

A Just Transition for Small and Medium Enterprises: The Case of Small-Scale Horticulture Growers in South Yorkshire Area

Project team:

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Challenge and Response

Horticulture is a branch of agriculture that encompasses the growing of fresh fruit, vegetables and ornamental plants. Decarbonising horticulture is a fundamental element towards achieving net-zero futures, since it is an energy dense and vulnerable to climate change sector^{1,2}. Embedding Small and Medium Enterprises (SMEs) on the decarbonisation agenda, is also important, as smallholder agriculture accounts for over 80% of global agriculture - including horticulture³ - and play a vital role in providing locally produced food, supporting local economies and sustaining sustainable livelihoods⁴. According to ONS data⁵ in the UK, fruit, vegetable and flower businesses are predominantly SMEs; while according to the

Horticulture Trades Association⁶ over 90% of environmental horticulture businesses are also SMEs.

However, net-zero/sustainability transitions create a plethora of socio-economic and spatial inequalities, and fairness concerns are constantly raised for smaller actors, across different geographies^{7,8}. Nevertheless, very scarce research has previously focused on how horticultural SMEs are positioned within decarbonisation pathways and just transition frameworks; leaving a significant gap around justice considerations in this sector.

This PhD study aims at uncovering the just agri-food transition narrative through the lens of

SMEs, and more specifically small and medium horticulture growers. For this study, we define small and medium horticulture growers, in line with the EU recommendation for SMEs i.e. employing <250 persons and having an annual turnover ≤€50 million⁹. Drawing upon empirical findings from our fieldwork in rural and peri-urban areas around South Yorkshire we develop an in-depth understanding on both what decarbonisation entails for small-scale growers, and also on how it can be designed in a fair-for-all manner. Focusing on the South Yorkshire Area specifically and building upon the existing community growing culture and rising number of agro-ecological market gardens¹⁰, we further explore the opportunity for promoting horticulture food production in urban areas¹¹, simultaneously uncovering the potential for revitalising South Yorkshire's post-industrial landscape.

Via in-depth semi-structured interviews we: (i)

shed light to the growers' vulnerability to climate change and current climate and decarbonisation action, (ii) uncover the transition-induced opportunities and challenges for smaller growers, and (iii) explore their visions of a just transition.

Through this qualitative research, we aspired to create a space of empowerment for the under-researched and under-represented groups, where they can share their perspectives and have their voices heard. Via re-thinking the just agri-food transition narrative, we position small-scale growers and local communities, at the epicentre of the net-zero transformation. This provides a creative pathway towards designing a resilient, equitable, and sustainable agri-food system. In order to provide a broader spectrum on the just transition planning process, we have also conducted additional interviews with specialists across Regional Authorities and City Councils, as well as local stakeholder organisations.

1 Wentworth, J., & Bradshaw, S. (2023, October 30). [Future of horticulture](#) (POST PN 0707). UK Parliament POST.

2 EHG (2024). [Mission green growth: A strategic plan](#). Environmental Horticulture Group.

3 Lowder, S. K., Sánchez, M. V., & Bertini, R. (2021). [Which farms feed the world and has farmland become more concentrated?](#). World Development, 142, 105455.

4 Woodhill, J., Hasnain, S., & Griffith, A. (2020). [What future for small-scale agriculture](#). Environmental Change Institute, University of Oxford: Oxford, UK.

5 ONS (2025). [Enterprises in agriculture by region, employment size and turnover size for 2022, 2023 and 2024](#).

6 Horticultural Trades Association (2025) [Written submission \(SBS0083\) to the Business and Trade Select Committee inquiry on the Small Business Strategy](#). UK Parliament.

7 Newell, P., & Mulvaney, D. (2013). [The political economy of the 'just transition'](#). The geographical journal, 179(2), 132-140.

8 Sovacool, B. K. (2021) [Who are the victims of low-carbon transitions? Towards a political ecology of climate change mitigation](#). Energy research & social science, 73, 101916.

9 European Commission (2003) [Commission Recommendation 2003/361/EC concerning the definition of micro, small and medium-sized enterprises](#), Official Journal of the European Union L124.

10 Halsall, F., Roberts, G., Graham, K., & Logan, R. (2021). [Farming Sheffield's Fringe: The potential of food growing and farming on peri-urban land around Sheffield](#). ShefFood / Shared Assets / Sustain.

11 Edmondson, J. L., Cunningham, H., Densley Tingley, D. O., Dobson, M. C., Grafius, D. R., Leake, J. R., McHugh, N., Nickles, J., Phoenix, G. K., Ryan, A. J., Stovin, V., Taylor Buck, N., Warren, P. H., & Cameron, D. D. (2020) [The hidden potential of urban horticulture](#). Nature Food, 1(3), 155-159.



