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AD|ARC (Administrative Data Agri-Research Collection): Linking Individual, Household and Farm Business Data to create a Research-Ready Dataset for ADR UK

Nathan O'Connor¹, Richard McFerran², Laura Madden², Sian Morrison-Rees³, and Paul Caskie⁴

¹ONS, London, United Kingdom

²Welsh Government, Cardiff, United Kingdom

³Swansea University, Swansea, United Kingdom

⁴Agri-Food and Biosciences Institute, Belfast, United Kingdom

Objectives

To produce a 'farm spine' to support the creation of a de-identified research-ready dataset (RRD) of farming individuals and households in England.

To publish the RRD in the ONS Secure Research Service to be utilised by accredited researchers to generate evidence to support policy development.

Methods

ONS' Linkage Team identified the data acquisition needs of the AD|ARC team.

June Agricultural Survey and Rural Payments Agency data from 2020-2022 were provided by DEFRA and linked by ONS' ADR Linkage team using farm identifiers, addresses, and contact information to create a "farm spine".

This spine, comprising two sources of address and contact information for both businesses and individuals, enhanced the matching potential when linking to the 2021 Census and the Inter-Departmental Business Register. Exact matching and deterministic linkage methods were used to match farms with associated households and businesses to create a unified linked dataset.

Results

The 'farm spine' product provides researchers with geographic and farm activity data, subsidy payment and business ownership and turnover information, and social characteristics of those living in farming households. This presentation will include details of the data preparation, challenges encountered, and solutions utilised at each stage of building this complex dataset.

Conclusion

The presentation will report on the resulting RRD, its benefits to accredited researchers, and crucial position in the UK-wide project with RRDs in each of the four nations. We will reflect on lessons learned with regards to navigating data acquisition and governance, and developing a strong cross-organisational relationship. To the best of our knowledge, the AD|ARC RRDs are the first datasets linking agricultural data to individual- and household-level data at a population level.

The AD|ARC RRD provides an invaluable resource that will inform policymakers seeking to support agricultural and rural communities, as the sector adapts to economic pressures and new policy priorities. The multi-organisational approach will allow us to reflect on lessons learned during the preparation of the RRD.



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