

FARM STRUCTURE SURVEY 2003

METHODOLOGICAL REPORT

MEMBER STATE:
NORTHERN IRELAND (UNITED KINGDOM)

Farm Structure Survey 2003 METHODOLOGICAL REPORT - NORTHERN IRELAND (UNITED KINGDOM)

SUMMARY

The Department of Environment, Food & Rural Affairs (DEFRA) was responsible for collating FSS 2003 data from each of the four countries of the United Kingdom and for passing them to Eurostat. The Department of Agriculture & Rural Development (DARD) in Northern Ireland is responsible for the collection of agricultural statistics for that country where it conducted FSS 2003.

The register used in the conduct of DARD farm surveys contains all farm businesses who have contact with the Department, either in an administrative role (application for grants or subsidies) or in a statistical role (response to a statistical survey). The register is maintained by IACS administration and is changed on a day to day basis. The population for statistical purposes is established each year when a download of currently active businesses is obtained from the register.

All active farms in Northern Ireland (28,281) were surveyed for the 2003 Structure Survey. The work was carried out in the following two postal surveys in addition to using administrative sources:

- Data on crop areas and livestock numbers were collected relating to the situation on 1st June 2003.
- Other data were collected in a special additional survey carried out in March 2003.

Since the June questions were the same as in previous years no pilot exercise was required. The labour questions, largely the same as in 1997 and 2000, were developed and checked in conjunction with a team of data users and were further tested by a number of Department staff who have close farming connections.

The response rate for the June survey was 74% and for the March survey 75%. For businesses which had made a return to earlier June surveys but which failed to respond in June 2003, estimates were provided, based on the previous year's return updated by trends reported by farms which did respond. For new businesses which failed to respond, estimates were made from administrative sources, covering the most significant crops and livestock. A different approach was used to deal with non-response to the March survey. The data were handled in the same way as in a sample survey, with raising factors, based on farm type, size and location, added to the responses.

For the June survey data entry was carried out by a commercial company, Fujitsu with double entry keying. Data from the March survey were captured

by DARD statistical staff using a scanner. All data validation was carried out by staff of Farm & Food Surveys Branch of DARD.

Preliminary results of the June survey were published on August 21st 2003 and final results on November 19th. Work on validating the March data was spread over two periods, one before the June survey and the other after that had been completed,

The main strength of the Northern Ireland system was the link with administrative systems which provided an accurate and up to date register and which provided an important means of validating returns. Almost 95% of NI farms make IACS returns. The main weakness was the response rates, which were low in relation to interview surveys but relatively high for postal surveys in Northern Ireland.

1 INTRODUCTION

1.1 History, scope

History

The series of crop and livestock surveys for the island of Ireland which extends over 150 years is one of the oldest in the world. The first survey was carried out in 1847. Annual surveys of crop areas and livestock numbers have been carried out in Northern Ireland in each year since its inception in 1921. These, along with data from special surveys to complete the requirements, have contributed data to Farm Structure Surveys since 1975.

Scope

The surveys were addressed to all businesses which, at the time of preparing the mailing list, were believed to be active. All businesses which received grants or subsidies in relation to crops or livestock were included along with any others which were active in the previous statistical survey or which had contact with DARD indicating active participation in an agricultural or horticultural enterprise. Returns from inactive businesses were subsequently excluded from the database. (Current average annual turnover in businesses is estimated as 7% closing and 5% new, with a net reduction of 1.8% per year.)

1.2 Legislation

National farm survey legislation

The Agricultural Returns Act (Northern Ireland) 1939 authorises DARD to demand response to a specific list of questions which encompasses those which were asked in the June survey. This Act was used in the conduct of the June 2003 survey but, while DARD has the power to do so, it was not politically or practically appropriate to prosecute for non-response. Before the first FSS in Northern Ireland, an amendment was made to the Act to allow the disclosure of individual records to the EU.

The Act does not empower DARD to collect information either on farm diversification or farmers' other gainful activities so it was not used in the conduct of the March survey which was voluntary.

Relevance to FSS

The Act requires occupiers of agricultural land or the owners of livestock to furnish to DARD, at any time or times in any year, such returns as may be prescribed in relation to a list of topics such as crop areas and livestock numbers. It is not specific to any one survey.

Protection of respondents

The Act restricts the ways in which individual records may be used and/or disclosed. This guarantee is reinforced by the Northern Ireland Code of Practice on Confidentiality which is adhered to by all Government statisticians in Northern Ireland. Along with the Data Protection Act 1998, this Code

extends the guarantee of confidentiality to respondents to voluntary surveys such as that undertaken in March 2003 for the FSS.

Legislation on survey costs

There is no specific legislation related to the cost of the FSS in Northern Ireland. The cost was met from the Department's annual budget. The collection of agricultural statistics contributes to one of the Departmental objectives, namely:

"To promote sustainable development of the agri-food industry and the countryside and stimulate the economic and social revitalisation of disadvantaged rural areas."

Northern Ireland's obligations to the UK

Following the devolution of powers to the Northern Ireland Assembly, DARD's obligations to provide statistical data to enable DEFRA to meet UK obligations to the EU were embodied in a Concordat relating to the provision of statistical information.

Planned changes to legislation

Steps are being taken to introduce new legislation to replace the 1939 Act, both to bring it up to date and, specifically, to widen its powers to cover all statistical data which DARD may be required to provide to the EU. The issue of prosecution for non-response will be addressed once the new Act is in place.

