

FARM STRUCTURE SURVEY 2005

METHODOLOGICAL REPORT

MEMBER STATE:
NORTHERN IRELAND (UNITED KINGDOM)

Farm Structure Survey 2005 METHODOLOGICAL REPORT - NORTHERN IRELAND (UNITED KINGDOM)

SUMMARY

The Department of Environment, Food & Rural Affairs (DEFRA) was responsible for collating FSS 2005 data from each of the four countries of the United Kingdom and submitting to Eurostat. The Department of Agriculture & Rural Development (DARD) in Northern Ireland is responsible for the collection of agricultural statistics for that country.

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 updated on regular 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 (27,064) were eligible for surveying for the 2005 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 2005.
- Other data were collected in a special additional survey carried out in March 2005.

Since the June questions were the same as in previous years no pilot exercise was required. The labour questions were largely the same as in previous surveys though with more detail, and 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 69% and for the March survey 63%. For businesses which had made a return to earlier June surveys but which failed to respond in June 2005, 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 a similar 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 Surveys Branch of DARD.

Preliminary results of the June survey were published on 25th August 2005 and final results on 15th November 2005. 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.

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 Statistics (Northern Ireland) Order 2004 authorises DARD to demand response to a specific list of questions which encompasses those which were asked in the June survey. This legislation was used in the conduct of the June 2005 survey but, while DARD has the power to do so, it was not politically or practically appropriate to prosecute for non-response.

Relevance to FSS

The Order 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 Order 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 2005 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.

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, 2003 and 2005 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 Deputy Principal 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 2005 FSS can be seen in the table below:

March survey³

November 2004	First draft of the March questionnaire prepared
December 2004	Options discussed by the Farm Census Development Group
December 2004	Plans discussed at UK level to ensure co-ordination
January 2005	Farmers' associations informed of planned surveys in 2005
January 2005	Contracts for printing and addressing forms agreed
February 2005	Staff instructions prepared
February 2005	Validation programmes prepared
February 2005	Press Release about the survey issued
February 2005	Forms posted
March 2005	Reminder posted to non-respondents
May 2005	Validation process halted ³
September 2005	Validation recommenced
October 2005	Clean file completed
April 2006	Results published

³ Work on validating and checking the data from the March survey began in May 2005, then interrupted by the June survey and a further survey carried out in December, before being restarted in September 2005.

June survey

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

May 2005	Press Release issued
May 2005	Forms posted
June 2005	First reminder issued
July 2005	Second reminder sent
August 2005	Third reminder sent
August 2005	Preliminary results published
October 2005	Files closed
November 2005	Final results published
January 2006	Detailed analyses published

3.3 Preparing the survey operations

3.3.1 Population and frame

The population for the additional survey questions was based on the 2004 June Agricultural survey. There were 27,614 active farms recorded for that year according to EU definition 571/88.

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

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.

register also includes other businesses which Farm Census Branch have identified from external sources.

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, lists of agricultural producers are received from other sources such as mushroom growers from crop advisors or poultry producers from quality assurance personnel, not normally covered by IACS. These lists are compared to the previous years register to identify any new producers 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. Checks are also made to ensure no holding is duplicated within the sampling population.

3.3.2 Survey design

The March and June surveys were conducted as sample surveys in which 24,211 farms were surveyed in June and 13,319 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

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.

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.

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 1.689 to 6.250 with 77% of records having a raising factor of less than 4.00.

The sample frame for the questionnaires sent for the Labour information (March) included only those farms which were going to receive a June Survey form.

3.3.3 Pilot Survey

The questions in the June 2005 survey were the same as those in previous June surveys so they were not tested through a pilot.

As changes to the basic Structure Survey questions were minimal – from the previous survey - a full pilot was not conducted in 2005 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, 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. E-mail reminders were also sent to those farmers who had registered their e-mail account with the Rural-NI farming portal.

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, poultry or potatoes were telephoned to obtain the maximum response.

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 2005 was 18 minutes. The time taken to collect the information of the specific Structure Survey was 14 minutes.

Data entry modes

The June data were captured using double entry keying system through a reputable professional company – using a heads down approach.

