Advanced manure standards for sustainable nutrient management and reduced emissions

MANURE STANDARDS

Notes from
Manure Standards Policy Workshop

6 November 2018
Warsaw, Poland

Background

At the 2013 HELCOM Ministerial Meeting, the Baltic Sea countries agreed to establish national guidelines or standards for nutrient content in manure by 2016 and to develop guidelines/recommendation on their use by 2018. The view was to fully utilize the manure nutrients in fertilization and to avoid over-fertilization.

The project "Advanced manure standards for sustainable nutrient management and reduced emissions" (Manure Standards) supports the Baltic Sea countries in accomplishing the agreed actions regarding manure standards. The project is led by Natural Resources Institute Finland (Luke) and has 19 partners from all Baltic Sea coastal countries. HELCOM is also a project partner and HELCOM Agri group has agreed to be the link between scientific results of the project and the authorities (Outcome of AGRI 3-2016). The two-year project started in October 2017 and is co-funded by Interreg Baltic Sea Region Programme.

The Manure Standards Policy workshop was organized in Warsaw, Poland on 6 November 2018 by Manure Standards project in cooperation with the Ministry of Agriculture and Rural Development of Poland and HELCOM. There were participants from all Baltic Sea coastal countries except for Latvia and Lithuania. The list of participants is included in Annex 1. The presentations of the workshop have been made available in the HELCOM Meeting Portal.

Presenting the first project results

Ms. Sari Luostarinen, Natural Resources Institute Finland, Project Coordinator, introduced the project activities. In addition to the manure sampling and calculation tool presented in the workshop the project is also working on environmental and economic assessment of the new manure tools as well as nutrient balance calculations.

Ms. Åsa Myrbeck, Research Institutes of Sweden, Leader of Work Package 2, presented the project work on manure sampling and analysis guidelines. The project is cooperating with over 80 pilot farms in the Baltic Sea region to take manure samples and create guidelines for manure sampling and analysis. The guidelines are expected to be finalized in March 2019. Also, a sampling movie will be produced.

Mr. Allan Kaasik, Estonian University of Life Science, Leader of Work Package 3, presented the manure calculation tool that is being developed in the project as well as comparisons between the manure analysis and calculation values. The validation with pilot farm data continues and a user manual for the use of the tool will be created.

Ms. Sari Luostarinen shared the results of a questionnaire on manure data needs in policy instruments that had been sent to HELCOM Agri group. There is some variation between the answers and they will be further checked and complemented by the project partners. A report on manure data and regulations in the Baltic Sea region will be created in spring 2019.

Ms. Susanna Kaasinen, HELCOM Secretariat, Leader of Work Package 5, introduced the draft HELCOM Recommendation on the use of national manure standards and Ms. Sari Luostarinen presented the plans of the project to further elaborate the recommendation. The next version of the recommendation will be presented at the next meeting of the Agri group in March 2019.

Feedback regarding the first results

The workshop participants provided feedback on the project results and highlighted some important aspects to make the results more useful for the stakeholders.

Communication

Communicating the project results to the stakeholders is very important. Regarding authorities and policymakers, the project should be clear about what harmonizing systems and methods really mean. There is now a large variety in the systems and we need to work together if we wish to find more common ground. Authorities are interested in the next step and how to get further with the results and apply them to the policy and environmental work.

Regarding farmers, the project should suggest how to/help to transfer this knowledge to farmers so they could use the tools. From the farmer's perspective it is also relevant to know how the new manure data really helps in improving farm nutrient balances.

It is important to spread the message that manure is a valuable resource and more precise use of manure could reduce the use of mineral fertilizers.

To get the project results into use, translating them into national languages is very important in many countries.

It should be clarified what happens to the data collected and tools developed in the project after the project has ended.

Farm size and economy

When creating the guidelines and tools, it is important to take into account both big and small farms. In general, big farms want a very precise tool but for small farms a simpler version will do.

The economic aspect, e.g. if the new manure data will affect the size of the manure storage, is very important. The economic impact assessment in the project is a valuable element.

Sampling

The project will create both more detailed sampling guidelines for professional samplers and simpler guidelines for farmers. In some countries, only a professional

sampler takes the samples while in others farmers take the samples. Thus, both guidelines would be useful. The sampling movie was considered a good additional resource.

2-4 subsamples could be realistic to include in the sampling guidelines for farmers.

It is important that the farmers understand why the sampling should be done properly to get a representative sample.

More precise instructions are needed for handling the samples e.g. storage, transport, freezing, time.

There are differences in the laboratories that analyze the samples regarding laboratory and billing rules and schedule. Sometimes it takes very long to analyze the samples. Some laboratories do not analyze NH4 which is a problem.

A quick manure analysis tool for the farms would be useful and the participants pointed out that online measurements are on their way although it might take some time until they are economically feasible for all farmers.

Calculation tool

It should be clarified how the different target groups of the project can benefit from the calculation tool. The model is quite complicated. The tool needs to be simple enough so it can be used by farmers. The participants thought that it was a good idea that the tool will be tested by farmers at least in Estonia.

The calculation of manure amount is more of a challenge than the nutrient amounts.

The tool may also be used by experts for national and regional manure data. Also the calculation results may be published as tables with data on manure quantity and composition.

It is not good to use the standard feeding amounts for all BSR. Feeding recommendations between countries vary. Feeding, production types and technologies in different countries need to be considered in the calculation tool.

Water added in manure is a problem for calculation and it was considered good topic for the project to investigate.

Manure data

The importance of having good quality national manure data was highlighted. In some countries, there is a problem with old data and the table values of manure nutrient content do not reflect the current farming technology.

In the HELCOM Recommendation there will be a recommendation on updating the national manure data. The participants suggested that the national data could be reviewed every four or five years to check if there is a need for an update. This could be synchronized with the four-year cycle included in the Nitrates directive reporting.

Annex 1. List of participants

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