1.3 Main changes in the 1990s

The main change in the 1990s involved (a) an improvement to the register and (b) the advent of IACS and the subsequent access to administrative data leading to improved data quality.

The register

Prior to 1997 the register used in the conduct of farm surveys was specific to that task and was based on land ownership. It was updated by means of returns from annual surveys. It was divided into "mains" holdings (above 6 ha) and "minor" holdings, the former being surveyed each year and the latter every third year. The occupiers of one third of all holdings took no active part in farming, all the land being let out on a short term basis. Holdings in this category were included in the FSS up to and including 1990, though in that year records from such farms were subsequently excluded from the FSS file.

Since 1997 the register has been shared with IACS and other administrative sections of DARD and updated on an on-going basis. IACS checks ensure that, for the majority of those covered by the surveys, there is no duplication which had been a problem under the old system.

A break in statistical series occurred when the new register was introduced in 1997. The 1990, 1993, 1995 and 1997 Surveys were on the old basis and the 2000 and 2003 Surveys on the new.

IACS and administrative data

Almost 95% of farms in Northern Ireland grow cereal crops or have cattle or sheep and are, therefore, included in the IACS system. This benefits the operation of the FSS first by facilitating the identification of all such businesses and second by providing basic data which can be used to verify returns. For example if a farm has received a subsidy in respect of ewes but omits sheep from his census return, a query will be made. Other administrative sources have also been used to improve data quality by flagging up which enterprises should be recorded in statistical returns for specific farms. These sources include animal health registers and also reports by farm hygiene inspectors and farm and horticulture advisors.

2 CONTENT

2.1 Characteristics

For the most part information was collected in Northern Ireland and provided to Eurostat according to the accepted exclusions listed in Commission Decision 98/377/EC amending Annex 1 to Council Regulation 571/88/EC.

There were a number of exceptions where items, though existing in the UK, were non-existent in Northern Ireland. In such cases, most notably D11 (sugar beet) and G04 (vineyards), zero was recorded.

The UK was not authorised in 98/377/EC to collect information on Section M from a sample survey and all farms were asked to provide data on this. However non-response proved a problem and no acceptable method of imputing estimates for this could be found. To ensure good quality of data on this topic, raising factors were attached to data on this section (the same raising factors as for Section L).

From its register DARD identified¹ very few “group holdings” and information on this was not sought for Northern Ireland.

2.2 Questionnaires

Two separate questionnaires were used --- one for crops and livestock (June) and the other for all other FSS items (March).

Both included questions not required for the FSS. The June form included a section on the numbers of farmers and workers² working on farms on June 1st. The March form sought information on the tasks for which agricultural contractors were employed. It also collected information on the ages of family and non-family regular workers and the other gainful activities of farmers' spouses whether they worked on the farm or not.

Copies of the questionnaires and associated notes for guidance are attached.

¹ The DARD business register includes background information on the composition of the ownership of each IACS business.

² The FSS labour definition do not satisfy the needs of other users of statistics on the agricultural labour force in Northern Ireland.

3 SURVEY METHODOLOGY

3.1 Survey organisation

The FSS in Northern Ireland was under the management of a Principal Agricultural Economist with one Assistant Statistician and 8 administrative staff who organised and carried out all the work with the exception of printing and mailing forms and data entry for the June questionnaire.

The work of the team was monitored by the Farm Census Development Group that considered and recommended any changes from earlier surveys. This group comprised a number of key users of the data.

3.2 Work process

Planning dates for the 2003 FSS can be seen in the table below:

March survey³

March 2002	First draft of the March questionnaire prepared
June 2002	Options discussed by the Farm Census Development Group
September 2002	Decision taken to conduct a full census for the labour questions rather than a sample as authorised at UK level
October 2002	Plans discussed at UK level to ensure co-ordination
October 2002	Farmers' associations informed of planned surveys in 2002
November 2002	Contracts for printing and addressing forms agreed
January 2003	Staff instructions prepared
January 2003	Dummy forms checked with the scanner
January 2003	Validation programmes prepared
17 February 2003	Press Release about the survey issued
March 2003	Forms posted
April 2003	Reminder posted to non-respondents
May 2003	Validation process halted ³
February 2004	Validation recommenced
March 2004	Clean file completed
	Results published

³ Work on validating and checking the data from the March survey was begun in May 2003, then interrupted by the June survey and a further survey carried out in December, before being restarted in February – March 2004.

June survey

The organisation of the June survey continues on an annual cycle but key dates in running the survey included the following.

May 2003	Press Release issued
May 2003	Forms posted
June 2003	First reminder issued
July 2003	Second reminder sent
August 2003	Third reminder sent
August 203	Preliminary results published
October 2003	Files closed
November 2003	Final results published
December 2003	Detailed analyses published

3.3 Preparing the survey operations

3.3.1 Population and frame

Definition of a farm business

The definition of a farm business used in Northern Ireland⁴ is:

“a single unit, both technically and economically, which has a single management and which produces agricultural products”

Within that framework a threshold is applied so that the population surveyed includes:

“all active farm businesses having one hectare or more of farmed land, whether owned, leased or taken in conacre⁵, and those with under one hectare having any cattle, sheep or pigs or with significant poultry or horticultural activity”.

