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Increasing adoption of agroforestry in the UK

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Executive Summary

The extent of agroforestry in the UK is low, with only 3.3%¹ of land cover used for this purpose. With the UK Government aiming for carbon neutrality by 2050, a crisis in nature occurring, and a lack of resilience in farming systems, the uptake of agroforestry by farmers must be increased considerably. A systematic review conducted as part of the Defra-funded Agroforestry ELM Test project aimed to determine what is holding farmers back from adopting agroforestry and what can be done to encourage them to plant trees on their land.

Key findings and recommendations

- Knowledge of the practice of agroforestry is very low among UK farmers. There must be a substantial investment in agroforestry farm advisory services for agroforestry adoption to increase.
- Farmers consider agroforestry an activity with multiple, long-term costs and find current payment mechanisms inadequate. Payment mechanisms for agroforestry must reflect the long-term nature of the commitment.
- Inclusion of a specific standard for agroforestry in the post-Brexit payment system would make it clear to farmers what is required of them and how they are to be paid for it.

Introduction

Agroforestry is the integration of trees and shrubs into farming systems and farmers typically plant strategically, using trees as a windbreak to prevent soil erosion, or as shade and shelter for livestock, or to diversify into tree products. Clear objectives and an understanding how trees interact with farming systems are required to design a good agroforestry system. Seventy percent² of the UK is used for agriculture and with the UK aiming to reach carbon neutrality by 2050, there is a need to increase agroforestry from its current 3.3% of land cover.

A team comprising the Organic Research Centre, the Woodland Trust, the Soil Association, and Abacus Agriculture has been funded by Defra to undertake the Agroforestry Elm Test project, to provide information to government on preferred farmer payment mechanisms and advice and guidance options for the delivery of agroforestry post-Brexit.

The first output from this study is a systematic review to determine "Incentives and disincentives to the adoption of agroforestry by UK farmers". View the review <u>here</u>.

" I simply don't know enough about agroforestry."

Anonymous farmer quote from a UK agroforestry survey³

About the systematic review

Ten influential surveys and reviews on farmer attitudes to agroforestry published over the last 10 years were examined and 35 potential incentives/disincentives to adoption of extracted. The top 10 factors were determined using a quantitative algorithm (Figure 1).



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Study results and recommendations

The top ten incentives/disincentives to UK farmers adopting agroforestry were as follows:

- 1) Lack of conceptual understanding and knowledge of agroforestry (top factor)
- 2) Grants, subsidy, funding opportunities for agroforestry or lack thereof (tied second)
- 3) Lack of practical understanding and knowledge of agroforestry (tied second)
- 4) Establishments costs (tied third)
- 5) Capital investment requirements (tied third)
- 6) Management and maintenance costs (tied third)
- 7) Reduced profitability and loss of yield (tied third)
- 8) Lack of economic understanding of agroforestry (tied third)
- 9) Access to case studies and demo farms (tied third)
- 10) Clashes with existing agricultural processes and activities (tied third)

Nine of the top 10 factors are knowledge or finance based. Farmers do not feel they know enough about agroforestry to plant an efficient agroforestry system and they have concerns about the long-term costs of agroforestry and financing it.

Recommendation 1

There must be a substantial investment in agroforestry knowledge exchange, including farm and forestry advisory services, peer to peer and mentoring services and education, for agroforestry adoption to increase. Advice must cover deficits in farmer agroforestry knowledge related to: general conceptual knowledge, practical knowledge, economic knowledge.

Recommendation 2

Post-Brexit incentive mechanisms for agroforestry must reflect the long-term nature of the commitment. Farmers identified: establishment costs, capital investment costs, long term management costs, and potentially reduced profitability and yields, as key areas.

Recommendation 3

As UK farmers have a lack of knowledge in agroforestry and concerns about how to finance it, it is argued that inclusion of an explicit agroforestry standard in post-Brexit agricultural policy will help farmers understand the value of the tree assets they have and enable them to enhance and expand tree cover within their farming systems.

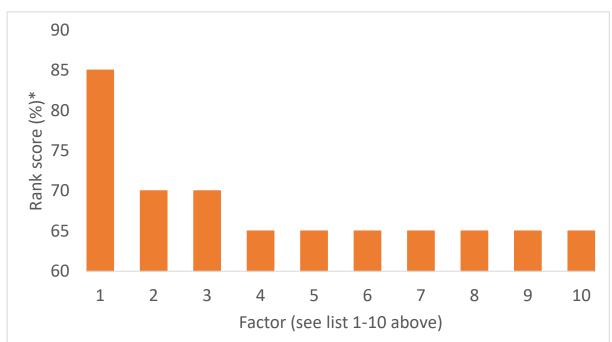


Figure 1: Rank scores of the top ten incentives/disincentives to UK farmers adopting agroforestry listed above.

*Rank score is the mean of % of surveys/reviews a factor was considered in, and the % of the reviews the factor was considered in, in which it was found to be a factor of significant importance in farmer decisions. A factor that appears in all surveys/reviews considered and is found to be important in all of these, scores 100%.

Opinion – Helen Chesshire, Lead Farming Advocate at the Woodland Trust

Helen Chesshire is a senior advisor for the Woodland Trust, responsible for working with the farming sector to promote the benefits of trees on farms. Otherwise known as agroforestry, the deliberate integration of trees within agricultural crops and livestock is a win –win for food production and the natural environment. The Woodland Trust can provide advice and support to farmers interested in agroforestry. Helen grew up on a mixed farm in the Midlands.



"I believe there is a strong argument for including an explicit agroforestry

component in the main farmer payment systems emerging post-Brexit: with an agroforestry standard in the Sustainable Farming Incentive and elements of agroforestry such as wood pasture in the Local Nature Recovery. As it stands currently, I see a distinct possibility of agroforestry falling through the cracks of post-Brexit agriculture policy."

Acknowledgements

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References

- Herder, Michael Den, Gerardo Moreno, Rosa M Mosquera-Losada, João H N Palma, Anna Sidiropoulou, Jose J Santiago Freijanes, Josep Crous-Duran, Joana A Paulo, Margarida Tomé, and Anastasia Pantera. 2017. "Current Extent and Stratification of Agroforestry in the European Union." Agriculture, Ecosystems & Environment 241: 121–32.
- Defra. 2018. "Agriculture in the United Kingdom 2017," 1–111. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7 41062/AUK-2017-18sep18.pdf.
- 3. Mayer, C. 2012. "Agroforestry: A Study of Farmer Attitudes and Perceptions in England (MSc Thesis)." University of Reading.

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