

# Agriculture in the United Kingdom



# 2014

Department for Environment, Food and Rural Affairs

Department of Agriculture and Rural Development (Northern Ireland)

Welsh Assembly, The Department for Rural Affairs and Heritage

The Scottish Government, Rural and Environment Research and Analysis Directorate





# **Agriculture In the United Kingdom 2014**

**Produced by:**

**Department for Environment, Food and Rural Affairs**

**Department for Agriculture and Rural Development (Northern Ireland)**

**Welsh Assembly Government, The Department for Rural Affairs and Heritage**

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# Preface

## Legal Basis

1. Agriculture in the United Kingdom (AUK) 2014 fulfils the requirement under the Agriculture Act 1993 that Ministers publish an annual report on such matters relating to price support for agricultural produce as they consider relevant. The Government will draw on this information when considering the policy issues, including proposals by the European Commission in respect to the Common Agricultural Policy (CAP) and the provision of agricultural support.

## Changes

2. Some of the figures now given for past years may differ from those published in proceeding issues. This is because of the use of later information, changes in scope and nature of available data and improvements in statistical methods. Where modifications to the data are made a 'Revisions' section will be added to the chapter to explain the changes.

## Data in the document

3. Most of the data are on calendar year basis. The data for 2014 are provisional and may be revised as more data becomes available
4. The following points apply throughout:
  - All figures relate to the United Kingdom unless otherwise stated
  - In the tables
    - means 'nil' or 'negligible' (less than half the last digit shown)
    - .. means 'not available' or 'not applicable'.
  - The figures for imports and exports include those from intervention stocks and the figures for exports include re-exports. Imports are based on country of consignment. Exports are based on country of reported final destination. The source of overseas trade statistics is HM Revenue and Customs.
  - Where statistics are shown for the European Union (EU) as a whole they represent the present member states in all the years regardless of when they became members.
  - Values are expressed as either current or real term values.
    - Current (or nominal) value is the value expressed in historical monetary terms
    - Real term value is the current value adjusted to take account of inflation.



# Chapter 1: Key Events

## Total income from Farming

1. Total Income from Farming is estimated to have fallen between 2013 and 2014 by 4.4% (£247 million) in real terms, to £5,379 million. The 2014 value was driven by increased production offset by lower prices. EU payments received have reduced significantly due to the strength of sterling against the euro.
2. Gross Value Added (outputs minus intermediate consumption) rose by £306 million, to £9.9 billion, in real terms a 3.2% increase due to a larger fall in the value of intermediate consumption compared with outputs. GVA represents agriculture's contribution to GDP.

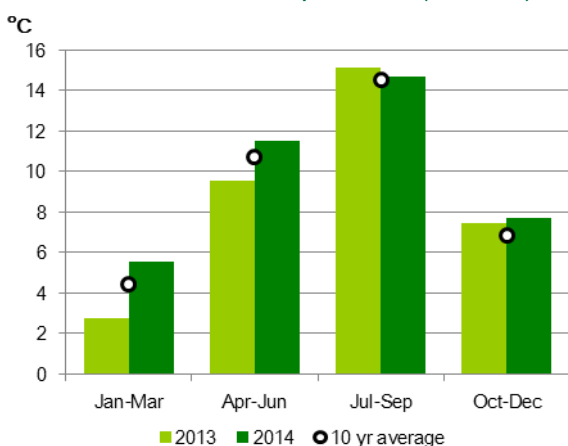
## Common Agricultural Policy

3. 2014 was the last year under the Single Payments Scheme (SPS) before the Basic Payment Scheme (BPS) comes into force in 2015. Most of the payments from 2015 will come under the BPS, including greening payments and the young farmer payments.
4. There will also be a new Rural Development programme which will support the environment and rural development schemes.
5. 2014 was the final year of milk quotas, the milk quota scheme ends on 31 March 2015.

## Weather (charts 1.1 and 1.2)

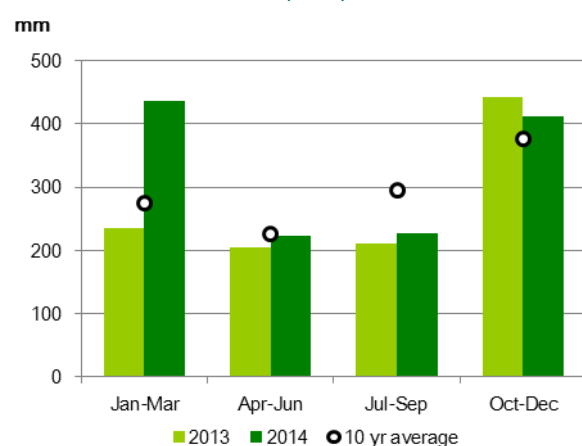
6. In 2014 the United Kingdom had the warmest annual average temperature of 9.9°C and one of the wettest starts to the year. There were floods in the south west of England, most notably the Somerset levels, at the start of 2014. A £10 million fund was made available to farmers for a one off grant scheme to help farm business restore flooded land and bring it back into production.

Chart 1.1 UK mean temperature (Celsius)



Source: The Met Office

Chart 1.2 UK rainfall (mm)



Source: The Met Office

7. The wet start to the year was followed by the warmest April to June with a mean temperature of 11.5°C. Overall the weather conditions in 2014 proved conducive to good crop growth as record cereal yields were seen in 2014.

## Animal health

8. Further measures to combat bovine TB in England as part of the overall strategy were introduced in 2014. This included a biosecurity action plan to help farmers reduce the risk of disease spread on their farms. England currently has the highest incidence of TB in Europe.
9. There was an avian flu outbreak in November. The outbreak was contained and all restrictions following the outbreak were lifted on 21 December.

# Chapter 2: The Structure of the Industry

## Summary

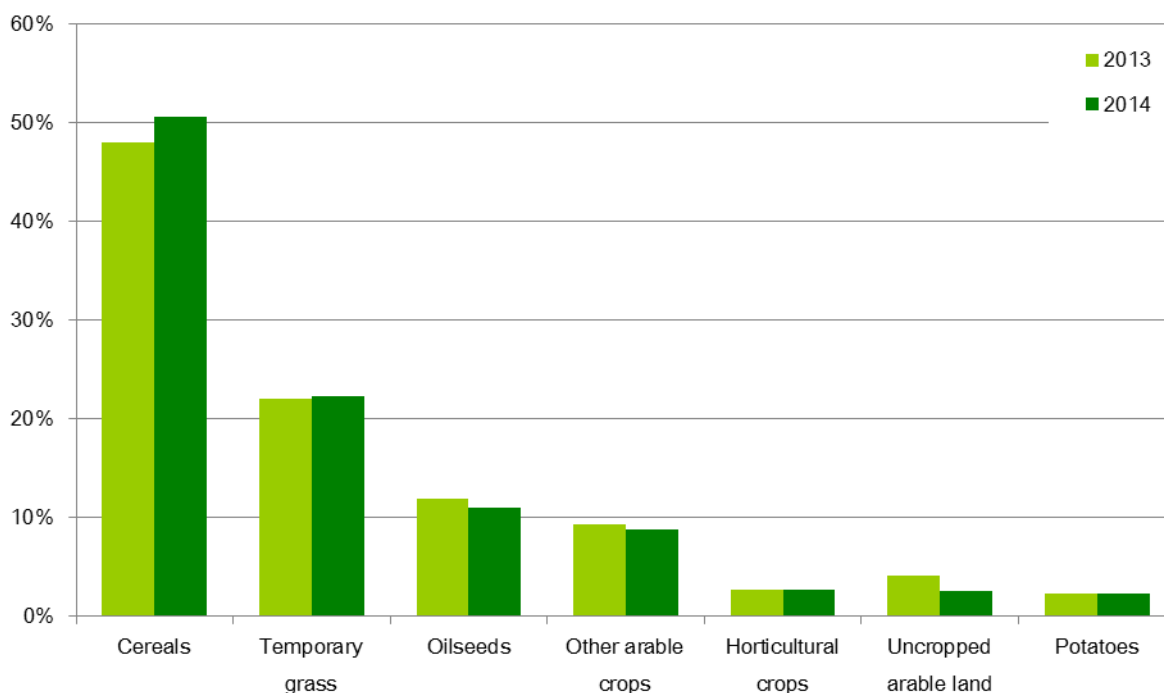
In 2014 compared with 2013:

- The Utilised Agricultural Area decreased by 0.1% in 2014 to 17.2 million hectares, accounting for 71% of land in the UK. The area of total crops has increased by 1.2% helping to offset the 37% decrease in uncropped arable land
- The area of oilseed crops planted decreased by 8.1% to 691 thousand hectares.
- The cereal crops area increased by 5.0% to 3.2 million hectares.
- The dairy herd saw an increase of 3.3% to 1.8 million.
- Total pig numbers have seen a slight decrease of 1.4% to 4.8 million from 4.9 million.
- Sheep and lamb numbers rose by 2.7% to 33.7 million, largely due to a 3.4% increase in the number of lambs.
- The total labour force on commercial holdings increased by 2.6% to 476 thousand.

## Introduction

1. The tables in this chapter show the size and structure of the agricultural industry in the United Kingdom. They provide information on land use and livestock numbers, on the distribution of these between holdings, on the labour force and the age of farm holders.
2. Data in this chapter are sourced primarily from the June Surveys of Agriculture carried out in the four UK countries each year. The exceptions to this are the holder age data (sourced from the EU Farm Structure Survey) and land use data in Scotland (sourced from Single Application Form (SAF) subsidy data). Also, cattle data are sourced from the Cattle Tracing System (CTS) in England, Wales and Scotland (from 2013) and from the equivalent Animal and Public Health Administration (APHIS) system in Northern Ireland. Prior to 2013 Scottish cattle data was sourced from agricultural surveys.
3. From 2009 onwards, England data relate to “commercial” holdings only. The term “commercial” covers all English holdings which have more than 5 hectares of agricultural land, 1 hectare of orchards, 0.5 hectares of vegetables or 0.1 hectares of protected crops, or more than 10 cattle, 50 pigs, 20 sheep, 20 goats, or 1,000 poultry. These thresholds are specified in the EU Farm Structure Survey Regulation EC 1166/2008.
4. For additional information on the June Survey and for more detailed results please see:  
England: <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/structure-of-the-agricultural-industry>  
Scotland: <http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/ PubFinal Results JuneCensus>  
Wales: [www.wales.gov.uk/statistics](http://www.wales.gov.uk/statistics)  
Northern Ireland: <http://www.dardni.gov.uk/index/statistics/statistical-bulletins.htm>

Chart 2.1 Total croppable area on agricultural holdings June 2013 and 2014



Land use, crop areas and livestock numbers (chart 2.1, tables 2.1 and 2.2)

5. At June 2014 the Utilised Agricultural Area (UAA) was 17.2 million hectares, making up 71% of the total UK land area. UAA is made up of arable and horticultural crops, uncropped arable land, common rough grazing, temporary and permanent grassland and land used for outdoor pigs. It does not include woodland and other non-agricultural land.
6. As chart 2.1 shows, 51% of croppable area is planted as cereal crops. Wheat and barley are the predominant cereal crops standing at 1.9 and 1.0 million hectares respectively. There has been a decrease of 37% in uncropped arable land which fell from 255 thousand hectares in 2013 to 160 thousand hectares in 2014. This reflects the better weather conditions for planting in 2014
7. The area of oilseed rape decreased for a second year in 2014, by 5.7% to 675 thousand hectares, after reaching a record high in 2012.
8. The total number of cattle and calves was almost unchanged between 2013 and 2014 at just over 9.8 million. The beef herd continued to decline, however the dairy herd increased by 3.3%, the first rise since 2005.
9. The UK population of sheep and lambs has risen by 2.7% to 33.7 million, largely due to the 3.4% increase in the number of lambs to 16.9 million.
10. The total number of pigs in the UK decreased by 1.4% between 2013 and 2014, with fattening and breeding pigs both seeing a reduction in numbers.
11. Poultry figures have increased by 4.4% to almost 170 million birds in 2014. The increase comes mainly from the 5.5% rise in table chickens.

Table 2.1 Agricultural land use (a)

Enquiries: Joanne Gardiner on +44 (0) 1904 455681

email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk)

Thousand hectares	At June of each year				
	2010	2011	2012	2013	2014
<b>Utilised agricultural area (UAA) (b)</b>	17 234	17 172	17 190	17 259	17 240
UAA as a proportion of total UK area	71%	70%	70%	71%	71%
<b>Total agricultural area</b>	18 282	18 263	18 349	18 449	18 456
<b>Common rough grazing</b>	1 228	1 199	1 200	1 198	1 199
<b>Total area on agricultural holdings</b>	17 054	17 064	17 149	17 250	17 257
<b>Total croppable area</b>	6 015	6 106	6 258	6 310	6 278
<b>Total crops</b>	4 610	4 673	4 748	4 665	4 722
Arable crops	4 441	4 497	4 576	4 502	4 559
Cereals	3 013	3 075	3 142	3 028	3 179
Oilseeds (includes linseed and borage)	686	742	785	752	691
Potatoes	138	146	149	139	141
Other crops	604	534	500	582	548
Horticultural crops	169	175	172	163	164
<b>Uncropped arable land (c)</b>	174	156	153	255	160
<b>Temporary grass under 5 years old</b>	1 232	1 278	1 357	1 390	1 396
<b>Total permanent grassland</b>	9 980	9 858	9 725	9 742	9 755
Grass over 5 years old	5 925	5 877	5 799	5 802	5 824
Sole right rough grazing (d)	4 055	3 981	3 926	3 940	3 930
<b>Other land on agricultural holdings</b>	1 059	1 100	1 166	1 198	1 224
Woodland	774	786	827	865	897
Land used for outdoor pigs	10	9	7	9	8
All other non-agricultural land	274	305	332	324	318

Source: June Surveys of Agriculture, SAF land data

(a) Figures for England from 2009 onwards relate to commercial holdings only.

(b) UAA includes all arable and horticultural crops, uncropped arable land, common rough grazing, temporary and permanent grassland and land used for outdoor pigs (it excludes woodland and other non-agricultural land).

(c) Includes all arable land not in production, including land managed in Good Agricultural and Environmental Condition (GAEC12), wild bird cover and game cover.

(d) Also includes mountains, hills, heathland or moorland.

Table 2.2 Crop areas and livestock numbers (a)

Enquiries: Joanne Gardiner on +44 (0) 1904 455681

 email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk)

	At June of each year				
	2010	2011	2012	2013	2014
<b>Crop areas</b> (thousand hectares)					
Total area of arable crops	4 441	4 497	4 576	4 502	4 559
of which:					
wheat	1 939	1 969	1 992	1 615	1 936
barley	921	970	1 002	1 213	1 080
oats	124	109	122	177	137
rye, mixed corn and triticale	29	27	26	24	26
oilseed rape	642	705	756	715	675
linseed	44	36	29	34	15
potatoes	138	146	149	139	141
sugar beet (not for stockfeeding)	118	113	120	117	116
peas for harvesting dry and field beans	210	155	120	147	139
maize	164	164	158	194	183
Total area of horticultural crops	169	175	172	163	164
of which:					
vegetables grown outdoors	121	129	123	116	116
orchard fruit (b)	24	24	24	23	23
soft fruit & wine grapes	10	10	9	10	9
outdoor plants and flowers	12	11	12	12	12
glasshouse crops	2	2	3	3	3
<b>Livestock numbers</b> (thousand head)					
Total cattle and calves	10 170	9 988	9 952	9 844	9 837
of which:					
cows in the dairy herd (c)	1 830	1 796	1 796	1 782	1 841
cows in the beef herd (d)	1 668	1 687	1 666	1 611	1 569
Total sheep and lambs	31 084	31 634	32 215	32 856	33 743
of which:					
ewes and shearlings	14 740	14 868	15 229	15 561	16 026
lambs under one year old	15 431	15 990	16 229	16 381	16 936
Total pigs	4 460	4 441	4 481	4 885	4 815
of which:					
sows in pig and other sows for breeding	360	362	357	355	349
gilts in pig	67	70	69	66	57
Total poultry	163 867	162 551	160 061	162 609	169 684
of which:					
table fowl	105 309	102 461	102 558	104 576	110 374
laying flock (including pullets)	37 497	38 357	36 646	35 841	37 146
breeding flock	9 610	10 253	9 987	11 184	11 258
turkeys, ducks, geese and all other poultry	11 451	11 481	10 870	11 008	10 907

Source: June Surveys of Agriculture, SAF land data, Cattle Tracing System, APHIS

- (a) Figures for England from 2009 onwards relate to commercial holdings only.  
 (b) Includes non-commercial orchards.  
 (c) Dairy cows are defined as female dairy cows over 2 years old with offspring.  
 (d) Beef cows are defined as female beef cows over 2 years old with offspring.



## Numbers and sizes of holdings and enterprises (tables 2.3 and 2.4)

12. The number of agricultural holdings has remained relatively stable between 2010 and 2014. The reduction from 222 thousand to 212 thousand seen in table 2.3 below is due to Wales identifying and removing a number of obsolete holdings. This had an effect on the number of holdings but minimal effect on the areas.

**Table 2.3 Numbers of holdings by size group (a)**

Enquiries: Joanne Gardiner on +44 (0) 1904 455681

email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk)

		2010		2014 (c)	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
At June of each year					
Total area on holdings	under 20 hectares	104	704	95	694
	20 to under 50 hectares	43	1 425	41	1 364
	50 to under 100 hectares	34	2 405	33	2 389
	100 hectares and over	41	12 520	42	12 810
	<b>Total</b>	<b>222</b>	<b>17 054</b>	<b>212</b>	<b>17 257</b>
	Average area (hectares)		77		81
	Average area on holdings with >=20 hectares		138		142
Croppable area (b)	0.1 to under 20 hectares	52	312	47	308
	20 to under 50 hectares	20	646	19	634
	50 to under 100 hectares	14	1 036	15	1 074
	100 hectares and over	18	4 021	19	4 262
	<b>Total</b>	<b>104</b>	<b>6 015</b>	<b>100</b>	<b>6 278</b>
	Average croppable area (hectares)		58		63

Source: June Surveys of Agriculture, SAF land data

(a) Figures for England relate to commercial holdings only.

(b) Croppable area is defined as land under crops, temporary grass under five years old and uncropped arable land.

(c) In 2014 Wales updated their datasets resulting in a number of obsolete holdings being identified and removed.

**Table 2.4 Numbers of holdings by size group and country at June 2014**

Enquiries: Joanne Gardiner on +44 (0) 1904 455681

email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk)

	England (a)		Wales (b)		Scotland		Northern Ireland	
	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings								
Under 20 hectares	35.1	318	18.3	111	32.4	163	9.2	102
20 to under 50 hectares	20.7	689	6.2	205	6.0	197	8.5	274
50 to under 100 hectares	18.9	1 369	5.1	363	5.0	363	4.3	295
100 hectares and over	26.7	6 657	4.7	953	8.8	4 873	1.9	327
<b>Total</b>	<b>101.4</b>	<b>9 033</b>	<b>34.2</b>	<b>1 631</b>	<b>52.2</b>	<b>5 596</b>	<b>24.2</b>	<b>997</b>
Average area (hectares)		89		48		107		41
Average area on holdings with >=20 hectares		131		95		273		61

Source: June Surveys of Agriculture, SAF land data

(a) Figures for England relate to commercial holdings only.

(b) In 2014 Wales updated their datasets resulting in a number of obsolete holdings being identified and removed.

## Labour force in agriculture (table 2.5)

13. The agricultural workforce increased by 2.6% in 2014 to 476 thousand people, following a decrease in 2013. Increases were seen in all categories with the exception of salaried managers, which have shown little change over a number of years. The largest percentage increase was seen in the seasonal, casual and gang labour category, up 8.7% on 2013.

### Table 2.5 Agricultural labour force on commercial holdings (a)

Enquiries: Joanne Gardiner on +44 (0) 1904 455681

email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk)

Thousands	At June of each year				
	2010	2011	2012	2013	2014
<b>Total labour force on commercial holdings (incl. farmers and spouses)</b>	466	476	481	464	476
<b>Farmers, business partners, directors and spouses</b>	295	299	298	290	294
Full time	134	140	141	138	140
Part time (b)	161	159	158	152	155
<b>Salaried managers</b>	11	11	11	11	11
<b>Other workers</b>	160	166	172	162	170
<b>Full time</b>	64	64	65	63	64
<b>Part time (b)</b>	39	39	41	39	40
<b>Seasonal, casual or gang labour</b>	56	62	67	61	66
Male	40	44	48	40	47
Female	17	18	19	21	19

Source: June Surveys of Agriculture

(a) 2010 and 2013 figures relate to commercial holdings only for all of the UK

(b) Part time is defined as less than 39 hours per week in England and Wales, less than 38 hours per week in Scotland and less than 30 hours per week in Northern Ireland.

## Age of holders (table 2.6)

14. Table 2.6 shows the proportion of holders by age group. The proportions of holders in each age band have remained broadly unchanged over the past decade.
15. The average age of holders is defined using the median. This is the middle value when all holders' ages are ranked in order. In 2013 the median age for holders was 59 years old, unchanged from 2010.

### Table 2.6 Agricultural labour force on commercial holdings (a)(b)

Enquiries: Joanne Gardiner on +44 (0) 1904 455681

email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk)

Holders' age	% of holders				
	2003	2005	2007	2010 (c)	2013 (c)
Under 35 years	3	3	3	3	3
35 - 44 years	15	14	12	11	10
45 - 54 years	24	23	23	25	25
55 - 64 years	29	29	29	29	28
65 years and over	29	31	33	32	34
Median age (years)	58	58	59	59	59

Source: EU Farm Structure Survey

(a) The holder is defined as the person in whose name the holding is operated. The data in this table relate to all holders whether or not the holder is also the manager of the holding.

(b) Holdings run by an organisation (such as limited companies) do not have a holder and are therefore excluded from these figures.

(c) 2010 and 2013 figures relate to commercial holdings only for all of the UK.

# Chapter 3: Farming Income

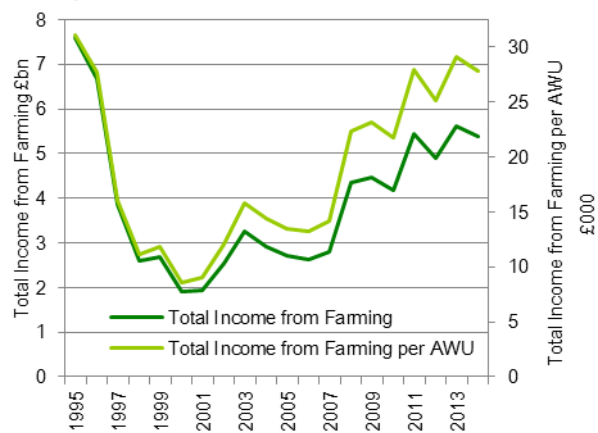
## Summary

- Total Income from Farming for the United Kingdom is estimated to have decreased between 2013 and 2014 by 4.4% (£247 million) to £5.4 billion, in real terms.
- Gross Value Added (outputs minus intermediate consumption) rose by £306 million, to £9.9 billion, in real terms a 3.2% increase due to a larger fall in the value of intermediate consumption compared with outputs.
- In 2014/15 Farm Incomes across all farm types in England, Wales and Northern Ireland are expected to fall or remain broadly similar. This is due to lower prices for key outputs such as milk, cereals, eggs and meat, offset to some extent by lower input costs, particularly for animal feed, fuel and fertiliser.

## Long term trends in farming income (chart 3.1)

1. Real term value is where previous year's data is adjusted to take account of inflation for comparison.
2. Total Income from Farming is estimated to have fallen between 2013 and 2014 by 4.4% in real terms, to £5.4 billion. The strengthening sterling against the euro reduced the value of payments received from the EU by £459 million pushing Total Income from Farming below 2013 levels.
3. Falling price offset by increased production saw the value of outputs fall by £593 million to £25.8 billion, in real terms. The value of intermediate consumption, the goods and services consumed or used as inputs in the productive process, is estimated to have reduced by £899 million to £15.9 billion.
4. In real terms when comparing 2014 to 2011, the last year which was not adversely affected by the weather, total income from farming fell by 1.2%. Outputs in 2014 were £866 million higher than 2011 driven by higher production but lower prices. There was little change in the value of intermediate consumption between the two years, a slight increase in the volume used offset by a slightly lower price.
5. Chart 3.1 shows Total Income from Farming per annual work unit (AWU) of entrepreneurial labour follows a similar trend to Total Income from Farming but owing to a decline in the number of farmers and other unpaid workers has performed better over time. Total Income from Farming per AWU of entrepreneurial labour is 4.4% lower than 2013 and just 0.4% lower than 2011. AWU is equivalent to the input of one person engaged in agricultural activities of the farm business on a full time basis for one year.

Chart 3.1 Long-term trends in real terms at 2014 prices



## Summary measures including total income from farming (table 3.1)

6. Table 3.1 shows summary measures from the aggregate agricultural accounts. More information on the accounts can be found in Chapter 4.

7. Net value added at factor cost is the value of outputs plus all subsidies minus intermediate consumption, consumption of fixed capital and taxes. Net value added at factor cost fell by 2.2% in real terms to £8.7 billion and is just above the value in 2011.
8. Total Income from Farming represents the income that is left to farmers when all costs are deducted. It differs from net value added at factor cost as it deducts interest, rent and labour costs. Total Income from Farming is estimated to have fallen by 4.4% and is 1.2% lower than the value of 2011.
9. Compensation of employees, which is the cost of employed labour has remained relatively constant in real terms over the last 10 years and currently stands at £2.5 billion.
10. Total Income from Farming per AWU of entrepreneurial labour is estimated to have fallen by 4.4% in real terms to £27,800 in 2014 and is just below the value in 2011.

**Table 3.1 Summary measures from the aggregate agricultural accounts**

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£ million (unless otherwise specified)

Year	Net value added at factor cost	Income from farming			
		Total Income from Farming	Compensation of employees	Income from agriculture of total labour input	Total Income from Farming per AWU of entrepreneurial labour (a)
<b>Current prices</b>		A	B	A + B	(£)
2004	4 980	2 310	1 894	4 204	11 400
2005	4 914	2 201	1 944	4 144	11 000
2006	4 907	2 191	1 973	4 163	11 000
2007	5 187	2 410	2 004	4 414	12 200
2008	6 651	3 853	2 065	5 919	19 700
2009	6 806	4 024	2 165	6 189	20 900
2010	6 759	3 888	2 226	6 114	20 300
2011	8 219	5 172	2 341	7 513	26 600
2012	7 832	4 723	2 353	7 076	24 200
2013	8 728	5 530	2 402	7 932	28 600
2014	8 680	5 379	2 459	7 838	27 800
<b>In real terms, 2014 prices</b>		A	B	A + B	(£)
2004	6 295	2 921	2 394	5 314	14 400
2005	6 045	2 707	2 391	5 098	13 500
2006	5 879	2 624	2 363	4 987	13 200
2007	6 042	2 808	2 334	5 142	14 200
2008	7 522	4 358	2 336	6 694	22 300
2009	7 552	4 466	2 402	6 867	23 200
2010	7 270	4 182	2 394	6 576	21 800
2011	8 655	5 446	2 465	7 911	28 000
2012	8 109	4 890	2 436	7 327	25 100
2013	8 879	5 626	2 444	8 070	29 100
2014	8 680	5 379	2 459	7 838	27 800

(a) An annual work unit (AWU) represents the equivalent of an average full-time person engaged in agriculture.

## Summary measures by country (table 3.2)

11. Table 3.2 shows main measures, at current price, for the agricultural industries in England, Wales, Scotland and Northern Ireland, and also for the United Kingdom as a whole. It also presents the contribution that agriculture makes to the economy for each country and to employment.

**Table 3.2 Summary measures by country at current price (a)**

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	2009	2010	2011	2012	2013	2014 (provisional)
<b>Gross output at basic prices £ million</b>						
United Kingdom	19 559	20 563	23 679	24 176	25 942	25 800
England	14 639	15 224	17 642	18 099	19 309	19 314
Wales	1 176	1 248	1 398	1 398	1 535	1 551
Scotland	2 398	2 569	2 917	2 935	3 152	3 049
Northern Ireland	1 345	1 522	1 722	1 745	1 947	1 886
<b>Intermediate consumption £ million</b>						
United Kingdom	12 741	13 684	14 999	15 528	16 491	15 879
England	9 013	9 729	10 738	11 008	11 760	11 290
Wales	978	1 060	1 096	1 146	1 202	1 168
Scotland	1 684	1 724	1 897	2 017	2 053	1 985
Northern Ireland	1 067	1 170	1 268	1 357	1 477	1 435
<b>Gross value added at basic prices £ million</b>						
United Kingdom	6 818	6 879	8 681	8 648	9 451	9 922
England	5 637	5 506	6 915	7 103	7 557	8 033
Wales	189	177	291	239	325	374
Scotland	714	845	1 020	918	1 099	1 064
Northern Ireland	278	352	454	388	470	450
<b>Total Income from Farming £ million</b>						
United Kingdom	4 024	3 888	5 172	4 723	5 530	5 379
England	3 133	2 851	3 830	3 722	4 149	4 197
Wales	144	108	220	147	222	212
Scotland	550	676	792	630	823	688
Northern Ireland	197	253	330	225	336	283
<b>Agriculture's share of total regional gross value added at basic prices (a) %</b>						
United Kingdom	0.51	0.49	0.60	0.59	0.62	..
England	0.50	0.46	0.56	0.56	0.58	..
Wales	0.41	0.37	0.59	0.48	0.62	..
Scotland	0.67	0.80	0.95	0.87	0.94	..
Northern Ireland	0.90	1.12	1.42	1.20	1.43	..
<b>Agriculture's share of total regional employment %</b>						
United Kingdom (b)	1.47	1.48	1.51	1.51	1.45	1.43
England (b)	1.10	1.10	1.14	1.13	1.08	1.06
Wales	4.10	4.27	4.30	4.31	3.88	4.19
Scotland	2.51	2.63	2.59	2.60	2.57	2.45
Northern Ireland	5.69	5.54	5.71	5.86	5.82	5.77

(a) Data on national and regional GVA for 2014 are not yet available.

(b) Estimates for England are based on employment on 'commercial holdings' only. Estimates for 2009 are not directly comparable owing to a register cleaning exercise for England in 2010 that was also applied to 2009.

