



**Standard SIMS Report:** 

**Farm Structure Survey** 





# Single Integrated Metadata Structure (SIMS) Report

# For

# **Farm Structure Survey**

This documentation applies to the reporting period: 2023 Onwards

Last edited: 24/10/2025



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#### 2. Introduction

A Farm Structure Survey (FSS) is carried out between Censuses to measure changes in farm structure. The first Census of Agriculture in Ireland was carried out in 1847, and annually thereafter until 1953. Between 1960 and 1980 Censuses were carried out at 5 yearly intervals. From 1980 Censuses were carried out at 10 yearly intervals.

Farm Structure Surveys were carried out on three occasions in the 1980s ('83, '85, and '87), 1990s ('93, '95, and '97), 2000s ('03, '05, '07) and twice in the 2010s ('13, and '16). There has also been a Census of Agriculture (COA) in 2020.

The objective of the survey is to compile data on farm structure, land utilisation, livestock numbers and farm labour at State and regional level. Similar Surveys are conducted in all EU member states during in order to collect comparable statistics across the European Union

Up until June 2009, agriculture surveys (e.g. FSS and Crops and Livestock Survey June) and the Census collected data on the number of cattle held on farms under different cattle categories (e.g. dairy cows, male cattle 3 years and over etc.). From 2010, the CSO does not collect data on cattle. Published cattle numbers come from administrative data held by the DAFM and the Irish Cattle Breeding Federation (ICBF). The DAFM's Animal Identification and Movement (AIM) system is a database which records all bovine birth, movements and disposals. The system captures details of all animal movements and this administrative data enables the CSO to publish cattle category totals at county, regional NUTS 2 & NUTS 3 levels.

The survey is co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or Eurostat. Neither the European Union nor the granting authority can be held responsible for them.



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# 4. Metadata Update

#### 4.1. Metadata last certified

28 November 2025

#### 4.2. Metadata last posted

12 February 2025

#### 4.3. Metadata last update

28 November 2025



#### 5. Statistical Presentation

#### 5.1. Data Description

This report presents the results from the Farm Structure Survey 2023 conducted by the Central Statistics Office (CSO) in June 2023. This work was undertaken within the framework of the statistical programme of the European Union.

The disseminated output is broken into several chapters:

#### Farm Structure, including:

- · number of farms broken down by region
- · Average utilised agricultural area
- · Farm type

#### Demographic profile of Farm Holders

- · Sex, by farm size and type
- · Percentage of females
- · Age of farm holders, by farm size and farm type
- · Farm holders by age and sex

#### Agriculture Labour force:

- Numbers of farm workers
- Family and non-family workers
- Mean AWU of holder by farm type
- Percentage of farms with succession plan

#### **Standard Output**

- · Median economic size, by county, by farm size
- · Median standard output
- Mean UAA by Economic size
- Economic size by farm type
- · Average Age of holder by economic size
- · Number of farms by economic size

#### Livestock:

- Total cattle, number of farms with cattle, cattle by region and county
- Number of sheep, farms with sheep, sheep by region and county
- Number of pigs, number of farms with pigs, pigs by region and county
- · Number of poultry, number of farms with poultry, poultry by region

#### Land Utilisation

- · Summary of land utilisation
- Agricultural area farmed by region
- · Total grassland area by region
- Total cereals area by region
- Number of farms with cereals
- · Other crops, fruit and horticulture by region.

#### Organic farming:

- · Organic farms by farm type, by farm size, by economic size
- · Land utilisation of organic farms
- Crop type and area under selected organic crops
- Organic farms with organic livestock

#### Farm machinery and renewables:

· Tractors owned by engine power





- · Farms by machinery type
- · Farms with livestock management equipment
- Precision farming equipment
- Renewable energy sources on farms

#### Soil management

- Drainage
- Tillage methods
- Soil cover arable land

#### 5.2. Classification System

Data are collected for the following main categories **Sheep** 

- Breeding Females
- Other Sheep

#### Cattle (from administrative source)

- Dairy cows
- Other cows
- Bulls
- Male cattle 2 years and over
- · Female cattle 2 years and over,
- Male cattle 1-2 years
- Female cattle 1-2 years
- Male cattle under 1 year
- Female cattle under 1 year

#### **Crops (from administrative source)**

- Cereals
- Pulses
- Potatoes
- Fodder roots and brassicas
- Industrial plants
- Vegetables for sale
- Fruit
- Flowers
- Seeds and seedlings
- Nurseries, horticulture etc.
- Other crops (includes fallow land, miscanthus and other energy crops)

The final results publication also reports the area covered (in hectares) by silage, hay, pasture and rough grazing at a NUTS2 & NUTS3 level.

