



## SuMaNu Policy Recommendation 6

*The SuMaNu project platform has produced a set of policy recommendations to support transition towards more sustainable agriculture and efficient nutrient recycling. These policy recommendations reference and complete each other and the reader is encouraged to read them all.*

### Knowledge transfer between farmers, advisors, researchers, authorities, and policymakers

Policies and support mechanisms should foster knowledge transfer from research to practical action at regional, national and international level. Therefore, it is recommended to:

1. Form national manure committees, which advice on manure legislation, knowledge transfer policies and research, both at national and international level.
2. Build national manure knowledge transfer systems, which support successful implementation of recommended and required manure management techniques and practices.
3. Support building of digital systems, which increase nutrient management data use efficiency and scope, both for farmers and society.



## Background

### National manure committees

Transferring and acquiring adequate data and latest knowledge and ensuring information exchange between different stakeholders form the backbone for recognising and implementing the best techniques and practices reducing nutrient emissions in agriculture.

Farmers in the EU member countries have long implemented measures to limit and minimise nutrient losses to the environment. New technologies and methods are constantly being developed and new policy incentives endorsed. However, the results have not met the expectations. One of the causes is that different stakeholders are functioning independently, in separate “information bubbles”, resulting in inefficient information exchange.

There is a need for more information exchange on the environmental efficiency of agri-environmental techniques and the effectiveness of agri-environmental measures in the Baltic Sea Region (BSR) countries. Although the national conditions may affect the effectiveness of measures, it would be important to have this information more widely available in the BSR.

It is recommended to form national manure committees to:

- a) Evaluate and advice national legislation and knowledge transfer policy related to manure management at national and EU level.
- b) Exchange the information with similar organisations in other countries to harmonise the manure policies between countries and learn from the experiences.
- c) Suggest manure research topics at national and international level, as well as evaluate results of the studies.
- d) Analyse the efficiencies of manure management advisory systems in the BSR countries. The aim would be to learn from the strengths of the other countries and to adjust the national advisory

systems accordingly. Currently, similar actions are recommended to policymakers of different countries, while baseline situations and available support systems in different countries differ.

The manure committees include representatives from farmer and advisory organisations, authorities, and technology experts.

### National manure knowledge transfer system

A knowledge transfer system is required to support successful implementation of sustainable manure management recommendations, regulations, and systems. It would have an implementation plan containing an overview about necessary knowledge and quality standards to implement manure management policies successfully, target groups, knowledge resources, transfer channels, and about knowledge update system and financing of the system. It would help to grant holistic approach by implementing the manure management measures, transferring knowledge and building research projects; improve cooperation between stakeholder groups and keep messages clear.

#### *Holistic approach*

Policies and support mechanisms should foster knowledge transfer from research to practical actions both nationally and internationally. The focus and level of research differs between BSR countries. Creating more focused and targeted research projects and innovation development requires international knowledge transfer. A multidisciplinary and cross-sectoral approach is an essential precondition for an efficient and targeted development of measures, to implement holistic, multipurpose/multi-target, multi-level, and non-conflicting solutions in practice.

#### *Close cooperation*

Direct contact is the most efficient way of transferring knowledge and it should be supported between scientists, policymakers, advisors, and farmers. This includes meetings, discussions, and training on farm,

opening the communication and knowledge transfer to and between farmers.

Information exchange improves policymakers' and scientists' practical understanding of the technicalities and challenges of recommended measures. Policymakers and scientists, who develop theoretical recommendations and policies, should be invited to learn about the possibilities and challenges of the farm practices. Farmers may be obliged to use production methods developed by scientists and directed by policymakers, although sometimes these methods do not meet the practical environment. Close cooperation between farmers and scientists should thus be promoted to facilitate short chain information flow in both directions before a particular method is recommended for a wide implementation. This would help to reduce bureaucracy, time, and resources required. A significantly higher efficiency in the path of reaching common environmental targets could be achieved.

### ***Clear messages***

Language is sometimes a barrier between policy and practice. The language used by scientists, policymakers, officials, and experts should be simplified to deliver clear and understandable messages for practitioners and entrepreneurs.

### **Digital systems**

Farmers use many different digital tools, which collect data about animals, fields, facilities, processes, and environment. In addition, data from their personal observations are recorded. Farmers are obligated to share some of the data to authorities. Often the collected data are underused and, at the same time, other missing data, is laying in unreachable databases. Therefore, it is recommendable to support the building of digital systems, which would help to increase nutrient management data use efficiency and scope, both for farmers and society:

- Agricultural big data system would help to connect the data collected to separate agricultural digital solutions, such as field books, herd-books, registers of land, buildings, fertilisers, crop varieties, weather data, databases of standards.
- Digital advisory tools, such as fertilising and crop rotation planning tools, farm-gate nutrient balance calculator (see also Policy Recommendation 2), P-index (see also Policy Recommendation 1) calculator, regional nutrient balance map (see also Policy Recommendation 4), manure storage size calculator, overview about emission reducing technologies (see also Policy Recommendation 3) and other similar tools which help to implement the recommendations and limitations about manure use. The tools are recommended to connect with big data system to increase the efficiency of data.
- Digital tools for authorities in connection to big data system would help to increase automatization of collecting data about nutrient flows. Greenhouse gas emission evaluation tools and other similar tools help countries collect and process manure data for national and EU statistics.

Digital solutions, for example YouTube, Wikipedia, and social media, could be utilised more in knowledge transfer. When people are looking for information on any given topic, including agriculture and the environment, they most often google it. It would be important that there is correct information available online.





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