



The Journal of Agricultural Education and Extension >

Competence for Rural Innovation and Transformation

Volume 22, 2016 - [Issue 2](#)

1,877 47

Views

0

CrossRef citations to date

Altmetric

Articles

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

Roberta McDonald , Kevin Heaney, Karina Pierce & Brendan Horan

Pages 163-177 | Published online: 07 Apr 2015

Cite this article <https://doi.org/10.1080/1389224X.2015.1026364>

Check for updates

Sample our Global Development journals, sign in here to start your access, latest two full volumes FREE to you for 14 days

Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

Read this article

Share

## 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

## Acknowledgements

The authors gratefully acknowledge the input from Dr. Donagh Berry and Mr. Tom O'Dwyer (Teagasc Moorepark, Ireland), Dr. Lorraine Brennan, Aoife O'Gorman and Anne Markey (University College of Dublin, Ireland), Professor Ellen Goddard (University of Alberta, Canada) and Dr. John Roche (DairyNZ, New Zealand). Many thanks also to the new entrant farmers who contributed to this study.

## Related research

People also read

Recommended articles

Cited by  
47

## Information for

Authors

R&D professionals

Editors

Librarians

Societies

## Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

## Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

## Help and information

Help and contact

Newsroom

All journals

Books

## Keep up to date

Register to receive personalised research and resources  
by email

 Sign me up

  

  

Copyright © 2026 Informa UK Limited Privacy policy Cookies Terms & conditions

Accessibility



Registered in England & Wales No. 01072954  
5 Howick Place | London | SW1P 1WG