The Register

The IACS administrative system maintains a register of all DARD “clients”. Each person or company is allocated a client reference and each client is associated with a specific business, in accordance with the rules operated by the IACS controls. To this register have been added other clients and businesses, such as pig, poultry, horticulture or potato specialists, who have not made an IACS return but which are included on other DARD administrative registers, e.g. customers of the DARD Advisory Service. The register also includes other businesses which Farm & Food Surveys Branch have identified from external sources.

⁴ This differs from that used in the other UK countries.

⁵ Conacre is the system of annual lets which involves 30% of agricultural land in Northern Ireland.

The register for each client includes

- name
- address
- telephone number
- a reference for the business with which he/she is associated. This business reference incorporates a grid reference of the main farm buildings.

Behind the register screen for each client the history of the associated business is held, including a report on its acceptance as a separate business and a note about which other clients are included in the business.

For each business a principal “client” is identified and a Survey Reference Number⁶ attached to that client name.

The register does not hold statistical data about each business. A separate data file is held for each survey in SPSS for Windows. Files can be merged as required.

Identification of the survey population from the Register

Around one month before each survey, the population of possibly active farms is downloaded from the register. This is defined as any which

- received a grant or subsidy for crops or livestock within the previous 15 months; or
- were flagged as “survey active” after the previous annual June survey; or
- were identified from other sources in the course of the previous year and which were flagged accordingly (see next section).

Steps to improve the Survey Register

Each year one sector, not covered by IACS, is targeted for special attention, i.e. potatoes (1998), pigs and poultry (1999), mushrooms (2000), other horticulture (2001) pigs (2003). When these are identified as participating in the sector in question, a flag in the register is set to advise of this so that they will be included in the next survey. A check is made to ensure that the activity which is flagged is recorded in the subsequent return.

3.3.2 Survey design

The March and June surveys were conducted as sample surveys in which 23,800 farms were surveyed in June and 11,778 were surveyed in the March survey. For the June data, estimates were provided for non-respondents. However, because of lack of other information sources, no estimates were made for those who failed to respond to the March survey. In that case the data were treated as if they were derived from a sample survey, the sample consisting of those who responded.

⁶ It was found necessary to maintain Survey Reference numbers in addition to Business References to facilitate managing the dynamics of change of business identifications.

Sampling/raising frame

Data from the March survey were raised in accordance with a 3 dimensional frame with 9 farm types by 3 business sizes by 4 NUTS3 areas. These were:

Type of farm: Cereals, General Cropping, Horticulture, Pigs & Poultry, Dairying, Cattle & Sheep: LFA, Cattle & Sheep: Lowland, Mixed, Other types.
Size of business: Under 8 ESU, 8-<40 ESU, 40 ESU & over
NUTS3 area: Belfast and Outer Belfast combined, East of NI, North of NI, West & South of NI.

Raising factors varied from 1.00 to 7.57 with 78% of records having a raising factor of less than 4.00.

3.3.3 Pilot Survey

The questions in the June 2003 survey were the same as those in previous June surveys so they were not tested.

The labour questions in the March 2003 survey were the same as those in 1997. Because changes to other items were minimal a full pilot was not conducted in 2003 but the Department's 5 FADN data collectors were consulted as were a similar number of DARD personnel with close farming connections.

3.3.4 Informing and training staff and respondents

Staff who investigated queries

For all surveys administrative staff whose job is to investigate and, if necessary, correct queried returns are provided with a detailed instruction manual which indicates the appropriate steps to be taken, i.e. where supporting evidence may be found in the IACS system and when a phone call to the farmer is necessary.

New staff are given individual training before beginning work on their first survey. DARD operates a comprehensive training programme. In addition to formal training delivered externally, training videos and manuals are provided for specific topics and staff units use these for more targeted training, e.g. good telephone techniques.

Respondents

Before the March survey a Press Release was issued, describing the role and coverage of the survey.

The June survey is regarded⁷ as a routine part of the farming year and farmers do not have to be specially informed about it. However special posters giving notice of the survey are placed in strategic locations (markets, rural banks, local DARD offices) in May each year.

⁷ As reported by one of the NI Farming Organisations.

3.4 Sampling, data collection and data entry

3.4.1 Drawing the sample

All farms classified as small, medium and large / very large (using the SGM methodology) were included in the survey. An additional 50% of farms, classified as very small, were identified and surveyed. These farms are targeted on alternate years.

3.4.2 Data collection

Data collection methods

The data were collected by means of a postal survey.

Non-respondents who were believed to have pigs, were telephoned to obtain information.

DARD is committed to reducing the burden of form filling and all June surveys collect information on the time taken to complete the questionnaire time. The average in 2003 was 25 minutes.

Data entry modes

The June data were captured using double entry, heads down, data entry.

The March data were scanned directly into an SPSS file.

3.4.3 Control of the data

June forms

An initial scrutiny of forms was made to ensure that they were legible before passing to the data entry process.

Data on the June forms were keyed twice into different files which were then compared to identify errors in data entry. The clean version was then returned to DARD for electronic validation. These were of 4 types:

Sub-totals: Sub-totals were included on the forms for land use and for each of the main livestock types.

Maximum values: For each item a maximum value was set, at a level below the absolute maximum expected.

Credibility checks: These identified unlikely scenarios, e.g. ewes but no lambs, sows but no piglets, large cereal areas but no setaside.

