

Rothamsted Repository Download

A - Papers appearing in refereed journals

De-Sousa, K. T., Wright, M., Cardenas, L. M., Deniz, M., Dittrich, J. R., Hotzel, M. J. and Enriquez-Hidalgo, D. 2025. Livestock farmer-reported knowledge and attitudes regarding agroforestry planning and management. *Agroforestry Systems*. 99 (28).
<https://doi.org/10.1007/s10457-024-01115-2>

The publisher's version can be accessed at:

- <https://doi.org/10.1007/s10457-024-01115-2>
- <https://rdcu.be/d7Ua7>

The output can be accessed at: <https://repository.rothamsted.ac.uk/item/99305/livestock-farmer-reported-knowledge-and-attitudes-regarding-agroforestry-planning-and-management>.

© 15 January 2025, Please contact library@rothamsted.ac.uk for copyright queries.

Livestock farmer-reported knowledge and attitudes regarding agroforestry planning and management

Karolini Tenffen De-Sousa, Melanie Writght, Laura Cárdenas, Matheus Deniz, João Ricardo Dittrich,
Maria José Hötzel, Daniel Enriquez-Hidalgo

Supplementary File

Table S1. Profile of the 48 livestock farmers from United Kingdom that participated in the survey on knowledge and attitude regarding agroforestry planning and management.

Demographics	Variables	n	%
Age (years)	18 – 29	5	10%
	30 - 39	7	15%
	40 – 49	12	25%
	50 - 59	12	25%
	60 or more	12	25%
Gender	Female	8	17%
	Male	40	83%
Education	Elementary school	2	4%
	College	12	25%
	Technical degree	6	12%
	Bachelor's degree	12	25%
	Post-graduate degree	16	34%
Years farming	Up to 10	11	23%
	11 - 20	11	23%
	21 or more	26	54%
Total farm area (ha)	< 10	5	10%
	11 - 100	15	31%
	> 101	28	59%
Farm animals	Cattle - Beef	36	75%
	Cattle - Dairy	13	27%
	Sheep	26	54%
	Poultry	7	14%
	Pigs	2	4%

Questionnaire

Section 1 - socio-demographic questions

- What is your gender?
 - Male
 - Female
 - Other
- What is your age (years)?
 - 18 – 29
 - 30 – 39
 - 40 – 49
 - 50 - 59
 - More than 60
- What is your highest level of formal education? (Tick one box)
 - Elementary school
 - College
 - Technical degree
 - Bachelor's degree
 - Graduate degree
 - Post-graduate degree
 - Other (Please describe)
- How many years have you been in farming?
 - 0 to 5 years
 - 6 to 10 years
 - 11 to 15 years
 - 16 to 20 years
 - More than 20 years
- What is the size of your farm in hectares?
 - I have no farm (tenants/ licensees)
 - Less than 5
 - 5 to 10
 - 11 to 30
 - 31 to 100
 - 102 to 200
 - More than 200
- What type of farming operation(s) do you run? Please tick all the boxes that apply to you.
 - Cattle – dairy
 - Cattle – beef
 - Sheep
 - Pigs
 - Poultry
 - Other (please specify)
- Agroforestry is where trees are deliberately combined with agriculture and/or livestock on the same piece of land. Do you have any agroforestry area on your

farm (examples: silvoarable, silvopastoral, riparian forest buffers, windbreak/shelterbelts, forest farming, orchards and hedgerows)?

- Yes (Go to section 4 – Farm area of agroforestry system)
- No (Go to section 6 – Farmers' without an agroforestry system)

- Do you have income from any type of animal production?
 - Yes (**Go to next section**)
 - No (**the questionnaire ENDS here**)
 - What is the percentage of your farm area devoted to the agroforestry system? (Question only for farmers that stated to have an agroforestry area)
 - Less than 5%
 - 6 to 25%
 - 26 to 50%
 - 51 to 75%
 - More than 76%
-

Section 2 - Knowledge and attitudes of participants toward information to plan and manage an agroforestry system

- In your opinion, what does a successful agroforestry system mean? How would you hope to achieve that success? (**open question**)
- Do you have expectations of getting technical support (e.g. courses, training, field days and regular visits) from the governmental agencies in maintaining agroforestry?
 - Yes
 - No
- How would you like to get technical support from the government in maintaining agroforestry? Please tick all the boxes which would you like.
 - Courses
 - Training
 - Field days
 - Regular visits
 - Online forum
 - Printed material (e.g.: guidebook)
- Select the most important sources from where you get your agroforestry technical information nowadays.
 - Internet (e.g. google)
 - Neighbours
 - Social media (e.g. Tiktok, Facebook, Twitter, Instagram)
 - Community groups
 - Universities
 - Research centres
 - Books
 - Online forum
 - I do not search agroforestry technical information

SECTION – All livestock farmers

- How much do you agree/ disagree with the following sentences:

Sentences	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
"I think that the technical support is important for planning agroforestry."					
"I feel that I have all the information necessary to successfully introduce agroforestry."					
"I feel that I have all the information necessary to successfully manage my agroforestry."					
"I would like to engage in courses to improve my knowledge on the management of agroforestry."					

Information to implement	○How do you rate your level of knowledge about this information to implement and manage agroforestry?				
	Below basic	Basic	Neutral	Proficient	Advanced
Tree species selection					
Tree spacing					
Tolerance of pasture to shade					
How to protect trees in the early years					
Practical management	Below basic	Basic	Neutral	Proficient	Advanced
Thinning					
Pruning					
Replanting trees					
How to prevent damage from animals to trees					
Maintenance of protective fences					
Grazing management					
Soil fertility amendments					
Livestock stocking rate					
Rotational grazing					

(the questionnaire ENDS here)