



Water-driven rural development in the Baltic Sea Region No. R094
WATERDRIVE

Swedish National Pathway

*National competence center for
sustainable water management in the
agricultural landscape*

2021 - 2030

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Project Partners

Sweden	Swedish University of Agricultural Sciences
Sweden	South Baltic Water District Authority/Kalmar County Administrative Board
Sweden	Swedish Board of Agriculture
Sweden	Västervik Municipality
Lithuania	Baltic Environmental Forum Lithuania
Finland	Natural Resources Institute Finland
Finland	Finnish Environment Institute
Finland	ProAgria Southern Finland
Finland	Finnish Field Drainage Association
Estonia	Stockholm Environment Institute Tallinn Centre
Latvia	Jelgava Local Municipality
Latvia	Latvia University of Life Sciences and Technologies
Latvia	Union Farmers' Parliament
Poland	Agricultural Advisory Service in Brwinow
Poland	European Regional Centre for Ecohydrology
Poland	PhenoHorizon OLP SP. zO.O.
Germany	Agency for Agriculture, Environment and Rural Affairs of the German Federal State Schleswig Holstein
Denmark	L&F SEGES
Russia	Northwest Research Institute of Agricultural Economics and Organisation (NWRIAEO)
Russia	Institute for Engineering and Environmental Problems in Agricultural Production – branch of Federal State Budgetary Scientific Institution “Federal Scientific Agroengineering Center VIM (IEEP)
Russia	Administration of Guryevsk city district



List of content to be elaborated

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Summary

Within EU-Interreg Waterdrive, partners from all countries around the Baltic Sea work to share knowledge and experiences about agricultural water management. In order to pass on lessons learned from Waterdrive to future projects, each country has developed so-called Pathways for priority areas in national contexts. The Swedish partner group consists of representatives from the Swedish Board of Agriculture, the Swedish Agency for Marine and Water Management, the Southern Baltic Water Authority, Västervik Municipality and Swedish University of Agricultural Sciences.

The need for innovation and coordination at and among authorities and in the local action work increases when several targets are to be combined in the agricultural landscape. This applies to targets about climate, water quality, water management, biodiversity, food safety etc. The group proposes that a National Competence Center for Sustainable Water Management will be established. The center shall be under the responsibility of relevant authorities, highlight the needs that exist among authorities but also cooperate closely with users and other actors in the agricultural landscape.

Introduction

Agricultural water issues are not just production and eutrophication. In order to succeed in achieving global sustainability goals and national environmental goals, all aspects of water in the agricultural landscape need to be involved as well as management of the use, utilization and conservation efforts. Landscape diversity with open water surfaces and transition zones between fields, forests and water creates more space for biodiversity. Climate measures and climate adaptations are about how water can be stored in the landscape so that the effects of extreme weather events are less and that there is enough water when agriculture needs it. Sustainability is also that the countryside is viable and the farms profitable.

Within EU-Interreg Waterdrive, partners from all countries around the Baltic Sea work to share knowledge and experiences about agricultural water management and water management. The project will end in 2021. To pass on lessons learned from Waterdrive to future projects, each country has developed so-called Pathways for issues that they see as important. The Swedish partner group consists of the Swedish Board of Agriculture, the Swedish Maritime Administration, the Southern Baltic Water Authority, the municipality of Västervik and SLU.

Need for better precision in choice of measures, location and follow-up

In order to achieve more and more site-adapted measures in the landscape and a higher degree of multi-functionality, more knowledge is needed about the function and effect of measures under different conditions. There is also a need to develop working methods to select, locate and follow up the overall effect in the landscape. Today, large resources are invested in implementing measures, but few in planning and follow-up. There is also little connection between measures for different needs.

Need for increased cooperation between authorities

Today, the government commissions authorities to work with specific issues within sustainable water management in the agricultural landscape. The Swedish Environmental Protection Agency is responsible for environmental monitoring of the properties of agricultural land and nutrient leaching from agriculture in some example areas. The Swedish Agency for Marine and Water Management (HaV) is responsible for environmental monitoring of major watercourses, while county administrative boards, municipalities and water organizations monitor other types of watercourses. HaV is also responsible for the implementation of the Water Framework Directive and reporting to the EU, while the Water Authorities ensure that water management is carried out by county administrative boards and municipalities. The Swedish Board of Agriculture ensures that Sweden implements the EU's agricultural policy with, among other things, measures against nutrient leaching and for biological diversity.

Much is being done, but there is a lack of an overall approach to the role of water management in the agricultural landscape. This means that many questions end up between the chairs. For example, what a systematic monitoring of surface water and groundwater in the agricultural landscape can look like, what are reasonable background levels for nutrient status in agricultural watercourses, how can methods for planning measures at local, regional and local level be coordinated so they are comparable, in what way should knowledge of environmental and climate measures be integrated and developed, what methods are needed for systematic follow-up after implementation, etc. From a policy perspective, water has a major impact on other overlapping policy areas such as climate, environment and food safety.

The authorities are currently tasked with collaborating with each other on specific issues and projects, but a continuous and freer form of cooperation for knowledge sharing and identification of common needs and solutions is lacking.

There is also a gap in communication between authorities at municipal, national and even EU level. The experience and knowledge that exists locally in municipalities and with landowners and users also needs to be disseminated better to authorities so that policy instruments are adapted so that they provide the greatest benefit to society, the environment and the user. A summary experience from Waterdrive, which applies to all countries around the Baltic Sea, is that more effective talks, a holistic view and leadership are needed. Water in the agricultural landscape is a complex issue and the need for knowledge is great when more target images are to be combined. A competence center for water management in the agricultural landscape shall support the authorities in that process.