Flag checks: Before the survey a number of Yes/No flags were set against each Survey Reference number. Information to do this was derived from IACS and related information, from the previous survey return and from other sources during the preceding year. For example, if the business had received a ewe subsidy but no sheep were recorded on the form, this was rejected.

March forms

Forms which recorded a farm diversification activity (Section A) were scrutinised and checked to ensure that the particular type of activity was correctly identified (respondents were asked to give details of the activity as well as placing it in a category).

The scanner automatically queried any figures about which it was not sure and gave the opportunity for manual correction. Then the first level of electronic validation involved checks to ensure that only one answer was given for each section for each person, e.g. only one age band box was ticked for each person. Second level checks applied when the information was converted from the format in which it was collected to that in which it was supplied to Eurostat. For example if the form indicated that the occupier was the manager, data for a separate manager were rejected. The third level checks were made when the Eurostat validation checks were run.

3.4.4 Non response

Non-response was interpreted as questionnaires which are not returned at all. Partly completed ones were treated as queries and finalised by telephone contact with the farmer.

Actions taken

One reminder was issued for the March survey and three for the June. Further reminders were not issued for March for fear of compromising response to the June survey. The first June reminder was a card, the second and third included duplicate forms. The third reminder also included a short note of common questions concerning the census, with answers which aimed to indicate its importance.

Non-respondents were not prosecuted because legal advice indicated that a successful prosecution would be unlikely and that the step would be likely to lower response to subsequent surveys rather than improve it.

During the 1990s attempts have been made to improve the image of the "Farm Census".

- Query calls are kept to a minimum through reference to other data sources;
- In most years the coverage of the June survey has been reduced from a full census to a sample survey;
- A poster campaign was adopted to present a more friendly image;
- Survey results are made freely available to all on the DARD website.

Reasons for non-response

Non-co-operation with Government is a political reality in some areas. There was a strong regional variation in response rates, ranging, for the June survey, from 58% to 71% in each of the six counties.

3.5 Data processing, analysis and estimation

3.5.1 Methods for handling missing or incorrect data items

June survey

Queries on forms which were returned for the June survey were dealt with:

- by reference to the relevant administrative file, i.e. cereals, fodder areas from IACS, cattle from subsidy claims and milk quota records, sheep from sheep subsidy claims;
- for other items the farmer was contacted by telephone.

A significant number of forms were returned indicating that the business was no longer active and that the land had been let. In such cases the administrative files were checked to ensure that no subsidy claims had been made.

Data were imputed for forms which were not returned for the June survey:

- since the same questions had been asked in each previous year, the most recent return was used as the basis for imputation;
- for items where significant⁸ changes between 2000 and 2003 were recorded by those farms which did respond, the “brought forward” data for non-respondents were trended accordingly;
- for farms with a large area of cereal crops, the IACS data were consulted and estimates made on the basis of the current year’s IACS data;
- for farms believed to have pigs, 1000 or more poultry or to grow mushrooms, telephone enquiries were made;
- for new businesses for which no “brought forward” record was available, estimates were made on the basis of the information in the IACS and other administrative systems.

March survey

Most queries on forms which were returned for the March survey were dealt with through telephone enquiries. However, for a number of questions a “no” answer was assumed if there was no response given, e.g. Section A (farm diversification), use of contractors, irrigation, other employment (if aged 50+).

Both surveys

Only staff of Farm & Food Surveys Branch of DARD are authorised to make changes. All changes are checked by a second member of staff.

⁸ For different items the level at which a change was significant varied. Also a subjective view was taken on whether changes were due to the number of farms including a particular crop or livestock type or whether due to an increase or decrease in enterprise size.

3.5.2 Estimation and sampling errors

A previous interview survey conducted among 10% of farm households in Northern Ireland indicated a good match with the FSS on the time spent on farm work and the incidence of other gainful employment. However it appears that the FSS under-estimated the frequency of diversification in the 2000 survey (Section A). This was partly due to respondents having difficulty in distinguishing between mainstream farming activities, diversification employment and off-farm employment. No additional information is available in this area.

3.5.3 Non-sampling errors

Coverage errors

Coverage errors are believed to be minimal for the cattle, sheep and cereal sectors. The other sectors are targeted in rotation when other sources of information are consulted.

The pig sectors were targeted in 2003, when 30 additional herds were identified

Coverage of the poultry sector is difficult because the questions refer to one specific date when a number of producers are likely to have no birds on their farm and to be disinfecting their premises. It is believed that a significant number of farms (1 or 2%) fatten turkeys specifically for the Christmas market and do not have any on their farms on the June census date. The number of farms with poultry at any time is believed to be around 10% short, but the number of birds recorded on the census date is believed to give a good measure of the position at that time.

Measurement errors

The main cause of measurement errors arises from the difficulty in estimating the ages of cattle and the weights of pigs and piglets. IACS requires farmers to have farm maps with the areas of each field marked on them and a percentage of areas are checked by IACS staff each year, so that errors in area estimation are thought to be small.

Processing errors

Scope for these is limited by the procedures and checks which are in place.

Non-response errors

The main source of error in the FSS 2003 for Northern Ireland resulted from non-response. The means of dealing with non-response is detailed in Section 3.5.1. For enterprises for which administrative data were available (cereals, beef cows, dairy cows, ewes) and for activities which were specially targeted (pigs, poultry, mushrooms) the impact of non-response in the totals is believed to have been within +/- 3%. It is likely to have been higher for other items, particularly those found on only a few farms.