#### Pigs

Data are collected for the following categories of pig in the Farm Structure Survey

- Piglets under 20 kg
- Breeding sows over 50 kg
- Other pigs



#### Poultry

Data are collected for the following categories of poultry in the Farm Structure Survey

- Broilers
- Laying hens
- Other poultry

#### **Labour Force**

Data are collected for the following Labour Force categories in the Farm Structure Survey

- Farm holder Age, Sex and Farm Work
- Farm manager Age, Sex and Farm Work
- · Farm work of family members
- · Farm work of non-family members
- Other Gainful Activities

#### **Economic Size (SO) Classification**

Holdings are classified by fourteen economic size classes which are set out in Annex II to Commission Regulation (EC) no 1242/2008. Some of these size classes have been grouped together and therefore only eight size classes are presented in this report.

#### **Farm Type Classification**

The EU Farm Typology Classification System was developed in order to identify and classify relatively homogeneous groups of farms by reference to two economic characteristics of the farm, its type of activity and its economic size. Both of these characteristics are determined by the application of Standard Output (SO) coefficients, estimated regionally per hectare of crop or per animal, to the individual farm's crop and livestock activities. In this way, all the farm's activities can be measured and compared on a standardised basis (i.e. SO). The classification system is used for the periodic Censuses and Farm Structure Surveys, the current series of which are conducted under Council Regulation (EU) No 1166/2008, as well as the ongoing Farm Accountancy Data Network (FADN) surveys. A complete description of the Farm Typology system is given in Commission Regulation (EC) no 1242/2008.

The *farm type* classification of a farm is determined by the relative contribution of the standard output of the different activities on the holding to the total standard output of the holding. The farm type classification is a three-level hierarchical nomenclature which divides types of farming into the following structure:

- Level 1: General Farm Types (9 headings)
- Level 2: Principal Farm types (21 headings)
- Level 3: Particular Farm types (62 headings)

The complete classification including the definition of farm types is described in Commission Regulation (EC) no 1242/2008 . https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32008R1242

For EU purposes, all farms included in the Farm Structure Survey were classified down to the most detailed farm type (i.e. Level 3). However, details at Level 1 and 2 are found to be adequate for most analytical purposes.

#### **Livestock Units**

Each livestock category is assigned a coefficient which reflects the relative importance of livestock in that category. The number of livestock in each such category is multiplied by the coefficient for that category and the results summed across categories to give a standardised total number of livestock for a particular farm size class or for a particular farm type. Coefficients used for each livestock category differ throughout the world. The coefficients used in this publication are taken from the EU Regulation covering the Farm Structure Survey.





#### **Regional Breakdowns**

A regional breakdown of the Farm Structure results is published as part of the Farm Structure Survey publication.

The composition of the Regions breakdown is outlined below.

- Northern & Western NUTS 2 Region
  - o Border: Cavan, Donegal, Leitrim, Monaghan, Sligo
  - o West: Galway, Mayo, Roscommon
- Southern NUTS 2 Region
  - o **Mid-West**: Clare, Limerick, Tipperary
  - o South-East: Carlow, Kilkenny, Waterford, Wexford
  - o **South-West**: Cork, Kerry
- Eastern & Midland NUTS 2 Region
  - o **Dublin & Mid-East**: Kildare, Meath, Wicklow, Louth, Dublin
  - o Midland: Laois, Longford, Offaly, Westmeath

#### 5.3. Sector Coverage

Agricultural Farming Sector NACE Rev 2.1 A01.

