

WATERDRIVE

Water driven rural development in the Baltic Sea Region

Executive Summary

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Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden

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2. Project Summary

Waters, ecosystems and local communities are under stress in the Baltic Sea Region (BSR), affected by high nutrient loadings and eutrophication. Responsible management of water resources in agricultural areas can reduce nutrient loadings by 30-50% and provide for healthier waters and more productive ecosystems. WATERDRIVE will enhance the opportunities and capacities for local authorities and communities in agricultural areas to reach such targets in a general context of sustainability and resource efficient growth.

WATERDRIVE is a pan-Baltic project with activities supporting transnational cooperation and actions in 8 countries: Poland, Lithuania, Latvia, Estonia, Finland, Sweden, Denmark and Germany. The experienced partnership is well anchored within the target groups, including local/regional authorities, agricultural advisory services, practitioners, farming communities and other water/land managers.

The project enhances local implementation practices for responsible water management, aiming to improve water quality and strengthen ecosystem services. Specifically, the project boosts capacity building in best practices for multi-actor implementation, facilitation by catchment officers, new technologies and decision support, spatial planning for precision water management, flood and drought management, and adaptation of policies and compensations systems. Activities are geared towards improving local implementation practices and achieving sustainable impact. The project does not focus on any specific measure or action, but provides tools and capacities for the target groups in order to optimise the management of their own water resources and ecosystems on a long-term basis.

National program evaluations, reviews by the European Court of Auditors, and HELCOM assessments indicate that there are major gaps in the realisation of water quality targets set by national and international directives, e.g. the WFD. The wide gaps reflect the lack of real opportunities and capacities for local authorities and communities to reach these targets and still develop a competitive rural business. WATERDRIVE aims to bridge this gap.

WATERDRIVE will combine environmental objectives with social and economic development objectives in rural areas. Project implementation requires a strong anchor within the target groups and simultaneous connections with the latest in innovation and research. This cross-sector implementation opens new opportunities for the target groups and enhances transnational cooperation. An inspiring possibility is the strategic adaptation of policies and compensation systems aiming to develop more cost-efficient agrienvironment programs and compensation systems. An example can be the adaptation of result-based payment systems.

Around 20 rural communities will be involved during project implementation; however, approx. 100 communities across the BSR are expected to implement WATERDRIVE's results in the 5-year post-project completion period.

3. Project Structure

WP1	Management and communication				
Lead: Swedish University of Agricultural Sciences					
WP2	Multi-actor implementation				
Lead: S	Lead: SEGES				
2.1	Best practices in multi-actor implementation				
2.2	Leadership and coordination development				
WP3	Advancing new technologies and methods				
Lead: Latvia University of Life Sciences and Technologies					
3.1	Accessibility to information about agri-environmental measures				
3.2	Multiscale decision support system				
3.3	Spatial planning in agricultural landscapes – methods and process				
WP4	Adapting policies and financing				
Lead: SEI-Tallinn					
4.1	Learning more about alternative policies and compensation systems				
4.2	Guidelines for testing policy instruments				
WP5	Strategic impacts and investments				
Lead: European Regional Centre for Ecohydrology					
5.1	Recommendations and strategies for water management in agricultural areas of the BSR				
5.2	Training and educational packages for the target groups				
5.3	Development of larger technical investment proposals				

4. Challenge to be addressed

The Baltic Sea is shallow and semi-enclosed, with a very long water exchange time of about 40 years. The varying brackish water conditions is challenging for all biological resources, and there are also high population centres in the drainage basin. For each person in the drainage basin there is not much more than an ordinary public swimming pool as a recipient for all anthropogenic effluents on an annual basis. Therefore, governments around the Baltic Sea must implement actions that are beyond what is required of most other European governments.

Reaching the sophisticated levels of water management needed to strengthen ecosystems in the BSR is indeed challenging and difficult for societies in general and local communities in particular. National program evaluations, reviews by the European Court of Auditors and HELCOM assessment all show that there are major gaps in the realisation of water quality targets set by national and international directives, e.g. the Water Framework Directive (WFD). The wide gaps reflect the lack of real opportunities and capacities for local authorities and local communities to reach these targets and still sustain a competitive rural business.

