The Lower Saxony Case Study

FAIRWAY

Closing nutrient cycles by manure transport

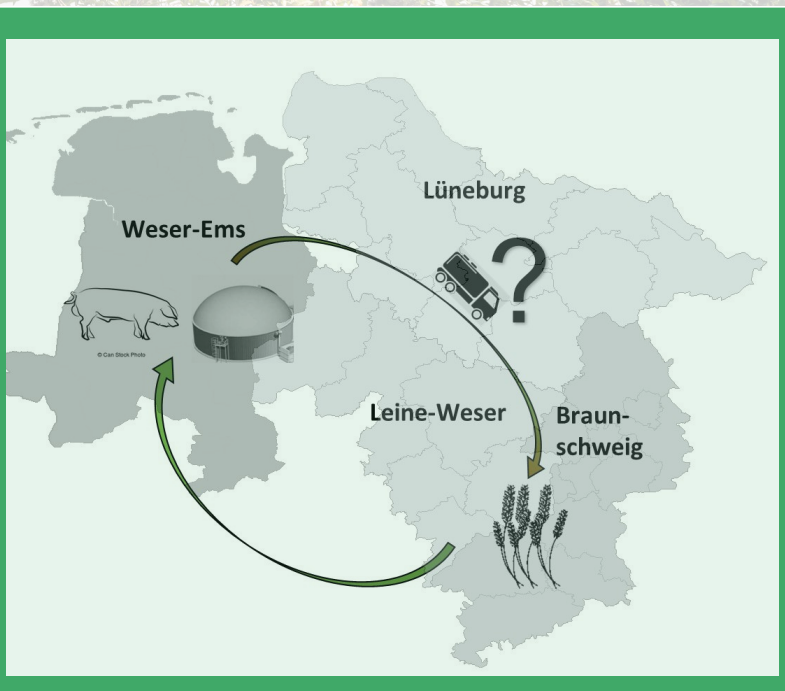
- Analysis of potential and experience report -

SITE

- county in Germany
- agric. area = 2.6 million ha

- west: sandy soils
  pig, poultry, biogas production
  --> manure surplus

- southeast: clayey soils,
  mainly arable (cereals)
  --> use of synthetic fertilizers



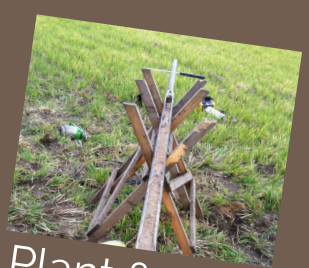
RESEARCH QUESTIONS AND OBJECTIVES

- Can supra-regional transport of farm manure help to reduce nutrient surpluses (through substitution of mineral by organic fertilizers)?
- Which uptake potential does the arable farming region have?
- Which limitations/obstacles do exist in practice?

ACTIONS

Decision support tools & advisory

Machinery demonstrations



Plant & soil analyses

News-letter

Multi-actor-meetings

Model farms

Field trials

Network with other projects

Survey among farmers

Emission monitoring

RESULTS & PERSPECTIVES

- Manure transport can contribute to close nutrient cycles in Lower Saxony. However, the uptake potential for farms in the southeast is limited to 60-90 kg/ha N(total) in average.
- Quality management of (processed) manure is a key aspect to promote its application in arable farming regions.
- In particular, concerns of the arable farmers (who receive manure) should be the focus of further investigations.

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