



Research Fellowship Applicant Webinar

Administrative Data – Agricultural Research Collection
(AD ARC)

10th November 2025
1:00 – 2:00 pm



AD | ARC

Administrative Data
Agricultural Research Collection



Linking the farm household with the farm business

We will cover:

- Introduction to AD | ARC
- Overview of the linked datasets
- Research themes and questions
- Synthetic data and 2021 data
- How to access further information

AD | ARC background

- **Need:** agriculture, a devolved policy area, facing enormous change
- **Aim:** to inform policy development and farmer interests by integrating business and human data
- **Organisation:** project delivering RRD and pilot research
- **Structure:** autonomous data collections in each UK nation



AD | ARC overview

- **Network:** engagement with government, academic, third-sector and practitioner stakeholders
- **Value:** rare opportunity to explore the dynamic formed by individual, household, business and spatial relationships
- **Scope** - four research themes:
 - Socio-demographic
 - Health and wellbeing
 - Prosperity and resilience
 - Environment and place
- **Ethos:** Fellows encouraged to work with project team and wider network



Anonymised Data Linking

- Link existing government datasets so information relating to the same person, household, organisation, place or event can be connected
- Identifying information is removed
- Can conduct research across several different data sources without ever having to identify a person, household or organisation
- Record for each individual or household
- Conduct research on de-identified linked data in secure research space

AD | ARC linked datasets

Administrative Data | Agriculture Research Collection – England

- Census of Population (2011)
- EU Farm Structure Survey (2010)
- Rural Payments (2010)
- Inter-Departmental Business Register (2006-2018)

Administrative Data | Agriculture Research Collection Wales (ARCW)

- Census of Population (2011)
- EU Farm Structure Survey (2010)
- Rural Payments (2010, 2013, 2016)
- Welsh Demographic Service Dataset

*Inter-Departmental Business Register
code available for additional linkage.*

ARC-England and ARC-Wales cohorts

The AD|ARC England/Wales cohorts are defined as: all members of households in England/Wales that have been successfully linked to farm businesses claiming under the Single Payment Scheme in 2010.

This means that the cohort contains both:

- households where at least one individual reported an agricultural main occupation in the Census 2011
- households where no-one reported an agricultural main occupation in the Census 2011.

All household members are included .

Agricultural Data Preparations

- Agricultural data is collected at different levels:
 - EU Farm Structure Survey – farming activity collected at a holding level
 - Subsidy Payments – made at a business level
- A household can own more than one business with each business containing more than one holding
- All farm business data has been aggregated to a household level

ARC-England and ARC-Wales cohorts

Household level table

- **Census 2011 variables** that relate to the household and property e.g. the tenure of the dwelling, household size, car/van availability, central heating
- **variables relating to the farm business and activity data** e.g. numbers of livestock, utilised agricultural area, total subsidy payments
- **variables derived from agricultural sources** e.g. Farm Type, farm size
- ****variables from the IDBR**, e.g. turnover.

Individual level table

- **Census 2011 variables** that relate to the individual e.g. age, gender, occupation, highest level of qualification, self-reported general health
- **Selected agricultural variables**, e.g. Farm Type, farm size
- **Derived variables** e.g. 'farming occupation household'

ARC Datasets

ARC - Wales

- Household level table – Approximately 18,000 records
- Individual level table – Approximately 50,000 records

ARC - England

- Household level table – Approximately 54,000 records
- Individual level table – Approximately 152,000 records

ARC – England and ARC – Wales control groups

Individual level control groups

- Up to 3 individuals per cohort member matched on age (+/- 3 years), gender and Lower layer Super Output Area (LSOA)
- Up to 3 individuals per cohort member matched on age (+/- 3 years), gender and employment status (e.g. self-employed)
- Up to 3 individuals per cohort member reporting their main occupation as farming (i.e. per self-reported 'farmer') matched on age (+/- 3 years), gender and a set of similar occupation codes in the Census 2011

Household level control group

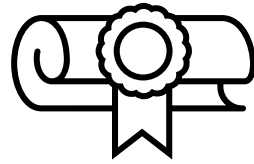
- Up to 3 households (using Household_ID) from the Census 2011 per farming household matched via the LSOA for a similar geographical area

Key Considerations for Research

Although the AD|ARC project team has undertaken the steps documented above to create a Research Ready Dataset, the following limitations should be kept in mind when both undertaking analysis and reporting findings:

- The dataset is ‘research ready’, not fully ‘analysis ready’
- The cohort should not be seen as a census of all ‘farming’ households and may not include ‘farmers’ who:
 - chose not to claim subsidies for which they were eligible
 - did not meet the eligibility criteria for subsidies
 - lived at a second address not listed in the Rural Payments application
- Some farm businesses are linked to more than one household
- Farm businesses may make their Rural Payments application through an agent

