



**An
Phríomh-Oifig
Staidrimh**

Central
Statistics
Office

Standard SIMS Report: Area Yield and Production of Crops



Single Integrated Metadata Structure (SIMS) Report

For

Area Yield and Production of Crops

This documentation applies to the reporting period:

June 2020 onwards

Last edited:

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2. Introduction

The “Area, Yield and Production of Crops” release is an annual release. It presents estimates of the area, yield and production of the main arable crops for a given year, together with the comparable estimates for the previous two years.

3. Contact

Contact Organisation:	Central Statistics Office
Contact Organisation Unit:	Agricultural Statistics
Contact Name:	Dr Grzegorz Głaczyński David O’Leary
Contact person function:	Dr Grzegorz Głaczyński, Statistician David O’Leary, Higher Executive Officer
Contact Mail address:	Central Statistics Office Skehard Road Cork T12 XOOE
Contact email address:	agri@csso.ie
Contact Phone Number:	+353 21 4535758
Contact Fax Number:	

4. Metadata Update

4.1. Metadata last certified

14/04/2021

4.2. Metadata last posted

14/04/2021

4.3. Metadata last update

14/04/2021



5. Statistical Presentation

5.1. Data Description

The objective of the survey is to provide an estimate of the area, yield and production of crops in Ireland on an annual basis. Results from this release are used by the Agricultural Accounts section of the CSO and by Eurostat (the statistical service of European Commission).

5.2. Classification System

Not applicable.

5.3. Sector Coverage

Not applicable.

5.4. Statistical Concepts and definitions

Principal subject area is the area, yield and production of crops in Ireland.

5.5. Statistical Unit

Crop yield.

5.6. Statistical Population

Teagasc Crop Specialists.

5.7. Reference Area

State.

5.8. Time Coverage

1985-2022

5.9. Base period

Not applicable.

6. Unit of Measure

Principal subject area is the area, yield and production of crops in Ireland.

7. Reference Period

June 2020 onwards

8. Institutional Mandate

8.1. Legal Acts and other agreements

Council Regulation (EC) No 543/2009 concerning crop statistics.
<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009R0543>

8.2. Data Sharing

Not applicable.



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:

<https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/>

9.2. Confidentiality – data treatment

Given the nature of the data, confidentiality is not an issue.

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:

<https://www.cso.ie/en/csolatestnews/releasecalendar/>

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

<https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/>

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

Annual

12. Accessibility and clarity

12.1. News release

Not applicable.

12.2. Publications

The Area, Yield and Production of Crops Release is available on the CSO website at 11am on the day of publication.

<https://www.cso.ie/en/statistics/agriculture/areayieldandproductionofcrops/>



12.3. On-line database

<https://data.cso.ie/product/aypc>

12.3.1. AC 1. Data tables - consultations

In the period 01/01/2021 to 02/11/2021 The Area Yield and Production of Crops had 2,255 page views. The number of unique web-hits for this period was 1096.

12.4. Micro-data Access

Not applicable.

12.5. Other

12.5.1. AC2. Metadata consultations

Not calculated.

12.6. Documentation on Methodology

Methodology for The Area Yield and Production of Crops survey can be found using the following link <https://www.cso.ie/en/methods/agricultureandfishing/teagascrcropyieldsurvey/>

12.6.1. AC3 – Metadata completeness – rate

Not calculated.

12.7. Quality Documentation

Quality documentation for the Area Yield and Production of Crops can be found using the following link <https://www.cso.ie/en/methods/qualityreports/areayieldandproductionofcrops/>

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 (ESCAP). 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 QMF.

13.2. Quality Assessment

The CSO requires that all produced outputs complete an annual self-assessment exercise to review the quality of the process used to generate disseminated products and the quality of the product itself. The latest iteration of this exercise highlighted that a revision of the methodology used to compile these statistics might be beneficial to generate processing efficiencies.

14. Relevance

Statistics on cereals in the EU are governed by Regulation (EC) No. 543/2009. The results are used within the CSO for agriculture and national accounts. They are also used by the DAFM, companies and semi-state organisations to monitor trends in crop statistics. At a European level, the results are used to fulfil reporting obligations to the AMIS (Agriculture Market Information System).



14.1. User Needs

14.1.1. Main National Users

- DAFM
- Other Sections within the CSO
- Teagasc
- Researchers
- The General Public

14.1.2. Principal External Users

- Eurostat
- EU Commission

14.2. User Satisfaction

Not applicable.

14.3. Data Completeness

We have near universal coverage of our user needs.

14.3.1. Data Completeness rate

Not calculated.

15. Accuracy and reliability

15.1. Overall accuracy

Statistics for the Area, Yield and Production of Crops are compiled from multiple sources, including administrative data from DAFM and a survey conducted by Teagasc. The overall accuracy of the disseminated figures is considered adequate.

15.2. Sampling Error

Not applicable.

15.2.1. A1. Sampling error indicator

Not applicable.

15.3. Non-sampling Error

Not applicable.

15.3.1. Coverage error

Not applicable.

15.3.1.1. A2. Over coverage rate

Not applicable.

15.3.1.2. A3. Common units – proportion

Not applicable.



