



Department of  
**Agriculture, Environment  
and Rural Affairs**

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CAP POLICY, ECONOMICS AND STATISTICS DIVISION

# Statistical Review of Northern Ireland Agriculture 2016



Agriculture, Fishing & Forestry



**A National Statistics publication**

# **Statistical Review of Northern Ireland Agriculture 2016**

***Department of Agriculture, Environment and Rural Affairs***

## **A National Statistics publication**

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# CONTENTS

List of tables and figures	iv
Preface	ix
Key facts	1
Comparisons of NI and UK agriculture	2
Trends in NI and UK livestock numbers and crop areas	3
1 Executive summary	4
2 The Agricultural Economy	
A. Aggregate output, input and income	8
B. Commodities and inputs	20
3 Crop areas and livestock numbers	32
4 Farm structure	37
5 Incomes at farm level	50
6 Food & Drinks sector	55
7 Rural Population	59
8 Animal Health and Welfare	68
9 Environment	72
Appendix - statistical and methodological notes	81

## LIST OF TABLES AND FIGURES

	<b>Table No.</b>	<b>Page</b>	
<b>Aggregate output, input and income</b>	2.1	Aggregate Agricultural Account: estimated output, input, value added and income of agriculture	10
	2.2	Summary income indicators at current prices and in real terms	12
	2.3	Output and input volume and productivity indices	12
	2.4	Estimated cash flow for agriculture	12
	2.5	Aggregate gross margin estimates for the main agricultural sectors	13
	2.6	Quantities of the main products in output	14
	2.7	Average producer prices of agricultural products	15
	2.8	Indices of producer prices of agricultural output	15
	2.9	Average market prices of breeding and store livestock	16
	2.10	Direct payments included in the Aggregate Agricultural Account	17
	2.11	Capital grants and other direct payments not included in the Aggregate Agricultural Account	18
	2.12	Estimated gross annual capital investment in fixed assets and equipment	18
	2.13	Milk Quota	19
	2.14	Number of persons working on farms	19
	2.15	Agricultural manpower	19
<b>Commodities and inputs</b>	2.16	Output of cattle and calves	26
	2.17	Sources of home-fed finished cattle marketed	27
	2.18	Output of milk	27
	2.19	Output of sheep	27
	2.20	Output of pigs	28
	2.21	Output of poultry	28
	2.22	Output of eggs	28
	2.23	Crop production	29
	2.24	Output of potatoes, barley and wheat	30
	2.25	Output of apples and mushrooms	30
	2.26	Quantity and cost of the main items of expenditure (including interest and labour)	31

<b>Crop areas and livestock numbers</b>	3.1	Land use, 2016	34
	3.2	Areas of crops, grass, rough grazing and other land, June 2011-2016	34
	3.3	Livestock numbers, June 2011-2016	35
	3.4	Areas of crops, grass, rough grazing and other land by Less Favoured Area (LFA) category of farm, June 2016	36
	3.5	Livestock numbers by Less Favoured Area (LFA) category of farm, June 2016	36
<b>Farm structure</b>	4.1	Number and area of farms by area farmed, June 2016	40
	4.2	Number of farms, average area and distribution of area by area farmed, June 2011-2016	40
	4.3	Number of farms by business size and area farmed, June 2016	40
	4.4	Number of farms by business size, June 2011-2016	41
	4.5	Number of farms by business size and Less Favoured Area (LFA) category, June 2016	41
	4.6	Number of farms by business size and type, June 2016	41
	4.7	Number of farms by business type, June 2011-2016	42
	4.8	Number of farms by business type and Less Favoured Area (LFA) category, June 2016	42
	4.9	Number of farms by business size and proportion of area owner occupied, June 2016	42
	4.10	Area of land by type of tenure, 2011-2016	43
	4.11	Average conacre rents by type of use, 2010-2015	43
	4.12	Distribution of the farm labour force by business size, June 2016	43
	4.13	Distribution of the farm labour force by Less Favoured Area (LFA) category, June 2016	44
	4.14	Distribution of numbers of livestock, hectares of crops, full-time labour and output by business size, June 2016	45
	4.15	Distribution of (a) dairy cows and (b) beef cows by herd size, June 2016	46
	4.16	Distribution of (a) slaughter cattle one year-old and over and (b) total cattle by herd size, June 2016	46
	4.17	Distribution of (a) ewes and (b) total sheep by flock size, June 2016	47
	4.18	Distribution of breeding sows by herd size, June 2016	47
	4.19	Distribution of (a) finishers/weaners and (b) total pigs by herd size, June 2016	47

	4.20	Distribution of (a) laying hens and (b) broilers by flock size, June 2016	48
	4.21	Distribution of total poultry by flock size, June 2016	48
	4.22	Distribution of (a) barley and (b) wheat by area of crop, June 2016	48
	4.23	Distribution of total cereals by area of crop, June 2016	49
	4.24	Distribution of potatoes by area of crop, June 2016	49
<b>Incomes at farm level</b>	5.1	Indices of average cash income in real terms by farm type, 2011/12 to 2016/17	52
	5.2	Distribution of farms by cash income (CI), net farm income (NFI) and farm business income (FBI) by farm type, 2015/16	52
	5.3	Cash income by business size and farm type, 2014/15 and 2015/16	53
	5.4	Farm business income by business size and farm type, 2014/15 and 2015/16	53
	5.5	Net farm income by business size and farm type, 2014/15 and 2015/16	53
	5.6	Average tenant's capital by farm type, 2015/16	54
	5.7	Average closing valuations by farm type, 2014/15 and 2015/16	54
<b>Food &amp; Drinks Sector</b>	6.1	Gross Turnover of the NI food and drinks processing sector	56
	6.2	Performance indicators for the food and drinks processing sector in Northern Ireland	56
	6.3	Estimated employment in the NI food and drinks processing sector and input supply sectors	57
	6.4	Destinations and values of Northern Ireland food and drinks processing subsector sales, 2014	58
	6.5	Value of Farm and Live Fish Exports (excluding sales to Great Britain)	58
	6.6	Value of non-edible product exports from the NI Agri-food and forestry sector	58
<b>Rural Population</b>	7.1	Median equivalised net disposable weekly household income, 2014/15	61
	7.2	Percentage of individuals with below 60% UK Median Income 2014/15	61
	7.3	Number of VAT and/or PAYE registered business operating in NI by broad industry group, 2015	62
	7.4	Number of VAT and/or PAYE registered businesses operating in NI, by employee sizeband, 2015	63
	7.5	Highest educational qualification 2015/16	63

	7.6	Performance of school leavers 2014/15	64
	7.7	Destinations of school leavers 2014/15	64
	7.8	Housing Tenure 2015/16	64
	7.9	House prices, 2016	65
	7.10	Average household size, 2015/16	65
	7.11	Household access to car or van, 2015/16	65
	7.12	Access to public transport	66
	7.13	Telecommunication services	66
	7.14	Life expectancy at birth	67
	7.15	Standardised Death Rate - All age, all cause Mortality	67
	7.16	Median Fire Response Times	67
	7.17	Median Ambulance Response Times	67
<b>Animal Health and Welfare</b>	8.1	Bovine Tuberculosis (TB) statistics	70
	8.2	Bovine Brucellosis (BR) statistics	70
	8.3	Bovine Viral Diarrhoea (BVD) Eradication Programme Statistics	70
	8.4	Outcomes (provisional) of on-farm animal welfare inspections completed on NI farms in 2016	71
<b>Environment</b>	9.1	Local authority collected waste management statistics for Northern Ireland, 2010/11 - 2015/16	76
	9.2	Percentage of river water bodies achieving Water Framework Directive classification overall (second cycle water body set and environmental standards) 2010 -2015	78
	9.3	Annual mean nitrate concentrations (in groundwater), 2010 – 2015	78
	9.4	Area of Farmland in Northern Ireland under Agri-Environmental Schemes, 2011 - 2016	78
	9.5	Organic and in-conversion agricultural land area, 2010 - 2015	79
	9.6	Forestry area, production, forest park visitor numbers and employment in Northern Ireland, 1995/96 - 2015/16	79
<b>Figure No.</b>			
	7.1	Population Trends in Northern Ireland	61
	9.1	Total greenhouse gas emissions in Northern Ireland, 1990 and 2014	77
	9.2	Total greenhouse gas emissions in Northern Ireland by sector, base year and 2014	77
	9.3	Area of new forest and woodland plantings by private landowners supported by grant aid	80





## PREFACE

The *Statistical Review of Northern Ireland Agriculture* is published annually and contains a wide range of statistics on the agricultural industry. It is an important reference document for agri-food sector stakeholders and policy makers. This is the 53rd edition.

The data contained in the *Statistical Review* are derived from farm surveys, including the Agricultural Census and the Farm Business Survey, as well as surveys of food processors and agricultural input supply firms. A number of these surveys are carried out in order to enable the Department of Agriculture, Environment and Rural Affairs (DAERA) to meet the legislative requirements with which it is charged. The data on animal welfare, the environment and rural areas comes from a variety of other sources.

In this edition of the *Statistical Review*, chapter six is replaced by four new chapters providing more in-depth statistics on rural areas, animal health and welfare, the environment, as well as food and drinks sector exports and performance.

The *Statistical Review* is a Departmental publication and in line with the guidance for these publications, DAERA provides a number of hardcopies to designated public libraries and the NI Assembly Government. Normally, after these requirements have been satisfied a small number of hardcopies become available and these are distributed free of charge on a first come first served basis while stocks last - please contact the Editor at the address below. As with all DAERA statistical publications, the *Statistical Review* is available in electronic format, free of charge, on the DAERA website, at [www.daera-ni.gov.uk](http://www.daera-ni.gov.uk). This website also contains long-term trend data for a selection of *Statistical Review* tables. New statistical releases appearing on the DAERA website are announced on the DAERA Twitter account: @DAERAstats. The *Statistical Review* is a National Statistics publication, indicating that its contents are produced to best professional standards. Queries or comments on its contents can be made to the Editor, Seamus McErlean, whose contact details are given below.

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## KEY FACTS 2016

	NI	UK	ROI	EU15
<b>GROSS VALUE ADDED (GVA)</b>				
Agriculture as % of total GVA	1.2 <sup>P</sup>	0.6 <sup>2</sup>	2.4 <sup>2</sup>	1.6 <sup>4</sup>
<b>EMPLOYMENT</b>				
Agricultural employment ('000)	21	358	111	4,995
As % of total civil employment	2.5	1.1	5.5	2.8
<b>LAND USE</b>				
Agricultural area ('000 ha)	1,013	17,147 <sup>1</sup>	4,430 <sup>1</sup>	155,317 <sup>3</sup>
As % of total area	75	70 <sup>1</sup>	64 <sup>1</sup>	45 <sup>3</sup>
<b>LESS FAVOURED AREAS (LFA)</b>				
LFA as % of agricultural area	69.5	49.5 <sup>1</sup>	75.0 <sup>5</sup>	60.6 <sup>5</sup>
<b>FARMS</b>				
Number ('000)	24.5	214.4 <sup>1</sup>	140 <sup>3</sup>	4,418 <sup>3</sup>
Average agricultural area (ha)	41.3	80.4 <sup>1</sup>	32.5 <sup>3</sup>	34.3 <sup>3</sup>
<b>ENTERPRISES</b>				
Average enterprise size:				
Dairy cows	90	90 <sup>1</sup>	64 <sup>3</sup>	47 <sup>3</sup>
Beef cows	18	27 <sup>1</sup>	15 <sup>3</sup>	22 <sup>3</sup>
Sheep	206	434 <sup>1</sup>	135 <sup>3</sup>	173 <sup>3</sup>
Pigs	1,784	412 <sup>1</sup>	1,194 <sup>3</sup>	461 <sup>3</sup>
Laying hens	18,000	1,237 <sup>3</sup>	266 <sup>3</sup>	666 <sup>3</sup>
Broilers	45,000	53,762 <sup>2</sup>	14,261 <sup>3</sup>	2,856 <sup>3</sup>
Cereals (ha)	14.6	64.2 <sup>1</sup>	24.6 <sup>3</sup>	21.5 <sup>3</sup>
Potatoes (ha)	7.8	14.5 <sup>1</sup>	8.2 <sup>3</sup>	3.5 <sup>3</sup>

1. 2015, 2. 2014 3. 2013 4. 2010, 5. 2007, P = Provisional

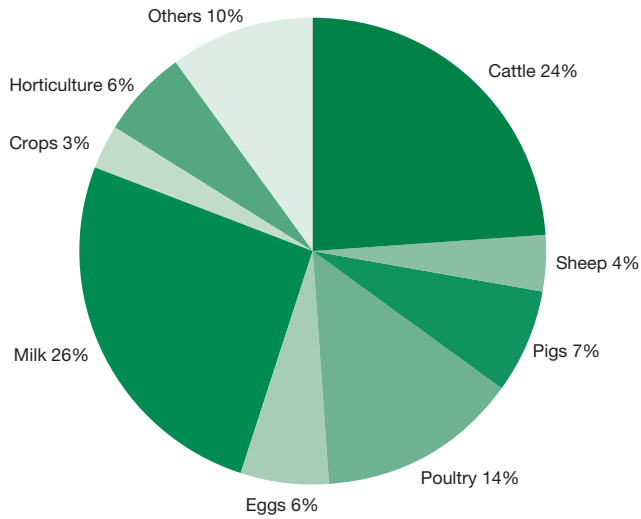
Note 1. NI = Northern Ireland; UK = United Kingdom; ROI = Republic of Ireland; EU15 = Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom.

Note 2. Due to national accounting principles GVA figures do not include Single Farm Payment.

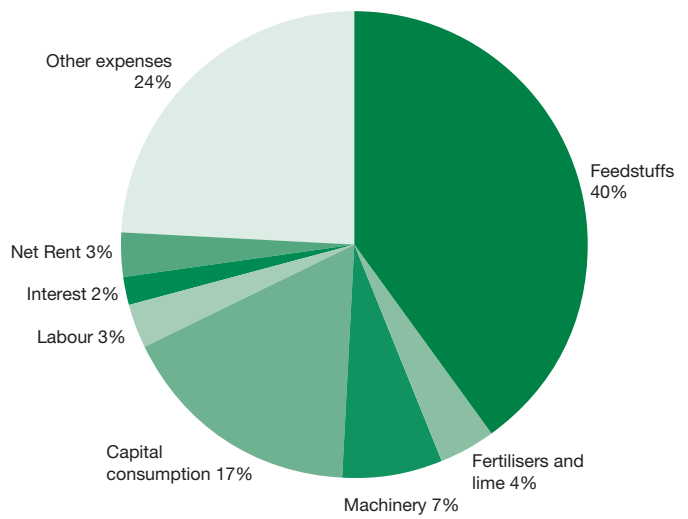
Note 3. In general, figures relate to the latest year for which statistics are available.

# COMPARISONS OF NI AND UK AGRICULTURE

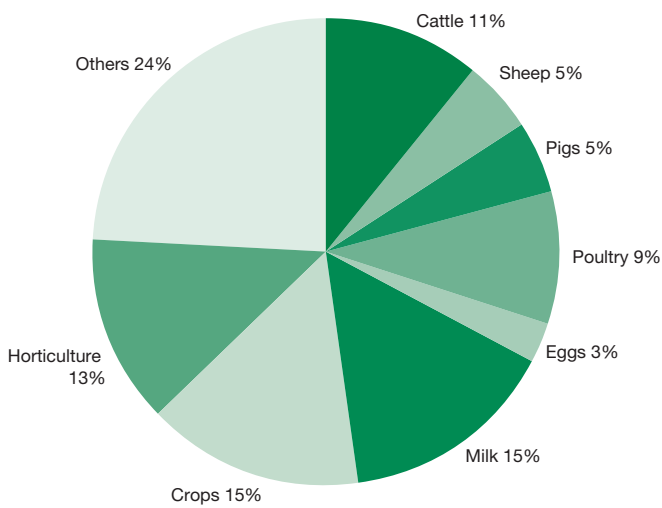
**Gross output of NI agriculture, 2016**



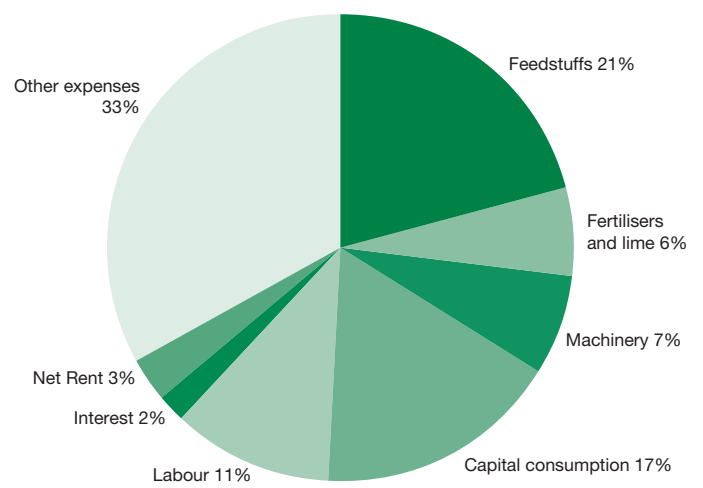
**Total expenses of NI agriculture, 2016**



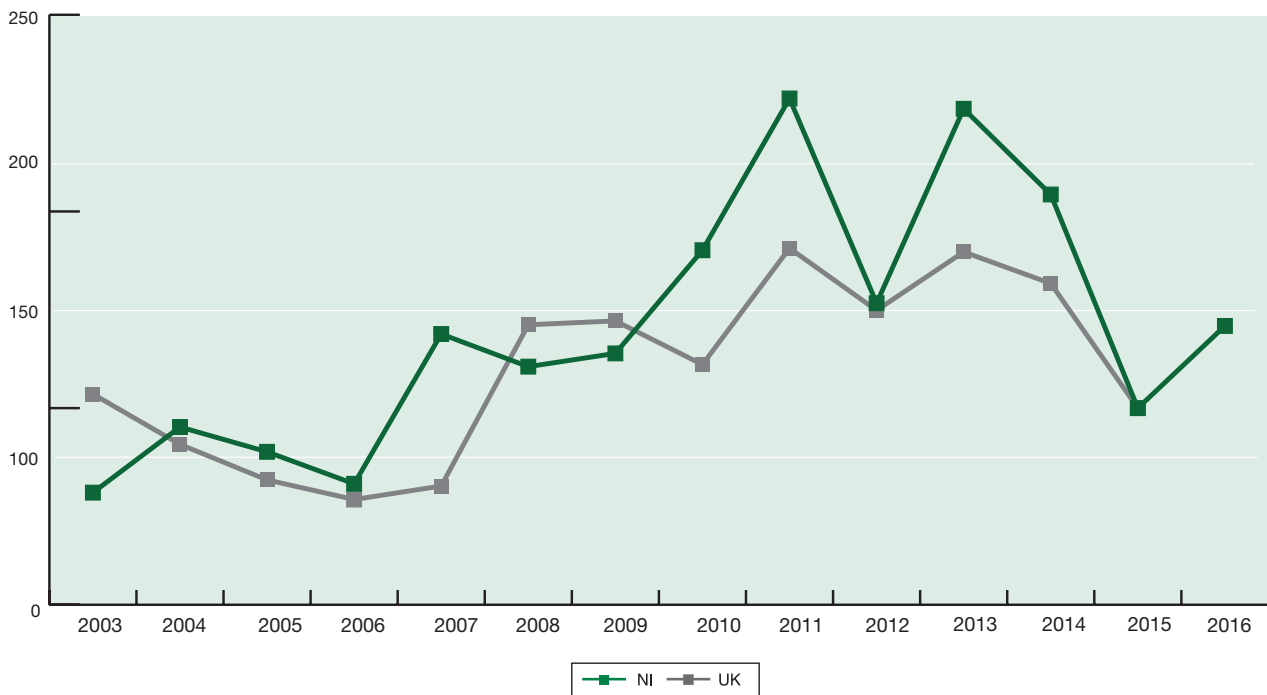
**Gross output of UK agriculture, 2015**



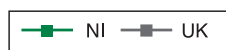
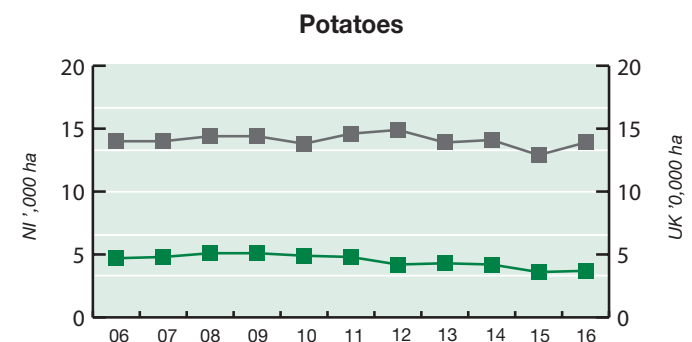
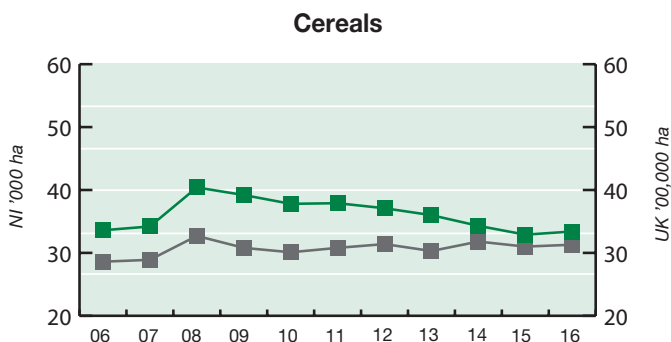
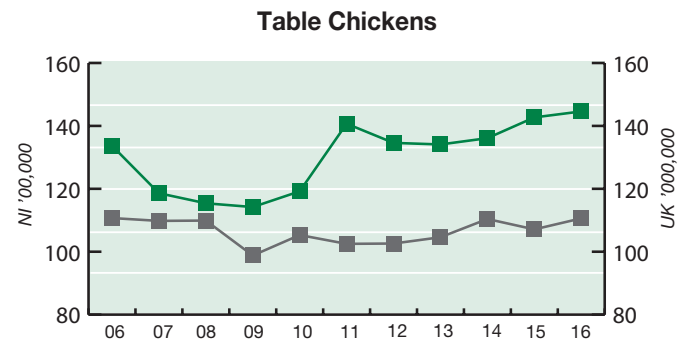
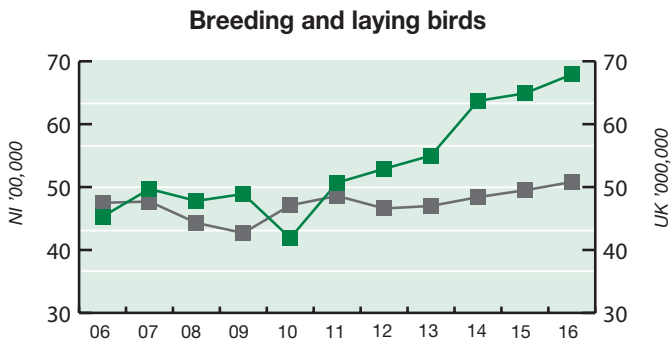
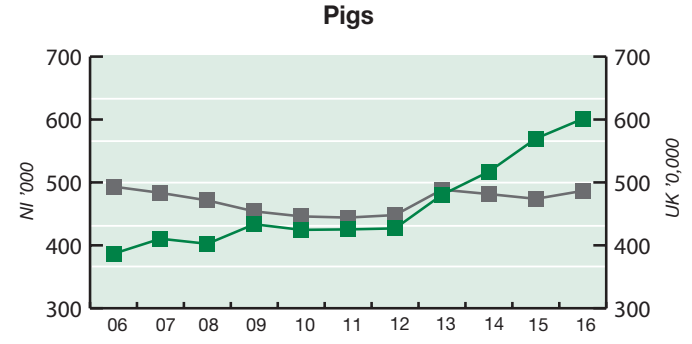
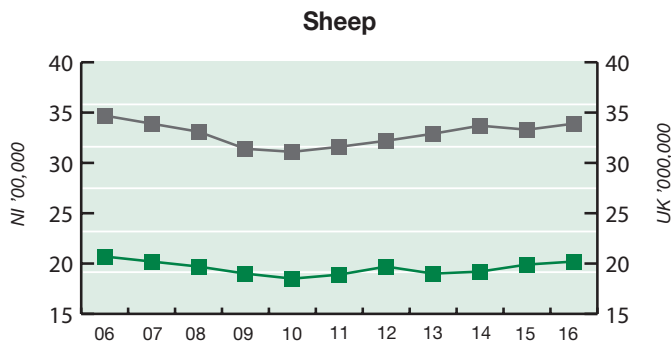
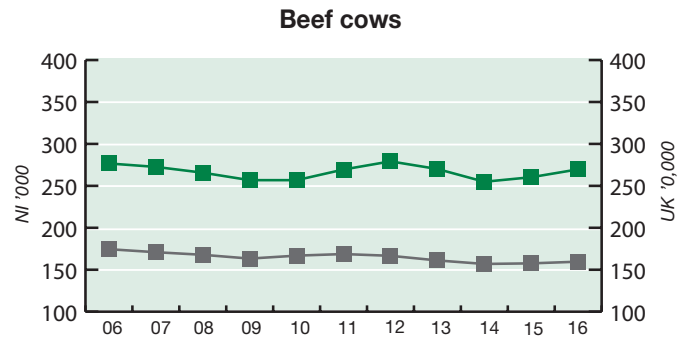
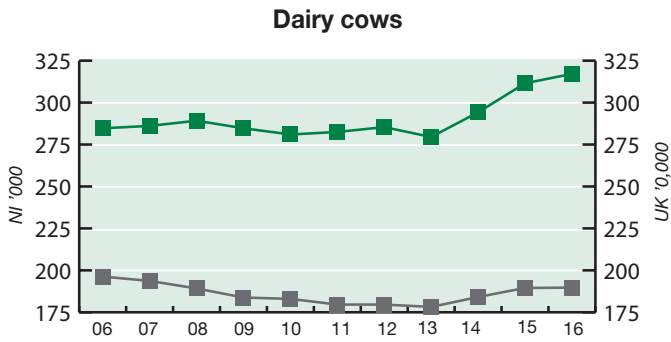
**Total expenses of UK agriculture, 2015**



**NI and UK Total Income from Farming Indices in real terms (2015 = 100)**



# TRENDS IN NI AND UK LIVESTOCK NUMBERS AND CROP AREAS



# 1. EXECUTIVE SUMMARY

*Note: comparisons are with 2015 unless otherwise stated.*

## Aggregate income (Tables 2.1 - 2.3)

- The agricultural income of Northern Ireland farms increased in 2016 from a low base in 2015.
- **Total income from farming (TIFF)** - which measures the return to farmers, partners and directors, their spouses and other family workers for their labour, management input and own capital invested – increased by 22 per cent (21 per cent in real terms) to £244 million, from £199 million in 2015.
- Following the increase in 2016, TIFF is now 11 per cent above the average of the last twenty years after accounting for inflation.
- The increase in TIFF in 2016 is due mainly to an 18 per cent rise in the value of direct CAP subsidy payments which was the result of a weakening of the value of Sterling against the Euro.

## Output, input and value added (Tables 2.1 - 2.3)

- **Gross output** of Northern Ireland agriculture is estimated at £1.76 billion for 2016. which is similar to the value estimated for 2015. There was a 1.1 per cent increase in the value of output from the livestock sector, which was offset by a 13 per cent decrease in the horticulture sector and 2.1 per cent fall in field crops.
- **Gross input** (or ‘intermediate consumption’) decreased by 2.3 per cent, to £1.35 billion. Feedstuff costs, which accounted for 53 per cent of the gross input figure, fell by 1.6 per cent in 2016 to £716 million. This was due to a 2.7 per cent fall in the volume of feedstuffs purchased, which was partially off-set by a rise in the price of feed by 1.0 per cent. The total cost of fertilisers fell by 6.7 per cent due to a 16 per cent decrease in average price per tonne which was offset by an 11 per cent increase in the volume purchased. Expenditure on lime also fell. Total machinery expenses decreased by 6.5 per cent to £129 million in 2016. This decrease was largely due to an 11 per cent reduction in the cost of fuel & oils.
- **Gross value added** increased in 2016 to £410 million; an increase of 8.8 per cent, while **net value added** - gross value added less consumption of fixed capital (or ‘depreciation’) plus direct CAP subsidies rose by 12 per cent, to £394 million.

## Productivity (Tables 2.3)

- Changes in the volumes of outputs and inputs combined to produce a 2.3 per cent increase in **total factor productivity (TFP)** - the productivity of all resources in the industry. However, **Single factorial terms of trade**, which is a measure of farmers’ economic welfare, increased only marginally by 0.6 per cent. The marginal increase in this index indicates that the increase in productivity was partially offset by a deterioration in the ratio

between inputs costs and farm-gate prices (due to farm gate prices falling while input prices remained unchanged) to leave only a small improvement in farmers' economic welfare.

**Cash flow  
(Table 2.4)**

- **Cash available to farm families from farming activity** was estimated to have risen by 32 per cent, to £338 million. The magnitude of this increase is more than the 22 per cent increase in TIFF for 2016, because the level of borrowings and capital consumption increased. In this estimate, 'non-cash' items such as stock changes as well as capital formation and consumption are removed and account is taken of the level of investment and change in borrowings, thereby more realistically portraying cash available from farming.

**Farm level incomes  
(Tables 5.3-5.4)**

- **Farm Business Income (FBI)** is the headline measure of farm-level income used throughout the UK. Measured across all farm types, average **Farm Business Income** decreased from £25,094 in 2014/15 to £14,788 in 2015/16, a decrease of £10,306 per farm. It is expected to increase from £14,788 in 2015/16 to £18,943 in 2016/17 i.e. an increase of £4,155 or 28 per cent per farm.

**Subsidies  
(Table 2.10)**

- The value of all **direct payments** to farmers increased by £31 million or 11 per cent in 2016, to £318 million. This increase was due to a increase in direct CAP payments as a result of a more favourable exchange rate between Sterling and the Euro. The estimated value of 2016 direct subsidies (Basic, Greening and Young Farmers payments) was £279 million; an increase of 43 per cent compared to 2015.

**Labour (Table 2.14)**

- The **total agricultural labour force** in 2016 decreased marginally by 0.6 per cent to just over 47,700 persons. Within this total there was a 0.9 per cent decrease in the number of farmers (full time and part-time), a 5.4 per cent rise in the number of spouses and a 2.8 per cent decrease in other workers.

**Livestock numbers  
(Table 3.3)**

- The number of **cattle** recorded in the June 2016 census was almost 1.7 million, an increase of 3.5 per cent compared to the previous year. At June 2016, there were 317,100 dairy cows; an increase of 1.8 per cent from 2015, and 269,700 beef cows; an increase of 3.6 per cent compared to 2015. In June 2016, the **sheep** breeding flock was 1.8 per cent higher than at 2015 with 955,200 ewes. Including lambs and other sheep the entire flock totalled 2.02 million in 2016
- At June 2016, the total number of **pigs** was 601,100, an increase of 5.5 per cent compared to 2015. There was a 1.8 per cent increase to 46,400 in sow numbers. **Broiler** numbers increased by 1.3 per cent to 14.5 million birds, while the size of



the **commercial laying flock** increased by 12 per cent to 3.6 million birds.