#### 5.4. Statistical Concepts and definitions

#### Farm/holding

An "agricultural holding" or "holding" means a single unit, both technically and economically, which has a single management, and which undertakes agricultural activities listed below within the economic territory of the European Union, either as its primary or secondary activity:

- growing of non-perennial crops
- growing of perennial crops
- plant propagation
- animal production
- mixed farming
- support activities to agriculture and post-harvest crop activities

#### **Agricultural Area Utilised**

The Agricultural Area Utilised (AAU) is the combined area under crops, silage, hay, pasture and rough grazing land in use (including fallow land). Areas under roads, tracks, water, bog, marsh, rocks, unused rough grazing land, buildings etc. are excluded.

#### Farm Type

For analytical purposes, farms are classified in this report as one of eight farm types. These types represent the primary areas of specialisation in Irish Farming. They are derived from groupings applied to a detailed EU farm typology classification system and are based on the relative economic importance of the various lines of agricultural activity carried out on each farm. These types are classified as Specialist Tillage, Specialist Dairying, Specialist Beef Production, Specialist Sheep, Mixed Grazing Livestock, Mixed Crops & Livestock, Mixed Field Crops and Other.

#### **Standard Output (SO)**

The Standard Output (SO) of an agricultural product is defined as the average monetary value of the agricultural output at farm-gate prices. SO is not a measure of farm income. It does not take into account costs, direct payments (such as the Single Farm Payment), value added tax or taxes on products. This has replaced the concept of Standard Gross Margin (SGM) which was previously used to measure the





economic size of a farm. Therefore, direct comparisons cannot be made between the economic size of farms in this report and the economic size of farms published for earlier years.

#### **Economic Size**

The economic size of the holding is measured as the total standard output of the holding expressed in euro. Holdings are classified by fourteen size classes which are set out in Annex II to Commission Regulation (EC) no 1242/2008. Some of these size classes have been grouped together here and therefore, only eight size classes are presented in this report.

#### Livestock unit

A Livestock Unit is a standard measurement unit that allows the aggregation of numbers of livestock across different categories of livestock for comparison purposes.

#### **Family Farms**

These are farms which are operated as family based enterprises.

#### **Commercial Farms**

These are farms registered as companies which paid all their workers as employees (including management) or farms connected with institutions (e.g. schools, colleges, religious communities, prisons etc.). All persons working on commercial farms are classified as regular non-family workers.

#### Farm Holder

The legal owner of a family farm.

#### Farm Manager

The person responsible for the day to day running of the farm. On 97.0% of Irish farms, the farm manager was also found to be the holder.

#### Non-Regular Labour Input

This refers to the labour supplied by those not employed on a regular basis such as casual workers, agricultural contractors and farm relief services.

#### **Annual Work Unit (AWU)**

The labour input of each person who worked on the farm was measured in terms of AWUs with one AWU being defined as 1800 hours or more of labour per person per annum.

#### **Significance of Farmwork**

This categorises the relative importance of farmwork as an occupation to the farm holder.

- Sole occupation: If an individual engaged in farmwork had no other occupation from which an income was earned, then farmwork was the sole occupation.
- *Major occupation:* If farmwork took up the greater part of a worker's time, it was regarded as a major occupation.
- Subsidiary occupation: If the time spent on gainful non-farming activity exceeded that spent on farmwork then farmwork was regarded as a subsidiary occupation. Gainful non-farming activity includes paid farmwork on other farms and all other non-farming activities from which an income was obtained, whether undertaken on or off the farm.





#### 5.5. Statistical Unit

An agricultural holding was defined, in line with the definition in Article 2 of Council Regulation 2018/1091 as 'a single unit, both technically and economically, which has a single management, and which undertakes agricultural activities within the economic territory of the European Union, either as its primary or secondary activity'.

Activities considered 'agricultural' for the purposes of the definition above as outlined in Annex I of Regulation 2018/1091, include the growing of perennial and non-perennial crops, plant propagation, animal 3 production, mixed farming and/or those maintaining agricultural land in good agricultural and environmental condition (under 01.61 of NACE Rev. 2).

#### 5.6. Statistical Population

Farms with size greater than 1 Hectare

#### 5.7. Reference Area

State.

#### 5.8. Time Coverage

2023

#### 5.9. Base period

Not applicable

#### 6. Unit of Measure

Hectares, Litres, numbers, percentages.

#### 7. Reference Period

2023

#### 8. Institutional Mandate

#### 8.1. Legal Acts and other agreements

Regulation (EU) No. 2018/1091 on integrated farm statistics.