(c) Data may be subject to change

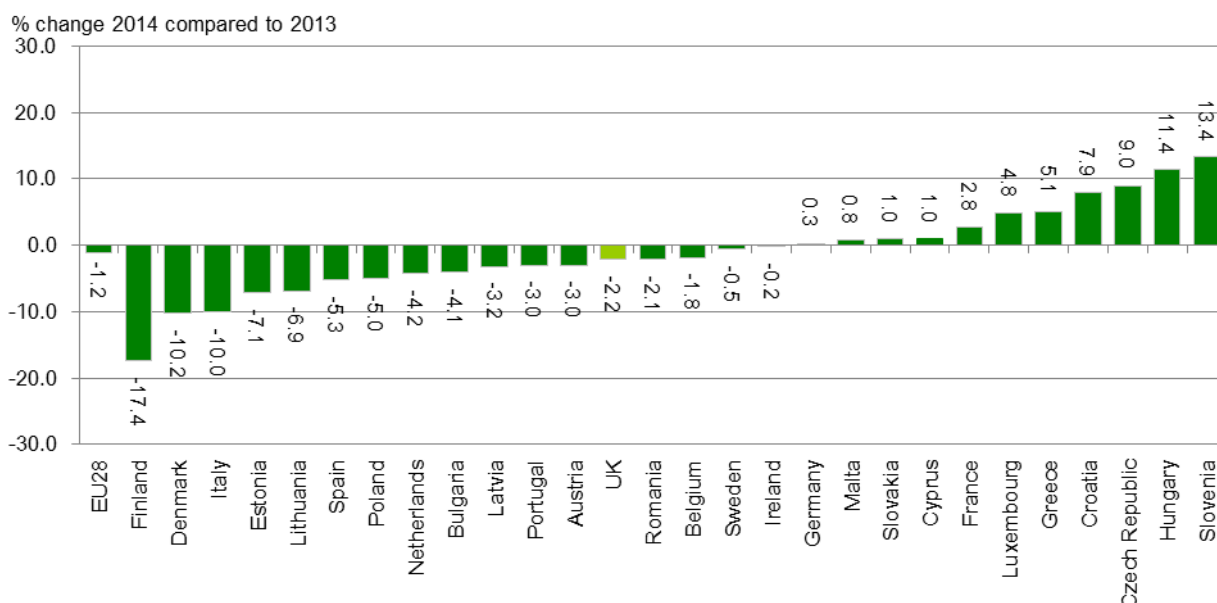
12. Gross Value Added at basic price which identifies agriculture's contribution to the Gross Domestic Product (GDP) rose by £471 million to £9.9 billion in the United Kingdom. England contributed £8.0 billion, Scotland £1.1 billion, Northern Ireland £450 million and Wales £374 million.

13. Total Income from Farming in United Kingdom is estimated to have fallen between 2013 and 2014 by 2.7% to £5.3 billion. In comparison Total Income from Farming in England is estimated to have risen marginally with value of outputs in England little changed whilst the value of inputs reduced by 4.7%.
14. In 2014, nationally England accounted for 78% of the value of total income from farming, Scotland 13%, Northern Ireland 5% and Wales 4%.
15. In 2014 agriculture employed 1.44% of the total workforce in the UK, a small fall on 2013. The largest year on year change was seen in Wales, whose agriculture share of regional employment rose by 8.1%, a result of the agriculture workforce rising by almost 13%.

### Comparison of income measures in EU Member States (chart 3.2)

16. Eurostat, the statistical office of the European Union, produces measures of income from agricultural activity based on data provided by Member States. These include:
  - Indicator A - Index of the real income of factors in agriculture per annual work unit, which corresponds to the real (i.e. deflated) net value added at factor cost of agriculture per total annual work unit.
  - Indicator B - Indicator B: Index of real net agricultural entrepreneurial income, per unpaid annual work unit.
  - Indicator C: Net entrepreneurial income of agriculture.
17. Eurostat’s preferred measure of agricultural income is Indicator A - Index of the real income of factors in agriculture, per annual work unit. Chart 3.2 shows the forecast change between 2014 and 2013 for all Member States and the European Union (28 countries) as a whole whereas the United Kingdom figures is calculated using the first estimate value for 2014. The decrease of 1.2% in the European Union as a whole masks a great range of changes in Member States, from a fall of 17% for Finland to an increase of 13% in Slovenia.

Chart 3.2 Changes in incomes from agricultural activity across the EU: Indicator A (a)



(a) 2014 forecast data for Member States, as stated in November, except UK which shows the 1<sup>st</sup> estimate 2014 published in April 2015

### Farm Business Incomes by farm type (tables 3.3, 3.4 and chart 3.3)

18. Farm Business Income, is presented in Tables 3.3 and 3.4. Chart 3.3 shows the distribution of performance for farms in the United Kingdom in 2013/14.
19. Estimates of Farm Business Income for 2014/15 (i.e. year ended February 2015 and harvest 2013) at current prices are shown in table 3.3 for England, Wales and Northern Ireland alongside outturn data for earlier years. These estimates include Single Payment Scheme receipts which are recorded as

due for the appropriate accounting year, e.g. receipts of the 2014 Single Payment Scheme are recorded in the 2014/15 accounting year. Note that forecasts of Farm Business Income for 2014/15 are not produced in Scotland.

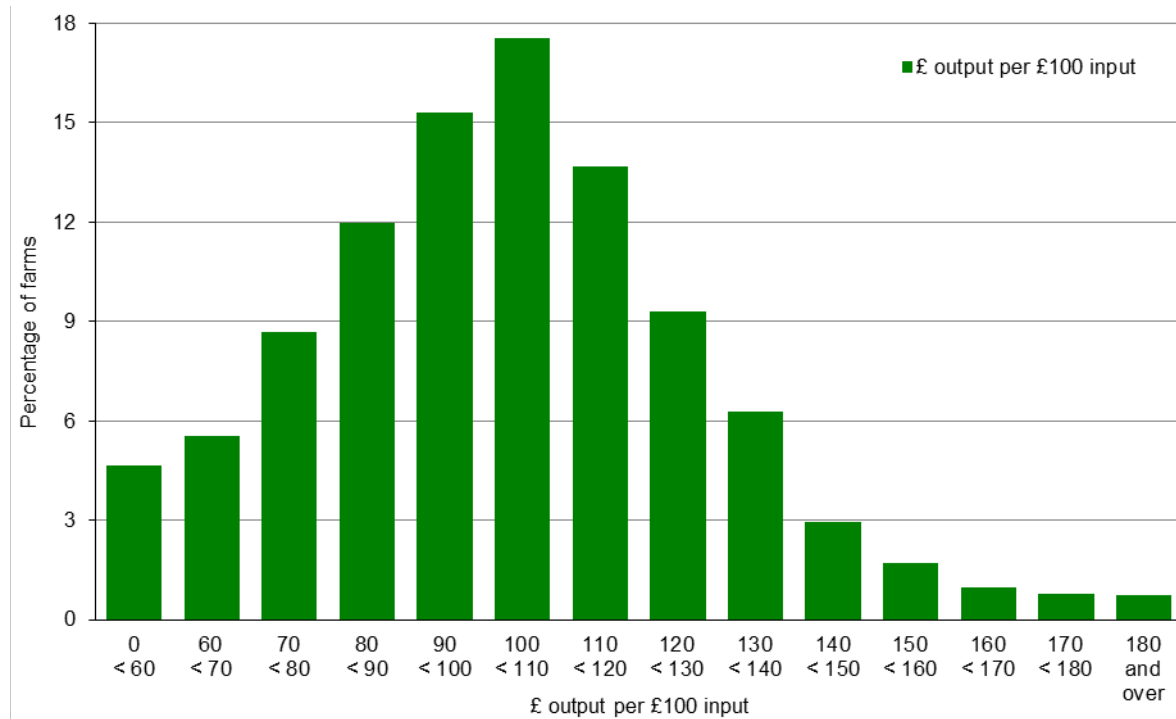
20. Incomes across all farm types in England, Wales and Northern Ireland are expected to fall or remain broadly similar. This is due to lower prices for key outputs such as milk, cereals, eggs and meat, offset to some extent by lower input costs, particularly for animal feed, fuel and fertiliser.
21. On dairy farms, average incomes are expected to fall by around 11% in England, 22% in Wales and just over a third in Northern Ireland driven primarily by lower milk prices. In England higher prices in the first half of the year together with high volumes, will have partially offset the reduction in prices seen in the second half of the year. The situation in Northern Ireland was similar but it experienced more dramatic falls in milk prices during the second half of the year. For the UK as a whole, milk production for 2014/15 was around 5% ahead of last year.
22. In England, average incomes on grazing livestock farms in both the Lowland and Less Favoured Areas (LFA) are expected to increase very slightly in 2014/15 albeit from a low base. Total input costs are expected to fall for both these farm types, more than offsetting the lower output from livestock enterprises driven by lower prices. The increases are marginal and amount to a 6% increase for Lowland Grazing Livestock farms and a 14% increase for LFA Grazing Livestock farms.
23. In Northern Ireland incomes on LFA grazing livestock farms are expected to fall due to lower cattle and sheep prices and single farm payment receipts. In Wales, incomes on LFA and lowland grazing livestock farms are expected to fall due to a combination of lower output and lower Single Farm Payment.
24. Average Farm Business Income is forecast to fall by around 20% to £51,500 on specialist pig farms. Higher throughput and carcass weights combined with lower feed costs are expected to be offset by lower pig prices. A change in livestock valuation is also responsible for some of the fall in income forecast for 2014/15 as the value of weaners and store pigs is estimated to be around 13% lower at closing, compared to opening, valuation.
25. Forecasts for specialist poultry farms are subject to a considerable degree of uncertainty reflecting both the structure of this sector and the relatively small sample of these farms in the FBS. Despite an increase in throughput, lower egg and broiler prices are expected to reduce total farm output on specialist poultry farms. This is expected to be partially offset by lower input costs, particularly feed which is a key input on these farms. Average incomes are therefore expected to fall by 11% to around £140,500.
26. Incomes on mixed farms in England are forecast to fall by 14% in 2014/15 to £25,500. These farm types reflect all the enterprises found in the more specialist farm types reported above. Enterprise output for both the livestock and cropping enterprises are expected to fall. Although input costs are also forecast to fall this is to a lesser extent than output resulting in a fall in incomes for farms within this farm type.
27. In England and Northern Ireland the Single Farm Payment was around 7% lower in 2014 than in 2013. This was due to a change in the exchange rate (sterling strengthening against the euro). In Wales, the Single Farm Payment was around 20% lower in 2014 than in 2013 due to a combined effect of the change in the exchange rate and the planned transfer of payments from Pillar 1 to Pillar 2.
28. Table 3.5 shows the variation in the level of Farm Business Income, Net Farm Income and Cash Income across farms in England, Wales, Scotland and Northern Ireland for 2013/14. Almost a fifth of farms in the UK failed to make a positive Farm Business Income although the proportion was lower (around 14%) in Northern Ireland. Around a half of farms in the UK and in each individual country fell into the lower income brackets (less than £20,000). At the top end of the scale just over a quarter of farms in England had an FBI of more than £50,000. The equivalent figure for Northern Ireland was 12%. Across the UK a quarter of farms had a Farm Business Income of more than £50,000.
29. A greater proportion of farms fall into the lower band income ranges for Net Farm Income. This is because Net Farm Income is a narrower measure of income; it is net of an imputed rent on owned land and an imputed cost for unpaid labour (apart from farmer and spouse). On this basis almost a third of farms in the UK failed to make a profit.

30. Chart 3.3 shows the differences in performance of farms in the United Kingdom for 2013/14. Performance is measured as £ of output per £100 of input. The chart illustrates the significant variation in performance across all farms in the United Kingdom with around 46 percent of farms failing to recover their costs in that year.

Chart 3.3 Distribution of performance (a) across farms 2013/14; United Kingdom

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**Table 3.3 Farm business income by country and type of farm (a)**

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Average farm business income per farm (£ farm)	Accounting years ending on average in February				
	2010/11	2011/12	2012/13(b)	2013/14 (b)	2014/15 Provisional
At current prices					
<b>England</b>					
Cereals	84 000	93 500	67 500	49 500	51 000
General cropping	110 000	100 500	89 000	67 500	56 500
Dairy	66 000	86 500	52 500	88 000	78 000
Grazing livestock (lowland)	21 500	32 000	16 000	15 000	16 000
Grazing livestock (LFA)	22 000	29 000	18 500	14 500	16 500
Specialist pigs	44 500	38 000	41 500	65 000	51 500
Specialist poultry	72 500	46 500	90 000	157 000	140 500
Mixed	50 500	74 000	37 500	29 500	25 500
<b>Wales</b>					
Dairy	57 500	68 000	45 000	77 000	59 500
Grazing livestock (lowland)	31 000	36 500	27 000	28 500	23 000
Grazing livestock (LFA)	30 000	34 500	21 500	19 000	15 000
<b>Scotland</b>					
Cereals	58 500	60 000	23 500	23 500	..
General cropping	72 500	50 500	55 000	36 000	..
Dairy	78 000	82 000	45 500	79 500	..
Grazing livestock (lowland)	42 000	33 500	18 000	24 000	..
Grazing livestock (LFA)	33 000	37 000	24 000	24 500	..
Mixed	54 000	49 000	34 500	30 000	..
<b>Northern Ireland</b>					
Dairy	51 500	58 000	28 000	61 500	40 500
Grazing livestock (LFA)	19 500	23 000	13 000	14 500	12 500
<b>United Kingdom (c)</b>					
Cereals	80 500	90 000	63 000	46 500	..
General cropping	99 500	86 500	81 500	59 500	..
Dairy	62 500	77 500	45 500	80 000	..
Grazing livestock (lowland)	22 000	31 000	16 500	16 000	..
Grazing livestock (LFA)	26 500	31 500	20 000	18 500	..
Specialist pigs	45 500	38 000	40 500	66 000	..
Specialist poultry	72 500	46 500	90 000	157 000	..
Mixed	50 500	65 500	36 500	30 000	..
<b>ALL TYPES (Including Horticulture)</b>	<b>50 500</b>	<b>57 000</b>	<b>38 000</b>	<b>38 500</b>	<b>..</b>
In real terms (at 2013/14 prices) (d)					
<b>United Kingdom</b>					
Cereals	76 500	86 500	62 000	46 500	..
General cropping	94 000	83 500	80 000	59 500	..
Dairy	59 500	75 000	45 000	80 000	..
Grazing livestock (lowland)	20 500	30 000	16 000	16 000	..
Grazing livestock (LFA)	25 500	30 500	19 500	18 500	..
Specialist pigs	43 000	36 500	40 000	66 000	..
Specialist poultry	68 500	45 000	88 500	157 000	..
Mixed	47 500	63 500	36 000	30 000	..
<b>ALL TYPES (Including Horticulture)</b>	<b>47 500</b>	<b>55 000</b>	<b>37 500</b>	<b>38 500</b>	<b>..</b>

(a) Figures rounded to nearest £500

(b) England and Wales results derived from 2010 standard output coefficients from 2012/13, Northern Ireland from 2013/14.

Scotland have yet to change from 2007 standard output co-efficients.

(c) UK totals include farm types that are present though not listed individually for some member countries.

(d) Uses GDP deflator

Table 3.4 All farm types: distribution of farm incomes by country 2013/14

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Percentage of farms	England	Wales	Scotland	Northern Ireland	United Kingdom
<b>Farm Business Income</b>					
Less than zero	19	18	22	14	19
1 to less than £5,000	8	6	6	7	8
£5,000 to less than £10,001	8	10	8	12	8
£10,000 to less than £20,001	13	17	18	23	15
£20,000 to less than £30,001	10	15	10	9	11
£30,000 to less than £50,001	14	16	16	17	15
£50,000 and over	27	18	21	18	24
Average (£ thousand per farm)	43	29	31	30	38
<b>Net Farm Income</b>					
Less than zero	33	29	31	26	32
1 to less than £5,000	7	11	8	10	8
£5,000 to less than £10,001	7	13	11	14	9
£10,000 to less than £20,001	12	14	15	13	13
£20,000 to less than £30,001	9	11	8	10	9
£30,000 to less than £50,001	12	11	11	14	12
£50,000 and over	20	12	16	14	18
Average (£ thousand per farm)	31	18	20	24	27
<b>Cash Income</b>					
Less than zero	9	9	11	4	9
1 to less than £5,000	5	5	4	5	5
£5,000 to less than £10,001	6	6	4	8	6
£10,000 to less than £20,001	12	14	13	16	13
£20,000 to less than £30,001	12	17	11	15	13
£30,000 to less than £50,001	17	20	21	21	18
£50,000 and over	39	28	36	31	37
Average (£ thousand per farm)	67	42	51	47	60

### Farm Income measures

31. Farm Business Income (FBI) is the preferred measure for comparisons of farm type and represents the return to all unpaid labour (farmers, spouses and others with an entrepreneurial interest in the farm business) and to all their capital invested in the farm business including land and farm buildings.

**Farm Business Income *equals***

Total output from agriculture (includes crop and livestock valuation change) *plus*  
 Total output from agri-environment schemes *plus*  
 Total output from diversification *plus*  
 Single payment scheme *less*  
 Expenditure (costs, overheads, fuel, repairs, rent, depreciation, paid labour) *plus*  
 Profit/(loss) on sale of fixed assets.

32. **Total Income from Farming (TIFF)** represents business profits and remuneration for work done by owners and other unpaid workers. It is used to assess United Kingdom agriculture as a whole.

**Total Income from Farming *equals***

Gross output at basic prices *plus*  
 Other subsidies less taxes *less*  
 Total intermediate consumption, rent, paid labour *less*  
 Total consumption of fixed capital (depreciation) *less*  
 Interest.

33. Differences and similarities

**Farm Business Income**

- the preferred measure for comparisons of farm type;
- covers the 12 month period March to February;
- does not subtract imputed rent for owner occupiers;
- complete range of on-farm activities including income from diversified activities where they are included in the farm accounts;
- treatment of stocks: the change in the book value of stocks between the start and end of the accounting year.

**Total Income from Farming**

- the main aggregate measure of farm income used to assess United Kingdom agriculture as a whole.
- covers the calendar year;
- does not subtract imputed rent for owner occupiers;
- complete range of on-farm activities including income from diversified activities where they are included in the farm accounts;
- treatment of stocks: the physical changes in stocks valued at average calendar year prices.

## Revisions

34. For total income from farming revisions information see Chapter 4.
35. Compared with the provisional 2013/14 results published in the 2013 edition of AUK, the outturns published for England and Wales show lower incomes for dairy, lowland and LFA grazing livestock farms than those forecast. On grazing livestock farms output from the sheep sector was lower than forecast due to lower productivity and the impact of lower stocking rates on the closing valuations. Input costs, particularly for feed were also higher than forecast on dairy farms. On general cropping farms in England the fall in potato prices was more severe than expected contributing to a reduced enterprise output of nearly 20 percent Output was higher than expected on specialist poultry farms in England, but note that the sample size is relatively small for this farm type and the results subject to considerable variability.
36. For Northern Ireland, the outturns published here show lower incomes for dairy and LFA grazing livestock farms than those of the provisional results published in the 2013 edition of AUK. In both cases, the lower incomes are due to higher than expected increases in input costs particularly for feed and fertilisers.

## Chapter 4: Accounts

### Summary

- Total Income from Farming is estimated to have fallen between 2013 and 2014 by 4.4% (£247 million) in real terms, to £5,379 million. The strengthening sterling against the euro reduced the value of payments received from the EU by £459 million pushing Total Income from Farming below 2013 levels.
- Falling price offset by increased production saw the value of outputs fall by £593 million to £25.8 billion. The value of intermediate consumption, the goods and services consumed or used as inputs in the productive process, is estimated to have reduced, in real terms, by £899 million (5.4%) to £15.9 billion.
- Gross value added at basic price for the agricultural industry, which identifies agriculture's contribution to the Gross Domestic Product (GDP), rose by £306 million to £9.9 billion. In real terms, a 3.2% increase.

### Introduction

1. This chapter shows production and income accounts for agriculture in the United Kingdom. Table 4.1 shows the value in real terms and Table 4.2 shows the values in current price. Real term value is where previous year's data is adjusted to take account of inflation so the values are comparable. Current price values are based on prices in the year in question. Table 4.3 presents the year on year changes in outputs and inputs at current price. See Table 4.4 for a list of definition of terms used in Tables 4.1, 4.2 and 4.3.
2. These accounts conform to internationally agreed accounting principles required by both the United Kingdom's National Statistics and by Eurostat, the statistical office of the European Union.

### Real term value (table 4.1)

3. Real term value is where previous year's data is adjusted to take account of inflation so the values are comparable.
4. In real terms Total Income from Farming in 2014 is estimated to be 4.4% lower than the 2013 total. After a wet start to the year and floods in South West England, good weather conditions in the spring and summer encouraged crop growth, record yields, ample forage and led to higher production levels. In comparison prices declined which led to a 2.2% fall in the value of outputs. The lower prices also reduced the value of intermediate consumption by 5.4%. This led to a 3.2% (£306 million) rise in gross value added at basic price to £9,922 million.
5. However the movement in the euro/sterling exchange rate led to reduced Single Farm Payments which reduced payments by £459 million in 2014. With small increases in capital consumption, labour and rent as well Total Income from Farming fell by 4.4% (£247 million) to £5,379 million.
6. Comparing 2014 against 2011, the last year which was not adversely affected by the weather, total income from farming fell by 1.2%. Outputs in 2014 were £866 million higher than 2011 driven by higher production but lower prices. There was little change in the value of intermediate consumption between the two years, a slight increase in the volume used offset by a slightly lower price. Gross value added at basic price was £781 million higher in 2014 compared to 2011. However the unfavourable exchange rate reduced the value of single farm payments and farmers received £733 million less in payments in 2014. This along with changes to consumption of fixed capital, labour and rent sees total income from farming £67 million less than 2011.

Table 4.1 Production and income accounts in real terms (adjusted to take account of inflation)

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£ million (real terms)	2010	2011	2012	2013	2014 (provisional)
<b>Output at market prices (a)</b>					
1 Output of cereals	2 439	3 401	3 314	3 450	3 473
of which: wheat	1 807	2 445	2 238	2 126	2 472
barley	560	852	953	1 155	896
oats	68	99	118	163	99
2 Output of industrial crops	1 130	1 604	1 404	1 204	1 158
of which: oilseed rape	725	1 169	1 021	757	684
protein crops	136	109	101	125	121
sugar beet	211	265	235	274	315
other industrial crops	33	34	30	23	23
3 Output of forage plants	203	196	151	220	265
4 Output of vegetables and horticultural products	2 434	2 461	2 483	2 574	2 386
of which: fresh vegetables	1 361	1 288	1 300	1 363	1 220
plants and flowers	1 072	1 173	1 183	1 211	1 166
5 Output of potatoes (including seeds)	643	748	683	963	684
6 Output of fruit	630	636	594	613	622
7 Output of other crop products including seeds	472	500	666	592	648
<b>Total crop output (sum 1 - 7)</b>	<b>7 950</b>	<b>9 547</b>	<b>9 294</b>	<b>9 615</b>	<b>9 237</b>
8 Output of livestock	7 869	8 602	8 943	9 330	8 889
primarily for meat	6 570	7 270	7 498	7 900	7 455
of which: cattle	2 317	2 710	2 891	2 943	2 582
pigs	1 052	1 127	1 180	1 297	1 270
sheep	1 053	1 210	1 056	1 064	1 112
poultry	1 935	2 005	2 149	2 366	2 260
gross fixed capital formation	1 299	1 332	1 445	1 430	1 435
of which: cattle	768	664	899	885	932
pigs	8	8	9	6	5
sheep	318	435	327	340	276
poultry	205	224	210	199	221
9 Output of livestock products	4 274	4 620	4 644	5 160	5 380
of which: milk	3 580	3 936	3 900	4 346	4 602
eggs	604	589	686	731	679
<b>Total livestock output (8 + 9)</b>	<b>12 142</b>	<b>13 222</b>	<b>13 587</b>	<b>14 491</b>	<b>14 269</b>
10 Other agricultural activities	987	1 080	1 051	1 071	1 063
11 Inseparable non-agricultural activities	1 007	1 057	1 078	1 196	1 210
<b>12 Output (at market prices) (sum 1 to 11)</b>	<b>22 087</b>	<b>24 905</b>	<b>25 010</b>	<b>26 373</b>	<b>25 780</b>
13 Total subsidies (less taxes) on product (b)	31	29	21	21	21
<b>14 Gross output at basic prices (12 + 13)</b>	<b>22 117</b>	<b>24 934</b>	<b>25 031</b>	<b>26 394</b>	<b>25 800</b>

continued

Table 4.1 Production and income accounts in real terms (adjusted to take account of inflation)  
*continued*

£ million (real terms)

	2010	2011	2012	2013	2014 (provisional)
<b>Intermediate consumption</b>					
15 Seeds	793	801	768	882	708
16 Energy	1 308	1 453	1 480	1 476	1 372
of which: electricity and fuels for heating	383	388	400	392	405
motor and machinery fuels	924	1 065	1 080	1 083	967
17 Fertilisers	1 441	1 673	1 576	1 537	1 440
18 Plant protection products	765	813	869	871	946
19 Veterinary expenses	435	422	435	455	461
20 Animal feed	4 396	4 747	5 064	5 663	5 012
of which: compounds	2 426	2 761	2 978	3 347	2 976
straights	1 492	1 447	1 500	1 601	1 411
feed produced and used on farm or purchased from other farms	478	539	586	715	625
21 Total maintenance	1 483	1 536	1 507	1 539	1 530
of which: materials	910	948	935	954	945
buildings	573	588	572	585	585
22 Agricultural services	987	1 080	1 051	1 071	1 063
23 FISM	92	94	99	90	93
24 Other goods and services (c)	3 019	3 173	3 229	3 195	3 253
<b>25 Total intermediate consumption (sum 15 to 24)</b>	<b>14 719</b>	<b>15 794</b>	<b>16 078</b>	<b>16 778</b>	<b>15 879</b>
<b>26 Gross value added at market prices (12 - 25)</b>	<b>7 368</b>	<b>9 112</b>	<b>8 933</b>	<b>9 594</b>	<b>9 901</b>
<b>27 Gross value added at basic prices (14 - 25)</b>	<b>7 399</b>	<b>9 141</b>	<b>8 954</b>	<b>9 616</b>	<b>9 922</b>
28 Total consumption of Fixed Capital	3 743	4 024	4 096	4 008	4 060
of which: equipment	1 549	1 616	1 667	1 705	1 728
buildings	953	974	982	942	953
livestock	1 241	1 434	1 448	1 362	1 379
cattle	730	833	901	872	884
pigs	8	9	8	7	6
sheep	313	377	311	273	290
poultry	189	216	227	209	199
<b>29 Net value added at market prices (26 - 28)</b>	<b>3 625</b>	<b>5 087</b>	<b>4 836</b>	<b>5 587</b>	<b>5 841</b>
<b>30 Net value added at basic prices (27 - 28)</b>	<b>3 656</b>	<b>5 116</b>	<b>4 858</b>	<b>5 608</b>	<b>5 862</b>
31 Other taxes on production	- 120	- 127	- 125	- 120	- 115
32 Other subsidies on production (b)	3 734	3 666	3 377	3 392	2 933
<b>33 Net value added at factor cost (30 + 31 + 32)</b>	<b>7 270</b>	<b>8 655</b>	<b>8 109</b>	<b>8 879</b>	<b>8 680</b>
34 Compensation of employees	2 394	2 465	2 436	2 444	2 459
35 Rent	446	477	483	502	525
36 Interest (d)	247	267	299	307	317
<b>37 Total Income from Farming (33 - 34 - 35 - 36)</b>	<b>4 182</b>	<b>5 446</b>	<b>4 890</b>	<b>5 626</b>	<b>5 379</b>

(a) Output is net of VAT collected on the sale of non-edible products. Figures for output at market prices exclude subsidies on products.

(b) "Subsidies (less taxes) on product": payments linked to the production of agricultural products. "Other subsidies on production": payments not linked to production from which agricultural producers can benefit as a consequence of engaging in agricultural activities e.g. Single Payment Scheme, agri-environment schemes.

(c) Includes livestock and crop costs, water costs, insurance premiums, bank charges, professional fees, rates, and other farming costs.

(d) Interest charges on loans for current farming purposes and buildings and works less interest on money held on short term deposit.

## Current price (tables 4.2 and 4.3)

7. Current price values are based on prices in the year in question.
8. In 2014 Total Income from Farming fell by £151 million to £5,379 million, a 2.7% decrease on 2013. The key contributors to the change were the decreases in: subsidies on production by £401 million, cattle by £311 million, potatoes by £263 million and barley by £239 million. This was somewhat offset by an increase of £382 million in wheat and a £331 million increase in the value of milk, both increases driven by higher production levels; and a decrease in animal feed costs by £555 million.
9. Gross value added at basic price, which identifies agriculture's contribution to the Gross Domestic Product (GDP), rose by £471 million to £9,922 million, a 5.0% increase.

## Outputs

10. Overall output of crops value fell by £214 million to £9,237 million, a fall of 2.3%. 2014 was a good year for crop production, the good weather led to some of the highest yields on record. In comparison prices fell due to increased supplies driving values down.
11. The value of wheat rose by £382 million to £2,472 million. A return to a more typical planted area and record yield saw wheat production levels 40% higher than 2013 and at their highest since 2008/9. The quality of the wheat crop was generally good but prices were lower than in 2013 and did not get above the £200 per tonne mark.
12. In contrast the value of barley fell by £239 million to £896 million following the record high seen in 2013, largely driven by much lower prices, down 20%. As with wheat 2014 saw the highest recorded yield for barley, 6.4 tonnes per acre but an 11% reduction in the planted area led to an overall 1.5% fall in the volume of barley.
13. The value of oilseed rape fell for the third year in a row by £60 million to £699 million. This fall was entirely due to the lower price, 20% lower than 2013, as good yields offset a reduction in crop area and led to a 16% increase in production.
14. In 2014 the value of potatoes fell by £263 million to £684 million, a return to a more normal level on the back of the weather related difficulties of 2012 and subsequent recovery in 2013. Price fell by 27% in 2014, and despite a smaller crop area, the favourable weather conditions led to higher yields which pushed production levels up.
15. Overall the total value of output of livestock was marginally higher at £14,269 million. Livestock was a mixed picture, the value of milk increased by £331 million to £4,602 million whereas the value of livestock primarily for meat decreased by £311 million to £7,455 million.
16. The value of milk increased by £331 million to £4,602 million. Milk production was at its highest level since 1987 achieved by an increase in dairy herd coupled with higher yields encouraged by the good grazing conditions. The average price of milk in 2013 (calendar year) was 31.6 pence per litre (ppl) compared to 31.5 ppl in 2014, with milk prices strong in the first half of 2014 but falling significantly in the second half of the year.
17. The fall in the value of livestock primarily for meat was largely due to the £311 million decrease in the value of cattle meat to £2,582 million, a result of the decline in price on the back of the record high prices seen in 2013.
18. The value of pig meat changed little at £1,270 million with higher production offset by lower price. The value of sheep meat increased by £66 million to £1,112 million a result of both higher production levels and good price.
19. The value of poultry meat fell by £66 million to £2,260 million, steadying the growth seen in the last ten years. Production levels fell by 2.9% whilst prices remained fairly stable.

