MIXED

EFFICIENT AND RESILIENT
MIXED FARMING & AGROFORESTRY

PRACTICE ABSTRACT

07

7M€ budget

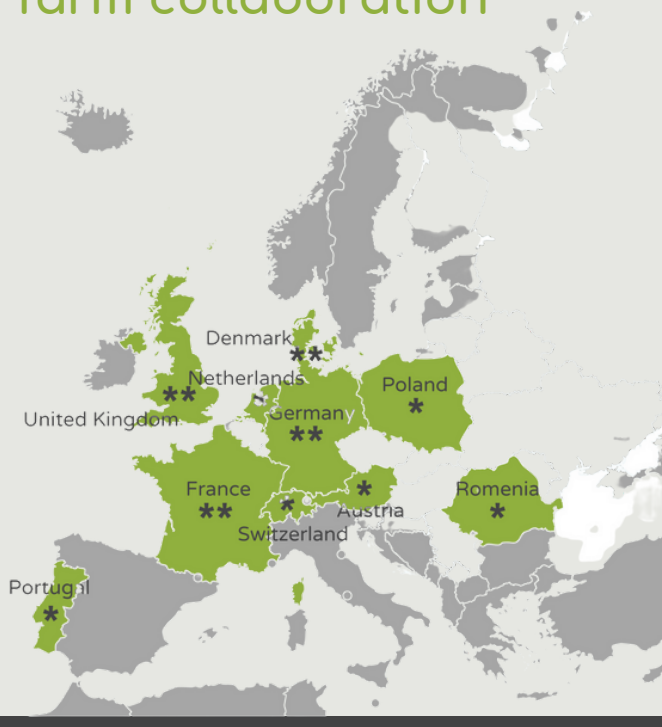
19 partners

10 countries

The EU-project MIXED (Multi-actor and transdisciplinary development of efficient and resilient MIXED farming and agroforestry systems) is supporting the development of European Mixed Farming and Agroforestry Systems that optimize efficiency and resource use, reduce GHG emissions, and show greater resilience to climate change by considering agronomic, technical, environmental, economic, institutional, infrastructure and social advantages and constraints.

Improved nutrient cycling and green biomass production via biorefinery and farm collaboration

In Denmark, MIXED is working with a subgroup of 8-15 farmers, practicing a mix of livestock and crop production, situated in a watershed with shallow estuaries and groundwater reservoirs for drinking water extraction, vulnerable to nitrogen leaching (168,000 Ha), where farmers are required to reduce the nitrate leaching significantly. Together with MIXED they will investigate ways of doing that with focus on a new biorefinery technology combined with biogas production and sustainable grassland management.



Learn more on www.mixed-project.eu

DESCRIPTION

The bio-refinery technology can transform grass to a high-quality protein, e.g. to be used for a growing organic pig and poultry production (SuperGrassPork) independent of imported soybean based protein, and with two by-products - a fibre-pulp for ruminant fodder, and a 'juice' that can also be used for biogas production and bio-based fertilisers for fodder and cash crops. The group of farmers are part of a larger initiative – a collaboration between Aarhus University, local municipalities, farmers and bio-based industries, with the objective to support local food production, a more circular economy, and at the same time protect environment and reduce climate impacts.

It is expected that MIXED will help farmers to reduce the nitrate leaching, reduce greenhouse gas emissions (including potentials for carbon storage in the soil), while increasing efficiency as well as resilience by reducing the areas with cereals (mainly wheat and maize) and replace it with grass and clover grass for a more diverse range of products (fodder for non-ruminants as well as ruminants, biogas and biobased fertilisers for local high value production, and potentially more high value biorefinery products for human consumption), and other types of land use. Thereby it can serve as an enabler for a more sustainable agricultural production, including potentials for more organic farming, and a more diverse agricultural landscapes. Thereby, it is expected that the project will facilitate a more integrated landscape approach within groups of farmers – an approach that might be replicated in other areas.

Read more (https://projects.au.dk/mixed/networks-national-teams/denmark)

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More info

www.mixed-project.eu

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