15.3.2. Measurement error

The yield survey is run jointly with Teagasc and the questionnaire is sent to and completed by Teagasc experts. Returns are checked by the Teagasc advisor to identify year on year changes in yield at a county level and where yield changes exceed a threshold level, the expert is contacted to confirm the particular yield.

15.3.3. Non-Response Error

As administrative data is used for area calculation, unit and item non-response is not applicable. With regards to 'Yield' there is unit non-response in some instances. A Teagasc expert advises on which counties can be used to impute for missing values. Item non-response is handled in the same way.

15.3.3.1. Unit non-response rate

Not applicable.

15.3.3.2. Item non-response rate

Not applicable.

15.3.4. Processing error

Data is entered manually into both an Excel spreadsheet and a SAS dataset. There is the possibility of typing errors at this point, but data is checked, and ranges etc. are also checked after data entry.

15.3.5. Model assumption error

No grossing or weighting is performed. Imputation is used in certain instances, but it is based on direct consultation with Teagasc advisers. Where imputation is not used, estimates are calculated based only on those counties that responded.

16. Timeliness and punctuality

16.1. Timeliness

16.1.1. TP1. Time lag – First results

No provisional results are produced. Early estimates are supplied to Eurostat and these are provided to the CSO by Teagasc.

16.1.2. TP2. Time lag – Final results

Results are usually published in April of t+1.

16.2. Punctuality

16.2.1. TP3. Punctuality – Punctuality - delivery and publication

The statistics are always released on the date specified in the CSO's advanced release calendar.

17. Comparability

17.1. Comparability – Geographical

Not applicable.

17.1.1. CC1. Asymmetry for mirror flow statistics

Not applicable.



17.2. Comparability over time

Comparisons are made with the previous year. Comparisons are also made with what is reported in farming newspapers regarding expected yields etc.

17.2.1. Length of Comparable Time series

Over 35 Years.

17.3. Coherence – cross domain

The production and yield figures are checked with the most recent Teagasc Crop Report prior to publication to ensure consistency with their figures. Area figures are administrative figures received from 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

Not applicable.

18. Cost and Burden

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

Survey specific information is available via CSO's dissemination database PxStat. <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: <https://www.cso.ie/en/methods/quality/treatmentofrevisions/>

19.2. Data Revision Practice

Not applicable.



19.2.1. Data Revision – Average size

Not applicable.

20. Statistical processing

20.1. Source Data

The area estimates are obtained from the Department of Agriculture, Food and the Marine (DAFM). The areas are those that qualify for Basic Payment Scheme payments. The yield estimates are obtained from the Crop Harvest survey.

20.1.1. Population and sampling frame

The register consists of the list of Teagasc crop specialists. A report is sent to everyone on the list by a representative Teagasc advisor.

20.1.2. Sampling design

Not applicable.

20.1.3. Survey size

26 counties surveyed by 14 Teagasc Crop Specialists.

20.1.4. Survey technique

The Crop Harvest report forms are sent to a Teagasc co-ordinator who then sends out the reports to the various county advisers country wide. Forms are returned to the Teagasc co-ordinator who in turn sends the forms to the CSO. The area estimates are obtained from the Department of Agriculture, Food and the Marine (DAFM). The areas are those that qualify for Basic Payment Scheme payments.

20.2. Frequency of data collection

Annual.

20.3. Data Collection

Crop Harvest Report Forms are sent out to a list of Teagasc Advisers who complete the form and return it directly to a Teagasc contact who then returns the forms to the CSO. Units of observations are the individual Teagasc Advisers. Returns are made at a county level and calculations are performed at county level. Final results are presented at State level.

Area is presented in Hectares, Yield is presented in Tonnes per Hectare, and Production is presented in Tonnes.

20.3.1. Type of Survey/Process

Census of county Teagasc Advisers. Forms are sent out to a list of Teagasc Advisers who complete the form and return it directly to a Teagasc contact who then return the forms to the CSO.

Yield figures (tonnes per hectare) are collected for cereals and various other crops. A separate figure is given for early, seed and main crop potatoes. The administrative DAFM Basic Payment Scheme data includes geographic coordinates for each parcel of land that qualifies for payment. This means that the total area under each cereal type can be calculated at a county level. Production figures are calculated at a county level (i.e. yield * area) and results are aggregated and published at State level.

20.3.2. Questionnaire (including explanations)

The survey form is in EXCEL format and consists of 4 worksheets. The form is sent via email to the Teagasc co-ordinator who then distributes it to the various advisers.



20.3.3. Survey Participation

Participation in the survey is voluntary.

20.3.4. Data Capture

Data are manually entered into an Excel spreadsheet and then are entered into SAS for analysis.

20.4. Data Validation

As there is only one return per county, the data editing is a relatively easy task. The most common error is where the yield value is reported as tonnes per acre instead of tonnes per hectare. This is identified by checking the range and consistency from year to year. Data editing is performed in Excel and SAS.

20.5. Data Compilation

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

Some ad-hoc imputation is performed in consultation with an expert from Teagasc – where values from a “similar” county might be used to fill in for a missing value for a particular county.

20.5.1.1. A7. Imputation rate

Not calculated

20.5.2. Grossing and Weighting

Not applicable.

20.6. Adjustment

20.6.1. Seasonal Adjustment

Not applicable.

21. Comment