### Intermediate consumption

20. The value of intermediate consumption fell by £613 million to £15,879 million.
21. The fall in intermediate consumption is largely due to the £555 million decrease in animal feed, the largest contributor to the intermediate consumption value. In 2014 feed prices fell by 12% as higher crop production pushed down grain prices. Volume levels rose by 1.8%, with straights 5.6% higher than 2013. Favourable weather conditions led to good grass growth and reduced the need for animal feed.
22. The value of seeds fell by to £159 million to £708 million. The favourable weather led to no unexpected problems, unlike 2013 when demand for seeds was high due to the wet weather conditions and a need to re-plant in both spring and autumn. As a result volumes levels fell by 8.3% and prices by 11% in 2014.
23. The value of energy fell by £78 million to £1,372 million. This is largely due to the reduction in the value of fuels for machinery, both price and volume driven. Declining world oil prices led to a fall in the red diesel price, a reduction of 11 pence per litre between January and December 2014. Volumes were 6.7% lower as there was less land work in the spring.

### Gross Value Added

24. Gross value added at basic price, which identifies agricultures contribution to the Gross Domestic Product (GDP), rose by £471 million to £9.9 billion, a 5.0% increase.

### Net Value Added at factor cost

25. Net Value Added at factor cost, which is Gross Value Added at basic prices adjusted for consumption of fixed capital, other taxes on production and other subsidies on production, is estimated to have decreased by £47 million (-0.5%) to £8.7 billion.
26. The value of consumption of fixed capital, which is capital, such as equipment, buildings and the breeding herd, used up in the process of generating new output fell £94 million (2.3%) to £3.9 billion.

### Compensation of employees

27. There was an increase of £57 million to compensate employees in 2014. This was due to an increase in pay and a small increase in the number of employees. The total compensation to employees in 2014 was £2.5 billion.

### Other subsidies on production

28. Subsidies fell by £401 million to £2,933 million. This 14% decrease in subsidies is due to the change in the exchange rate between sterling and the Euro and is a significant contributor to the fall in the Total Income from Farming.



Table 4.2 Production and income accounts at current prices

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£ million (current prices)

	2010	2011	2012	2013	2014 (provisional)
<b>Output at market prices (a)</b>					
1 Output of cereals	2 267	3 230	3 201	3 391	3 473
of which: wheat	1 680	2 322	2 162	2 090	2 472
barley	521	809	920	1 135	896
oats	63	94	114	160	99
2 Output of industrial crops	1 051	1 524	1 356	1 183	1 158
of which: oilseed rape	674	1 110	986	744	684
protein crops	127	103	98	123	121
sugar beet	197	251	227	270	315
other industrial crops	30	32	29	23	23
3 Output of forage plants	189	186	146	217	265
4 Output of vegetables and horticultural products	2 263	2 337	2 398	2 530	2 386
of which: fresh vegetables	1 266	1 224	1 255	1 340	1 220
plants and flowers	997	1 114	1 142	1 191	1 166
5 Output of potatoes (including seeds)	598	711	659	947	684
6 Output of fruit	585	604	573	602	622
7 Output of other crop products including seeds	439	475	644	581	648
<b>Total crop output (sum 1 - 7)</b>	<b>7 392</b>	<b>9 067</b>	<b>8 977</b>	<b>9 451</b>	<b>9 237</b>
8 Output of livestock	7 316	8 169	8 637	9 171	8 889
primarily for meat	6 108	6 904	7 242	7 765	7 455
of which: cattle	2 154	2 573	2 792	2 893	2 582
pigs	978	1 070	1 139	1 274	1 270
sheep	979	1 149	1 020	1 045	1 112
poultry	1 799	1 904	2 075	2 326	2 260
gross fixed capital formation	1 208	1 265	1 395	1 406	1 435
of which: cattle	714	631	868	870	932
pigs	8	8	8	6	5
sheep	295	413	316	334	276
poultry	191	213	203	195	221
9 Output of livestock products	3 973	4 387	4 485	5 072	5 380
of which: milk	3 329	3 738	3 767	4 271	4 602
eggs	561	559	662	718	679
<b>Total livestock output (8 + 9)</b>	<b>11 289</b>	<b>12 556</b>	<b>13 123</b>	<b>14 243</b>	<b>14 269</b>
10 Other agricultural activities	918	1 026	1 015	1 052	1 063
11 Inseparable non-agricultural activities	936	1 003	1 041	1 176	1 210
<b>12 Output (at market prices) (sum 1 to 11)</b>	<b>20 535</b>	<b>23 652</b>	<b>24 155</b>	<b>25 922</b>	<b>25 780</b>
13 Total subsidies (less taxes) on product (b)	29	28	20	21	21
<b>14 Gross output at basic prices (12 + 13)</b>	<b>20 563</b>	<b>23 679</b>	<b>24 176</b>	<b>25 942</b>	<b>25 800</b>

continued

Table 4.2 Production and income accounts at current prices *continued*

£ million (current prices)

	2010	2011	2012	2013	2014 (provisional)
<b>Intermediate consumption</b>					
15 Seeds	737	761	742	867	708
16 Energy	1 216	1 380	1 429	1 450	1 372
of which: electricity and fuels for heating	357	369	386	386	405
motor and machinery fuels	859	1 012	1 043	1 065	967
17 Fertilisers	1 339	1 589	1 523	1 511	1 440
18 Plant protection products	711	772	839	856	946
19 Veterinary expenses	405	401	420	447	461
20 Animal feed	4 087	4 508	4 891	5 567	5 012
of which: compounds	2 255	2 622	2 876	3 290	2 976
straights	1 387	1 374	1 448	1 574	1 411
feed produced and used on farm or purchased from other farms	444	512	566	703	625
21 Total maintenance	1 379	1 459	1 455	1 513	1 530
of which: materials	846	900	903	937	945
buildings	533	559	552	575	585
22 Agricultural services	918	1 025	1 015	1 052	1 063
23 FISM	86	89	95	88	93
24 Other goods and services (c)	2 807	3 013	3 118	3 140	3 253
<b>25 Total intermediate consumption (sum 15 to 24)</b>	<b>13 684</b>	<b>14 999</b>	<b>15 528</b>	<b>16 491</b>	<b>15 879</b>
<b>26 Gross value added at market prices (12 - 25)</b>	<b>6 850</b>	<b>8 653</b>	<b>8 627</b>	<b>9 430</b>	<b>9 901</b>
<b>27 Gross value added at basic prices (14 - 25)</b>	<b>6 879</b>	<b>8 681</b>	<b>8 648</b>	<b>9 451</b>	<b>9 922</b>
28 Total consumption of Fixed Capital	3 480	3 822	3 956	3 939	4 060
of which: equipment	1 440	1 535	1 610	1 675	1 728
buildings	886	925	949	926	953
livestock	1 154	1 362	1 398	1 338	1 379
cattle	679	791	870	857	884
pigs	8	8	8	7	6
sheep	291	358	301	268	290
poultry	176	205	220	206	199
<b>29 Net value added at market prices (26 - 28)</b>	<b>3 370</b>	<b>4 831</b>	<b>4 671</b>	<b>5 491</b>	<b>5 841</b>
<b>30 Net value added at basic prices (27 - 28)</b>	<b>3 399</b>	<b>4 859</b>	<b>4 691</b>	<b>5 512</b>	<b>5 862</b>
31 Other taxes on production	- 112	- 121	- 121	- 118	- 115
32 Other subsidies on production (b)	3 472	3 482	3 262	3 334	2 933
<b>33 Net value added at factor cost (30 + 31 + 32)</b>	<b>6 759</b>	<b>8 219</b>	<b>7 832</b>	<b>8 728</b>	<b>8 680</b>
34 Compensation of employees	2 226	2 341	2 353	2 402	2 459
35 Rent	415	453	467	493	525
36 Interest (d)	230	253	289	302	317
<b>37 Total Income from Farming (33 - 34 - 35 - 36)</b>	<b>3 888</b>	<b>5 172</b>	<b>4 723</b>	<b>5 530</b>	<b>5 379</b>

(a) Output is net of VAT collected on the sale of non-edible products. Figures for output at market prices exclude subsidies on products.

(b) "Subsidies (less taxes) on product": payments linked to the production of agricultural products. "Other subsidies on production": payments not linked to production from which agricultural producers can benefit as a consequence of engaging in agricultural activities e.g. Single Payment Scheme, agri-environment schemes.

(c) Includes livestock and crop costs, water costs, insurance premiums, bank charges, professional fees, rates, and other farming costs.

(d) Interest charges on loans for current farming purposes and buildings and works less interest on money held on short term deposit.

Table 4.3 Changes in outputs and inputs at current price

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£ million

	Current price value		Changes %		
	2013	2014	value	volume	price
<b>Output at market prices (a)</b>					
1 Output of cereals	3 391	3 473	2	26	- 19
of which: wheat	2 090	2 472	18	25	- 6
barley	1 135	896	- 21	25	- 37
oats	160	99	- 38	29	- 52
2 Output of industrial crops	1 183	1 158	- 2	5	- 7
of which: oilseed rape	744	684	- 8	- 4	- 4
protein crops	98	123	26	24	- 100
sugar beet	270	315	17	28	- 8
other industrial crops	23	23	-	-	-
3 Output of forage plants	217	265	23	78	- 31
4 Output of vegetables and horticultural products	2 530	2 386	- 6	5	- 10
of which: fresh vegetables	1 340	1 220	- 9	9	- 17
plants and flowers	1 191	1 166	- 2	1	- 3
5 Output of potatoes (including seeds)	947	684	- 28	21	- 40
6 Output of fruit	602	622	3	15	- 10
7 Output of other crop products including seeds	581	648	11	7	4
<b>Total crop output (sum 1 - 7)</b>	<b>9 451</b>	<b>9 237</b>	<b>- 2</b>	<b>16</b>	<b>- 16</b>
8 Output of livestock	9 171	8 889	- 3	-	- 3
primarily for meat	7 765	7 455	- 4	-	- 4
of which: cattle	2 893	2 582	- 11	- 4	- 7
pigs	1 274	1 270	0	7	- 7
sheep	1 045	1 112	6	7	- 1
poultry	2 326	2 260	- 3	0	- 3
gross fixed capital formation	1 406	1 435	2	- 1	3
of which: cattle	870	932	7	0	7
pigs	6	5	- 14	- 11	- 3
sheep	334	276	- 17	- 10	- 8
poultry	195	221	13	7	6
9 Output of livestock products	5 072	5 380	6	9	- 2
of which: milk	4 271	4 602	8	9	- 1
eggs	718	679	- 5	4	- 9
<b>Total livestock output (8 + 9)</b>	<b>14 243</b>	<b>14 269</b>	<b>-</b>	<b>3</b>	<b>- 3</b>
10 Other agricultural activities	1 052	1 063	1	1	-
11 Inseparable non-agricultural activities	1 176	1 210	3	14	- 10
<b>12 Output (at market prices) (sum 1 to 11)</b>	<b>25 922</b>	<b>25 780</b>	<b>- 1</b>	<b>8</b>	<b>- 8</b>
13 Total subsidies (less taxes) on product (b)	21	21	-	..	..
<b>14 Gross output at basic prices (12 + 13)</b>	<b>25 942</b>	<b>25 800</b>	<b>- 1</b>	<b>8</b>	<b>- 8</b>

continued

Table 4.3 Changes in outputs and inputs at current price *continued*

£ million

	Current price value		Changes %		
	2013	2014	value	volume	price
<b>Intermediate consumption</b>					
15 Seeds	867	708	- 18	- 4	- 15
16 Energy	1 450	1 372	- 5	- 1	- 4
of which: electricity and fuels for heating	386	405	5	- 7	13
motor and machinery fuels	1 065	967	- 9	1	- 10
17 Fertilisers	1 511	1 440	- 5	1	- 6
18 Plant protection products	856	946	11	11	- 1
19 Veterinary expenses	447	461	3	6	- 3
20 Animal feed	5 567	5 012	- 10	8	- 17
of which: compounds	3 290	2 976	- 10	6	- 15
straights	1 574	1 411	- 10	7	- 16
feed produced and used on farm or purchased from other farms	703	625	- 11	26	- 29
21 Total maintenance	1 513	1 530	1	1	-
of which: materials	937	945	1	2	- 1
buildings	575	585	2	-	2
22 Agricultural services	1 052	1 063	1	1	-
23 FISM	88	93	5	-	5
24 Other goods and services (c)	3 140	3 253	4	3	1
<b>25 Total intermediate consumption (sum 15 to 24)</b>	<b>16 491</b>	<b>15 879</b>	<b>- 4</b>	<b>4</b>	<b>- 7</b>
<b>26 Gross value added at market prices (12 - 25)</b>	<b>9 430</b>	<b>9 901</b>	<b>5</b>	<b>15</b>	<b>- 9</b>
<b>27 Gross value added at basic prices (14 - 25)</b>	<b>9 451</b>	<b>9 922</b>	<b>5</b>	<b>15</b>	<b>- 9</b>
28 Total consumption of Fixed Capital	3 939	4 060	3	1	2
of which: equipment	1 675	1 728	3	7	- 3
buildings	926	953	3	- 1	4
livestock	1 338	1 379	3	- 4	7
cattle	857	884	3	- 4	8
pigs	7	6	- 17	- 7	- 11
sheep	268	290	8	1	7
poultry	206	199	- 3	- 10	8
29 Net value added at market prices (26 - 28)	5 491	5 841	6	26	- 15
30 Net value added at basic prices (27 - 28)	5 512	5 862	6	26	- 15
31 Other taxes on production	- 118	- 115	- 3	..	..
32 Other subsidies on production (b)	3 334	2 933	- 12	..	..
33 Net value added at factor cost (30 + 31 + 32)	8 728	8 680	- 1	..	..
34 Compensation of employees	2 402	2 459	2	..	..
35 Rent	493	525	6	..	..
36 Interest (d)	302	317	5	..	..
<b>37 Total Income from Farming (33 - 34 - 35 - 36)</b>	<b>5 530</b>	<b>5 379</b>	<b>- 3</b>	<b>..</b>	<b>..</b>

- means 'nil' or 'negligible' (less than half the last digit shown).

.. means 'not available' or 'not applicable'.

(a) Output is net of VAT collected on the sale of non-edible products. Figures for output at market prices exclude subsidies on products.

(b) "Subsidies (less taxes) on product": payments linked to the production of agricultural products. "Other subsidies on production": payments not linked to production from which agricultural producers can benefit as a consequence of engaging in agricultural activities e.g. Single Payment Scheme, agri-environment schemes.

(c) Includes livestock and crop costs, water costs, insurance premiums, bank charges, professional fees, rates, and other farming costs.

(d) Interest charges on loans for current farming purposes and buildings and works less interest on money held on short term deposit.

## Capital (table 4.4)

29. The aggregate balance sheet for agriculture shown at table 4.4 values the total assets and liabilities for agriculture at the end of each calendar year and estimates the total net worth of the industry.
30. Net worth is estimated to be £225 billion in December 2013, the last year in which all data are available. This shows a £28.6 billion increase on 2012, which is largely down to a £26.7 billion increase in the estimate of land values due to the higher prices seen in 2013.

**Table 4.4 Aggregate balance sheet for the agricultural industry**

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£ million	2009	2010	2011	2012	2013
<b>At current prices</b>					
<b>Assets</b>					
Fixed (a):					
Land (b)	144 724	163 497	178 284	189 638	216 347
Buildings, plant, machinery and vehicles	28 406	28 629	30 730	31 044	31 928
Breeding livestock	8 230	6 813	8 603	7 571	8 225
Total fixed	181 359	198 939	217 617	228 253	256 500
Trading livestock	3 523	3 305	4 030	4 024	4 172
Crops and stores	3 001	3 557	4 024	4 050	3 976
Debtors, cash deposits	5 274	6 107	6 286	6 068	6 241
Total current	11 799	12 968	14 340	14 142	14 388
	193 158	211 907	231 957	242 395	270 889
<b>Liabilities</b>					
Long and medium term:					
AMC and SASC (c)	1 213	1 469	1 621	1 762	1 761
Building Societies and Institutions	946	1 017	1 247	1 336	958
Bank loans	3 693	4 324	5 127	5 727	5 616
Family Loans	445	537	454	488	616
Other	24	18	20	35	20
Total long and medium term	6 322	7 365	8 469	9 348	8 971
Short term:					
Leasing	89	80	81	82	82
Hire purchase	925	1 039	1 271	1 303	1 225
Trade Credit	1 702	1 912	2 323	2 476	2 475
Bank overdrafts	2 941	2 846	2 566	2 519	2 799
Other	100	106	72	63	54
Total short term	5 756	5 983	6 312	6 442	6 636
Total Liabilities	12 078	13 349	14 781	15 790	15 607
<b>Net worth</b>	<b>181 080</b>	<b>198 558</b>	<b>217 176</b>	<b>226 605</b>	<b>255 282</b>
<b>In real terms (as deflated by the gdp deflator):</b>					
Indices 2011 = 100					
GDP deflator	95	98	100	102	104
Total assets	88	93	100	103	113
Total liabilities	86	92	100	105	102
Net worth	88	93	100	103	114

(a) The valuations of land and breeding livestock are at average market prices; cost, net of consumption of fixed capital. those of buildings, plant, machinery and vehicles are replacement

(b) Includes values for arable land and pasture in Great Britain & Northern Ireland based on land area from June Surveys.

(c) Agricultural Mortgage Company (AMC) and Scottish Agricultural Securities Corporation (SASC).

## Revisions

31. These estimates will be subject to revision as more data becomes available.
32. In this edition methodological changes have been made to the calculation of the consumption of capital formation. These changes have extended the period that the capital is consumed and changed the profile of consumption. Changes to the data have been made back to 1973.
33. In addition there are methodological changes made to calculation of rent data. These changes improve the land area calculation and have been made back to 1987.
34. There are changes to plant protection products data back to 2008. This corrects errors in the interpretation of the data. Changes have also been made to seeds all the way back to 1973 to rectify an error in the data.
35. The Office of National Statistics have implemented changes to their FISIM time series which resulted in relative changes to both interest and FISIM back to 2008.
36. Changes to cereal and potatoes were made back to 2010 due to methodological changes.
37. There are methodological changes to the aggregate balance sheet land prices. These changes improve the land area calculation and have been made back to 1984.

## Definition of terms used in tables 4.1, 4.2 and 4.3

Terms	Table 4.1 & 4.2 reference number	Definition
Agricultural industry		All agricultural activities taking place within businesses that carry out agricultural activities. These businesses include all farms and specialist agricultural contractors.
Capital formation in livestock	8	Production of animals that will be used as the means of production, e.g. breeding animals.
Other agricultural activities	10	Agricultural activities that do not result in sales of final product, e.g. quota leasing, contract work.
Inseparable non-agricultural activities	11	Non-agricultural activities which are included within the business level accounts and are inseparable, e.g. some cases of bed and breakfast and recreation facilities.
Output at market prices	12	Output excluding subsidies. The output of the agricultural industry includes some non-agricultural activities and transactions within the industry.
Basic prices		Market price plus directly paid subsidies that are linked to production of specific product.
Subsidies (less taxes) on product	13	Subsidies and taxes linked to the production of an agricultural product. All subsidies are recorded on an 'as due' basis.
FISIM	23	Financial Intermediation Services Indirectly Measured (FISIM) is an estimate of the value of services provided by financial intermediaries, such as banks, for which no explicit charges are made, and which are paid for as part of the margin between rate applied to savers and borrowers.
Intermediate consumption	25	Consumption of goods and services, e.g. feed, seeds, fertiliser, pesticides.
Gross value added	26	Gross output less intermediate consumption.
Consumption of fixed capital	28	The value (at current prices) of capital assets used in the production process, e.g. buildings, plant, machinery, vehicles and livestock.
Net value added	30	Gross value added at basic prices less consumption of fixed capital.
Other subsidies on production	32	Subsidies and taxes not linked to production of a specific product, e.g. Single Payment Scheme, agri-environment payments, animal disease compensation.
Net value added at factor cost	33	Net value added at basic prices plus other subsidies (less taxes) on production.
Compensation of employees	34	The full costs of employees to the business including national insurance contributions.
Total Income from Farming	37	Income to those with an entrepreneurial interest in the agricultural industry, e.g. farmers, partners, spouses and most other family workers.

# Chapter 5: Productivity

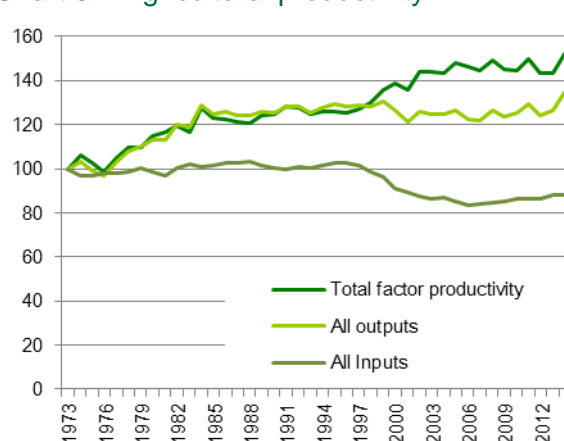
## Summary

- Total factor productivity in the United Kingdom is estimated to have risen by 6.0% in 2014. This follows two years of poor productivity when bad weather conditions affected production. Compared to 2011 productivity is up 1.7%
- The volume of all outputs rose by 6.5%. The good weather conditions in 2014 led to record cereal yields which led to a 13% increase in the volume of all crops. There was a 0.4% increase in the volume of all inputs.
- Since 1973 total factor productivity has risen by 52% due to a 34% increase in the volume of all outputs and a 12% decrease in the volume of all inputs.

## Introduction (chart 5.1)

1. A key measure of agriculture's competitiveness is its productivity that is how efficiently it turns inputs into outputs. It is a key measure of the economic sustainability of agriculture, an important driver of farm incomes and an essential foundation for the environmental contributions which farming makes.
2. Measuring productivity is not always straightforward and comparisons between years need to be interpreted carefully. Agricultural productivity can be influenced by factors outside the farmers control such as the weather and disease outbreaks.
3. The headline measure, total factor productivity, shows the change in the volume of output leaving the industry per unit of all inputs entering the industry, including fixed capital and labour. The partial factor productivity indicators show the volume of output leaving the industry per unit of one particular type of input, in this case intermediate consumption, consumption of fixed capital, labour and land.
4. For the first time land is included in the calculation of total factor productivity. This brings the calculation in line with other countries that produce productivity indicators. The introduction of land has slightly reduced the overall increase in productivity.

Chart 5.1 Agricultural productivity



## Details (table 5.1)

5. Total factor productivity of the agricultural industry in the United Kingdom is estimated to have risen by 6.0% between 2013 and 2014. Following two years where productivity was negatively affected by the weather 2014 was a marked change. Despite above average rainfall at the start of the season the rest of the year was conducive to good crop growth. With large increases in the volume of all crops produced in 2014 the overall volume of all outputs rose by 6.5%.
6. This increase in the volume of outputs was achieved with only a small increase of 0.4% in the volume of all inputs.



## Output: Crops

7. The volume of all crops produced in 2014 was 13% higher than 2013.
8. A key driver of crop growth was the 29% increase in the volume of cereals. Wheat was the stand out performer as increased yields, the average yield recorded was 8.6 tonnes/hectare, and an increased planted area led to a 46% increase in the volume of wheat. In contrast the volume of barley decreased in 2014 as there was a reduced planted area as farmers returned to winter wheat, despite high average yields of 6.4 tonnes/hectare, the volume of barley decreased by 3.0%.

## Output: Livestock

9. The volume of all livestock outputs increased by 2.9% in 2014.
10. The volume of milk produced in 2014 was a key contributor to the overall increase in the volume of livestock outputs. 2014 saw the highest recorded yields of milk since 1987, which led to an overall 8.2% increase in the volume of milk when compared to 2013. This was achieved by an increase in 2.6% of the herd size as well as increased yields per cow. The higher milk prices at the start of 2014 are thought to have encouraged the additional production seen in 2014.
11. There was a mixed picture seen in the volume of meat produced in 2014 with increases seen in pigs and sheep whilst there were decreases in cattle and poultry.

## Inputs

12. In 2014 there was a 0.4% increase in the volume of all inputs.
13. Animal feed is the largest input and there was a 1.6% increase in the volume used in 2014. Overall, the volume of compounds used in 2014 was down by 0.2%. There was an increase in compounds used for poultry and pigs but a reduction for cattle and sheep. However, it is worth noting that there was an increase in the volume of compounds used by dairy herds to accommodate the increased milk production. The total volume of straights used in 2014 increased by 5.6%. This was driven by the lower cost of straights and an increase in oilseed based products possibly to boost the lower protein content seen in cereals this year.
14. The volume of plant protection products used in 2014 increased by 5.0%. This was due to a greater use of fungicides to match the increased area of winter wheat and winter oilseed rape. There was also higher disease pressure in 2014 compared to 2013.
15. There was an 8.3% fall in the volume of seeds used in 2014 when compared to 2013. However this is back to a more normal level of seed use after higher than normal seed use in 2013 due to increased spring plantings seen that year.
16. There was a 1.9% fall in the use of energy in 2014. This was largely driven by the reduction in fuels for machinery as there was less land work in the spring, notably the reduction in spring plantings of cereals.

## Partial factor productivity (charts 5.2a, 5.2b, 5.2c and 5.2d)

17. Partial factor productivity shows the impact key inputs have on productivity. It measures total outputs against a part of the inputs. The charts below clearly show that labour is the key input in driving productivity gains. Productivity by labour shows a steady increase over the whole period. Labour volumes are now approximately half of what they were in 1973. However over the last few years growth in labour productivity is due to increased output rather than a reduction in labour numbers
18. In 2014 all the partial factor productivity indicators were driven by the 6.5% increase in the volume of outputs. Land productivity saw the largest increase of 6.9% in 2014 as the area of utilised agricultural land fell by 0.4%. All other indicators saw a rise in their inputs and therefore a smaller increase in productivity.

Chart 5.2a Productivity by intermediate consumption

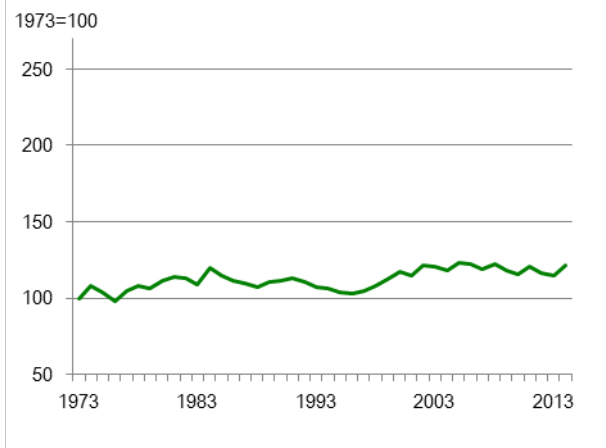


Chart 5.2b Productivity by capital consumption

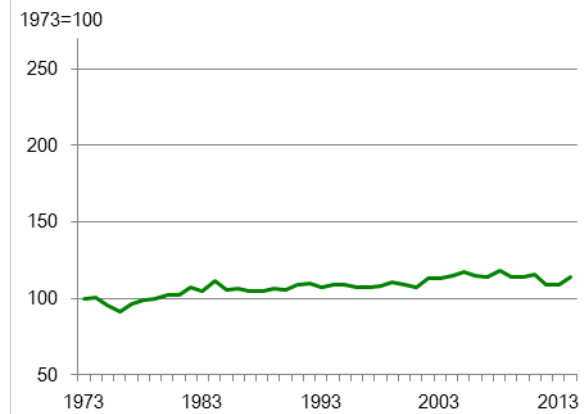


Chart 5.2c Productivity by labour

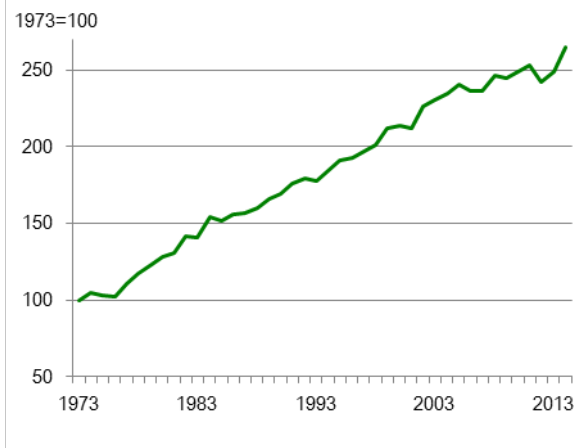
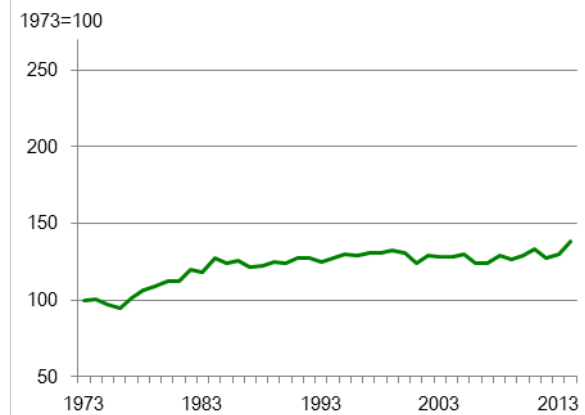


Chart 5.2d Productivity by land



## Revisions

19. Revisions have been made owing to further information becoming available and methodology reviews.
20. The key change in this publication is the introduction of land in the productivity indicator. The volume of land is based on the utilised agricultural area. The price associated for land is the rental value. Owned land is given a notional rent value. Due to the value associated to land it has become a key component of the productivity indicator. The overall impact of land on the indicator is a slight reduction in productivity gains. Productivity growth from 1973 to 2014 is 52% when land is included compared to 53% when land is excluded.
21. Methodological changes have been made to the calculation of consumption to fixed capital. These changes have extended the period that the capital is consumed and changed the profile of consumption. Changes to the data were made back to 1973.
22. There were changes to plant protection products data back to 2008. This corrects errors in the interpretation of the data.
23. There were data changes made to seeds all the way back to 1973 to rectify an error in the data. Changes to cereals and potatoes data were made back to 2010.