Findings and Potential Impacts

Whilst data analysis is still in progress, below is a summary of key findings emerging from our research:

- **Vulnerability to climate change and adaptation:** Growers have expressed their concerns over the impact of unpredictable weather patterns on crop yields - as most of them are growing outdoors - which they see as an important challenge in their efforts to adopt more sustainable practices, whilst also building adaptation and resilience.
- **Feelings towards net-zero:** Growers' feelings and attitude towards decarbonisation vary. Decarbonisation is perceived as a major challenge for growers who lack the necessary resources and technical know-how; thus, triggering reluctance and problematisation. In other cases, growers feel more optimistic and feel that the net-zero transition is an opportunity to move towards a more sustainable operation, focusing on a more conscious use of natural resources, ensuring more equitable benefits for the planet and the people.
- **Identities of small-scale:** Operating at a micro and small-scale, growers talk about their distinct characteristics, but also highlight numerous challenges that they are currently facing due to their size. Growers make an urgent call for a greater focus on the ways they operate, as well as on the vital role they play at ensuring a more sustainable agri-food system, and supporting the local economy. Growers also share a strong desire for greater

accessibility and representation in the decision-making processes, as well as a greater inclusion in policy and regulatory frameworks related to sustainability, climate action and decarbonisation.

This research holds significant potential for scaling, by embedding different types of SMEs of the horticulture sector, such as processors, distributors, and retailers. Expanding the research to these actors will allow for a more holistic understanding of the opportunities and the challenges posed by decarbonisation across the horticulture supply chain, also providing a more solid foundation for an appropriate design of a just transition of the sector. Using a comparative case study approach allows the research to generate insights that can inform policymakers and foster more targeted interventions, whilst also enabling the replication of successful strategies across sectors and regions.

Recommendations

A key recommendation involves the development of tailored policies for horticulture SME growers. To support small-scale horticulture businesses in the transition toward low-carbon and sustainable practices, policies need to be specifically designed to address their unique needs. This might include financial support, such as grants and incentives for adopting low-carbon technologies, as well as guidance on the range of decarbonisation options that are available for fruit-vegetable growers and flower farmers operating at a smaller or micro scale. Implementation should involve tailored funding schemes, advisory services, and capacity-building programmes, which take into consideration the sector, scale, and business

models of small growers; all of which at the moment are highly underserved by existing policy and regulatory frameworks. By providing this targeted support, small-scale horticulture businesses would be able to adopt sustainable practices more easily and without facing financial constraints, facilitating in this way the transition towards net-zero, whilst also fostering more equitable and achievable outcomes for SMEs, which are vital actors in the agri-food system.

A second recommendation revolves around the promotion of shared learning and the creation of collaboration networks within the horticulture community, in the form of peer-to-peer learning initiatives, information-sharing platforms, and structured networks that enable small growers to exchange knowledge on sustainable growing practices and low-carbon strategies. Facilitation of local collaboration networks - led by SMEs, and supported by the Local Councils - can aid growers to share insights, experiences, and practical solutions, fostering a sense of community, and reducing isolation. These collaborative spaces will not only enhance the collective capacity of small-scale growers to transition effectively but will also provide a supportive environment that encourages innovation and continuous improvement. This will ultimately strengthen the sector's resilience and contribution to a just and sustainable agri-food system for all.

Next Steps

In order to maximise the impact of this research, next steps need to involve the replication and expansion of the study. On this note it is important to highlight that this study has already been

expanded to include the Western Greece Region. The City of Patras, which is the capital of the Region, was strategically chosen as it is also a post-industrial area and provides a robust comparative case study that will allow to extrapolate shared lessons, whilst also enhancing relevance and transferability findings.

The follow up will include data analysis and exploration of emerging findings, in order to initiate a comparative discussion and uncover lessons learned in different geographical settings. This will allow for a more in-depth understanding of small-scale growers' experiences across different regions, but will also provide a more robust foundation towards planning for a just transition.

A final step includes engaging stakeholders, through participatory approaches. In this study, we have targeted and conducted research with different groups of participants, separately. Future research should seek to take a further step towards bringing together policymakers, SMEs, and stakeholder organisations, in order to establish direct lines of communication, promote engagement, and enhance co-creation in the net-zero transition planning. Co-creation will foster a truly equitable decarbonisation, by equally taking into consideration the views of all actors involved, and by promoting a green regional transition, built upon sustainability and solidarity.

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