#### 8.2. Data Sharing.

Data is shared with Eurostat





### 9. Confidentiality

#### 9.1. Confidentiality - policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.

These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes. Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit: <a href="https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/">https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/</a>

#### 9.2. Confidentiality – data treatment

All data from respondents are treated as strictly confidential in accordance with the Statistics Act 1993. Care is taken to ensure that disclosure of potentially confidential results is avoided.

### 10. Release Policy

#### 10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

#### 10.2. Release calendar access

The release calendar can be accessed via the CSO website, www.cso.ie, or directly from this link: <a href="https://www.cso.ie/en/csolatestnews/releasecalendar/">https://www.cso.ie/en/csolatestnews/releasecalendar/</a>

#### 10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at <a href="https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/">https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/</a>

The various results are published nationally in statistical release format as well as on the CSO website (www.cso.ie). Selected extracts from the results are posted on the CSO's data dissemination database, PxStat.

## 11. Frequency of Dissemination

**Triennial** 



## 12. Accessibility and clarity

#### 12.1. News release

Not applicable.

#### 12.2. Publications

The most recent results of the Farm Structure survey can be found on the CSO website or directly from this link: https://www.cso.ie/en/statistics/agriculture/farmstructuresurvey/

#### 12.3. On-line database

The Farm Structure Survey tables are released on the database PxStat on the CSO website. The tables can be accessed directly from this link <a href="https://data.cso.ie/product/FS">https://data.cso.ie/product/FS</a>

#### 12.3.1. AC 1. Data tables - consultations

Not measured.

#### 12.4. Micro-data Access

A Farm Structure Survey micro data set is submitted to Eurostat for validation.

#### 12.5. Other

All assistance within the bounds of maintaining confidentiality is given to users. Decisions on whether to perform special analyses are taken on a case-by-case basis.

European wide results can be found on the Eurostat website at: <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

#### 12.5.1. AC2. Metadata consultations

Not calculated.

#### 12.6. Documentation on Methodology

Farm Structure Survey and Methodology information is available on the CSO website: <a href="https://www.cso.ie/en/methods/agriculture/farmstructuresurvey/">https://www.cso.ie/en/methods/agriculture/farmstructuresurvey/</a>

#### 12.6.1. AC3 - Metadata completeness - rate

Not calculated.

#### 12.7. Quality Documentation

Further information on the quality of this release is available from the CSO methods page: https://www.cso.ie/en/methods/qualityreports/farmstructuresurvey/





### 13. Quality Management

#### 13.1. Quality Assurance

Quality Management Framework

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCOP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the OMF.

#### 13.2. Quality Assessment

As part of the overall CSO Quality strategy an annual self-assessment exercise is completed to evaluate the quality of processes and outputs.

#### 14. Relevance

#### 14.1. User Needs

The main groups of national characteristics surveyed are decided based on EU FSS legislation, i.e. Regulation 2018/1091. A small number of additional variables were collected for national purposes. The need for these variables was identified through a consultation process with the main stakeholders prior to the survey design stage. Specifically, these variables related to:

- Sheep: A more detailed breakdown of sheep, consisting of rams, ewes (both under and over 2 years) and other sheep (both under and over 1 year).
- Equidae: The sub-division of Equidae into thoroughbred, other horses and mules, jennets and donkeys.
- Deer: Number of farmed deer

#### 14.1.1. Main National Users

Government, agriculturalists and researchers

- · Department of Agriculture, Food and the Marine
- Other section within the CSO
- Semi State organisations such as Teagasc

#### 14.1.2. Principal External Users

- Eurostat
- EU Commission

#### 14.2. User Satisfaction

Not measured.

#### 14.3. Data Completeness

Not applicable.



#### 14.3.1. Data Completeness rate

Not calculated.

### 15. Accuracy and reliability

#### 15.1. Overall accuracy

Macro edit checks, where totals for each category are compared with previous years are performed on all results to ensure consistency and identify processing errors.

