SuMaNu's Final Conference

## **Practices and technologies for sustainable nutrient management**

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## The need to recycle nutrients and to reduce nutrient losses noted in the EU

#### • EU Green Deal

- Climate neutrality by 2050
- Promoting resource-efficiency via a transition into clean circular economy
- Restoring biological diversity and reducing pollution
- EU Common Agricultural Policy and sustainable agriculture
  - Sustainable food system (Farm to Fork)
  - Biodiversity strategy
  - Climate neutrality
  - No emissions (soil, water, air)





### **EU Farm to Fork Strategy**



#### 2030 Targets for sustainable food production



Reduce by 50% the overall use and risk of chemical pesticides and reduce use by 50% of more hazardous pesticides



Reduce nutrient losses by at least 50% while ensuring no deterioration in soil fertility; this will reduce use of fertilisers by at least 20 %



Reduce sales of antimicrobials for farmed animals by 50%



Achieve at least 25% of the EU's agricultural land under organic farming and a significant increase in organic aquaculture





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Baltic Sea Region



# The Baltic Sea and nutrients – still a need to cut down losses to the sea

- Eutrophication one of the main challenges of the Baltic Sea
- The impact of agricultural nutrient losses significant and thus measures towards reducing losses and improving nutrient recycling are still needed
- HELCOM Baltic Sea Action Plan being updated right now and many measures address nutrient management
  - Reduction of nutrient input from all human activities, restoration of biodiversity, implementation of nutrient recycling strategy





## **HELCOM Regional Nutrient Recycling** Strategy for the Baltic Sea

- Vision:
  - Nutrients are managed sustainably in all HELCOM countries, securing the • productivity of agriculture and minimizing nutrient loss to the Baltic Sea environment through efficient use of nutrients and cost-effective nutrient recycling.
- Many objectives and sub-objectives:
  - Baltic Sea region as a model area for nutrient recycling
  - Reducing environmental impacts
  - Safe nutrient recycling •
  - Knowledge exchange and awareness raising
  - Creating business opportunities ۰
  - Improving policy coherence •
- Current recycling status: varies significantly between countries





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#### Nutrient recycling – as the nature intended it



https://www.pmfias.com/

Dependence on mineral fertilizer products must be reduced with a return towards. nutrient and carbon recycling





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### A system level change required - FARM

- Animal farms should make better use of the manure via using best available techniques and practices in animal rearing, manure management and manure fertilizer use
- Potential farm-level manure surplus should be redistributed to other farms in need of nutrients



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#### A system level change required - REGION

 Regions with dense livestock production and often also oversupply of manure nutrients should process part of the manure so that it can be reallocated to regions in deficit of nutrients



#### **Example of manure processing – mass balance**



Pig slurry TS 8 % N 4 g/kg P 1 g/kg

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#### SuMaNu reports for more information www.balticsumanu.eu







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### Conclusions

- Solutions to better recycling of nutrients and carbon are needed around the world
- Transnational regulation, action plans and strategies can and should push improved nutrient management forward as an integral part of a sustainable food system and efficient circular economy
- National regulation, strategies and actions should be targeted to those measures that are country-specifically the most effective

Forerunners could set an example and show what is meant in practise. Who wants to take the lead?





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### Thank you!

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