### **Crops and grass areas (Table 3.2)**

- Between June 2015 and 2016 there was a 0.5 per cent increase in the total **agricultural cropped area**, to 44,500 hectares. The total area of **cereals** was 33,400 hectares in June 2016, which was an increase of 1.6 per cent compared to 2015. In 2016, the total area of potatoes grown increased by 4.0 per cent to 3,700 hectares compared to the previous year.

### **Farm Numbers (Table 2.2)**

- There were 24,528 active **farm businesses** in Northern Ireland at June 2016, which was 379 less than in 2015. This decrease is in keeping with the long term trend in total farm numbers which for many years has been downward at a rate of about 1.5 per cent per annum.

### **Food & Drinks Sector**

- The performance indicators for the **food and drinks processing sector** indicate continued growth over the period 2009 to 2014. Employment has also grown. Exports account for 28 per cent of sales by the food and drinks processing sector.

### **Rural Population**

- In 2015, 60 per cent of the population lived in urban areas, with 4 per cent in mixed urban/rural areas and 36 per cent in rural areas. Rural households on average enjoy higher incomes than urban counterparts, however, this is not the case for more remote rural areas.

### **Animal Health and Welfare**

- There have been no cases of BSE since 2012. During 2016 1,739 new herds in Northern Ireland were affected by bovine tuberculosis compared with 1,513 new incidents in 2006 and 1,688 in 2015. There were no new brucellosis serological reactor breakdowns compared with 118 in 2006 and 8 in 2014. The last confirmed brucellosis breakdown occurred in February 2012 and Northern Ireland achieved Official Brucellosis Freedom on 6 October 2015.

The Veterinary Service (DAERA) carried out 656 on-farm welfare inspections in 2016. Of the inspections carried out as a result of complaints, risk assessment (related to cross-compliance) and targeted visits 88 per cent were fully compliant with legislation, while for random visits 96 per cent were fully compliant with legislation. In 2016, a total of 3 farm animal keepers were disqualified by the courts as a result of serious welfare breaches.

Bovine viral diarrhoea (BVD) is a highly contagious viral disease of cattle. In March 2016 compulsory testing was introduced. The number of tests with negative results is just under 99 per cent.

## **Environment**

- The landfill rates for Local Authority collected municipal waste and household waste have declined over the last six years. In 2016, some 46,000 hectares or 4.4 per cent of farmland was registered in an agri-environmental scheme in Northern Ireland. In 2014, agriculture was estimated to contribute 28 per cent of all greenhouse gas emissions in Northern Ireland. However, total emissions from agriculture fell by 5.2 per cent between 1990 and 2014.

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## 2. THE AGRICULTURAL ECONOMY

### A. AGGREGATE OUTPUT, INPUT AND INCOME

#### **Methodological note**

*A series of the Aggregate Agricultural Account covering several decades is available on the DAERA website, at [www.daera-ni.gov.uk](http://www.daera-ni.gov.uk). In the following commentary, comparisons are with 2015 unless otherwise stated.*

#### **Summary**

The estimated income of Northern Ireland agriculture in 2016 **increased** for the first time in three years. **Total income from farming (TIFF)** - which represents the return on own labour, management input and own capital invested for all those with an entrepreneurial involvement in farming (including all members of the family working on farm) - rose by 22 per cent (21 per cent in real terms) to just under £244 million, up from £199 million in 2015 (see Table 2.1).

#### **Output**

The value of **gross output** in 2016, estimated at £1.76 billion, was unchanged when compared with 2015. However, this masks some significant movements across the different commodities. Full details of commodity trends in all the individual outputs are given in Section 2B.

#### **Inputs** (or 'intermediate consumption')

The value of **gross input** decreased by 2.3 per cent during 2016, to £1.35 billion. Most of this decrease can be attributed to a reduction in expenditure on feedstuffs as well as fertiliser, fuel and oils. Full details of trends in individual inputs are also given in Section 2B.

#### **Gross and net value added**

**Gross value added** - gross output less gross input - increased by 8.8 per cent to £410 million in 2016 as a result of the lower gross input value. **Net value added** (at factor cost), i.e. gross value added less consumption of fixed capital (or 'depreciation') plus direct CAP subsidies - increased further, by 12 per cent, to £394 million.

Net value added is the sum of all 'incomes' arising in the industry, namely the earnings of paid labour, interest on borrowed capital, rent on conacre land (paid to non-farming persons) and the residual 'total income from farming'. The cost of paid labour (also termed 'compensation of employees') decreased by 4.6 per cent from £69 million in 2015 to £66 million in 2016. The total cost of borrowings in agriculture (interest payments plus financial intermediation services indirectly measured (FISIM), see Table 2.29) was £40 million in 2016, a 2.3 per cent increase compared to 2015. Interest rates remained low throughout 2016 (with the Bank of England base rate falling further in August), therefore the extra cost of interest was due to a 4.7 per cent increase in the level of borrowings. Conacre rent paid to non-farmers rose by 1.0 per cent to £52 million in 2016.

<b>Total Income from farming</b>	The net result of these changes was that <b>total income from farming (TIFF)</b> recovered in 2016, by 22 per cent to £244 million, a rise of 21 per cent after allowing for inflation. Following this increase in 2016, TIFF was 11 per cent above the average of the last twenty years after accounting for inflation. Over the same 20-year period, the number of persons drawing an income from farming also declined. From 1997 to 2016, the number of units of entrepreneurial labour decreased by 24 per cent with the result that, in real terms, <b>TIFF per unit of entrepreneurial labour</b> in 2016 was 19 per cent above the 20-year average.
<b>Cash flow</b>	TIFF measures the return (on own labour, management input and own capital invested) to farmers, their spouses and other family workers, i.e. all those with an entrepreneurial interest in farming. It is calculated according to internationally agreed practices, which require the inclusion of ‘book’ items such as stock changes, capital formation and consumption (depreciation). TIFF may not, therefore, realistically portray the cash available from farming. In the estimates shown in Table 2.4, TIFF is adjusted to remove these non-cash items and to take account of the level of investment and change in borrowings (the derivation is given in the footnotes to Table 2.4). <b>Cash available to farm families from farming</b> was estimated to have risen by 32 per cent, to £338 million in 2016.
<b>Subsidies</b>	<b>Total direct payments</b> to farmers increased significantly in 2016, by £31 million or 11 per cent, to £318 million. The total value of the Basic, Greening and Young Farmer payments estimated to have accrued in 2016 was £276 million, a net increase of 18 per cent or £42 million compared with the equivalent payments in 2015. The increase for 2016 can be attributed to a more favourable exchange rate between Sterling and the Euro. The Basic, Greening and Young Farmer payments account for approximately 87 per cent of all direct payments.
<b>Investment</b>	<b>Gross annual capital investment</b> decreased by 3.6 per cent or £7.3 million to £194 million in 2016. Within this total there was a 0.8 per cent increase in total investment in plant, machinery and vehicles, while investment in buildings and works was down by 10 per cent.

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**Table 2.1 Aggregate Agricultural Account: estimated output, input, value added and income of agriculture<sup>1</sup>**

	<i>£ million</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
<b>OUTPUT<sup>2</sup></b>						
<b>Livestock and livestock products<sup>3</sup></b>						
Finished cattle and calves <sup>4</sup>	354.6	415.7	442.3	391.9	402.3	424.5
Finished sheep and lambs <sup>4</sup>	64.3	68.9	66.7	69.4	63.2	72.6
Finished pigs	106.9	114.5	132.5	133.4	114.8	121.9
Poultry <sup>5</sup>	242.2	241.6	265.2	257.9	249.1	246.4
Eggs <sup>6</sup>	56.6	65.6	67.4	79.6	88.6	97.0
Milk	549.0	525.5	640.5	654.2	480.1	451.9
Minor products <sup>7</sup>	13.4	12.9	15.0	15.0	15.3	14.5
<b>Total livestock and livestock products</b>	<b>1,387.1</b>	<b>1,444.8</b>	<b>1,629.7</b>	<b>1,601.5</b>	<b>1,413.5</b>	<b>1,428.7</b>
<b>Field crops</b>						
Potatoes	23.4	19.0	26.5	18.8	17.1	20.0
Cereals	44.0	37.8	38.3	31.6	28.9	26.6
of which: barley	24.7	24.8	25.0	19.8	18.3	16.7
wheat	17.2	11.2	11.4	9.9	8.7	8.2
oats	2.2	1.8	1.9	1.9	1.9	1.7
Other crops <sup>8</sup>	12.6	13.3	14.9	12.4	12.4	10.5
<b>Total field crops</b>	<b>80.1</b>	<b>70.1</b>	<b>79.7</b>	<b>62.7</b>	<b>58.3</b>	<b>57.1</b>
<b>Horticultural products</b>						
Fruit	7.4	5.5	9.8	11.4	11.8	10.5
Vegetables	17.5	15.0	20.5	22.2	21.5	19.0
Mushrooms	24.7	38.4	40.6	54.6	67.5	53.5
Ornamental and hardy nursery stock	10.9	9.5	12.0	14.3	18.9	20.9
<b>Total horticultural products</b>	<b>60.5</b>	<b>68.4</b>	<b>82.8</b>	<b>102.5</b>	<b>119.6</b>	<b>103.8</b>
Capital formation (breeding livestock)	113.8	89.8	72.4	59.2	74.5	78.0
Agricultural contract work <sup>9</sup>	69.6	71.4	77.7	79.6	73.6	72.7
Milk quota leasing	0.0	0.0	0.0	0.0	0.0	0.0
Inseparable non-agricultural activities <sup>10</sup>	15.1	15.1	17.5	17.6	17.4	17.4
<b>A Gross output</b>	<b>1,726.0</b>	<b>1,759.6</b>	<b>1,959.9</b>	<b>1,923.2</b>	<b>1,756.8</b>	<b>1,757.7</b>

1. A description of the methodology relating to this series and the derivation of the main aggregates, is given in the Appendix.

2. Output represents the estimated value of home-produced sales, including the value of inter-farm transfers and on-farm use (see Appendix). It includes the value of subsidies on products, the sale value of store animals imported from the Republic of Ireland and Great Britain and finished in Northern Ireland and the value of produce used in farm households. Stock change estimates are included within the individual output and input items.

3. Includes finished, breeding and store animals exported to the Republic of Ireland and shipped to Great Britain. The value of imported animals has been deducted.

4. The LFA Compensatory Allowance (or Areas of Natural Constraint payment from 2015) is included in 'other subsidies'.

5. Includes shipments and exports of breeding and non-breeding birds, and eggs for hatching.

6. Includes eggs for processing and duck eggs.

7. Includes horses, wool, deer and minor livestock products.

8. Hay, straw, flax, linseed, oilseed rape, mixed corn, protein crops, lawn turf, triticale, hemp and forage crops.

9. Receipts to both farmer contractors and specialist contractors.

10. Receipts from non-agricultural activities which use farm resources.

**Table 2.1 (continued)**

	<i>£ million</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
<b>A Gross output</b>	<b>1,726.0</b>	<b>1,759.6</b>	<b>1,959.9</b>	<b>1,923.2</b>	<b>1,756.8</b>	<b>1,757.7</b>
<b>INPUT (also known as 'intermediate consumption')</b>						
<b>Expenditure</b>						
Feedstuffs <sup>11</sup>	635.1	719.4	796.9	773.5	727.9	716.1
Seeds <sup>12</sup>	9.7	9.3	12.2	11.1	10.6	10.1
Marketing expenses <sup>13</sup>	35.4	38.1	36.0	35.5	36.5	38.0
Fertilisers and lime	79.9	83.0	102.2	82.9	74.5	69.3
Total machinery expenses (excl. depreciation)	149.9	150.2	153.9	152.2	138.4	129.4
Farm maintenance	46.5	43.0	43.5	44.4	42.8	42.6
Veterinary expenses and medicines	55.2	55.6	57.5	60.1	61.6	62.9
Other variable costs <sup>14</sup>	57.8	56.9	63.3	68.0	68.3	68.2
Miscellaneous expenses <sup>15</sup>	112.1	117.4	122.3	132.8	138.5	131.2
Agricultural contract work	69.6	71.4	77.7	79.6	73.6	72.7
Milk quota leasing	0.0	0.0	0.0	0.0	0.0	0.0
FISIM <sup>16</sup>	8.8	7.4	7.9	8.1	7.0	7.1
<b>B Gross input</b>	<b>1,260.0</b>	<b>1,351.6</b>	<b>1,473.4</b>	<b>1,448.3</b>	<b>1,379.7</b>	<b>1,347.4</b>
<b>C Gross value added (A-B)</b>	<b>466.0</b>	<b>408.0</b>	<b>486.4</b>	<b>474.9</b>	<b>377.1</b>	<b>410.3</b>
Consumption of fixed capital (depreciation)						
- livestock	75.5	70.3	65.0	64.8	62.8	81.7
- plant, machinery and vehicles	112.3	118.8	122.3	124.3	125.4	128.4
- buildings and works	117.9	118.6	118.4	117.8	116.3	115.6
<b>D Total consumption of fixed capital</b>	<b>305.8</b>	<b>307.7</b>	<b>305.7</b>	<b>306.8</b>	<b>304.5</b>	<b>325.7</b>
Other subsidies (not paid on products) <sup>17</sup>	320.5	294.6	314.3	292.5	287.2	318.3
Other taxes (not levied on products) <sup>18</sup>	7.8	8.1	8.1	8.2	8.3	8.4
<b>E Other subsidies (less taxes)</b>	<b>312.6</b>	<b>286.5</b>	<b>306.2</b>	<b>284.3</b>	<b>278.9</b>	<b>309.9</b>
<b>F Net value added (at factor cost) (C-D+E)</b>	<b>472.8</b>	<b>386.8</b>	<b>486.9</b>	<b>452.4</b>	<b>351.5</b>	<b>394.5</b>
<b>G Paid labour</b>	<b>60.2</b>	<b>67.1</b>	<b>63.5</b>	<b>65.2</b>	<b>68.8</b>	<b>65.7</b>
<b>H Interest</b>	<b>27.9</b>	<b>29.7</b>	<b>32.0</b>	<b>30.4</b>	<b>32.0</b>	<b>32.9</b>
<b>I Net rent<sup>19</sup></b>	<b>48.2</b>	<b>47.8</b>	<b>48.4</b>	<b>51.3</b>	<b>51.7</b>	<b>52.2</b>
<b>J Total income from farming<sup>20</sup> (F-G-H-I)</b>	<b>336.5</b>	<b>242.2</b>	<b>343.1</b>	<b>305.6</b>	<b>199.1</b>	<b>243.7</b>

11. Includes home-fed cereals, proteins, forage crops, hay and stockfeed potatoes. The figure for 2013 includes additional cost of fodder imported under the fodder transport scheme.

12. Includes home-saved seed.

13. Hired transport charges, auction fees, slaughter charges and inter farm expenses.

14. Livestock costs other than veterinary and medicines, crop protection, other crop costs, packaging and royalties and levies.

15. Electricity, heating fuel, water rates, fire insurance and other overheads.

16. FISIM - Financial Intermediation Services Indirectly Measured. A description is provided on page 25.

17. Includes Single Farm Payment (for the years 2011-2014), Basic, Greening and Young Farmer's Payments (from 2015) LFA Compensatory Allowance (or Areas of Natural Constraint payment from 2015), payments for the non-capital element of the Environmentally Sensitive Area Scheme, Countryside Management Scheme and other minor grants and subsidies. See table 2.10 for a breakdown of this item.

18. Farm rates and vehicle road tax.

19. Conacre payments to non-producing landowners.

20. This estimate should be regarded only as an indicator of trend. The income estimate, being a residual is subject to cumulative errors in the estimation of input and output items (see Appendix).

**Table 2.2 Summary income indicators at current prices and in real terms**

	<i>Indices: 2015 = 100</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
<b>Index at current prices</b>						
Net value added <sup>1</sup>	134.5	110.0	138.5	128.7	100.0	112.2
Total income from farming <sup>1</sup>	169.0	121.6	172.3	153.5	100.0	122.4
<b>Index in real terms<sup>2</sup></b>						
Net value added	142.2	114.6	141.6	129.4	100.0	110.8
Total income from farming	178.7	126.7	176.1	154.3	100.0	120.9

1. For definitions see Appendix.

2. Deflated by the GDP deflator.

**Table 2.3 Output and input volume and productivity indices**

	<i>Indices: 2015 = 100</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
Gross output volume <sup>1</sup>	88.5	89.3	92.0	96.4	100.0	100.3
Gross input volume <sup>1</sup>	93.3	96.7	100.1	99.8	100.0	98.7
Gross value added volume <sup>1</sup>	83.1	80.9	82.7	92.5	100.0	102.2
Net value added volume <sup>1</sup>	72.8	70.0	73.1	90.0	100.0	104.6
Total factor productivity <sup>2</sup>	92.1	90.4	90.9	96.5	100.0	102.3
Labour productivity <sup>3</sup>	74.0	70.5	73.7	90.8	100.0	106.7
Single factorial terms of trade <sup>4</sup>	102.7	96.3	103.2	105.4	100.0	100.6

1. Calculated by applying 2015 output and input prices to the volume of each item of output and input in every year. The resulting series, therefore, represent volume changes at constant 2015 prices.

2. Calculated as the ratio of output at constant prices to all inputs (including labour and capital) at constant prices.

3. Calculated as the ratio of net value added at constant prices to total labour input (in Annual Work Units).

4. Single factorial terms of trade measures changes in farmers' economic welfare.

**Table 2.4 Estimated cash flow for agriculture**

	<i>£ million</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
<b>Total income from farming</b>	<b>336.5</b>	<b>242.2</b>	<b>343.1</b>	<b>305.6</b>	<b>199.1</b>	<b>243.7</b>
Less:						
output stock change	-20.7	1.2	-6.9	6.9	8.1	6.4
gross fixed capital formation (breeding livestock)	113.8	89.8	72.4	59.2	74.5	78.0
capital investment <sup>1</sup>	221.7	200.0	193.9	191.2	179.4	187.6
Plus:						
input stock change	-3.3	0.0	0.9	0.8	0.7	0.4
capital consumption	305.8	307.7	305.7	306.8	304.5	325.7
capital grants paid in year <sup>2</sup>	5.5	1.2	4.4	2.0	0.0	0.0
change in borrowings	-48.2	3.6	55.7	-28.7	14.4	40.0
<b>Cash available to farm families from farming</b>	<b>281.5</b>	<b>263.6</b>	<b>450.4</b>	<b>329.2</b>	<b>256.7</b>	<b>337.7</b>

1. The capital investment figures used are those given in Table 2.12 but with a deduction made for the value of work done by principal farmers and spouses. The figures for buildings and works in Table 2.12 are estimated from the Farm Business Survey (with an addition for non grant-aided investment) and are shown in that table as investment in the year in which work was undertaken. Since there is known to be a delay between work being done and grant being paid, the investment estimates have been included in the 'cash flow' one year earlier.

2. These estimates are entered in the year in which they are paid. The grants are mostly in respect of capital investments made in previous years.

**Table 2.5 Aggregate gross margin estimates for the main agricultural sectors**

2015								
Sector	Adjusted outputs <sup>1</sup>	Estimated specific costs <sup>2</sup>			Total	Sector gross margins <sup>3</sup>		
		Feedstuffs	Fertilisers, seeds & sprays			Others	£m	%
			£m	£m				
Dairy cows and followers	568.6	240.3	23.9	11.3	275.5	293.1	40.0%	
Beef cattle, rearing and fattening	350.2	117.8	37.4	23.2	178.4	171.8	23.5%	
Sheep and wool	64.6	17.7	12.7	4.9	35.3	29.4	4.0%	
<b>Total grazing livestock</b>	<b>983.4</b>	<b>375.8</b>	<b>74.0</b>	<b>39.3</b>	<b>489.2</b>	<b>494.3</b>	<b>67.5%</b>	
Pigs	114.7	92.0	-	4.1	96.1	18.6	2.5%	
Poultry & Eggs	337.6	259.6	-	8.6	268.2	69.4	9.5%	
<b>Total intensive livestock</b>	<b>452.3</b>	<b>351.6</b>	<b>-</b>	<b>12.7</b>	<b>364.4</b>	<b>88.0</b>	<b>12.0%</b>	
Cereals	41.2	-	12.5	-	12.5	28.7	3.9%	
Potatoes	17.1	-	4.4	-	4.4	12.6	1.7%	
Horticulture <sup>4</sup>	119.6	-	24.3	11.9	36.2	83.4	11.4%	
<b>Total field crops</b>	<b>177.9</b>	<b>-</b>	<b>41.2</b>	<b>12.0</b>	<b>53.2</b>	<b>124.7</b>	<b>17.0%</b>	
Other items	33.1	5.6	1.8	0.2	7.5	25.6	3.5%	
<b>Total</b>	<b>1,646.7</b>	<b>733.0</b>	<b>117.0</b>	<b>64.2</b>	<b>914.2</b>	<b>732.5</b>	<b>100.0%</b>	

2016 (Provisional)								
Sector	Adjusted outputs <sup>1</sup>	Estimated specific costs <sup>2</sup>			Total	Sector gross margins <sup>3</sup>		
		Feedstuffs	Fertilisers, seeds & sprays			Others	£m	%
			£m	£m				
Dairy cows and followers	532.1	233.5	22.0	11.1	266.6	265.4	36.2%	
Beef cattle, rearing and fattening	360.2	93.9	34.8	23.8	152.4	207.8	28.3%	
Sheep and wool	74.2	18.5	11.7	5.0	35.3	38.9	5.3%	
<b>Total grazing livestock</b>	<b>966.4</b>	<b>345.9</b>	<b>68.5</b>	<b>39.9</b>	<b>454.3</b>	<b>512.1</b>	<b>69.8%</b>	
Pigs	121.8	91.7	-	3.9	95.6	26.3	3.6%	
Poultry and eggs	343.4	276.5	-	8.9	285.3	58.1	7.9%	
<b>Total intensive livestock</b>	<b>465.2</b>	<b>368.2</b>	<b>-</b>	<b>12.8</b>	<b>380.9</b>	<b>84.3</b>	<b>11.5%</b>	
Cereals	37.1	-	12.5	-	12.5	24.6	3.3%	
Potatoes	20.0	-	4.4	-	4.4	15.5	2.1%	
Horticulture <sup>4</sup>	103.8	-	19.9	10.3	30.3	73.6	10.0%	
<b>Total field crops</b>	<b>160.9</b>	<b>-</b>	<b>36.8</b>	<b>10.4</b>	<b>47.2</b>	<b>113.7</b>	<b>15.5%</b>	
Other items	32.0	6.6	1.5	0.1	8.2	23.8	3.2%	
<b>Total</b>	<b>1,624.7</b>	<b>720.6</b>	<b>106.9</b>	<b>63.2</b>	<b>890.7</b>	<b>734.0</b>	<b>100.0%</b>	

1. The items making up total gross output (as shown in Table 2.1) have been regrouped into the above enterprises and Outputs have been adjusted for changes in volume. In the case for breeding livestock stock appreciation has been excluded.
2. Estimates of the costs of the inputs of seed, fertiliser, spray, purchased feedstuffs and home grown cereals have been allocated amongst the various enterprises on the basis of results obtained from analysis of the Farm Business Survey. Other variable costs have been allocated as appropriate. No attempt has been made to allocate fuel, machinery or other overhead expenses.
3. 'Sector gross margins' represent the value of products remaining after deducting most of the variable costs and give a useful measure of the contribution of each enterprise to the earnings of the agricultural industry.
4. Horticulture comprises fruit, vegetables, mushrooms, flowers and hardy nursery stock.



**Table 2.6 Quantities of the main products in output<sup>1</sup>**

	Units of quantity	2011	2012	2013	2014	2015	2016 (provisional)
<b>Livestock and livestock products</b>							
Cattle and calves	tonnes dcw	144,031	141,757	140,534	133,974	136,752	145,828
Sheep and lambs	„	17,937	20,801	20,953	20,982	20,996	20,936
Pigs <sup>2</sup>	„	84,274	86,468	88,614	94,197	101,817	108,994
Cattle and calves	‘000 head	463	458	470	446	439	467
Sheep and lambs	„	802	928	951	929	933	953
Pigs <sup>2</sup>	„	1,015	1,042	1,047	1,091	1,173	1,251
Poultry <sup>3</sup>	‘000 tonnes lwt	260	259	270	279	278	288
Eggs <sup>4</sup>	m. doz	83	81	92	110	118	130
Milk <sup>5</sup>	m. litres	1,982	2,001	2,015	2,206	2,268	2,200
<b>Field crops</b>							
Wheat	‘000 tonnes	89.7	71.8	58.7	58.6	66.4	63.2
Barley	„	137.3	134.1	137.2	132.5	150.4	124.9
Oats	„	12.8	11.6	9.6	10.6	10.2	14.7
Potatoes	„	199.3	176.7	151.4	163.5	179.0	134.4
<b>Horticultural crops</b>							
Fruit	‘000 tonnes	48.1	40.6	32.3	39.0	43.8	38.0
Vegetables	„	37.7	34.4	51.1	71.2	64.8	55.9
Mushrooms	„	17.7	26.9	28.0	36.8	45.1	35.7

1. Estimated home-produced sales, on-farm use and household consumption. See Footnote 2 to Table 2.1. Animals imported direct to slaughter are not included.
2. Includes exports of store pigs.
3. Excludes shipments and exports of breeding and non-breeding birds and hatching eggs.
4. Includes eggs for processing and duck eggs.
5. Includes farmhouse consumption.

**Table 2.7 Average producer prices<sup>1</sup> of agricultural products**

		<i>£ per unit</i>					
	Units	2011	2012	2013	2014	2015	2016
							(provisional)
Finished steers, heifers and young bulls	head	977	1,074	1,157	1,086	1,106	1,082
Finished steers, heifers and young bulls	kg dwt	2.92	3.17	3.55	3.29	3.26	3.19
Calves slaughtered or exported	head	249	244	247	297	308	304
Culled cows and bulls	head	714	740	785	681	666	670
Culled cows and bulls	kg dwt	2.29	2.44	2.57	2.18	2.14	2.16
Store cattle exported	head	668	711	762	771	795	749
Finished sheep and lambs	head	89.79	78.46	82.39	83.08	73.89	83.00
Finished sheep and lambs	kg dwt	4.13	3.64	3.87	3.82	3.40	3.88
Finished clean pigs	head	110.14	115.44	130.72	125.01	102.41	102.22
Finished clean pigs	kg dwt	1.34	1.40	1.56	1.46	1.19	1.18
Milk <sup>2</sup>	litre	0.276	0.262	0.318	0.297	0.212	0.206
Eggs for consumption	dozen	0.682	0.805	0.734	0.722	0.756	0.747
Broilers	kg lwt	0.803	0.804	0.860	0.812	0.750	0.714
Potatoes:							
Ware maincrop <sup>3</sup>	tonne	121	153	196	125	129	151
Seed	tonne	183	157	218	167	153	168
Barley	tonne	179	196	179	146	130	134
Wheat	tonne	191	203	195	156	136	137
Oats	tonne	173	207	193	162	152	141
Mushrooms	tonne	1,390	1,425	1,450	1,484	1,496	1,496
Apples	tonne	133	183	267	259	265	266

1. Before deduction of marketing charges, commissions and levies, where applicable.
2. Before deduction of superlevy, if applicable.
3. Does not include early potatoes. Therefore, the price differs from that quoted in Table 2.24.

**Table 2.8 Indices of producer prices<sup>1</sup> of agricultural output**

		<i>Indices: 2015 = 100</i>					
	Weights <sup>2</sup>	2011	2012	2013	2014	2015	2016
							(provisional)
Finished steers and heifers	216	90	97	109	101	100	98
Culled cows and bulls	41	107	114	120	102	100	101
Store cattle exported	6	84	89	96	97	100	94
Finished sheep and lambs	37	121	107	114	112	100	114
Finished clean pigs	75	113	118	131	123	100	99
Milk	303	131	124	150	140	100	97
Eggs for consumption	56	91	107	98	96	100	99
Broilers	120	107	107	115	108	100	95
Potatoes:							
Ware maincrop	12	94	119	152	97	100	118
Seed	1	119	103	143	109	100	110
Barley	12	137	150	137	112	100	102
Wheat	6	141	149	144	115	100	101
Mushrooms	43	93	95	97	99	100	100
Apples	7	49	68	99	96	100	98
<b>Total products index<sup>2</sup></b>	<b>935</b>	<b>110</b>	<b>111</b>	<b>125</b>	<b>117</b>	<b>100</b>	<b>99</b>
<b>Inputs index<sup>3</sup></b>	<b>1,000</b>	<b>99</b>	<b>105</b>	<b>110</b>	<b>107</b>	<b>100</b>	<b>100</b>

1. The indices relate to prices from which marketing expenses have not been deducted.
2. The total products index is calculated by taking into account the significance of each item in the base period (2015). This is shown in the column of weights. Since only the main items of output are included, the total of their weights does not add to 1,000. Also, since the price index does not cover items such as production grants, compensation payments and gross fixed capital formation, it should not be regarded as a 'deflator' to be used in estimating the volume of output. (A volume series of gross output is given in Table 2.3).
3. This index does not cover all inputs. It comprises feedstuffs, seeds, fertilisers and lime and marketing expenses.