The March data were keyed in-house.

3.4.3 Utilisation of administrative data sources

Data was also obtained through administrative sources. Appendix 3 lists the variables associated with these. Each administrative unit used is based on the holding definitions used for any farm surveys. The coverage of data from administrative sources is complete, particularly those with financial links which are subject to stringent checks.

All of the data derived from administrative sources (with the exception of the ESA coverage) were matched using name and address as key identifiers. As the total numbers were small, each case was linked manually to eliminate errors.

⁷ As reported by one of the NI Farming Organisations.

3.4.4 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 sheep premium 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).

A series of validation programs were set up using the SPSS analytical package. These tested for logical errors and credibility checks. 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.

Missing data was investigated by administrative staff. Data credibility checks were scrutinised by administrative supervisors, under pre-set guidance instructions (e.g. maximum values).

3.4.5 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 to avoid compromising responses to the June survey. The first June reminder was a card, the second and third included duplicate forms with the third reminder form to very small farms (<3ESU) shortened to include only aggregated data. The third reminder also included a short note of common questions concerning the census, with answers which aimed to highlight 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.

The Department is continuing to make the census as easy for the data providers as possible. The following is a list of ongoing activities to assist with this aim.

- 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;
- Help is freely available to farmers in completing the form.
- An on-line version is available to anyone wishing to complete the form through those means

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 60% to 72% across 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 2003 and 2005 were recorded by those farms which did respond, the “brought forward” data for non-respondents were trended accordingly;
- for farms believed to have pigs, 1000 or more poultry or to grow potatoes, 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 Census Branch of DARD are authorised to make changes. All changes are checked by a second, more senior, member of staff. All data are processed using SPSS analyses programs. These include a suite of credibility checks and maximum values tests.

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. An analysis of the response rate across the nine main robust farm types shows a 0.998 correlation between sample responses and the population total.

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 potato and horticultural sectors were targeted in 2005 and the registers updated where appropriate. A separate Horticultural survey provided additional information on the coverage of this type of enterprise

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 2005 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, potatoes) 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 and APHIS system ensuring the coverage is as robust as possible. The 2005 comparison of estimated survey total and APHIS total indicated a difference of <0.5% between the two systems. Comparisons between only those returns received for 2004 and 2005 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 2005	Preliminary results (macro level) published through a Press Release and the DARD website
19 th November 2005	Final results (macro level) published through a Press Release and the DARD website
13 th January 2006	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

April 2006	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

Both publications are available free to download from the DARD website at www.dardni.gov.uk

Access to individual data is not possible.

5 SUGGESTIONS FOR FURTHER TASKS

Each year a review of the farm survey system is to be undertaken..

The main issues in the reviews are include:

- revised use of IACS data in light of SFP processes
- wider use of the cattle tracing system
- access to other administrative systems
- improving response
- targeting the non-IACS sectors
- 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 throughout the UK examining the issues around allowing 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.

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.

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 are targeted in rotation.

REFERENCES

Most information on the statistics collected in the FSS 2005 in Northern Ireland can be found on the DARD website at <http://www.dardni.gov.uk/econs/econ0033.htm> . This includes:

- Census 2005
- European Union Structure Survey 2005

Alternatively hard copies may be obtained from DARD of:

- The Agricultural Census in Northern Ireland: Results for June 2005
- EU Farm Structure Survey 2005, Northern Ireland:

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Appendix 1 – Structure Survey



Department of
**Agriculture and
Rural Development**
www.dardni.gov.uk

EUROPEAN UNION STATISTICAL ENQUIRY

**Notice requiring attention
by 21st March 2005**

Business ref:

Census ID:

You can now complete your survey form on the Internet by clicking on the census button at the www. ruralni.gov.uk website.

Explanatory note

The Statistical Office of the European Union requires Member States to carry out a statistical survey of farms in 2005.

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

The questions in the 2005 survey reflect the EU's growing interest in issues relating to farm labour.

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 **21st March**.