Table 5.1 Total factor productivity volume indices

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	2010=100				
	2010	2011	2012	2013	2014
					(provisional)
1 Output of cereals	100.0	105.0	92.6	92.9	119.9
wheat	100.0	104.2	88.2	76.4	111.8
rye	100.0	100.0	68.2	90.9	113.6
barley	100.0	110.7	111.3	154.2	149.6
oats and summer cereal mixtures	100.0	92.1	93.2	150.4	112.2
other cereals	100.0	99.5	93.3	106.0	105.3
2 Output of industrial crops	100.0	118.3	104.4	97.3	109.7
oil seeds	100.0	122.9	112.9	95.2	108.3
oilseed rape	100.0	123.7	114.6	95.4	110.3
other oil seeds	100.0	98.9	58.0	86.4	54.7
protein crops	100.0	76.0	55.5	68.9	79.1
sugar beet	100.0	130.3	111.7	129.2	142.6
other industrial crops	100.0	101.1	57.1	57.1	57.1
3 Output of forage plants	100.0	107.1	109.0	121.3	121.3
4 Output of vegetables and horticultural products	100.0	97.7	95.0	97.8	99.9
fresh vegetables	100.0	98.1	93.4	97.9	102.2
plants and flowers	100.0	97.2	96.7	97.7	97.3
5 Output of potatoes	100.0	116.4	90.3	111.1	110.9
6 Output of fruit	100.0	101.3	93.0	100.1	106.7
7 Output of other crop products	100.0	114.4	126.9	119.1	132.6
<b>Total crop output (sum 1 - 7)</b>	100.0	105.5	95.4	97.7	110.5
8 Output of livestock (meat)	100.0	102.8	102.6	103.0	103.0
cattle	100.0	102.8	101.7	98.0	97.1
pigs	100.0	106.4	107.8	111.1	115.6
sheep	100.0	105.9	101.1	104.2	108.3
poultry	100.0	99.5	102.2	105.2	102.2
other animals	100.0	100.0	100.0	100.0	100.0
9 Output of livestock products	100.0	101.3	98.9	100.2	107.5
milk	100.0	101.5	99.9	100.5	108.8
eggs	100.0	99.6	96.5	99.5	100.0
raw wool	100.0	105.2	110.7	97.5	103.6
other animal products	100.0	98.7	57.5	84.2	106.8
<b>Total livestock output (8 + 9)</b>	100.0	102.2	101.2	101.9	104.9
10 Inseparable non-agricultural activities	100.0	101.5	103.1	115.4	117.7
<b>11 All outputs</b>	100.0	103.4	99.0	100.9	107.4

continued

Table 5.1 Total factor productivity volume indices (*continued*)

	2010	2011	2012	2013	2014
				2010=100	2014
					(provisional)
12 Seeds	100.0	97.6	101.3	106.4	97.6
13 Energy	100.0	96.3	96.3	97.0	95.2
electricity and fuels for heating	100.0	94.5	93.8	87.4	87.4
motor and machinery fuels	100.0	96.9	97.2	100.9	98.2
14 Fertilisers	100.0	103.2	97.9	99.2	99.0
15 Plant protection products	100.0	108.1	117.9	124.9	131.2
16 Veterinary expenses	100.0	97.2	100.3	104.1	106.5
17 Animal feed	100.0	93.0	94.7	99.1	100.7
compounds	100.0	97.7	103.0	109.3	109.1
straights	100.0	85.3	81.3	82.5	87.2
18 Total maintenance	100.0	99.8	99.3	100.4	100.4
materials	100.0	101.4	100.2	102.2	102.2
buildings	100.0	97.2	97.8	97.6	97.6
19 FISIM	100.0	100.0	100.0	100.0	100.0
20 Other goods and services	100.0	103.4	96.0	99.6	100.6
<b>21 Intermediate consumption</b>	100.0	98.6	98.0	101.3	101.7
<b>22 Consumption fixed capital (excluding livestock)</b>	100.0	102.3	104.0	106.0	108.0
equipment	100.0	104.0	107.2	110.9	114.5
buildings	100.0	99.6	99.0	98.3	97.6
<b>23 All Labour</b>	100.0	101.6	101.7	100.9	101.1
Compensation of employees	100.0	102.3	102.4	101.7	102.0
Entrepreneurial workers (farm and specialist contractor)	100.0	101.3	101.3	100.5	100.6
<b>24 Land</b>	100.0	99.6	99.7	100.1	99.7
<b>25 All Inputs and Entrepreneurial Labour</b>	100.0	99.9	99.8	101.6	102.0
<b>Total factor productivity (11 divided by 25)</b>	100.0	103.5	99.2	99.3	105.3
<b>Partial factor productivity indicators</b>					
Productivity by intermediate consumption (11 divided by 21)	100.0	104.9	101.1	99.6	105.7
Productivity by capital consumption (11 divided by 22)	100.0	101.1	95.1	95.1	99.5
Productivity by labour (11 divided by 23)	100.0	101.8	97.3	100.0	106.3
Productivity by land (11 divided by 24)	100.0	103.8	99.2	100.7	107.7

# Chapter 6: Prices

## Summary

In 2014 compared with 2013:

- The strengthening pound against the Euro and US dollar saw prices for both inputs and outputs fall in 2014. The average producer price of agricultural products fell by 9% while the average price of agricultural inputs fell by 4.1%.
- The average price of crop products fell by 16.2%. Better UK harvest and increased global supplies saw cereal prices fall by 21%.
- The average price of livestock and livestock products fell by 3.7%, with cattle prices falling by 10.5% and egg prices falling by 6.6%.
- The average price of animal feeding stuffs that is influenced by the cereal price fell by 13.4%.

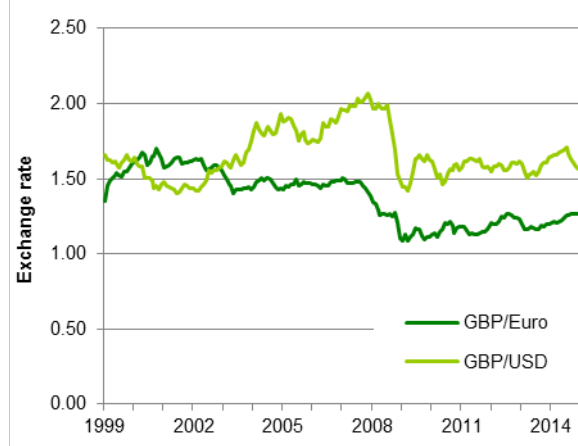
## Data Sources

1. The Agricultural Price Index (API) measures the monthly price changes in agricultural outputs and inputs for the UK. The output series reflects the price farmers receive for their products, also referred to as farm gate price. Information is collected for all major crops (for example wheat and potatoes) and on livestock and livestock products (for example sheep, milk and eggs).
2. The input series reflects the price farmers pay for goods and services. This is split into two groups: goods and services currently consumed; and goods and services contributing to investment. Goods and services currently consumed refer to items that are used up in the production process, for example fertiliser, or seed. Goods and services contributing to investment relate to items that are required but not consumed in the production process, such as tractors or buildings.

## Price Indices during 2014 (charts 6.1, 6.2, 6.3, 6.4, 6.5 and table 6.1)

3. The annual index for outputs has fallen 9.0% compared to 2013. The annual index for inputs fell by 4.0% compared to 2013.
4. The strength of the pound against the euro and also the US dollar has an impact on the price index as the global market impacts on UK prices, see chart 6.1. In 2014 the pound strengthened against the euro and the US dollar which saw the prices fall in 2014.
5. The annual crop product index was 16% lower than in 2013 due to the decreased prices for cereals, potatoes and oilseed rape.
6. Chart 6.2 shows that the price of cereals was not high at the start of the year as supplies were good and fell away further

Chart 6.1 Exchange rate of sterling against the euro and US dollar



Source: European Central Bank

due to the bumper harvest in the UK and around the world.

- Chart 6.3 shows a similar monthly trend for animal feedingstuff prices in 2014 as there was in 2013 but the price was 13% lower at the start of the year and never recovered. This was due to the low price of cereals throughout 2014 exacerbated by the bumper worldwide harvest.

Chart 6.2 Comparison monthly cereal price index 2013 and 2014

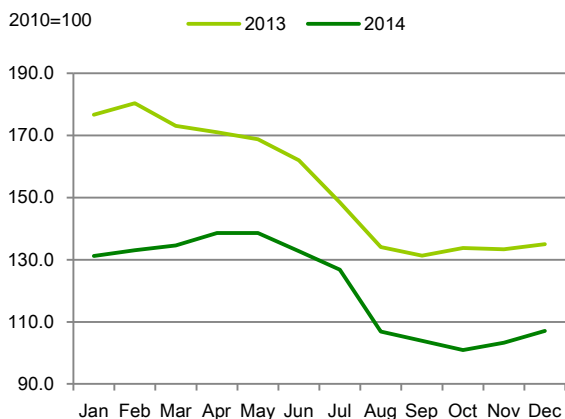
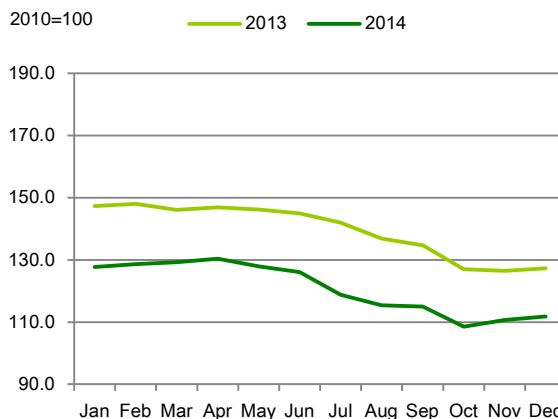


Chart 6.3 Comparison monthly animal feeding stuffs price index 2013 and 2014



- The annual potato price index was 34% lower than in 2013. This was partly due to the high prices seen for potatoes in the first half of 2013 when supplies were low. The 2013 and 2014 harvests saw increased supplies of potatoes whilst the demand remained flat which caused prices to fall. See Chart 6.4.

- The annual index for oilseed rape was 22% lower than in 2013. This was due to large oilseed harvests in Europe, a large soya harvest in the US and strong sterling at the time. This continued the downward trend from 2012 which shows no sign of reversing.

Chart 6.4 Comparison of monthly potato price index 2013 and 2014

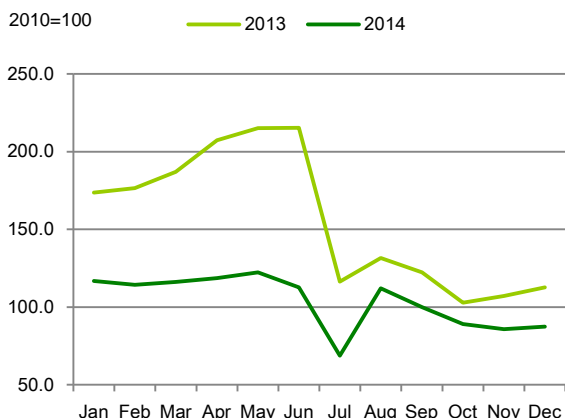
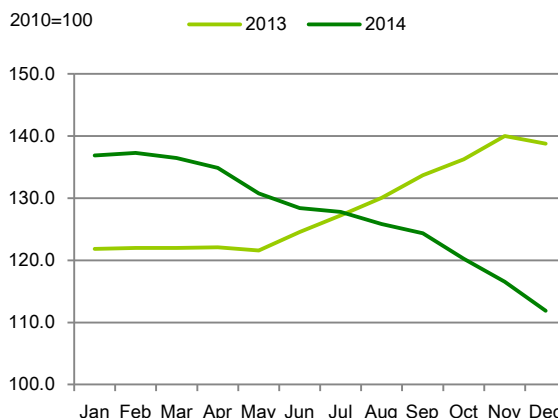


Chart 6.5 Comparison of monthly milk price index 2013 and 2014



- Chart 6.5 shows the downturn in the milk price in 2014. High domestic production across the year combined with the ban on dairy imports to Russia and falling returns from global commodity markets had a large impact on the industry. In consequence, the majority of UK milk processors reduced the payments to farmers for raw liquid milk. For further information see chapter 8 of this publication.

Table 6.1 Price indices for outputs and inputs

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2010=100	2010	2011	2012	2013	2014
<b>All Outputs</b>	100.0	113.0	118.6	125.4	114.1
<b>Crop products</b>	100.0	117.8	124.1	128.6	107.8
Cereals	100.0	144.8	149.7	153.1	120.6
Wheat	100.0	141.7	144.3	151.9	121.3
Barley	100.0	150.3	160.9	154.4	119.2
Oats	100.0	177.8	190.1	173.7	112.6
Potatoes	100.0	107.1	121.9	156.1	103.7
Industrial Crops	100.0	132.0	130.0	121.5	101.9
Oilseed Rape	100.0	143.3	139.1	127.0	99.7
Sugar Beet	100.0	99.9	104.3	105.7	106.4
Forage plants	100.0	112.6	106.2	114.8	107.3
Fresh Vegetables	100.0	92.7	108.6	110.2	96.1
Fresh Fruit	100.0	98.7	103.7	104.8	97.6
Flowers and plants	100.0	99.1	109.3	110.9	108.3
Other crop products	100.0	93.3	98.7	98.7	98.7
<b>Animals and animal products</b>	100.0	109.5	114.7	123.2	118.6
Animals (for slaughter & export)	100.0	109.6	114.6	120.0	113.3
Cattle and calves	100.0	116.4	129.3	137.7	123.2
Pigs	100.0	102.1	106.3	116.7	111.7
Sheep and lambs	100.0	112.3	105.1	102.0	106.1
All Poultry	100.0	102.9	105.0	109.3	105.9
Animal products	100.0	109.4	114.8	128.1	126.9
Milk	100.0	111.0	113.8	128.2	127.7
Eggs	100.0	99.9	124.0	130.8	122.2
<b>All Inputs</b>	100.0	112.2	114.0	116.9	112.2
<b>All goods and services currently consumed in agriculture</b>	100.0	113.9	116.4	119.7	112.9
Seeds	100.0	105.8	98.5	110.2	98.1
Energy and lubricants	100.0	118.2	122.4	123.4	119.1
Fertilisers and soil improvers	100.0	130.4	125.2	113.1	106.5
Plant protection products	100.0	100.7	102.0	97.7	102.6
Veterinary services	100.0	102.0	103.5	106.1	107.0
Animal feedingstuffs	100.0	120.7	128.5	139.4	120.7
Straight feedingstuffs	100.0	122.9	135.7	147.6	120.1
Compound feedingstuffs	100.0	119.2	123.7	134.0	121.1
Maintenance of Materials	100.0	104.9	106.5	108.3	110.3
Maintenance of Buildings	100.0	107.4	109.8	110.1	110.9
Other goods and services	100.0	106.0	107.2	109.6	110.6
<b>Goods and services contributing to investment</b>	100.0	103.6	101.7	102.9	108.7
Materials	100.0	103.0	99.1	100.4	108.5
Buildings	100.0	105.8	107.4	107.7	108.4
Other (Engineering and soil improvement operations)	100.0	102.5	104.5	107.2	110.7

## Revisions

Revisions were made to 2013 data for potatoes, and 2011, 2012 and 2013 data for sugar beet, flowers and plants and plant protection products.

Farmer’s share of food items (table 6.2)

11. In 2014 the farmgate share of the retail price of a basket of items covering staples of agricultural production was 40%, up from the previous year of 39%. The absolute level of the farmgate share is sensitive to which retail products are chosen for the basket; some have a greater amount of added value beyond the farmgate and it would therefore be expected that the share accounted for by the farmer would be lower.
12. Table 6.2 shows the items in the basket and how the farmers’ share has changed for each. Items are weighted according to their value to farmers in the United Kingdom. Milk has a weight of 361 units, which means it accounts for 36% of the basket.
13. Meat and dairy products are influenced by the underlying feed costs required in production – crops are likewise affected by weather conditions. International trade and changes to currency exchange rates also have an impact and the farmgate share will reflect the relative influences of these factors in any given year.
14. In 2014, the farmgate share rose notably for onions and milk although these have been volatile in recent years.

Table 6.2 Farmers’ share of the value of a basket of food items <sup>(a)</sup>

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		Farmgate share in 1988	Farmgate share in 2000	Farmgate share in 2014	% change in share 1988/2014	Weight in 2014 basket
		%	%	%		
<b>Farmers’ share of basket</b>		47	35	40	-15	
<b>Farm gate product</b>	<b>Retail product</b>					
apples	dessert apples per kg	55	40	34	-39	6
beef	untrimmed beef (b) per kg	67	44	50	-26	175
carrots	carrots per kg	30	38	34	12	8
cabbages	cabbage, hearts, per kg	38	39	38	-2	5
chicken	oven ready roasting chicken, fresh or chilled per kg	47	37	39	-17	138
eggs	Free range eggs per dozen (c)	28	29	32	na	54
lamb	untrimmed lamb (b) per kg	65	43	52	-20	79
onions	onions per kg	25	19	38	51	8
pork	untrimmed pork (b) per kg	57	47	40	-28	99
potatoes	old loose white potatoes per kg	24	27	17	-30	5
tomatoes	tomatoes per kg	48	41	27	-43	9
wheat	white loaf sliced, 800g	16	10	9	-43	52
milk	whole milk (d)	38	28	39	3	361

(a) Farm gate prices from Defra, retail prices from the Office for National Statistics and the Agriculture & Horticulture Development Board (AHDB).

(b) Retail prices for beef, lamb and pork are untrimmed AHDB prices adjusted for drip loss.

(c) Farmgate share in 1988 is based on non-free range size 2 eggs; there was also a break in the series in 2012 due to changes in methodology, therefore the comparison with 2012 is indicative only.

(d) The average price of one pint of delivered milk and one pint of shop milk (the shop milk based on a two pint purchase).



# Chapter 7: Crops

## Summary

- Harvested production of wheat was 16.6 million tonnes in 2014, 39% higher than 2013 and the value of production was 18% higher at £2.4 billion.
- Sugar beet yields were high and coupled with a high price the farm gate value was a record at £315 million in 2014.
- Fresh vegetable production was good in 2014 but low prices pushed the farm gate value down by 8.5% to £1.2 billion.
- Potatoes returned to more normal levels with a farm gate value of £684 million in the 2014 calendar year after having been exceptionally high in 2013.

## Cereals (tables 7.1 to 7.4)

1. Harvested production of wheat was 39% higher in 2014 at 16.6 million tonnes. The value of production of wheat was £2.4 billion in 2014, 18% higher than in 2013. The value of production of barley decreased by 21% to £896 million. The value of production of oats decreased by 39% to £99 million.
2. The area of wheat increased by 20% whereas barley decreased by 11% and oats decreased by 29%. Overall wheat yields were 16% higher than last year and above the 5 year average. Yields for all cereals were aided by good crop establishment, adequate moisture during the spring and summer and sunshine during grain fill. Better planting conditions in autumn 2013 led to many farmers reverting back to planting more winter sown crops, winter barley area was 38% higher than last year whereas the area of spring barley was 28% lower. Harvest 2014 had an earlier start than average; crops were ahead of normal for much of the growing period with an increased proportion of winter crops drilled earlier in the drilling period. Mild conditions aided development throughout the growing season. Settled weather allowed rapid clearance of early crops but wet weather in the peak harvest period at the end of August caused some delays.
3. The overall quality of the crops was good, for wheat the specific weight was 77.1kg/hl, very similar to last year (77.0kg/hl) and higher than 2012 (69.6kg/hl). The proportion of wheat samples meeting the full specifications for bread wheat in 2014 was 12% compared to 38% last year and only 3% in 2012. The larger 2014 harvest meant that imports were 38% lower than last year, millers continued to move back to domestic milling wheat. Feed wheat continued to come under pressure in the feed ration from plentiful supplies of competitively priced maize, barley and oats. Feed wheat was increasingly used by the United Kingdom's bio-ethanol plants which utilised more of their capacity in 2014. The average nitrogen content of GB barley was the lowest since records dating back to 1977; this was beneficial to the United Kingdom's buoyant distilling sector with imports limited to specialist requirements.
4. Cereal prices were below 2013 values, underpinned by increased global cereal production. The price of milling wheat declined as more domestic supplies became available. Like last year the feed sector was characterised by the use of competitively priced maize and the large wheat barley and oats crop also put pressure on prices.

## Straw

5. Cereal straw production in 2014 was 9.5 million tonnes, a rise of 18% on 2013 with an increase in the proportion of wheat straw and a decrease in the proportion of barley straw. Production in 2013 had been impacted by reduced crop areas and poor yields. Production in 2014 was higher than in any of the last 5 years, including the previous high of 8.4 million tonnes in 2012.

## Oilseed rape and linseed (tables 7.5 and 7.6)

6. The value of oilseed rape for the 2014 calendar year account was £684 million, down 7.7% on 2013 with a large price drop. The area planted was lower but the yield was good, resulting in an increase in production of 16%. Harvest of winter oilseed rape was completed earlier and quicker than in any of the previous 5 years. The average yield estimate for winter and spring oilseed rape was 3.6 tonnes per hectare with an average oil content of 45%. Oilseed rape prices in 2014 were on average 20% lower than in 2013. Prices were lowest in mid-August at £225 per tonne ex farm, but recovered slightly to £238 per tonne at the end of the harvest period. The expected record EU crop as well as high predicted US soya yields contributed to these low prices.
7. Very little linseed was grown in 2014 and the value to the calendar year account was only £15 million.

## Sugar beet (table 7.7)

8. The farm gate value of sugar beet was £315 million in 2014, up £46m on 2013 and the highest on record. The 2014 sugar beet crop saw an increase in price to £33.9 per tonne and an increase in volume of harvested production to 9.3 million tonnes. Along with high yields of 80.1 tonnes per hectare this led to a record value. With the exception of 2010 when the yield was significantly affected by severe winter weather, production as a proportion of total new supply has remained consistent at around 60%.

## Peas and Beans (table 7.8)

9. The area of field peas increased by 10% in 2014 but was still 47% lower than in 2009. The increased area combined with an increased yield meant that production utilised for animal feed stood at 58 thousand tonnes, an increase of 19% on 2013. The value of production of field peas was similar to last year at £10 million, with higher production negated by lower prices. The 2014 harvest progressed well and yields were above average with higher yields from crops grown on lighter, free draining land or land that had not grown pulses on rotation for some time. The quality of field peas was acceptable with good colour and size in earlier harvested samples but heavy rain in late August caused some bleaching in later harvested crops.
10. The area of field beans was 9% lower than last year at 107 thousand hectares. Despite the reduced area increased yields led to a 19% increase in production compared to last year at 448 thousand tonnes. The value of production of field beans was 7% lower at £84 million due to lower prices.

## Fresh vegetables (table 7.9)

11. Vegetable production decreased by 8.5% to £1.2 billion in 2014. This is mainly due to oversupply and lack of demand for brassicas and root vegetables with the exception of bulb onions. The decrease was driven by carrots, down by £31 million, calabrese down by £25 million and lettuce down £12 million.
12. Bulb onions had a significant rise in prices in 2014 due to limited supply. Salad crops such as tomatoes, cucumbers and celery have also seen increases in 2014. Tomatoes have had a notable increase in value due to a combination of increased area, yields and high prices early in the year. Production as a percentage of total new supply to the United Kingdom for all fresh vegetables was 58% which was 2.2% up on 2013. This change was largely driven by decreased imports.

## Plants and flowers (table 7.10)

13. The value of production in the ornamental sector was down 2.0% to £1.2 billion in 2014. A mild winter followed by a warm spring resulted in high demand for bedding plants over Easter and early May bank holiday, ensuring a good start to the first half of the year. Subsequent hot and drier weather conditions affected sales resulting in the year's production figures being similar to 2013.

14. After a mild start to 2014, the cut flower industry benefitted from high demand, and good crop quality with low wastage. The overall area of daffodils planted increased slightly in 2014, demand for the flowers strengthened as United Kingdom sales increased. Dry bulb sales have experienced certain difficulty this year with a mild autumn delaying the removal of bedding plants which affected demand.
15. The value of flowers/bulbs and protected stock saw decreases of 1.6% and 2.2% respectively, while the value of hardy ornamental nursery stock (including Christmas trees) decreased by 8.6%.

### Potatoes (table 7.11)

16. Despite a good harvest the value of potatoes reduced to a more normal level of £684 million in the 2014 calendar year after having been very high at £947 million in the 2013 calendar year. The effects of the poor 2012 harvest had driven very high prices in the 2012 crop year which had had an upward effect on the value of potatoes in the 2013 calendar year.
17. Sales for human consumption were hardly changed in 2014 but prices were about 30% lower than in 2013. The planted area of potatoes was lower in 2014 but favourable growing conditions over the season increased yields and production was slightly higher than in 2013. End year potato stocks in 2014 were estimated at just under 3 million tonnes, an increase on 2013 that is consistent with a slightly larger crop and near perfect harvest conditions in some areas.

### Fresh Fruit (table 7.12)

18. The value of fruit production was up 3.3% to £622 million in 2014, with strawberries up £30m and raspberries up £14m contributing much of the increase. The volume of fruit production was up 10% to 427 thousand tonnes in 2014, due to demand, larger yields and a long growing season.
19. The value of dessert apples increased by £2.4 million with better yields in 2014. The value of culinary apples was down 10% on 2013, with many left unpicked due to size and low demand for this apple pushing prices down. The value of pears was down 3.0% on 2013. Production as a percentage of total new supply for use in the United Kingdom increased from 10% to 11% in 2014.

### Revisions

20. There have been revisions to the estimates of wheat and barley back to 2010 due to changes in stocks data and methodology.
21. Prices used to compile the spring cabbage valuation have been revised back to 2008 as the previous data source is now unavailable. Other revisions are as a result of updated figures being supplied for Scotland and Northern Ireland.
22. Revisions to estimates from 2011 to 2013 have been made to ornamentals as data processing has been modernised. As a result the value of hardy nursery stock has been increased in 2013 from £718 million to £809 million.
23. There have been revisions to the method of estimating potatoes. Sales for human consumption are now based on data on actual sales of potatoes rather than a residual of estimates of production, stockfeed and waste.

Table 7.1 Total cereals

Enquiries: Allan Howsam on +44 (0) 1904 455076

 email: [allan.howsam@defra.gsi.gov.uk](mailto:allan.howsam@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar year				
	2010	2011	2012	2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares)	3 013	3 076	3 142	3 029	3 179
Volume of harvested production	20 946	21 484	19 515	20 083	24 468
<b>Value of production (£ million) (a)</b>	<b>2 267</b>	<b>3 230</b>	<b>3 201</b>	<b>3 391</b>	<b>3 473</b>
<b>Supply and use</b>					
Production	20 946	21 484	19 515	20 083	24 468
Imports from: the EU	1 535	1 361	2 520	4 065	2 645
the rest of the world	678	707	844	1 211	1 373
Exports to: the EU	3 945	2 908	1 827	1 046	1 795
the rest of the world	518	238	317	420	676
Total new supply	18 696	20 406	20 735	23 893	26 016
Change in farm and other stocks	- 2 342	36	- 798	1 581	3 488
Total domestic uses	21 038	20 370	21 533	22 312	22 528
<b>Production as % of total new supply for use in the UK</b>	<b>112</b>	<b>105</b>	<b>94</b>	<b>84</b>	<b>94</b>

(a) Includes arable area payments, but excludes set-aside payments and farm saved seed. Taxes, where applicable, are deducted.

Table 7.2 Wheat

Enquiries: Allan Howsam on +44 (0) 1904 455076

 email: [allan.howsam@defra.gsi.gov.uk](mailto:allan.howsam@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar year				
	2010	2011	2012	2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares)	1 939	1 969	1 992	1 615	1 936
Yield (tonnes per hectare)	7.7	7.8	6.7	7.4	8.6
Volume of harvested production	14 878	15 257	13 261	11 921	16 606
<b>Value of production (£ million) (a)</b>	<b>1 680</b>	<b>2 322</b>	<b>2 162</b>	<b>2 090</b>	<b>2 472</b>
of which : sales	1 728	2 218	2 230	1 933	1 879
on farm use	81	72	139	192	127
change in stocks	- 129	32	- 207	- 36	467
<b>Prices (£ per tonne)</b>					
Milling wheat	122	175	173	193	159
Feed wheat	113	150	163	174	146
<b>Supply and use</b>					
Production	14 878	15 257	13 261	11 921	16 606
Imports from: the EU	642	493	1 358	2 490	1 369
the rest of the world	469	409	427	475	455
Exports to: the EU	2 908	2 125	1 282	413	804
the rest of the world	427	162	221	35	339
Total new supply	12 654	13 872	13 543	14 438	17 287
Change in farm and other stocks	- 1 231	359	- 849	394	3 361
<b>Total domestic uses</b>	<b>13 885</b>	<b>13 513</b>	<b>14 392</b>	<b>14 044</b>	<b>13 926</b>
of which : flour milling	6 458	6 123	6 306	6 506	6 725
animal feed	6 389	6 268	6 807	6 632	6 365
seed	295	299	304	290	290
other uses and waste	742	823	975	616	546
<b>Production as % of total new supply for use in the UK</b>	<b>118</b>	<b>110</b>	<b>98</b>	<b>83</b>	<b>96</b>
% of home grown wheat in milling grist	86	89	84	69	82

(a) Excludes farm saved seed

**Table 7.3 Barley**

Enquiries: Allan Howsam on +44 (0) 1904 455076

email: [allan.howsam@defra.gsi.gov.uk](mailto:allan.howsam@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	2010	2011	2012	Calendar year	
				2013	2014
				(provisional)	
<b>Production</b>					
Area (thousand hectares)	921	970	1 002	1 213	1 080
Yield (tonnes per hectare)	5.7	5.7	5.5	5.9	6.4
Volume of harvested production	5 252	5 494	5 522	7 092	6 911
<b>Value of production (£ million) (a)</b>	521	809	920	1 135	896
of which : sales	461	563	637	691	686
on farm use	186	264	282	290	234
change in stocks	- 126	- 18	1	155	- 24
<b>Prices (£ per tonne)</b>					
Malting barley	108	162	185	177	146
Feed barley	98	146	161	149	121
<b>Supply and use</b>					
Production	5 252	5 494	5 522	7 092	6 911
Imports from: the EU	115	129	162	193	100
the rest of the world	0	0	0	2	0
Exports to : the EU	940	724	494	478	795
the rest of the world	91	76	96	385	335
Total new supply	4 336	4 823	5 094	6 424	5 881
Change in farm and other stocks	- 1 037	- 289	38	1 011	171
<b>Total domestic uses</b>	5 373	5 112	5 055	5 405	5 702
of which : brewing/distilling	1 656	1 788	1 837	1 868	1 925
animal feed	3 533	3 135	2 997	3 336	3 487
seed	145	150	182	162	162
other uses and waste	38	39	40	47	135
<b>Production as % of total new supply for use in the UK</b>	121	114	108	110	118
(a) Excludes farm saved seed					

Table 7.4 Oats

Enquiries: Allan Howsam on +44 (0) 1904 455076

 email: [allan.howsam@defra.gsi.gov.uk](mailto:allan.howsam@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar year				
	2010	2011	2012	2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares)	124	109	122	177	137
Yield (tonnes per hectare)	5.5	5.6	5.1	5.5	6.0
Volume of harvested production	685	613	627	964	820
<b>Value of production (£ million) (a)</b>	63	94	114	160	99
of which : sales	54	76	78	87	81
on farm use	17	26	31	35	29
change in stocks	- 8	- 8	5	38	- 10
<b>Prices (£ per tonne)</b>					
Milling oats	93	150	181	174	128
Feed oats	93	159	188	151	111
<b>Supply and use</b>					
Production	685	613	627	964	820
Imports from: the EU	19	34	64	66	34
the rest of the world	0	0	0	0	0
Exports to: the EU	73	23	11	17	65
the rest of the world	0	0	0	0	1
Total new supply	631	624	680	1 013	789
Change in farm and other stocks	- 74	- 33	13	175	- 45
<b>Total domestic uses</b>	705	657	667	838	834
of which : milling	445	472	474	507	499
animal feed	240	167	166	306	310
seed	17	15	25	19	19
other uses and waste	3	3	3	5	5
<b>Production as % of total new supply for use in the UK</b>	109	98	92	95	104
(a) Excludes farm saved seed					

Table 7.5 Oilseed rape

Enquiries: Jim Holding on +44 (0) 1904 455069

 email: [jim.holding@defra.gsi.gov.uk](mailto:jim.holding@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar year				
	2010	2011	2012	2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares)	642	705	756	715	675
Yield (tonnes per hectare)	3.5	3.9	3.4	3.0	3.6
Volume of harvested production	2 230	2 758	2 557	2 128	2 460
<b>Value of production (£ million)</b>	674	1 110	986	741	684
of which : sales	640	1 025	1 017	801	647
change in stocks	34	85	- 31	- 60	37
<b>Prices (average weighted by volume of sales (£ per tonne))</b>	302.3	402.3	385.7	348.2	278.0
<b>Supply and use</b>					
Production	2 230	2 758	2 557	2 128	2 460
Imports from: the EU	159	64	18	148	77
the rest of the world	9	0	0	29	10
Exports to: the EU	262	659	1 057	437	333
the rest of the world	2	0	0	2	38
Total new supply	2 134	2 164	1 518	1 867	2 176
<b>Production as % of total new supply for use in the UK</b>	105	127	168	114	113

Table 7.6 Linseed

Enquiries: Jim Holding on +44 (0) 1904 455069

email: [jim.holding@defra.gsi.gov.uk](mailto:jim.holding@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar year				
	2010	2011	2012	2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares)	44	36	28	35	15
Yield (tonnes per hectare)	1.6	2.0	1.5	1.8	2.7
Volume of harvested production	72	71	42	62	39
<b>Value of production (£ million)</b>	23	27	16	24	15
of which : sales	22	27	17	23	16
change in stocks	1	-	- 1	1	- 1
<b>Supply and use</b>					
Production	72	71	42	62	39
Imports from: the EU	10	8	12	11	2
the rest of the world	2	2	2	2	0
Exports to: the EU	47	49	52	37	6
the rest of the world	-	-	-	-	0
Total new supply	37	31	4	38	36
<b>Production as % of total new supply for use in the UK</b>	192	226	1145	163	108

Table 7.7 Sugar

Enquiries: Tom Johnson on +44 (0) 1904 455301

email: [tom.johnson@defra.gsi.gov.uk](mailto:tom.johnson@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar years				
	2010	2011	2012	2013	2014 (provisional)
<b>Sugar Beet</b>					
Area (thousand hectares)	118	113	120	117	116
Yield (tonnes per hectare)	55.1	75.4	60.7	72.1	80.1
Volume of harvested production	6 527	8 504	7 291	8 432	9 310
Value of production (£ million)	197	251	227	270	315
Sugar content (%)	16.9	18.4	17.0	17.5	17.2
<b>Prices (average market price (£ per adjusted tonne)) (a)</b>	30.1	29.6	31.2	32.0	33.9
<b>All Sugar (refined basis)</b>					
Production (b)	995	1315	1144	1324	1446
Imports from: the EU	404	396	406	423	476
the rest of the world	926	832	648	691	699
Exports to: the EU	225	154	163	135	232
the rest of the world	285	154	93	98	94
Total new supply	1 814	2 235	1 943	2 204	2 296
<b>Production as % of total new supply for use in the UK</b>	55	59	59	60	63

(a) Average price for all sugar, including transport allowance and bonus

(b) Sugar coming out of the factory in the early part of the new year is regarded as being part of production in the previous calendar year.

