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Factors Influencing New Entrant Dairy Farmer's Decision-making Process around Technology Adoption

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Abstract

Purpose: The aims of this paper are to (1) evaluate the main factors influencing grazing system technology adoption among new entrant (NE) dairy farmers within Europe and the Irish pasture-based dairy industry, and (2) to determine the extent to which economic factors influence decision-making around technology adoption and use among NEs to the Irish dairy industry.

Methodology: Multivariate analysis is used to investigate the associations between region, education level, previous experience in dairy farming, herd size, age and the farmer's perception of the usefulness (PU) and ease-of-use of a technology (PEOU), and the likelihood of that technology being adopted.

Findings: The results of this study identify a high rate of grazing, artificial insemination (AI) and financial management technology adoption among NE dairy farmers whose technology decisions are primarily motivated by financial considerations and are closely related to the PU and PEOU scores of the technology. Grassland measurement had the lowest adoption rate (51%) compared to AI (86%) and farm financial management (84%).

Practical Implications: The substantial importance of PU and PEOU to technology adoption decisions indicates that future research, extension and education programmes should place increased emphasis on the benefits and usability of key technologies in addition to evaluating their scientific merit.

Originality/Value: For the first time information assessing technology adoption amongst new dairy farmers is available. This has the potential to improve and increase extension and education for new dairy farmers in a future post-quota environment.

Key Words:

- Technology adoption
- Decision-making
- Extension
- Pasture-based system
- New dairy farmers
- Farmer learning

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