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Background

Effective field drainage is a basic necessity for farming, but drainage can also be planned not only to remove excess water from the fields but also to maintain and recycle water on the fields by, e.g. controlled sub-surface drainage or (sub-)irrigation by recycled drainage water. About half of the arable land in Baltic Sea Region (BSR) is drained and much of this infrastructure is in acute need of renovation. Renovation of the drainage infrastructure must be done in an environmentally sustainable way, also utilizing the possibility, wherever feasible, to reduce nutrient concentrations on the catchment level and thus contributing to reaching river basin level water quality targets.

The [Revised Palette of measures for reducing phosphorus and nitrogen losses from agriculture](#) lists drainage related measures, both on and off farm, as follows:

On farm: Effective purification of runoff waters (E. a.), Ditch filters and dams (E. b.);

Off farm: Establishment of wetlands (D. a.).

However, this is not a comprehensive list as innovative sub-surface drainage technologies are not mentioned. Missing from the list are also so-called natural water retention measures which can be implemented in ditches, streams, main channels and catchments on a larger scale for retention of nutrients and purification of the water also of other chemical and biological pollution.

The 2013 HELCOM Ministerial Meeting agreed to apply innovative water management measures, in particular under difficult soil conditions, to ensure that upgrading and renovation of the agricultural drainage systems aim at reducing nutrient concentrations in the outlets of the adjacent catchment (cf. HELCOM Copenhagen Ministerial Declaration paragraph 14 (N)).

An emerging flagship project under EU Strategy for the Baltic Sea Region (EUSBSR) Priority Area Agri, initiated by Swedish University of Agricultural Sciences (SLU), which has been granted seed funding from the CBSS Project Support Facility, will focus on agricultural drainage on field and landscape levels with foreseen activities in research, demonstration, pilot management plans and investments, communication and exchange, as well as policy dialogue on the BSR level within the scope of relevant sectoral framework policies. A brief project outline is attached to this document.

Action required

The countries are invited to provide information about implementation of measures on improvement of agricultural drainage systems with the aim to reduce nutrient input to the aquatic environment e.g. in the WFD river basin management plans.

The Meeting is invited to consider, how the 2013 HELCOM Ministerial Meeting commitment concerning agricultural drainage systems can be incorporated in HELCOM work and make use of it in planning further activities of the Agri Group.

Application for project preparation financing from CBSS Project Support Facility

Project: ***FLOW Baltic flagship initiation project***

Submitted: 1 April 2014

Granted: 23 June 2014

Contract signed: pending for PSF grant of 50 000 EUR

Project period: 1 August 2014-31 July 2014

Project owner: Swedish University of Agricultural Sciences (SLU), Sweden

Partners: ProAgria, Finland & Lithuanian Agricultural Advisory Service (LZUKT)

Short summary

The proposed FLOW Baltic Flagship Initiation project, aims to establish FLOW Baltic as a Flagship project under the EUSBSR PA Agri. The flagship project is proposed as an umbrella, in which the main project would link to other research and cooperation projects in the field. The umbrella project (=the FLOW Baltic flagship project) would ensure coordinated communication of the activities and results of the clustered projects and support pan-Baltic cross-sector authority level dialogue on water quality and water flow management, field drainage and agricultural productivity with connection to climate change adaptation and supporting innovations in bio-economy. The proposed pre-project will deliver a financing application for a sub-project on local pilot areas and a plan to operationalize and sustain the FLOW Baltic flagship.

Project description

The project addresses the need to combine ecosystem and productivity goals in the agricultural contexts and answers the rising interest in sustainable renovation of field drainage systems in connection with more holistic water management in the landscape. The project idea is based on the flagship project proposal submitted to the Ministry of Agriculture, Forestry and Fisheries of Finland, the coordinator of the Priority Area for Sustainable Agriculture, Forestry and Fisheries (PA AGRI) of the European Union Strategy for the Baltic Sea Region (EUSBSR), in August 2013. The working title for the proposed flagship project is 'FLOW Baltic- Field-to-Landscape level water management as Opportunity for Win-Win outcomes for the Baltic Sea Region'. A subsequent letter of support to the proposal was received on 24 September 2013. A copy of the letter accompanies this application.

Since the presentation of the flagship project concept for FLOW Baltic, it was understood that the scope of the flagship project as well as the strategic importance of the issue are too vast for a single project to cover effectively. Therefore, an umbrella model for the flagship FLOW Baltic is proposed, where one of the full scale territorial cooperation projects is initiated within this pre-project. Also within this pre-project, the focus, target groups, issues and activities within the umbrella of the flagship project FLOW Baltic are further discussed with stakeholders with the aim of establishing a Baltic Sea Region wide platform for authorities to exchange information and approaches concerning water management across agriculture and environment sectors.