Table 7.8 Peas and beans harvested dry

Enquiries: Allan Howsam on +44 (0) 1904 455076

email: [allan.howsam@defra.gsi.gov.uk](mailto:allan.howsam@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar year				
	2010	2011	2012	2013	2014 (provisional)
<b>Peas for harvesting dry (a)</b>					
Area (thousand hectares)	23	12	11	13	14
Yield (tonnes per hectare)	3.5	4.1	2.4	3.7	4.0
Volume of harvested production	81	49	26	48	58
<b>Value of production (£ million)</b>	12	8	6	10	10
<b>Field beans</b>					
Area (thousand hectares)	168	125	96	118	107
Yield (tonnes per hectare)	3.5	3.4	3.3	3.2	4.2
Volume of harvested production	580	419	317	378	448
<b>Value of production (£ million)</b>	92	72	74	90	84

(a) The figures presented here cover only that part of the crop which is assumed to be used for stockfeed including for pets and specialist bird food. It also includes an estimate for those varieties originally grown for human consumption but did not meet the required grade. The percentage utilised for animal feed is variable with typical estimates ranging from 30-60%. The remainder is included in UK fresh vegetables, Table 7.9.



Table 7.9 Fresh vegetables

Enquiries: Julie Dobson on +44 (0) 190455080

email: [julie.dobson@defra.gsi.gov.uk](mailto:julie.dobson@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)		2010	2011	2012	Calendar year	
					2013	2014
					(provisional)	
<b>Production</b>						
Area (thousand hectares):		134	135	128	131	132
of which:	grown in the open (a) (b)	134	134	127	130	131
	protected (c)	1	1	1	1	1
<b>Value of production (£ million):</b>		1 274	1 234	1 260	1 349	1 234
of which:	grown in the open	943	925	949	1 025	885
	protected	331	309	311	324	349
Selected crops:	cabbages	73	85	57	71	65
	carrots	115	113	128	137	106
	cauliflowers	48	45	53	47	48
	calabrese	60	56	86	56	31
	lettuces	147	143	157	156	145
	mushrooms	113	119	114	118	116
	onions	109	85	60	97	104
	tomatoes	116	95	97	105	118
<b>Prices (farm gate price (£ per tonne))</b>						
Selected crops:	cauliflowers	435	444	591	511	505
	tomatoes	1 288	1 052	1 165	1 125	1 194
<b>Supply and use (d)</b>						
Total production		2 783	2 636	2 512	2 657	2 796
<b>Imports from:</b>	the EU	1 620	1 718	1 805	1 960	1 925
	the rest of the world	252	258	244	265	254
<b>Exports to:</b>	the EU	89	84	81	75	103
	the rest of the world	6	5	4	5	15
Total new supply		4 559	4 523	4 475	4 801	4 857
<b>Production as % of total new supply for use in the UK</b>		61	58	56	55	58

(a) Includes peas harvested dry for human consumption.

(b) Areas relate to field areas multiplied by the number of crops in the year and hence differ from those shown in table 2.2.

(c) Excludes area of mushrooms from 1992.

(d) Trade figures relate to fresh produce where distinguishable.

Table 7.10 Plants and flowers

Enquiries: Jim Holding on +44 (0) 1904 455069

 email: [jim.holding@defra.gsi.gov.uk](mailto:jim.holding@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)					Calendar year
	2010	2011	2012	2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares) (a):	12	12	13	12	12
Value of production (£ million)	996	1 114	1 142	1 191	1 166
of which: flowers and bulbs in the open (b)	33	39	38	45	42
hardy plants and flowers nursery stock	648	756	791	809	796
protected crops	314	319	313	336	328
<b>Trade (£ million)</b>					
Imports					
Bulbs	63	95	90	85	82
Cut flowers	605	628	653	663	691
Foliage	41	35	38	36	37
Indoor plants	121	112	107	127	136
Outdoor plants	43	59	55	58	66
Trees	63	68	63	62	51
Other	41	42	47	46	44
<b>Total Imports (exc. Channel Islands)</b>	<b>977</b>	<b>1 039</b>	<b>1 053</b>	<b>1 079</b>	<b>1 106</b>
Exports					
Bulbs	10	13	11	9	7
Cut flowers	16	22	14	26	24
Foliage	1	1	1	1	1
Indoor plants	6	6	5	4	5
Outdoor plants	3	4	4	5	4
Trees	2	3	3	4	4
Other	11	10	10	12	12
<b>Total Exports</b>	<b>49</b>	<b>59</b>	<b>47</b>	<b>61</b>	<b>56</b>

(a) Areas relate to field areas multiplied by the number of crops in the year and hence differ from those shown in table 2.2.

(b) Including forced flower bulbs.

Table 7.11 Potatoes

Enquiries: Jim Holding on +44 (0) 1904 455069

email: [jim.holding@defra.qsi.gov.uk](mailto:jim.holding@defra.qsi.gov.uk)

Thousand tonnes (unless specified otherwise)	2010	2011	2012	Calendar year	
				2013	2014 (provisional)
<b>Production</b>					
Area (thousand hectares)	138	146	149	139	140
of which : early	9	8	7	5	5
maincrop	130	138	141	134	135
Yield (tonnes per hectare)	44	43	31	42	42
of which : early	29	35	26	27	34
maincrop	45	44	32	43	43
Volume of harvested production	6 056	6 310	4 658	5 902	5 921
of which : early	251	294	192	143	177
maincrop	5 805	6 016	4 466	5 759	5 744
End of year stocks	2 635	2 746	2 214	2 606	2 960
<b>Value of production (£ million)</b>	598	711	659	947	684
of which : sales	630	674	722	846	617
change in stocks	- 52	16	- 86	78	49
<b>Prices (average price paid to registered producers (£ per tonne))</b>					
early potatoes	226	161	299	272	157
maincrop potatoes	139	147	167	203	148
all potatoes	145	150	175	206	150
<b>Supply and use</b>					
Total production	6 056	6 310	4 658	5 902	5 921
<b>Imports</b>	1 568	1 671	1 858	2 363	1 773
of which : early potatoes	105	121	79	119	67
maincrop potatoes	127	118	356	466	166
processed (raw equivalent)	1 319	1 404	1 396	1 739	1 513
seed	16	28	27	38	27
<b>Exports</b>	495	553	479	478	469
of which : raw	225	263	168	169	160
processed (raw equivalent)	172	168	191	191	188
seed	97	123	119	118	121
Total new supply	7 129	7 429	6 037	7 788	7 224
Change in stocks	- 387	111	- 532	392	355
<b>Production as % of total new supply for use in the UK</b>	85	85	77	76	82

Table 7.12 Fresh fruit

Enquiries: Julie Dobson on +44 (0) 1904 455080

 email: [julie.dobson@defra.gsi.gov.uk](mailto:julie.dobson@defra.gsi.gov.uk)

Thousand tonnes (unless otherwise specified)		2010	2011	2012	Calendar year	
					2013	2014
						(provisional)
<b>Production</b>						
Area (thousand hectares):		28	29	29	29	28
	of which: orchard fruit (a)	19	19	19	19	19
	soft fruit (b)	10	10	10	10	9
End year stocks (c)		66	64	58	80	71
<b>Value of production (£ million) (d):</b>		585	604	576	602	622
	of which: orchard fruit	144	153	154	184	163
	soft fruit	392	399	364	353	393
	of which: sales	586	606	580	584	628
	change in stocks (c)	- 2	- 1	- 4	18	- 6
Selected crops:	dessert apples	64	68	70	73	75
	culinary apples	40	44	46	47	42
	pears	15	16	15	13	12
	raspberries	103	111	97	95	109
	strawberries	239	245	223	214	244
<b>Prices (farm gate price (£ per tonne))</b>						
Selected crops:	dessert apples	509	533	604	554	507
	culinary apples	362	390	530	550	447
	pears	488	483	580	593	482
	raspberries	6 461	7 161	6 198	6 501	6 114
	strawberries	2 496	2 407	2 356	2 283	2 338
<b>Supply and use</b>						
Total production		419	423	366	387	427
Imports from:	the EU	1 156	1 283	1 332	1 371	1 452
	the rest of the world	2 089	2 080	2 091	2 193	2 162
Exports to:	the EU	141	148	108	142	97
	the rest of the world	2	2	2	2	2
Total new supply		3 520	3 637	3 679	3 808	3 942
Change in stocks		- 4	- 2	- 5	22	- 9
Total domestic uses		3 524	3 639	3 684	3 786	3 951
<b>Production as % of total new supply for use in the UK</b>		12	12	10	10	11

(a) Includes field area of commercial orchards only, and may therefore differ from the area in table 2.2, which also includes non-commercial orchards.

(b) Excludes area of wine grapes and may therefore differ from the area in table 2.2.

(c) Stocks relate to apples and pears.

(d) Includes glasshouse fruit.

# Chapter 8: Livestock

## Summary

In 2014, compared with 2013, the value of production for:

- Beef and veal fell by 11% to £2.6 billion (excluding subsidies).
- Pig meat was largely unchanged at £1.27 billion.
- Mutton and lamb rose by 6.4% to £1.11 billion.
- Poultry meat fell by 2.8% to £2.26 billion.
- Milk and milk products rose by 7.8% to £4.6 billion.
- Eggs fell by 5.4% to £679 million.

### Cattle and calves: beef and veal (table 8.1)

1. Prime cattle slaughtering increased by 1.7% in 2014 but remain around 7% lower than the average over the previous 10 years. Home fed production increased 3.6% to 871 thousand tonnes as good forage and weather conditions over 2014 resulted in higher carcass weights. The value of production, however, decreased 11% largely due to the decline in price on the back of the record high prices seen in 2013. The fall in feed prices in 2014 had a lesser effect in the beef sector as feed is less intensively used compared to other livestock sectors.

### Pigs and pig meat (table 8.2)

2. Home fed pig meat production rose by 4.1% in 2014 to 820 thousand tonnes, with continued breeding herd productivity increases and higher clean pig carcass weights. Pig prices however, have fallen steadily; ending the year 4.0% lower than in 2013. Falling feed costs have largely offset the falling prices leading to a small overall decrease in the value of production of 0.3%.

### Sheep and lambs: mutton and lamb (table 8.3)

3. The total sheep population increased for the fourth consecutive year in 2014. This, along with healthy carcass weights encouraged by the good weather, led to a 2.3% increase in home-fed mutton and lamb production to 307 thousand tonnes. With prices remaining strong the value of home-fed production rose by 6.4% to £1.1 billion.

### Poultry and poultry meat (table 8.4)

4. Total production of poultry meat fell 0.8% in 2014 to 1.65 million tonnes as the growth in the sector seen in recent years has steadied. Turkey meat production has seen the largest fall within the sector, falling 8.5% to 171 thousand tonnes. This follows a 4.4% decrease seen between 2012 and 2013. This fall in production and fairly stable prices have seen an overall reduction in the value of the poultry meat sector of 2.8% to £2.26 billion.

### Milk (table 8.5)

5. Milk production increased by 8.3% in 2014. A 3.1% increase to the dairy herd along with a 5.0% increase in yields, encouraged by good grazing conditions, resulted in the highest production levels in around 25 years.
6. There was a 7.8% increase in the value of production for 2014 to £4.6 billion. The average milk price across 2014 (calendar year) was 31.5 pence per litre (ppl). This is very similar to the 2013 average price (31.6ppl) but masks the detail that prices started 2014 strongly, and then fell significantly in the second half of the year. The average monthly milk price fell 18.5% between January and December, finishing the year at 27.6ppl. Falling input costs (feed, energy and fertiliser) have partially offset the fall in milk prices.

### Hen eggs (table 8.6)

7. The value of egg production decreased in 2014 by 5.4% to £679 million. An increase of 1.1% in the volume of production was offset by a 6.6% reduction in the average price.
8. Intensive egg production regained a little more of the market share it had previously lost to free range production. It now accounts for 52% of throughput; up from 51% in 2013 while organic and barn production continue at relatively low levels.

### Revisions

9. Figures in these tables for 2014 are provisional and may be subject to revision.
10. Revisions have been made to previous data due to on-going revisions caused by estimated survey data being replaced with actual data when it is received; survey respondents supplying amended figures for previous survey periods; changes to data supplied by Scotland and Northern Ireland and amended administrative data; updates to trade data supplied by HMRC. The scale of revision is not significant.

**Table 8.1 Cattle and calves; beef and veal**

Enquiries: Ben Drummond on +44 (0)1904 455059

email: [ben.drummond@defra.gsi.gov.uk](mailto:ben.drummond@defra.gsi.gov.uk)

Thousand tonnes (unless otherwise stated)

	2010 (g)	2011	2012	2013	2014 (provisional)
<b>Population</b>					
Total cattle and calves (thousand head at June)	10 170	9 988	9 952	9 844	9 837
of which: dairy cows	1 830	1 796	1 796	1 782	1 841
beef cows	1 668	1 687	1 666	1 611	1 569
<b>Production (a)</b>					
Total home-fed marketings (thousand head)	2 678	2 824	2 652	2 594	2 643
of which: steers, heifers and young bulls	2 063	2 090	1 930	1 892	1 928
calves	61	92	80	93	113
cows and adult bulls	554	642	641	609	601
Average dressed carcase weight (kg):					
steers, heifers and young bulls	347	345	347	342	350
calves	38	43	45	43	45
cows and adult bulls	320	316	311	307	316
Production (dressed carcase weight):					
home-fed production	897	931	877	840	871
Value of production (£ million)	2 176	2 595	2 812	2 913	2 603
of which: value of home-fed production (a)	2 220	2 653	2 761	2 841	2 653
subsidies (b)	22	22	20	21	21
change in work-in-progress (c)	- 55	- 74	36	61	- 62
less imported livestock	11	6	5	9	9
plus breeding animals exported	..	..	..	..	..
Value of production at market prices (£ million) (d)	2 154	2 573	2 792	2 893	2 582
<b>Prices</b>					
Store cattle (£ per head):					
Hereford/cross bull calves	148.1	156.2	195.8	183.1	175.9
Beef/cross yearling steers	638.6	670.9	814.0	824.8	842.6
Finished cattle (pence per kg liveweight): All prime cattle	147.2	169.3	189.9	204.4	183.2
<b>Supply and use (thousand tonnes, dressed carcase weight) (e)</b>					
Home-fed production (a)	897	931	877	840	871
Imports from:					
the EU (f)	225	221	223	224	237
the rest of the world	82	81	82	82	87
Exports to:					
the EU	125	164	135	121	125
the rest of the world	4	6	7	5	9
Total new supply	1 076	1 062	1 040	1 019	1 061
Home-fed production as % of total new supply for use in the UK	83%	88%	84%	82%	82%

(a) Measures of home-fed marketings, dressed carcase weights, production and value include animals raised and slaughtered in the UK, excluding any animals removed from the food chain.

(b) Comprising Scottish Beef Calf Scheme.

(c) A valuation of the change in work-in-progress of animals to be slaughtered.

(d) Excluding subsidies and taxes.

(e) Does not include meat offals or trade in preserved or manufactured meat products. Boneless meat has been converted to bone-in weights.

(f) Includes meat from imports of live finished animals.

(g) For comparability with other years, the figures for 2010 have been adjusted from a 53-week to a 52-week basis where appropriate.

Table 8.2 Pigs and pig meat

Enquiries: Ben Drummond on +44 (0)1904 455059

 email: [ben.drummond@defra.gsi.gov.uk](mailto:ben.drummond@defra.gsi.gov.uk)

Thousand tonnes (unless otherwise specified)

	2010 (e)	2011	2012	2013	2014 (provisional)
<b>Population</b>					
Total pigs (thousand head at June)	4 460	4 441	4 481	4 885	4 815
of which: sows in pig and other sows for breeding	360	362	357	355	349
gilts in pig	67	70	69	66	57
<b>Production (a)</b>					
Total home-fed marketings (thousand head) (g)	(f)	(f)	9 702	9 743	9 955
of which: clean pigs	8 670	9 204	9 426	9 479	9 698
sows and boars	(f)	(f)	276	265	257
Average dressed carcass weight (kg):					
clean pigs	78	78	78	79	81
sows and boars	155	151	150	147	145
Production (dressed carcass weight):					
home-fed production (a)	712	757	776	787	820
Value of production (£ million)	978	1 070	1 139	1 274	1 270
of which: value of home-fed production	978	1 067	1 142	1 265	1 264
change in work in progress (b)	- 2	- 2	- 4	8	5
less imported livestock	..	..	..	..	..
plus breeding animals exported	3	6	2	2	2
<b>Prices (pence per kg deadweight)</b>					
Clean pigs	141.7	144.8	150.2	165.5	158.8
<b>Supply and use of pigmeat (carcass weight equivalent) (c)</b>					
Home-fed production (a)	712	757	776	787	820
Imports from:					
the EU (d)	799	772	723	716	726
the rest of the world	12	11	10	10	11
Exports to:					
the EU	144	153	139	154	157
the rest of the world	25	39	43	54	62
Total new supply	1 354	1 347	1 327	1 305	1 337
Home-fed production as % of total new supply for use in the UK	52%	56%	58%	60%	61%

(a) Measures of home-fed marketings, dressed carcass weights, production and value include animals raised and slaughtered in the UK, excluding any animals removed from the food chain.

(b) A valuation of the change in work in progress of animals to be slaughtered.

(c) Does not include meat offals or trade in preserved or manufactured meat products. Boneless meat has been converted to bone-in weights.

(d) Includes meat from imports of live finished animals.

(e) For comparability with other years, the figures for 2010 have been adjusted from a 53-week to a 52-week basis where appropriate.

(f) data are confidential

(g) Data revised back to 2009 due to amendments from Northern Ireland. See dataset for more details.



**Table 8.3 Sheep and lambs; mutton and lamb**

Enquiries: Ben Drummond on +44 (0)1904 455059

email: [ben.drummond@defra.gsi.gov.uk](mailto:ben.drummond@defra.gsi.gov.uk)

Thousand tonnes (unless otherwise specified)

	2010 (g)	2011	2012	2013	2014 (provisional)
<b>Population</b>					
Total sheep and lambs (thousand head at June)	31 084	31 634	32 215	32 856	33 743
of which: ewes and shearlings	14 740	14 868	15 229	15 561	16 026
lambs under one year old	15 431	15 990	16 229	16 381	16 936
<b>Production (a)</b>					
Total home-fed marketings (thousand head)	14 440	15 007	14 221	15 024	15 061
of which: clean sheep and lambs	12 480	12 956	12 347	12 906	13 222
ewes and rams	1 961	2 051	1 874	2 118	1 838
Average dressed carcase weight (kg):					
clean sheep and lambs	19	19	19	19	19
ewes and rams	25	26	26	26	27
Production (dressed carcase weight):					
home-fed production (a)	287	301	286	300	307
Value of production (£ million)	979	1 149	1 020	1 045	1 112
of which: value of home-fed production	981	1 139	1 012	1 049	1 109
change in work in progress (b)	- 1	9	9	- 4	4
less imported livestock	2	0	0	0	1
plus breeding animals exported	-	-	-	-	-
<b>Prices</b>					
Store sheep (£ per head): (c)					
Lambs, hoggets and tegs	59.3	60.3	67.5	49.2	61.8
Finished sheep (pence per kg estimated dressed carcase weight) (d):					
Great Britain	389.6	432.9	411.3	415.1	420.6
Northern Ireland	340.6	403.9	356.1	375.6	373.4
<b>Supply and use (dressed carcase weight) (e)</b>					
Home-fed production (a)	287	301	286	300	307
Imports from:					
the EU (f)	19	16	16	18	17
the rest of the world	109	93	90	102	95
Exports to:					
the EU	101	110	107	119	116
the rest of the world	1	1	1	1	1
Total new supply	313	299	283	300	302
Home-fed production as % of total new supply for use in the UK	92%	101%	101%	100%	102%

(a) Measures of home-fed marketings, dressed carcase weights, production and value include animals raised and slaughtered in the UK, excluding any animals removed from the food chain.

(b) A valuation of the change in work in progress of animals to be slaughtered.

(c) Average prices at representative markets in England and Wales.

(d) Unweighted average of weekly prices at representative markets.

(e) Does not include meat offals or trade in preserved or manufactured meat products. Boneless meat has been converted to bone-in weights.

(f) Includes meat from imports of live finished animals.

(g) For comparability with other years, the figures for 2010 have been adjusted from a 53-week to a 52-week basis where appropriate.

Table 8.4 Poultry and poultry meat

Enquiries: Ben Drummond on +44 (0)1904 455059

 email: [ben.drummond@defra.gsi.gov.uk](mailto:ben.drummond@defra.gsi.gov.uk)

Thousand tonnes (unless otherwise specified)

	2010	2011	2012	2013	2014 (provisional)
<b>Population</b>					
Number (thousand head at June):	163 867	162 551	160 061	162 609	169 684
of which: table fowl	105 309	102 461	102 558	104 576	110 374
laying and breeding fowl	47 107	48 610	46 633	47 024	48 404
turkeys, ducks, geese and all other poultry	11 451	11 481	10 870	11 008	10 907
<b>Production</b>					
Slaughterings (millions):	933	931	952	976	972
of which: fowls	904	899	919	945	942
turkeys	16	17	18	18	15
ducks & geese	14	15	15	14	15
Production (carcase weight) (a):	1 570	1 559	1 609	1 662	1 648
of which: chickens and other table fowls	1 323	1 297	1 322	1 388	1 385
boiling fowls (culled hens)	53	56	58	55	58
turkeys	162	171	196	187	171
ducks & geese	31	35	34	32	34
Value of production (£ million):	1 799	1 904	2 075	2 326	2 260
of which: fowls	1 382	1 444	1 562	1 777	1 746
change in work in progress in fowls (b)	2	- 5	- 4	11	3
turkeys, ducks, geese	320	367	416	423	398
exports of live poultry	96	99	103	87	77
hatching eggs for export	31	33	40	71	83
less live poultry imported	15	18	15	9	20
less hatching eggs imported	17	17	26	33	27
<b>Prices (average producer prices (pence per kg carcase weight)):</b>					
Chickens and other table fowls	104.0	110.9	117.7	128.0	125.6
Boiling fowls (culled hens)	9.4	9.7	9.2	9.0	9.7
Turkeys	144.6	156.7	161.5	169.3	169.2
Ducks	250.4	263.3	274.0	290.3	300.6
Geese	588.5	616.6	616.1	616.8	641.3
<b>Supply and use (carcase weight) (a)</b>					
Production (a)	1 570	1 560	1 609	1 662	1 648
Imports from:					
the EU	442	483	442	440	465
the rest of the world	33	32	26	30	30
Exports to:					
the EU	206	205	197	216	237
the rest of the world	62	86	79	90	94
Total new supply	1 776	1 785	1 802	1 827	1 812
Production as % of total new supply for use in the UK	88%	87%	89%	91%	91%

(a) Excludes offal.

(b) A valuation of the change in work-in-progress of fowls to be slaughtered.

**Table 8.5 Milk**

Enquiries: Leigh Riley on +44 (0) 1904 455095

email: [leigh.riley@defra.gsi.gov.uk](mailto:leigh.riley@defra.gsi.gov.uk)

Million litres (unless otherwise specified)

	2010	2011	2012	2013	2014
					(provisional)
<b>Population and yield</b>					
Dairy herd (annual average, thousand head) (a)	1 842	1 807	1 798	1 794	1 850
Average yield per dairy cow (litres per annum)	7 303	7 563	7 477	7 543	7 916
<b>Production</b>					
Milk from the dairy herd (b)	13 453	13 665	13 443	13 534	14 649
Milk from the beef herd (b)	7	7	7	7	7
less on farm waste and milk fed to stock	116	115	111	114	122
Volume for human consumption	13 344	13 557	13 339	13 426	14 534
Value of production (£ million)	3 329	3 738	3 767	4 271	4 602
of which: raw milk leaving farm (c)	3 259	3 674	3 712	4 215	4 548
raw milk processed on farm (d)	69	64	55	57	55
<b>Prices (average price received by milk producers, net of delivery charges (pence per litre)) (e)</b>					
Farmgate price of milk excluding bonus payments	24.7	27.3	28.0	31.6	31.5
Farmgate price of milk including bonus payments	24.7	27.4	28.1	31.7	31.5
<b>Supply and use</b>					
Production	13 460	13 672	13 450	13 541	14 656
Imports	88	102	129	132	139
Exports	417	481	466	473	486
Total new supply	13 131	13 292	13 113	13 200	14 310
of which:					
for liquid consumption	6 836	6 892	6 816	6 861	7 028
for manufacture	6 112	6 260	6 089	6 220	7 018
of which: butter	246	267	298	298	288
cheese	3 529	3 710	3 722	3 549	3 866
cream	254	243	245	297	301
condensed milk (f)	279	300	289	290	270
milk powder	1 139	1 130	926	1 111	1 562
other	665	610	610	674	732
dairy wastage and stock change	45	3	74	- 17	118
other uses (g)	138	138	133	137	145
Production as a % of new supply	103%	103%	103%	103%	102%

(a) Average size of the dairy herd across the whole year, rather than the size at a particular time of year. Dairy herd is defined as dairy cows over two years of age with offspring.

(b) Excludes suckled milk.

(c) Value of raw milk sold to other businesses (dairies) for processing.

(d) Value of milk and milk products processed on farm and sold direct to the consumer.

(e) No deduction is made for superlevy.

(f) Includes condensed milk used in the production of chocolate crumb and in the production of machine skimmed milk.

(g) Includes farmhouse consumption, milk fed to stock and on farm waste. Excludes suckled milk.

## Revisions

Dairy herd population data has been revised back to 2007. As a consequence, average yield figures have also been revised. See dataset for more details.

Table 8.6 Hen eggs

Enquiries: Leigh Riley on +44 (0) 1904 455095

email: [leigh.riley@defra.gsi.gov.uk](mailto:leigh.riley@defra.gsi.gov.uk)

Million dozen (unless otherwise specified)	Calendar years				
	2010	2011	2012	2013	2014 (provisional)
<b>Population</b>					
Number of laying fowl (thousands)	37 497	38 357	36 646	35 841	37 146
<b>Production</b>					
Volume of production of eggs	944	937	918	960	970
of which:					
eggs for human consumption	826	821	797	829	839
eggs for hatching	105	103	105	107	108
other (a)	13	13	16	23	23
Value of production of eggs for human consumption (£ million) (b)	561	559	662	718	679
<b>Prices (pence per dozen)</b>					
Weighted average of eggs graded in the UK (c)	68.0	68.1	83.1	86.6	80.9
<b>Supply and use</b>					
UK production of eggs for human consumption	826	821	797	829	839
of which:					
eggs sold in shell	673	664	654	695	695
eggs processed	152	158	143	134	144
Imports from (d):					
the EU	135	126	162	152	157
the rest of the world	1	1	1	1	1
Exports to (d):					
the EU	8	10	19	23	11
the rest of the world	0	1	0	0	0
Total new supply	953	937	941	959	986
Production as % of total new supply for use in the UK	87%	88%	85%	86%	85%

(a) Includes hatching eggs for export and waste

(b) Eggs for hatching and hatching egg exports are not valued as they are included in the final value for poultry in table 8.4

(c) Represents the price paid by packers to producers in the United Kingdom and takes accounts of all egg systems - intensive, free range, barn and organic. Methodology changes: data up to and including 2011 excludes bonus payments, thereafter bonus payments are included.