Recently published long-term data indicates that the ecological status is not improving, but in some areas is in fact deteriorating. However, there are also positive signs of recovery and improved water quality - a study performed in Sweden indicates that the capacity building and training efforts to minimise losses of nutrients from farms in parts of southern Sweden have been successful. There are also success stories of managing water resources jointly by local authorities and agricultural communities.

The challenge is to optimise the exact location of measures in the agricultural landscape. For example, a wetland in the wrong place costs as much to construct as a wetland in the right place. However, the difference in water quality improvements is drastic, with a factor as much as 1:10, depending on the location. This form of precision water management will save money for society but requires spatial planning and qualified decision support and can only be implemented with the knowledge and flexibility of local adaptations and regional support. However, in general local actors are not cooperating sufficiently enough across sectors and between actors, but there are also exceptional successful local cross-sector initiatives.

The question is what can we learn from these successful initiatives, and how can local actors be inspired and empowered to engage more in water management? The answer is probably found in a change of attitudes on several levels of society from local to national. There is not a lack of water management plans, nor a lack of biological and technical solutions, but there is a lack of success stories, financing and local level coordination and leadership. Without strengthening those essential elements of change and development, it will be difficult to reach the targets of the WFD and the HELCOM Baltic Sea Action Plan (BSAP).

WATERDRIVE bridges the gaps between high water quality targets set and real opportunities at hand for local authorities and communities. Local cross-sector water management practices, precision water management and transnational cooperation will be at the heart of the WATERDRIVE strategy. This strategy will come into action in the project pilot regions. Pilot regions have been invited to participate in the project through being a region/area with substantial problems related to loadings of nutrients, commitment to resolve the problems and, to some extent, available basic data and information to

facilitate a cross-sector dialogue on how to proceed. The pilot regions within WATERDRIVE are South West Finland, Southern Sweden, the Odense district in Denmark, the Schwentine-Holsteinische Schweiz model region in Germany, the Kujawsko-Pomorskie, Łódzkie, Lubelskie and Wielkopolskie regions in Poland, and the Zemgale Region in Latvia. Pilot regions for Estonia and Lithuania have not yet been confirmed.

The present financial compensation systems coming through the CAP Rural Development Program is primarily geared towards implementing actions on farm level and not particularly stimulating effectiveness of those actions on a drainage basin level. It is an inspiring opportunity to develop and adapt those policies and compensation systems aiming to enhance local implementation practises and precision water management on a catchment or drainage basin level. The CAP is the main financial instrument and, as mentioned, the EU commission is communicating the possibilities for increased flexibility and national and regional adaptations in the future programs. WATERDRIVE results can be used by the BSR countries and on the transnational level to facilitate a transition to more effective future programs.

5. Partnership

The WATERDRIVE partnership is designed to achieve long-term impacts and enhance individual and institutional capacities. WATERDRIVE has attracted highly experienced individuals working with water and land use quality issues as officials, advisors, spatial planners, farmers and researchers. The partnership has further attracted national support from the Polish Ministry of Agriculture and Rural Development, the Estonian Ministry for Rural Affairs, the Estonian Ministry for Environment, The Ministry of Agriculture of the Republic of Latvia and many regional and local authorities. The WATERDRIVE partnership is designed to enhance capacities on local, national and transnational levels and mobilise resources in the project pilot regions. The partnership rotates local implementation practices with the latest from innovation and research.

Other experienced partners are the Latvian Farmers Parliament (ZSA), Pro-Agria and the Finnish Field Drainage Association, SET-Tallinn as a policy expert and municipalities such as the Västervik Municipality in Sweden, the Jelgava Rural Municipality in Latvia, and the Baltic Environmental Forum Lithuania. Several additional municipalities and county/regional authorities are included as associated organisations. The cross sector local partnerships form project pilot regions. The number of local authorities in the project pilot areas is expected to increase after the start of the project.