The interest and need for international authority dialogue in the BSR is verified through earlier projects and is a cornerstone in better implementation of the EU Strategy for the BSR. Experience gained, for instance, through the first three years of the HELCOM Agriculture/Environment Forum has proven that for policy relevant cooperation to be effective and yield results, it must be systematic and supported by resources for information management and for participation at the meetings by responsible competent national authorities. Year 2015 is an international milestone year with regards to water related policies as both the HELCOM Baltic Sea Action Plan implementation and the EU Water Framework Directive implementation is reviewed. Also the new programme period for the Rural Development Programmes is in full motion and it

can be established how countries have decided to implement the mechanisms available, for instance with respect to agri-environment-climate programmes, the cooperation measure and the EIP, as well as the LEADER method. These processes provide both the purpose and framework for intensified international dialogue in water management.

Aims

In short, the proposed FLOW Baltic flagship initiation project aims to

1. Establish and initiate an EUSBSR PA AGRI Flagship project FLOW Baltic as an umbrella project for several clustered research and cooperation projects;
2. Prepare a full-scale project application to an EU Territorial Cooperation programme in the Baltic Sea Region, and to
3. Explore the interest, key issues and continued funding for the umbrella project and international cross-sector authority dialogue.

Target groups

The target groups for the project are mainly the relevant EUSBSR focal points and potential partners in the full-scale project, key actors in rural drainage renovation activities such as farmers, advisory organisations, field drainage associations and municipalities. The secondary target group are, in addition to the above, all end users and stakeholders of the FLOW Baltic flagship project, including national and regional agricultural and environmental authorities, water management boards, rural planning departments and environmental ngo's.

Main objectives

Specific main objectives of the FLOW Baltic flagship initiation project are:

1. To define the concept and format for the proposed EUSBSR PA AGRI Flagship project FLOW Baltic, secure its approval as a flagship project and set up a focus group to provide oversight and advise;
2. To establish a project partnership and prepare a project application to one of the upcoming territorial cooperation programmes (Central Baltic Cross-Border Cooperation Programme or Baltic Sea Region Programme) or other relevant and applicable financing source for Baltic Sea Region cooperation; and
3. To engage authorities in national, regional and municipal levels across the Baltic Sea Region in discussions about desirability and topics for a cross-sector policy dialogue platform and, in cooperation with other stakeholders and financiers, plan for continued funding for FLOW Baltic Flagship as the home for such a platform.

Expected results

As a result of the proposed pre-project, a new EUSBSR PA Agri flagship project FLOW Baltic is adopted as an umbrella project, and under this umbrella project, one new territorial cooperation project concerning rural water management in local pilot areas is launched. Relevant ongoing research projects in the fields of natural water retention measures, agricultural drainage management and drainage cooperation are linked within the umbrella project. The implementation of the FLOW Baltic flagship project serves the ongoing

international dialogue and policy work to meet the dual goals of agricultural productivity and well-being of the ecosystem with a particular attention to water quality. Should BSR national stakeholders and EUSBSR focal points consider the concept of the umbrella project worthwhile, additional funding will be sought to maintain international cross-sector authority dialogue and facilitate the information dissemination from research and territorial cooperation projects for a minimum one year. Possibly this can be an activity of another territorial cooperation project.

Successful communication efforts, international and national visibility and raising interest in the issue of comprehensive water management to meet environmental and productivity goals may generate spin-off effects in terms of national EIP Operational Groups (local innovation projects) or immediate local innovations in delivering ecosystem services through drainage management measures in the landscape. Local demonstration and intervention projects planned and implemented within the sub-project may provide lessons for better coordination and adaptation between the WFD River Basin Management Plans and the Rural Development Programmes for the regional and national levels.

In summary, the results of the proposed FLOW Baltic flagship initiation project are capitalized in the possible implementation of a full-scale territorial cooperation project on local comprehensive water management which integrates on the local scale the goals of improved water quality in the catchment and improved agricultural productivity through increased nutrient retention and improved nutrient economy and soil management on the field. The actors involved in the territorial cooperation partnership form a network which serves as a backbone to build broader pan-Baltic authority level dialogue on. The results can be further accentuated and transferred on the BSR scale through improved cross-sector authority dialogue within the FLOW Baltic flagship on the concrete possibilities to combine environmental and productivity goals in agriculture on a larger scale.