**Table 2.9 Average market prices of breeding and store livestock<sup>1</sup>**

	<i>£ per head</i>					
	2011	2012	2013	2014	2015	2016
<b>CATTLE</b>						
<b>Breeding cattle</b>						
Dairy cows/heifers in milk	1,273	1,251	1,234	1,282	1,043	1,000
Dairy cows in calf	1,195	1,157	1,063	980	805	712
Dairy springing heifers	1,227	1,130	1,140	923	850	1,168
Beef cows/heifers with calf at foot	1,091	1,098	1,064	1,183	1,209	1,119
Beef cows in calf	868	895	864	955	942	902
Beef springing heifers	1,008	1,088	941	1,145	1,258	1,084
<b>Store cattle</b>						
150-300 kg steers	513	532	540	598	638	589
300-400 kg steers	617	661	689	721	753	701
400-500 kg steers	735	794	864	842	864	819
Over 500 kg steers	936	1,029	1,114	1,047	1,065	1,010
150-300 kg heifers	473	498	491	567	589	546
300-400 kg heifers	580	626	649	687	706	664
400-500 kg heifers	723	779	844	831	847	804
Over 500 kg heifers	891	982	1,063	1,018	1,024	980
<b>Suckled calves</b>						
Under 200 kg steers	369	372	356	371	461	421
Over 200 kg steers	593	642	650	690	719	677
Under 200 kg heifers	382	401	370	406	435	408
Over 200 kg heifers	543	581	575	633	658	619
<b>Dropped calves</b>						
For rearing	166	163	139	173	200	190
<b>Cull cows</b>	692	701	695	649	636	611
<b>SHEEP</b>						
<b>Breeding ewes/hoggets</b>						
Blackface	89.28	107.04	109.13	131.51	112.28	119.96
Blackface Cross	135.07	106.92	117.71	131.04	114.66	123.43
Other breeds	138.74	109.70	103.43	124.10	111.89	122.51
<b>Breeding ewe lambs</b>						
Blackface	79.71	67.49	72.35	98.12	82.45	80.18
Blackface Cross	82.35	62.76	62.58	74.66	69.16	85.49
Other breeds	95.33	71.90	76.14	77.73	73.34	80.60
<b>Breeding ewes/hoggets with lamb(s) at foot</b>						
Blackface	113.18	89.00	115.00	64.22	88.95	98.81
Blackface Cross	168.14	135.74	103.67	117.10	85.22	87.82
Other breeds	169.10	157.72	120.09	143.10	144.36	137.08
<b>Cull ewes</b>						
Blackface	45.30	33.65	30.28	38.20	41.32	39.51
Blackface Cross	62.10	49.44	41.29	52.93	54.84	51.02
Other breeds	72.07	59.93	51.31	61.57	67.65	62.22
<b>Cull rams</b>	74.37	65.78	56.23	64.91	68.24	65.83
<b>Store lambs</b>	62.28	49.84	54.77	59.62	51.37	59.01

1. Average prices calculated from returns made by auction marts.

**Table 2.10 Direct payments included in the Aggregate Agricultural Account<sup>1,2</sup>**

	<i>£ million<sup>3</sup></i>					
	2011 <sup>4</sup>	2012 <sup>4</sup>	2013	2014	2015	2016 (provisional)
<b>DIRECT PAYMENTS<sup>5</sup></b>						
<b>Single farm payment</b>	<b>267.0</b>	<b>244.6</b>	<b>265.2</b>	<b>248.4</b>	-	-
<b>Basic Payment Scheme</b>	-	-	-	-	<b>158.8</b>	<b>187.4</b>
<b>Greening Payment</b>	-	-	-	-	<b>70.0</b>	<b>82.7</b>
<b>Young Farmers Payment</b>	-	-	-	-	<b>4.7</b>	<b>5.5</b>
<b>Financial Discipline Reimbursement</b>	-	-	-	-	<b>2.6</b>	<b>3.3</b>
<b>Milk</b>						
Dairy Support Package	-	-	-	-	5.1	-
<b>Total milk</b>	-	-	-	-	<b>5.1</b>	-
<b>Other direct payments</b>						
Environmentally Sensitive Areas (non-capital)	8.4	5.5	5.3	4.8	4.9	4.9
LFA Compensatory Allowance (or ANC <sup>6</sup> from 2015)	24.4	25.2	23.7	23.7	25.4	18.7
Countryside Management Scheme (non-capital)	20.2	18.9	18.6	15.5	15.7	15.7
New Entrants Scheme	0.4	0.3	0.2	0.1	0.0	0.0
Others <sup>7</sup>	0.1	0.0	1.3	0.0	0.0	0.0
<b>Total other direct payments</b>	<b>53.4</b>	<b>50.0</b>	<b>49.1</b>	<b>44.2</b>	<b>46.1</b>	<b>39.4</b>
<b>Total direct payments</b>	<b>320.5</b>	<b>294.6</b>	<b>314.3</b>	<b>292.5</b>	<b>287.2</b>	<b>318.3</b>

1. Table 2.1

2. These data relate to monies due rather than monies actually received (ie. they are on an accruals basis).

3. Dashes (-) indicate payments of nil or less than £50,000.

4. Single Farm Payments after 'modulation' (i.e. reduction) of 9.5% (4.5% on first €5,000) in 2007, 11% (6% on first €5,000) in 2008, 12% (7% on first €5,000) in 2009, 13% (8% on first €5,000) in 2010, 14% (9% on the first €5,000) in 2011 and 14% (9% on the first 5,000) in 2012. After application of €5,000 franchise per farm from 2005, total modulation amounted to £19.7 million in 2007, £26.7 million in 2008, £33.4 million in 2009, £34.7 million in 2010, £37.6 million in 2011 and £34.4 million in 2012.

5. Excludes expenditure on market regulation (such as intervention purchases and export refunds) by the UK Rural Payments Agency.

6. LFA allowance became the Areas of Natural Constraint payment from 2015.

7. Includes Organic Farming Scheme and other miscellaneous payments. Transport Fodder Scheme in 2013.

**Table 2.11 Capital grants and other direct payments not included in the Aggregate Agricultural Account<sup>1</sup>**

	<i>£ million<sup>2</sup></i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
<b>CAPITAL GRANTS</b>						
Environmentally Sensitive Areas	-	-	-	-	-	-
Countryside Management Scheme	-	-	-	-	-	-
Farm Modernisation Scheme	4.9	-	4.3	1.4	-	-
Manure Efficiency Technology Scheme	0.5	1.2	-	0.7	-	-
<b>Total capital grants</b>	<b>5.5</b>	<b>1.2</b>	<b>4.4</b>	<b>2.0</b>	<b>-</b>	<b>-</b>
<b>OTHER DIRECT PAYMENTS</b>						
Other animal disease compensation <sup>3</sup>	12.6	16.9	12.7	13.9	16.4	15.0
Snow Hardship Fund	-	-	2.8	-	-	-
<b>Total other direct payments<sup>4</sup></b>	<b>12.6</b>	<b>16.9</b>	<b>15.5</b>	<b>13.9</b>	<b>16.4</b>	<b>15.0</b>

1. These data relate to monies due rather than monies actually received (ie. they are on an accruals basis).

2. Dashes (-) indicate payments of nil or less than £50,000.

3. Includes tuberculosis, brucellosis, and BSE reactor compensation payments.

4. Includes miscellaneous minor payments.

**Table 2.12 Estimated gross annual capital investment in fixed assets and equipment<sup>1</sup>**

	<i>£ million</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
Grant-aided investment <sup>2</sup>	11.0	5.6	10.4	4.1	0.0	0.0
Non-aided investment	81.3	66.2	72.8	85.2	82.2	74.0
<b>Total buildings and works<sup>3</sup></b>	<b>92.3</b>	<b>71.8</b>	<b>83.2</b>	<b>89.4</b>	<b>82.2</b>	<b>74.0</b>
Plant and machinery	149.1	113.7	106.6	110.2	104.4	105.2
Vehicles <sup>3,4</sup>	15.8	14.6	11.3	13.0	14.3	14.4
<b>Total plant, machinery and vehicles</b>	<b>164.9</b>	<b>128.3</b>	<b>117.9</b>	<b>123.2</b>	<b>118.6</b>	<b>119.6</b>
<b>Total investment</b>	<b>257.2</b>	<b>200.1</b>	<b>201.1</b>	<b>212.6</b>	<b>200.9</b>	<b>193.6</b>

1. Excluding investment in forestry and arterial drainage.

2. See Table 2.11 for details.

3. Estimated from the Farm Business Survey.

4. Vehicles shown at 'farm share'.

**Table 2.13 Milk quota**

	2011	2012	2013	2014	2015	2016 <sup>3</sup>
<b>Milk quota (million litres)</b>						
Owned <sup>1</sup>	1,944.0	2,004.3	2,044.9	2,098.1	-	-
Leased <sup>2</sup>	0.0	-0.7	0.0	0.0	-	-
<b>Total</b>	<b>1,944.0</b>	<b>2,003.6</b>	<b>2,044.9</b>	<b>2,098.1</b>	-	-

1. Permanent wholesale and direct sale quota as at 31 March each year.
2. Quota leased-in, less quota leased-out in Northern Ireland as at 31 March each year.
3. The milk quota regime ended on 31 March 2015.

**Table 2.14 Number of persons working on farms**

	<i>number of persons</i>					
	2011	2012	2013	2014	2015	2016
<b>AGRICULTURAL LABOUR FORCE<sup>1</sup></b>						
<b>Farmers and partners</b>						
Full time	15,823	15,886	16,235	16,206	16,637	16,233
Part time	13,320	13,171	12,798	12,894	13,431	13,571
<b>Total</b>	<b>29,143</b>	<b>29,057</b>	<b>29,033</b>	<b>29,100</b>	<b>30,068</b>	<b>29,804</b>
<b>Spouses of farmers</b>	<b>6,263</b>	<b>6,293</b>	<b>6,391</b>	<b>6,279</b>	<b>6,084</b>	<b>6,410</b>
<b>Other workers</b>						
Full time	3,249	3,422	3,464	3,485	3,463	3,209
Part time	3,436	3,754	4,009	4,081	3,971	4,215
Casual/seasonal	4,757	4,938	4,899	4,919	4,393	4,074
<b>Total other workers</b>	<b>11,442</b>	<b>12,114</b>	<b>12,372</b>	<b>12,485</b>	<b>11,827</b>	<b>11,498</b>
<b>Total agricultural labour force</b>	<b>46,848</b>	<b>47,464</b>	<b>47,796</b>	<b>47,864</b>	<b>47,979</b>	<b>47,712</b>
<b>Annual Work Units (AWUs)<sup>2</sup></b>	<b>27,964</b>	<b>28,237</b>	<b>28,173</b>	<b>28,164</b>	<b>28,427</b>	<b>27,873</b>

1. Full-time work is defined as involving 30 hours per week or more and casual work as covering less than 20 weeks per year.
2. An Annual Work Unit is equivalent to the time worked by one person employed full-time in agricultural activities over a whole year.

**Table 2.15 Agricultural manpower<sup>1</sup>**

	<i>number of persons</i>					
	2011	2012	2013	2014	2015	2016
<b>MANPOWER STATISTICS<sup>1</sup></b>						
<b>Self-employed</b>						
Male	15,185	15,288	15,612	15,590	15,931	15,519
Female	638	598	623	616	706	714
<b>Total</b>	<b>15,823</b>	<b>15,886</b>	<b>16,235</b>	<b>16,206</b>	<b>16,637</b>	<b>16,233</b>
<b>Employees</b>						
Male	9,963	10,535	10,807	10,883	10,192	9,902
Female	1,479	1,579	1,565	1,602	1,635	1,596
<b>Total</b>	<b>11,442</b>	<b>12,114</b>	<b>12,372</b>	<b>12,485</b>	<b>11,827</b>	<b>11,498</b>
<b>Total agricultural manpower</b>	<b>27,265</b>	<b>28,000</b>	<b>28,607</b>	<b>28,691</b>	<b>28,464</b>	<b>27,731</b>

1. Agricultural manpower statistics refer to the count of employees and self-employed workers in agriculture, as used by the Department of Economy in aggregate labour statistics. The count of self-employed includes farmers and partners who work full-time on their farms; the count of employees includes all other workers except part-time farmers and partners and farmers' spouses.

## B. COMMODITIES AND INPUTS

**Cattle and calves** The number of clean cattle marketed during 2016 increased by 5.5 per cent to 316,150 head. All categories of slaughtered animals recorded an increase for the year. The number of steers rose by 5.9 per cent to 157,700 head, heifers increased by 0.7 per cent to 113,650 head and the number of young bulls were 23 per cent higher at 37,900. As a result the proportion of steers in the slaughter mix remained unchanged at 50 per cent in 2016, while the proportion of heifers decreased from 38 per cent in 2015 to 36 per cent in 2016. Meanwhile, the proportion of young bulls slaughtered increased from 10 per cent in 2015 to 12 per cent in 2016.

The average dressed carcase weights increased marginally in 2016 to 340 kg. As a result the volume of clean beef produced increased by 5.7 per cent to 107,400 tonnes. The average producer price paid was 2.4 per cent lower at £3.19 per kilogram deadweight. The overall result of these changes was that the sales value of finished clean cattle increased by 3.2 per cent to £342 million.

Sales of culled cows and bulls increased by 12 per cent to 110,100 head in 2016. Average carcase weights for these animals was 0.5 per cent lower at 311 kg. The average price of culled cows and bulls rose by 1.0 per cent to £2.16 per kilogram deadweight. Overall, total receipts from cull cattle sales, increased 13 per cent to £74 million in 2016.

The number of calves presented for slaughter in 2016 increased by 16 per cent to 7,500 head. An estimated 24,200 calves were exported in 2016, which was an increase of 9.8 per cent compared with 2015 levels. The average calf price was 1.1 per cent lower at £304 per head and the revenue generated was £9.6 million.

The number of store cattle sold outside Northern Ireland decreased by 22 per cent to 9,400 head in 2016. When combined with a 5.8 per cent decrease in the average producer price paid, £749 per head, this generated revenues of £7.0 million; a decrease of 26 per cent from 2015 levels. The main market outlet for these store cattle was Great Britain, which accounted for 88 per cent of these shipments.

Overall, the value of output of cattle and calves in 2016 (which deducts the value of imported cattle but includes breeding cattle and store cattle exports) increased by 5.5 per cent to £425 million.

## **Milk**

The annual average dairy cow population in 2016 was 1.5 per cent higher than 2015 at 315,800 head. Average gross milk yield per cow decreased from 7,390 litres in 2015 to 7,100 litres in 2016; a 3.9 per cent reduction. This may be attributable in part to the weather conditions experienced during 2016 but also a reaction to the lower milk price on offer for output.

The lower milk yields contributed to a 2.5 per cent decrease in total milk output in 2016 in Northern Ireland; to 2.2 billion litres. The average gross milk price for 2016 (before deducting transport costs) was 3.2 per cent lower than 2015 at 20.55 pence per litre. The volatility in average milk price over recent years is a reflection of the fact that Northern Ireland is dependent on global commodity markets, where prices were rising throughout much of 2013 but fell during 2014 and 2015, and remained at these depressed levels during much of 2016.

Overall, the value of output of milk decreased again in 2016, to £452 million, 5.9 per cent.

## **Sheep and lambs**

Marketings of clean sheep and lambs decreased by 1.0 per cent to 775,900 head in 2016. The average dressed carcass weight also decreased marginally in 2016 to 21.4 kg per head. As a result, the volume of clean sheep meat produced during 2016 reduced by 2.5 per cent to 16,600 tonnes. Clean sheep and lamb producer prices increased by 14 per cent to 388 pence per kg deadweight in 2016. The combined volume and price changes meant that the total market value of clean sheep and lambs rose by 11 per cent to £64 million.

Marketings of culled ewes and rams increased by 0.8 per cent to 136,400 head in 2016. There was a 7.1 per cent decrease in the price received for these animals (£52 per head). These changes resulted in the value of market receipts for culled ewes and rams decreasing to £7.1 million; a decrease of 6.4 per cent.

Overall, the total value of output (which deducts the value of imported sheep but includes breeding sheep and store exports) from the sector rose by 15 per cent, to £73 million in 2016.

## **Pigs**

The number of clean pigs slaughtered in 2016 was 6.8 per cent higher at 1.24 million head. Average dressed carcass weights were marginally higher at 86.5kg in 2016. When combined these changes resulted in a 7.2 per cent increase in the quantity of pigmeat produced to 106,800 tonnes. However, pig producer prices decreased by 0.5 per cent to 118 pence per kg deadweight. As a result, the output from clean pig production was 6.4 per cent higher at £126 million.



Marketings of cull sows and boars were up by 5.4 per cent in 2016 at 15,400 head. The average price per head of cull sows and boars was unchanged at 75 pence per kg deadweight. These changes resulted in market returns for these animals increasing by 6.8 per cent to £1.6 million in 2016.

Overall, the value of output from the pig sector increased by 6.2 per cent to £122 million (this figure includes deductions for the value of imported pigs and additions for the value of breeding and store pig exports).

## **Poultry**

In 2016, the total volume of poultry meat production was 287,900 tonnes liveweight, an increase of 4.6 per cent from 2015 levels. Broiler production was 3.7 per cent higher at 262,400 tonnes liveweight. Broiler producer prices were lower than 2015 levels by 4.9 cent at 71 pence per kg. Overall, as a result of these changes the market value of broilers in 2016 was 1.4 per cent lower at £187 million. Broilers accounted for 77 per cent of the total market value of the poultry sector.

Turkey production increased in 2016, by 13 per cent, to 12,700 tonnes liveweight.

The value of output from the poultry sector in 2016 was £246 million; 1.1 per cent lower than 2015.

## **Eggs**

Packing station throughput of graded eggs was estimated at 126 million dozen eggs in 2016, which is a new record level of production for Northern Ireland. This was a rise of 11 per cent on 2015 levels. The proportion of throughput attributed to free range management systems increased from 54 per cent in 2015 to 56 per cent in 2016 with eggs originating from the intensive systems accounting for 44 per cent of throughput.

The average producer price of eggs increased, by 0.7 per cent, to 75 pence per dozen. Overall, the value of output for eggs increased by 9.4 per cent to £97 million (this figure includes eggs for processing, unrecorded sales for human consumption and duck eggs).

## **Potatoes**

The area of potatoes planted in 2016 increased by 4.0 per cent to 3,700 hectares. The average yield decreased, by 7.6 per cent, to 40 tonnes per hectare as the result of a more challenging growing season. As a result of these changes the total quantity of potatoes harvested in 2016 is estimated to be 3.9 per cent lower at 150,900 tonnes.

Marketings of ware potatoes during 2016 were 25 per cent lower at 111,400 tonnes. Sales in the first half of the 2016 calendar year were significantly lower than the equivalent period in 2015

and would have been almost exclusively from the smaller 2015 harvest. During the second half of 2016 the level of sales were also lower than for the equivalent half of 2015, despite being from the 2016 harvest. Both harvests had very low production levels by historical standards.

In 2016, the volume of seed potato output (including home-saved seed) fell by 11 per cent to 10,300 tonnes. In total for 2016, the volume of potato output (including ware, seed and stockfeed potatoes) was 134,400 tonnes. This was a decrease of 25 per cent.

The average price of ware potatoes was £153 per tonne in 2016, an increase of 16 per cent from 2015 levels. The average price of seed potatoes was also higher than 2015 at £168 per tonne. Overall, the total value of potato output rose in 2016, by 17 per cent, to £20 million (after accounting for a large volume stock change).

## **Cereals**

The area of spring barley sown in 2016 was 6.2 per cent lower than 2015 levels at 14,700 hectares, while recorded yields were also down by 9.5 per cent. As a consequence, production of spring barley decreased by 15 per cent. The area of winter barley sown, in 2016, was up by 8.6 per cent to 7,600 hectares but yields were also down; by 12 per cent. These changes resulted in the production of winter barley decreasing by 4.0 per cent. Overall, total barley production was 11 per cent lower in 2016 at 124,900 tonnes, even though the total area of barley grown was down just 1.6 per cent lower at 22,300 hectares.

The total volume of barley sold or used on-farm in 2016 was 17 per cent lower at 124,900 tonnes. The average producer price of barley increased, by 2.4 per cent, to £134 per tonne. These changes plus a negative stock change resulted in the value of barley output falling by 8.8 per cent to £17 million.

The area of wheat grown in 2016 was 8.0 per cent higher at 8,600 hectares but when coupled with a 13 per cent decrease in yields, production was down by 6.2 per cent to 60,000 tonnes.

In 2016, the volume of wheat sold or used on-farm was 3.8 per cent lower at 63,200 tonnes, while the price per tonne of wheat increased by 1.0 per cent to £137 per tonne. These changes combined with a negative stock change contributed to the value of wheat output decreasing by 5.4 per cent to £8.2 million.

The area of oats grown in 2016 was 8.7 per cent higher at 2,300 hectares. However, yields were down by 9.4 per cent, which resulted in oats production decreasing by 1.4 per cent to 12,100 tonnes. The average producer price of oats was 8.0 per cent

lower at £141 per tonne. The changes in price and production resulted in the value of output falling by 8.3 per cent to £1.7 million.

## **Horticulture**

The total value of horticultural output in 2016 decreased by 13 per cent to £104 million. Returns from the sale of fruit (mainly apples) decreased by 11 per cent to £10 million. Apple production fell by 13 per cent to 37,800 tonnes while prices decreased by 1.6 per cent. Overall, the market value of apples reduced by 15 per cent. The value of output from mushrooms fell by 21 per cent to £53 million as a result of a similar reduction in production to 35,700 tonnes. Receipts from the sale of vegetables decreased, by 12 per cent, to £19 million. The output value of ornamental and hardy nursery stock rose by 11 per cent to £21 million due to a 2.3 per cent increase in the area used for this enterprise.

## **Feedstuffs**

The total volume of all compound feedstuffs purchased during 2016 was 2.6 per cent lower than the 2015 levels at 2.12 million tonnes. Within this total, the purchased volumes of all cattle (and calf) compounds decreased by 6.1 per cent with dairy compounds purchased falling by 5.1 per cent and beef cattle compounds reducing by 1.3 per cent. The volume of sheep compounds purchased were 7.7 per cent lower. Total purchases of pig compounds rose in 2016 by 12 per cent while poultry compounds remained unchanged.

Inputs of straights (including home-fed cereals) fell by 3.1 per cent in 2016 to 410,000 tonnes. In total, the volume of all feed purchased was 2.7 per cent lower in 2016 at 2.58 million tonnes. The average price of feedstuffs (compounds and home-fed cereals) increased, by 1.0 per cent, to £278 per tonne in 2016. Overall, the cost of purchased feedstuffs in 2016 fell, by 1.6 per cent, to £716 million.

**Fertilisers and lime** The quantity of fertilisers purchased in 2016 increased by 11 per cent to 291,400 tonnes while the average price decreased by 16 per cent to £232 per tonne. In volume terms, 46 per cent of total fertiliser sales were straights, while 54 per cent were compounds.

As a result of these movements in both quantity purchased and price paid, the total value of fertiliser purchases fell, by 6.7 per cent, to £68 million.

Total expenditure on lime reduced by 20 per cent when compared to 2015 levels to £1.6 million. The quantity purchased decreased by 17 per cent to 125,300 tonnes while the price paid reduced by 2.8 per cent.

<b>Marketing expenses</b>	In 2016 total marketing expenses were 4.2 per cent higher than 2015 levels at £38 million. Cattle marketing expenses were £21.7 million, while sheep expenses were £3.9 million. Marketing expenses for milk were £8.1 million, while those for pigs were £4.3 million.
<b>Machinery expenses</b>	Machinery expenses in 2016 decreased, by 6.5 per cent, to £129 million. This decrease was driven by an 11 per cent fall in fuel and oil costs, reflecting global price commodity movements.
<b>Interest</b>	<p>Total farm borrowings in 2016 increased by 4.7 per cent. The average cost of borrowing is estimated to have fallen marginally to 4.4 per cent. As a result, the total interest bill (including FISIM) increased by 2.3 per cent in 2016 to £40 million.</p> <p>Financial intermediaries (mainly banks) charge explicit commissions and fees for their services to customers, as well as implicit ones by paying and charging different rates of interest to borrowers and lenders. The revenue from the margin on lending and borrowing by financial intermediaries is described as financial intermediation services indirectly measured (FISIM). The inclusion of FISIM in the account is in line with recommended EU national accounting conventions. It is a reallocation to gross output of part of the interest paid by farmers. While the inclusion of FISIM will increase intermediate consumption and decrease gross value added, it will decrease, by the same amount, the figure shown for interest paid and consequently this change in methodology has no impact on total income from farming.</p>
<b>Labour</b>	In 2016, the volume of paid labour input (excluding labour used on capital projects) was 5.1 per cent lower, at 7.9 million hours. The cost of paid labour was 4.6 per cent lower than 2015 at £66 million. This was due to a combination of decreases in the average weekly number of hours worked and the number of total workers employed.

**Table 2.16 Output of cattle and calves**

	2011	2012	2013	2014	2015	2016 (provisional)
<b>Steers, heifers and young bulls</b>						
Sales ('000 head)	331.1	313.3	319.9	300.8	299.8	316.2
Average producer price (p per kg dwt) <sup>1,2</sup>	292.3	317.4	355.3	328.8	326.2	318.5
Average dressed carcass weight (kg) <sup>2</sup>	334.4	338.4	325.7	330.4	339.1	339.8
Quantity of output ('000 tonnes) <sup>2</sup>	110.7	106.0	104.2	99.4	101.6	107.4
Value of output (£m)	323.6	336.6	370.2	326.8	331.6	342.2
<b>Cows and bulls</b>						
Sales ('000 head)	96.6	105.6	104.3	94.6	98.4	110.1
Average producer price (p per kg dwt) <sup>1,2</sup>	229.1	244.4	257.1	218.4	213.6	215.8
Average dressed carcass weight (kg) <sup>2</sup>	311.9	302.8	305.2	311.8	312.0	310.5
Quantity of output ('000 tonnes) <sup>2</sup>	30.1	32.0	31.8	29.5	30.7	34.2
Value of output (£m)	69.0	78.1	81.8	64.4	65.6	73.8
<b>Calves</b>						
Sales ('000 head)	29.4	28.9	33.4	39.3	28.5	31.7
Average producer price (£ per head) <sup>1</sup>	249	244	247	297	307	304
Value of output (£m)	7.3	7.1	8.3	11.7	8.8	9.6
<b>Store cattle sold outside Northern Ireland</b>						
Marketings ('000 head)	6.2	9.9	12.0	10.9	11.9	9.4
Average producer price (£ per head) <sup>1</sup>	668	711	762	771	795	749
Value of output (£m)	4.1	7.0	9.2	8.4	9.5	7.0
<b>Breeding cattle sold outside Northern Ireland</b>						
Marketings ('000 head)	1.1	2.2	2.8	1.7	2.8	2.6
Average producer price (£ per head)	1,325	1,198	1,178	1,337	1,081	1,054
Value of output (£m)	1.5	2.6	3.3	2.3	3.0	2.7
<b>Less Imported cattle</b>						
Marketings ('000 head)	35.8	30.2	24.1	29.2	31.2	16.0
Average producer price (£ per head)	851	886	981	976	920	887
Value of output (£m)	30.5	26.8	23.6	28.5	29.0	14.2
<b>Total Market Value (£m)</b>	<b>375.1</b>	<b>404.7</b>	<b>449.1</b>	<b>385.0</b>	<b>389.4</b>	<b>421.1</b>
Stock change due to volume (£m)	-20.5	+11.1	-6.8	+6.9	+12.9	+3.4
<b>Total value of output (£m)</b>	<b>354.6</b>	<b>415.7</b>	<b>442.3</b>	<b>391.9</b>	<b>402.3</b>	<b>424.5</b>

1. Average realised return gross of marketing expenses for cattle for human consumption.

2. See note 1 Table 2.6.

**Table 2.17 Sources of home-fed finished cattle marketed**

	2011	2012	2013	2014	2015	2016
						<i>per cent</i> (provisional)
<b>Cows and bulls</b>	23	25	25	24	25	25
<b>Steers and heifers originating from:</b>						
- the dairy herd;	33	33	32	32	33	35
- the beef herd;	32	35	38	40	38	35
- calves and stores imported from the Republic of Ireland or shipped from Great Britain	13	7	6	4	5	6
<b>Total<sup>1</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total number marketed ('000 head)</b>	<b>428</b>	<b>419</b>	<b>424</b>	<b>395</b>	<b>398</b>	<b>405</b>

1. Individual items may not add to 100 due to roundings.

**Table 2.18 Output of milk**

	2011	2012	2013	2014	2015	2016
						<i>(provisional)</i>
Annual average number of dairy cows ('000 head)	281.2	282.5	280.0	295.5	311.2	315.8
Average gross yield per cow (to nearest 10 litres per annum) <sup>1</sup>	7,160	7,190	7,310	7,580	7,390	7,100
<b>Total output of milk for human consumption (million litres)</b>	<b>1,982</b>	<b>2,001</b>	<b>2,015</b>	<b>2,206</b>	<b>2,268</b>	<b>2,210</b>
of which:						
sales off farms	1,980	1,999	2,013	2,204	2,266	2,209
used in farm households	2	2	2	1	1	1
<b>Average producer price (pence per litre)</b>						
Gross price <sup>2</sup>	27.65	26.21	31.79	29.66	21.22	20.55
Net price <sup>3</sup>	27.26	25.72	31.44	29.31	20.87	20.18
<b>Market Value (£m)</b>	<b>549.0</b>	<b>525.5</b>	<b>640.5</b>	<b>654.2</b>	<b>480.1</b>	<b>451.9</b>
<b>Value of output (£m)<sup>2</sup></b>	<b>549.0</b>	<b>525.5</b>	<b>640.5</b>	<b>654.2</b>	<b>480.1</b>	<b>451.9</b>

1. Comprising sales off farms, milk consumed in farm households and milk fed to other livestock.

2. After deduction of superlevy but not marketing expenses (transport costs).

3. After deduction of marketing expenses (transport costs) but not superlevy.

**Table 2.19 Output of sheep**

	2011	2012	2013	2014	2015	2016
						<i>(provisional)</i>
<b>Marketings ('000 head)<sup>1</sup></b>						
Finished sheep and lambs	693.1	776.6	797.5	791.5	784.1	775.9
Culled ewes and rams	99.3	134.8	133.8	130.7	135.3	136.4
<b>Average price (p per kg deadweight)<sup>2</sup></b>						
Finished sheep and lambs	413.3	363.6	386.5	381.5	340.2	387.9
Culled ewes and rams	221.1	170.4	155.3	185.5	199.7	185.5
<b>Average dressed carcass weight (kg)</b>						
Finished sheep and lambs	21.7	21.6	21.3	21.8	21.7	21.4
Culled ewes and rams	27.9	28.5	27.8	28.0	28.2	28.1
<b>Quantity of Output ('000 tonnes)</b>						
Finished sheep and lambs	15.1	16.8	17.0	17.2	17.0	16.6
Culled ewes and rams	2.8	3.8	3.7	3.7	3.8	3.8
<b>Market Value (£m)<sup>3</sup></b>	<b>65.4</b>	<b>65.3</b>	<b>69.9</b>	<b>69.9</b>	<b>63.5</b>	<b>71.0</b>
Stock change due to volume (£m)	-1.1	+3.6	-3.2	-0.5	-0.3	+1.6
<b>Value of output (£m)</b>	<b>64.3</b>	<b>68.9</b>	<b>66.7</b>	<b>69.4</b>	<b>63.2</b>	<b>72.6</b>

1. Estimated home-produced marketings, including unrecorded exports.

2. Average realised return gross of marketing expenses.

3. Includes breeding and store sheep exported less all sheep imported.

**Table 2.20 Output of pigs**

	2011	2012	2013	2014	2015	2016 (provisional)
<b>Marketings ('000 head)<sup>1</sup></b>						
Finished clean pigs	1,001.9	1,031.2	1,034.5	1,078.5	1,156.6	1,235.3
Culled sows and boars	12.7	11.0	13.0	12.9	14.6	15.4
<b>Average price (p per kg deadweight)<sup>2</sup></b>						
Finished clean pigs	133.88	140.19	155.82	145.93	118.84	118.22
Culled sows and boars	81.00	95.87	93.29	91.58	75.20	75.19
<b>Average dressed carcase weight (kg)</b>						
Finished clean pigs	82.3	82.4	83.9	85.7	86.2	86.5
<b>Quantity of Output ('000 tonnes)</b>						
Finished clean pigs	82.4	84.9	86.8	92.4	99.7	106.8
Culled sows and boars	1.9	1.6	1.8	1.8	2.1	2.2
<b>Market Value (£m)<sup>3</sup></b>	<b>106.8</b>	<b>114.1</b>	<b>132.5</b>	<b>132.1</b>	<b>113.7</b>	<b>122.1</b>
Stock change due to volume (£m)	+0.1	+0.4	0.0	+1.3	+1.1	-0.3
<b>Value of output (£m)</b>	<b>106.9</b>	<b>114.5</b>	<b>132.5</b>	<b>133.4</b>	<b>114.8</b>	<b>121.9</b>

1. Estimated home-produced marketings, including unrecorded exports.

2. Average realised return gross of marketing expenses.

3. Includes breeding and store pigs exported less all pigs imported.

**Table 2.21 Output of poultry**

	2011	2012	2013	2014	2015	2016 (provisional)
<b>Poultrymeat production ('000 tonnes liveweight)</b>						
All poultrymeat (including broilers)	260.0	259.1	269.9	279.0	277.9	287.9
Broilers	231.8	229.8	241.7	250.9	253.0	262.4
<b>Average producer price (p per kg liveweight)</b>						
All poultrymeat (including broilers)	81.9	81.4	86.6	80.8	75.1	71.2
Broilers	80.3	80.4	86.0	81.2	75.0	71.4
<b>Market value</b>						
All poultry (£m)	242.8	241.0	265.8	260.2	248.0	243.7
of which broilers	186.1	184.7	207.8	203.8	189.8	187.2
Stock change due to volume (£m)	-0.5	+0.7	-0.6	-2.3	+1.1	+2.7
<b>Value of Output (£m)<sup>1</sup></b>	<b>242.2</b>	<b>241.6</b>	<b>265.2</b>	<b>257.9</b>	<b>249.1</b>	<b>246.4</b>

1. Includes shipments and exports of breeding and non-breeding birds and eggs for hatching, less imports of birds and hatching eggs.