(d) Includes shell egg equivalent of whole (dried, frozen and liquid) egg, egg yolk and albumen.

# Chapter 9: Intermediate Consumption

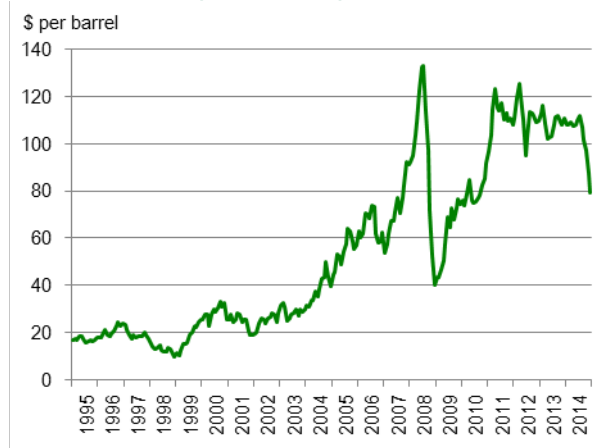
## Summary

- In 2014, oil prices, which influence the cost of some inputs such as fuels, electricity and fertilisers, averaged \$103 per barrel down from a \$108 per barrel in 2013.
- In 2014, the value of the energy used by the agricultural industry is estimated to be just under £1.4 billion, a decrease of 5.4% compared to 2013.
- The cost of animal feed, the largest item of expenditure recorded in the production and income account, fell by £0.5 billion to £5.0 billion in 2014.

## Introduction (chart 9.1)

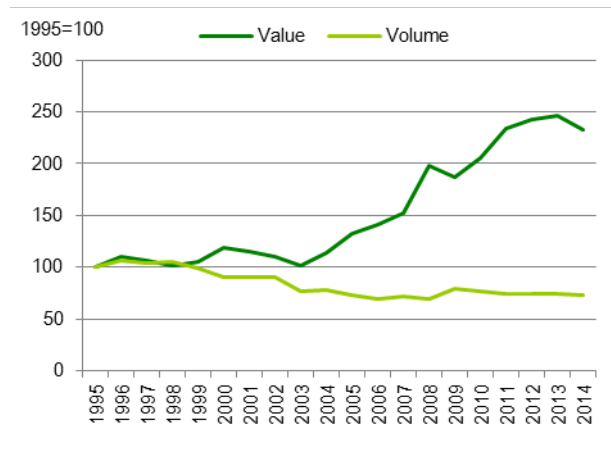
1. Some inputs, such as fuels, electricity and fertilisers are closely linked to the oil price. In recent years we have seen high crude oil prices. In 2014, crude oil prices were stable at the start of the year, peaking in June at an average of \$111 per barrel, by December they had fallen sharply to an average of \$79 per barrel as strong global production exceeded demand. This represents a fall of nearly 30% and the lowest price for over 4 years, helping lower the cost of those inputs linked to oil prices.
2. Chart 9.1 shows the trend in Europe Brent crude oil prices since 1995. The price began to rise in 2002 with a steep peak in mid-2008 when the price reached over \$130 dollars per barrel and then fell sharply to around \$40 dollars per barrel by the end of the year. Subsequently the price rose notably again until mid-2011 after which it stabilised around the \$110 dollars per barrel level. Prices once again fell quickly in the fourth quarter of 2014, although still a long way short of the steep fall of 2008.

Chart 9.1 Europe Brent Spot Price FOB



Source: US Energy Information Administration

Chart 9.2 Energy index for value and volume



## Intermediate consumption costs (charts 9.2, 9.3 and 9.4)

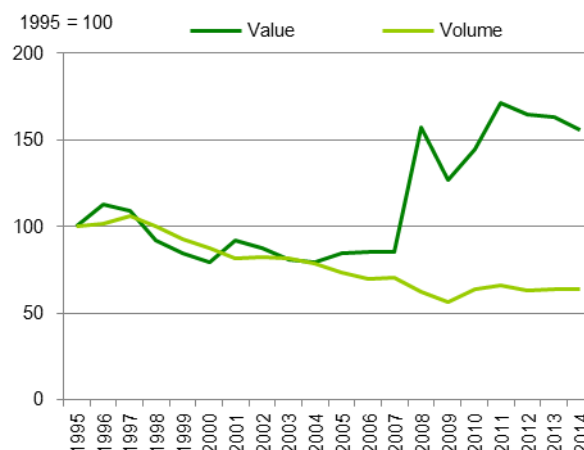
3. The total value of energy used within the agricultural industry in the UK is estimated to be just under £1.4 billion in 2014, 5.4% lower than 2013, largely due to the reduction in fuel costs. The cost of energy, particularly motor and machinery fuels is heavily influenced by trends in oil prices.

4. Chart 9.2 shows that the value of energy follows a similar pattern to that of the crude oil price while the volumes used have slightly fallen over time.

5. The price of oil not only affects the price of energy, it also affects the cost of other inputs such as fertiliser, which has an energy intensive manufacturing process. The price of natural gas, used to synthesise atmospheric nitrogen, is a significant driver of the cost and is linked to the oil price.

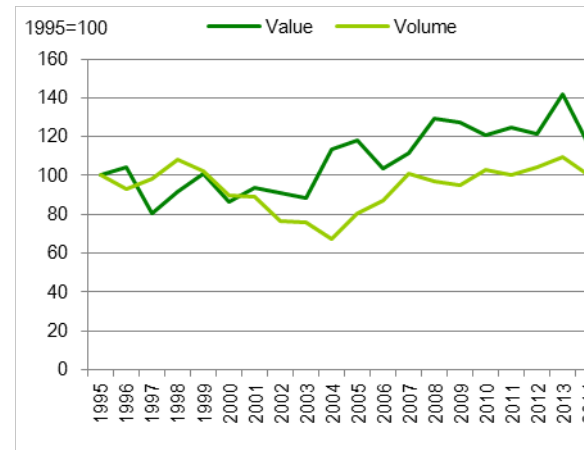
6. Chart 9.3 shows that although usage has significantly decreased since the mid-90s, the value of the fertiliser used has risen driven by movements in prices. In 2014 the value of fertiliser decreased to £1.4 billion, its lowest level since 2010 and a fall of 4.7% on 2013. The decrease in value was price driven as volumes were virtually unchanged.

Chart 9.3 Fertiliser



7. The value of seed in 2014 was £708 million a fall of £159 million from 2013. A decrease in the volume of seed used, due to less spring sown crops, and a fall in price led to the overall fall in the value of seed.

Chart 9.4 Seeds



8. The value of pesticides increased by 11% to £946 million. This was due to increased use of fungicides reflecting the increased area of wheat and winter oilseed rape, which are high input crops for fungicides, as well as price rises.

9. The value of veterinary expenses increased by 3.1% to £461 million in 2014. The increase was due to small increases in prices and use of vets and their products.

10. There was an increase of 1% in the value of agricultural services to £1,063 million. The increase was primarily due to small changes in prices as contractors reviewed their price list to take account of inflation.

11. Other goods and services which is the second largest cost behind animal feed rose by 3.6% in 2014 to £3.3 billion. Other goods and services incorporate the costs not included elsewhere such as: rates, telecoms; water rates; insurance; bank charges; etc.

Animal Feed (table 9.1)

12. The cost of animal feed is the largest item of expenditure recorded in the production and income account. Usage has remained broadly level since 1993 and so the value of animal feed used within the agricultural industry has closely followed trends in commodity prices, shaped by exchange rates and world prices.

13. The total value of all animal feed decreased by 10% between 2013 and 2014 to £5.0 billion, mainly due to the fall in feed prices. The total volume of all 'purchased' animal feed increased by 5.3% to 29.9 million tonnes. Total compound feed production decreased by 0.6% with a significant decrease of 21% for sheep compound feed. This decrease was due to higher than usual sheep feed usage in the previous year. Pig compound feed increased by 4.5%, reflecting a rise in the number of pigs slaughtered during 2014 and also heavier carcass weights. Besides compound feed usage, there was an increase of 3.2% in purchased straight concentrates and a 15% increase in inter/intra farm sales.

## Table 9.1 Animal feed (a)

Enquiries: Tom Johnson on +44 (0) 1904 455301

email: [tom.johnson@defra.gsi.gov.uk](mailto:tom.johnson@defra.gsi.gov.uk)

Thousand tonnes (unless specified otherwise)	Calendar years				
	2010	2011	2012	2013	2014 (provisional)
<b>Compounds (b)</b>					
cattle	4 680	4 584	4 895	5 240	5 050
calves	213	218	248	253	250
pigs	1 580	1 621	1 829	1 807	1 889
poultry (c)	3 828	3 759	3 861	4 019	4 109
sheep	859	765	836	966	766
<b>Total compounds plus imports less exports</b>	<b>11 060</b>	<b>10 795</b>	<b>11 377</b>	<b>12 119</b>	<b>12 051</b>
Straight concentrates (d)	7 935	6 920	6 725	6 782	6 997
Non-concentrates (e)	525	525	525	525	525
Inter/intra farm transfer	8 145	7 444	6 560	8 965	10 336
<b>Total all purchased animal feed</b>	<b>27 666</b>	<b>25 684</b>	<b>25 187</b>	<b>28 390</b>	<b>29 909</b>
<b>Value of purchased animal feed (£ million) (f)</b>	<b>4 087</b>	<b>4 508</b>	<b>4 891</b>	<b>5 567</b>	<b>5 012</b>

(a) Including direct inter-farm and intra-farm transfer and Maize for stockfeed

(b) UK produced compounds, excludes imports and exports

(c) Includes poultry feed produced by 'retail' compounders but excludes production from integrated poultry units which are included within the straight concentrates data

(d) These are cereals, cereal offals, proteins and other high energy feeds.

(e) Low energy bulk feeds expressed as concentrate equivalent. Brewers and distillers grains, hay, milk by-products and other low-energy bulk feeds expressed in terms of equivalent tonnage of high energy feeds.

(f) See table 4.1 for a breakdown of this total.

## Revisions

14. These estimates will be subject to revision as more data becomes available.
15. The animal feed data has been amended to now include 'Maize for stockfeed' under the 'Inter/intra farm transfer category'. There are other small amendments to animal feed data between 2010 and 2013, due to a combination of both revised data becoming available and system improvements.

# Chapter 10: Public Payments

## Summary

- Total direct payments were £2.9 billion in 2014, 12% lower than 2013
- The Single Payment Scheme contributed £2.3 billion in 2014, a drop of 14% compared to 2013.
- Payments linked to agri-environment schemes were £503 million in 2014.
- Payments under the Less Favoured Area Support Scheme were £91 million in 2014.

## Payments (tables 10.1, 10.2 and 10.3)

1. The UK receives payments for the Single Payment Scheme in euros and this is converted to sterling using the exchange rate set in September as shown in table 10.1.
2. The strengthening sterling against the euro resulted in a reduction in single farm payments made to farmers, down 14% to £2.3 billion in 2014 compared to 2013.
3. The 2013 and 2014 figure includes an adjustment for financial discipline, 2.45% and 1.3% respectively. The 2013 also includes financial discipline reimbursement payment of £44 million made to those customers where financial discipline was applied to their claim in 2013 and who submitted a valid claim in 2014.

### Table 10.1 Single payment scheme and exchange rate

Enquiries: Nick Olney on +44 (0) 1904 455355

email: [nick.olney@defra.gsi.gov.uk](mailto:nick.olney@defra.gsi.gov.uk)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Single Payment Scheme (£ million) (a)	2 405	2 475	2 313	2 592	2 980	2 798	2 805	2 600	2 685	2 313
Exchange rate (€/£) (b)	0.68	0.68	0.70	0.79	0.91	0.86	0.87	0.80	0.84	0.78
Financial discipline (%)	..	..	..	..	..	..	..	..	2.45	1.30

(a) Includes Financial Discipline reimbursement of £44m in England

(b) Exchange rate set by the European Central Bank on the last day of September

4. Chart 10.1 and tables 10.2 to 10.4 details all direct payments to farmers under current scheme arrangements, including Single Farm Payments, Agri-environment schemes and Area Less Favoured Support Schemes.
5. Total direct payments were £2.9 billion in 2014, 12 % lower than 2013. The Single Farm Payment Scheme contributed £2.3 billion.
6. Payments under the Agri-environment Schemes fell by £22 million in 2014 to £503 million.
7. Payments under the Less Favoured Area Support Scheme saw a small fall to £91 million in 2014.



Chart 10.1 Direct Payments made to farmers

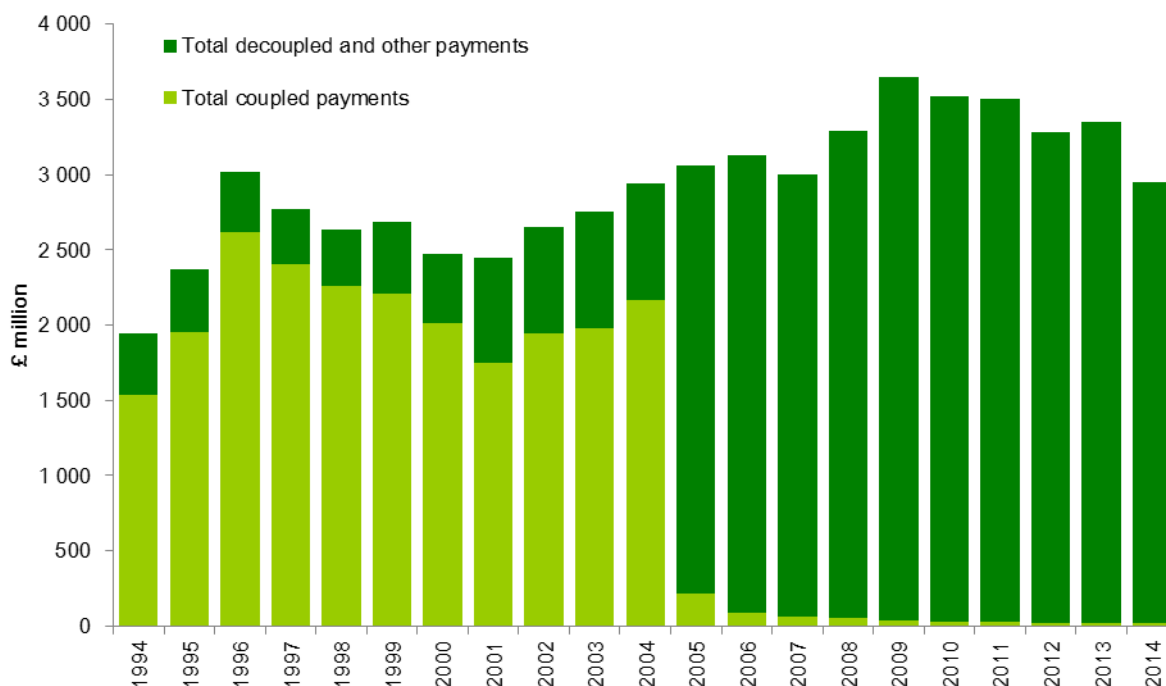


Table 10.2 Direct payments to farmers

Enquiries: Nick Olney on +44 (0) 1904 455355

email: [nick.olney@defra.gsi.gov.uk](mailto:nick.olney@defra.gsi.gov.uk)

£ million

	2009	2010	2011	2012	2013	2014 (provisional)
<b>Coupled payments (linked to production)</b>						
Crop subsidies						
Other crop subsidies (a)	14	7	5	..	..	..
Livestock subsidies						
Scottish beef calf scheme	23	22	22	20	21	21
<b>Total coupled payments</b>	<b>37</b>	<b>29</b>	<b>28</b>	<b>20</b>	<b>21</b>	<b>21</b>
<b>Decoupled and other payments (not linked to production)</b>						
Single Payments Scheme	2 980	2 798	2 805	2 600	2 685	2 313
Agri-environment schemes (b)	479	515	534	520	525	503
Less Favoured Areas support schemes	135	138	123	121	93	91
Animal disease compensation (c)	22	17	18	20	20	21
Other (d)	1	27	1	-	10	5
<b>Total decoupled and other payments</b>	<b>3 616</b>	<b>3 495</b>	<b>3 482</b>	<b>3 261</b>	<b>3 334</b>	<b>2 933</b>
<b>Total direct payments less levies</b>	<b>3 654</b>	<b>3 524</b>	<b>3 509</b>	<b>3 282</b>	<b>3 354</b>	<b>2 954</b>
Capital transfers and other payments not included in the production and income account	56	37	39	32	33	32

(a) CAP hops and herbage seeds support; hemp and flax aid; protein crop premium; area aid for nuts; energy crops aid.

(b) Value for Sites of Special Scientific Interest (SSSI) are included here.

(c) Compensation paid for livestock compulsorily slaughtered under disease control measures. Compensation paid for work-in-progress livestock are recorded here while compensation paid for capital livestock are recorded as capital transfers.

(d) Includes one off payments

Table 10.3 Direct payment to farmers by country 2014

Enquiries: Nick Olney on +44 (0) 1904 455355

 email: [nick.olney@defra.gsi.gov.uk](mailto:nick.olney@defra.gsi.gov.uk)

£ million	England	Wales	Scotland	Northern Ireland	United Kingdom
<b>Coupled payments (linked to production)</b>					
Livestock subsidies					
Scottish Beef Calf Scheme	..	..	21	..	21
<b>Total coupled payments</b>	..	..	21	..	21
<b>Decoupled payments (not linked to production)</b>					
Single Payment Scheme	1 488	197	382	246	2 313
Less Favoured Areas support schemes (a)	1	..	66	25	91
Agri. environment schemes					
Environmental Stewardship / Countryside Stewardship Schemes	384	..	..	..	384
Rural Priorities / Land Manager Options	..	..	40	..	40
Tir Glastir / Tir Gofal / Tir Cynnal	..	44	..	..	44
Countryside Management Scheme	..	..	..	17	17
Organic Aid & Organic Farming Schemes	-	4	-	-	4
Environmentally Sensitive Areas Schemes	7	-	-	5	12
Sites and Areas of Special Scientific Interest	-	2	-	-	2
Other (b)	5	-	-	-	5
Animal disease compensation	12	3	1	5	21
<b>Total decoupled payments</b>	1 896	249	489	299	2 933
<b>Total direct payments</b>	1 896	249	510	299	2 954

(a) Tir Mynydd in Wales, Less Favoured Area Compensatory Allowance Scheme in Northern Ireland, Less Favoured Areas Support Scheme in Scotland and Upland Transitional Payment (UTP) in England.

(b) Includes one off payments

### Direct Payments made through key measures of the Rural Development Programmes (table 10.4)

8. There are four rural development programmes in the United Kingdom, covering England, Wales, Scotland and Northern Ireland.
9. Table 10.4 shows details of payments made through two key measures of these programmes: Less Favoured Areas and Agri-Environment.
10. The Environmental Stewardship scheme is the main agri-environment scheme for England funded by the Rural Development Programme for England (RDPE). It was introduced in August 2005 and provides funding to farmers and other land managers who deliver effective environmental management of the land. There are two legacy schemes: Countryside Stewardship and Environmentally Sensitive Areas.
11. The principle agri-environment schemes in Scotland are the Rural Priorities and Land Managers option schemes, both introduced in 2009. There are a number of legacy schemes.
12. The principal Welsh agri-environment scheme is Glastir, which was introduced in 2012 and gradually replaced Tir Cynnal, Tir Gofal and support for organic farming. Those who previously claimed under Tir Mynydd are expected to claim through Glastir as well.
13. The principle agri-environment schemes in Northern Ireland are the Environmentally Sensitive Areas and Countryside Management schemes. The Environmentally Sensitive Areas scheme was launched in 1988 and covers 20% of the agricultural land in Northern Ireland. The Countryside Management scheme was introduced in 2000 and targeted those outside the Environmentally Sensitive Areas scheme.

Table 10.4 Direct Payments made through key measures of the Rural Development Programmes

Enquiries: Nick Olney on +44 (0) 1904 455355

email: [nick.olney@defra.gsi.gov.uk](mailto:nick.olney@defra.gsi.gov.uk)

£ Million

		2010	2011	2012	2013	2014
						(provisional)
<b>Less Favoured Areas and Areas with Environmental Restrictions measure</b>						
England:	Hill Farm Allowance / Uplands Transitional Payment (a)	24	8	6	3	1
Wales:	Tir Mynydd (b)	25	25	24	..	..
Scotland:	Less Favoured Areas Support Scheme	64	66	65	66	66
Northern Ireland:	Less Favoured Areas Compensatory Allowance	25	24	25	25	25
<b>Agri. Environment and Animal Welfare measure</b>						
England:	Organic Farming Scheme	-	..	..	..	..
	Countryside Stewardship Scheme	71	53	37	21	7
	Environmentally Sensitive Areas Scheme	48	39	31	19	7
	Environmental Stewardship Scheme	266	321	342	373	377
Wales:	Organic Farming Scheme	4	4	4	4	4
	Tir Cymen	..	..	..	..	..
	Tir Gofal	29	27	24	27	18
	Environmentally Sensitive Areas Scheme	-	-	-	-	-
	Tir Cynnal	7	7	7	7	-
	Glastir (c)	..	..	7	7	26
Scotland:	Organic Aid Scheme	2	2	-	-	-
	Countryside Premium Scheme	1	-	-	-	-
	Rural Stewardship Scheme	8	4	1	-	-
	Environmentally Sensitive Areas Scheme	1	1	-	-	-
	Land Management Contract Scheme	17	7	-	-	-
	Land Managers Options	1	4	6	7	5
	Rural Priorities	22	32	33	33	35
Northern Ireland:	Organic Farming Scheme	-	-	-	-	-
	Countryside Management Scheme	23	20	19	19	17
	New Environmentally Sensitive Areas Scheme (d)	8	8	6	5	5

(a) Hill Farm Allowance payments replaced by Uplands Transitional Payments in 2011

(b) Tir Mynydd has closed to be replaced by Glastir. No longer able to identify less favoured areas and environmental restriction measure payments.

(c) Introduced in 2012; all existing scheme agreements in Wales will gradually move across to this scheme.

(d) The Environmentally Sensitive Areas Scheme (ESA) in Northern Ireland ended in 2002 when it was replaced by the New Environmentally Sensitive Areas Scheme (NESA); existing agreements under the ESA Scheme continue to be honoured.

### Take-up of Agri-Environment Schemes (tables 10.5 and 10.6)

- Under the Common Agriculture reform agreement current schemes ended in December 2013 with 2014 a transitional year between programmes. The new schemes will begin in January 2015.
- When scheme arrangements expire in a particular year it is possible they will not be recorded in tables 10.5 and 10.6, depending on the expiry date. However, it is likely that they will still have received payments for that year. This is noticeable with the Northern Ireland figures for 2014 as both the Countryside Management and Environmentally Sensitive Areas schemes drew to a conclusion.
- Agri-environment schemes provide an incentive to farmers to adopt land management and farm practices that are beneficial to the environment. The take-up of agri-environment schemes is shown by area of land under each type of agreement currently in existence in the United Kingdom (Table 10.5) and by the number of agreements (Table 10.6). Due to the differing requirements of schemes, care should be taken when making comparisons.

17. Further information on the rural development programmes can be found at:

<https://www.gov.uk/rural-development-programme-for-england>  
<http://www.scotland.gov.uk/Topics/farmingrural/SRDP>  
<http://wales.gov.uk/topics/environmentcountryside/farmingandcountryside/cap/ruraldevelopment>  
<http://www.dardni.gov.uk/index/rural-development.htm>

Table 10.5 Agri-environment schemes – area under schemes

Enquiries: Elizabeth Finch on +44 (0) 1904 455823

email: [elizabeth.finch@defra.gsi.gov.uk](mailto:elizabeth.finch@defra.gsi.gov.uk)

thousand hectares	31 December				
	2010	2011	2012	2013	2014
<b>England</b>					
Organic Farming Scheme	-	-	-	-	-
Countryside Stewardship Scheme (a)	268	172	100	36	-
Environmentally Sensitive Areas Scheme (a)	417	341	269	92	-
Environmental Stewardship Scheme					
Entry Level Scheme (b)	5 584	5 607	6 094	6 514	6 389
Higher Level Scheme (c)	809*	882	1 047	1 276	1 348
<b>Wales</b>					
Organic Farming/Organic Farming Conversion Scheme (d)	132	130	132	51	97
Tir Cymen/Tir Gofal (e)	381	378	372	358	12
Environmentally Sensitive Areas Scheme	8	7	-	-	-
Tir Cynnal	279	245	253	297	-
Glastir (f)					
Glastir Entry	..	..	155*	203	508
Glastir Advanced (on Entry)	..	..		29	184
Glastir Commons	..	..	23	34	111
<b>Scotland</b>					
Organic Aid Scheme (g)	94	34	4	2	-
Countryside Premium Scheme/Rural Stewardship Scheme (g)	118	36	-	-	-
Environmentally Sensitive Areas Scheme (g)	51	49	9	1	-
Land Management Contracts (g)	56	-	-	-	-
Land Managers Options	238	328	405	387	338
Rural Priorities	617	834	1 122	1 158	1 212
<b>Northern Ireland</b>					
Organic Farming Scheme (h)	5	3	2	1	-
Countryside Management Scheme (i)	351	333	350	295	280
Environmentally Sensitive Areas Scheme (j)	108	107	103	91	84

(a) Remaining agreements expired during 2014 with the majority renewed into Environmental Stewardship from May 2014.

(b) Includes Entry Level Pilot Scheme, OELS, Uplands ELS (from 2010) and HLS linked to ELS.

(c) Includes Freestanding HLS and HLS linked to ELS.

(d) Organic Farming Scheme replaced by Organic Farming Conversion Scheme.

(e) Now closed; majority of Tir Gofal agreements ended on 31 December 2013.

(f) Introduced in 2012; all existing scheme agreements will gradually move across to this scheme.

(g) Land has gradually moved into Rural Payments and Land Managers Options.

(h) Commenced under 2007-2013 NIRD and agreements continue to be honoured.

(i) Includes agreements which commenced under NIRD 2000-2006 and 2007-2013; agreements continue to be honoured.

(j) Commenced under 2000-2006 NIRD; existing agreements continue to be honoured.

\*Glastir figures presented as a total figure rather than separated by scheme.

**Table 10.6 Agri-environment schemes – number of agreements**

Enquiries: Elizabeth Finch on +44 (0) 1904 455823

email: [elizabeth.finch@defra.gsi.gov.uk](mailto:elizabeth.finch@defra.gsi.gov.uk)

Rounded to nearest hundred agreements

	2010	2011	2012	31 December	
				2013	2014
<b>England</b>					
Organic Farming Scheme	-	-	-	-	-
Countryside Stewardship Scheme (a)	8 500	6 500	3 700	1 300	-
Environmentally Sensitive Areas Scheme (a)	6 500	5 700	3 600	1 400	-
Environmental Stewardship Scheme:					
Entry Level Scheme (b)	41 000	41 600	44 700	48 200	47 400
Higher Level Scheme (c)	6 900	8 500	10 900	13 300	14 100
<b>Wales</b>					
Organic Farming/Organic Farming Conversion Scheme (d)	1 000	1 000	1 000	600	1 000
Tir Cymen/Tir Gofal (e)	3 100	3 000	3 000	2 800	100
Environmentally Sensitive Areas Scheme	-	-	-	-	-
Tir Cynnal	4 200	3 900	3 800	3 700	-
Glastir (f)					
Glastir Entry (g)	..	..	1700*	1 900	4 200
Glastir Advanced (on Entry)	..	..		300	1 000
Glastir Commons (h)	..	..	100	100	200
<b>Scotland</b>					
Organic Aid Scheme (i)	300	200	-	-	-
Countryside Premium Scheme/Rural Stewardship Scheme (i)	2 000	500	-	-	-
Environmentally Sensitive Areas Scheme (i)	200	200	-	-	-
Land Management Contracts (i)	1 900	-	-	-	-
Land Managers Options	3 500	4 600	4 900	5 000	4 600
Rural Priorities	3 200	4 500	5 800	5 900	6 400
<b>Northern Ireland</b>					
Organic Farming Scheme (j)	100	-	-	-	-
Countryside Management Scheme (k)	9 400	9 000	9 300	7 500	7 100
Environmentally Sensitive Areas Scheme (l)	3 000	3 000	2 900	2 500	2 300

(a) Remaining agreements expired during 2014 with the majority renewed into Environmental Stewardship from May 2014.

(b) Includes Entry Level Pilot Scheme, OELS, Uplands ELS (from 2010) and HLS linked to ELS.

(c) Includes Freestanding HLS and HLS linked to ELS.

(d) Organic Farming Scheme replaced by Organic Farming Conversion Scheme.

(e) Now closed; majority of Tir Gofal agreements ended on 31 December 2013.

(f) Introduced in 2012; all existing scheme agreements will gradually move across to this scheme.

(g) Includes Glastir Advanced (on Entry).

(h) Includes Glastir Advanced (on Commons).

(i) Land has gradually moved into Rural Payments and Land Managers Options.

(j) Commenced under 2007-2013 NIRDP and agreements continue to be honoured.

(k) Includes agreements which commenced under NIRDP 2000-2006 and 2007-2013; agreements continue to be honoured.

(l) Commenced under 2000-2006 NIRDP; existing agreements continue to be honoured.

\*Glastir figures presented as a total figure rather than separated by scheme.

## All Common Agricultural Policy payments by funding stream (table 10.7)

19. Table 10.7 shows all agricultural market support under the Common Agricultural Policy. This is different to the other tables in chapter 10, which show expenditure feeding into the agricultural account only, i.e. only those payments received by units as a consequence of engaging in agricultural activity. The market price support element of this table can be paid to non-agricultural units. In addition, readers should note the difference in timings as the data is for European Union agricultural financial years (see table footnote) and they are in Euros.