The partnership also comprises of individuals with specific competences as facilitators and experts in spatial planning, water management and outreach. Those are e.g. the Finnish Environment Institute (SYKE), and the Polish PHENO Horizon. Research institutions including the European Regional Centre for Ecohydrology (ERCE), the Finnish Natural Resource Institute (LUKE), the Swedish University of Agricultural Sciences (SLU) and the Latvia University of Life Sciences and Technologies (LLU) contribute in their roles as coordinators and science based experts. Regional and national authorities the Swedish Board of Agriculture (SBA), the Agency for Agriculture, Environment and Rural Affairs of the German Federal State Schleswig-Holstein (LLUR), South Baltic Water District Authority/Kalmar County Administrative Board (SBWA) and associated partners the Zemgale Planning Region in Latvia and the South West Finland Centre for Economy, Transport and Environment (VARELY) are all connectors between the national authority level and the local implementation of responsible water management practices.

Project Partners

Role	Organisation (English)	Organisation (Original)	Country	Organisation Type
PP1	Swedish University of Agricultural Sciences	Sveriges Lantbruksuniversitet (SLU)	SE	National public authority
PP2	South Baltic Water District Authority/Kalmar	Södra Östersjöns	SE	Local public authority
	County Administrative Board	vattendistrict/Länsstyrelsen Kalmar län		
PP3	Swedish Board of Agriculture	Jordbruksverket	SE	National public authority
PP4	Västervik Municipality	Västerviks kommun	SE	Local public authority
PP5	Baltic Environmental Forum Lithuania	Vsj Baltijos aplinkos forumas Lietuvoje	LT	Interest groups including NGOs
PP6	Natural Resources Institute Finland	Luonnonvarakeskus (Luke)	FI	Higher education and research institution
PP7	Finnish Environment Institute	Suomen ympäristökeskus (SYKE)	FI	National public authority
PP8	ProAgria Southern Finland	ProAgria Etelä Suomi ry	FI	Interest groups including NGOs
PP9	Finnish Field Drainage Association	Salaojayhdistys ry	FI	Interest groups including NGOs
PP10	Stockholm Environment Institute Tallinn	Stockholmi Keskkonnainstituudi Tallinna	EE	Higher education and
	Centre	Keskus		research institution
PP11	Jelgava Local Municipality	Jelgavas Novads	LV	Local public authority
PP12	Latvia University of Life Sciences and Technologies	Latvijas Lauksaimniecibas universitate	LV	Higher education and research institution
PP13	Union Farmers' Parliament	Biedriba Zemnieku Saeima	LV	Interest groups including NGOs
PP14	Agricultural Advisory Service in Brwinow	Centrum Doradztwa Rolniczego w Brwinowie	PL	National public authority
PP15	European Regional Centre for Ecohydrology	Europejskie Regionalne Centrum Ekohydrologii Polskiej Akademii Nauk	PL	Business support organisation
PP16	PhenoHorizon OLP SP. zO.O.	PhenoHorizon OLP Spólka z ograniczona odpowiedzialnoscia	PL	Small and medium enterprise
PP17	Agency for Agriculture, Environment and	Landesamt für Landwirtschaft, Umwelt und	DE	Local public authority
	Rural Affairs of the German Federal State	ländliche Räume		
	Schleswig Holstein			
PP18	L&F SEGES	Landbrug & Fødevarer F.m.b.A.	DK	Business support organisation