**Table 2.22 Output of eggs**

	2011	2012	2013	2014	2015	2016 (provisional)
Graded packing station throughput (million dozen)	81.2	79.7	89.2	106.8	114.2	126.2
Average producer price (p per dozen) <sup>1</sup>	68.49	80.80	74.07	72.85	75.85	75.33
<b>Value of output (£m)<sup>2</sup></b>	<b>56.6</b>	<b>65.6</b>	<b>67.4</b>	<b>79.6</b>	<b>86.6</b>	<b>97.0</b>

1. Relates to graded eggs sold through packing stations only and differs from that shown in Table 2.7.

2. Includes eggs for processing, duck eggs and unrecorded sales.



**Table 2.23 Crop production**

	<i>harvest years</i>					
	2011	2012	2013	2014	2015	2016
	(provisional)					
<b>Potatoes<sup>1</sup></b>						
Area ('000 hectares)	4.8	4.2	4.3	4.2	3.6	3.7
Harvestable yield (tonnes per hectare)	45.5	39.4	40.1	43.0	43.7	40.4
Production ('000 tonnes)	219.8	163.6	173.6	180.2	157.1	150.9
of which:						
saleable potatoes	194.7	135.5	141.3	156.3	134.1	131.3
chats <sup>2</sup> and waste	25.1	28.1	32.4	23.9	23.0	19.5
<b>Barley<sup>3,4</sup></b>						
Area ('000 hectares)	24.0	25.5	25.8	23.6	22.7	22.3
Yield (tonnes per hectare)	5.73	4.98	5.43	5.78	6.17	5.59
Production ('000 tonnes)	137.9	127.2	139.8	136.1	140.0	124.9
<b>Wheat<sup>4</sup></b>						
Area ('000 hectares)	11.6	9.4	8.0	8.5	8.0	8.6
Yield (tonnes per hectare)	7.77	5.98	7.32	7.54	8.02	6.97
Production ('000 tonnes)	89.9	56.2	58.3	64.1	64.0	60.0
<b>Oats<sup>3,4</sup></b>						
Area ('000 hectares)	2.1	1.9	2.0	2.1	2.1	2.3
Yield (tonnes per hectare)	6.02	4.77	5.02	5.61	5.93	5.37
Production ('000 tonnes)	12.6	9.0	9.9	11.7	12.3	12.1
<b>Oilseed rape<sup>5</sup></b>						
Area ('000 hectares)	0.6	0.8	0.5	0.5	0.6	0.6
Yield (tonnes per hectare)	3.90	3.60	3.00	3.60	3.60	3.10
Production ('000 tonnes)	2.3	2.9	1.4	1.8	2.2	2.7
<b>Hay</b>						
Area ('000 hectares)	13.8	9.7	19.6	20.6	14.2	11.6
Yield (tonnes per hectare)	8.3	8.3	7.3	7.6	8.1	7.1
Production ('000 tonnes)	114.1	79.9	143.2	156.6	115.3	82.1
<b>Grass silage</b>						
Area ('000 hectares)	287.5	275.2	290.6	309.4	308.1	286.7
Yield (tonnes per hectare)	31.1	29.7	31.2	31.7	30.4	30.2
Production ('000 tonnes)	8,946	8,171	9,070	9,812	9,357	8,660

1. Includes early, maincrop ware and seed crops.

2. Under 40 mm.

3. Comprises spring and winter varieties.

4. Yield and production estimates are standardised to 15% moisture content.

5. Yield and production estimates are standardised to 9% moisture content.



**Table 2.24 Output<sup>1</sup> of potatoes, barley and wheat**

	2011	2012	2013	2014	2015	2016 (provisional)
<b>POTATOES<sup>2</sup></b>						
<b>Quantity of output ('000 tonnes)</b>						
Ware	155.2	136.2	111.8	126.4	147.9	111.4
Seed	19.8	16.1	14.9	13.3	11.7	10.3
Stockfeed	24.3	24.5	24.7	23.7	19.4	12.7
<b>Total</b>	<b>199.3</b>	<b>176.7</b>	<b>151.4</b>	<b>163.5</b>	<b>162.0</b>	<b>134.4</b>
<b>Average producer price (£ per tonne)</b>						
Ware	122.47	156.10	197.55	125.68	131.88	152.94
Seed	182.56	157.36	218.14	167.37	152.86	167.58
<b>Market Value (£m)</b>						
Ware	19.0	21.3	22.1	16.2	19.5	17.0
Seed	3.6	2.5	3.2	2.1	1.8	1.7
Stockfeed	0.4	0.6	0.5	0.4	0.3	0.2
<b>Total<sup>3</sup></b>	<b>23.0</b>	<b>24.3</b>	<b>25.8</b>	<b>18.5</b>	<b>21.6</b>	<b>19.0</b>
Stock change due to volume (£m)	+0.5	-5.3	+0.7	+0.3	-4.5	+1.0
<b>Value of output (£m)</b>	<b>23.4</b>	<b>19.0</b>	<b>26.5</b>	<b>18.8</b>	<b>17.1</b>	<b>20.0</b>
<b>BARLEY<sup>4</sup></b>						
Quantity of output ('000 tonnes)	137.3	134.1	137.2	132.5	150.4	124.9
Average producer price (£ per tonne)	178.94	195.76	179.21	145.89	130.36	133.55
<b>Market Value (£m)</b>	<b>24.6</b>	<b>26.3</b>	<b>24.6</b>	<b>19.3</b>	<b>19.6</b>	<b>16.7</b>
Stock change due to volume (£m)	+0.1	-1.4	+0.4	+0.5	-1.3	0.0
<b>Value of output (£m)</b>	<b>24.7</b>	<b>24.8</b>	<b>25.0</b>	<b>19.8</b>	<b>18.3</b>	<b>16.7</b>
<b>WHEAT<sup>4</sup></b>						
Quantity of output ('000 tonnes)	89.7	71.8	58.7	58.6	66.4	63.2
Average producer price (£ per tonne)	191.10	203.08	194.98	155.66	135.84	137.29
<b>Market Value (£m)</b>	<b>17.1</b>	<b>14.6</b>	<b>11.4</b>	<b>9.1</b>	<b>9.0</b>	<b>8.7</b>
Stock change due to volume (£m)	+0.0	-3.4	-0.1	+0.8	-0.3	-0.4
<b>Value of output (£m)</b>	<b>17.2</b>	<b>11.2</b>	<b>11.4</b>	<b>9.9</b>	<b>8.7</b>	<b>8.2</b>

1. Output data are for calendar years and reflect the influence of two crop years.
2. Includes ware consumed in farm households and seed retentions but excludes in-store losses.
3. Net of inspection fees.
4. Includes cereals retained on the farm of origin or sold farm-to-farm.

**Table 2.25 Output of apples and mushrooms**

	2011	2012	2013	2014	2015	2016 (provisional)
<b>APPLES<sup>1</sup></b>						
Quantity of output ('000 tonnes)	47.9	40.4	32.0	38.7	43.6	37.8
Average producer price (£ per tonne)	133	183	267	259	271	266
<b>Market value (£m)</b>	<b>6.4</b>	<b>7.4</b>	<b>8.5</b>	<b>10.0</b>	<b>11.8</b>	<b>10.1</b>
Stock change due to volume (£m)	+0.4	-2.8	-0.0	+0.4	-0.8	-0.2
<b>Value of Output (£m)</b>	<b>6.8</b>	<b>4.6</b>	<b>8.5</b>	<b>10.4</b>	<b>11.0</b>	<b>9.8</b>
<b>MUSHROOMS</b>						
Quantity of output ('000 tonnes)	17.7	26.9	28.0	36.8	45.1	35.7
Average producer price (£ per tonne)	1,390	1,425	1,450	1,484	1,496	1,496
<b>Value of output (£m)</b>	<b>24.7</b>	<b>38.4</b>	<b>40.6</b>	<b>54.6</b>	<b>67.5</b>	<b>53.5</b>

1. Output data are for calendar years and reflect the influence of two crop years.

**Table 2.26 Quantity and cost of the main items of expenditure (including interest and labour)**

	2011	2012	2013	2014	2015	2016 (provisional)
<b>FEEDSTUFFS<sup>1</sup></b>						
Quantity purchased ('000 tonnes concentrate equivalent)	2,383	2,526	2,626	2,619	2,649	2,577
of which: Non-concentrates <sup>2</sup> ('000 tonnes)	51	53	69	51	54	52
Compounds ('000 tonnes)	1,965	2,088	2,170	2,183	2,172	2,115
Straights & cereals fed on-farm ('000 tonnes)	367	385	388	386	423	410
Average cost (£ per tonne concentrate equivalent)	268	285	303	295	276	278
<b>Value of feed consumed (£m)</b>	<b>638.2</b>	<b>719.3</b>	<b>796.2</b>	<b>772.6</b>	<b>727.5</b>	<b>715.1</b>
of which:						
stock change due to volume	-3.1	+0.1	+0.7	+0.9	+0.4	+0.9
<b>FERTILISERS</b>						
Quantity purchased ('000 tonnes product)	247	264	328	269	262	291
Nutrient content ('000 tonnes)	80	88	118	99	97	112
of which:						
Nitrogen	63	70	81	68	65	79
Phosphate	6	6	9	8	7	8
Potash	11	12	16	13	13	15
Sulphur	-	-	11	10	12	10
Average cost (£ per tonne of nutrient)	316	308	305	300	277	232
<b>Value of purchases (£m)</b>	<b>78.2</b>	<b>81.3</b>	<b>100.1</b>	<b>80.6</b>	<b>72.5</b>	<b>67.6</b>
<b>LIME</b>						
Quantity purchased ('000 tonnes)	159	140	167	193	152	125
Average cost (£ per tonne)	10.67	12.33	12.40	12.03	13.45	13.07
<b>Value of purchases (£m)</b>	<b>1.7</b>	<b>1.7</b>	<b>2.1</b>	<b>2.3</b>	<b>2.0</b>	<b>1.6</b>
<b>MARKETING EXPENSES<sup>3</sup></b>						
Cattle	19.9	21.1	21.6	20.2	20.5	21.7
Sheep	3.4	3.1	3.1	3.4	3.5	3.9
Pigs	4.5	4.1	4.1	4.3	4.6	4.3
Milk	7.6	9.8	7.1	7.6	7.9	8.1
<b>Total</b>	<b>35.5</b>	<b>38.1</b>	<b>36.0</b>	<b>35.5</b>	<b>36.5</b>	<b>38.0</b>
<b>INTEREST</b>						
Average bank advances outstanding (£m)	748.7	752.0	804.6	777.5	791.1	828.5
Bank base lending rate (%)	0.5	0.5	0.5	0.5	0.5	0.4
<b>Total interest charges (£m)<sup>4</sup></b>	<b>36.7</b>	<b>37.1</b>	<b>37.0</b>	<b>35.7</b>	<b>36.1</b>	<b>39.9</b>
<b>LABOUR</b>						
Average weekly hours of full-time paid workers	40.58	40.85	41.14	40.20	40.83	39.58
Average earnings of full-time paid workers (£ per hour) <sup>5</sup>	7.40	7.73	7.33	7.53	7.92	8.11
Average earnings of full-time paid workers (£ per week) <sup>5</sup>	300.32	315.80	301.35	302.80	323.52	321.05
Volume of paid labour (million hours) <sup>6</sup>	8.05	8.53	8.56	8.56	8.52	7.91
<b>Value of paid labour (£m)<sup>6</sup></b>	<b>60.2</b>	<b>67.1</b>	<b>63.5</b>	<b>65.2</b>	<b>68.3</b>	<b>65.7</b>

1. Includes compounds, straights, home-fed cereals, proteins, forage crops, hay and stockfeed potatoes.

2. Includes milk by-products, forage crops, hay and stockfeed potatoes.

3. Includes hired transport costs, auction fees, slaughter charges and interfarm expenses.

4. Includes interest on hire purchase and leasing agreements and trade credit. Includes FISIM (See page 25 for an explanation of FISIM).

5. Gross wage before deduction of tax and national insurance, and including the value of perks.

6. Excludes labour used on capital projects.

### 3. CROP AREAS AND LIVESTOCK NUMBERS

#### Land use

Approximately 77 per cent of the total Northern Ireland land area of 1.35 million hectares is used for agriculture, including common rough grazing. Around 8.3 per cent of the total land area is used for forestry (Table 3.1). The greater part of the total forested area (112,000 hectares) is managed by the Forest Service of the Department of Agriculture, Environment and Rural Affairs (see *Forest Service Annual Report, 2015/2016*<sup>1</sup>).

Most farmland in Northern Ireland is under grass. Only 3,283 farms (13 per cent) have arable or horticultural crops. These crops occupy 47,400 hectares and make up only 4.7 per cent of the total area farmed. Barley (22,300 hectares) is the main crop grown followed by wheat with 8,600 hectares. The total area of cereals grown (33,400 hectares) was 1.6 per cent higher in 2016 than in 2015. Weather has a significant impact on annual variation in the area grown, especially as it impacts ground conditions in the autumn when winter wheat and winter barley crops are sown. In 2016, the area of potatoes grown also increased on 2015 levels by 4.0 per cent to 3,700 hectares. Potatoes are an expensive crop to produce, while market returns are variable. In 2016, the cropped area also included 2,900 hectares of horticultural crops, mainly apple orchards (1,500 hectares) and vegetables (1,200 hectares).

#### Grazing livestock

All but 6 per cent of Northern Ireland farms keep cattle or sheep. In 2016, cattle were present on 19,942 farms (81 per cent), sheep on 9,810 farms (40 per cent) and cattle and/or sheep on 23,063 farms (94 per cent).

The total number of cattle on farms at the time of the June 2016 Agricultural Census, was approximately 1.7 million, a 3.5 per cent increase on the previous year. There were 317,100 dairy cows (1.8 per cent more than in 2015), and 269,700 beef cows (3.6 per cent more than in 2015). The total cattle population peaked in 1998 at 1.8 million before gradually falling to just under 1.6 million in 2009. Since then the total number has remained relatively stable.

In June 2016, the sheep breeding flock was 1.8 per cent larger than in 2015 at 955,200 ewes. Including lambs and other sheep the entire flock totalled 2.0 million in 2016 which is the highest numbers recorded since 2007.

#### Intensive livestock

In Northern Ireland, pigs and/or poultry (for commercial purposes) are present on 4.4 per cent of farms.

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<sup>1</sup>Available on the DAERA website at [www.daera-ni.gov.uk/publications/forest-service-annual-reports](http://www.daera-ni.gov.uk/publications/forest-service-annual-reports)

In 2016, pig numbers were derived from the NI Annual Pig Inventory (conducted in June) and were estimated at 601,100. Sow numbers increased to 46,400 in 2016.

In June 2016, the Northern Ireland poultry flock was recorded at 21.8 million birds, 2.5 per cent higher than in 2015. The number of laying birds (3.6 million) increased by 12 per cent in 2016, and the numbers of broilers (14.5 million) increased by 1.3 per cent. Poultry production is a highly vertically integrated sector in Northern Ireland and production is managed in response to market conditions and business objectives in the processing sector.

### **Less Favoured Areas**

The term Less Favoured Areas (LFA) is used to describe those parts of the country which, because of their relatively poor agricultural conditions, have been so designated under EU legislation. These areas, which include developed land as well as that used for agriculture and forestry, extend to 826,000 hectares. Further details are given in the Appendix.

Farms classed as **LFA farms** occupy 69 per cent of farmed land in Northern Ireland (Table 3.4) and livestock farming predominates. Crops occupy 12 per cent of land on lowland farms compared with only 1.4 per cent in the case of LFA farms. There are also significant differences in the patterns of livestock farming. Beef cows (206,000) predominate on **LFA farms**, where they are more important than dairy cows (156,000). On **lowland farms**, in contrast, there were 64,000 beef cows and 161,000 dairy cows in 2016. **LFA farms** account for 34 and 62 per cent of the Northern Ireland's pigs and poultry, respectively.

**Table 3.1 Land use, 2016**

	<i>thousand hectares</i>				
	<b>Crops</b>	<b>Grass and rough grazing</b>	<b>Woodland</b>	<b>Other land</b>	<b>Total land area</b>
Farms	47	938	16	12	<b>1,013</b>
Common grazing	-	35	-	-	<b>35</b>
NI Forest Service <sup>1</sup>	-	-	62	11	<b>74</b>
Other areas	-	-	34	197	<b>231</b>
<b>All land<sup>2</sup></b>	<b>47</b>	<b>973</b>	<b>112</b>	<b>220</b>	<b>1,353</b>

1. Excludes 1,700 ha let to farmers; these areas are included in the area of agricultural holdings.

2. Land area, excluding significant areas of inland water.

**Table 3.2 Areas of crops, grass, rough grazing and other land, June 2011 - 2016**

	<i>thousand hectares</i>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Oats	2.1	1.9	2.0	2.1	2.1	2.3
Wheat	11.6	9.4	8.0	8.5	8.0	8.6
Barley: Winter	6.8	5.3	5.3	6.7	7.0	7.6
Spring	17.2	20.2	20.5	16.8	15.7	14.7
Mixed corn	0.2	0.3	0.2	0.1	0.2	0.2
Potatoes	4.8	4.2	4.3	4.2	3.6	3.7
Arable crop silage	3.3	3.7	4.1	4.0	3.3	3.3
Other field crops	5.4	5.2	4.2	4.4	4.5	4.0
<b>Total agricultural crops</b>	<b>51.4</b>	<b>50.1</b>	<b>48.6</b>	<b>46.8</b>	<b>44.3</b>	<b>44.5</b>
Fruit	1.5	1.5	1.5	1.5	1.5	1.5
Vegetables	1.3	1.3	1.4	1.3	1.4	1.2
Other horticultural crops	0.1	0.1	0.1	0.1	0.2	0.2
<b>Total horticultural crops</b>	<b>3.0</b>	<b>2.9</b>	<b>3.0</b>	<b>3.0</b>	<b>3.1</b>	<b>2.9</b>
Grass: Under 5 years old	129.7	133.9	139.2	146.2	149.9	148.2
5 years old and over	647.4	646.0	648.8	641.8	650.4	652.6
<b>Total grass</b>	<b>777.1</b>	<b>779.8</b>	<b>788.0</b>	<b>788.0</b>	<b>800.3</b>	<b>800.8</b>
<b>Total crops and grass</b>	<b>831.5</b>	<b>832.8</b>	<b>839.6</b>	<b>837.8</b>	<b>847.7</b>	<b>848.2</b>
Rough grazing <sup>1</sup>	140.9	138.8	140.1	140.1	131.1	137.2
Woods and plantation	10.8	11.0	10.3	11.1	11.1	16.1
Other land <sup>2</sup>	8.2	8.3	8.0	7.8	7.9	11.8
<b>Total area of farms</b>	<b>991.4</b>	<b>991.0</b>	<b>998.0</b>	<b>996.8</b>	<b>997.7</b>	<b>1,013.2</b>

1. Excludes common rough grazing.

2. Includes set aside and land not used for agriculture.

**Table 3.3 Livestock numbers, June 2011 - 2016***thousand head*

	2011	2012	2013	2014	2015	2016
<b>CATTLE<sup>1</sup></b>						
<b>Dairy cows</b>	<b>282.5</b>	<b>285.4</b>	<b>279.5</b>	<b>294.2</b>	<b>311.5</b>	<b>317.1</b>
Dairy heifers in calf	62.3	65.4	67.1	62.1	60.8	58.8
<b>Beef cows</b>	<b>269.5</b>	<b>279.2</b>	<b>270.1</b>	<b>254.9</b>	<b>260.3</b>	<b>269.7</b>
Beef heifers in calf	42.1	40.9	37.4	31.9	31.7	31.1
<b>Total cows</b>	<b>552.0</b>	<b>564.6</b>	<b>549.6</b>	<b>549.1</b>	<b>571.8</b>	<b>586.9</b>
<b>Total heifers in calf</b>	<b>104.4</b>	<b>106.3</b>	<b>104.5</b>	<b>93.9</b>	<b>92.5</b>	<b>90.0</b>
Bulls for service	18.7	19.0	18.8	18.1	17.7	17.4
<b>Other cattle</b>						
Over 2 years	123.7	117.2	113.3	132.6	121.1	101.7
1-2 years	338.7	334.5	345.2	331.8	328.3	358.1
Under 1 year	452.9	483.9	456.3	441.8	477.4	510.5
<b>Total cattle</b>	<b>1,590.5</b>	<b>1,625.4</b>	<b>1,587.8</b>	<b>1,567.3</b>	<b>1,608.9</b>	<b>1,664.6</b>
<b>SHEEP</b>						
Breeding ewes	895.2	937.5	921.4	910.6	938.6	955.2
Other sheep	992.4	1,031.4	982.1	1,012.3	1,051.0	1,067.8
<b>Total sheep</b>	<b>1,887.6</b>	<b>1,968.9</b>	<b>1,903.5</b>	<b>1,922.9</b>	<b>1,989.7</b>	<b>2,023.0</b>
<b>PIGS<sup>2</sup></b>						
Sows and gilts	38.0	38.3	42.5	42.8	45.6	46.4
Other pigs	387.2	388.6	437.8	474.2	524.1	554.7
<b>Total pigs</b>	<b>425.3</b>	<b>426.9</b>	<b>480.3</b>	<b>517.1</b>	<b>569.7</b>	<b>601.1</b>
<b>POULTRY<sup>3</sup></b>						
Laying birds	2,429.7	2,556.7	2,438.4	3,044.6	3,174.1	3,550.0
Growing pullets	1,109.2	1,089.2	909.3	916.3	908.0	961.9
Breeding flock	1,528.0	1,641.1	2,150.6	2,413.7	2,404.9	2,282.7
Table chickens	14,069.4	13,459.4	13,412.0	13,614.2	14,273.1	14,459.2
<b>Total ordinary fowl</b>	<b>19,136.3</b>	<b>18,746.4</b>	<b>18,910.4</b>	<b>19,988.8</b>	<b>20,760.1</b>	<b>21,253.8</b>
Other poultry	486.2	441.7	463.5	412.4	485.6	530.0
<b>Total poultry</b>	<b>19,622.5</b>	<b>19,188.2</b>	<b>19,373.8</b>	<b>20,401.1</b>	<b>21,245.7</b>	<b>21,783.8</b>
<b>HORSES &amp; PONIES<sup>4</sup></b>	<b>12.0</b>	<b>12.0</b>	<b>11.7</b>	<b>11.1</b>	<b>11.0</b>	<b>10.3</b>
<b>GOATS</b>	<b>3.1</b>	<b>3.1</b>	<b>3.2</b>	<b>3.2</b>	<b>3.8</b>	<b>3.8</b>

1. From 2005 onwards, cattle figures were derived from APHIS.

2. From 2013 onwards, pig figures sourced from the Northern Ireland Annual Inventory of Pigs

3. From 2007 onwards, poultry figures were taken from the Northern Ireland Bird Register Update.

4. Horses and ponies on agricultural holdings.

**Table 3.4 Areas of crops, grass, rough grazing and other land by Less Favoured Area (LFA) category<sup>1</sup> of farm, June 2016**

*thousand hectares*

	Areas on farms wholly or mainly in:				
	Severely Disadvantaged Area (SDA)	Disadvantaged Area (DA)	Total LFA	Non LFA	LFA as % NI
Cereals	1	5	6	27	19
Potatoes	0	1	1	3	25
Other agricultural crops	1	1	2	5	27
Horticultural crops	0	0	0	2	15
<b>Total crops</b>	<b>3</b>	<b>7</b>	<b>10</b>	<b>38</b>	<b>21</b>
Grass: Under 5 years old	48	41	89	59	60
5 years and over	261	191	452	200	69
<b>Total grass</b>	<b>309</b>	<b>233</b>	<b>542</b>	<b>259</b>	<b>68</b>
Rough grazing <sup>2</sup>	121	10	131	6	96
Woods/other land	8	14	21	6	77
<b>Total area</b>	<b>440</b>	<b>264</b>	<b>704</b>	<b>309</b>	<b>69</b>

1. For statistical purposes, farms classified as LFA farms have all or most of their land (after adjustment for conacre) within the LFA and are further classified as SDA or DA according to where the greater part of their LFA land lies. Lowland farms have most or all of their land outside the LFA.

2. Excludes common rough grazing.

**Table 3.5 Livestock numbers by Less Favoured Area (LFA) category<sup>1</sup> of farm, June 2016**

*thousand head*

	Areas on farms wholly or mainly in:				
	Severely Disadvantaged Area (SDA)	Disadvantaged Area (DA)	Total LFA	Non LFA	LFA as % NI
<b>CATTLE</b>					
Dairy cows	52	104	156	161	49
Beef cows	126	80	206	64	76
Heifers in calf	22	28	51	39	56
Bulls for service	6	5	12	6	66
<b>Other cattle</b>					
Over 2 years	21	33	54	48	53
1-2 years	81	118	199	159	56
Under 1 year	153	162	315	195	62
<b>Total cattle</b>	<b>461</b>	<b>531</b>	<b>992</b>	<b>672</b>	<b>60</b>
<b>SHEEP</b>					
Breeding ewes	537	219	755	200	79
Other sheep	577	259	837	231	78
<b>Total sheep</b>	<b>1,114</b>	<b>478</b>	<b>1,592</b>	<b>431</b>	<b>79</b>
<b>PIGS</b>					
Sows and gilts	5	13	18	28	39
Other pigs	51	135	186	368	34
<b>Total pigs</b>	<b>57</b>	<b>148</b>	<b>205</b>	<b>397</b>	<b>34</b>
<b>POULTRY</b>					
Laying birds	1,376	1,053	2,429	1,121	68
Table fowl	2,245	6,269	8,514	5,945	59
Other poultry	1,289	1,219	2,508	1,266	66
<b>Total poultry</b>	<b>4,910</b>	<b>8,542</b>	<b>13,452</b>	<b>8,332</b>	<b>62</b>
<b>HORSES AND PONIES<sup>2</sup></b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>50</b>
<b>GOATS</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>73</b>

1. See Note 1, Table 3.4.

2. See Note 3, Table 3.3.

## 4. FARM STRUCTURE

**Methodological Notes** In the Northern Ireland Agricultural Census, the statistical definition of a farm is the same as that applied under the Integrated Administration and Control System (IACS), i.e. it is based on the concept of separate businesses. Until 1997, the definition was based on land ownership. The current definition is in keeping with that adopted for European Union surveys on the structure of agricultural holdings, according to which a farm is:

*‘a single unit, both technically and economically, which has a single management and which produces agricultural products’*

but it differs from that used elsewhere in the UK where a higher minimum size threshold is applied.

***The Agricultural Census in Northern Ireland covers all active farm businesses having one hectare or more of farmed land, whether owned, leased or taken in conacre, and those with under one hectare having any cattle, sheep or pigs or with significant poultry or horticultural activity.***

**Farms** The number of active farm businesses within the scope of the June 2016 Census, 24,528, was 379 lower than in 2015. This is a net change on the previous year, with some new businesses being created (often as off-shoots from existing farms) and others merging or ceasing to be active.

Some 22 per cent of farms have less than 10 hectares of crops and grass, while some 1,429 farms (5.8 per cent) have 100 hectares or more. The latter occupy over one quarter of the total area of crops and grass.

**Business size** Since quite large businesses can be operated on small areas (e.g. those with intensive livestock or horticultural crops), and land quality is variable, area alone does not accurately capture the level of business activity on farms. To overcome this problem Standard Outputs (SO) are used throughout the EU to measure farm business size and define farm type. However, in the UK it is felt that SO can be difficult to interpret and that a size definition more clearly linked to labour requirements is more meaningful. So, while farm business type is based on the EU SO approach, from 2004 onwards farm size has been determined by Standard Labour Requirements (SLR) for farms (see appendix for more detail). The system applies across the UK, but has been adapted to take account of some regional variation. Smaller field sizes in Northern Ireland, compared with the rest of the UK, mean that additional labour inputs are required for grassland and cropping activities and when applicable this is reflected in higher SLR coefficients than apply for Great Britain. Using the SLR approach, the spectrum of farm sizes that exist are grouped into four bands: **very small, small, medium or large.**

The majority of farm businesses in Northern Ireland, 76 per cent in 2016, are classified as **very small**. In 2016, there were 18,651 farms



in this category (Table 4.3) which is slightly lower than the 2015 figure. These farms are unlikely to provide full time employment or an adequate income solely from farming activities.<sup>1</sup> They contribute 22 per cent of the industry's total SO but account for 48 per cent of the farmed area (Table 4.14). The main activities of these farms are cattle and sheep rearing. In 2016, 58 per cent of beef cows<sup>2</sup> and 53 per cent of total sheep were to be found on very small farms. Approximately 29,975 persons are engaged in the work of these farms (Table 4.12).

There were 2,938 **small** farms, generally involving one person full time with, in some cases, part time or seasonal help. These farms make important contributions to all sectors, for example accounting for 28 per cent of poultry and 26 per cent of total sheep activities; they cover 20 per cent of the agricultural area and involve 19 per cent of the full time agricultural labour force (Table 4.14).

The 1,238 **medium** and 1,701 **large** farms (together representing 12 per cent of all farms) contribute 60 per cent of the total SO from approximately one third (32 per cent) of the land area (Table 4.14). These farms dominate the dairy, pigs and poultry layer sectors with 83, 93 and 60 per cent shares of the livestock numbers, respectively.

Seventy-three per cent of **very small** and 65 per cent of **small** farms are mainly in the LFA whereas, for **medium** and **large** farms, the proportions are 57 and 46 per cent, respectively (Table 4.5).

## Farm type

Ninety per cent of Northern Ireland farms derive two-thirds or more of their total SO from grazing livestock (Table 4.6), including 11 per cent classified as **dairy** farms and 79 per cent as **cattle and sheep**. Relatively few farms depend predominantly on cropping with 275 (1.1 per cent) classified as **cereal** farms, 506 (2 per cent) as **general cropping** and 280 (1.1 per cent) as **horticulture**. The **other types** category mainly consists of specialist horse farms, (143 farms in total). Specialist **pigs and poultry** farms together (766) account for 3.1 per cent, while **mixed** farms (570) make up 2.3 per cent of the total.

## Farm tenure

Almost all farms in Northern Ireland have owned land and just under half include some rented land. Within the total farms, only 4.7 per cent were entirely rented or leased, 45 per cent had a mixture of owned and rented land and the remaining 51 per cent were entirely owner-occupied (Table 4.10). Much of the rented land is taken under the conacre system of short-term lettings which is a particular feature of land tenure throughout Ireland. By renting conacre land, farmers may expand their businesses to grow more crops or keep more livestock than would be possible on the owned area. Landowners who are unable or unwilling to farm all or part of their land may let it in conacre, i.e. on a seasonal basis, (nominally for 11 months or 364 days) without entering into a long-term commitment.

