

Climate Change and Climate Action in Welsh Agriculture

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SUMMARY

This paper explores the opinions and perspectives of Welsh farmers in relation to climate change, climate action and the future. In conjunction with, this paper explores how these opinions and perspectives translate into real life behaviours, and how the contextualisation of an ‘environment’ in terms of how abstract or how closely aligned it is to a farmer can impact their drive for climate action.

KEYWORDS

Climate ergonomics, agriculture, climate action, future thinking.

Introduction

There is an identifiable need for all sectors within Wales to do more to curb their contributions to climate change if Wales is to achieve its target of net zero emissions by 2050. The agricultural sector in particular needs to adapt its practices with current predictions suggesting that the sector could become the largest contributor to Welsh emissions by 2035 (Wales Centre for Public Policy, 2023), particularly as there is a recognised lack of future planning in relation to climate change within small businesses (SME Climate Hub, 2022; Mittal, 2024). Encouraging episodic future thinking (EFT), or the mental simulation of future events, could be useful in encouraging people to adopt more pro-environmental behaviours and climate action (Lee et al., 2020) which could in turn help with encouraging farmers to adjust the management of their farms. There is research ((Kuehne, 2012; Woods et al., 2017; Brobakk, 2018; Davidson et al., 2019; Houser, Gunderson and Stuart, 2019) to suggest that farmers have a lower than average acceptance of climate change, or have higher than average scepticism of it, with financial incentive or increased productivity acting as better motivators for climate action than the risk of adverse effects due to climate change itself. As such, with climate change risk perception acting as a mediator between EFT and climate conscious attitudes (Lee et al., 2020), farmers may find it more difficult to engage with EFT, but could still benefit nonetheless, particularly with the cumulative effect repeated EFT can have on delay discounting (Mellis et al., 2019). This study aimed to explore the opinions and perspectives of climate change and climate action, as well as the future thinking of Welsh farmers in order to contribute to the wider literature around the efficacy of EFT as an intervention in behaviours relating to climate action, as well as amplifying the opinions and concerns of farmers, an underrepresented group that have a huge impact on the natural environment. Furthermore, this study investigated the ways in which Welsh farmers engage with their own local environment, and how the way they view, and engage with, their environment affects the way they perceive climate change.

Methods

Semi-structured interviews were conducted to capture detailed perspectives, allowing the participants to share their opinions and perspectives, whilst affording the researcher the flexibility to

explore interesting tangents whilst sticking to a pre-planned topic guide. Said topic guide structured the interviews into four sections: general farm information, opinions on climate change, future farming perspectives, and the interplay of future planning and climate change. Questions were open-ended to encourage detailed responses, supplemented by targeted probes where needed. A purposive sample of 10 Welsh farmers was chosen to reflect the proportional distribution of farm types in Wales. Farms were categorized by primary produce, with mixed farms proportionally divided. The inclusion criteria required participants to be principal farmers operating in Wales. Diversification enterprises were noted but not included in sample criteria. Interviews were conducted in person, recorded, and transcribed verbatim with identifying information removed. Thematic analysis was employed inductively, ensuring themes emerged organically from the data while acknowledging some deductive influence from the research questions.

Findings

Six core themes were identified from the interview data, with strong inter-theme relationships established. These themes included Climate Change, Climate Action, Government Policy, Barriers to Climate Action, Future of Farming and Future Thinking. Furthermore, these themes had strong inter-theme relationships which are described in table 1.

Table 1: Inter-theme relationships

Inter-theme relationship	Description
Climate Change & Barriers to Climate Action	Participants who were sceptical about climate change often viewed climate action as futile, citing it as a waste of time or resources.
Government Policy & Barriers to Climate Action	Distrust in government policy aligned with scepticism about climate action, particularly regarding political motives and practical challenges.
Climate Action & Future Thinking	Participants actively engaged in climate action often emphasized its economic benefits but also acknowledged environmental advantages, linking sustainability with clearer visions of the future.
Barriers to Climate Action & Future of Farming	Financial and systemic barriers to climate action were linked to concerns about the wider farming sector's insecure future.
Climate Change & Climate Action	Despite scepticism about climate change when talking about the environment at large, participants showed strong commitment to preserving their farmland, revealing a personal connection to environmental stewardship. Optimism was higher when discussing the participant's personal futures rather than the wider sector.

Perhaps the most interesting finding to emerge was the stark difference in attitudes participants had when talking about different kinds of environments. When talking about the more abstract (to them) wider environment, they appeared to believe they had little to no responsibility to protect it, or that climate change even exists. However, when the environment being discussed was their own local environment, there was a real sense of duty to protect it against changing and increasingly adverse weather. This suggests that the context with which farmers are approached in relation to climate action and sustainable practices can have a significant impact on their acceptance of pro-climate measures. However, this intense sense of duty for their local environments appears to pose challenges for policy makers/governments who were widely considered to be an untrustworthy outgroup with questionable motives.

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