Example Farmer



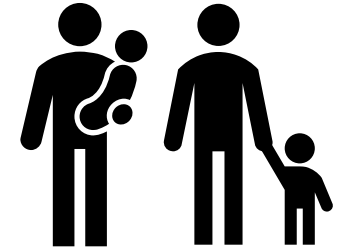
Further education diploma



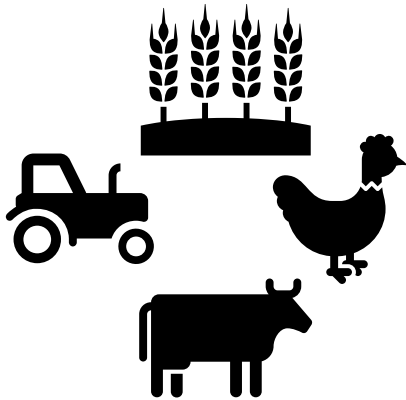
- Detached house (owns outright)
- No central heating



35-year-old male



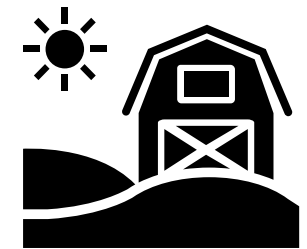
- Lives with his partner and two children
- Spouse works part-time as a Primary School teacher



- 150 cows
- Grows wheat



- Claimed £50,000 in subsidies
- Turnover of £500,000



Medium-sized dairy farm

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Research Priorities

Research Priorities

Socio-Demographic

Do part-time and full-time farmers have different socio-economic characteristics?

Health and Wellbeing

How does farmer and farm household members 'general health' or 'long-term illness' compare with that of rural control households?

Prosperity and Resilience

How dependent are farm households on farm income and subsidies?

Environment and Place

Is the type and frequency of off-farm employment correlated with farm location?



All research topics and questions listed are illustrative only and intended to demonstrate the research potential of the dataset. For AD|ARC's research priorities, please see the [areas of research interest](#) and the ADR UK Research Fellowships funding opportunity.

Synthetic Data

- Wales Synthetic dataset
- Permission from data owners
- Low-fidelity
- Tool for researchers
- Link to explore synthetic data:
<https://adarc.ac.uk/guides/>

DOWNLOADS

Synthetic Data



AD|ARC Wales Synthetic Data

This document contains a low-fidelity synthetic dataset. Figures are randomly generated within a similar range so do not resemble the original figures. The synthetic data is not suitable for analysis.

Download

AD|ARC Wales Synthetic Data - Important Information

This document contains important information regarding the AD|ARC Wales Synthetic Dataset. Please read before exploring the synthetic data.

Download

AD | ARC 2021 research-ready datasets

The AD | ARC 2021 research-ready datasets for England and Wales are **not yet available** but will be made available in 2026.

England 2021:

- Census of Population (2021)
- June Survey of Agriculture and Horticulture (2021)
- Rural Payments (2020-2022)
- Inter-Departmental Business Register (2008-2023)

Wales 2021:

- Census of Population (2021)
- June Survey of Agriculture and Horticulture (2022)
- Rural Payments (2022)
- Inter-Departmental Business Register (2007-2023)

If you have any queries about the 2021 RRDs, please contact the team.

Funding and acknowledgements

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The AD|ARC project notes with thanks the many collaborators who have supported the development of the Research Ready Dataset, including the Welsh Government, Public Health Wales, the AD|ARC Scientific Advisory Board, and both England and Wales Stakeholder Reference Groups. Similarly, the AD|ARC team notes with thanks the support of other data linking projects in the development this introductory guidance, most notably the Data First and ECHILD projects.

- DEFRA
- ONS (including ADR Data Acquisition Team and ADR Linkage Team)
- SAIL Databank
- ONS Secure Research Service
- Rural Payments

These parties do not accept any responsibility for any inferences or conclusions derived by the authors.

Accessing the data


- Conduct research on de-identified linked data in secure research space.
- Access the ARC - England dataset via the ONS Secure Research Service.
- Access the ARC - Wales dataset via the SAIL Databank.
- Research projects need to be approved by the appropriate panel.
- The data can only be accessed by trained and accredited researchers. Researchers who are fully accredited under the Digital Economy Act (2017) can apply for access.



Where to access more information

7 DOWNLOADS


Dataset information



AD|ARC User Guide Wales

This guide provides an overview of what data is included in the AD|ARC Wales dataset and the methodology for creating the national databases.


[Download](#)



AD|ARC User Guide England

This guide provides an overview of what data is included in the AD|ARC England dataset and the methodology for creating the national databases.


[Download](#)



AD|ARC Wales Metadata

This metadata outlines all of the variables available in the AD|ARC Wales database

[Download](#)



AD|ARC England Metadata

This metadata outlines all of the variables available in the AD|ARC England database

[Download](#)

AD|ARC Documentation: <https://www.adarc.ac.uk/guides>

ADR-UK AD|ARC project page:
<https://www.adruk.org/our-work/browse-all-projects/administrative-data-agricultural-research-collection-enhancing-the-prosperity-and-wellbeing-of-farm-households-293>

ONS Secure Research Service:
<https://www.ons.gov.uk/aboutus/whatwedo/statistics/requestingstatistics/secureresearchservice>

SAIL databank:
<https://saildatabank.com/data/apply-to-work-with-the-data>

Get in touch: AD|ARC@gov.wales



Thank you!

Find us at adruk.org or
on Twitter [@ADR_UK](https://twitter.com/ADR_UK)