<sup>1</sup> For further information on the persons living and working on farms of different sizes, see "Farmers and Farm Families in Northern Ireland", DAERA 2002.

<sup>2</sup> Figures for cattle are derived from the cattle tracing system (APHIS).

## Enterprises

In 2016, 3,529 farms (14 per cent) had dairy cows, 14,756 (60 per cent) had beef cows (Table 4.15) and 19,942 (81 per cent) had cattle of some type (Table 4.16). The average number of dairy cows per herd, 90, was 2 more than in 2015. It compares with an average herd size for beef breeding herds of approximately 18 cows. Sixty-five per cent of dairy cows are in herds of 100 or more cows, compared with 9 per cent of beef cows.

Some 9,598 farms had breeding sheep (Table 4.17), with an average of 100 ewes per flock. There were relatively few large flocks in Northern Ireland, with only 21 farms having a flock size of 1,000 ewes or more.

In 2016, pig data was extracted from the Northern Ireland Annual Inventory of Pigs and showed that 337 commercial pig herds were operational in June (Table 4.19). Most of the pig herds (294 in 2016) had sows, averaging 158 sows per herd (Table 4.18). Eighty-eight per cent of sows were found on farms with 100 or more sows – although these farms make up only one third of all farms with sows. Similarly, of total pigs, the largest units accounting for one-third of total pig herds hold over 90 per cent of pigs.

Figures for poultry were taken from the Northern Ireland Bird Register Update in 2016, with only commercial producers considered. Of the 202 business with laying hens (Table 4.20) 90 per cent had flocks over 1,000. 25 businesses (12 per cent) farmed over thirty thousand birds with these farms accounting for 45 per cent of total laying birds. On broiler units, the average flock size is a great deal larger, with over half of farms having thirty thousand birds or more on farm when the Bird Register Update was conducted in June. Over 80 per cent of broilers are found on these farms (Table 4.20).

In 2016, cereals were grown on 2,292 farms (Table 4.23), 9.3 per cent of all farms in Northern Ireland. The average area of a cereal enterprise was 14.6 hectares. While almost two-fifths (854) of the farms with cereals had less than 5 hectares, the 135 farms which grew 50 hectares or more accounted for over one third of the total cereal area grown.

Some 481 farms, 2.0 per cent of total farms, grew potatoes in 2016. Of this number, 93 grew 10 hectares or more, with these farms accounting for almost three quarters of the total area of potatoes grown (Table 4.24).

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**Table 4.1 Number and area of farms by area farmed<sup>1</sup>, June 2016**

Size group (hectares)	By crops and grass area		By total area	
	Farms	Hectares	Farms	Hectares
Nil	397	-	135	-
0.1 - 9.9	4,906	29,292	4,306	25,729
10.0 - 19.9	5,789	84,453	5,382	78,903
20.0 - 29.9	4,040	98,575	3,986	97,551
30.0 - 49.9	4,339	167,338	4,532	175,469
50.0 - 99.9	3,628	248,465	4,208	290,533
100.0 - 199.9	1,213	158,508	1,577	210,086
200.0 +	216	61,536	402	134,977
<b>Total</b>	<b>24,528</b>	<b>848,168</b>	<b>24,528</b>	<b>1,013,248</b>

1. The area farmed is after adjustment for conacre taken or let.

**Table 4.2 Number of farms, average area and distribution of area by area farmed, June 2011 - 2016**

	2011	2012	2013	2014	2015	2016
<b>Number of farms</b>	24,436	24,285	24,503	24,228	24,907	24,528
<b>Average area per farm (ha):</b>						
Crops and grass	34.0	34.3	34.3	34.6	34.0	34.6
Total area	40.6	40.8	40.7	41.1	40.1	41.3
<b>Per cent of crops and grass area farmed in units of:</b>						
(hectares)						
0.1 - 9.9	3.5	3.5	3.5	3.4	3.5	3.5
10.0 - 19.9	9.8	9.8	9.9	9.8	10.1	10.0
20.0 - 29.9	11.5	11.5	11.5	11.4	11.8	11.6
30.0 - 49.9	20.3	20.3	20.2	20.2	20.3	19.7
50.0 - 99.9	30.5	30.0	30.3	30.2	29.5	29.3
100.0 +	24.4	24.8	24.6	25.1	24.8	25.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table 4.3 Number of farms by business size and area farmed, June 2016**

Area of crops and grass farmed (hectares)	Business size <sup>1</sup>					All sizes
	Very Small	Small	Medium	Large		
Under 10	5,013	154	57	79		5,303
10.0 - 19.9	5,544	158	35	52		5,789
20.0 - 29.9	3,651	273	73	43		4,040
30.0 - 49.9	3,160	883	207	89		4,339
50.0 - 99.9	1,192	1,199	619	618		3,628
100.0 +	91	271	247	820		1,429
<b>Total</b>	<b>18,651</b>	<b>2,938</b>	<b>1,238</b>	<b>1,701</b>		<b>24,528</b>

1. For a description of how business size is measured, see Appendix.

**Table 4.4 Number of farms by business size, June 2011 - 2016**

	<i>number</i>					
<b>Business size<sup>1</sup></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Very small	18,563	18,441	18,719	18,521	19,078	18,651
Small	3,094	3,076	3,063	2,935	2,951	2,938
Medium	1,261	1,210	1,187	1,226	1,249	1,238
Large	1,518	1,558	1,534	1,546	1,629	1,701
<b>Total</b>	<b>24,436</b>	<b>24,285</b>	<b>24,503</b>	<b>24,228</b>	<b>24,907</b>	<b>24,528</b>

1. See Note 1, Table 4.3

**Table 4.5 Number of farms by business size and Less Favoured Area (LFA) category<sup>1</sup>, June 2016**

	<i>number</i>				
<b>Business size<sup>2</sup></b>	<b>Severely Disadvantaged Area (DA)</b>	<b>Disadvantaged Area (DA)</b>	<b>Total LFA</b>	<b>Non LFA</b>	<b>LFA as % NI</b>
Very small	7,968	5,634	13,602	5,049	73
Small	996	903	1,899	1,039	65
Medium	327	378	705	533	57
Large	271	505	776	925	46
<b>Total</b>	<b>9,562</b>	<b>7,420</b>	<b>16,982</b>	<b>7,546</b>	<b>69</b>

1. For statistical purposes, farms classified as LFA farms have all or most of their land (after adjustment for conacre) within the LFA and are further classified as SDA or DA according to where the greater part of their LFA land lies. Lowland farms have most or all of their land outside the LFA.

2. See Note 1, Table 4.3.

**Table 4.6 Number of farms by business size and type, June 2016**

	<i>number</i>				
<b>Business type<sup>1</sup></b>	<b>Business size<sup>1</sup></b>				
	<b>Very small</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>	<b>All sizes</b>
Cereals	225	31	13	6	275
General cropping	406	40	16	44	506
Horticulture	98	50	33	99	280
Pigs	51	26	32	65	174
Poultry	191	216	104	81	592
Dairy	290	741	620	1,043	2,694
Cattle & sheep (LFA) <sup>2</sup>	12,775	1,163	232	155	14,325
Cattle & sheep (lowland) <sup>2</sup>	4,216	544	116	93	4,969
Mixed	305	103	60	102	570
Others	94	24	12	13	143
<b>All types</b>	<b>18,651</b>	<b>2,938</b>	<b>1,238</b>	<b>1,701</b>	<b>24,528</b>

1. For a description of how business size and type are measured, see Appendix.

2. See Note 1, Table 4.5

**Table 4.7 Number of farms by business type, June 2011 - 2016**

	<i>number</i>					
<b>Business type<sup>1</sup></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Cereals	323	296	311	297	281	275
General cropping	293	373	497	368	516	506
Horticulture	288	278	304	289	293	280
Pigs	191	186	177	179	185	174
Poultry	606	560	591	591	601	592
Dairy	2,662	2,594	2,598	2,655	2,742	2,694
Cattle & sheep (LFA) <sup>2</sup>	14,497	14,426	14,457	14,316	14,497	14,325
Cattle & sheep (lowland) <sup>2</sup>	4,720	4,736	4,786	4,775	5,014	4,969
Mixed	642	623	561	559	588	570
Others	214	213	221	199	190	143
<b>All types</b>	<b>24,436</b>	<b>24,285</b>	<b>24,503</b>	<b>24,228</b>	<b>24,907</b>	<b>24,528</b>

1. See Note 1, Table 4.6.

2. See Note 1, Table 4.5.

**Table 4.8 Number of farms by business type and Less Favoured Area (LFA) category<sup>1</sup>, June 2016**

	<i>number</i>				
<b>Business type<sup>2</sup></b>	<b>Severely Disadvantaged Area (DA)</b>	<b>Disadvantaged Area (DA)</b>	<b>Total LFA</b>	<b>Non LFA</b>	<b>LFA as % NI</b>
Cereals	11	33	44	231	16
General cropping	92	139	231	275	46
Horticulture	23	74	97	183	35
Pigs	37	62	99	75	57
Poultry	170	212	382	210	65
Dairy	557	948	1,505	1,189	56
Cattle & sheep	8,588	5,737	14,325	4,969	74
Mixed	59	175	234	336	41
Others	25	40	65	78	45
<b>All types</b>	<b>9,562</b>	<b>7,420</b>	<b>16,982</b>	<b>7,546</b>	<b>69</b>

1. See Note 1, Table 4.5.

2. See Note 1, Table 4.6.

**Table 4.9 Number of farms by business size and proportion of area owner occupied, June 2016**

	<i>farms</i>				
<b>Owned land as percentage of farmed area</b>	<b>Business size<sup>1</sup></b>				
	<b>Very Small</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>	<b>All sizes</b>
All owner occupied	10,933	889	290	296	12,408
50-<100%	4,475	1,309	618	860	7,262
>0-<50%	2,209	655	308	524	3,696
None owner occupied	1,034	85	22	21	1,162
<b>All farms</b>	<b>18,651</b>	<b>2,938</b>	<b>1,238</b>	<b>1,701</b>	<b>24,528</b>

1. For a description of how business size is measured, see Appendix.

**Table 4.10 Area of land by type of tenure, 2011 - 2016**

	<i>hectares</i>					
	2011	2012	2013	2014	2015	2016
<b>Owner-occupied</b>	675,006	678,167	688,912	690,477	713,095	730,767
<b>Rented</b>	316,435	312,815	309,040	306,327	284,653	282,481
<b>Total</b>	<b>991,441</b>	<b>990,983</b>	<b>997,952</b>	<b>996,804</b>	<b>997,748</b>	<b>1,013,248</b>
<b>Percentage of owned land</b>	<b>68.1</b>	<b>68.4</b>	<b>69.0</b>	<b>69.3</b>	<b>71.5</b>	<b>72.1</b>
<b>Common grazing</b>	<b>36,794</b>	<b>36,845</b>	<b>35,407</b>	<b>35,631</b>	<b>35,486</b>	<b>35,325</b>

**Table 4.11 Average concrete rents by type of use, 2010 - 2015**

	<i>£/hectare</i>					
Use	2010	2011	2012	2013	2014	2015
Grass	189	195	216	226	236	241
Potatoes	654	703	501	734	706	508
Cereals	240	246	241	263	293	289
Rough grazing	37	41	37	33	38	49
<b>All uses</b>	<b>172</b>	<b>179</b>	<b>179</b>	<b>182</b>	<b>191</b>	<b>208</b>

Source: Farm Business Survey.

**Table 4.12 Distribution of the farm labour force by business size, June 2016**

Labour item	<i>number of persons</i>				
	<b>Business size<sup>1</sup></b>				<b>All farms</b>
	<b>Very Small</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>	
<b>Farmers and partners</b>					
Full time	8,886	3,222	1,582	2,543	16,233
Part time	12,028	867	284	392	13,571
<b>Total</b>	<b>20,914</b>	<b>4,089</b>	<b>1,866</b>	<b>2,935</b>	<b>29,804</b>
<b>Spouses of farmers</b>	<b>4,145</b>	<b>991</b>	<b>488</b>	<b>786</b>	<b>6,410</b>
<b>Other workers</b>					
Full time	611	361	339	1,898	3,209
Part time	2,318	745	400	752	4,215
Casual/seasonal	1,987	761	361	965	4,074
<b>Total other workers</b>	<b>4,916</b>	<b>1,867</b>	<b>1,100</b>	<b>3,615</b>	<b>11,498</b>
<b>Total agricultural labour force</b>	<b>29,975</b>	<b>6,947</b>	<b>3,454</b>	<b>7,336</b>	<b>47,712</b>

1. For a description of how business size is measured, see Appendix.

**Table 4.13 Distribution of the farm labour force by Less Favoured Area (LFA) category<sup>1</sup>, June 2016**

*number of persons*

Labour item	Severely Disadvantaged Area (DA)	Disadvantaged Area (DA)	Total LFA	Non LFA	LFA as % NI
<b>Farmers and partners</b>					
Full time	5,717	4,958	10,675	5,558	66
Part time	5,539	4,064	9,603	3,968	71
<b>Total</b>	<b>11,256</b>	<b>9,022</b>	<b>20,278</b>	<b>9,526</b>	<b>68</b>
<b>Spouses of farmers</b>	<b>2,257</b>	<b>1,907</b>	<b>4,164</b>	<b>2,246</b>	<b>65</b>
<b>Other workers</b>					
Full time	663	834	1,497	1,712	47
Part time	1,415	1,264	2,679	1,536	64
Casual/seasonal	1,190	1,160	2,350	1,724	58
<b>Total other workers</b>	<b>3,268</b>	<b>3,258</b>	<b>6,526</b>	<b>4,972</b>	<b>57</b>
<b>Total agricultural labour force</b>	<b>16,781</b>	<b>14,187</b>	<b>30,968</b>	<b>16,744</b>	<b>65</b>

1. See Note 1, Table 4.5.

**Table 4.14 Distribution of numbers of livestock, hectares of crops, full-time labour and output by business size, June 2016**

**A. Number of farms having the item**  
**B. Total for each item ('000)**  
**C. Percentage of Northern Ireland total of each item**

Item	Business size <sup>1</sup>												All Farms		
	Very Small			Small			Medium			Large					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
<b>Cattle</b>															
Total	14,673	580	35	2,629	319	19	1,117	211	13	1,523	555	33	19,942	1,665	100
Dairy cows	554	9	3	989	44	14	737	58	18	1,249	206	65	3,529	317	100
Beef cows	11,171	157	58	2,010	63	23	718	24	9	857	26	10	14,756	270	100
Slaughter cattle >1 year	12,482	161	43	2,467	79	21	1,055	43	11	1,482	93	25	17,486	376	100
<b>Sheep</b>															
Total	7,497	1,067	53	1,395	529	26	442	183	9	476	244	12	9,810	2,023	100
Ewes	7,327	508	53	1,377	246	26	431	86	9	463	115	12	9,598	955	100
<b>Pigs</b>															
Total	132	16	3	61	26	4	50	54	9	94	505	84	337	601	100
Sows	105	2	4	51	2	4	46	4	9	92	39	83	294	46	100
Finishers/ Weaners	110	12	3	57	19	4	47	40	9	92	377	84	306	447	100
<b>Poultry</b>															
Total	216	2,549	12	246	6,155	28	135	4,514	21	160	8,566	39	757	21,784	100
Layers	49	213	6	76	947	27	35	600	17	42	1,790	50	202	3,550	100
<b>Crops</b>															
Oats	169	1	29	79	0	21	46	0	19	61	1	31	355	2	100
Wheat	227	2	20	121	2	18	82	1	15	229	4	47	659	8	100
Barley	1,005	7	32	393	5	22	197	3	14	340	7	32	1,935	22	100
Potatoes	245	0	12	101	1	17	48	0	10	87	2	60	481	4	100
Crops & grass	18,362	404	48	2,888	164	19	1,214	90	11	1,667	191	23	24,131	848	100
Rough grazing	4,131	69	50	768	36	26	290	15	11	300	18	13	5,489	137	100
<b>Total area</b>	<b>18,651</b>	<b>483</b>	<b>48</b>	<b>2,938</b>	<b>202</b>	<b>20</b>	<b>1,238</b>	<b>113</b>	<b>11</b>	<b>1,701</b>	<b>215</b>	<b>21</b>	<b>24,528</b>	<b>1,013</b>	<b>100</b>
<b>Labour</b>															
Full-time labour force <sup>2</sup>	8,765	10	49	2,659	4	19	1,187	2	10	1,662	5	23	14,273	21	100
<b>Output</b>															
Standard Output <sup>3</sup>	18,651	411	22	2,938	335	18	1,238	274	14	1,701	879	46	24,528	1,900	100

1. For a description of how business size is measured, see Appendix.

2. The full-time labour force includes full-time farmers, partners, spouses and other full-time workers.

3. Figures in Column B are in million euros; for a definition of Standard Output, see Appendix.



**Table 4.15 Distribution of (a) dairy cows and (b) beef cows by herd size, June 2016<sup>1</sup>**

Number per farm	Dairy Cows				Beef cows			
	Numbers of Farms	Numbers of Cows	Percentage of Farms	Percentage of Cows	Numbers of Farms	Numbers of Cows	Percentages of Farms	Percentages of Cows
<10	267	1,731	7.6	0.5	6,184	27,835	41.9	10.3
10 - 14	118	1,419	3.3	0.4	2,363	28,037	16.0	10.4
15 - 19	115	1,959	3.3	0.6	1,701	28,653	11.5	10.6
20 - 29	202	4,930	5.7	1.6	1,972	47,420	13.4	17.6
30 - 39	261	8,993	7.4	2.8	948	32,738	6.4	12.1
40 - 49	253	11,310	7.2	3.6	571	25,042	3.9	9.3
50 - 59	253	13,722	7.2	4.3	333	18,083	2.3	6.7
60 - 69	268	17,205	7.6	5.4	221	14,209	1.5	5.3
70 - 99	589	49,174	16.7	15.5	285	23,220	1.9	8.6
100 & Over	1,203	206,703	34.1	65.2	178	24,509	1.2	9.1
<b>Total 2016</b>	<b>3,529</b>	<b>317,146</b>	<b>100</b>	<b>100</b>	<b>14,756</b>	<b>269,746</b>	<b>100</b>	<b>100</b>
<b>Total 2015</b>	<b>3,537</b>	<b>311,520</b>			<b>15,090</b>	<b>260,325</b>		
<b>Average 2016</b>		<b>89.9</b>				<b>18.3</b>		
<b>Average 2015</b>		<b>88.1</b>				<b>17.3</b>		

1. Cattle figures for 2015 and 2016 were derived from APHIS - the DAERA system for recording and tracing cattle movements.

**Table 4.16 Distribution of (a) slaughter cattle one year-old and over and (b) total cattle by herd size, June 2016<sup>1</sup>**

Number per farm	Cattle one year old and over, intended for slaughter				Total cattle			
	Numbers of Farms	Numbers of Cattle	Percentage of Farms	Percentage of Cattle	Numbers of Farms	Numbers of Cattle	Percentages of Farms	Percentages of Cattle
1 - 4	5,023	11,186	28.7	3.0	620	1,788	3.1	0.1
5 - 9	3,354	22,760	19.2	6.1	1,231	8,728	6.2	0.5
10 - 19	3,623	50,118	20.7	13.3	2,921	42,091	14.6	2.5
20 - 29	1,851	44,425	10.6	11.8	2,472	60,095	12.4	3.6
30 - 39	1,103	37,533	6.3	10.0	2,000	68,606	10.0	4.1
40 - 49	694	30,581	4.0	8.1	1,644	72,783	8.2	4.4
50 - 69	820	47,872	4.7	12.7	2,136	125,907	10.7	7.6
70 - 99	502	41,606	2.9	11.1	2,039	169,523	10.2	10.2
100 - 199	401	53,394	2.3	14.2	2,828	395,960	14.2	23.8
200 - 299	70	16,768	0.4	4.5	1,101	266,852	5.5	16.0
300 & over	45	19,566	0.3	5.2	950	452,259	4.8	27.2
<b>Total 2016</b>	<b>17,486</b>	<b>375,809</b>	<b>100</b>	<b>100</b>	<b>19,942</b>	<b>1,664,592</b>	<b>100</b>	<b>100</b>
<b>Total 2015</b>	<b>17,648</b>	<b>368,924</b>			<b>20,357</b>	<b>1,608,851</b>		
<b>Average 2016</b>		<b>21.5</b>				<b>83.5</b>		
<b>Average 2015</b>		<b>20.9</b>				<b>79.0</b>		

1. Cattle figures for 2015 and 2016 were derived from APHIS - the DAERA system for recording and tracing cattle movements.

**Table 4.17 Distribution of (a) ewes and (b) total sheep by flock size, June 2016**

Number per farm	Ewes				Total Sheep			
	Numbers of		Percentage of		Numbers of		Percentages of	
	Farms	Ewes	Farms	Ewes	Farms	Sheep	Farms	Sheep
1 - 24	1,909	25,955	19.9	2.7	996	13,409	10.2	0.7
25 - 49	2,082	74,685	21.7	7.8	1,230	44,953	12.5	2.2
50 - 99	2,483	174,168	25.9	18.2	1,981	144,494	20.2	7.1
100 - 199	1,906	259,117	19.9	27.1	2,390	342,686	24.4	16.9
200 - 299	670	160,338	7.0	16.8	1,242	303,146	12.7	15.0
300 - 399	265	89,315	2.8	9.4	651	224,827	6.6	11.1
400 - 499	132	57,283	1.4	6.0	380	169,024	3.9	8.4
500 - 699	82	46,985	0.9	4.9	493	287,086	5.0	14.2
700 - 999	48	39,447	0.5	4.1	270	221,583	2.8	11.0
1,000 & Over	21	27,905	0.2	2.9	177	271,765	1.8	13.4
<b>Total 2016</b>	<b>9,598</b>	<b>955,198</b>	<b>100.0</b>	<b>100.0</b>	<b>9,810</b>	<b>2,022,973</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>9,305</i>	<i>938,644</i>			<i>9,529</i>	<i>1,989,674</i>		
<b>Average 2016</b>		<b>99.5</b>				<b>206.2</b>		
<i>Average 2015</i>		<i>100.9</i>				<i>208.8</i>		

**Table 4.18 Distribution of breeding sows by herd size, June 2016<sup>1</sup>**

Number per farm	Sows (including gilts)			
	Numbers of		Percentage of	
	Farms	Sows	Farms	Sows
1 - 9	78	291	26.5	0.6
10 - 19	27	367	9.2	0.8
20 - 49	50	1,714	17.0	3.7
50 - 99	44	3,296	15.0	7.1
100 - 199	43	6,303	14.6	13.6
200 - 299	16	3,877	5.4	8.3
300 - over	36	30,595	12.2	65.9
<b>Total 2016</b>	<b>294</b>	<b>46,443</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>317</i>	<i>45,611</i>		
<b>Average 2016</b>		<b>158.0</b>		
<i>Average 2015</i>		<i>143.9</i>		

1. From 2013 onwards, pig figures sourced from the Northern Ireland Annual Inventory of Pigs.

**Table 4.19 Distribution of (a) Finishers/Weaners and (b) total pigs by herd size, June 2016<sup>1</sup>**

Number per farm	Finisher/Weaners				Total pigs			
	Numbers of		Percentage of		Numbers of		Percentages of	
	Farms	Pigs	Farms	Pigs	Farms	Pigs	Farms	Pigs
1 - 9	38	219	12.4	0.0	30	194	8.9	0.0
10 - 19	20	262	6.5	0.1	33	445	9.8	0.1
20 - 49	32	980	10.5	0.2	34	974	10.1	0.2
50 - 99	25	1,648	8.2	0.4	24	1,722	7.1	0.3
100 - 199	26	3,640	8.5	0.8	32	4,781	9.5	0.8
200 - 399	28	8,669	9.2	1.9	24	6,976	7.1	1.2
400 - 999	46	32,310	15.0	7.2	47	30,288	13.9	5.0
1,000 - 1,999	44	59,727	14.4	13.4	53	78,131	15.7	13.0
2,000 & over	47	339,714	15.4	76.0	60	477,590	17.8	79.5
<b>Total 2016</b>	<b>306</b>	<b>447,169</b>	<b>100.0</b>	<b>100.0</b>	<b>337</b>	<b>601,101</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>315</i>	<i>420,333</i>			<i>350</i>	<i>569,738</i>		
<b>Average 2016</b>		<b>1,461.3</b>				<b>1,783.7</b>		
<i>Average 2015</i>		<i>1,334.4</i>				<i>1,627.8</i>		

1. From 2013 onwards, pig figures sourced from the Northern Ireland Annual Inventory of Pigs.

**Table 4.20 Distribution of (a) laying hens and (b) broilers by flock size, June 2016<sup>1</sup>**

Number per farm	Laying Hens				Broilers			
	Numbers of Farms	Hens ('000)	Percentage of Farms	Hens	Numbers of Farms	Broilers ('000)	Percentages of Farms	Broilers
1-999	20	3	9.9	0.1	4	1	1.2	0.0
1,000-4,999	12	32	5.9	0.9	4	12	1.2	0.1
5,000-9,999	51	371	25.2	10.5	9	73	2.8	0.5
10,000-19,999	76	1,113	37.6	31.4	69	1,152	21.4	8.0
20,000-29,999	18	427	8.9	12.0	54	1,328	16.7	9.2
30,000-49,999	18	643	8.9	18.1	84	3,115	26.0	21.5
50,000 & over	7	961	3.5	27.1	99	8,778	30.7	60.7
<b>Total 2016</b>	<b>202</b>	<b>3,550</b>	<b>100.0</b>	<b>100.0</b>	<b>323</b>	<b>14,459</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>196</i>	<i>3,174</i>			<i>326</i>	<i>14,273</i>		
<b>Average 2016</b>		<b>17,574</b>				<b>44,765</b>		
<i>Average 2015</i>		<i>16,194</i>				<i>43,782</i>		

1. Figures for poultry numbers are taken from the Northern Ireland Bird Register Update.

**Table 4.21 Distribution of total poultry by flock size, June 2016<sup>1</sup>**

Number per farm	Total poultry			
	Numbers of Farms	Birds ('000)	Percentage of Farms	Birds ('000)
1-999	38	12	5.0	0.1
1,000-4,999	55	158	7.3	0.7
5,000-9,999	106	769	14.0	3.5
10,000-19,999	218	3,345	28.8	15.4
20,000-29,999	105	2,542	13.9	11.7
30,000-49,999	120	4,398	15.9	20.2
50,000 & over	115	10,558	15.2	48.5
<b>Total 2016</b>	<b>757</b>	<b>21,784</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>782</i>	<i>21,246</i>		
<b>Average 2016</b>		<b>28,776</b>		
<i>Average 2015</i>		<i>27,168</i>		

1. Figures for poultry numbers are taken from the Northern Ireland Bird Register Update.

**Table 4.22 Distribution of (a) barley and (b) wheat by area of crop, June 2016**

Number per farm (ha)	Barley				Wheat			
	Number of Farms	Area of Barley (ha)	Percentages of Farms	Barley	Number of Farms	Area of Wheat (ha)	Percentages of Farms	Wheat
under 1	35	23	1.8	0.1	11	7	1.7	0.1
1 - 4.9	738	2,120	38.1	9.5	198	606	30.0	7.0
5 - 9.9	496	3,533	25.6	15.8	181	1,283	27.5	14.9
10 - 19.9	381	5,161	19.7	23.1	145	2,003	22.0	23.2
20 - 29.9	130	3,103	6.7	13.9	64	1,515	9.7	17.6
30 - 39.9	52	1,814	2.7	8.1	25	858	3.8	10.0
40 - 49.9	38	1,677	2.0	7.5	14	600	2.1	7.0
50 & over	65	4,904	3.4	22.0	21	1,744	3.2	20.2
<b>Total 2016</b>	<b>1,935</b>	<b>22,336</b>	<b>100.0</b>	<b>100.0</b>	<b>659</b>	<b>8,616</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>2,002</i>	<i>22,708</i>			<i>624</i>	<i>7,976</i>		
<b>Average 2016</b>		<b>11.5</b>				<b>13.1</b>		
<i>Average 2015</i>		<i>11.3</i>				<i>12.8</i>		

**Table 4.23 Distribution of total cereals by area of crop, June 2016**

Total cereals				
Area per farm (ha)	Numbers of Farms	Area of Cereals (ha)	Percentages of Farms Cereals	
under 1	43	27	1.9	0.1
1 - 4.9	811	2,315	35.4	6.9
5 - 9.9	560	3,988	24.4	11.9
10 - 19.9	443	6,060	19.3	18.1
20 - 29.9	166	4,003	7.2	12.0
30 - 39.9	82	2,826	3.6	8.5
40 - 49.9	52	2,299	2.3	6.9
50 & over	135	11,921	5.9	35.6
<b>Total 2016</b>	<b>2,292</b>	<b>33,439</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>2,361</i>	<i>32,924</i>		
<b>Average 2016</b>		<b>14.6</b>		
<i>Average 2015</i>		<i>13.9</i>		

**Table 4.24 Distribution of potatoes by area of crop, June 2016**

Potatoes				
Area per farm (ha)	Numbers of Farms	Area of Potatoes (ha)	Percentages of Farms Potatoes	
under 1	131	58	27.2	1.6
1 - 4.9	189	472	39.3	12.6
5 - 9.9	68	465	14.1	12.4
10 - 19.9	48	686	10.0	18.4
20 - 29.9	15	364	3.1	9.7
30 - 39.9	8	271	1.7	7.2
40 - 49.9	10	451	2.1	12.1
50 & over	12	970	2.5	26.0
<b>Total 2016</b>	<b>481</b>	<b>3,737</b>	<b>100.0</b>	<b>100.0</b>
<i>Total 2015</i>	<i>494</i>	<i>3,593</i>		
<b>Average 2016</b>		<b>7.8</b>		
<i>Average 2015</i>		<i>7.3</i>		

## 5. INCOMES AT FARM LEVEL

### **Methodological Notes**

This section contains information, collected in the Farm Business Survey (FBS), on average incomes for the main types and sizes of full time farm businesses in Northern Ireland. A detailed analysis of FBS results is published in 'Farm Incomes in Northern Ireland 2015/16'.

Farms in the FBS are classified by type and size. A brief description of the typology system can be found in the Appendix to this publication.

The accounting concepts and practices used in compiling FBS income data differ from those on which the Aggregate Agricultural Account, presented in Section 2, are based. The income measures derived from the two sources are not therefore directly comparable. It should be noted that the latest year for which FBS results are available is 2015/16. However, provisional income estimates are also presented below for the 2016/17 year.

### **Income measures**

**Farm Business Income (FBI)** was introduced in January 2008 as new headline measure of farm income in the UK following consultation in 2006-07. It is closely aligned to the main EU measure of farm incomes 'Family Farm Income' and therefore allows easier comparison between Northern Ireland and other Member States. FBI is the return to all unpaid labour (farmer, spouses and others with an entrepreneurial interest in the farm business) and to their capital invested in the farm business which includes land and buildings.

**Net Farm Income (NFI)** was the previous headline measure of farm income. NFI represents the return to the farmer and spouse for their manual and managerial labour and tenant type capital invested in the farm business. In order for NFI to represent the return to farmer and spouse alone, a notional deduction is made for any unpaid labour that is provided in addition to that of the farmer or spouse. Also, to confine NFI to tenant type activities and assets of the business, an imputed rent is firstly deducted for owner occupied land and buildings and for landlord type improvements made by the tenant. Secondly, no account is taken of interest paid on any farming loans, overdrafts or mortgages or any interest earned on financial assets.