#### 15.2. Sampling Error

As administrative sources are used for crop and cattle totals and the pig survey is a de facto census of the specialised pig farms that are responsible for the clear majority of pig farming within the state, the focus of the June survey is on the correct measurement of sheep totals. Farm Structures Surveys are carried out at intervals in the period between each complete Census of Agriculture. The last Farm Structures Survey took place in 2016. The Farm Structures Survey is considered a representative sample of all farms in the state and includes new farms obtained from administrative records held by the Department of Agriculture. The June sample is selected in a manner that ensures a representative sample of farms with sheep. In addition, emphasis is placed on ensuring that there are adequate farms in the sample for year N (reference year), which responded to the June survey (or FSS or Census) in year N-1 (preceding year). This is required to support the matched sample methodology for estimating sheep totals.

#### 15.2.1. A1. Sampling error indicator

Not applicable.

#### 15.3. Non-sampling Error

Not applicable.

#### 15.3.1. Coverage error

All necessary steps are taken to ensure full coverage of the population. The Agriculture Register, finalised after COA 2020, was further updated in April 2023 (prior to FSS2023) to add approximately 5,000 new 'births' which had been identified as newly active holdings on the DAFM's administrative databases. Therefore, the Agriculture register was considered very comprehensive. The only units that could have been excluded were those farming but not registered on either of the two administrative databases (BPS & Bovine Register). However, the likelihood of a new farm not falling into one of these two databases is considered low.

While new 'births' were added to the register, it is not always easy to identify farm 'deaths'. However, page 1 of the FSS questionnaire asks the respondent to indicate if the holding has been sold or leased or if the registered holder has retired or is deceased. These units are subsequently marked as inactive and considered 'out-of-scope'. These out-of-scope units are taken into consideration when calculating survey weights, in that only in-scope responses are included when calculating the non-response weight.

#### 15.3.1.1. A2. Over coverage rate

Not calculated.





#### 15.3.1.2. A3. Common units - proportion

Not calculated.

#### 15.3.2. Measurement error

Measurement errors are not formally calculated for the Survey. The questionnaire is clear and unambiguous and easily understood by respondents. Crop, cattle, and goat published totals are taken from the DAFM administrative data.

#### 15.3.3. Non-Response Error

**Unit non-response** Unit non-response occurs when a sample unit declines to respond to the questionnaire, despite the issuing of reminder letters. Non-response is assumed (as opposed to out-of-scope/inactivity) when a form wasn't returned. Administrative data is utilised where possible for farms which were found to be active on 8 administrative files despite providing no response. Otherwise, imputation was used to impute certain characteristics for the non-sampled units to compile a full census.

However, there are no administrative data or robust imputation method available for a small number of FSS characteristics (other gainful activities, crop rotation and soil management). Therefore, these are available for the responding units only and as such are weighted variables. Non-response is taken into consideration when calculating weights for these variables.

Full non-response is addressed by using administrative data to confirm level of activity and provide data. Therefore, bias due to non-response is considered to have been addressed.

Item Non Response As all data on bovines and crops are collected from administrative records, only variables collected in the FSS paper or web survey is affected by item non-response. This seems to occur mostly in the crop rotation, soil management and training sections. The FSS is a self-completed postal questionnaire (8 pages) or web survey and as such there may be respondent fatigue by the time these sections are reached. The data being collected are complex and do not work well in a postal questionnaire with no trained interviewer present during completion. It can therefore be difficult also to determine if the cells are empty due to non-response or are in fact real zero.

Where available, administrative data is used to impute for item non-response or to confirm real zero. In the absence of administrative data, data are imputed using regression if appropriate explanatory variables can be identified.

#### 15.3.3.1. Unit non-response rate

The unit non-response rate is 31.8%,

#### 15.3.3.2. Item non-response rate

Non-responding units with unknown eligibility status are treated the same way as the ineligible units.

#### 15.3.4. Processing error

The potential for processing errors is limited due to well defined processes within the DMS. Numerous edit checks are performed to ensure reasonableness of the data used at aggregation stage. Macro edit checks, where totals for each category are compared with previous years are performed on all results to ensure consistency and identify processing errors.



#### 15.3.5. Model assumption error

No known model related effects.

### 16. Timeliness and punctuality

#### 16.1. Timeliness

Farm Structure Survey 2023 results are not published until the dataset and National Methodological Report have been validated and accepted by Eurostat. However, totals for crops and cattle for 2023 gathered from administrative data sources are published in March 2024 as part of annual time series publications for crops & livestock required under EU Regulation 1165/2008 (Livestock) and EU Regulation 543/2009 (Crops). There is a three-month time lag between the end 2023 (reference) year and the final crops & livestock publication.