3.5.4 Evaluation of estimates

The annual June survey covers all farms greater than the very small classification and an alternating half of those classified as very small, giving 78% coverage. Validations on census returns are carried out using the IACS system ensuring the coverage is as robust as possible. Comparisons between only those returns received for 2002 and 2003 and finalised totals (including estimates and new businesses) are favourable with only a few percent variation. Greater variations are seen in marginal or volatile enterprises such as pigs and poultry.

4 PUBLICATION AND DISSEMINATION

June survey

21 st August 2003	Preliminary results (macro level) published through a Press Release and the DARD website
19 th November 2003	Final results (macro level) published through a Press Release and the DARD website
13 th January 2004	Final results (micro level analyses by enterprise size and by geographical area) published in a booklet which was freely available in full on the DARD website.

March survey

March 2004	Final results (micro level analyses by enterprise size and size) published in a booklet which was freely available in full on the DARD website.
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Both the published booklets contain full descriptions of the methodology

5 SUGGESTIONS FOR FURTHER TASKS

In the year 2005 a full review of the farm survey system will be undertaken..

The main issues in this review are likely to include:

- continued use of IACS data
- wider use of the cattle tracing system
- access to other administrative systems
- incorporation of environmental data into the survey system
- the frequency of conducting a full census
- maintenance of all-farm data on farm diversification
- improving response
- targeting the non-IACS sectors
- new legislation
- It impact of the single farm payment system
- The demand for more focused information
- The demand for information for equality proofing

IACS data

With the introduction of the Single Farm Payment the change in the data collected via the IACS system will have to be taken into consideration when preparing the census forms.

Cattle tracing system (APHIS)

A comparison was made between the June 2003 livestock survey and the APHIS file for the same date. Work is underway to allow APHIS data to be used in future statistical systems.

Other administrative systems

Wherever possible all DARD administrative systems are being linked to the central DARD client register. In the coming year the register of Audjeskys-free pig herds will be linked as will the horticultural advisory service reports.

Environmental data

New Agenda 2000 schemes will require the recording of environmental information relating to individual farms. Steps will be taken to ensure that such information can be downloaded into a data file. It is foreseen that a review of the Farm Typology system may require such information to be used to distinguish between farm types. The need to provide some environmental data for FSS 2005 will drive this development.

Full census versus sample survey

The Agenda 2000 reforms placed increasing importance on the need to monitor structural change. Partly because of the flexibility of the land tenure system in Northern Ireland, there is a large turnover in the number of active businesses (see Section 1.1) and around 5% (gross) new businesses are created each year. A full census every 5 years is a probable outcome.

Farm diversification data

FSS 2003 has highlighted the difficulty in collecting information on this topic by means of a postal survey. Work has since begun in setting up a list of known diversifiers to be used as a basis for future Farm Structure Surveys. Consideration will be given to separating this from the labour questions in future FSS and making it the subject of a separate survey, using the questions which were developed for the interview survey currently being conducted (see Section 3.5.2).

Improving response

Major improvements to response rates are unlikely to be achieved over the next few years but steps can be taken to safeguard against further deterioration. These include giving publicity to the role played by good statistics in developing Government policies and continuing to ensure that no lapse in confidentiality occurs. During the coming year two ideas will be piloted. These are, first, using special delivery for reminders and, second, sending non-respondents a copy of the estimates made for them and asking them to correct them.

Targeting the non-IACS sectors

Currently new means of sharing the information held and gathered by the horticultural advisory service are being explored. This has improved coverage of horticultural activities from 2002 and will be continued. Other sectors will be targeted in rotation.

New legislation

New legislation will be in place in late 2004 which will place a legal obligation on farmers to provide whatever statistical information the UK, and hence DARD, is required by the EU to collect.

REFERENCES

Most information on the statistics collected in the FSS 2003 in Northern Ireland can be found on the DARD website at <http://www.dardni.gov.uk/econs/econ0033.htm> . This includes:

- Census 2003
- European Union Structure Survey 2003

Alternatively hard copies may be obtained from DARD of:

- The Agricultural Census in Northern Ireland: Results for June 2003
- EU Farm Structure Survey 2003, Northern Ireland: Report on the Agricultural Labour Force, Farm Diversification, Use of Contractors.

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DARD LOGO

**EUROPEAN UNION
STATISTICAL ENQUIRY**

**Notice requiring information
by 28th March 2003**

Business ref:

Explanatory note

The Statistical Office of the European Union requires Member States to carry out a statistical survey of farms in 2003.

The statistics on farm structure which this survey provides are used in the formulation of agricultural policies.

The questions in the 2003 survey reflect the EU's growing interest in issues relating to the environment.

Data will be anonymised before transmission to the EU. The information you provide will be used for statistical purposes only.

Further information about the survey including the results of the last such survey can be obtained from the Department's website (www.dardni.gov.uk)

Most of the information on the structure of Northern Ireland farms will be derived from the June census but you are asked to provide some additional information on this form which you should return in the postage-paid envelope by **28th March**.

Notes and definitions are provided on a separate page (enclosed).

For help or further information please telephone 01232- 524428

Please return the form, in the envelope provided to:

Farm & Food Surveys Branch, Department of Agriculture for Northern Ireland, Annex B
Dundonald House, Upper Newtownards Road, Belfast BT4 3TB
by 28th March 2003

Section A Farm diversification

* Please tick a box beside any of the commercial enterprises listed which you run on this farm. Exclude mainstream farming, i.e. livestock breeding and rearing and crop production, and exclude activities run by persons who are not part of your farm business.