FBI differs from NFI in that it represents the return to all unpaid labour, not just the farmer and spouse and it treats the tenure of farms as it is: tenants as tenants, owner occupiers as owner occupiers and those with both types of tenure as mixed.

**Cash Income (CI)**, measures the difference between total farm receipts and total farm cash costs. This measure excludes notional items such as depreciation charges and livestock/crop valuation changes. It also takes no account of net expenditure on capital investment. CI provides a better indication than NFI and FBI of the short term income position. Trends in Cash Income since 2011/2012 are presented in Table 5.1.

**Income changes 2015/16** Cash Income, Farm Business Income and Net Farm Income by type of farm for the years ending mid-February 2014/15 and 2015/16 are presented in Tables 5.3 to 5.5. These income figures are for a sample of 285 farm businesses which were in the FBS in both account years and are at least 0.5 Standard Labour Requirements in size. This sample of farms is representative of 91 per cent of the farms of this size in Northern Ireland. The only significant types of farm business excluded from the FBS are horticulture and poultry.

At the individual farm type level, the results show that Farm Business Income, Net Farm Income and Cash Income all increased between 2014/15 and 2015/16 on General Cropping and Cattle & Sheep (LFA) farms, but decreased on Cereal, Pig, Dairy, Cattle & Sheep (Lowland), and Mixed farms.

Measured across all farm types, average Farm Business Income decreased from £25,094 in 2014/15 to £14,788 in 2015/16, a decrease of £10,306 per farm. Also measured across all farm types, average Net Farm Income decreased from £20,433 in 2014/15 to £10,082 in 2015/16 (a decrease of £10,351 per farm) and average Cash Income decreased from £42,784 in 2014/15 to £33,673 in 2015/16 (a decrease of £9,111 per farm).

**Provisional estimates of incomes for 2016/17**

Provisional estimates of incomes for full time farm businesses for the year ending mid February 2017 show average Farm Business Income measured across all farm types increasing from £14,788 in 2015/16 to £18,943 in 2016/17 i.e. an increase of £4,155 or 28 per cent per farm.

Farm Business Income is also expected to rise (by varying amounts) for all individual farm types between 2015/16 and 2016/17. The upturn in their incomes is mainly attributed to higher subsidy receipts combined with more favourable lamb and pig prices in the 2016/17 accounting year.

Average Cash Income measured across all farm types is estimated to increase from £33,673 in 2015/16 to £37,827 in 2016/17, which is an increase of £4,154 per farm. Whereas, average Net Farm Income measured across all farm types is estimated to be £14,237 in 2016/17 which is a £4,155 increase on the previous year.

The provisional income estimates described above were prepared in mid-January 2017 and relate to an account year ending in mid February 2017. They are based on the most recent information on prices, animal populations and marketings, and crop areas and yields. They should be regarded only as broad indications of the levels of income in 2016/17, as a small change between the expected and actual out-turn values of either output or input can lead to a large change in income.

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**Table 5.1 Indices of average cash income in real terms by farm type, 2011/2012 to 2016/17<sup>1</sup>**

*Indices: 2008/09 - 2010/11 = 100*

Business type	11/12	12/13	13/14	14/15	15/16	16/17 (provisional)
Cereals	101	144	129	107	88	97
General cropping	94	95	46	33	36	39
Pigs	98	86	113	118	79	89
Dairy	137	92	149	121	69	72
Cattle and sheep (LFA)	105	84	94	82	99	116
Cattle and sheep (lowland)	129	105	122	125	112	126
Mixed	124	111	115	101	44	48
All types	119	89	116	100	79	87

1. Where there are less than 3 farms in any particular cell, income figures are not published. However, where available, such income data are used to compile average 'all sizes' incomes.

**Table 5.2 Distribution of farms by cash Income (CI), net farm income (NFI), farm business income (FBI) and by farm type, 2015/16**

*per cent*

Income (£'s)	Dairy			Cattle and sheep (LFA)			All types		
	CI	NFI	FBI	CI	NFI	FBI	CI	NFI	FBI
Less than 0	6	26	26	4	33	20	7	35	24
1 - 4,999	1	15	9	4	8	7	3	11	7
5,000 - 9,999	9	5	13	9	13	8	8	10	13
10,000 - 14,999	1	13	7	8	14	17	9	12	13
15,000 - 19,999	4	5	10	15	10	21	10	7	14
20,000 - 29,999	25	8	10	29	10	6	24	8	9
30,000 - 49,999	16	19	18	17	7	16	18	10	15
> 50,000	38	10	7	15	5	6	21	6	6
<b>Total</b>	..	<b>100</b>	..	..	<b>100</b>	..	..	<b>100</b>	..
Number of farms in sample		109			100			285	

**Table 5.3 Cash income by business size and farm type, 2014/15 and 2015/16**£'000 per farm<sup>1</sup>

Business type	0.5 < 1 SLR		1 < 2 SLR		2 < 3 SLR		> 3 SLR		+ 0.5 SLR	
	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
Cereals	...	...	62.4	43.5	...	...	...	...	49.6	44.3
General cropping	...	...	...	...	...	...	...	...	22.4	31.8
Pigs	...	...	35.8	17.6	...	...	108.6	47.1	69.5	45.5
Dairy	22.1	8.5	39.1	25.9	74.0	51.8	118.5	62.5	75.9	44.2
Cattle and sheep (LFA)	15.9	19.0	30.0	36.3	84.2	83.2	95.0	135.3	25.7	30.5
Cattle and sheep (lowland)	15.7	17.1	29.1	22.0	61.3	52.1	...	...	28.3	24.9
Mixed	25.7	8.9	58.7	32.2	63.5	49.7	...	...	59.5	27.4
All types	16.5	17.6	34.0	30.2	73.7	60.4	116.8	69.2	42.8	33.7

1. Where there are less than 3 farms in any particular cell, income figures are not published. However, where available, such income data are used to compile average 'all sizes' incomes.

**Table 5.4 Farm business income by business size and farm type, 2014/15 and 2015/16**£'000 per farm<sup>1</sup>

Business type	0.5 < 1 SLR		1 < 2 SLR		2 < 3 SLR		> 3 SLR		+ 0.5 SLR	
	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
Cereals	...	...	29.0	27.5	...	...	...	...	27.0	22.7
General cropping	...	...	...	...	...	...	...	...	5.5	9.5
Pigs	...	...	27.5	1.8	...	...	72.9	5.6	48.5	18.6
Dairy	15.1	1.4	25.7	10.6	46.9	24.9	66.4	7.7	45.2	11.9
Cattle and sheep (LFA)	8.9	10.0	15.2	17.9	60.9	43.9	75.5	109.3	15.3	16.8
Cattle and sheep (lowland)	9.0	6.2	15.3	14.3	32.1	26.5	...	...	16.3	13.5
Mixed	9.6	7.1	33.5	16.4	19.7	12.1	...	...	28.3	15.3
All types	9.4	8.4	19.1	14.9	46.0	29.9	68.8	22.5	25.1	14.8

1. Where there are less than 3 farms in any particular cell, income figures are not published. However, where available, such income data are used to compile average 'all sizes' incomes.

**Table 5.5 Net farm income by business size and farm type, 2014/15 and 2015/16**£'000 per farm<sup>1</sup>

Business type	0.5 < 1 SLR		1 < 2 SLR		2 < 3 SLR		> 3 SLR		+ 0.5 SLR	
	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
Cereals	...	...	18.9	18.7	...	...	...	...	20.1	16.3
General cropping	...	...	...	...	...	...	...	...	-5.3	-1.6
Pigs	...	...	38.3	11.6	...	...	92.9	27.9	62.1	33.1
Dairy	12.4	-1.6	23.3	8.1	50.7	28.4	70.9	14.0	46.8	14.1
Cattle and sheep (LFA)	4.0	5.1	10.9	11.2	39.2	22.6	42.4	75.5	8.8	9.7
Cattle and sheep (lowland)	-0.4	-3.4	4.3	4.3	34.0	28.0	...	...	7.0	4.3
Mixed	1.2	-1.4	7.6	-7.7	4.3	-3.4	...	...	15.9	4.1
All types	3.4	2.4	13.2	8.1	43.3	27.0	69.2	24.5	20.4	10.1

1. Where there are less than 3 farms in any particular cell, income figures are not published. However, where available, such income data are used to compile average 'all sizes' incomes.



**Table 5.6 Average tenant's capital by farm type, 2015/16**

*£'000 per farm<sup>1</sup>*

	Cereals	General cropping	Dairy	Cattle and sheep (LFA)	Cattle and sheep (lowland)	Mixed	All Types
<b>Farm size (SLR)</b>	1.3	1.4	3.0	1.1	1.2	1.9	1.7
<b>Total farm area (ha)</b>	92.8	60.2	84.1	104.8	67.3	68.8	88.9
<b>Farm Business income</b>	22.7	9.5	11.9	16.8	13.5	15.3	14.8
<b>Total tenant's capital</b>	<b>93.8</b>	<b>99.8</b>	<b>213.2</b>	<b>103.0</b>	<b>138.1</b>	<b>172.0</b>	<b>144.3</b>
of which:							
<b>Short term (working) capital</b>							
trading livestock	2.9	12.5	37.7	34.5	63.0	54.9	41.7
crops	15.4	12.2	19.7	7.1	9.2	13.8	11.4
other	0.4	1.0	1.9	0.6	0.9	1.3	1.0
<b>Medium term capital</b>							
breeding livestock	1.2	0.0	94.0	32.8	33.1	37.0	49.7
machinery	73.9	74.2	60.0	28.1	31.9	65.0	40.5

1. Where there are less than 3 farms in any particular cell, income figures are not published. However, where available, such income data are used to compile average 'all sizes' incomes.

**Table 5.7 Average closing valuations by farm type, 2014/15 and 2015/16**

*£'000 per farm<sup>1</sup>*

	Dairy		Cattle and sheep (LFA)		All types	
	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
<b>ASSETS</b>						
<b>Total fixed assets</b>	1,398.4	1,366.3	1,085.6	1,081.7	1,232.8	1,219.0
of which:						
land and buildings	1,241.7	1,214.9	1,025.4	1,020.7	1,142.2	1,129.6
other fixed assets	156.6	151.4	60.2	61.0	90.6	89.4
<b>Total current assets</b>	85.9	80.0	52.5	50.0	68.8	68.4
of which:						
trading livestock, crops and stores	59.0	59.5	43.2	40.9	54.2	54.1
debtors/other short term lending	14.7	12.3	0.1	0.3	4.5	4.0
cash in hand at the bank	12.2	8.1	9.2	8.7	10.2	10.4
<b>A Total assets</b>	<b>1484.3</b>	<b>1446.2</b>	<b>1138.1</b>	<b>1131.7</b>	<b>1301.6</b>	<b>1287.5</b>
<b>LIABILITIES</b>						
<b>Total long/medium term loans</b>	71.2	79.5	6.1	6.6	27.5	30.8
of which:						
bank/other institutional	70.4	78.7	6.1	6.6	27.3	30.4
<b>Total short term loans</b>	34.7	40.7	10.3	10.6	17.9	20.3
of which:						
bank overdraft	23.7	27.9	8.9	9.0	13.2	14.4
<b>B Total external liabilities</b>	<b>106.0</b>	<b>120.2</b>	<b>16.5</b>	<b>17.2</b>	<b>45.5</b>	<b>51.2</b>
<b>NET WORTH (A-B)</b>	<b>1,378.3</b>	<b>1,326.1</b>	<b>1,121.6</b>	<b>1,114.5</b>	<b>1,256.2</b>	<b>1,236.3</b>

1. Data are averages within each farm type.

## 6. FOOD AND DRINK SECTOR

<b>Turnover</b>	Gross turnover in the food and drinks processing sector has grown considerably over the last six years, though the rate of growth has slowed over the last two years for which data is available. Provisional figures for 2015 indicate that seven out of the ten subsectors experienced growth in sales compared to 2014.
<b>Performance</b>	Sales per employee in the food and drinks processing sector has grown steadily over the last six years. Value added per employee follows a similar growth trend. Return on capital employed (ROCE) has varied from year to year over the six years.
<b>Employment</b>	The total number of full time equivalent employees (i.e. total processing sector and agency employment) involved in the processing of food and drink products has grown each year from 2011. Employment in the input supply sectors has remained fairly static over the last six years.
<b>Destination of Sales</b>	Great Britain was the main destination of sales from the NI food and drinks processing sector in 2014. The Republic of Ireland is the largest export market. Exports to Republic of Ireland and other European Union countries account for 25 per cent of Northern Ireland's food and drinks processing sector sales. The Rest of the World accounts for 3% of the sector's total sales.
<b>Farm Level Exports</b>	The total value of farm level exports increased between 2012 and 2014 mainly as a result of the growth in raw milk exports. In 2015 the total value of farm level exports fell below the 2012 value due to decreases in raw milk, sheep and live fish exports.
<b>Non-Edible Exports</b>	The total value of non-edible product exports has been in decline since 2013.

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**Table 6.1 Gross Turnover of the NI food and drinks processing sector<sup>1,2</sup>**

	<i>£ million</i>					
	2010	2011	2012	2013	2014	2015 (provisional)
Animal by-products	23	29	37	40	51	60
Bakeries	261	272	273	286	286	293
Beef and sheepmeat	992	1,039	1,167	1,214	1244	1265
Drinks	350	387	391	416	416	424
Eggs	89	97	113	132	139	134
Fish	67	71	70	76	77	76
Fruit and vegetables	230	253	257	301	309	314
Milk and milk products	875	976	972	1,000	994	1008
Pigmeat	244	250	300	316	321	312
Poultrymeat	645	671	675	697	706	710
<b>Total processing sector</b>	<b>3,777</b>	<b>4,044</b>	<b>4,254</b>	<b>4,477</b>	<b>4,544</b>	<b>4,596</b>

1. For a description of how the data have been estimated, see the publication "Size and Performance of the Northern Ireland Food and Drinks Processing Sector, Subsector Statistics", DAERA. Figures for 2015 have been estimated by adjusting the 2014 baseline, largely on the basis of information available within DAERA.
2. These figures do not include an estimate of the gross turnover of food and drinks processing businesses with turnovers of less than £250,000.

**Table 6.2 Performance indicators for the food and drinks processing sector in Northern Ireland<sup>1,2</sup>**

	2009	2010	2011	2012	2013	2014
Sales per employee (£)	174,865	187,544	201,357	208,202	214,815	218,892
Value added per employee (£)	31,394	31,869	32,204	33,621	33,795	34,721
Rate of return on capital employed (%)	9.9	10.5	10.1	10.6	10.3	10.8

1. For a description of how the data have been estimated, see the publication "Size and Performance of the Northern Ireland Food and Drinks Processing Sector, Subsector Statistics", DAERA.
2. These figures do not include an estimate of food and drinks processing businesses with turnovers of less than £250,000.

**Table 6.3 Estimated employment in the NI food and drinks processing sector and input supply sectors**

	<i>£ million</i>					
	2010	2011	2012	2013	2014	2015 (provisional)
<b>Processing of products<sup>1,2</sup></b>						
Animal by-products	115	114	120	117	116	119
Bakeries	3,396	3,165	3,260	3,261	3,462	3,461
Beef and sheepmeat	3,726	3,916	4,136	4,385	4,550	4,752
Drinks	1,168	1,437	1,385	1,377	1,362	1,349
Eggs	228	263	268	291	311	342
Fish	568	512	516	533	553	519
Fruit and vegetables	2,069	2,096	2,152	2,305	2,400	2,484
Milk and milk products	2,201	2,050	2,163	2,182	2,135	2,159
Pigmeat	1,305	1,291	1,312	1,378	1,362	1,352
Poultrymeat	5,262	5,124	4,985	5,014	4,510	4,513
<b>Total processing sector</b>	<b>20,037</b>	<b>19,966</b>	<b>20,294</b>	<b>20,843</b>	<b>20,758</b>	<b>21,048</b>
<b>Agency Employment in food and drinks processing</b>						
	-	<b>1,788</b>	<b>1,755</b>	<b>2,008</b>	<b>2,547</b>	<b>2,509</b>
<b>Manufacture and supply of inputs<sup>3</sup></b>						
Animal feed	740	740	740	750	750	750
Fertilisers and lime	200	200	200	200	200	200
Other requisites (incl. medicines)	910	890	900	910	910	910
Farm machinery (incl. servicing)	740	730	740	750	750	730
Services <sup>4</sup>	1,140	1,120	1,130	1,150	1,150	1,150
<b>Total supply sector</b>	<b>3,730</b>	<b>3,680</b>	<b>3,710</b>	<b>3,750</b>	<b>3,750</b>	<b>3,740</b>

1 See note 1 Table 6.1.

2 These figures do not include an estimate of the employment of food and drinks processing businesses with turnovers of less than £250,000.

3 Estimated from trade directory information and other DAERA sources.

4 Includes contractors, veterinary surgeons, workers in auction marts, employees of farming and marketing associations and artificial insemination workers.

**Table 6.4 Destinations and values of Northern Ireland food and drinks processing subsector sales, 2014**

*£ million*

	NI <sup>1</sup>	GB <sup>2</sup>	ROI <sup>3</sup>	Other <sup>4</sup>	ROW <sup>5</sup>	Inter- vention	Total Sales	External <sup>6</sup> Sales	Export <sup>7</sup> Sales
Animal By-Products	*	*	*	*	*	0.0	<b>51.2</b>	*	*
Bakeries	156.2	54.5	72.8	*	*	0.0	<b>286.1</b>	129.9	75.3
Beef/Sheepmeat	221.1	782.5	98.4	122.7	19.5	0.0	<b>1,244.2</b>	1,023.1	240.6
Drinks	188.8	47.6	146.8	13.4	19.6	0.0	<b>416.1</b>	227.3	179.8
Eggs	45.4	81.3	*	*	0.0	0.0	<b>139.4</b>	94.0	12.7
Fish	13.0	34.1	6.5	21.2	2.3	0.0	<b>77.1</b>	64.1	30.0
Fruit/Vegetables	99.7	151.1	56.2	0.9	0.7	0.0	<b>308.6</b>	208.9	57.8
Milk/Milk Products	320.2	216.6	149.6	243.3	64.3	0.0	<b>994.0</b>	673.8	457.2
Pigmeat	132.7	105.6	68.0	*	*	0.0	<b>320.9</b>	188.3	82.7
Poultrymeat	*	*	94.0	*	*	0.0	<b>706.0</b>	*	*
<b>Total</b>	<b>1,244.5</b>	<b>2,009.8</b>	<b>708.2</b>	<b>440.9</b>	<b>140.3</b>	<b>0.0</b>	<b>4,543.6</b>	<b>3,299.2</b>	<b>1,289.4</b>

\*Information has been suppressed to avoid disclosure.

1. Northern Ireland, 2. Great Britain, 3. Republic of Ireland, 4. Other European Union, 5. Rest of World, 6. Sales outside NI, 7. Sales outside UK.

**Table 6.5 Value of Farm and Live Fish Exports (excluding sales to Great Britain)**

*£ million*

	2011	2012	2013	2014	2015	2016 (provisional)
Live Cattle	14.9	15.5	14.1	13.0	16.0	15.1
Live Sheep	41.4	32.6	33.4	30.6	25.1	33.7
Live Pigs	1.9	1.5	3.3	1.9	1.5	1.6
Live Poultry/hatching Eggs	18.8	18.2	19.0	20.2	20.1	18.8
Live Fish <sup>1</sup>	22.2	26.9	24.1	26.5	19.6	8.2
Raw Milk	113.8	116.7	137.2	153.2	124.5	...
<b>Total Export Value</b>	<b>213.0</b>	<b>211.4</b>	<b>231.0</b>	<b>245.4</b>	<b>206.9</b>	...

1. Includes fish landings by NI trawlers in foreign countries and live farmed fish exports.

**Table 6.6 Value of non-edible product exports from the NI Agri-Food and Forestry sector**

*£ million*

	2010	2011	2012	2013	2014	2015 (provisional)
Animal feedstuffs <sup>1</sup>	72.6	90.1	97.7	117.4	96.7	96.8
Animal hides and skins	18.1	26.2	26.4	37.1	33.3	32.3
Processed wood and timber	47.7	47.3	39.7	40.7	47.1	47.0
Inedible animal and veg products <sup>2</sup>	19.5	19.7	15.4	12.3	12.8	10.7
<b>Total</b>	<b>157.9</b>	<b>183.3</b>	<b>179.1</b>	<b>207.5</b>	<b>189.8</b>	<b>186.8</b>

1. Excluding un-milled cereals.

2. Including cut flowers, hardy nursery stock, bulbs, bedding, etc. and excluding hides and skins.

Source: HMRC Regional Trade Statistics.

## 7. RURAL POPULATION

### Methodological Notes

The definition of rural used throughout this section, with the exception of Tables 7.12 and 7.13, is that provided in the Review of the Statistical Classification and Delineation of Settlements (Northern Ireland Statistics and Research Agency (NISRA) 2015). This classification recommends a default urban-rural boundary at a population threshold of 5,000.

Much of the information included in these tables is aggregated from postcode level data. However, some data are available only at small area and not at postcode level. Some small areas which comprise both urban and rural postcodes have been classified by NISRA as 'mixed' rural/urban areas. Therefore, where information is available only at small area level, tables in this section show data for 'mixed' areas.

The NISRA 2015 classification also includes a consideration of service provision, achieved by calculating estimated travel times to the location of a major service provider, operationalised as the town centre of a medium or larger settlement (at least 10,000 usual residents). Areas are further classified by their distance to Belfast. Where data is available, tables in this section provide information for rural areas within or outside a 20 minute drive-time of a medium or larger settlement, and within or outside an hour's distance from Belfast. A full description of the NISRA 2015 settlement classification is available at: <http://www.nisra.gov.uk/archive/geography/review-of-the-statistical-classification-and-delineation-of-settlements-march-2015.pdf>

Information in Table 7.12 is based on the NISRA settlement classification of 2005, which set the rural/urban population threshold at the slightly lower level of 4,500. This table will be updated next year with data based on the 2015 classification. Full details of the NISRA 2005 settlement classification is available at: [http://www.nisra.gov.uk/archive/geography/digital\\_products/urban\\_rural\\_classifications/ur\\_report.pdf](http://www.nisra.gov.uk/archive/geography/digital_products/urban_rural_classifications/ur_report.pdf)

Information in Table 7.13 is based on the Locale definitions of rural and urban used by Ofcom in 2016 [https://www.ofcom.org.uk/data/assets/pdf\\_file/0035/95876/CN-Report-2016.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0035/95876/CN-Report-2016.pdf). Locale is a third-party data source which uses a combination of Government conurbation definitions, population density, urban sprawl boundaries, Ordnance Survey roadmaps and visual inspection to classify areas. Details of the Locale definitions are available at: [http://www.bluewavegeographics.com/images/LOCALE\\_Classification.pdf](http://www.bluewavegeographics.com/images/LOCALE_Classification.pdf)

### Rural Population

In 2015, based on mid-year population estimates at small area level, 60 per cent of people in Northern Ireland lived in urban areas, 4 per cent in mixed urban/rural areas and 36 per cent in rural areas. Of those living in rural areas, 59 per cent lived within

20 minutes drive time of a medium or larger settlement and 64 per cent lived within an hour's drive time from Belfast. Rural areas have experienced a much greater population growth since 2001 than urban areas, with the biggest increases being in mixed rural/urban areas, and in rural areas less than an hour's distance from Belfast (see Figure 7.1).

**Income**

Rural households on average enjoy higher incomes than their urban counterparts. However, there is a stark difference in incomes between those living in more remote and those in more accessible rural areas. Residents of more remote areas have lower incomes and a much higher risk of poverty than rural dwellers living closer to a medium or larger settlement and/or to Belfast (see Tables 7.1 and 7.2).

**Businesses**

In 2015, there were 68,085 businesses which were registered for VAT and/or PAYE schemes in Northern Ireland. In 2015/16 businesses were legally obliged to register for VAT once their turnover exceeded £82,000. Agriculture is by far the leading industry in rural areas, particularly in those which are more than an hour's distance from Belfast. The majority of small businesses without employees are also located in rural areas, reflecting the dominance of agriculture in the rural economy (see Tables 7.3 and 7.4).

**Education**

The adult rural population have on average a lower level of degree level or higher qualification attainment than those living in urban areas (see Table 7.5). In contrast, rural school leavers are more likely to achieve GCSE or A level qualifications and to enter higher education than their urban peers (see Tables 7.6 and 7.7).

**Housing**

Rural areas show a higher level of home ownership and a much lower level of social renting than urban areas, although the latter may in part reflect availability. House prices are in general higher and have been rising faster in rural areas when compared to urban areas. The average household size is also higher in rural areas (see Tables 7.8 - 7.10).

**Transport and telecommunications**

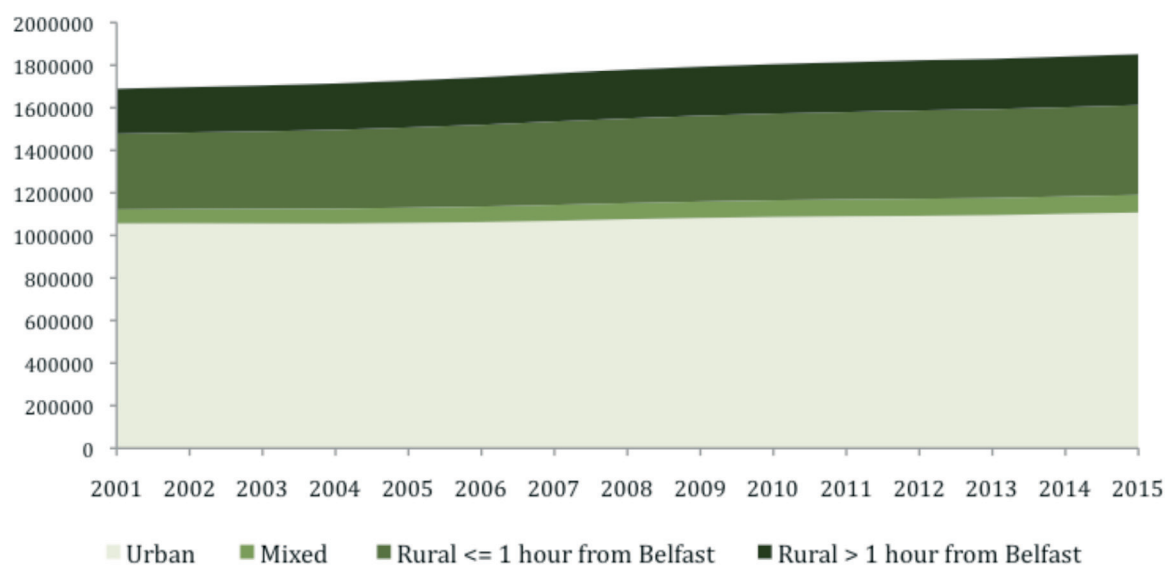
Rural dwellers have a heavy reliance on private transport, in contrast to those in urban areas who enjoy much better access to bus and rail services (see Tables 7.11 and 7.12). Availability of superfast broadband and mobile services, though improving, is still much poorer in rural areas, due to the relatively high cost of deploying communications infrastructure in areas of sparse population or difficult terrain (see Table 7.13).

**Health**

Average life expectancy is higher and mortality rates are lower in rural areas (see Tables 7.14 and 7.15). Median emergency response times are much higher in rural than in urban areas (see Tables 7.16 and 7.17).

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**Figure 7.1 Population Trends in NI**



Source: NISRA Mid year estimates 2015, November 2016, <http://www.nisra.gov.uk/demography/default.asp125.htm>  
 Small area look up table, urban/rural status 2015, <http://www.ninis2.nisra.gov.uk/public/Theme.aspx?themeNumber=10&themeName=People+and+Places>

**Table 7.1 Median equivalised<sup>1</sup> net<sup>2</sup> disposable weekly household income, 2014/15**

	Before Housing Costs £	After Housing Costs £
<b>Urban</b>	<b>420</b>	<b>373</b>
Rural <= 20 minutes of a medium or larger settlement	442	413
Rural > 20 minutes from a medium or larger settlement	363	329
Rural <= 1 hour from Belfast	436	409
Rural > 1 hour from Belfast	384	343
<b>All Rural</b>	<b>422</b>	<b>397</b>
<b>All Households (NI)</b>	<b>420</b>	<b>380</b>

- Household income is adjusted to account for variation in household size and composition.
- Net income is gross income less income tax, national insurance and a number of other costs. For full details see: Households Below Average Income Northern Ireland Quality and Methodology Information Report, 2014/15 <https://www.communities-ni.gov.uk/sites/default/files/publications/communities/hbai-2014-15-quality-methodology-information-report.pdf>

Source: DfC, Households below average income, 2014/15

**Table 7.2 Percentage of individuals with incomes below 60% UK Median Income<sup>1</sup> 2014/15**

	Before Housing Costs	After Housing Costs
<b>All Urban</b>	<b>21</b>	<b>22</b>
Rural <= 20 minutes of a medium or larger settlement	17	17
Rural > 20 minutes from a medium or larger settlement	34	32
Rural <= 1 hour from Belfast	19	17
Rural > 1 hour from Belfast	30	31
<b>All Rural</b>	<b>23</b>	<b>22</b>
<b>All Households (NI)</b>	<b>22</b>	<b>22</b>

- Relative poverty threshold.

Source: DfC, Households below average income, 2014/15.



**Table 7.3 Number of VAT and/or PAYE registered business operating in NI by broad industry group<sup>1</sup>, 2015**

Broad Industry Group	Urban	Rural					Not assigned <sup>3</sup>	Total
		<=20 mins to settlement <sup>2</sup>	>20mins to settlement <sup>2</sup>	<=hour from Belfast	> hour from Belfast	All rural		
<b>Agriculture, forestry &amp; fishing</b>	<b>3%</b>	48%	48%	52%	45%	<b>96%</b>	1%	17,255
<b>Production</b>	<b>41%</b>	34%	24%	39%	19%	<b>58%</b>	1%	4,380
<b>Construction</b>	<b>33%</b>	34%	33%	41%	25%	<b>66%</b>	1%	8,975
<b>Motor trades</b>	<b>39%</b>	39%	21%	40%	20%	<b>60%</b>	1%	2,350
<b>Wholesale</b>	<b>46%</b>	32%	19%	34%	16%	<b>50%</b>	3%	3,265
<b>Retail</b>	<b>62%</b>	20%	15%	22%	13%	<b>35%</b>	4%	6,140
<b>Transport &amp; storage (inc. postal)</b>	<b>35%</b>	37%	25%	41%	22%	<b>62%</b>	3%	2,160
<b>Accommodation &amp; food services</b>	<b>69%</b>	16%	14%	18%	12%	<b>30%</b>	1%	3,580
<b>Information &amp; communication</b>	<b>72%</b>	16%	8%	19%	5%	<b>24%</b>	4%	1,615
<b>Finance &amp; insurance</b>	<b>70%</b>	16%	9%	18%	7%	<b>25%</b>	5%	1,050
<b>Property</b>	<b>66%</b>	21%	11%	23%	10%	<b>33%</b>	1%	1,925
<b>Professional, scientific &amp; technical</b>	<b>69%</b>	17%	10%	21%	7%	<b>28%</b>	3%	5,210
<b>Business administration and support services</b>	<b>48%</b>	30%	19%	31%	18%	<b>49%</b>	3%	2,365
<b>Public administration and defence</b>	<b>85%</b>	*	0%	*	0%	*	*	65
<b>Education</b>	<b>72%</b>	18%	8%	18%	9%	<b>27%</b>	1%	600
<b>Health</b>	<b>69%</b>	17%	11%	18%	10%	<b>29%</b>	2%	2,875
<b>Arts, entertainment, recreation and other services</b>	<b>67%</b>	19%	12%	21%	10%	<b>31%</b>	2%	4,275
<b>All Industries</b>	<b>41%</b>	<b>31%</b>	<b>26%</b>	<b>35%</b>	<b>23%</b>	<b>57%</b>	<b>2%</b>	<b>68,085</b>

1. For full description of standard industrial classification (2007) see Office for National Statistics: <https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007>

2. Settlement with population of 10,000 or more.

3. A small number of businesses could not be classified as Urban/Rural due to incomplete geographical information

\*Counts under 5 have been suppressed.

