

# Advanced Manure Standards for sustainable nutrient management and reduced emissions

Sari Luostarinen

Coordinator

Principle Research Scientist, PhD, Adj.Prof.

Natural Resources Institute Finland (Luke)



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## The story behind the project (I)

- **OVERALL:**
  - Need to improve nutrient recycling and reduce nutrient losses to the environment in agriculture, industry and municipalities
- **IN THE BALTIC SEA REGION:**
  - Eutrophication of the Baltic Sea and the role of agricultural nutrient input
- **IN MORE DETAIL:**
  - Manure from animal farms the major recyclable biomass with a lot of nutrients
  - Manure use as fertiliser currently based on variable methods to determine its nutrient content
  - Bad quality data on manure may cause bad choices in manure management and use
  - Need to improve the data and harmonise methods between countries

## The story behind the project (2)

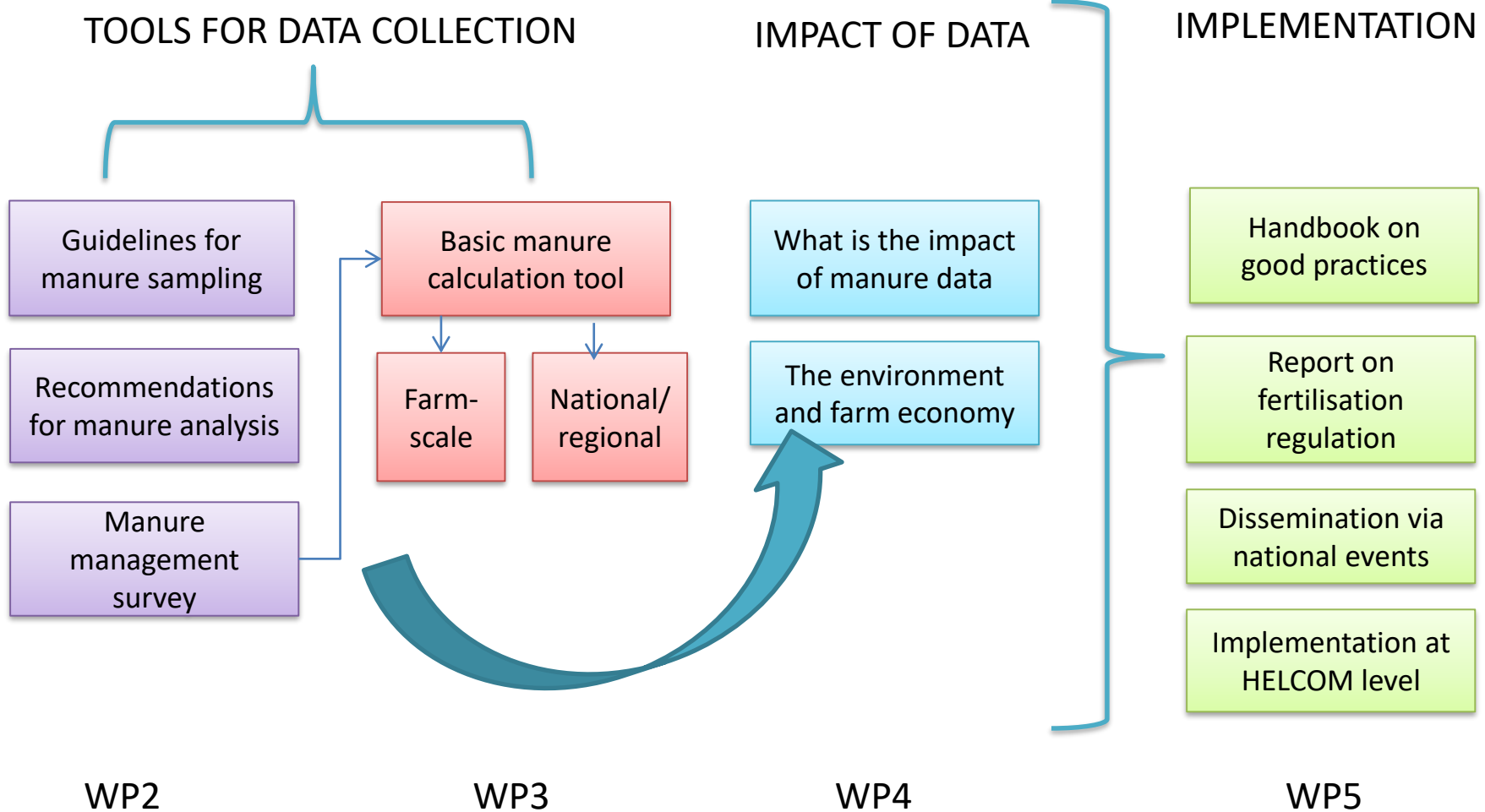
- In 2013, HELCOM Ministerial Meeting made a declaration:
  - Development of national manure standards for manure nutrient content by 2016; joint guidelines for their use by 2018
- The way forward: a joint project with partners from research, authorities, farmers, advisors and collaboration with policymakers
- Manure Standards
  - October 2017 – September 2019, 19 partners from 9 Baltic Sea Countries
  - Main funding from Interreg Baltic Sea Region Programme (total 2.9 M€)
  - Flagship project for the EU Strategy for the Baltic Sea Region



# What do we do in Manure Standards?



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# An example of results



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## WP2: The making of instructions for sampling

- Development of a sampling protocol according to different national and scientific guidelines for liquid and solid manures
- Over 80 pilot farms in nine countries
  - Sampling on the pilot farms at different times using the joint protocol
- Analysis in more than one laboratory
  - Comparison of results considering the analysis methods
- Final guidelines for taking representative manure samples

## WP2: Dissemination of good sampling practices



**Step 3: Liquid manure –**  
Then 5-10 subsamples are mixed in a bucket before taking out 1 litre of representative sample for analysis. And again – sample must be stored well sealed in cool temperatures!

## In the end, we aim to...

- Have a basis for more harmonised methods for manure data collection
- Know more about the uncertainties included in the methodology
- Provide clear guidelines for good practices in manure management using best possible, updated data on manure quantity and quality
- Inform about the impact the quality of manure data used in policies and in practice can have on nutrient recycling targets, farm economy and on the environment
- Assist policymakers in making effective, nationally and transnationally equal regulation and support for manure management
- Assist farmers to make most of their valuable manure



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*Thank you!*



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