#### 16.1.1. TP1. Time lag - First results

Not applicable.

#### 16.1.2. TP2. Time lag - Final results

T+12 months

#### 16.2. Punctuality

The publication dates of all CSO releases are specified in the public release calendar available from CSO.ie. The 'Farm Structure Survey' release was disseminated in accordance with the date determined in the calendar.

#### 16.2.1. TP3. Punctuality - Punctuality - delivery and publication

0 days, the release was delivered within the time frame specified in the release calendar.

## 17. Comparability

#### 17.1. Comparability - Geographical

As a common legislative framework is in place across the European Union for this survey, results are comparable against other European Union countries.

#### 17.1.1. CC1. Asymmetry for mirror flow statistics

Not applicable.

#### 17.2. Comparability over time

In terms of times series, results are comparable from 2005.

#### 17.2.1. Length of Comparable Time series

20 years.





#### 17.3. Coherence – cross domain

Different data sources were used to evaluate the data that was to be processed. Sources included the FSS 2013, Census 2010 and administrative sources from the Ministry.

Wherever possible, FSS data were also compared with other available sources and data in other domains. For example, the results were compared with FSS 2013, Census of Agriculture 2010 as well as annual crop and animal production surveys.

Consistency checks are also performed against other data providers, namely Teagasc, Bord Bia and DAFM.

Wherever possible, FSS data are also compared with other available sources and data in other domains. For example, the results are compared with FSS 2016, Census of Agriculture 2020 as well as annual crop and animal production surveys.

Consistency checks are also performed against other data providers, namely Teagasc, Bord Bia and DAFM

#### 17.3.1. Coherence - Sub annual and annual statistics

Not applicable.

#### 17.3.2. Coherence with National Accounts

Not applicable.

#### 17.4. Coherence - internal

At micro level, data is examined throughout the editing process. Different data sources are used to evaluate the data to be processed. Sources included the FSS 2016, Census 2020 and administrative sources from the DAFM.

Examination of the animal production data showed some very slight differences which were deemed acceptable. Production of crops data show some differences with the FSS 2016 results which can be explained by differences in definitions and/or reference periods and as such can be of limited use.

#### 18. Cost and Burden

Estimates of Cost and Burden can be obtained from the Response Burden Barometer <a href="https://www.cso.ie/en/statistics/enterprisestatistics/responseburdenbarometer/">https://www.cso.ie/en/statistics/enterprisestatistics/responseburdenbarometer/</a>

Survey specific information is available via CSO's dissemination database PxStat.  $\underline{\text{https://data.cso.ie/product/RBB}}$ 

#### 19. Data Revision

#### 19.1. Data Revision Policy

Published statistics are subject to correction and revision for a variety of reasons. The most common reasons include the receipt of additional information (for example, late survey responses) and updated seasonal factors. Occasional revisions also occur as a result of changes to definitions, methodology, classifications and general updating of statistical series.





It is recognised internationally that the existence of a sound revisions policy maintains credibility in official statistics. The CSO General Revisions Policy, which details how revisions should be managed and communicated to users, outlines the three main types of revisions:

- Planned Routine Revisions
- Planned Major Revisions
- •Unplanned Revisions.

One reason for unplanned revisions occurring can be when errors are detected after publication. The 'CSO Error Correction Policy – How to deal with Publication Errors' outlines the steps taken when these errors are detected. As required under Principle 6.3 of the European Statistics Code of Practice, errors detected in published statistics are corrected at the earliest possible date and users are informed. An important step in the process is the documentation and analysis of errors that have occurred and their causes. This allows the CSO to take measures preventing similar errors from occurring in the future and uniformity in dealing with them when they do.

The data revision policy that CSO statistics adheres to can be found via the following link: <a href="https://www.cso.ie/en/methods/quality/treatmentofrevisions/">https://www.cso.ie/en/methods/quality/treatmentofrevisions/</a>

#### 19.2. Data Revision Practice

Revisions do not usually occur from one survey to the next, but revision may take place due to changes in methodologies and data collection methods.

#### 19.2.1. Data Revision - Average size

Not calculated.

