TTP DEMOGRAPHIC DATA QUALITY REPORT

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| **DATA SOURCE** | |
| DATA SUPPLIER: | Department of Agriculture, Environmental and Rural Affairs (DAERA) |
| DESCRIPTION: | Agricultural Census NI 2010 |
| COVERAGE: | Northern Ireland |
| NUMBER OF RECORDS: | 24,471  <https://www.daera-ni.gov.uk/sites/default/files/publications/dard/the-agricultural-census-ni-2010.pdf> |
| **DATA BACKGROUND** | |
| The June 2010 Agricultural Census covered all active farms. Estimates were made for the crop areas, livestock and labour numbers for farms that failed to return their 2010 census form. For the most part these estimates were based on data collated from other administrative systems within the Department, or from the latest return from each farm. However, all farms which had substantive numbers or areas of pigs, poultry or mushrooms in 2009, and which failed to make a return in 2010, were telephoned for the information.  The population of farms to which these census statistics refer includes all active farm businesses having one or more hectare of farmed land, whether owned, leased or taken in conacre, and those with under one hectare having any cattle, sheep or pigs or with significant poultry or horticultural activity.  The list of active farms (the farm register) which is used both to draw the sample and estimate the totals is not a compulsory register and so may be prone to omissions, particularly within certain enterprise types. Farms do not consist of contiguous fields and the location of the farm is centred on the address of the farmer, or the business owner.  Further information on the quality and background of agricultural data is available on the DAERA website at:  <https://www.daera-ni.gov.uk/publications/previous-agricultural-census-publications> | |
| **ADDRESS INFORMATION** | |
| Information available to the TTP for linkage purposes -   * Name information (1 variable) * Address information of farm (5 Variables) | |
| **DATA QUALITY & PRE-PROCESSING** | |
| Record linkage is highly dependent on the quality of the data being linked. Many key variables can be presented quite differently between datasets as the information has been collected and recorded using different methods. This can greatly complicate record linkage unless understood ahead of time. Pre-processing can be used to standardise these variables into a consistent format prior to linkage.  **NAME INFORMATION-** This is available for all records, however, is provided in a number of different formats, e.g. Smith & Sons, Mr and Mrs Smith, Jack Smith. Processing of the data can increase the utility but the names are not sufficient for matching at person level. Names can be used to assist in the verification of address matching.  **-** A name function can be used to parse into First name, Last name and middle names  - Common names which arise in the last name field such as ‘sons’, ‘brothers’, ‘junior’, and ‘deceased’ can be removed and the previous name field used in the last name field.  **ADDRESS INFORMATION-** All records have address information available.  - A number of records (less than 0.5%) have address information outside Northern Ireland.  - Postcode information is standardised prior to linkage. | |
| **MATCHING METHODS** | |
| Using the demographic information provided, and given the quality of the names data, the following matching can be undertaken-  - Address matching | |
| **PREVIOUS LINKAGE MATCH RATES** | |
| The Agricultural Census provided by DAERA has previously been matched to the Population CENSUS 2011 as part of a previous ADRC-NI project. This produced a match rate of 89.2%. | |
| **EVALUATION** | |
| The demographic data from the Agricultural Census provided by DAERA is of very good quality and can be used for matching without extensive pre-processing. | |

Document Management

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| Access Limitations: | ADRCNI TTP, RSU, Data Suppliers, Researchers |
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# Version History

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| Version | Notes | Last Amended |
| 1.1 | Created by ADRCNI TTP, 18/07/16 |  |