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

For help or further information please telephone 02890 - 525432

Please return the form, in the envelope provided to:

Farm Census Branch, Department of Agriculture and Rural Development,
Annex B, Dundonald House, Upper Newtownards Road, Belfast BT4 3TB
by 21st March 2005

Section A: Status of the farm business

(1) **Who has legal and financial responsibility for the farm?** Tick **one** box only in this section

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

(2) **Who is mainly responsible for the day-to-day running of the farm?** Tick **one** box only in this section

The occupier A member of the occupier's family }
 The occupier's spouse Another person }
 These two options are termed the "**manager**"

(3) Indicate any agricultural training that the person **mainly responsible for the day to day running of the farm** has undertaken? Tick **one** box only in this section

Practical experience only	<input type="checkbox"/>
Formal course(s) lasting less than 2 years	<input type="checkbox"/>
Formal course(s) lasting 2 years or more	<input type="checkbox"/>

Section B: The occupier, occupier's spouse, manager

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

(1) **Does the occupier have a spouse?** Yes No

Please tick a box in **each** of the 3 columns below for (a) **the occupier**, (b) **the occupier's spouse** (if married/co-domiciled) and (c) **the manager**, (if not the occupier or spouse).

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

Section C: Other persons who regularly worked on the farm during the past 12 months

If there is no occupier or if the business is a partnership other than a family one, record all workers as hired.

Please tick all appropriate boxes.		Other Family Workers						Hired Workers (not contractors or casual workers)						
		1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th	7th
(1) SEX	Male													
	Female													
(2) AGE	16 to 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	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							If more columns are needed please include on a separate page.						
	Less than on the farm													
	More than on the farm													

Section D: Contractors and Casual Labour

(1) 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) **person days**

(2) For which activities were contractors 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"/>

(3) 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 (e.g. 3 workers for 2 days = 6 person-days) **person days**

Section E: Farm Diversification

(1) 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

Tourism (Accommodation)	<input type="checkbox"/>	Non-Agricultural Contracting	<input type="checkbox"/>
Tourism (Other)	<input type="checkbox"/>	Livestock Haulage	<input type="checkbox"/>
Direct Sales	<input type="checkbox"/>	Equine Sport	<input type="checkbox"/>
Processing of farm products	<input type="checkbox"/>	Other Sports	<input type="checkbox"/>
Renewable Energy Production	<input type="checkbox"/>	Other Commercial Activities	<input type="checkbox"/>
Agricultural Contracting	<input type="checkbox"/>	None	<input type="checkbox"/>

If any Other Commercial Activity, please specify (e.g aquaculture, bee keeping, handicrafts, wood processing, etc.)

Section F: Machinery and equipment belonging to the holding

(1) Please tick yes or no in the boxes below and enter number if applicable

	NO	YES	IF YES STATE NUMBER
Tractors (all types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Combine harvesters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Forage harvesters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Potato harvesters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Quads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Irrigation equipment: mobile	<input type="checkbox"/>	<input type="checkbox"/>	
fixed	<input type="checkbox"/>	<input type="checkbox"/>	

Section G: Machinery used in the last 12 months that belongs to another holding, a machinery ring or is hired.

(1) Please tick yes or no in the boxes below

	NO	YES
Tractors (all types)	<input type="checkbox"/>	<input type="checkbox"/>
Combine harvesters	<input type="checkbox"/>	<input type="checkbox"/>
Forage harvesters	<input type="checkbox"/>	<input type="checkbox"/>
Potato harvesters	<input type="checkbox"/>	<input type="checkbox"/>

Could you please indicate the length of time taken to complete this form?

DARD (NI) is committed to reducing the burden of form filling and this information may help. Minutes

Appendix 2 – June Census

Farm Census Branch
Room 908, Dundonald House
Upper Newtownards Road
Belfast BT4 3SB

Telephone (028) 9052 5432

Agricultural & Horticultural Census

J05

**IT IS COMPULSORY
TO COMPLETE AND RETURN THIS FORM**

Business Ref. No.

Census ID.