### 20. Statistical processing

#### 20.1. Source Data

#### Crops

The Basic Payment Scheme (BPS) was introduced in 2015 as part of the new measures agreed in the reform of the Common Agricultural Policy. Under the BPS, a farmer applies to the DAFM in which the farmer declares all of their land specifying the crop type of each parcel of land. This administrative data enables the CSO to publish crop statistics at a regional level. This means that the number of crop related questions on CSO agriculture survey forms has greatly reduced since the CSO commenced using administrative crop data from the DAFM. The use of administrative data improves the quality of the statistics and reduces respondent burden.

Cattle: The results for cattle are obtained from DAFM's AIM system. Breeding Bull data is received from the Irish Cattle breeding Federation (ICBF).

Pigs: A specialist pig survey is conducted by the CSO due to the intensive nature of this activity and the results are published separately. The pig survey is a de facto census of the specialised pig farms that are responsible for the vast majority of pig farming within the State.

Poultry: A specialist poultry survey is conducted by the CSO due to the intensive nature of this activity.

Sheep: A statistical survey is conducted by the CSO to compile statistics on Farm Labour and Sheep totals. The sampling frame for this survey is compiled using a combination of the pre-existing CSO Farm





Register and two administrative databases held by the DAFM, namely the Corporate Client System (CCS) and the Animal Identification and Movement (AIM) system.

#### 20.1.1. Population and Sampling Frame

The statistical register compiled for the 2020 Census of Agriculture was updated for FSS 2023 by adding new administrative records of agriculture holdings or livestock herds created since the 2020 Census. These administrative records were provided by the Irish Ministry of Agriculture, known as the Department of Agriculture, Food and the Marine (DAFM). New administrative 'births' were added to the existing register of holdings from the 2020 Census giving a total sample frame of approximately 135,000 holdings while also accounting for deaths.

The Farm Register is compiled using a combination of the pre-existing CSO Farm Register and two administrative databases held by the DAFM, namely the Corporate Client System (CCS) and the Animal Identification and Movement (AIM) system:

- The pre-existing CSO Farm Register was created for the Census of Agriculture which took place in 2020. This register is maintained by the CSO Agriculture Register Section and updated with births and deaths identified in the annual June and December surveys between 2020 and 2023 which incorporates BPS data. It was used as the sampling frame for every agriculture survey that was carried out by CSO since 2020. The availability of administrative files since 2010 ensures that now all entries on this register can be checked on an annual basis for activity and accurate contact details. The CSO register holds only contact information and location details. The register does not hold any structural variables.
- (ii) The CCS database was received from DAFM in Spring 2023. This contained records consisting of the name, address, telephone number, email, date of birth, and herd number of every farmer considered to be active by the DAFM. The CCS database is separate to the BPS database but contains all of the holdings that are on the BPS system. The CCS database is used solely for the purposes of building the register. No statistical data is extracted from the CCS.
- (iii) The AIM database was received from DAFM in Spring 2023. Any record without a corresponding entry in CCS (ii above) were added to the Register. The resulting register was used as the frame for the FSS2023.

#### 20.1.2. Sampling design

The sample was a stratified one-stage sample of holdings (probability design). The sample was stratified by farm size and region, resulting in 56 strata. Primary outputs of this survey are that of land use. For this reason, farms size was selected as the stratifying variable. The strata were allocated using the Neyman allocation method.

Farms where the agricultural area used was at least 1 hectare (2.47 acres) may be included in the Farm Structure Survey. Farms with less than 1 hectare may also be included if they were engaged in intensive production.

#### 20.1.3. Survey size

Questionnaires are issued to approximately 35,000 holdings in the week preceding the reference date of 1st June 2023.

#### 20.1.4. Survey technique

The survey is carried out by post. Three reminders are issued at approximately fortnightly intervals to maximise the response rate.





The survey is carried out by post and web survey and follow up reminders are sent to non-respondents.

#### 20.2. Frequency of data collection

Triennial

#### 20.3. Data Collection

The FSS survey data were collected entirely by post

An 8-page A4 sized questionnaire (Farm Structure Survey 2023 Survey Form) is issued to all farm holdings in the week prior to June 1st, 2023 to be completed and returned to the CSO by Monday 12th June 2023

This is accompanied by an information booklet (Farm Structure Survey 2023 Survey Form Information Leaflet) with detailed notes on each section of the questionnaire.