Table 10.7 All Common Agricultural Policy (CAP) payments by funding stream

Enquiries: Michael Redfern on +44 (0) 118 968 7439

 email: [michael.redfern@ukcb.gsi.gov.uk](mailto:michael.redfern@ukcb.gsi.gov.uk)

Euros million	EU financial years (a)				
	2010	2011	2012	2013	2014
<b>UK CAP payments</b>					
<b>Pillar 1</b>	3,424	3,309	3,348	3,326	3,234
of which: Direct Aids	3,325	3,304	3,290	3,285	3,195
Market price support (b)	99	5	58	41	39
<b>Pillar 2 (c)</b>	913	1,018	1,085	1,091	1,065
of which: EAFRD (d)	512	653	742	752	798
Co-financing	401	365	343	339	267
<b>Total UK CAP payments</b>	<b>4,337</b>	<b>4,327</b>	<b>4,433</b>	<b>4,417</b>	<b>4,299</b>
<b>England CAP payments</b>					
<b>Pillar 1</b>	2,199	2,099	2,146	2,126	2,048
of which: Direct Aids	2,100	2,094	2,088	2,085	2,009
Market price support (b)	99	5	58	41	39
<b>Pillar 2 (c)</b>	562	597	631	666	666
of which: EAFRD (d)	348	448	470	532	563
Co-financing	214	149	161	134	103
<b>Total England CAP payments</b>	<b>2,761</b>	<b>2,696</b>	<b>2,777</b>	<b>2,792</b>	<b>2,714</b>
<b>Wales CAP payments</b>					
<b>Pillar 1</b> Direct Aids	316	312	309	309	301
<b>Pillar 2 (c)</b>	97	105	117	97	112
of which: EAFRD (d)	38	45	54	48	54
Co-financing	59	60	63	49	58
<b>Total Wales CAP payments</b>	<b>413</b>	<b>417</b>	<b>426</b>	<b>406</b>	<b>413</b>
<b>Scotland CAP payments</b>					
<b>Pillar 1</b> Direct Aids	589	583	584	583	566
<b>Pillar 2 (c)</b>	190	243	256	236	191
of which: EAFRD (d)	92	123	167	113	119
Co-financing	98	120	89	123	72
<b>Total Scotland CAP payments</b>	<b>779</b>	<b>826</b>	<b>840</b>	<b>819</b>	<b>757</b>
<b>Northern Ireland CAP payments</b>					
<b>Pillar 1</b> Direct Aids	320	315	309	308	319
<b>Pillar 2 (c)</b>	64	73	81	92	96
of which: EAFRD (d)	34	37	51	59	62
Co-financing	30	36	30	33	34
<b>Total Northern Ireland CAP payments</b>	<b>384</b>	<b>388</b>	<b>390</b>	<b>400</b>	<b>415</b>

(a) Information based on EU financial year 16th October – 15th October. Figures exclude financial corrections/penalties.

(b) Market price support covers interventions in agricultural markets, e.g. public intervention and private storage aid.

(c) Pillar 2 funds rural development, e.g. for agri-environment schemes, competitiveness of agriculture and economic diversification and quality of life in rural areas.

(d) EAFRD is the European Agricultural Fund for Rural Development. Member states are required to co-finance these receipts with a contribution from their exchequer. Figures are based on in-year quarterly returns, rather than the annual account (in order to provide the split between EAFRD and co-financing)

# Chapter 11: Environment

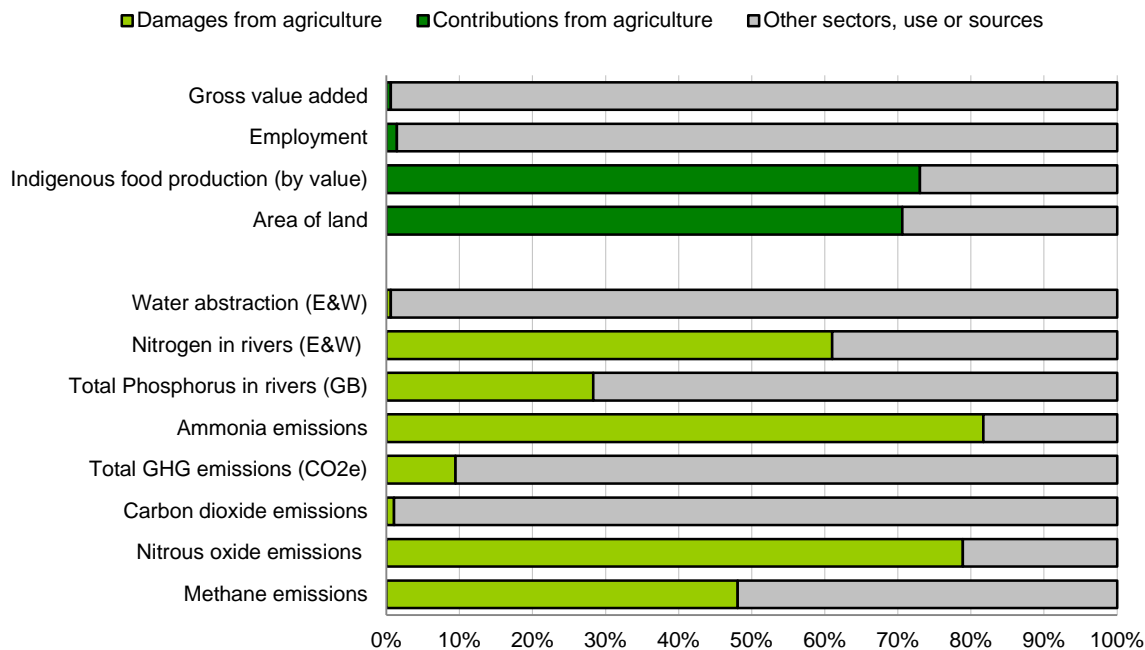
## Summary

- Agriculture accounts for 71% of land use in the United Kingdom. Land management practices contribute to shaping the landscape and can also have profound impacts on soils, water bodies, air quality, biodiversity, and ecosystem services.
- In recent years, the key drivers of change in terms of environmental pressures from farming management practices have been:
  - declines in the number of livestock, specifically ruminants, and
  - reductions in fertiliser applications, particularly to grassland.
- Between 2000 and 2013 the estimated soil nutrient balances for nitrogen and phosphorus have fallen by 17% and 28%, respectively, representing a reduction in the surpluses of nutrients that can potentially be lost to the environment.
- Between 1990 and 2013 estimated nitrous oxide and methane emissions from agriculture have both fallen by 17%.
- Between 1990 and 2013 estimated ammonia emissions from agriculture have fallen by 28%.
- In 2013 the population of UK farmland birds was less than half (45%) of its 1970 level, as estimated by the Farmland Bird Index.

## Introduction (chart 11.1)

1. Whilst agriculture contributes 0.6% to the United Kingdom's economy, it provides around three-quarters of the food we eat and at 71% is the predominant form of land use (Chart 11.1). As well as being vital for food production, agriculture helps to shape the landscape, providing important recreational, spiritual and other cultural benefits.
2. Agricultural land management practices and the associated inputs (nutrients and agro-chemicals) influence the quality, composition and availability of habitats and can negatively impact on biodiversity, air, water and soils. These effects may be detrimental to important regulating ecosystem services, such as pollination, pest and disease regulation, water and soil quality, and climate regulation.
3. In recent years, the key drivers of change in terms of environmental pressures from agriculture are declines in the number of livestock, specifically ruminants, and reductions in fertiliser applications, particularly on grassland. Reforms to the Common Agricultural Policy, and in particular the decoupling of subsidy payments from production, have been instrumental to these drivers of change. As a result of these reforms agriculture has become more responsive to market conditions which may influence wider provision of ecosystem services, both positively and negatively.
4. This chapter provides an overview of the change in inputs (fertiliser, pesticide and water usage) and environmental management over time and the monitoring of environmental impacts to which agriculture contributes.

Chart 11.1 Agriculture's relative contribution to the economy and its impact on the environment

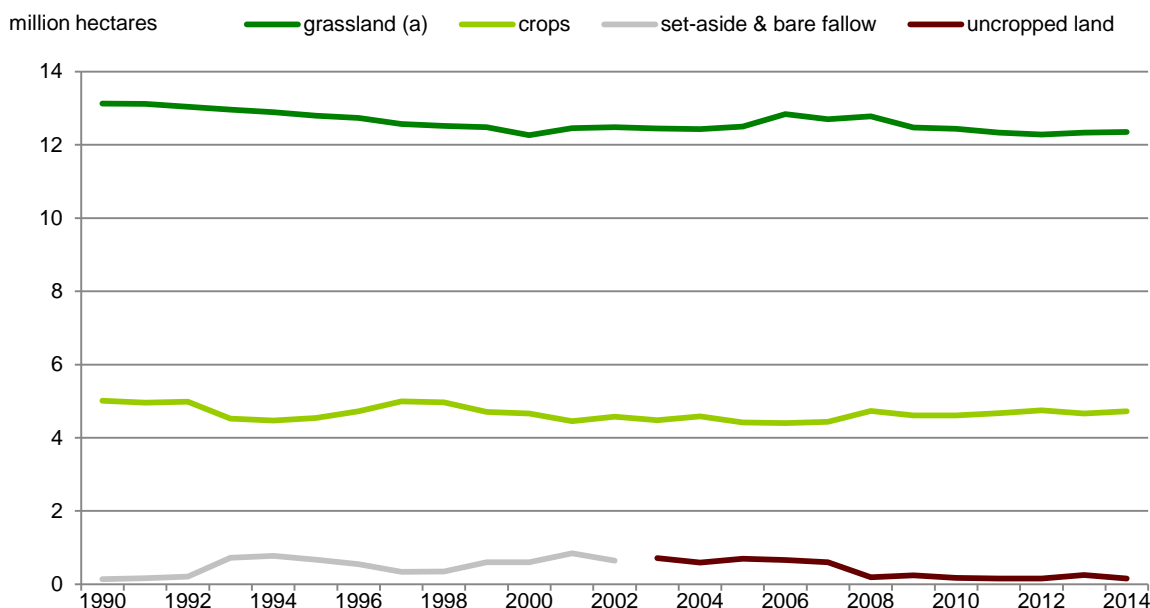


Source: Collated by Defra

Land use (chart 11.2)

5. Between 1990 and 2014 agricultural land use has remained relatively stable (Chart 11.2) with little change in the proportion of land used for grassland (72%) and crops (27%). The area of uncropped land has remained low since 2008 when it fell sharply due to the abolition of set-aside and high cereal prices. Between 2013 and 2014 the area of uncropped land decreased by 37% to 0.16 million hectares. This was largely offset by the area of total crops increasing by 1.2% due to a return to more typical weather conditions.

Chart 11.2 Agricultural land use



Source: Defra

(a) Grassland includes temporary and permanent grasslands, sole rights rough grazing and common rough grazing areas.



## Agri-environment schemes

6. Agri-environment schemes provide an incentive to farmers to adopt land management and farm practices that are beneficial to the environment. Farmers within the schemes receive payments designed to compensate them for the typical cost of these practices. There are a range of schemes in operation across the United Kingdom with each Administration implementing their own schemes.
7. The number of agreements and areas of land within individual schemes operating within the United Kingdom are detailed in Chapter 10. In 2014 farms within agri-environment schemes accounted for around 54% of the Utilised Agricultural Area, equivalent to 9.2 million hectares. This has risen from around 2.4 million hectares in 2000.

## Pesticide usage

8. Plant protection products are used to manage pests and diseases in crops and to regulate growth. They play a major role in maintaining high crop yields and therefore greater production from agricultural land. However, they can have detrimental impacts on the environment, particularly on terrestrial and aquatic biodiversity.
9. The need for pesticide usage varies from year to year depending on weather conditions which influence disease, weed and pest pressures. In addition, longer term variations are due to changes in the range and activity of active substances, the economics of pest control and resistance issues. For example, in the United Kingdom, whilst the treated area of arable crops (number of hectares multiplied by number of applications) has fluctuated since 2000, and in 2012 was 24% higher than in 2000, the weight of pesticides applied has generally shown a downward trend with the 2012 level being 46% lower than that in 2000, highlighting the complexities.

Further information on pesticide usage on arable crops in the UK can be found at: <https://secure.fera.defra.gov.uk/pusstats/surveys/documents/arable2012v2.pdf>.

## Water use

10. Water may be abstracted from surface waters and groundwater for irrigation purposes, particularly in areas where there is low rainfall, and for certain crops in order to achieve good crop quality and high yields. Whilst water from agriculture may have positive impacts by helping to recharge aquifers it may also contribute to soil erosion and flooding. Over-abstraction may also damage sensitive aquatic habitats. In 2013, in England and Wales agriculture accounted for 0.6% of recorded water abstractions by volume; the majority was used in the south and east of England.
11. Levels of water abstraction are highly variable from year to year being greatly influenced by annual rainfall, particularly during the growing season. In 2013 the recorded agricultural abstraction rate in England and Wales was 126 million cubic metres per year. This was 70% higher than 2012 due to the return to drier weather conditions in 2013.

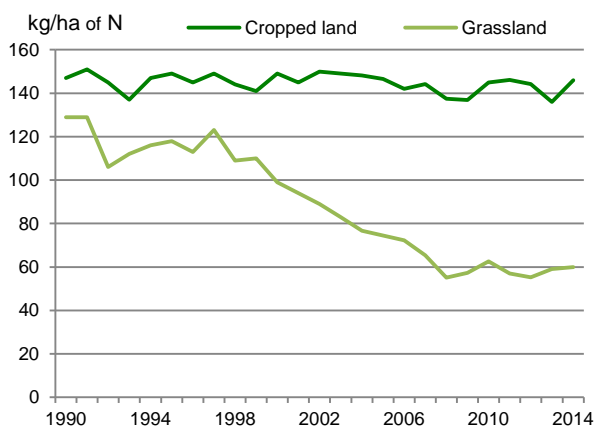
Further information on water abstraction can be found at: <https://www.gov.uk/government/statistical-data-sets/agri-environment-indicators>.

## Fertiliser use (charts 11.3 and 11.4)

12. Nitrogen and phosphorus are two of the key nutrients required for crop growth. A deficit of these nutrients impacts on crop yields and therefore on levels of production. The main sources of these nutrients are mineral fertilisers and organic fertilisers (e.g. manures and slurries from livestock). Losses of these nutrients to the environment from soils and manures can impact on water quality (nitrogen and phosphorus levels in water bodies), air quality (ammonia emissions) and contribute to climate change (nitrous oxide emissions).
13. Most agricultural soils do not contain enough naturally occurring plant available nitrogen to meet the needs of a crop throughout the growing season so supplementary nitrogen applications are needed each year. Nitrogen usually has a large immediate effect on crop growth, yield and quality. Correct rate and timing of applications is important to ensure crop growth requirements are met.

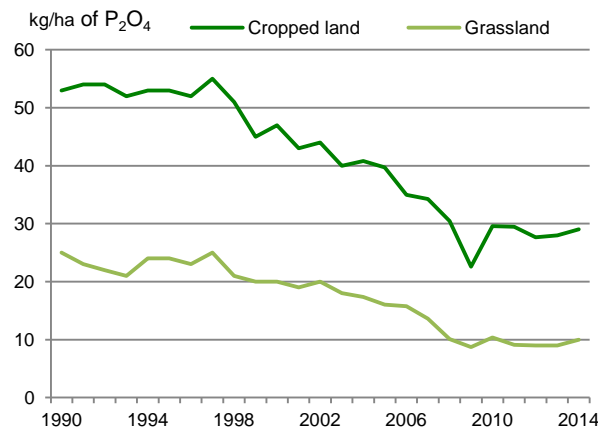
14. For Great Britain between 1990 and 2014 the overall mineral nitrogen application rate on cropped land has largely been in the range of 145-150 kg/ha. In 2013 this fell to 136 kg/ha due to more spring cropping as a result of adverse weather during autumn 2012. In 2014 the nitrogen application rate increased to 146 kg/ha, seeing a return to more typical levels. For grassland, nutrient application rates have always been lower than for cropped land. Between 1990 and 2014 there has been a downward trend in the overall mineral nitrogen application rate on grassland and in 2014 this was 60 kg/ha (Chart 11.3). A reduction in total cattle numbers is thought to have contributed to this, possibly in conjunction with some improvement in manure use efficiency.
15. Phosphate is applied in fertilisers and manures, particularly to replace the quantities removed in harvested crops. Most British soils are able to hold large quantities of phosphate in forms that are available for crop uptake over several years. Therefore managing the supply of phosphate is based on maintaining appropriate levels in the soil with the timing of applications less critical.
16. Overall mineral phosphate application rates on cropped land have declined between 1990 and 2014 to now stand at 29 kg/ha in 2014. The overall phosphate application rate on grassland has also declined over this time to stand at 10 kg/ha in 2014 (Chart 11.4).

Chart 11.3 Nitrogen (N) use (kg/ha) on all crops and grass, Great Britain



Source: BSFP

Chart 11.4 Phosphate (P<sub>2</sub>O<sub>5</sub>) use (kg/ha) on all crops and grass, Great Britain



Source: BSFP

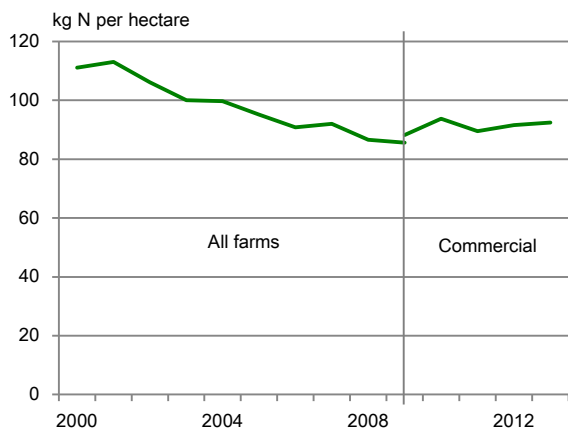
17. Annual levels of use of nitrogen and phosphate are influenced by fertiliser prices, crop prices, crop type and weather related issues during the growing season, e.g. the drop in nutrient application rates in 2009 was related to high fertiliser prices.

Further information is available in the annual report of the British Survey of Fertiliser Practice and the accompanying Statistical Notice which can be found at:  
<https://www.gov.uk/government/statistics/british-survey-of-fertiliser-practice-2014> .

### Soil nutrient balances (charts 11.5 and 11.6)

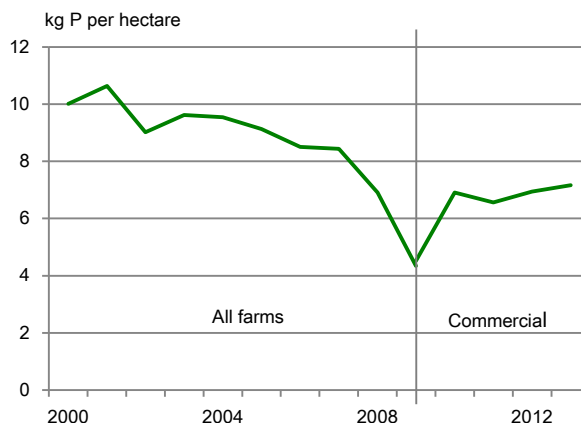
18. Soil nutrient balances provide an indication of the overall environmental pressure from nitrogen and phosphorus in agricultural soils. They measure the difference between nutrients applied to soils (largely as fertilisers and manures) and those removed from soils by the growth of crops, including grass for fodder, and grazing. An increase in the balance per hectare indicates a greater environmental risk whereas a decrease in the balance per hectare broadly indicates a reduced environmental risk from nutrient losses and their associated emissions. There is a theoretical risk that nutrient deficits lead to poor soil fertility and subsequent loss of yields.

Chart 11.5 Nitrogen (N) soil nutrient balance



Source: Defra

Chart 11.6 Phosphorus (P) soil nutrient balance



Source: Defra

19. Provisional estimates for 2013 show that the nitrogen balance for the UK was a surplus of 92 kg/ha of managed agricultural land (Chart 11.5). Whilst this represents a 1.0% increase compared with 2012, the overall long-term trend is downwards as there has been a 19 kg/ha reduction in the nitrogen balance since 2000 (-17%).
20. The main drivers for overall reductions in the surplus of nitrogen since 2000 have been decreases in the application of mineral fertilisers and manure production (due to lower livestock numbers), although this has been partially offset by a reduction in the nitrogen offtake (particularly forage) over the same period. The increase between 2012 and 2013 has been mainly driven by a small reduction in off-take (via harvested crops and crop residues) while inputs remain largely unchanged.
21. The UK phosphorus balance was estimated to be a surplus of 7.2 kg/ha of managed agricultural land in 2013 (Chart 11.6). Whilst this represents an increase of 3% compared with 2012, since 2000 the phosphorus balance has reduced by 2.8 kg/ha (-28%).
22. The main drivers for the overall reductions in the surplus of phosphorus since 2000 are similar to those for nitrogen. The increase between 2012 and 2013 has been mainly driven by an increase in inputs from mineral fertilisers while outputs have remained at similar levels.

Further information concerning soil nutrient balances can be found at:

<https://www.gov.uk/government/statistics/uk-and-england-soil-nutrient-balances-2013> .

## Water quality

23. Agriculture contributes to the pollution of water bodies through fertilisers and manure (nutrients), pesticides, sediments and faecal bacteria. Rainfall may wash a proportion of fertiliser off fields into local water bodies or cause soluble nutrients to filter into groundwater. Pesticides can be washed into water bodies by rainwater or may enter them directly if spraying close to water and can also enter groundwater via soil infiltration. Erosion washes topsoil into water bodies. In additions, soils can carry large amounts of phosphates and agri-chemicals that bond to clay particles.
24. Due to the implementation of the Water Framework Directive (WFD) a revised approach to monitoring water quality across the UK was introduced in 2009. The WFD assesses water quality using three categories (ecological quality, chemical quality and hydrological quality). Each category is assigned a grade and these are combined to provide an overall classification. The combined score is based on 'one out, all out', e.g. if one category is ranked as 'poor' the water body will be classified as 'poor'.
25. High levels of nitrogen and phosphorus in agricultural soils increase the risk of their transportation to water bodies. High nutrient concentrations, particularly phosphorus, can cause nutrient enrichment (eutrophication) resulting in poor water quality from excessive growth of macrophytes and algae and low dissolved oxygen levels at night. Excessive levels of nutrients must be removed from water bodies used for drinking water to meet legal limits, with water companies incurring significant costs. It is estimated that agriculture accounts for around 61% of the total nitrogen in river water in England

and Wales<sup>1</sup> and around 28% of the total phosphorus load in river water in Great Britain<sup>2</sup> although this estimate may also include phosphorus from septic tanks<sup>3</sup>.

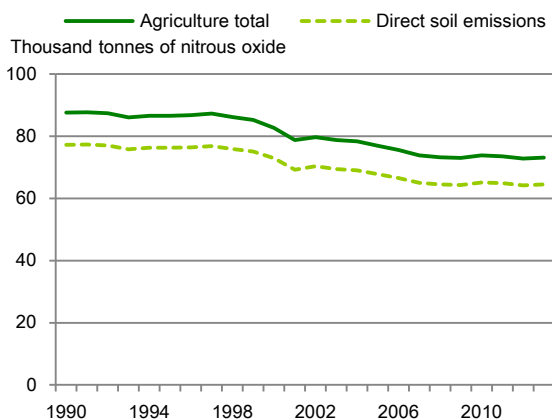
- 26. Between 2008 and 2012 there was no significant change in the overall number of water bodies awarded high or good surface water status in the United Kingdom. In 2012, 33% of rivers were classified as either high (2%) or good (31%). Diffuse water pollution from agriculture and rural land use is directly attributed to 28% of failures to meet the WFD standards in England<sup>4</sup>.

Further information on the status of water bodies in the United Kingdom can be found at: <http://jncc.defra.gov.uk/page-4250>

### Greenhouse gas emissions (charts 11.7 and 11.8)

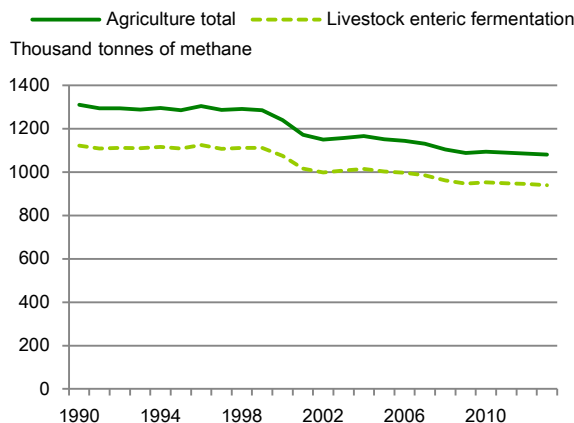
- 27. In 2013 agriculture accounted for 9.5% of total greenhouse gas emissions in the UK. The three greenhouse gasses emitted by agriculture are nitrous oxide, methane and carbon dioxide.
- 28. Agriculture is the major source of both nitrous oxide and methane emissions in the UK accounting for 79% of total nitrous oxide emissions and 48% of total methane emissions in 2013. In contrast agriculture only accounted for 1.1% of total carbon dioxide emissions in the UK.
- 29. Around 88% of agricultural nitrous oxide emissions come from soils, particularly as a result of fertiliser applications. Between 1990 and 2013, nitrous oxide emissions from agriculture are estimated to have fallen by 17% which is consistent with trends in fertiliser usage over the same period (Chart 11.7).
- 30. Almost 87% of methane emissions from agriculture arise from enteric fermentation (digestive processes) in ruminating animals with manure management practices accounting for the remaining 13%. Between 1990 and 2013 methane emissions from agriculture are estimated to have fallen by 17% mainly as a result of decreasing livestock numbers, particularly cattle (Chart 11.8).

Chart 11.7 Nitrous oxide emissions from agriculture



Source: DECC

Chart 11.8 Methane emissions from agriculture



Source: DECC

Further information on greenhouse gas emissions from agriculture can be found at: <https://www.gov.uk/government/statistical-data-sets/agri-environment-indicators>.

### Air quality

- 31. Ammonia emissions impact on air quality and subsequently human and animal health. In addition, deposition of ammonia can damage sensitive habitats due to eutrophication and the acidification of soils. In 2013 agriculture accounted for almost 82% of the UK's ammonia emissions.

<sup>1</sup> Hunt, D.T.E., *et al*, 2004, Updating an estimate of the sources of nitrogen to waters in England and Wales. Defra project WT03016.  
<sup>2</sup> White, P.J. and Hammond, J.P., 2006, Updating the estimate of the sources of phosphorus in UK waters. Defra project WT0701CSF.  
<sup>3</sup> May, L., *et al*, 2011, The impact of phosphorus inputs from small discharges on designated freshwater sites. Report to Natural England and Broads Authority, SWR/CONTRACTS/08-09/112.  
<sup>4</sup> POSTnote 478 October 2014 Diffuse Pollution of Water by Agriculture,

32. The primary source of ammonia emissions in the UK is agricultural livestock and in particular cattle. Between 1990 and 2013 ammonia emissions from agriculture are estimated to have fallen by 28% due to reductions in cattle numbers and more efficient fertiliser use.

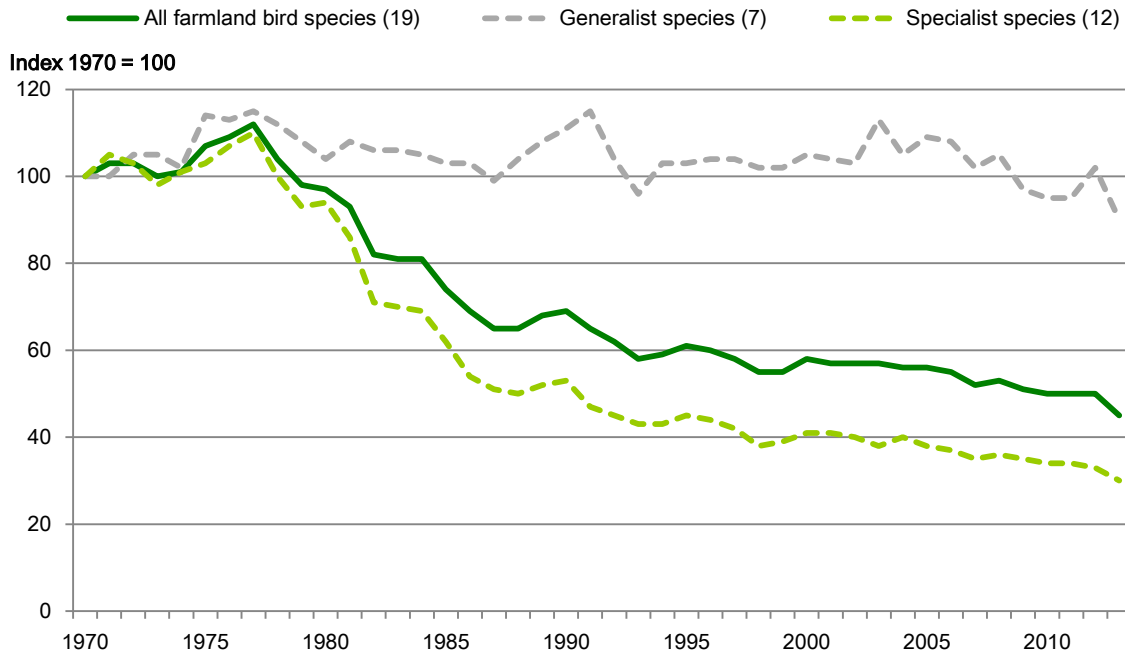
Further information on total ammonia emissions can be found at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/388195/Emissions\\_of\\_a\\_ir\\_pollutants\\_statistical\\_release\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388195/Emissions_of_a_ir_pollutants_statistical_release_2014.pdf) and <https://www.gov.uk/government/statistical-data-sets/agri-environment-indicators>.

## Biodiversity (chart 11.9)

33. Bird populations are considered to be a good indicator of the general state of wildlife as they have a wide habitat distribution, they are near the top of the food chain and there are long-term datasets available. Agriculture provides valuable resources in terms of winter food, spring forage and nesting habitats for farmland bird populations. The largest declines in farmland bird populations occurred between the late 1970s and early 1990s due to the impact of rapid changes in farmland management. Whilst agri-environment schemes offer specific measures designed to help stabilise and recover farmland bird populations, the situation is complex with other pressures such as weather effects and disease pressures adversely impacting on some species.
34. The farmland bird index comprises 19 species of bird. The long-term decline of farmland birds in the UK has been mainly driven by the decline of the 12 species known as the 'specialists' that are restricted to, or highly dependent on, farmland habitats (Chart 11.9). Between 1970 and 2013, populations of farmland specialists declined by 70% whereas farmland generalists have declined by 10%. In 2013 the farmland bird index is less than half (45%) of its 1970 level.

### Chart 11.9 Farmland Bird Index



Source: BTO/RSPB

Further information on the farmland bird index can be found at:

<https://www.gov.uk/government/statistics/wild-bird-populations-in-the-uk>.

## Chapter 12: Overseas Trade

### Summary

- Exports of food, drink and animal feed were worth £18.9 billion in 2014, a 1.9% real terms fall on 2013.
- Imports of food, drink and animal feed decreased by 3.3% in real terms to £39.6 billion in 2014.
- The trade gap in food, drink and animal feed narrowed by 4.9% in real terms to £20.7 billion in 2014.
- Principal destinations for exports in 2014 were the Irish Republic (18%), France (11%), USA (10%) and the Netherlands (7.1%).
- Most imports to the UK in 2014 were despatched from the Netherlands (12%), France (11%), Irish Republic (9.7%), Germany (9.4%) and Spain (6.3%).
- Whisky exports totalled £4.1 billion in 2014, an 8.9% fall on 2013 in real terms.
- Exports of fresh vegetables increased by 11% to £80 million in 2014 while exports of fresh fruit fell by 32% to £75 million.