*Area owned
(hectares)*

Or Business Partner

You can now submit your survey form over the Internet by clicking on the **CENSUS ONLINE** button at the www.ruralni.gov.uk website.
Please use the Business Ref. No. and Census ID above to gain secure access

Dear Farmer / Grower,

AGRICULTURAL AND HORTICULTURAL CENSUS, 2005

Under the Agricultural Statistics (Northern Ireland) Order 2004 you are required to complete **all** of this form in respect of the land you occupy. **This is a legal requirement.** Under Section 6.1 of the Order, anyone who without reasonable excuse fails to complete and return this form shall be guilty of an offence and may be liable, on summary conviction, to a fine not exceeding £1,000.

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 **1 June 2005** and the numbers of persons working in your business on that date. Data collected under the Agricultural Statistics (Northern Ireland) Order 2004 may only be used for specified purposes, such as the preparation of statistics or to assist with the control of serious animal diseases.

Notes:

- **Please return the form, in the pre-paid envelope provided, by 15th June 2005. 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 2005

OFFICIAL BOX			
Query	Cleared	Checked	Notes
1st Scrutiny		2nd Scrutiny	
Inits.	Date	Inits.	Date



FSS Methodological Report 2005: Northern Ireland (UK)

AREAS OF CROPS, GRASS AND OTHER LAND AS ON 1 JUNE 2005

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.

IF YOU ARE NO LONGER FARMING

Please indicate the reason by ticking the relevant box:

Sold farm

Transferred farm

Other (Please specify)
(_____)

Name and address of new owner:

Please complete the declaration on the back of this form and return in the pre-paid envelope provided.

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 below 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.

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	•

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	•	
Hardy nursery stock	50	•		
Glasshouse area (or plastic houses)	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, bogs, wasteland, gardens, land for recreation	72	•	
TOTAL area farmed (Items 20 to 72 = Item 4)		75	•	

FSS Methodological Report 2005: Northern Ireland (UK)

LIVESTOCK NUMBERS ON 1 JUNE 2005
(see the enclosed Notes for Guidance)

CATTLE		DAIRY		Number	Official Use	HORSES AND PONIES		Number	Official Use	
MILK	Mainly for producing MILK for sale	Cows and heifers in milk		80		Brood mares	Horses	150		
		Cows in calf but not in milk		81			Ponies	151		
		Heifers in calf with first calf	2 yrs old and over		82		Stallions		152	
			Under 2 yrs		83		Other horses		153	
SUCKLERS						Other ponies		154		
BEEF	Mainly for producing and rearing calves for BEEF (Sucklers)	Cows and heifers in milk		84		TOTAL Horses/Ponies (Items 150-154)				
		Cows in calf but not in milk		85				160		
		Heifers in calf with first calf	2 yrs old and over		86		PIGS		Number	Official Use
			Under 2 yrs		87		Pigs for breeding	Breeding Sows	170	
Bulls for service	2 years old and over		88		Gilts in pig	171				
	1 year old and under 2 years		89		Boars	173				
All other cattle and calves	2 years old and over	Male		90		Maiden Gilts		174		
		Females for slaughter		91		Sows waiting on cull	175			
	1 year old and under 2 years	Females for breeding but not in calf		92		All other pigs by liveweight	110kg and above (240lb+) (Finishers)	176		
		Male		93			80 to 110kg (175 to 240lb) (Finishers)	177		
	6 months old and under 1 year	Females for slaughter		94			50 to 80kg (110 to 175lb) (Finishers)	178		
		Females for breeding but not in calf		95			20 to 50kg (45 to 110lb) (Second stage weaners)	179		
	Under 6 months old	Male		96			8 to 20kg (17 to 45lb) (First stage weaners)	180		
		Female		97			Under 8kg (under 17lb) (Suckling pigs)	181		
		Male		98		TOTAL Pigs (Items 170-181)				
		Female		99				185		
TOTAL Cattle and Calves (Items 80-99)				100		POULTRY				
SHEEP		Number	Official Use							
Ewes put to the ram in 2004 and still on farm at 1 June 2005		109		For producing table eggs		Laying birds from point of lay to end of first laying cycle	190			
Rams for service		112		Mainly for producing hatching eggs	Hens retained after first laying cycle	Hens, pullets, cockerels, etc. (not turkeys, ducks, etc.)	193			
Other sheep 1 year old and over	For breeding	114				Broilers and other table chickens	194			
	Other	116		Other poultry	Turkeys	195				
Lambs under 1 year		119			Geese	196				
TOTAL Sheep (Items 109-119)					120		Ducks	197		
GOATS		Number	Official Use		Others	198				
Female goats which have kidded		125		TOTAL Poultry (Items 190-198)						
All other goats and kids		126					200			
TOTAL Goats (Items 125-126)				130		FARMED DEER				
FARMED DEER		Number	Official Use							
Farmed deer		140								