Associated Organisations

Role	Organisation (English)	Organisation (Original)	Country	Organisation Type
A01	Ministry of Rural Affairs, Estonia	Maaeluministeerium	EE	National public authority
AO2	Ministry of the Environment, Estonia	Keskkonnaministeerium	EE	National public authority
AO3	Ministry of Agriculture and Rural	Ministerstwo Rolnictwa i Rozwoju Wsi	PL	National public authority
	Development, Poland			
AO4	Bauska Rural Municipality	Bauskas Novada Dome	LV	Local public authority
AO5	National Water Management Authority	Państwowe Gospodarstwo Wodne	PL	National public authority
	"Polish Waters"	"Wody Polskie"		
A06	The Centre for Economic Development,	Varsinais-Suomen ELY-keskus (VARELY)	FI	National public authority
	Transport and the Environment of Southwest			
	Finland			
A07	The Federation of Swedish Farmers	Lantbrukarnas Riksförbund	SE	Interest groups including
				NGOs
A08	County Administrative Board Västmanland	Länsstyrelsen Västmanlands län	SE	Regional public authority
AO9	Race for the Baltic	Race for the Baltic	SE	Interest groups including
				NGOs
AO10	Zemgale Planning Region	Zemgales Planosanas Regions	LV	Regional public authority
A011	Penn State Agriculture and Environment	Penn State Agriculture and Environment	Other	Higher education and
	Center	Center		research institution
AO12	Russian Academy of Sciences, P.P. Shirshov	Атлантическое отделение	RU	Higher education and
	Institute of Oceanology Atlantic Branch			research institution
AO13	Baltic Institute for Ecology of the Hydrosphere	Балтийский институт экологии	RU	Higher education and
	Ltd.	гидросферы		research institution
A014	Odense Municipality	Odense commune	DK	Local public authority
AO15	National Council of Agricultural Chambers	Krajowa Rada Izb Rolniczych (KRIR)	PL	Business support organisation
A016	Łodz Agricultural Advisory Center	Łódzki Ośrodek Doractwa Rolniczego	PL	Business support organisation
A017	Marshal's Office of the Łodz Voivodship	Urzad Marzalkowski Wojewodztwa	PL	Regional public authority
		Łodzkiego		
AO18	Marshal's Office of the Kujawsko-Pomorskie	Urzad Marzalkowski Wojewodztwa	PL	Regional public authority
	Voivodeship in Torun	Kujawsko-Pomorskiego w Toruniu		
AO19	The Regional Council in Kalmar County	Regionförbundet i Kalmar Län	SE	Regional public authority
AO20	Centrovice	Centrovice	DK	Small and medium enterprise
AO21	DLMO	Dansk Landbrug Midt- og Østjylland	DK	Business support organisation
		(DLMØ)		
AO22	Ministry of Agriculture and Forestry, Finland	Maa- ja metsätalousministeriö	FI	National public authority

Role	Organisation (English)	Organisation (Original)	Country	Organisation Type
AO23	Latvian Rural Advisory and Training Centre	Latvijas Lauku konsultāciju un izglītības centrs	LV	Business support organisation
AO24	Latvian Fund for Nature	Latvijas Dabas fonds	LV	Interest groups including NGOs
AO25	The Baltic Sea Network for the European Agricultural Fund for Rural Development (BSN-EAFRD)	The Baltic Sea Network for the European Agricultural Fund for Rural Development (BSN-EAFRD)	LT	Sectoral agency
AO26	Kujawsko-Pomorskie Agricultural Advisory Centre	Kujawsko-Pomorski Osrodek Doradztwa Rolniczego w Minikowie	PL	Business support organisation
A027	Lubelskie Agricultural Advisory Centre	Lubelski Osrodek Doradztwa Rolniczego w Konskowoli	PL	Business support organisation
AO28	Wielkopolski Agricultural Advisory Centre	Wielkopolski Osrodek Doradztwa Rolniczego w Poznaniu	PL	Business support organisation
AO29	Central Agricultural Library, Poland	Centralna Biblioteka Rolnicza	PL	Infrastructure and public service provider
AO30	Foundation of Managerial Initiatives	Fundacja Inicjatyw Menedzerskich (FIM)	PL	Small and medium enterprise
AO31	Institute of Rural and Agricultural	Instytut Rozwoju Wsi i Rolnictwa Polskiej	PL	Higher education and
	Development of the Polish Academy of Sciences	Akademii Nauk (IRWiR PAN)		research institution
AO32	Latvian Environment, Geology and	Latvijas Vides, Geologijas un	LV	Sectoral agency
	Meteorology Centre (LEGMC)	Meteorologijas Centrs		
AO33	Lithuanian Agricultural Advisory Service	Lietuvos žemės ūkio konsultavimo tarnyba	LT	Business support organisation
AO34	Ministry of Agriculture of the Republic of Latvia	Zemkopības ministrija	LV	National public authority
AO35	The Foundation for a Living Baltic Sea (Baltic Sea Action Group)	Elävä Itämeri säätiö	FI	Interest groups including NGOs