**RRES Press Release 15 August 2024 New survey highlights multiple barriers to farm uptake of climate change mitigation measures**

*Urgent policy re-think required if UK livestock farmers are to be convinced of benefits say researchers*

Livestock farmers have expressed a significant unwillingness to adopt greenhouse gas mitigation measures, according to a new UK survey conducted by Rothamsted researchers. Various barriers to adoption were identified, including inflexible land contracts, cost, poor awareness of mitigation measures, non-availability of markets for bioenergy crops and scepticism about the future impacts.

201 farmers were included in the survey. The results consistently showed that age, labour availability and farm sector influence the likely adoption of mitigation measures. In particular, livestock grazing farmers showed a significant unwillingness to adopt these best practices.

“Rapid uptake of greenhouse gas mitigation measures is central to reducing agricultural and land use emissions and meeting the UK Net Zero policy,” said research lead Dr Asma Jebari. “The socioeconomic challenges and barriers to uptake are poorly understood, suggesting that existing policies and structures are unlikely to deliver effective outcomes.”

Some agricultural land managers in the survey thought that those proposing GHG mitigation measures and emission reduction targets seemed to have not considered how they might impact profitability. In the case of reducing stocking density, many were of the opinion that, although reducing this in grassland would likely also reduce emissions, such action might negatively affect their farm’s efficiency and profitability and result in poor performance of grassland as a result of under-grazing.

“If I lose one [animal], I reduce my income,” said one respondent. “Reducing organic stocking rates would have no effect on decreasing carbon. In fact, it would reduce carbon sequestration in my soil,” said another.

The study also highlighted problems of limited farm resources. Shortage of agricultural labour, for instance, is an ongoing challenge in the UK and this may affect farmers’ ability to implement more innovative practices.

“Our research showed a clear need for more flexible land contracts, as this is central to the uptake of certain structural measures such as agroforestry and bioenergy crops,” said Dr Jebari. “This also extends to more cost-intensive approaches, such as the use of anaerobic digesters and long-term soil and organic amendments, which require long-term land contracts and flexibility in land use.”

This research further underscored a general poor awareness and knowledge of GHG mitigation measures, including their impact on business-as-usual farming operations. However, responses were mixed. Some agricultural land managers were fully aware of the issues and were already transitioning land use to reduce GHGs. Other respondents stated very limited awareness.

“There is a need to promote farm-level awareness and on-farm demonstrations of the various mitigation measures on offer to improve adoption among farmers. In addition, cost of uptake is a critical barrier, and there is much uncertainty about the likely outcomes of new technologies and interventions. Policy innovation could help in varying ways; such as offsets to support on-farm experimentation. In addition, landscape models to facilitate more cooperation and co-adoption between farms would be very helpful,” said Dr Jebari.

**Publication**

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