PEOPLE WORKING ON THE FARM

INCLUDE

- All persons **normally** engaged in agricultural or horticultural work in the business on 1st June 2005.
- 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 1st June (record as paid workers).

EXCLUDE

- School children.
- Individuals employed by others but working on your farm on a contract basis on 1st 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	
		MALES	FEMALES
FARMERS			
Normally:			
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		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 waged family members) who work on the farm for 20 weeks or more per year	30 hrs/week or more	229	259
	Less than 30hrs/week	230	260
Casual/seasonal workers (paid) who work for less than 20 weeks per year	All times	231	261
OTHER WORKERS			
Other workers , aged 16 or over who work on the farm for 20 weeks or more per year	30 hrs/week or more	236	266
	Less than 30hrs/week	237	267
Casual/seasonal workers (unpaid) who work for 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 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 |
| (4) Your land is not farmed | <input type="checkbox"/> | | 290 |

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?
DARD (NI) is committed to reducing the burden of form filling and this may help. (mins)

THANK YOU FOR YOUR CO-OPERATION

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

Appendix 3 – Administrative Sources

1. Organic producers

A register of all organic producers is held by a specialist unit at Greenmount Campus (College of Agriculture Food and Rural Enterprise). This consists of the name and address – including postcode – of the participants, coupled with the area currently considered organic or under conversion plus the types of enterprises conducted there. A sub-list of poultry producers is also held were the actual area of production may be registered as zero. This list was merged with the sample drawn for the Structure Survey using both address and name as key variables.

2. Productive Investments

A register of all recipients of monies relating to Measure 1.9 “Investment in Agricultural Holdings” is kept by the administering branch. A list of the recipients and their addresses was obtained. This list was merged with the sample drawn for the Structure Survey using both postcode and name as key variables.

3. Rural Development

A register of all recipients of monies relating to rural development measures was obtained from the administering branch including the following list of measures:

4.4 Setting up of Farm Relief and Farm Management Services

4.7 Renovation and Development of Villages and Protection and Conservation of the Rural Heritage

4.8 Diversification of Agricultural Activities and Activities Close to Agriculture to Provide Multiple Activities or Alternative Incomes

4.9 Development and Improvement of Infrastructure Connected with the Development of Agriculture

4.10 Encouragement for Tourist and Craft Activities

4.11 Protection of the Environment in Connection with Agriculture, Forestry, and Landscape Conservation as well as the Improvement of Animal Welfare

4.12 Financial Engineering

6.2A Management, Monitoring and Evaluation of the Programme and Co-ordination with Other Programmes

4.2B Outward and Forward Looking Tourism - Enhancing the Region as a Tourism Destination

5.6A Agriculture and Rural Development Co-operation - Cross-border Community Development

1.2B Sustainable Tourism Development based on shared natural and cultural resources (NI) -Natural Resource Rural Tourism-

2.9A Renovation and Development of Villages and Protection and Conservation of the Rural Heritage (NI) - Single Identity

2.10 Encouragement for Tourist and Craft Activities (NI) - Local Identity Culture and Heritage

1.7B Diversification of Agricultural Activities and Activities close to Agriculture to provide Multiple Activities or Alternative Incomes (NI) - Part-Time Employment

1.10A Basic Services for the Rural Economy and Population (NI) - Retail Services

1.10B Basic Services for the Rural Economy and Population (NI) – ICT

A list of the recipients and their addresses was obtained. This list was merged with the sample drawn for the Structure Survey using both address and name as key variables.

4. Agricultural areas with environmental restrictions

A list of postcodes covering the ESA areas was obtained from the branch administering the scheme. This was merged with the census data to indicate the status of the each farm using name and address as key variables.