Reminders are issued based on the response rate in order to maximise the response rate.

A separate 2-page A4 sized questionnaire (Pig Survey Form June 2023) is also issued to all specialist pig producers.

A separate 2-page A4 sized questionnaire is also issued to all specialist poultry-producers.

The paper questionnaires returned to the CSO are batched, receipted and scrutinised. They are then electronically scanned, verified and edited.

#### 20.3.1. Type of Survey/Process

Postal Survey, Web Survey, DAFM administrative data and ICBF administration data.

#### 20.3.2. Questionnaire (including explanations)

The questionnaire is an eight-page questionnaire which is simple in design to allow easy usage. Please see the following URL to view the survey form =>

https://www.cso.ie/en/media/csoie/methods/farmstructuresurveyfss/Farm\_Structure\_Survey\_2023\_Survey\_Form.pdf

The specific pig survey form issued by CSO can be found at the following link: <a href="https://www.cso.ie/en/methods/surveyforms/pigsurvey/">https://www.cso.ie/en/methods/surveyforms/pigsurvey/</a>

#### 20.3.3. Survey Participation

The survey is a voluntary survey on respondents.

#### 20.3.4. Data Capture

The FSS survey data is collected entirely by post and web survey (i.e. no interviewers). Each questionnaire issued includes a pre-addressed freepost reply envelope and a QR code which links to the web survey. The envelopes are mechanically cut open across the top and the questionnaire held within is removed manually.





#### 20.4. Data Validation

Data editing is performed using the DMS. Edit rules focus on difference between current and previous year's returns. Cases where the change from one year to the next is outside certain bounds are examined to ensure that the change is not due to an error on the returned form.

Data from administrative sources is not edited.

Cross referencing of survey results against DAFM's Sheep & Goat and Pig Censuses.

Consistent Macro edits within DMS are performed which compare totals over a number of years.

Consultation with experts within industry to ascertain reasons behind emerging trends.

A Farm Structure Survey micro data set is submitted to Eurostat for validation.

#### 20.5. Data Compilation

Forms are scanned, and the dataset is then entered into the Data Management System (DMS) for edit checks etc. Administrative data from the DAFM is then merged with the scanned returns. A clean dataset is exported from the Data Management System to SAS for analysis.

A series of SAS programmes are run to identify all farmers who responded in the current year and in the previous year. Then, for each category of livestock (where matched sampling is used for total estimation) the percentage change between the two years is calculated. This percentage change is then applied to the published totals for the previous year to come up with estimates for the totals for the current year. Using the matched sampling methodology and administrative sources the "Crops and Livestock Survey June 2023 Provisional estimates" is released on September 27th, 2023.

The Farm Structure Survey data is processed and merged with all administrative sources. Final areas of crops and numbers of livestock for June 2023 is published in March 2024 as "Crops and Livestock June 2023 Final Results". This publication provided details of crops at national and regional level and cattle at national, regional and county level, and results for sheep, pigs and other livestock at national and regional level.

A final FSS publication detailing farms by size, type, economic size and detailed farm labour force data is published once NMR and FSS2023 dataset have been validated and accepted by Eurostat. The data tables will be accompanied by background notes on data collection, derivation of farm typology, livestock unit coefficients and a copy of the questionnaire.

#### 20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

Sheep: The annual Sheep & Goat Census carried out by the Ministry of Agriculture, which provides a register of all sheep producers with a reference date of December of each year. This is used to impute for missing sheep data. The number of breeding females is taken from the Census and an expected non-breeding flock per unit of breeding female was derived controlling for whether the farm was an upland or lowland holding (as this factor influences productivity per breeding female).

Grass: Where no grassland area was provided for farms with bovines, the number of bovines in each category are used as explanatory variables in predicting a value for area of grassland.

Also, imputation from administrative data or previous surveys is also used to account for unit non-respo



#### 20.5.1.1. A7. Imputation rate

Not calculated.

#### 20.5.2. Grossing and Weighting

Results are based on the created full population data set, so no grossing or weighting is used.

### 20.6. Adjustment

#### 20.6.1. Seasonal Adjustment

Not applicable.

### 21. Comment