Contracting/Haulage	<input type="checkbox"/>	Direct sales	<input type="checkbox"/>
Tourism	<input type="checkbox"/>	Food processing	<input type="checkbox"/>
Equine sport	<input type="checkbox"/>	Other commercial activities	<input type="checkbox"/>
Other sport	<input type="checkbox"/>	None	<input type="checkbox"/>

If any: Yes No
Does the diversification activity occupy anyone full-time throughout the year?

Please give details of the diversification here (e.g. horse livery, B&B, farm shop, bee keeping, etc)

Section B Environmental issues

Environmental schemes Yes No

Do you participate in any environmental scheme?

If yes, please indicate (tick) which scheme(s)

Environmentally Sensitive Area (ESA)	<input type="checkbox"/>	Countryside management	<input type="checkbox"/>
Forestry	<input type="checkbox"/>	Organic	<input type="checkbox"/>
Other	<input type="checkbox"/>		

If you have ticked "other" please indicate which scheme(s)

.....

Land taken out of production

Other than annual setaside, have you taken any land out of agricultural production during the past year?

	Yes	Ha	No
Temporarily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permanently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please give details.....

.....

Irrigation Yes No

Do you have access to field irrigation equipment?

If yes, please detail the source of water and method of delivery (e.g. stream/ sprinkler)

.....

Storage of slurry/farmyard manure

How is the farmyard manure produced on your farm stored?

Please tick each facility which applies and indicate your estimate of how many months' production they can hold without emptying (winter months if applicable)

	Yes	No	Capacity in months
Solid manure heap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Slurry tank (no separator)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Slurry tank (with separator)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>



Section C Status of the farm business

* Who has legal and financial responsibility for the farm?

Put a tick (✓) in one box

- The occupier
- Occupier and family partner(s)
- Occupier and other partner(s)
- An institution (eg hospital, school, church) or a limited liability company

Please designate **one person** as the principal occupier and answer the following questions accordingly.

There is no 'occupier', complete the section for 'manager'.

* Who is mainly responsible for the day-to-day running of the farm?

Put a tick () in one box

- The occupier
- The occupier's spouse
- A member of the occupier's family
- Another person

This person is termed the "manager".

Section D The occupier, occupier's spouse, manager

* Does the occupier have a spouse?

Yes No

* Please tick a box in each of the 3 sections below for (a) the occupier, (b) the occupier's spouse (if applicable) and (c) the manager, as appropriate

		Occupier	Occupier's spouse	Manager (if not the occupier or spouse)
(1) SEX	Male			
	Female			
(2) AGE	Under 25			
	25 - 34			
	35 - 44			
	45 - 54			
	55 - 64			
	65 & over			
(3) Time spent working on THIS FARM as a proportion of a full working year	None			
	Some, less than 1/4			
	1/4 to less than 1/2			
	1/2 to less than 3/4			
	3/4 to less than full			
	A full year			
(4) Time spent working ELSEWHERE	None			
	Some, less than on the farm			
	Some, more than on the farm			

Section E: Other family members

* Please tick a box in each of the 3 sections below for each member of the occupier's family aged 16 and over who worked on the farm during the past 12 months

		Family member					
		1st	2nd	3rd	4th	5th	6th
(1) SEX	Male						
	Female						
(2) Time spent working on THIS FARM as a proportion of a full working year	Some, less than 1/4						
	1/4 to less than 1/2						
	1/2 to less than 3/4						
	3/4 to less than full						
(3) Time spent working ELSEWHERE	None						
	Some, less than on the farm						
	Some, more than on the farm						

Section F: Other regular workers

* Please give numbers of non-family workers in each age category

		Number of males	Number of females
Time spent working on THIS FARM as a proportion of a full working year	Some, less than 1/4		
	1/4 to less than 1/2		
	1/2 to less than 3/4		
	3/4 to less than full		
	A full year		

Section G: Casual workers

- * Have you employed any casual labour on the farm during the past 12 months? Yes No
- * If "yes" please estimate the number of "person-days" work done by casual workers Days

Section H: Use of agricultural contractors

- * Did you employ contractors to carry out any work relating to crop or livestock production or hedge cutting (not building) during the past 12 months? Yes No
- * If yes, please give the number of person-days worked by contractors and their staff (e.g. 3 workers for 2 days=6 person-days) Days
- * For which activities were they employed? (Please tick as appropriate)
- | | |
|---|---|
| Hay/ silage making <input type="checkbox"/> | Milking <input type="checkbox"/> |
| Crop harvesting <input type="checkbox"/> | Sheep shearing <input type="checkbox"/> |
| Spreading slurry/manure/fertilisers/lime <input type="checkbox"/> | Other livestock work <input type="checkbox"/> |
| Other field work <input type="checkbox"/> | Hedge cutting <input type="checkbox"/> |

Farm Census Branch
Annexe B, Dundonald House
Upper Newtownards Road
Belfast BT4 3TB

Telephone (028) 9052 5432

Agricultural & Horticultural Census

J03

A statutory inquiry conducted by the Department of Agriculture
and Rural Development under the Agricultural Returns Act (NI)
1939 (as amended)

		<i>Business Ref. No.</i>
		<i>Census ID.</i>
		<i>Area owned (hectares)</i>

Or Business Partner

Dear Farmer / Grower,

AGRICULTURAL AND HORTICULTURAL CENSUS, 2003

Under the Agricultural Returns Act (N.I.) 1939 (as amended) you are required to complete this form in respect of the land you occupy. ***This is a legal requirement.*** The information you give will be used only in accordance with the terms of the above Act and the European Communities (Agric) Order (N.I.) 1972, S.R.&O. (N.I.) 1972 No. 351.