Figures have been rounded to the nearest 5 and thus may not sum to totals.

Source: Interdepartmental Business Register, 2015, DoF.

**Table 7.4 Number of VAT and/or PAYE registered businesses operating in NI, by employee sizeband, 2015**

	Urban	Rural				All rural	Not assigned <sup>2</sup>	Total
		<=20 mins to settlement <sup>1</sup>	>20mins to settlement <sup>1</sup>	<=hour from Belfast	> hour from Belfast			
<b>Sole Trader (No employees)</b>	<b>14%</b>	41%	44%	46%	39%	<b>85%</b>	1%	15,960
<b>Other<sup>3</sup> (No employees)</b>	<b>18%</b>	44%	37%	49%	32%	<b>81%</b>	1%	6,015
<b>Micro (1-9 employees)</b>	<b>51%</b>	28%	20%	30%	17%	<b>47%</b>	2%	38,580
<b>Small (10-49 employees)</b>	<b>64%</b>	20%	12%	22%	10%	<b>32%</b>	4%	6,015
<b>Medium (50-249 employees)</b>	<b>63%</b>	16%	9%	18%	7%	<b>25%</b>	12%	1,220
<b>Large (250+ employees)</b>	<b>71%</b>	8%	2%	7%	3%	<b>10%</b>	19%	295
<b>All</b>	<b>41%</b>	<b>31%</b>	<b>26%</b>	<b>35%</b>	<b>23%</b>	<b>57%</b>	2%	68,085

1. Settlement with population of 10,000 or more.

2. A small number of businesses could not be classified as Urban/Rural due to incomplete geographical information.

3. This sizeband includes partnerships, holding companies and those companies that are not yet trading, for example, if a factory is under construction.

Figures have been rounded to the nearest 5 and thus may not sum to totals.

Source: Interdepartmental Business Register, 2015, DoF.

**Table 7.5 Highest educational qualification<sup>1</sup> 2015/16**

	Degree level or higher qualifications	Qualifications below degree level	No qualifications	Base <sup>1</sup> =100%
<b>All Urban</b>	<b>27%</b>	<b>54%</b>	<b>19%</b>	<b>1,821</b>
Rural <= 20 minutes of a medium or larger settlement	22%	59%	18%	528
Rural > 20 minutes from a medium or larger settlement	23%	57%	19%	411
Rural <= 1 hour from Belfast	23%	60%	17%	609
Rural > 1 hour from Belfast	22%	55%	23%	330
<b>All rural</b>	<b>23%</b>	<b>58%</b>	<b>19%</b>	<b>939</b>
<b>Total</b>	<b>26%</b>	<b>55%</b>	<b>19%</b>	<b>2,760</b>

1. Includes only respondents aged under 70 years

Source: DoF, NI Continuous Household Survey, 2015/16

**Table 7.6 Performance of school leavers 2014/15**

	Urban	Rural					All NI
		<=20 mins to settlement <sup>1</sup>	>20mins to settlement <sup>1</sup>	<=hour from Belfast	> hour from Belfast	All rural	
<b>At least 5 GCSEs A*-C<sup>2</sup></b>	<b>79%</b>	84%	84%	84%	83%	<b>84%</b>	<b>81%</b>
<b>At least 5 GCSEs A*-C<sup>2</sup> inc. GCSE English and maths</b>	<b>63%</b>	71%	71%	72%	69%	<b>71%</b>	<b>66%</b>
<b>2+ A Levels A*-E<sup>2</sup></b>	<b>56%</b>	60%	60%	60%	59%	<b>60%</b>	<b>58%</b>
<b>TOTAL</b>	<b>13,004</b>	5,146	4,069	5,958	3,257	<b>9,215</b>	<b>22,219</b>

1. Settlement with population of 10,000 or more.

2. Including equivalents.

Source: DE School Leaver's Survey 2014/15.

**Table 7.7 Destinations of school leavers 2014/15**

	Urban	Rural					All NI
		<=20 mins to settlement <sup>1</sup>	>20mins to settlement <sup>1</sup>	<=hour from Belfast	> hour from Belfast	All rural	
<b>Higher Education<sup>2</sup></b>	<b>39%</b>	46%	47%	47%	46%	<b>47%</b>	<b>42%</b>
<b>Further Education</b>	<b>36%</b>	35%	32%	34%	34%	<b>34%</b>	<b>35%</b>
<b>Employment</b>	<b>9%</b>	6%	7%	7%	6%	<b>7%</b>	<b>8%</b>
<b>Training<sup>3</sup></b>	<b>10%</b>	9%	10%	9%	11%	<b>9%</b>	<b>10%</b>
<b>Unemployment</b>	<b>3%</b>	2%	2%	2%	2%	<b>2%</b>	<b>3%</b>
<b>Others</b>	<b>2%</b>	1%	1%	1%	2%	<b>1%</b>	<b>2%</b>
<b>TOTAL</b>	<b>13,004</b>	5,146	4,069	5,958	3,257	<b>9,215</b>	<b>22,219</b>

1. Settlement with population of 10,000 or more.

2. Destination is defined by Institution. Institutions may provide courses at both Further and Higher Education levels.

3. Numbers entering training include those entering the Training for Success programme, operated by the Department for the Economy. Training on Training for Success is delivered by a range of training providers, including Further Education Colleges. Training for Success trainees who receive training at Further Education Colleges are recorded as being in training and not in Further Education. This convention avoids double counting of Training for Success trainees.

Source: DE School Leaver's Survey 2014/15.

**Table 7.8 Housing Tenure 2015/16**

	Owner occupied/ co-ownership	Social rented	Private rented	Rent free	Base =100%
<b>All Urban</b>	<b>59%</b>	<b>22%</b>	<b>18%</b>	<b>1%</b>	<b>1,690</b>
Rural <= 20 minutes of a medium or larger settlement	75%	9%	14%	2%	450
Rural > 20 minutes from a medium or larger settlement	77%	6%	15%	2%	354
Rural <= 1 hour from Belfast	75%	7%	15%	3%	516
Rural > 1 hour from Belfast	77%	8%	13%	2%	288
<b>All rural</b>	<b>76%</b>	<b>7%</b>	<b>15%</b>	<b>2%</b>	<b>804</b>
<b>Total</b>	<b>65%</b>	<b>17%</b>	<b>17%</b>	<b>1%</b>	<b>2,494</b>

Source: DoF, NI Continuous Household Survey, 2015/16

**Table 7.9 House prices, 2016**

	Q3 2016	Increase since Q1, 2015
<b>All Urban</b>	<b>£118,748</b>	<b>11.7%</b>
Rural <= 20 minutes of a medium or larger settlement	£140,996	12.9%
Rural > 20 minutes from a medium or larger settlement	£137,495	12.2%
Rural <= 1 hour from Belfast	£144,233	11.8%
Rural > 1 hour from Belfast	£128,390	14.8%
<b>All Rural</b>	<b>£139,904</b>	<b>12.7%</b>
<b>All Households (NI)</b>	<b>£124,093</b>	<b>11.9%</b>

Source: NI House price Index, Detailed Statistics, November, 2016, <https://www.finance-ni.gov.uk/publications/ni-house-price-index-statistical-reports>

**Table 7.10 Average household size, 2015/16**

	Mean number persons per household	Base=100%
<b>All Urban</b>	<b>2.33</b>	<b>1,691</b>
Rural <= 20 minutes of a medium or larger settlement	2.65	450
Rural > 20 minutes from a medium or larger settlement	2.74	354
Rural <= 1 hour from Belfast	2.68	516
Rural > 1 hour from Belfast	2.69	288
<b>All Rural</b>	<b>2.69</b>	<b>804</b>
<b>All Households (NI)</b>	<b>2.44</b>	<b>2,495</b>

Source: DoF, NI Continuous Household Survey, 2015/16

**Table 7.11 Household access to car or van, 2015/16**

	No cars /vans	1 car /van	2 cars vans	>2 cars /vans	Base=100%
<b>All Urban</b>	<b>26%</b>	<b>45%</b>	<b>24%</b>	<b>5%</b>	<b>1,691</b>
Rural <= 20 minutes of a medium or larger settlement	9%	38%	39%	14%	450
Rural > 20 minutes from a medium or larger settlement	8%	42%	36%	13%	354
Rural <= 1 hour from Belfast	8%	40%	38%	14%	516
Rural > 1 hour from Belfast	10%	39%	38%	14%	288
<b>All rural</b>	<b>9%</b>	<b>40%</b>	<b>38%</b>	<b>14%</b>	<b>804</b>
<b>Total</b>	<b>21%</b>	<b>43%</b>	<b>28%</b>	<b>8%</b>	<b>2,495</b>

Source: DoF, NI Continuous Household Survey, 2015/16

**Table 7.12 Access to public transport<sup>1</sup>**

	Urban	Rural	All NI
<b>Walk to nearest bus stop</b>			
3 minutes or less	40%	22%	34%
44 minutes or longer	0%	9%	4%
<b>Bus service frequency</b>			
At least once every 15 minutes	20%	0%	13%
Less than daily	0%	3%	1%
<b>Walk to nearest railway station</b>			
6 minutes or less	5%	1%	3%
44 minutes or longer or n/a	44%	92%	62%
<b>Rail service frequency<sup>2</sup></b>			
At least once an hour	82%	64%	76%
Less frequent service	4%	4%	4%

1. Based on the 2005 NISRA urban rural definition, which has now been updated.

2. This question was not asked if the respondent replied 'Not applicable' to the question on distance to nearest railway station.

Source: Travel Survey for NI, Urban-Rural report 2012-14, <https://www.infrastructure-ni.gov.uk/system/files/publications/infrastructure/TSNI%20Urban-Rural%20report%202012-2014.pdf>

**Table 7.13 Telecommunication services**

	Urban <sup>1</sup>	Rural <sup>1</sup>	NI
<b>Broadband speeds and availability</b>			
Average download speeds (Mbits)	39	21	34
Average monthly data usage (GB)	122	96	115
Average upload speeds (Mbits)	4	4	4
Premises with Superfast Broadband	37%	24%	33%
<b>Mobile Coverage</b>			
Premises in partial not-spots (Voice)	8%	44%	19%
Premises in partial not-spots (Data)	16%	59%	28%
Premises in complete not-spots (Voice)	0%	4%	1%
Premises in complete not-spots (Data)	0%	6%	2%
Premises covered by all operators (Voice)	92%	51%	80%
Premises covered by all operators (Data)	84%	36%	70%

1. Based on Locale classification of Urban and Rural.

Source: Ofcom, 2016: Connected Nations 2016, Northern Ireland, [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0037/95878/CN16-NI.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0037/95878/CN16-NI.pdf)

**Table 7.14 Life expectancy at birth<sup>1</sup>**

Years

	2009-11		2010-12		2011-13		2012-14	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>Urban</b>	76.4	81.1	76.7	81.4	77.0	81.6	77.3	81.6
<b>Mixed Urban/Rural</b>	79.5	82.3	79.8	82.3	79.6	82.6	79.1	82.2
<b>Rural</b>	78.9	83.2	79.1	83.5	79.5	83.7	79.9	83.7
<b>All NI</b>	77.4	81.9	77.7	82.1	78.0	82.3	78.3	82.3

1. The expected years of life at time of birth based on mortality patterns in the period in question. Based on the average death rates over a 3 year period.

Source: <https://www.health-ni.gov.uk/publications/health-inequalities-regional-report-2016>

**Table 7.15 Standardised Death Rate - All age, all cause Mortality<sup>1</sup>**

Deaths per 100,000 population

	2008-12	2009-13	2010-14
<b>Urban</b>	1,152	1,129	1,105
<b>Mixed Urban/Rural</b>	1,024	1,027	1,041
<b>Rural</b>	987	965	950
<b>All NI</b>	1,090	1,068	1,048

1. Calculated by standardising (using the direct method) the average death rate in NI over a 5 year period to the 2013 European standard

Source: <https://www.health-ni.gov.uk/publications/health-inequalities-regional-report-2016>

**Table 7.16 Median Fire Response Times<sup>1</sup>**

Time (Minutes:Seconds)

	2010-11	2011-12	2012-13	2013-14	2014-15
<b>Urban</b>	06:44	06:42	06:07	05:15	05:21
<b>Mixed Urban/Rural</b>	09:20	09:54	08:53	07:58	08:23
<b>Rural</b>	13:49	14:44	12:19	11:48	12:07
<b>All NI</b>	07:57	08:10	07:00	06:20	06:26

1. The median response time taken by the Northern Ireland Fire and Rescue Service (NIFRS) to respond to an incident.

Source: <https://www.health-ni.gov.uk/publications/health-inequalities-regional-report-2016>

**Table 7.17 Median Ambulance Response Times<sup>1</sup>**

Time (Minutes:Seconds)

	2011	2012	2013	2014	2015
<b>Urban</b>	04:53	05:42	05:43	06:53	07:46
<b>Mixed Urban/Rural</b>	05:56	07:22	07:17	07:42	09:09
<b>Rural</b>	11:46	12:41	12:30	13:33	15:03
<b>All NI</b>	05:50	06:51	06:48	08:15	09:21

1. The median time taken by the first ambulance to respond to an incident.

Source: <https://www.health-ni.gov.uk/publications/health-inequalities-regional-report-2016>

## 8. ANIMAL HEALTH AND WELFARE

### Disease

DAERA has on-going programmes of disease management and eradication. Recent diseases of importance are bovine tuberculosis, bovine brucellosis, bovine spongiform encephalopathy (BSE) and bovine viral diarrhoea (BVD). Since BSE was first reported in Northern Ireland during 1988, there have been a total of 2,189 cases. The number of BSE cases in Northern Ireland has declined significantly since the peak in 1993. There have been no cases of BSE since 2012 and Northern Ireland has applied for BSE negligible risk status.

During 2016, there were 1,739 new herd breakdowns in Northern Ireland due to bovine tuberculosis, while there were no confirmed brucellosis breakdowns. The last confirmed brucellosis breakdown occurred in February 2012 and Northern Ireland achieved Official Brucellosis Freedom on 6 October 2015. Bovine tuberculosis was at a peak level in 2002 and since that time the herd incidence has reduced although a rising incidence was observed during 2015 and 2016.

Bovine viral diarrhoea (BVD) is a highly contagious viral disease of cattle that can be spread directly by infected animals, or indirectly, for example by contaminated materials. The majority of persistently infected (PI) animals will die before they reach breeding age or slaughter weight, so the disease has significant animal health and economic impacts.

The Northern Ireland programme is an industry led scheme and the compulsory phase began on 1st March 2016. It is based on testing ear tissue tag samples, collected using tissue sample-enabled official identity tags, for BVD virus.

The introduction of compulsory testing has led to a marked increase in the number of herds that have joined the programme. The number of tests being returned with negative results is approximately 99 per cent. Key to eradication will be the identification and removal of PI animals from the cattle population.

### Animal Welfare

DAERA undertakes farm animal welfare surveillance activity and plays an important and active role in educating livestock keepers in standards of welfare. Farm premises, farming practices, animal transportation, markets and slaughter houses are all assessed against legal requirements, and enforcement used where necessary. The responsibility for many of these routine and targeted checks falls to the Veterinary Service Animal Health Group (VSAHG).

Veterinary Service Animal Health Group carried out 656 on-farm welfare inspections in 2016. Inspections take place as a result of complaints from members of the public; or are targeted as a result

of information produced by vets working in meat plants; or are programmed as part of the statutory cross compliance surveillance system to assess whether on-farm welfare meets the standards laid down in legislation. Since 2007 many of the inspections are carried out as part of the Cross-Compliance inspection programme associated with the Single Farm Payment scheme. Some inspections, particularly in the complaint category, will represent repeated visits to the same farm where an on-farm welfare problem has been identified. Most inspections will involve more than one category of stock inspection.

Of the 656 welfare inspections carried out on farms by VSAHG during 2016, 92 per cent were complaint, targeted, or cross compliance inspections (where herds are identified as being “at risk”) with the remaining 8 per cent being random cross compliance checks.

Of the 55 random cross compliance inspections in 2016, 96 per cent achieved an overall assessment of compliance with legislation (compared with 97 per cent in 2014 and 100 per cent in 2015).

Of the complaint and targeted visits and risk cross compliance inspections in total, 88 per cent achieved compliance with legislation (compared with 80 per cent in 2015 and 85 per cent in 2014). Just over 12 per cent of these 601 inspections indicated levels of non-compliance needing corrective action. This category of inspections carries a higher risk of non-compliance compared to those that are randomly selected from all Northern Ireland keepers as they are identified through known triggers. The vast majority of Northern Ireland herd keepers are compliant.

Taking all welfare inspections into account there were 4 per cent assessed as showing a serious welfare problem requiring immediate action with respect to application of administrative or criminal penalties. In 2016, a total of 3 farm animal keepers were disqualified by the courts as a result of serious welfare breaches.

All complaints and allegations of poor welfare on specific farms are treated as a matter of urgency. DAERA also co-operate closely with other organisations such as PSNI and the USPCA.



**Table 8.1 Bovine Tuberculosis (TB) Statistics**

	2011	2012	2013	2014	2015	2016
No. cattle herds eligible for TB testing <sup>1</sup>	25,677	25,776	25,671	25,841	26,105	25,945
<b>Total Number of Unrestricted Herd Tests</b>	27,247	26,992	26,703	26,670	27,716	27,504
Total number of animals TB tested	1,607,171	1,643,626	1,620,055	1,607,660	1,662,526	1,709,790
Total new herd TB incidents <sup>2</sup>	1,386	1,695	1,479	1,397	1,688	1,739
Number of TB reactors	8,136	10,897	8,271	8,838	10,996	11,923

1. Based on the number of cattle herds presenting cattle for a TB herd test during the previous four years.

2. Herds with at least one TB skin reactor animal but no TB skin reactor animals during the previous 12 months.

**Table 8.2 Bovine Brucellosis (BR) Statistics**

	2011	2012	2013	2014	2015 <sup>3</sup>	2016
No. cattle herds eligible for BR testing <sup>1</sup>	23,302	23,189	23,121	23,063	23,041	22,547
<b>Total number of unrestricted Herd Tests</b>	23,297	21,622	20,807	20,221	15,286	8,689
Total number of animals BR tested	945,609	938,693	926,298	902,672	732,716	253,265
Total new herd BR incidents <sup>2</sup>	21	23	26	8	0	2
New BR herd incidents confirmed by isolation of Br. abortus	4	1	0	0	0	0
Number of BR reactors	247	64	32	10	0	2
Number of BR reactors confirmed by isolation of Br. abortus	70	8	0	0	0	0

1. Based on the number of cattle herds presenting cattle for a brucellosis herd test during the previous four years.

2. Herds with at least one brucellosis serological reactor animal but no reactor animals during the previous 12 months.

3. No confirmed BR breakdowns since February 2012 and Northern Ireland declared Officially Brucellosis Free on 6th October 2015.

**Table 8.3 Bovine Viral Diarrhoea (BVD) Eradication Programme Statistics**

	2013 (voluntary phase)	2014 (voluntary phase)	2015 (voluntary phase)	2016 (compulsory from 1st March)
Number of Herds Joined Programme	1,910	2,125	619	13,115
Tests uploaded	63,529	156,348	178,716	481,875
% Negative tests	98.37%	98.55%	98.72%	98.75%
% (Number) Positive* tests	0.63% (382)	0.49% (742)	0.46% (795)	0.68% (3,181)
% (Number) Inconclusive* tests	0.01% (4)	0.01% (8)	0.01% (21)	0.01% (63)
% (Number) Empty* tests	1.00% (613)	0.96% (1,464)	0.81% (1,412)	0.56% (2,592)

\*Based on initial tag test result, prior to any confirmatory testing.

**Table 8.4 Outcomes (provisional) of on-farm animal welfare inspections completed on NI farms in 2016**

Type of inspections	Compliance with animal welfare legislation	Number of Inspections	Category of Non-compliance	Number per category	Percentage of total %
<b>Cross-compliance programme of random inspections</b>	No	2	A	0	0.0
			B	1	1.8
			C	1	1.8
	Yes	53		53	96.4
	<b>Total</b>	<b>55</b>		<b>55</b>	<b>100.0%</b>
<b>Cross-compliance Risk Assessment based, other Targeted and Complaint related inspections</b>	No	75	A	35	5.8
			B	12	2.0
			C	28	4.7
	Yes	526		526	87.5
	<b>Total</b>	<b>601</b>		<b>601</b>	<b>100%</b>
<b>All inspections</b>	No	77	A	35	5.3
			B	12	2.0
			C	29	4.4
	Yes	579		579	88.3
	<b>Total</b>	<b>656</b>		<b>656</b>	<b>100%</b>

Note 1 Reference EC decision 2006/778. Categories of non-compliance are defined as follows:

- Category A: non-compliance related to housing or animal treatment with no immediate action for administrative or criminal penalties, though corrective action is required within 3 months.
- Category B: non-compliance associated with staff training, record keeping or frequency of inspection of animals with no immediate action for administrative or criminal penalties, though notice should give an appropriate amount of time to make the necessary improvements i. e. more than 3 months.
- Category C: a serious welfare problem requiring immediate action with respect to application of administrative or criminal penalties.

## 9. ENVIRONMENT

**Local Authority Collected Waste** In 2015/16, Northern Ireland's councils collected 969,157 tonnes of Local Authority Collected (LAC) municipal waste (see table 9.1). This was a 1.9 per cent increase on the 951,423 tonnes collected in 2014/15. Household waste accounts for the majority of total LAC municipal waste arisings and has varied between 88 per cent and 89 per cent in recent years. The longer term trend has been a reduction in LAC municipal waste arisings from 985,176 tonnes in 2010/11 to a low of 913,546 in 2012/13, a 7.3 per cent decrease. Since then arisings have increased by 6.1 per cent. The amount of household waste per capita and household waste per household followed a similar trend to the total waste arisings showing a fall until 2012/13 and then a gentle increase since.

The recycling rates for LAC municipal waste and household waste have increased over the last six years. The LAC recycling rate increased from 36 per cent in 2010/11 to 42 per cent in 2015/16 whilst the household recycling rate increased from 37 per cent in 2010/11 to 42 per cent in 2015/16. It is important to bear in mind that the recycling rate has included reuse as well as dry recycling and composting from 2012/13 onwards, this added around 0.1 percentage points to the rate.

The proportion of LAC municipal waste sent for energy recovery has seen strong growth between 2010/11 to 2015/16 with the energy recovery rate increasing from 1.4 per cent in 2010/11 to 18 per cent in 2015/16.

The landfill rates for LAC municipal waste and household waste have been declining over the last six years. The landfill rate for household waste recorded a new low of 40 per cent in 2015/16, which is 3 percentage points less than the 2014/15 rate (43 per cent) and 21 percentage points less than the 2010/11 rate (61 per cent).

The amount of biodegradable LAC municipal waste (BLACMW) sent to landfill in 2015/16 has fallen by 38 per cent compared with the amount sent in 2010/11. Whilst the tonnage of BLACMW being sent to landfill is decreasing in line with the allocation, the proportion of the allocation used has remained similar at around 75-82 per cent, with the exception of 2011/12 and 2012/13 when 66 per cent and 86 per cent of the allocation was used.

**Greenhouse Gas Emissions** Greenhouse gases include carbon dioxide, methane and nitrous oxide. The presence of these gases in the atmosphere affects the temperature of the earth. There are concerns that increasing concentrations of greenhouse gases in the atmosphere are contributing to climate changes with potentially harmful consequences for the environment and human health. Agriculture is a major contributor to emissions of methane and nitrous oxide.

In 2014, Northern Ireland's greenhouse gas emissions were estimated to be 20.3 million tonnes of carbon dioxide equivalent. This was a decrease of 3.0 per cent compared to 2013. The longer term trend showed a decrease of 17 per cent compared to the base year (see figure 9.1). The base year is 1990 for carbon dioxide, methane and nitrous oxide, and 1995 for the fluorinated gases. The largest sectors in terms of emissions in 2014 (see figure 9.2) were agriculture (28 per cent), transport (21 per cent) and energy supply (19 per cent). Most sectors showed a decreasing trend since the base year. The largest decreases were in the energy supply, residential and waste sectors. Emissions from the agriculture sector decreased by 5.2 per cent between the base year and 2014, whereas, between 2013 and 2014 its emissions decreased of 0.6 per cent.

### **Water quality**

There are a number of ways to assess water quality. An overall classification which uses a combination of biological, chemical and hydromorphological quality elements (including macroinvertebrates, pH and ammonia) can be derived from the specification of quality elements in the Water Framework Directive (WFD). This classification permits the quality status of river water-bodies to be assigned as one of five classes from 'high' through to 'bad'.

WFD classifications prior to 2015 were based on the first cycle water body set that related to 623 water bodies. During the first cycle, improvements were made to the classification tools and standards that resulted in a reduction in the number of water bodies for the second cycle. Within the second cycle, there were a total of 497 surface water bodies in Northern Ireland. This includes 450 rivers, 21 lakes, and 26 transitional and coastal waters. The total area covered remains the same but the water bodies across the two cycles are not directly comparable.

In 2015, approximately 12 per cent of river water bodies were classified as 'poor' or 'bad' quality, using the new water body sets and new standards. This compares with approximately 14 per cent classified as 'poor' or 'bad' in 2014 (see table 9.2).

Regional monitoring of nitrate concentrations in groundwater across Northern Ireland began in 2000. The Groundwater Daughter Directive (2006/118/EC) sets the groundwater quality standard at 50 mg NO<sub>3</sub>/l. In the period 2000 to 2006, approximately 91 per cent of sites had an annual mean concentration of less than 40 mg NO<sub>3</sub>/l and approximately 82 per cent were less than 25 mg NO<sub>3</sub>/l. Regional monitoring re-commenced in 2008, after a major review of the network was undertaken. The figures both pre and post review are broadly comparable. In 2015, nitrate concentrations were monitored at 51 groundwater sites across Northern Ireland giving an average concentration of 4.4 mg NO<sub>3</sub>/l. Groundwater nitrate concentrations across Northern Ireland are generally low with 49 of the 51 (96 per

cent) stations below 25 mg NO<sub>3</sub>/l in 2015 (see table 9.3). Note that one station equals 2.0 per cent.

**Agri-environmental Schemes** Agri-environmental schemes are managed in Northern Ireland under the Rural Development Programme (RDP). In 2015, 305,000 hectares (approximately 29 per cent of NI farmland) had been managed under agri-environment scheme agreements. These schemes include the Northern Ireland Countryside Management Scheme (NICMS), Countryside Management Scheme (CMS), the Environmentally Sensitive Areas Scheme (ESAS) and the Organic Farming Scheme (OFS). During 2016, the area of agricultural land managed through these schemes decreased by 85 per cent to 46,000 hectares (approximately 4-5 per cent of NI farmland). This was due to the expiration in 2016 of those remaining 10 year agreements from the older agri-environment schemes (CMS and ESAS). Within the newer NICMS scheme, a significant proportion of the total number of agreements also came to the end of their 7 year term in late 2015. The land within this NIC1 proportion was considered to be outside the agreement period from 01/01/2016. There are now only approximately 585 agreements still active within the NICMS scheme.

The trends for uptake of agri-environment schemes and the area under agreement have been determined by a number of factors including length of scheme agreement, farmer participation, available funding and resources to manage and deliver schemes.

It is anticipated that the imminent launch of the new Environmental Farming Scheme (EFS) during the first half of 2017 will again increase the amount of land participating within agri-environment schemes from the current low point.

The planned intake for Tranche 1 of EFS in 2017/2018 is 2,000 businesses with an EFS Wider agreement and 300 with an EFS Higher agreement.

The new EFS was developed under the NIRD 2014-2020. This 5 year scheme will be launched in successive tranches and will have three levels

- A targeted level, primarily for designated sites.
- A wider level to deliver benefits across the countryside, outside of environmentally designated areas.
- A group level to support co-operative action by farmers in specific areas such as a river catchment or commonages.

**Organic farming** Organic farming involves holistic production management systems for crops and livestock, based on ecological principles that impose strict limitations on farm inputs, especially purchased inputs, in order to minimise damage to the environment and wildlife. Farming is only considered to be 'organic' at EU-level if it complies with Council

Regulation (EEC) No. 2092/91. Northern Ireland has one of the lowest proportions of farmland under organic management amongst the EU-15. The area of land farmed organically in Northern Ireland has fallen by 47 per cent from 15 thousand hectares in 2010 to 8 thousand hectares in 2015. The UK overall recorded a decrease of 27 per cent, from 718 thousand hectares in 2010 to 521 thousand hectares in 2015 (see table 9.5).

## **Forestry**

In Northern Ireland the state owned forest area has changed little since 1995 (see table 9.6). In 2012 the Northern Ireland Woodland Base-map incorporated new woodland data from the DAERA Land Parcel Identification System (LPIS) project. This has contributed a significant additional area of woodland that had not previously been captured by any of the original datasets. Remote sensing was used to identify significant areas of non-woodland and the removal of these also resulted in an improved estimate. Following the introduction of a new system the area of 'privately owned forest area' is estimated to be 50 thousand hectares in 2015/16. Privately-owned forest area data for the years prior to 2011/12 are now thought to be under-estimates.

The area of woodland in the UK has increased over the past century. Approximately 5 per cent of the UK was covered by woodland in 1924; in 2005 almost 12 per cent of the UK was wooded.

Grant support to encourage afforestation and sustainable management of privately owned woodlands is provided by forestry measures in the Rural Development Programme. In 2015/16, there were 54 hectares of new woodland funded by the European Commission under the transitional arrangements in place after the closure of the 2006-2013 Rural Development Programme and opening of a 2014-2020 Rural Development Programme (see Figure 9.3). In Northern Ireland, Short Rotation Coppice (SRC) willow for renewable energy was planted with support from the 2007 – 2013 Rural Development Plan.

**Table 9.1 Local Authority Collected Waste Management Statistics for Northern Ireland, 2010/11 - 2015/16**

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Arisings</b>						
Total LAC municipal waste arisings (tonnes)	985,176	949,491	913,546	924,412	951,423	969,157
Household waste arisings (tonnes)	870,254	834,149	803,624	814,764	839,569	860,786
Non household waste arisings (tonnes)	114,922	115,343	109,922	109,649	111,853	108,371
<b>Household waste per capita and per household</b>						
Annual household waste per capita (kg)	482.2	459.8	440.7	445.3	456.2	464.9
Annual household waste per household (tonnes)	1.224	1.170	1.121	1.130	1.158	1.179
<b>Recycling</b>						
LAC municipal waste sent for preparing for reuse, recycling and composting (%)	35.5	38.4	38.8	40.7	41.4	41.8
Household waste sent for preparing for reuse, recycling and composting (%)	37.3	39.7	39.8	41.4	42.0	42.2
<b>Energy Recovery</b>						
LAC municipal waste sent for energy recovery (%)	1.4	2.9	6.9	10.1	14.9	17.6
<b>Landfill</b>						
LAC municipal waste landfilled (%)	62.8	58.1	53.6	48.6	43.4	40.3
Household waste landfilled (%)	61.0	56.7	52.8	48.0	42.7	39.7
<b>Biodegradable LAC municipal waste (BLACMW)</b>						
biodegradable LAC municipal waste landfilled (tonnes)	350,725	309,792	276,723	251,951	229,099	218,898
biodegradable LAC municipal waste allocation (tonnes)	469,937	465,950	320,000	305,714	291,428	277,142
proportion of allocation utilised (%)	75	66	86	82	79	79

Source: NIEA, <https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-2015>

Notes:

LAC = local authority collected.

