MIXED
EFFICIENT AND RESILIENT
MIXED FARMING & AGROFORESTRY

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION' HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT N. 862357

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission . Neither the European Union nor the European Commission can be held responsible for them.

PRACTICE ABSTRACT

SHARING EXPERIENCES FROM: DENMARK

Farm collaboration for improved landscape and nutrient management using biogas and biorefinery technologies

AUTHORS:
Tommy Dalgaard

tommy.dalgaard@agro.au.dk

In one of the MIXED farmer networks in Denmark, 11 farmers are managing livestock and farmland in the vicinity of streams flowing into the shallow and nutrient vulnerable waters of Limfjorden - an inland fjord system connected to the sea. Reduction of nitrate leaching from agriculture is required to improve the aquatic conditions in Limfjorden.

The network consist of a mix of pig and dairy farms with crop production, small-holder farms, and arable farms. The farmland soils are dominated by sandy soils with varying clay content. 90 % of the farmland is cultivated with arable crops mainly winter wheat, spring barley, winter oilseed rape, and maize and 8 % is cultivated as grassland mostly concentrated on the dairy farms.
Network farmers are already aware of the importance of reducing nitrate leaching. Farmers have widely adapted the use of biogas plants and a targeted use of catch crops to improve nutrient utilization and reduce nitrate leaching.

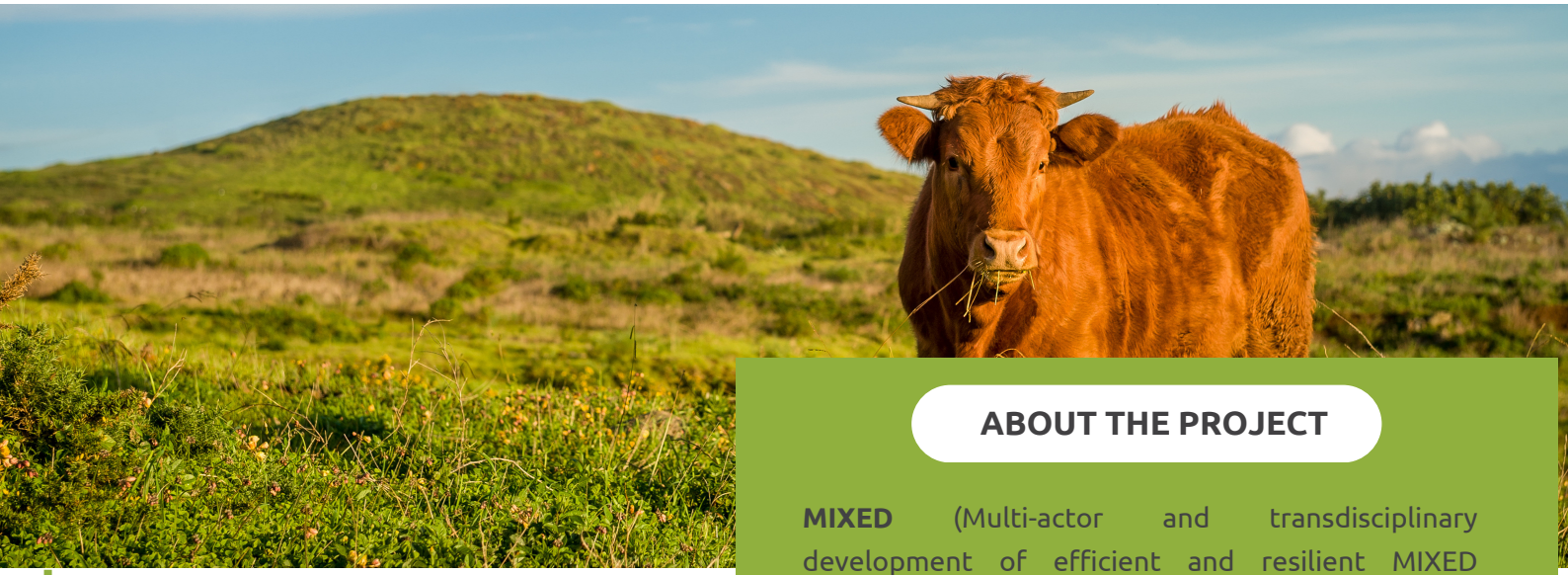
There is a need for a joint effort among farmers to find viable solutions addressing the environmental issue of nitrate leaching in the region. We recommend that farmers discuss the issue together and consider the potential for in collaboration cultivating more grassland targeted to areas with the lowest groundwater nitrogen retention. In addition, farmers should discuss their willingness to cooperate on a local biorefinery of green biomass coupled with grasslands and a biogas plant. We also advice farmers to reflect on integration of crop and livestock production, exchange of resources between farmers (e.g. nutrients, knowledge, machinery, farmland, and livestock), and inclusion of other relevant stakeholders to improve nutrient management.

AARHUS UNIVERSITY
Innovationscenter for Økologisk Landbrug

FIND OUT MORE ABOUT MIXED' NETWORK FROM DENMARK

MIXED
EFFICIENT AND RESILIENT
MIXED FARMING & AGROFORESTRY

THIS PROJECT HAS RECEIVED FUNDING FROM THE **EUROPEAN UNION' HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME** UNDER GRANT AGREEMENT N. 862357



ABOUT THE PROJECT

MIXED (Multi-actor and transdisciplinary development of efficient and resilient MIXED farming and agroforestry systems), an EU-project, is supporting the development of European Mixed Farming and Agroforesty Systems (MiFAS) that are more efficient and resilient to climate changes.

7M€	19	10
BUDGET	PARTNERS	COUNTRIES

ABOUT MIXED IN DENMARK

In Denmark MIXED is implemented by Innovation Centre for Organic Farming and Aarhus University in collaboration. The project is working with two groups of farmers practicing MiFAS (Mixed Farming and Agroforestry Systems) in different ways.

Agriculture in Denmark can be characterized as highly specialized, intensively managed and in general very productive. The highest concentration of livestock is in the western part of the country, where soils in general are more sandy and less fertile than in the eastern part of the country.

Many organic farmers in Denmark are taking the potential contributions of the organic system to public goods into consideration. The drivers for the group of farmers that MIXED is working with is specifically to improve biodiversity, c-sequestration, animal welfare and environment.

MIXED partners from Denmark:

AARHUS UNIVERSITY

Innovationscenter for Økologisk Landbrug