of the drainage corporatives are not active and drainage stewards have not been nominated. This causes delay of renovation and separate stakeholder find the restart difficult, because they do not know, to whom they should contact. This is why the stakeholders try to renovate short proportions of the channel on their property, and the results are not desirable. Renovation made by local part-time contractors together with the land owners give mainly bad quality results. One of the major bottlenecks is that farmers are unaware of the financial support possibilities, workable policies and methods and the benefits of a systematic planning approach.

Main tasks/goals of the focus groups

Provide information on workable policies and methods, financial support options and measures. Most important is that farmers are aware of how problems can and should be solved over the long term. It is essential that farmers realize the benefits of a systematic planning approach that takes into account both economic aspects and the environment. We have too little focus in information compared to expectations of implementing measures.

Strategic planning of focus groups (what to do when and how?)

- 1) Nationwide study on the most difficult nutrient outflow and weakest productivity risk areas by modeling, measuring and basic data studying for every province.
- 2) Establish an info system for farmers, where they can obtain knowledge on subsidies and grants for the measures together with methods and operations of drainage management, laws and acts, benefits and opportunities of the measures.
- 3) Regionally choose the catchment areas and waterbodies to renovation, based on the results of the risk assessment. Dependent on the size of the waterbody do an assessment if there should be established a cooperation group, negotiation committee or other combining organization, if there is not any. The organization should include authorities, local cooperatives, foundations, nature or water conservation NGOs, planners, contractors, scientists, advisors and local stakeholders. An organization coordinating the actions should be chosen, for example local water conservation association or other analogous. The objective is implementation of the renovation extensively and comprehensively, both on the catchment area and on the waterbody. Each member of the organization is responsible their operational part and financing for the actions and management will be applied together or separately.

- 4) The members of the organization clarify together with the municipalities, advisory organizations and local stakeholders the landowners of the most difficult risk areas, for targeted information delivery. This can be utilizing the old data and mapping of beneficiary areas of drainage corporative bodies of ELY-centers or Province archives, and also property register of the National Land Survey.
- 5) Drainage planners compose the drainage needs assessment, study on basic situation and feasibility study of possible water protection constructions together with the land owners. This includes also other possible measures, such as improvements on fishery perspective, improvement of recreational values etc.
- 6) After needed basic studies, measurements and mappings should the local drainage corporative body be activated, in the case of actions targeted to agricultural areas. For decreasing of internal loading or other water management actions should be activated some other organization who is responsible, such as joint property management association (= "landowner cooperative for water management") or water conservation NGO and decide the implementation of the actions, needed for the renovation.
- 7) Compose the final plans, complete the needed assessment for the authorities, get needed licenses, ensure financing and do the procurement of contractors.
- 8) Exact marks to the sites, such as marker poles. Survival of the works.
- 9) Compose a wider regional action plan and maintenance plan to ensure the implementation and financing of possible needed additional actions, including also maintenance of the constructions in future.

The implementation is a joint activity of different stakeholders, based on commitment of the landowners. Drainage management of agriculture should be included to crop planning. This is a tool to introduce drainage management to farm level, as a part of normal crop production practices. Different projects can further on act with development of methods and practices, promotion of the approach and composing the regional risk assessments. Anyhow, the actual renovation work according to holistic drainage management should be implemented utilizing different and more sustainable subsidies and grants for agriculture and water protection.

Focus group meeting 1 (Farmers / land owners)

- **The main purpose of the meeting**
 - Explain the need for action in the case area and show the results of preliminary measurements and together consider options for possible measures
- **Participants**
 - Farmers / land owners, Municipality of Porvoo and Drainage Center of Southern Finland
- **Main inputs made for the future work in the case area**
 - It was decided to continue the planning process with the landowners and the city. It was also decided to update the old drainage plan and make decision on holistic solutions for environmental measures, fisheries and agricultural drainage. In addition, there will be considering for possible measures for urban runoff and recreational landscape solutions in the case area. Next main work is updating the drainage corporate body rules, cost allocation, shareholder list, drawings (surface map, slittings and cross-sections) and cost estimations. Later, a new meeting will be congregated to decide on contracting and implementation issues.
- **What we learned from the focus groups meeting**

- **What worked great?**
- The best results can be achieved by carefully pre-planning (surveying and measuring before the meeting) and giving the landowners concrete details of the problems, possibilities and possible measures, as well as costs. Farmers are interested in productivity and the economy, so measures must be beneficial for both a production economy and environment. Information and transparency are essential throughout the project. In the end farmers are making a decision for the implementation of the measures on their land, so the top-down approach does not work. The cooperation will bring the best results. Knowledge of the practices and requirements in agriculture and in the environmental sector are essential. Cooperation with stakeholders (drainage corporate bodies, authorities, fishery practitioners, foundations, associations, planners, contractors, scientists, advisers, farmers and land owners) is very important.

- **What might be improved at the next meeting?**
- Information is essential throughout the project and there is always something to improve.

- **Special needs?**
- All co-operation groups should have sufficient knowledge of the practices and requirements for both agriculture and environmental sector. It is important that different parties understand each other viewpoints so that a win-win solution can be made. Sometimes compromises may have to be made on both sides, but in the end there must be consensus and common interest.