Who receives a census form

All Small, Medium and Large businesses are included in the survey as well as half the Very Small ones.

Businesses are defined as those which :

- received a grant or subsidy payment during 2002/2003; or
- had contact with the Department indicating active participation in an agricultural or horticultural enterprise.

Information to be supplied

The information which you are asked to supply concerns the use, by you and other partners in your business, of agricultural and horticultural land, the numbers of livestock you own on **2 June 2003** and the numbers of persons working in your business on that date. Data collected under the Agricultural Returns Act (N.I.) 1939 (as amended) may be used only for specified purposes, such as the preparation of statistics or the giving of assistance to farmers; the Act prohibits the use of data for an individual farm to assess that business's entitlement to, or liability for, any payments.

Notes

- **Please return the form, in the pre-paid envelope provided, by 16th June 2003. A stamp is not required.**
- Further notes for guidance are enclosed. Should you have any problems with the completion of this form, please telephone the number above.
- A copy of the form is enclosed for you to retain for your own records.

Mr Pat Toal
Permanent Secretary
May 2003

OFFICIAL BOX			
Query	Cleared	Checked	Notes

1st Scrutiny		2nd Scrutiny	
Inits.	Date	Inits.	Date

**DEPARTMENT OF AGRICULTURE
AND RURAL DEVELOPMENT (NI)**

FSS Methodological Report 2003: Northern Ireland (UK)

AREAS OF CROPS, GRASS AND OTHER LAND AS ON 2 JUNE 2003

You are asked to state which crops are grown on the land you FARM, including any land you take in conacre (or which you crop or stock for another person), and excluding land you let to someone else.

EVERYONE SHOULD COMPLETE ITEMS 1 TO 4.

PLEASE ENTER AREA TO 1 DECIMAL PLACE ONLY, E.G. 10.5

1 acre = 0.4 ha or 2.47 acres = 1.0 ha

AREA OF HOLDING		Hectares	Official Use
Owned Land	Area owned by your business	1	•
Land Taken	Area which you take in conacre or on lease	2	•
Land Let	Area which you let out in conacre or lease to another business	3	•
Area Farmed	Area farmed by your business (including horticultural and wooded areas) (Items 1 + 2 - 3)	4	•

The remaining questions on this form refer to the area shown at **item 4**, i.e. the land actually **farmed** by you.

LESS FAVOURED AREA LAND		Hectares	Official Use
Land officially designated as Less Favoured	Area of SDA, "old LFA" land	5	•
	Area of DA, "new LFA" land	6	•
Area not in LFA		7	•
TOTAL area farmed (= Item 4)		10	•

NOTES ON AREA OWNED

The area shown on the front of this form is the area of agricultural land (in hectares) which you recorded in Item 1 on last year's census form.*

If your answer to Item 1 above differs significantly from that area, please indicate (tick) which circumstance applies:

- You bought or inherited in the last year
- You sold land in the last year
- Farm maps have been updated recently

If you sold land recently, was it for farming by another person
for non-agricultural use

*If you did not return a census form last year, the area refers to that held on the Department's Field Management System.

GRASS, CROPS AND OTHER USES OF THE LAND (i.e. area at Item 4)		Hectares	Official Use
Grass for grazing, hay or silage	Grass under 5 yrs old	20	•
	Grass 5 yrs old and over	21	•
Rough land for grazing (sole rights)	Hill or rough land on which implements cannot be used	22	•
Cereals and other crops for threshing (not set-aside crops)	Oats	25	•
	Wheat	26	•
	Barley { Winter	27	•
		Spring	28
	Mixed corn	29	•
Oilseed rape	30	•	
Potatoes	Ware	35	•
	Seed (certified)	36	•
Fodder crops	Whole crop cereals	40	•
	Turnips, swedes, fodder beet, other forage root crops	41	•
	Kale or cabbage	42	•
	Forage maize	43	•
	Other crops for stockfeed	44	•
Fruit, vegetables and flowers grown outdoors or under cloches for sale	Apples	45	•
	Strawberries	46	•
	Other fruit	47	•
	Vegetables for sale	48	•
	Bulbs and flowers	49	•
Glasshouse area (or plastic houses)	Hardy nursery stock	50	•
	Please specify crops:		•
Other crops	Please specify:		•
Set-aside	All land set-aside under an official payment scheme	65	•
Woodlands	Woods and plantations excluding set-aside	70	•
All other land	Roads, buildings, boos, wasteland, gardens, land for recreation	72	•
TOTAL area farmed (Items 20 to 72 = Item 4)		75	•

FSS Methodological Report 2003: Northern Ireland (UK)

LIVESTOCK NUMBERS ON 2 JUNE 2003
(see the enclosed Notes for Guidance)

CATTLE		Number	Official Use	
MILK	Cows and heifers in milk	80		
	Cows in calf but not in milk	81		
	Heifers in calf with first calf	2 yrs old and over	82	
		Under 2 yrs	83	

