Factors Influencing Tillage Students' Decision to Diversify into Horticultural Food Production

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Introduction

Due to shifting market trends and agricultural policy objectives, diversification is an option being promoted and built into EU agriculture and rural development policy (Turner *et al,* 2006). Horticulture has ben recognised as a sector that contains opportunities for growth, particularly through import substitution (DAFM Foodwise 2025). This poster highlights some of the key factors that were found to influence tillage students' decision around horticultural diversification and some of the proposals for the 'Agricultural Knowledge and Innovation System' that emerged. A perceived lack of technical, financial and market information on horticultural opportunities is causing uncertainty and risk, from the perspectives of tillage students in this study. Misperceptions of the horticultural industry and social pressures around continuing tradition play a major role in suppressing innovation into the horticultural sector.

Results

The graphic below highlights the factors that influence participants' willingness to consider horticultural diversification, based around the pillars of The Theory of Planned Behaviour (Ajzen, 1991).

Discontent with Profits Achievable in Tillage Farming

Participants were dissatisfied with profits in tillage farming and felt that the sector is overly reliant on EU subsidies

High Potential Profits and Low Land Utilisation

Participants recognized the opportunities in terms of potential profits and land utilization as a major driver to the horticulture sector

Misperception of Horticulture

Participants initially perceived horticulture as small scale gardening and amenity focused, displaying a lack of knowledge of the commercial sector and the people in it

Adverse Attitude Towards Risk

Participants were more accustomed to 'incremental' diversification opportunities and had a risk aversive attitude to 'radical' or innovative opportunities Attitudes and Perceptions

Perceived Behavioural Control

Subjective Norms

Pressure to Continue Tradition

Participants felt pressure to continue tillage farming traditions from their family and community

Methods and Participants

The participants of this study were nine level five tillage students' from Kildalton Agricultural College. All of the participants were Irish, male, between 18-21 years old and from tillage farming backgrounds. The conceptual framework for this study was based around The Theory of Planned Behaviour (Ajzen, 1991). It focused on developing knowledge on students attitudes, subjective norms and perceived behavioural control towards horticultural diversification. The participants were asked to complete a qualitative survey which was made up of Likert scale and word association style questions. Participants were then asked to watch two videos of horticultural producers as an exploratory 'before and after' part of the method (Fraenkel, Wallen and Hyun, 2012). Finally, participants were invited to complete a 15-20 minute semi-structured interview which focused on developing a deeper understanding of participants attitudes, subjective norms and perceived behavioural control towards horticultural diversification.

Incomplete Information

A lack of crop financial and technical information on the opportunities in horticulture resulting in immeasurable risk

Lack of Hort Related Technical and Business Skills

Participants felt they lacked technical skills required for specialised horticultural crops, as well as business related skills such as labour management and administration, which was a barrier to diversification

Marketing Risks

Participants felt access to markets, the lack of contract security and meeting quality standards were risks of the sector

Lack of community support towards innovation

Participants felt that if they diversified into horticulture, they would risk being ridiculed by their community.

They perceived a sense of envy or begrudgery culture in their community towards innovation

Proposals for the AKIS

The AKIS has a responsibility to maximise the innovative capacity of the agricultural and horticultural sectors and based on the evidence of this study, the following initiatives are proposed.

- Increase innovation and diversification modules in Agricultural Colleges - Increased exposure to horticulture and young 'champions' of diversification to help develop positive attitudes and social norms conducive to innovation.
- Promote cross-sectoral collaboration among advisors Farm visits, seminars and events where farmers and advisors have the chance to share knowledge of opportunities outside their immediate sector.
- Investment in the horticultural sector Further research of the opportunities in the horticultural market is required. Investment in AKIS resources to generate and disseminate the required technical information for the sector to take advantage of the opportunities







Acknowledgements and references

For further details and links to the references Ajzen, (1991), DAFM Foodwise 2025 (2015), Fraenkel, Wallen and Hyun, (2012) and Turner *et al*, 2006, please contact Eoin Sweetman at the email address at the top of the page.