Rates calculated by dividing total tonnage of waste sent in each category by total waste arisings.

In 2012/13, reuse was included with recycling and composting. The impact was small, adding less than 0.1 percentage points to the NI rate.

The per capita rates are calculated by dividing household waste arisings by population (using NISRA mid-year estimates).

The per household rates are calculated by dividing household waste arisings by number of households (estimated from the total housing stock from LPS adjusted for vacant properties using the 2011 census).

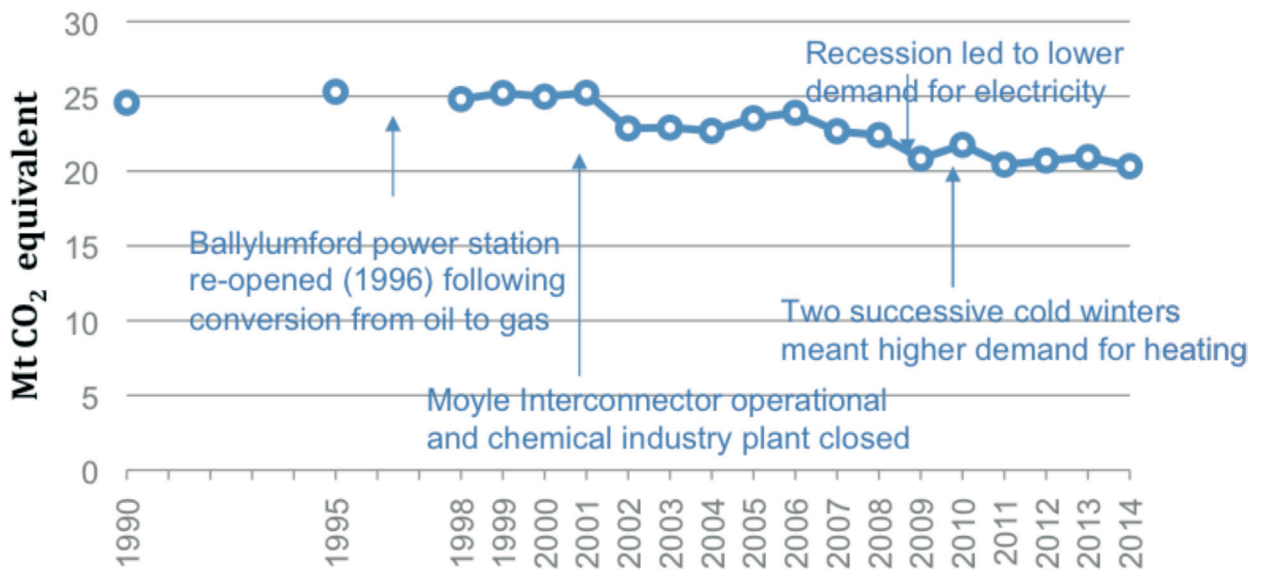
Energy recovery is when waste products are converted into energy through either incineration or the application of other technologies.

Under the Northern Ireland Landfill Allowance Scheme regulations councils have been allocated a number of allowances (each allowance represents 1 tonne) for each year until 2019/20. However in any scheme year a council may transfer allowances to other councils in order to ensure that each council does not exceed the amount it is permitted to send to landfill. The allowance allocations shown above are after transfers. For more information see NIEA's annual NILAS report:

<https://www.daera-ni.gov.uk/articles/northern-ireland-landfill-allowance-scheme-nilas>



**Figure 9.1 Total greenhouse gas emissions in Northern Ireland, 1990 and 2014**

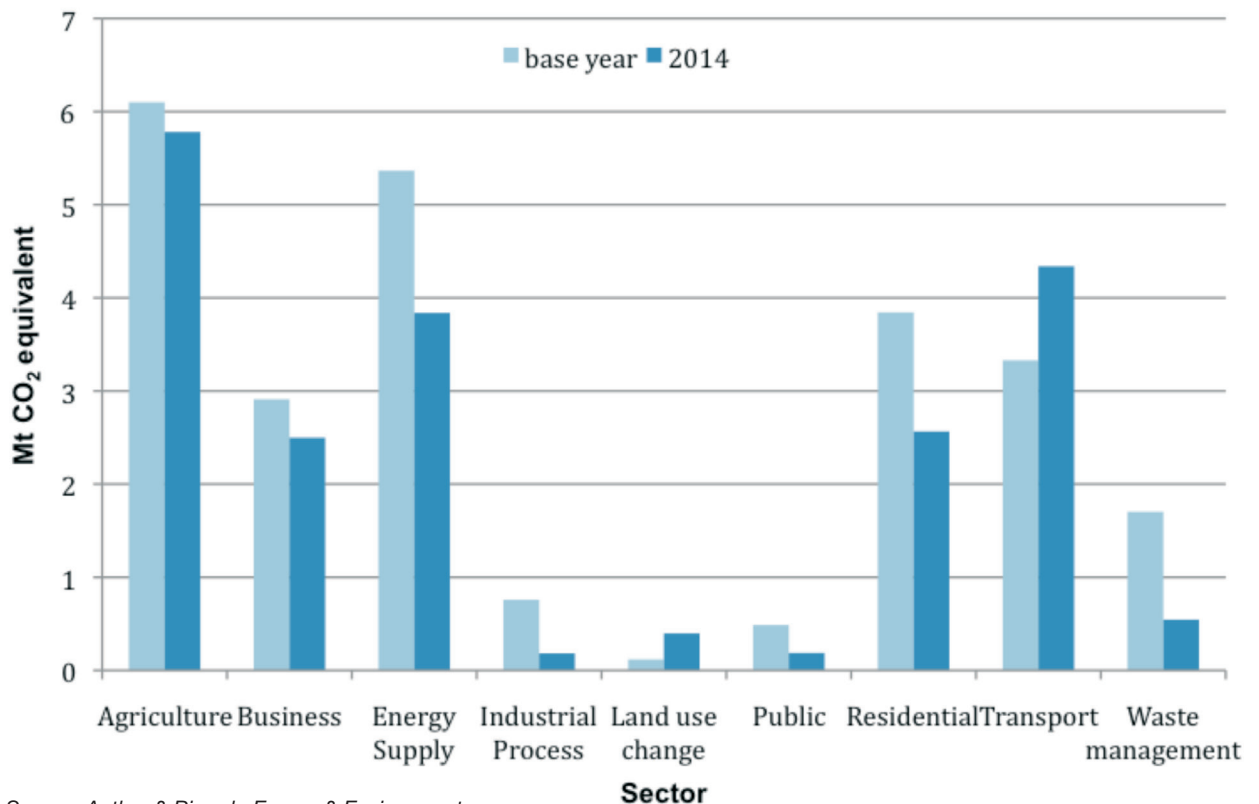


Source: Aether & Ricardo Energy & Environment.

Note: Figures amended from previously published figures due to on-going improvements to data collection or estimation techniques.

Note: The base year for UK greenhouse gas emissions is 1990 for carbon dioxide, methane and nitrous oxide, and 1995 for fluorinated gases.

**Figure 9.2 Total greenhouse gas emissions in Northern Ireland by sector, base year and 2014**



Source: Aether & Ricardo Energy & Environment

Note: The base year for UK greenhouse gas emissions is 1990 for carbon dioxide, methane and nitrous oxide, and 1995 for fluorinated gases.



**Table 9.2 Percentage of River Water Bodies Achieving Water Framework Directive Classification Overall (Second Cycle Water Body Set and Environmental Standards, 2010 - 2015<sup>1,2,3</sup>**

*Percentage of river water-bodies*

Classification	2010	2011	2012	2013	2014	2015
High	-	-	-	-	2.2	1.8
Good	-	-	-	-	29.8	30.9
Moderate	-	-	-	-	52.4	54.4
Poor	-	-	-	-	12.9	10
Bad	-	-	-	-	1.8	1.8
No data	-	-	-	-	0.9	1.1

1. Source: Northern Ireland Water Framework Directive statistics report October 2015.
2. The river waterbody classification has been produced using the results from the EU Water Framework Directive quality elements. Overall classification utilises a combination of biological, chemical and hydromorphological quality elements including macroinvertebrates, pH (measure of acidity or alkalinity of a solution) and ammonia to assign status of river quality in one of five classes from 'high' through to 'bad'. The figures presented for each year relate to data gathered in the previous year.
3. The figures presented are based on the second cycle water body set and environmental standard, in which there are 450 rivers. Unfortunately, figures based on the second cycle are not available for the years prior to 2014.
4. The 2014 figures were based on information that was partially incomplete and therefore may be less robust than subsequent estimates.

**Table 9.3 Annual mean nitrate concentrations (in groundwater), 2010 - 2015**

*Unit: Percentage of sites*

	2010	2011	2012	2013	2014	2015
0 to < 10 mg NO <sub>3</sub> /l	77.4	76.9	89.1	87.5	86.6	78.4
10 to < 25 mg NO <sub>3</sub> /l	20.8	17.3	9.1	8.3	9.6	17.6
25 to < 40 mg NO <sub>3</sub> /l	1.9	1.9	0	2.1	1.9	2.0
40 to < 50 mg NO <sub>3</sub> /l	0	0	0	0	0	0
≥ 50 mg NO <sub>3</sub> /l	0	3.8	1.8	2.1	1.9	2.0

Source: NIEA

**Table 9.4 Area of Farmland in Northern Ireland under Agri-Environmental Schemes, 2011 - 2016**

*thousand hectares*

	2011	2012	2013	2014	2015	2016
Organic Farming Scheme	3	2	2	0	0	0
Countryside Management Scheme	334	350	294	280	246	46
New Environmentally Sensitive Area Scheme	107	103	91	84	59	0

1. Source: Countryside Management Division, DAERA.

**Table 9.5 Organic and in-conversion agricultural land area, 2010 - 2015<sup>1</sup>***thousand hectares*

	2010	2011	2012	2013	2014	2015
Northern Ireland	15	12	10	9	9	8
Wales	123	123	120	102	96	83
Scotland	189	170	152	148	136	126
England	392	351	324	316	308	304
UK	718	656	606	576	549	521

1. Source: DEFRA.

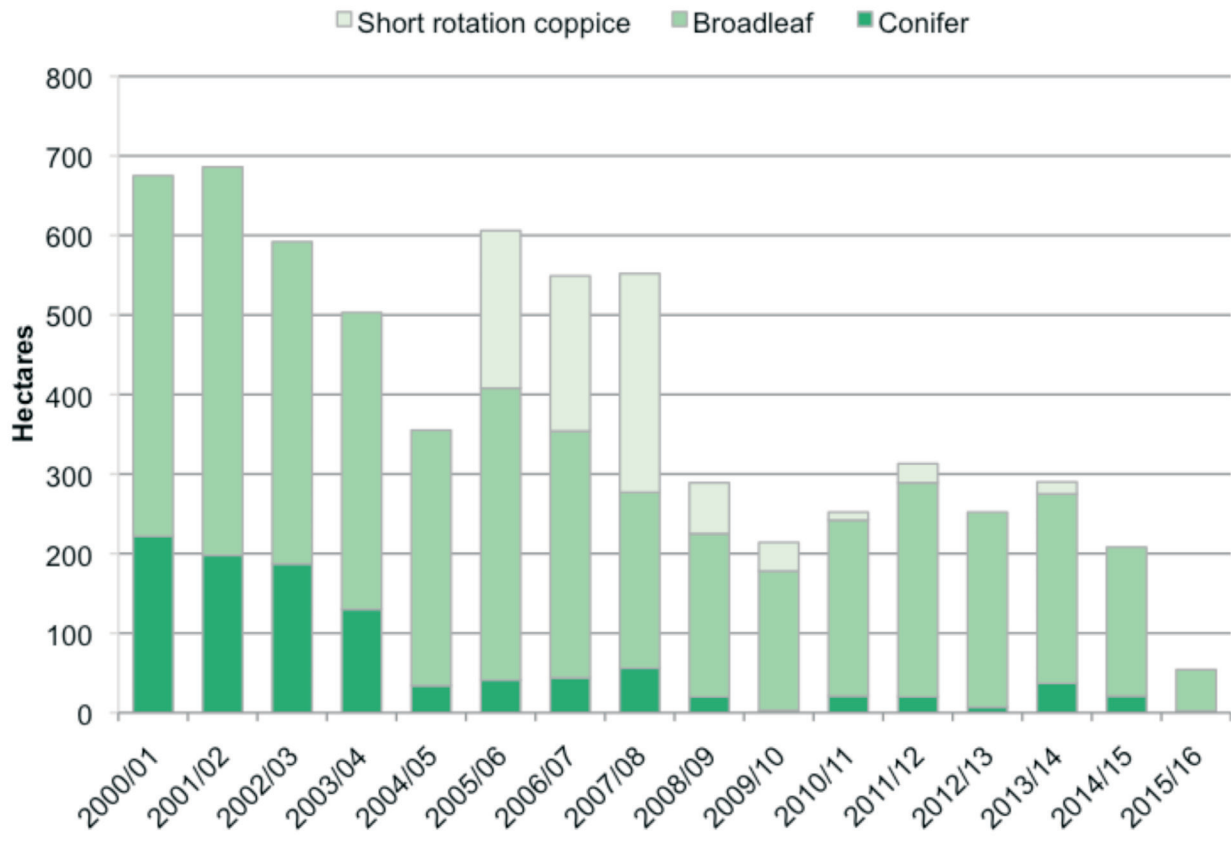
**Table 9.6 Forestry area, production, forest park visitor numbers and employment in Northern Ireland, 1995/96 - 2015/16**

	1995/96	2000/01	2005/06	2010/11	2013/14	2014/15	2015/16
<b>Forested area (000ha)</b>							
State	61	61	61	61	62	62	62
Private	19	22	25	27	50	50	50
<b>All forested areas</b>	<b>80</b>	<b>83</b>	<b>86</b>	<b>88</b>	<b>112</b>	<b>112</b>	<b>112</b>
<b>Timber production from state forests</b>							
Volume (000 cubic metres)	223	359	387	496	425	401	409
<b>Visitors to Forest Parks</b>							
Day Visitors (000's)	...	...	370	393	310	339	432
<b>Employees (number) Forest Service</b>	460	360	288	222	203	232	223

Source: Forest Service, DAERA

1. The Forest Service introduced a new Woodland Register in 2011/12 and this has identified more privately owned woodland than the previous measurement approach. Note that the data from 2011/12 onwards for 'Private' forested area is not comparable to data for previous years.

**Figure 9.3 Area of new forest and woodland plantings by private landowners supported by grant aid.**



Source: Forest Service, DAERA.

## APPENDIX

### STATISTICAL AND METHODOLOGICAL NOTES

#### AGGREGATE AGRICULTURAL ACCOUNT (AAA)

The AAA, from which agriculture's output, input, value added and income are obtained, is conducted according to the rules and conventions of the United Nations *System of National Accounts 1993*, the subsequent *European System of Accounts 1995* and Regulation (EC) No. 138/2004 (which incorporates the revised *European Union's Manual on the Economic Accounts for Agriculture 1997*, introduced throughout the UK in 1998).

The main features of the AAA are as follows:

- (i) The AAA is conducted on a 'sector' basis. This means that agricultural activity includes 'inseparable non-agricultural secondary activities', such as pony trekking, which are carried out on-farm and for which the inputs cannot be separated from farming inputs.
- (ii) The AAA is calculated on an accruals basis, i.e. 'as due' rather than 'as paid'. This means that subsidies such as CAP direct payments are counted in the year in which they are due rather than in the year when they are paid. The detailed allocation of subsidies is documented in footnotes to Table 2.1.
- (iii) Rent paid on 'conacre' (short-term lettings) to non-farming persons is included as an expense.
- (iv) Capital formation in, and depreciation of, breeding livestock is included.
- (v) Direct inter-farm sales and on-farm use of finished products such as cereals are included as both outputs and inputs thereby, in most cases, leaving gross and net product and total income from farming unchanged.

#### Income indicators

The main indicator of the return to all of the factors of production, i.e. land, labour, capital and 'enterprise', is **net value added** (strictly, net value added at factor cost). This is defined as gross output less expenditure on material and service inputs purchased from outside the sector, less consumption of fixed capital (or depreciation) plus subsidies not paid on products. Hence:

Gross output - gross input  
(also known as 'intermediate consumption')  
**= gross value added**

Gross value added - consumption of fixed capital + subsidies not paid on products (such as CAP direct payments)  
**= net value added (at factor cost)**

The income of all farm families in NI is given by **total income from farming (TIFF)**. This includes returns to farmers, their spouses and family workers for their labour and ‘enterprise’ and on their own capital invested; it therefore represents the income of all those with an entrepreneurial involvement in farming. It is the preferred income measure, conforming to national and international accounting practice and forming the basis of a Eurostat (the EU Statistical Office) indicator used for income comparisons across the EU. The derivation of TIFF is:

**Net value added (at factor cost)**

*less* paid labour  
(also known as ‘compensation of employees’)  
interest  
net rent

**= Total income from farming (TIFF)**

**Cash flow**

A **cash flow** series is shown in Table 2.4. Cash flow omits the effects of stock changes, but takes into account receipts of capital grants, expenditure on capital investment and changes in borrowings. It is a useful indicator of cash available to farm families from farming, but should not be considered as an alternative measure of income.

**Sensitivity of estimates**

Since agricultural income measures are ‘residuals’ between two large aggregates, they are sensitive to quite small changes in either aggregate. For example, total income from farming in 2016 would change by almost +13 per cent if there were one per cent changes (in opposite directions) in gross output and gross input. The degree of sensitivity rises as the level of income falls.

**Provisional estimates**

‘Provisional’ figures for 2016 presented in this *Review* are estimates based on data available during the period from December 2016 to January 2017, in most cases covering only the first 9-11 months of the year (2016). Forecasts are used to cover the months where no data is available. Provisional figures are therefore subject to revision when complete information becomes available. Revised figures will be published in next year’s *Review*.

**Revisions to Income series**

The 2015 figures have been revised as more complete information has become available. Net value added in 2015 is now estimated at £351.5 million (previously £322.6 million) while total income from farming for 2015 is now estimated at £199.1 million (previously £182.5 million). A 30-year plus consistent series of the AAA is available on the DAERA website at [www.daera-ni.gov.uk](http://www.daera-ni.gov.uk).

## Census

Statistics on employment on farms (Tables 2.14 and 2.15), crop areas and livestock numbers (Section 3) and farm structure, (Section 4) are derived from the June Agricultural and Horticultural Census. This is an annual statistical survey which is based on a large sample survey, though in 2000 and 2010 a full census of every farm was conducted. In 2016 forms were issued to all the larger businesses but to only half those classified as 'Very Small'.

For those who did not return a form, estimates were included, based on the latest available returns and on information available in the Integrated Administration and Control System (IACS). For new farms from which a 2016 return was not obtained, estimates were based on the IACS and other administrative systems. Owners of horticultural, mushroom or very large enterprises who failed to make a return in 2016 were contacted by telephone in order that up to date information could be obtained. From 2013 onwards, data for pigs is sourced from the NI Annual Inventory of Pigs.

## Census coverage

The statistical definition of a farm, which was changed in 1997, is based on separate business status as applied under the Integrated Administration and Control System (IACS), having previously been based on land ownership. The census now covers **all active farm businesses having one hectare or more of farmed land, whether owned, leased or taken in conacre, and those with under one hectare having any cattle, sheep or pigs or with significant poultry or horticultural activity.**

Over the past 50 years, the following criteria have been used to determine the coverage of the agricultural census in Northern Ireland:

Years	Census methods and coverage
Until 1954	Census information was collected by police enumerators who identified and visited all farms, including any under one acre (0.4 hectares), and recorded in special books information given to them orally by the farmer.
1954-1972	A postal census was introduced in 1954. This used the list of farmers which had been identified in the 1953 census, but included only those of <b>one acre or more</b> . From this time onwards a distinction was made between ' <b>main</b> ' holdings which were included in the census and ' <b>minor</b> ' holdings which were surveyed on a sample basis using simplified questions. Estimates were made for their total crop areas and livestock numbers but these holdings were not included in the count of farms.

- 1973-1980 In 1973, in conformity with a similar change in the rest of the United Kingdom, an alteration was made in the scope of the census in Northern Ireland. From then until 1980, the main census covered all holdings which had **at least 10 acres (4 hectares)** of land with the addition of any below that size which had any full-time agricultural workers or whose stock and cropping amounted to an annual estimated labour requirement of more than 40 man-days. This definition of a 'main' holding removed some 7,700 holdings from the old register but, at the same time, brought back a number of 'minor' holdings of less than one acre. The net reduction in the number of 'main' holdings arising from these adjustments was some 5,500.
- 1981-1996 A further change was made between 1980 and 1981 when, with the introduction of a new system of farm classification, and with changes to the minimum threshold in other parts of the UK, the threshold for inclusion in the 'main' census in Northern Ireland was raised. This new threshold restricted the census to holdings which had (a) a total land area (owned or taken on long-term lease) of 6 hectares or more or (b) any full-time workers other than the farmer or (c) a farm business size of 1,000 ECUs of Standard Gross Margin. This change resulted in the exclusion of a further 6,690 'minor' holdings from the main census between 1980 and 1981.
- 1997 The basis of the agricultural census was changed in 1997 from a 'census register' to a central register of all of the Department's 'clients'. The change was made possible as a result of the introduction of IACS and of work undertaken to streamline administrative functions. This resulted in a common means of identification across all schemes, with each farmer who was/is in contact with the Department being allocated a unique Client Reference Number and each "Client" being linked to a Business Identifier. The population surveyed in 1997 consisted of one 'Client' in each business for which a census return with crops and/or livestock was obtained in the preceding year or which had received a subsidy in respect of crops or livestock during the preceding 15 months. Also included were those with a milk quota and those known by the Department to be engaged in the production of pigs, poultry, potatoes or horticultural crops. The distinction between 'main' and 'minor' holdings was discontinued.

- 1998-1999 A further 166 pig farms with no owned land were added to the population in 1998 and sampling was introduced. Census forms were issued only to half of the **'very small'** farms.
- 2000 A full census was conducted. Mushroom production was targeted and around 100 mushroom businesses which had not previously been surveyed were identified and added to the list of businesses covered.
- 2001-2006 A sample survey was carried out on the same basis as that conducted in 1999.
- 2007-2009 A sample survey was carried out. The number of cattle questions on the survey form were reduced as data was sourced primarily from APHIS (Animal and Public Health Information System) to determine cattle numbers. No poultry questions were asked, with data on poultry being sourced from the Northern Ireland Bird Register Update.
- 2010 A full census of all farm businesses in Northern Ireland was carried out.
- 2011 -2012 Sample survey completed similar to years 2007-2009.
- 2013 on Sample survey completed similar to 2011-2012. Pig questions removed from paper form. Data on pigs sourced from NI Annual Inventory of Pigs.

**Farm business size** Farm business size is determined by calculating each farm's total Standard Labour Requirement (SLR). Standards or norms have been calculated for all major enterprises. The total SLR for each farm is calculated by multiplying its crop areas and livestock numbers by the appropriate SLR coefficients and then summing the result for all enterprises on the farm. A standard labour unit is equivalent to 1,900 hours of work per year.

Prior to 2004, the farm business size had been determined by calculating each farm's Standard Gross Margin (SGM). However, it was felt that using SLR's was a more appropriate and accurate method to size farm businesses in the UK.

To show year-to-year changes in business size, the enterprise SLR coefficients are held constant for a number of years. The current series (introduced in 2004) is based on the average labour requirements during the period 1999-2001. For a list of these values, see table on p86.



## STANDARD LABOUR REQUIREMENTS

The following factors have been used to classify farms in N.I.

Enterprise	Item	Unit	Standard Labour Requirement (hours)
Crops	Cereals	ha	30
	Oilseeds	ha	22.5
	Potatoes	ha	135
	Outdoor vegetables	ha	150
	Set-aside	ha	1.5
Fruit and Ornamentals	Fruit	ha	450
	Ornamentals	ha	1,500
Indoor Crops	Glasshouse vegetables	ha	5,000
	Other glasshouse	ha	25,000
	Mushrooms	house	1,050
Forage	Forage crops	ha	9
	Grass	ha	6
	Rough grazing	ha	2.25
Cattle	Dairy Cows	head	39
	Beef cows	head	12
	Other cattle	head	9
Sheep	Ewes and rams: Lowland	head	5.2
	Ewes and rams: LFA	head	4.2
	Other sheep: Lowland	head	3.3
	Other sheep: LFA	head	2.6
Pigs	Sows and gilts	head	16
	Piglets	head	1.0
	Other pigs	head	1.3
Poultry	Laying hens	head	0.17
	Pullets	head	0.12
	Broilers	head	0.04
	Turkeys, Ducks etc.	head	0.045
Other Livestock	Horses	head	150
	Goats	head	20
	Deer	head	15

In UK agricultural statistics, business size is described in terms of five SLR size bands. These are:

Size	Standard Labour Requirement
Very small	Less than 1
Small	1-<2
Medium	2-<3
Large	3-<5
Very large	5 or more

\* 1 standard labour unit = 1900 hours.

Since there are few farms in the **very large** size range in Northern Ireland, these are included in the **large** category.

### Farm business type<sup>1</sup>

The system of classifying farms according to the type of farming found on a holding is set out in Commission Regulation (EC) 1242/2008 and explained in greater detail in the EU Farm Accountancy Data Network (FADN) Typology Handbook RI/CC 1500 rev.3.

Depending on the amount of detail required, farms can be classified into 1 of 62 types. Individual farms are allocated to a type category on the basis of the aggregate value of farm outputs. As it is not feasible to estimate the value of outputs on a farm-by-farm basis, Standard Outputs (SOs) are calculated as reference values for a variety of farm products. The SO of a specific product (crop or livestock) is the average monetary value (per ha or head) of agricultural output based on regional farm-gate prices over a 5 year period. The SO excludes direct payments and no costs are deducted. Once the numbers of livestock and hectares of crop for an individual farm have been multiplied by the relevant SOs, it is allocated to a type category depending on where most of the total SO comes from. To ensure a stable framework for comparison and analysis SO values, once calculated, are held constant for a number of years. The SO values in use at the moment cover the five year period centred on 2010.

<sup>1</sup>The EU typology has been updated from 2007 Standard Output coefficients to 2010 coefficients. The impact of the change on the numbers of farms of each type can be seen at Annex 1 of the Agricultural Census in Northern Ireland publication.

These are:

<b>Type</b>	<b>Definition</b>
<b>Cereals</b>	Farms on which cereals and combinable crops account for more than two-thirds of the total SO.
<b>General cropping</b>	Farms which do not qualify as cereals farms but have more than two-thirds of the total SO in arable, including field scale vegetable, crops or in a mixture of arable and horticultural crops where arable crops account for more than one-third of the total SO and no other grouping accounts for more than one-third. In addition, farms with a substantial area of grassland but few livestock are also included within this farm type.
<b>Horticulture</b>	Farms with more than two-thirds of the total SO in horticultural crops (including specialist mushroom growers).
<b>Specialist pigs</b>	Farms of which pigs account for more than two-thirds of total SO.
<b>Specialist poultry</b>	Farms on which poultry account for more than two-thirds of total SO.
<b>Dairy</b>	Farms on which dairy cows account for more than two-thirds of the total SO.
<b>Grazing livestock (LFA)</b>	Farms wholly or mainly in the Less Favoured Area which do not qualify as Dairy farms but have more than two-thirds their total SO in grazing livestock (cattle and sheep).
<b>Grazing livestock (Lowland)</b>	Farms wholly or mainly outside the Less Favoured Area, which do not qualify as Dairy farms but have more than two-thirds their total SO in grazing livestock (cattle and sheep).
<b>Mixed</b>	Farms that have no dominant enterprise and do not fit into the above categories.
<b>Other types</b>	Farms that specialise in enterprises which do not fit the definitions of mainstream agricultural activities. For the most part this category is made up of specialist horse farms plus other farms that are unclassified.

## **Less Favoured Areas**

The term **Less Favoured Areas (LFA)** is used to describe those parts of the country which, because of the relatively poor agricultural conditions which prevail there, have been so designated under EU legislation. This recognition allows those who farm in such areas to apply for special support, such as LFA Compensatory Allowance (LFACA) and for additional benefits under various capital grant and forestry schemes.

The LFA consists of a **Severely Disadvantaged Area (SDA)**, which is the original LFA as designated in 1975 (487,000 hectares), and the **Disadvantaged Area (DA)** which was designated following reviews in 1984 (335,000 hectares) and 1990 (3,700 hectares). (The areas designated include some non-agricultural land).

## **FARM BUSINESS SURVEY (FBS)**

The Farm Business Survey (FBS) is a continuous annual survey that monitors the physical and financial performance of farm businesses in Northern Ireland. The survey is carried out by CAP Policy, Economics & Statistics Division of the Department of Agriculture, Environment and Rural Affairs. Similar surveys are carried out in England by DEFRA, in Scotland by Scottish Government, and in Wales by WAG. These surveys along with the Northern Ireland FBS constitute the UK's contribution to the Farm Accounts Data Network (FADN) of the European Union which was established under EC regulation 79/65.

In the most recent accounting year, 2015/16, the FBS obtained farm accounts information from 360 businesses. This accounting information enables outputs, inputs and incomes to be analysed by farming type and business size. Trends in farm incomes from the FBS are produced by comparing results from identical samples of farms participating in the survey in successive years. Indices showing trends in cash incomes are derived by linking the results of identical samples from successive pairs of years (Table 5.1).

## **Differences between FBS and AAA**

The coverage and methodology of the FBS differ in several important respects from the Aggregate Agricultural Account (AAA) presented in Section 2. The FBS does not cover **Very Small** farms or **horticultural** businesses, whereas, the AAA covers the whole agricultural sector. The FBS account years end between October and May, with an average account ending date of mid-February, while the AAA relates to calendar years. Farm Business Income includes changes in both the volume and price of crops and livestock, whereas the AAA includes volume changes only. For these reasons no direct comparison between the FBS and AAA income series can be made.

**GENERAL NOTES  
TO TABLES**

**Symbols:**

- means nil, or an insignificant quantity.
- ... means not available, or not collected.

**Rounding:**

Most figures have been rounded individually and the totals shown may therefore differ slightly from the sum of the constituent items.

**Metric units:**

Metric units are used throughout this publication. Conversion factors from metric to imperial units, correct to 4 significant figures, are given below:

1 hectare (ha) = 2.471 acres

1 kilogram (kg) = 2.205 pounds

1 tonne (t) = 0.9842 tons

1 litre (l) = 0.2200 gallons

**Abbreviations:**

dcw - dressed carcase weight

dwt - deadweight

lwt - liveweight

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