BEEF	Cows and heifers in milk	84		
	Cows in calf but not in milk	85		
	Heifers in calf with first calf	2 yrs old and over	86	
		Under 2 yrs	87	

Bulls for service	2 years old and over	88	
	1 year old and under 2 years	89	
All other cattle and calves	2 years old and over	Male	90
		Females for slaughter	91
		Females for breeding but not in calf	92
	1 year old and under 2 years	Male	93
		Females for slaughter	94
		Females for breeding but not in calf	95
	6 months old and under 1 year	Male	96
		Female	97
	Under 6 months old	Male	98
		Female	99
TOTAL Cattle and Calves (Items 80-99)		100	

SHEEP		Number	Official Use
Ewes put to the ram in 2002 and still on farm at 2 June 2003		109	
Rams for service		112	
Other sheep 1 year old and over	For breeding	114	
	Other	116	
Lambs under 1 year		119	
TOTAL Sheep (Items 109-119)		120	

GOATS		Number	Official Use
Female goats which have kidded		125	
All other goats and kids		126	
TOTAL Goats (Items 125-126)		130	

FARMED DEER		Number	Official Use
Farmed deer		140	

HORSES AND PONIES		Number	Official Use
Brood mares	Horses	150	
	Ponies	151	
Stallions		152	
Other horses		153	
Other ponies		154	
TOTAL Horses/Ponies (Items 150-154)		160	

PIGS		Number	Official Use	
Pigs for breeding	Sows in pig	170		
	Gilts in pig	171		
	Other sows being suckled or dry sows being kept for further breeding	172		
	Boars being used for service	173		
	Gilts, 50kg (110lb) liveweight and over, not yet in pig but expected be used for breeding	174		
	Cull sows being fattened		175	
	All other pigs by liveweight	110kg (240lb) and over	176	
80kg (175lb) and under 110kg (240lb)		177		
50kg (110lb) and under 80kg (175lb)		178		
20kg (45lb) and under 50kg (110lb)		179		
Under 20kg (45lb)		180		
TOTAL Pigs (Items 170-180)		185		

POULTRY		Number	Official Use
For producing table eggs	Laying birds from point of lay to end of first laying cycle	190	
	Hens retained after first laying cycle	191	
	Growing pullets from day old to point of lay	192	
Mainly for producing hatching eggs	Hens, pullets, cockerels, etc. (not turkeys, ducks, etc.)	193	
Broilers and other table chickens		194	
Other poultry	Turkeys	195	
	Geese	196	
	Ducks	197	
	Others	198	
TOTAL Poultry (Items 190-198)		200	

FSS Methodological Report 2003: Northern Ireland (UK)

PEOPLE WORKING ON THE FARM

INCLUDE

- All persons **normally** engaged in agricultural or horticultural work in the business on 2nd June 2003.
- Those who are **normally** employed in the business but who were absent on the census date.
- Persons working on your farm as self employed agricultural or horticultural workers on 2nd June (record as paid workers).

EXCLUDE

- School children.
- Individuals employed by others but working on your farm on a contract basis on 2nd June.

AGRICULTURAL/HORTICULTURAL WORK

- **INCLUDES** care of crops and livestock, managerial, supervisory and office work, preparation and marketing of produce, maintenance (ditching etc)
- **EXCLUDES** gardening, housework, work on capital investments (i.e on new buildings)

	Time spent on farm work in this business	NUMBER OF		
FARMERS	Normally:	MALES	FEMALES	
Farmer or principal partner (one only)	30 hrs/week or more	220		250
	Less than 30hrs/week	221		251
Spouse of farmer or principal partner (if working on the farm)	30 hrs/week or more	225		255
	Some, less than 30hrs/week	226		256
Other partners in this farm business	30 hrs/week or more	227		257
	Some, less than 30hrs/week	228		258
PAID WORKERS				
Regular workers (including unpaid family members) who work on the farm during at least 20 weeks per year	30 hrs/week or more	229		259
	Less than 30hrs/week	230		260
Casual/seasonal workers (paid) who work less than 20 weeks per year	All times	231		261
OTHER WORKERS				
Other workers , aged 16 or over who work on the farm during at least 20 weeks per year	30 hrs/week or more	236		266
	Less than 30hrs/week	237		267
Casual/seasonal workers (unpaid) who work less than 20 weeks per year	All times	238		268
TOTAL Farmers and Workers		240		270

OTHER DETAILS

Please indicate (✓) if any of the following circumstances apply.

- | | | | |
|---|--------------------------|--|--|
| (1) You grow mushrooms for sale | <input type="checkbox"/> | Number of mushroom houses/tunnels | <input style="width: 80%;" type="text"/> |
| (2) You have no livestock now but expect to have some later this year | <input type="checkbox"/> | | |
| (3) You have no livestock now but you expect to make hay or silage this year | <input type="checkbox"/> | | 280 <input style="width: 40%;" type="text"/> |
| (4) Your land is not farmed | <input type="checkbox"/> | | 290 <input style="width: 40%;" type="text"/> |

DECLARATION

I declare that the information I have given on this form is true and complete to the best of my knowledge and belief.

Signed _____ Date _____

Name _____ Telephone/ mobile number _____

Could you please indicate the length of time taken to complete this form? (mins)
 DARD (NI) is committed to reducing the burden of form filling and this may help.

THANK YOU FOR YOUR CO-OPERATION

The results will be published on our website www.dardni.gov.uk