- **Possible actions and improvements before and during next meeting**
- Work together with the Drainage corporate body, the City Representative and the local Water protection association, as well as scientists and authorities, to determine the best possible solutions and measures for the next meeting when decisions for implementation will be made.

- **The main purpose of the meeting**
 - Explain the need for actions in the case area and show the results of preliminary measurements and consider together of options for possible measures, discuss about the role of the city in the project and its objectives in the case area of agricultural water protection and urban runoff and its role as a member of the drainage corporate body.

- **Participants**
 - Municipality of Porvoo and Drainage Center of Southern Finland

- **Main inputs made for the future work in the case area**
 - A contact person of the city was appointed for the project. Cooperation will be flexible.

- **What we learned from the focus groups meeting**
 - Personal meetings and creating an operation model are very important for future projects. Knowledge of the goals and practices of different stakeholders and the exchange of ideas will essential. It is also important to get to know your colleagues and partners on a personal level.

 - **What might be improved at the next meeting?**
 - Discuss and seek alternative solutions to urban runoff measures and recreation values

 - **Special needs?**
 - All co-operation groups should have sufficient knowledge of the practices and requirements for both agriculture and environmental sector. It is important that different parties understand each other viewpoints so that a win-win solution can be made. Sometimes compromises may have to be made on both sides, but in the end there must be consensus and common interest.

- **Possible actions and improvements before and during next meeting**
 - Work together with the Drainage corporate body, the City Representative and the local Water protection association, as well as scientists and authorities, to determine the best possible solutions and measures for the next meeting when decisions for implementation will be made.

Focus group meeting 3 (Water protection association_ Itä-Uudenmaan ja Porvoonjoen vesien- ja ilmansuojeluyhdistys r.y.)

- **The main purpose of the meeting**
 - Explain the need for actions in the case area and show the results of preliminary measurements and consider together of options for possible measures, discuss about the role of the association in the project and its objectives in the case area of agricultural water protection and fishery.

- **Participants**
 - Water protection association and Drainage Center of Southern Finland

- **Main inputs made for the future work in the case area**
 - Discuss and seek alternative holistic solutions for environmental, fisheries and agricultural drainage.

- **What we learned from the focus groups meeting**
 - Personal meetings and creating an operation model are very important for future projects. Knowledge of the goals and practices of different stakeholders and the exchange of ideas will essential. It is also important to get to know your colleagues and partners on a personal level.

 - **What might be improved at the next meeting?**
 - Longer and closer cooperation will be planned across the entire operation area.

 - **Special needs?**
 - All co-operation groups should have sufficient knowledge of the practices and requirements for both agriculture and environmental sector. It is important that different parties understand each other viewpoints so that a win-win solution can be made. Sometimes compromises may have to be made on both sides, but in the end there must be consensus and common interest.

- **Possible actions and improvements before and during next meeting**
 - Work together with the Drainage corporate body, the City Representative and the local Water protection association, as well as scientists and authorities, to determine the best possible solutions and measures for the next meeting when decisions for implementation will be made.

Results (actions, measures, ideas, products, etc)

There are a number of different agro-environmental measures whose synergies are most important in water protection. Holistic agro-environmental water management includes a combination of activities of basic and local drainage and runoff management (including constructed wetlands and urban runoff), taking into account biodiversity and fisheries needs. Holistic water management is aimed at eliminating floods and wetlands and improving soil structure and growth, and thereby reducing solids and nutrient loads. The integrated approach seeks to achieve simultaneous productivity growth and to secure water and nature management, and to reconcile productive and environmental management.

Possible measurements in holistic agro-environmental water management:

Basic drainage

- Maintenance of the ditches
- Enable local drainage
- Constructions for control of the water levels at summertime
- Two-stage ditches

Local drainage

- Subsurface drainage systems
- Improved management of surface flow (lime filtration drainage)
- Drainage flow management, controlled drainage (control wells)
- Possibilities to sub surface irrigation (water reservoirs, ponds, pumping of additional water)
- Service and maintenance of underground drainage (flushing)
- Field levelling
- Soil structure improvement (mechanical, substrate additions, amelioration, soil reclamation)
- Farm level flow control of production premises (storage sites, outdoor paddocks, washing sites, etc.)

Environmental water management and runoff management

- Constructed wetlands, sedimentation ponds
- Bottom thresholds, dams and adjustable dam constructions for controlled adjustment of summertime water level
- Flood protection (embankments, pumping, flood ledges)
- River and lake restorations (fishery, benthos)
- Biodiversity

Conclusions

Large-scale and holistic drainage management and maintenance demands a clear division of roles for different stakeholders. Planning has been relocated from authorities to private service providers and advisory together with guidance is transferring to advisory organizations. Juridical review remains to state authorities and province administration are taking over the financial subsidizing. There is a need of a clear “command chain” from the catchment area to water bodies. The links of this chain would be drainage cooperatives, authorities, fishery regions, land owner cooperatives, foundations, associations, planners, contractors, scientists, advisers, farmers and land owners. Responsibility of actions could not remain to separate actor of the chain, but we need an operative set. Everyone should have a clear approach, which leads the activities towards operational

basic and local drainage including surface water management. As a result should be the good status of waterbodies according to the demands of Water Framework Directive. Catchment area wide cooperation groups, negotiation committees and foundations which coordinate the projects have been solutions adapting and combining the actors, enabling the formation of operative chain.

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