

2022 Masters in Agricultural Innovation Support

Project Summary

1. Project Title and Associated Programme

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| KT Programme | Teagasc/Dairygold Joint Programme |
| Project title | Farmer led identification of barriers and solutions to the adoption of clover on dairy farms |

2. Project background

The recent EU Green deal set an ambitious target to achieve a 20% reduction in fertilizer use by 2030 (EU, 2020). The use of biologically fixed N from white and red clover on farms will be vital if a reduction in chemical N fertiliser is to be realised while maintaining our sustainable pasture based milk production model. The use of clover has also been identified as an important measure to reduce both ammonia and GHG emissions within the Teagasc GHG (Teagasc, 2020) and ammonia MACC (Teagasc, 2020).

There has been extensive technical research on clover within Teagasc which has proven its benefits. However, the adoption of clover at farm level has been relatively low. The reasons behind this poor adoption at farm level are not well understood. There is an imminent need in the face of various environmental challenges to better understand why farmers are not adopting clover and what are the key barriers to its adoption at farm level.

While limited, there are a number of farmers who have successfully established and utilised clover on their farms to reduce N input and their knowledge and experience of establishing clover needs to be shared with other farmers to break down barriers to clover adoption and ultimately improve the adoption of clover at farm level.

This study will adopt a bottom up approach where the current attitudes of dairy farmers in the Dairygold co-op catchment area towards clover and barriers to its adoption will be identified and discussed with farmers who are actively utilising clover to co-develop solutions and targeted KT messages to promote clover adoption.

3. Project aims and objectives

- Identify the current attitudes of dairy farmers in the Dairygold co-op area towards clover and rank in order of importance the key barriers preventing them adopting clover on their farms
- Identify farmer-lead solutions to the key barriers to the adoption of clover at farm level
- Develop targeted KT messages (Verbal, written, social media) to improve the adoption of clover at farm level

4. Suggestions for methodology

Part one:

Dairy farmers within Teagasc/Dairygold joint programme discussion groups will be surveyed to attain their current attitudes towards clover and the key barriers they see to the adoption of clover.

Part two:

Focus groups will be held with the current Teagasc National clover group, which consists of 17 dairy farmers from the southern half of Ireland. The results of the survey in part one of the study will be discussed at these focus groups to identify and collate how they overcame these barriers to the adoption of clover on their farms.

Part three:

The solutions established in part two will be used to co-produce targeted KT messages on the adoption of clover that will be communicated back to the Teagasc/Dairygold joint programme discussion group members

Part four:

The dairy farmers within the Teagasc/Dairygold joint programme discussion groups will be surveyed again to assess attitude change towards clover and review if the messages developed in part three were successful

5. Expected Impact of the Project

The Teagasc dairy roadmap 2027 (Teagasc, 2020) is targeting a reduction in chemical fertiliser N use via the adoption of clover. This study will provide valuable insights for our KT programme into the key barriers that are preventing our clients from adopting clover and help to provide practical innovative solutions to overcome these barriers as identified from farmers who have successfully established clover.

This study is also strongly aligned with the objectives of the Teagasc Signpost programme to 'lead and support the transition of Irish farming to more sustainable farming systems, reduce emissions, improve water quality and reduce costs'. The adoption of clover at farm level is also a key target for phase two of the Teagasc Grass10 programme.