

## "Nutrients stewardship" session – Summary of outcomes

- **Establishing nutrient thresholds** (ranges) for water quality targets for lakes and rivers in Europe.
- Additional research challenges regarding **transboundary lakes and rivers**
- Training needed for **new researchers** (PhD students) for further nutrient stewardship actions.
- Studies needed at **different scales**, from catchment to food systems, including different sectors and stakeholders.
- Developing a planning tool to **match regional demand and supply** of nutrients.
- **Environmental impact assessment**, e.g. assessing effect on soils.
- **Challenge in maintaining soils and food production** with reduced environmental impact still not solved, with present farming systems/practice we do not reach nature and environmental objectives.
- Opportunities and barriers to use **biotechnology** for nutrient stewardship.
- New circular **business strategies** and cost and sustainability assessments.
- **Nutrient flow analysis** to monitor and enhance nutrient use in society. Need for build on existing work and for better data, databases, factors model approaches, interfaces, indicators, visualization.

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- Important to get research **results to farmers** to bring **recommendations into action**. Farmers associations and advisory bodies can play a key role.
- A strong **policy-research interaction** is needed, to get research knowledge and experiences used as a basis for new policies.
- **Different farming systems** must be considered in research to have specific recommendations linked to a certain agricultural sector and/or region.
- In case of **stakeholder engagement** there is a need for a **structured approach** / interviews, especially if input data and information for research is sourced.
- **Integrative complete solutions** are needed, e.g how to get all nutrients out of wasteflows, which technologies aim at multiple challenges.
- Further development of **consumer and food industry acceptance** of biobased fertilisers, including risks assessments and interpretation
- Research/models must show the **effect of measures** to get actors in action, like water quality effects of changes in fertilisation practices by farmers, including costs
- **New/updated long term field experiments** needed for new type of products and fertilisation strategies. Former trials have value should be updated according to new challenges.