

KT Masters in Agricultural Innovation Support (MAIS) Project Summary 2025

1. Project title

Understanding the drivers of grassland management practices on Irish organic livestock farms

2. Project background

Clover research is central to Teagasc's grassland programme, which looks at ways to utilise grass to improve the profitability and sustainability of Ireland's milk and meat production. The experience of the organic specialist team and their engagement with organic farmers (including through the Growing Organics monitor farm programme) tell us that top performing organic farmers are already achieving high levels of DM production (11 – 12 ton DM/Ha) with swards containing high levels of clover and zero N. However, a key challenge is that good grazing management is required at farm level to grow, maintain and utilise white clover. This poses technical and farm management challenges with uncertainty over productivity and farm management factors.

There is opportunity to learn from experienced organic farmers to showcase and create an awareness amongst the greater Irish farming population of what is possible in terms of pasture growth in an organic/zero N setting, and to develop tailored KT tools and messages for both organic and conventional farmers.

The project aligns with **EU Green Deal targets**, national sectoral targets, and "National Irish Organic Strategy – 2024-2030" which aim to increase the environmental sustainability of farms and support organic adoption.

3. Project aims and objectives

Aims:

- To understand the management strategies, challenges, and opportunities of organic farmers achieving high dry matter (DM) production with zero nitrogen (N) input.
- To identify key Knowledge Transfer (KT) lessons on clover management that can support both organic and conventional farmers in reducing inputs while maintaining productivity.

Objectives:

- **Farmer Engagement & Data Collection:**
 - To explore organic farmers' experiences, challenges, and motivations as they relate to grassland management practices.
 - To identify lessons and opportunities for improved clover-based systems.
- **Knowledge Transfer & Impact Pathways:**
 - Identify practical KT lessons for wider adoption of low-input management practices on organic grassland systems.
 - Provide recommendations for conventional farmers interested in reducing N inputs while maintaining productivity.
 - To chronicle the journey of participating farmers in facing the challenges of zero N to glean useful lessons for both farmers and advisors.

4. Suggestions for methodology

This study uses a **mixed-methods approach** to combine **quantitative performance analysis** with **qualitative farmer insights**, ensuring a comprehensive understanding of best practices in high clover swards/organic grassland management.

- **Grassland Performance Analysis:**
 - This project will build on grass measurement data collected in collaboration with the Teagasc "Grass 10" team using the PBI system on a cohort of organic farms. This will provide **grass measurements** to assess dry matter (DM) production and seasonal variations under zero nitrogen (N) input, providing a basis for comparison with conventional farms.
- **Farmer Engagement & Knowledge Transfer (KT):**
 - Conduct **semi-structured interviews** with organic and conventional farmers to explore and compare decision-making, challenges, and motivations.
 - Organize **focus groups** with organic and conventional farmers to facilitate peer learning and identify barriers to adoption.
- **Data Integration & Analysis:**
 - Use **thematic analysis** to extract key lessons from farmer discussions.
 - Apply **comparative analysis** to identify commonalities and differences in successful organic management strategies.

This **blend of field data, farmer expertise, and participatory learning** will provide actionable insights for both advisers, conventional farmers and organic farmers.