Already in progress

Between municipalities and also between water organizations, there is more experience of working together to solve common problems. In a similar way, a knowledge platform is now being developed where LEVA coordinators who work with coordinating local action work learn from each other and share experiences. There are also many more existing forms of collaboration, dissemination of knowledge and competence centers, such as Greppa Näringen's newsletter which fulfills an important function for knowledge transfer in agriculture, as well as the Swedish Board of Agriculture's competence center for sustainable water management in agriculture that gathers knowledge about land drainage and wetlands. The Hydrotechnical Society has been working for a long time with practical and legal issues concerning soil drainage.

Suggested Pathway

By working across authorities to identify needs and find solutions while anchoring with other actors and stakeholders, the conditions for more effective action work increase.

The proposal from Waterdrive is to:

- establish a national competence center for sustainable water management in the agricultural landscape

Finding forms for this type of collaboration is in itself a challenge, but by creating a new and complementary way of collaborating, better conditions are created for innovation in many other applications (Figure 1).

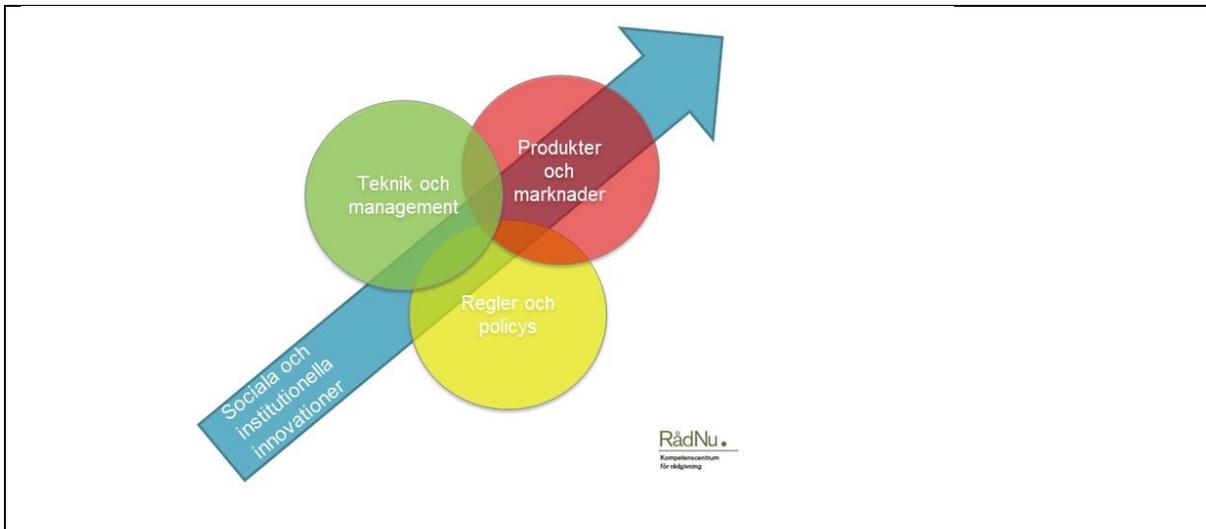


Figure 1. Social innovations create conditions for the development of technology, products and policy (SLU RådNu, Magnus Ljung).

Actors from local to national level

The competence center brings together authorities from the local to the national level and also collaborates with organizations that represent the agricultural industry, nature conservation, water councils, etc.

In order to be able to actively participate in the competence center and thereby provide conditions for development to take place, resources need to be available from participating authorities. It is also necessary to be given a mandate to work with issues that are broader than one's own business.

Sustainable water management in the agricultural landscape integrates many needs and interests

The proposed national competence center covers the subject of sustainable water management in the agricultural landscape. This means that the focus is on water quality and water management, but that issues of production, biodiversity and climate are also included. The national competence center must be

characterized by and take initiatives based on a holistic view of water management in the agricultural landscape.

Knowledge sharing and innovation

The competence center functions as a “think-tank” where the needs of participating authorities can be raised, developed and concretized. The center shall have its own resources for knowledge acquisition, for analysis of data and information. The center will not conduct research but instead coordinate research results both nationally and internationally. The center can also be a referral body. The center shall work closely with users and other actors in the agricultural landscape for effective feedback between needs and the exercise of authority.

Communication about ongoing activities and projects takes place on an ongoing basis so that the participants have knowledge of current issues and are involved. The communication takes place through newsletters about the competence center's activities but also by linking to relevant information from other sources.

Organization of the competence center

The competence center has a board and where the chairmanship travels around between participating authorities. For day-to-day operations, there is a secretariat that is also responsible for continuity. The financing takes place through the participating authorities having written in their regulation letters that they must participate in the competence center. The operating costs for the center are estimated at SEK 8-10 million per year. It is proposed that it be carried out as a pilot project for 5 years with external evaluation after 2 and 5 years.

Objectives - The network is established by 2030

- A national competence center for collaboration on the development of sustainable water management in the agricultural landscape is well established
- The competence center formulates, with the support of the relevant authorities, issues and solutions that are at the forefront of achieving several sustainability goals.
- The presidency travels between participating authorities and creates natural participation
- The competence center has a secretariat for information gathering, analysis, communication and day-to-day administration
- The competence center is financed by the participating authorities having the assignment written in their regulatory letters