### Introduction

1. The Overseas Trade Statistics presented in this chapter are based on data collected by HM Revenue and Customs and are compiled from returns made by importers and exporters. Before the completion of the Single Market in the European Union at the end of 1992, all overseas trade data for the United Kingdom was compiled from Customs declarations made by traders. Since the beginning of 1993, the collection of trade statistics has been divided into two categories: that transacted between the United Kingdom and countries outside the European Union (extra-EU trade) and that between the United Kingdom and its European Union partners (intra-EU trade). Extra-EU trade statistics are compiled, as before, from Customs declarations by importers, exporters and their agents, while intra-EU trade statistics are compiled using a system linked to traders' VAT returns, known as Intrastat.
2. The trade statistics shown here may not match those shown in the commodities tables in Chapter 8 where, for example, trade in meat includes the carcase weight equivalent of trade in live animals and trade in milk is of raw milk before processing and not of processed and packaged milk and cream as shown here.

## Value of trade in food, feed and drink (chart 12.1, table 12.1)

- Exports of food, feed and drink were worth £18.9 billion in 2014. To compare 2014 exports with previous years it is necessary to adjust for the effects of inflation in the economy. The real terms value of exports was £0.36 billion or 1.9% lower in 2014 than 2013 but the long term trend is upwards. Since 2005 the real terms value of exports has risen by £6.7 billion or 54%. This is a consequence of the combination of the relative strength of sterling, proactive responses to disease related issues and an upward trend in world commodity prices in the last decade.
- Imports of food, drink and animal feed were worth £39.6 billion in 2014. To compare 2014 imports with previous years it is necessary to adjust for the effects of inflation in the economy. The real terms value of imports was £1.37 billion or 3.3% lower in 2014 than 2013 but the long term trend is upwards. Since 2005 the real terms value of imports has risen by £10.7 billion or 37%.
- The trade gap narrowed by 4.9% in real terms between 2013 and 2014 but has widened by 25% in real terms from £16.6 billion in 2005 to £20.7 billion in 2014.
- Of the 11 food, drink and animal feed categories, the dairy, fish, cereals, sugar, and miscellaneous edible products and preparations ones have seen an increase in exports, the largest increase occurring in the “miscellaneous” category which showed a rise of 12%. Once again, exports of oils and fats showed the largest decrease of 12% at 2014 prices. Exports decreased in real terms in 2014 by 7.5% for fruit and vegetables and by 7.1% for drinks. Imports increased in 2014 in real terms in three food and drink categories; coffee and tea by 4.8%, miscellaneous edible products and preparations by 0.5% and meat by 0.3%. The two categories which saw the largest fall in imports were oils and fats, by 13% to £1.7 billion, and cereals, which decreased by 10% in value from £3.6 billion in 2013 to £3.3 billion in 2014.

Chart 12.1 Value of UK trade in food, drink and animal feed in real terms

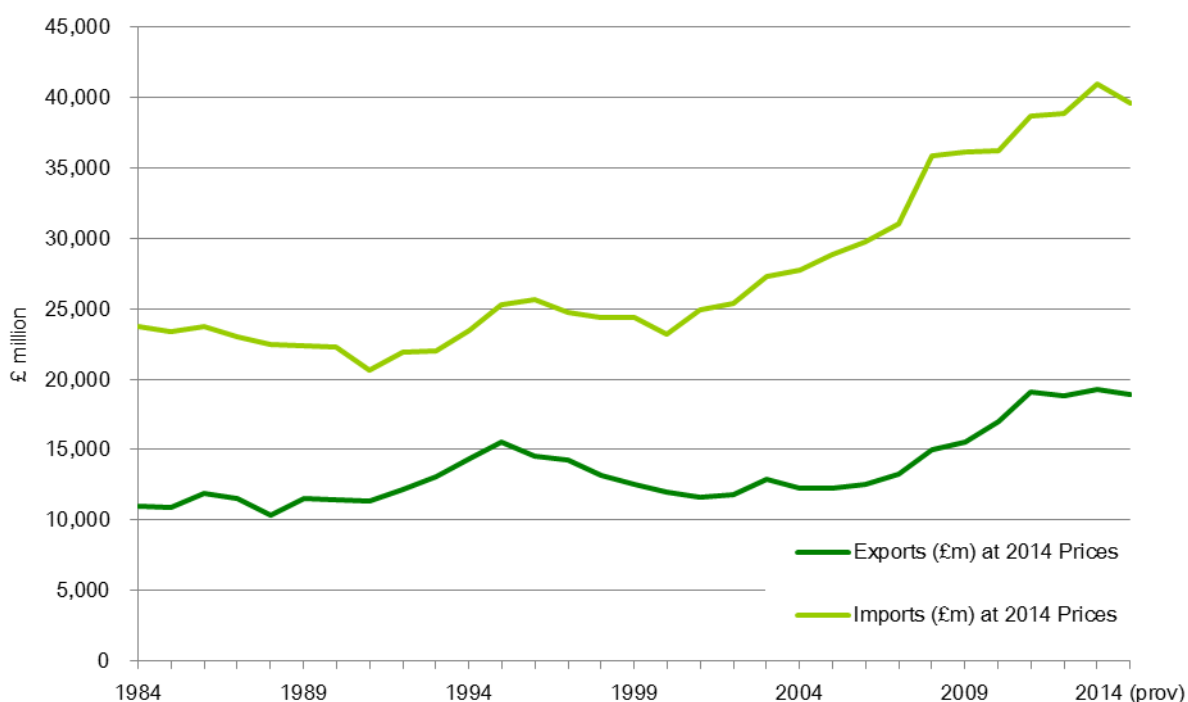


Table 12.1 Value of UK trade in food, drink and animal feed in real terms

Enquiries: Julian Groom on +44 (0) 1904 455435

 email: [julian.groom@defra.gsi.gov.uk](mailto:julian.groom@defra.gsi.gov.uk)

£ million		Calendar year									
SITC Division		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Code	Type	(provisional)									
<b>Exports</b>											
01	Meat & Meat Preps	895	909	972	1 313	1 370	1 506	1 763	1 638	1 700	1 665
02	Dairy & Eggs	886	870	941	992	928	1 114	1 312	1 209	1 399	1 498
03	Fish & Fish Preps	1 156	1 131	1 144	1 142	1 294	1 448	1 542	1 392	1 490	1 561
04	Cereals & Cereal Preps	1 526	1 482	1 582	1 984	1 968	2 079	2 137	2 008	1 895	1 939
05	Fruit and Veg & Preps	634	698	698	780	841	871	928	880	974	901
06	Sugar & Sugar Preps	419	448	455	502	502	473	401	394	381	407
07	Coffee, tea, etc.	771	805	853	981	982	1 085	1 148	1 188	1 256	1 227
08	Animal feed	388	436	497	596	649	696	741	845	949	899
09	Misc. edible preps	901	930	908	1 010	1 105	1 175	1 240	1 256	1 425	1 598
11	Beverages	4 315	4 490	4 773	5 169	5 467	6 022	7 148	7 043	7 062	6 562
22 + S4	Oils/fats & Oilseeds	340	384	460	503	461	570	763	953	708	625
<b>Total</b>		<b>12 230</b>	<b>12 584</b>	<b>13 283</b>	<b>14 974</b>	<b>15 567</b>	<b>17 038</b>	<b>19 122</b>	<b>18 807</b>	<b>19 239</b>	<b>18 881</b>
<b>Imports</b>											
01	Meat & Meat Preps	4 578	4 701	4 757	5 306	5 519	5 463	6 035	5 855	5 970	5 988
02	Dairy & Eggs	2 149	2 231	2 181	2 604	2 606	2 658	2 719	2 771	2 994	2 872
03	Fish & Fish Preps	2 087	2 303	2 323	2 500	2 416	2 426	2 695	2 662	2 803	2 737
04	Cereals & Cereal Preps	1 859	1 866	2 241	2 789	2 738	2 535	2 680	3 085	3 629	3 255
05	Fruit and Veg & Preps	6 943	7 158	7 420	8 146	8 000	8 200	8 514	8 502	9 136	8 746
06	Sugar & Sugar Preps	1 180	1 161	1 132	1 318	1 334	1 257	1 343	1 325	1 443	1 326
07	Coffee, tea, etc.	1 700	1 769	1 872	2 212	2 569	2 691	2 948	2 811	2 758	2 891
08	Animal feed	1 142	1 216	1 249	1 617	1 719	1 836	1 783	1 845	2 122	2 036
09	Misc. edible preps	1 458	1 513	1 789	2 203	2 428	2 305	2 559	2 617	2 765	2 780
11	Beverages	4 579	4 562	4 676	4 949	4 936	5 061	5 231	5 340	5 326	5 211
22+S4	Oils/fats & Oilseeds	1 146	1 271	1 414	2 151	1 814	1 778	2 154	2 061	1 974	1 714
<b>Total</b>		<b>28 821</b>	<b>29 751</b>	<b>31 055</b>	<b>35 795</b>	<b>36 079</b>	<b>36 209</b>	<b>38 661</b>	<b>38 875</b>	<b>40 921</b>	<b>39 555</b>

source: HMRC

Defra's aggregate 'Food, drink and animal feed' is composed of the following divisions from the Standard International Trade Classification:

1. Meat: meat from cattle, sheep, pigs, goats, poultry, horses etc.; preparations including blood, juices, sausages, livers, offal.
2. Dairy: includes milk (skimmed or otherwise), butter, buttermilk, cream, yoghurt, ice cream, whey, cheese and curd, all types of eggs both in and out of shell.
3. Fish: All types of edible marine life excluding mammals, fresh, frozen, processed, prepared or preserved.
4. Cereals: includes rice, wheat, barley, oats, maize, grain sorghum and preparations including sweet biscuits, waffles, gingerbread, and uncooked/unstuffed pasta.
5. Fruit and vegetables: includes fresh, frozen or prepared fruit (except crystallised) and vegetables, nuts (except groundnuts), vegetable and fruit juices of all kinds except wine (see division 11), jams, marmalades, fruit or nut puree/paste etc.
6. Sugar: includes both natural sugar and sugar confectionery (but not chocolate or cocoa), both natural and artificial honey, and liquorice.
7. Coffee, tea, etc.: includes all types of tea, coffee (e.g. green, decaffeinated), extracts and substitutes thereof; cocoa and chocolate (of all kinds); all kinds of spices.
8. Animal feed: includes hay, fodder, bran, sharps and other residues derived from cereals or leguminous plants, oil-cake and other solid residues, other residues, brewing dregs, all types of pet or animal food.
9. Miscellaneous: includes margarine, shortening, homogenised products or preparations not elsewhere specified, sauces, vinegar, soups, yeasts, cooked/stuffed pasta, food preparations for infant use.
11. Drink: includes alcoholic drinks of all kinds; also natural or artificial mineral and aerated waters sweetened or otherwise.
- 22+S4 Oils: includes groundnuts (peanuts), soya beans, sunflower seeds, rape seeds, palm nuts, linseed, poppy seeds etc., lard, pig fat, olive oil, rape oil, corn oil, linseed oil, beeswax etc.

Division 00, which covers all live animals, is excluded from the aggregate 'Food, drink and animal feed' because it includes non-food animals, particularly race horses. S4 stands for Section 4 in the SITC and covers animal and vegetable oils, fats and waxes.



## Trading partners (charts 12.2 and 12.3)

7. Principal destinations of food, drink and animal feed exports to the European Union in 2014 were the Irish Republic (£3.4 billion), France (£2.1 billion), Netherlands (£1.3 billion) and Germany (£1.2 billion). The principal European Union countries from which food, drink and animal feed was imported into the United Kingdom in 2014 were the Netherlands (£4.9 billion), France (£4.2 billion), the Irish Republic (£3.8 billion) and Germany (£3.7 billion).
8. Principal non-EU destinations of food, drink and animal feed exports in 2014 were the USA (£1.9 billion), Hong Kong (£376 million) and the UAE (£304 million), while the main non-EU countries from which food, drink and animal feed was imported into the United Kingdom were the USA (£1.2 billion), Brazil (£761 million) and Thailand (£718 million).

Chart 12.2 Imports of food, drink and animal feed by country of dispatch 2014; United Kingdom

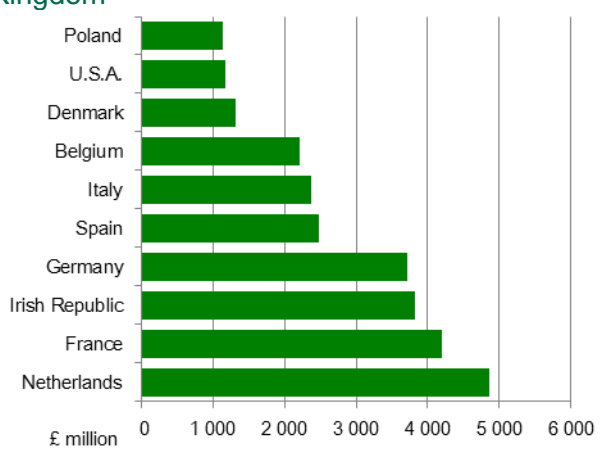
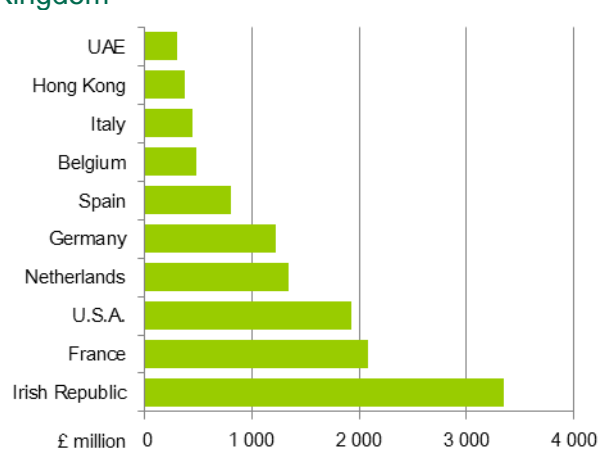


Chart 12.2 Exports of food, drink and animal feed by country of destination 2014; United Kingdom



## Exports and imports by degree of processing (charts 12.4 and 12.5)

9. Trade in food, drink and animal feed covers a wide range of products from raw agricultural commodities through lightly processed foods such as meat, cheese and butter, powdered milk, flour and sugar to highly processed products such as confectionery, canned meats, jams, alcoholic drinks and ice cream. By grouping foods into unprocessed, lightly processed and highly processed additional insights in trading patterns can be found.
  - Exports of highly processed foods such as confectionery, canned meats, jams, alcoholic drinks and ice cream, increased by 56% in real terms value between 2005 and 2014.
  - Exports of lightly processed foods and drinks, i.e. goods that retain their raw recognisable form, such as meat, cheese and butter, rose by 49% in real terms value between 2005 and 2014.
  - Exports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, increased by 68% in real terms value between 2005 and 2014.
  - Imports of highly processed foods and drink increased by 49% in real terms value between 2005 and 2014.
  - Imports of lightly processed foods and drinks increased by 32% in real terms value between 2005 and 2014.
  - Imports of unprocessed commodities increased by 29% in real terms value between 2005 and 2014.

Chart 12.4 Exports in food, drink and animal feed by degree of processing at 2014 prices; United Kingdom

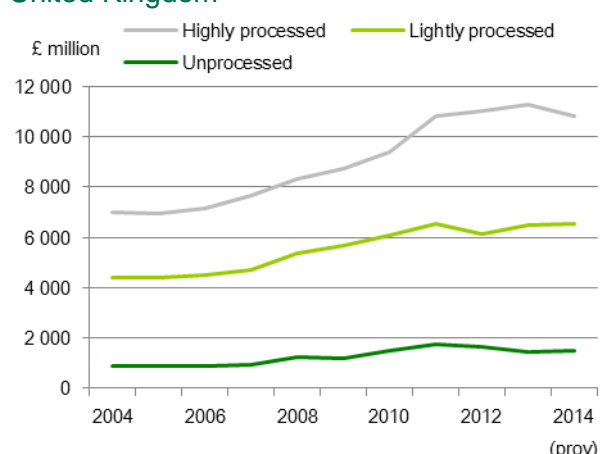
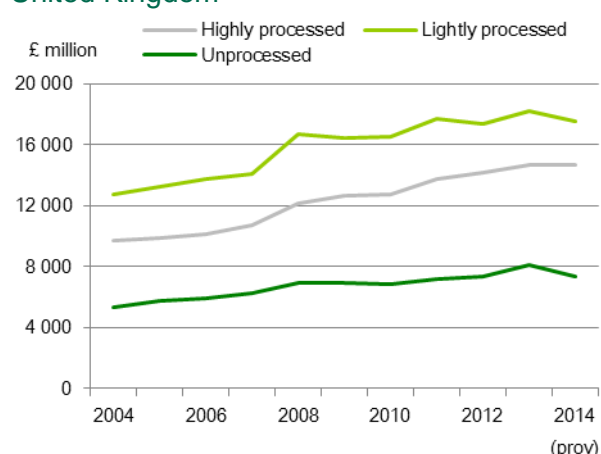


Chart 12.5 Imports in food, drink and animal feed by degree of processing at 2014 prices; United Kingdom



### Value and volume of trade in key commodities (tables 12.2 and 12.3)

10. To compare the values of 2014 exports with previous years it is necessary to adjust for the effects of inflation in the economy and quote values in real terms.
11. The value of exports across a range of different commodities has increased since 2005. The notable exceptions were fresh fruit and poultry meat. In 2014 exports of fresh fruit declined 32% in real terms to £75 million and exports of poultry meat fell by 12% in real terms to £305 million.
12. The value of exports of whisky, which is the highest valued food and drink item, fell by 8.9% in real terms in 2014 to £4.1 billion. It remains 36% higher in real terms than in 2005. The value of exports of unmilled wheat increased by 88% to £165 million in 2014, after very low exports in 2013 following poor domestic harvests in 2012 and 2013. Exports of fresh vegetables increased by 11% in real terms to £80 million in 2014. Eggs and egg products increased by 5.9% in real terms to £97 million in 2014 in line with a general trend of sustained growth since 2010. Salmon exports continued to increase, rising by 5.7% in real terms to £617 million in 2014.
13. The value of imports across a range of different commodities has increased significantly between 2005 and 2014. The three exceptions are butter where imports have fallen by 29% in real terms to £269 million, bacon and ham where imports have fallen by 7.4% in real terms to £601 million, and pork where imports have fallen by 3.6% in real terms to £699 million.
14. Wine imports cost £3.1 billion in 2014 a real terms increase of 6.7% since 2005, though the value fell during 2014 by 4.9%. Fresh fruit and vegetable imports accounted for £4.9 billion in 2014, a real terms increase of 15% or £4.3 billion since 2005. Milk and cream imports were worth £135 million in 2014, over three times more in real terms than in 2005 despite a fall by 6.5% in the last year. Cheese exports increased in real terms by 74% between 2005 and 2014 to £469 million, while imports increased in real terms by 38% to £1,449 million.
15. The overall volume<sup>5</sup> of exports of food, drink and animal feed hardly changed in 2014 compared to 2013. Over the longer term the volume of exports is rising and in 2014 was 28% higher than in 2005. Since 2005 the volume of imports has increased by 15%, just over half as much as the percentage rise in exports.

<sup>5</sup> The aggregate volume of exports is calculated using index number theory. Actual year on year volume changes as recorded in the trade data for commodity groups such as apples or cheese are averaged together using the Fisher index to give an overall average year on year change in exports of food, drink and animal feed.

Table 12.2 UK trade in key commodities in real terms

Enquiries: Julian Groom on +44 (0) 1904 455435

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£ million		Calendar year									
Commodity	Flow	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
		(provisional)									
Whisky	Imports	123	137	115	121	134	135	137	136	167	198
	Exports	2 973	3 027	3 351	3 538	3 561	3 787	4 543	4 517	4 444	4 050
Wine	Imports	2 898	2 798	2 991	3 225	3 056	3 168	3 200	3 330	3 253	3 093
	Exports	158	205	243	268	360	460	573	460	455	459
Cheese	Imports	1 050	1 061	1 084	1 352	1 317	1 316	1 336	1 361	1 475	1 449
	Exports	270	276	281	318	314	366	426	422	451	469
Poultry meat	Imports	936	845	904	890	949	1 024	1 137	1 005	1 013	1 059
	Exports	256	192	233	246	256	281	323	296	348	305
Poultry meat products	Imports	453	520	555	682	697	739	840	831	863	889
	Exports	110	104	145	154	135	136	151	142	128	135
Beef and veal	Imports	718	748	714	838	797	828	904	897	970	982
	Exports	31	110	146	241	286	357	461	402	379	375
Wheat, unmilled	Imports	166	159	242	362	285	216	239	416	672	346
	Exports	245	229	269	457	338	489	434	280	88	165
Lamb and mutton	Imports	359	338	325	354	423	411	434	382	390	407
	Exports	263	279	213	297	351	344	394	365	390	380
Pork	Imports	726	818	781	761	706	706	762	714	753	699
	Exports	128	119	103	150	128	160	180	196	222	214
Breakfast cereals	Imports	128	124	134	165	201	185	194	194	187	194
	Exports	373	378	365	399	459	394	401	373	382	362
Milk and cream	Imports	45	55	61	89	84	110	126	121	144	135
	Exports	213	214	213	226	217	265	312	262	263	263
Bacon and ham	Imports	650	659	656	777	850	773	713	671	656	601
	Exports	34	31	35	81	57	48	63	38	40	38
Butter	Imports	381	401	266	264	266	307	337	312	324	269
	Exports	90	72	77	62	64	87	135	105	148	149
Eggs and egg products	Imports	95	109	124	150	170	150	137	196	183	175
	Exports	34	29	29	43	51	50	51	61	91	97
Fresh vegetables	Imports	1 877	1 842	1 917	1 967	1 904	2 035	1 971	1 932	2 121	2 017
	Exports	59	58	57	61	72	80	76	74	72	80
Fresh fruit	Imports	2 380	2 495	2 505	2 706	2 706	2 702	2 791	2 799	2 982	2 883
	Exports	102	129	93	97	106	109	105	84	111	75
Salmon (inc. smoked)	Imports	103	169	168	170	219	241	265	262	351	368
	Exports	195	236	226	238	322	420	509	457	584	617

Source: HMRC

Whisky	includes bourbon, scotch (malted and blended) and other whiskies.
Wine	includes grape must, vermouth and wine of fresh grapes (sparkling and still).
Cheese	includes grated or powdered, processed, blue-veined and fresh (e.g. curd).
Poultry meat	includes carcass meat, cuts and offal (inc. liver).
Beef and veal	includes carcass meat and cuts, both bone-in and boneless.
Wheat, unmilled	includes durum, other wheat (inc. spelt) and meslin.
Lamb and mutton	includes carcass meat and cuts, both bone-in and boneless.
Pork	includes carcass meat and cuts, both bone-in and boneless.
Breakfast cereals	includes cereal grains worked or prepared for breakfast cereals
Milk and cream	includes milk (inc. skimmed milk) and cream, not concentrated or sweetened.
Fresh vegetables	excludes potatoes.
Salmon (inc. smoked)	includes fresh, chilled, frozen or smoked, but not canned

Table 12.3 Trade in key commodities by volume; United Kingdom

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Thousand tonnes (unless otherwise specified)		Calendar year									
Commodity	Flow	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 (provisional)
Whisky (million litres pure alcohol)	Imports	13	17	14	16	16	16	16	15	23	29
	Exports	284	302	326	308	311	305	361	345	353	343
Wine (million litres)	Imports	1 315	1 260	1 309	1 289	1 295	1 365	1 371	1 326	1 318	1 424
	Exports	21	32	48	44	58	90	88	80	95	104
Cheese	Imports	353	378	403	422	419	436	414	444	468	467
	Exports	96	104	97	88	105	113	124	126	125	134
Poultry meat	Imports	406	382	383	335	340	381	412	292	398	423
	Exports	305	259	292	278	258	270	295	297	350	353
Poultry meat products	Imports	180	206	230	249	241	255	279	394	291	306
	Exports	33	31	46	46	38	38	46	46	42	49
Beef and veal	Imports	240	236	240	247	231	238	235	236	241	255
	Exports	9	41	59	81	83	110	144	120	105	112
Wheat, unmilled	Imports	1 201	1 028	1 238	1 248	1 390	1 111	902	1 785	2 965	1 824
	Exports	2 495	2 117	1 911	2 766	2 533	3 335	2 287	1 503	448	1 143
Lamb and mutton	Imports	110	114	114	112	116	101	88	86	98	93
	Exports	85	87	69	87	96	89	96	95	104	102
Pork	Imports	432	459	463	393	360	363	373	349	352	358
	Exports	92	95	99	118	104	131	144	154	181	190
Breakfast cereals	Imports	83	93	92	103	110	105	108	102	98	108
	Exports	171	175	165	160	171	158	161	150	146	146
Milk and cream	Imports	79	124	133	193	158	193	215	194	245	221
	Exports	592	621	513	532	539	561	648	617	574	654
Bacon and ham	Imports	283	264	277	293	323	313	280	258	250	256
	Exports	11	10	12	31	21	24	34	15	13	14
Butter	Imports	129	147	103	81	96	102	100	104	106	95
	Exports	45	36	32	24	27	27	36	38	45	51
Eggs and egg products	Imports	79	78	93	95	90	75	68	100	95	100
	Exports	14	13	12	14	23	24	17	18	28	21
Fresh vegetables	Imports	1 940	1 893	1 947	1 957	1 823	1 871	1 975	2 049	2 225	2 179
	Exports	88	83	88	80	78	95	89	85	80	119
Fresh fruit	Imports	3 284	3 470	3 510	3 326	3 175	3 229	3 347	3 408	3 544	3 590
	Exports	120	177	147	128	153	142	149	109	143	98
Salmon (inc. smoked)	Imports	30	44	48	47	53	50	57	63	69	74
	Exports	49	54	60	57	71	83	96	100	111	123
Food, feed and drink Index, 2005=100	Imports	100	104	105	107	103	104	107	110	114	115
	Exports	100	102	107	106	109	116	123	122	128	128

Source: HMRC

Whisky	includes bourbon, scotch (malted and blended) and other whiskies.
Wine	includes grape must, vermouth and wine of fresh grapes (sparkling and still).
Cheese	includes grated or powdered, processed, blue-veined and fresh (e.g. curd).
Poultrymeat	includes carcase meat, cuts and offal (inc. liver).
Beef and veal	includes carcase meat and cuts, both bone-in and boneless.
Wheat, unmilled	includes durum, other wheat (inc. spelt) and meslin.
Lamb and mutton	includes carcase meat and cuts, both bone-in and boneless.
Pork	includes carcase meat and cuts, both bone-in and boneless.
Breakfast cereals	includes cereal grains worked or prepared for breakfast cereals
Milk and cream	includes milk (inc. skimmed milk) and cream, not concentrated or sweetened.
Fresh vegetables	excludes potatoes.
Salmon (inc. smoked)	includes fresh, chilled, frozen or smoked, but not canned

## Volume of Trade with EU 27 countries (charts 12.6 to 12.11)

16. This section describes the volume of trade in 3 key commodities between the United Kingdom and the other 27 Member States of the European Union (the EU 27 countries). These commodities have been chosen because the vast majority of UK trade in them is with countries within the EU.

### Bacon and ham

17. Imports of bacon and ham from the EU 27 countries have been far in excess of exports for many years. Imports have remained relatively stable over the last 11 years, with the exception of 2009 and 2010 when they went up to 323 and 313 thousand tonnes respectively. They have since declined until 2014 when imports stood at 256 thousand tonnes, up from 250 thousand tonnes in 2013. The Netherlands and Denmark provided 79% of all imported bacon and ham, with a further 14% contributed by Germany. In 2014, exports increased by 5.7% to 14 thousand tonnes.

Chart 12.6 Trade with EU 27 countries: bacon and ham

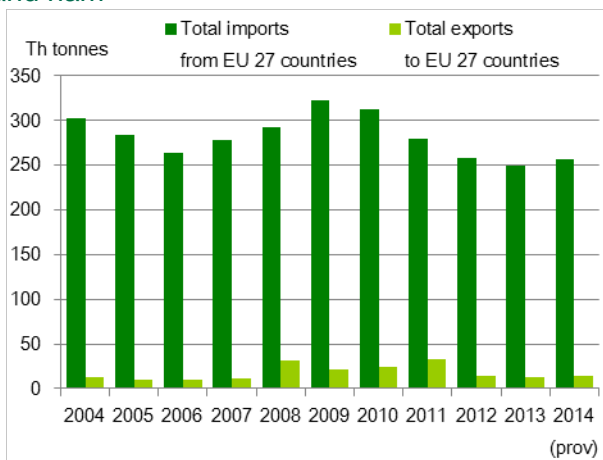
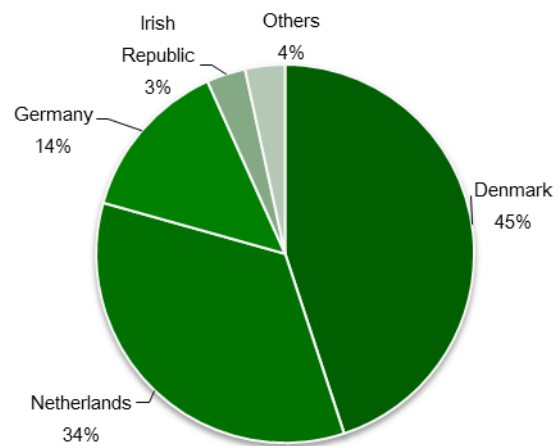


Chart 12.7 Trade with EU 27 countries: imports of bacon and ham in 2014 (provisional)



### Pork

18. Since the ban on exports during the outbreak of foot and mouth disease in 2001, exports of pork to EU countries has been much lower. In 2014 there were 128 thousand tonnes of pork exported to the EU countries which remained 23% less than the 166 thousand tonnes exported in 2000. Exports of pork rose marginally in 2014 and have risen by 75% since 2004. Imports of pork from EU countries were increasing until 2007 when they stood at 458 thousand tonnes. Since 2009 imports of pork from EU countries have been relatively static and were 357 thousand tonnes in 2014. Denmark accounted for 25% of the imports of pork in 2014, with Germany accounting for 21% and a further 26% contributed by the Netherlands (16%) and Belgium-Luxembourg (10%).

Chart 12.8 Trade with EU 27 countries; pork

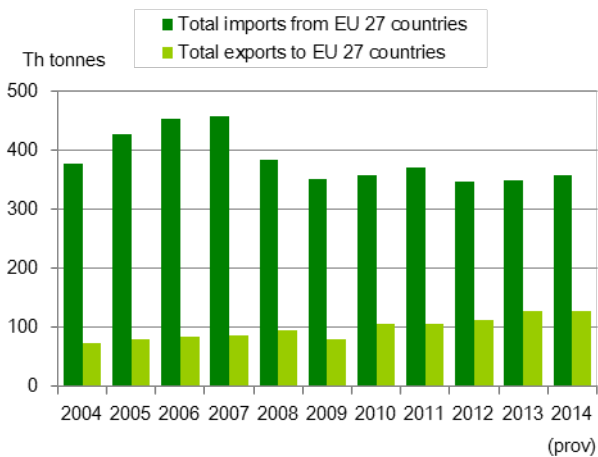
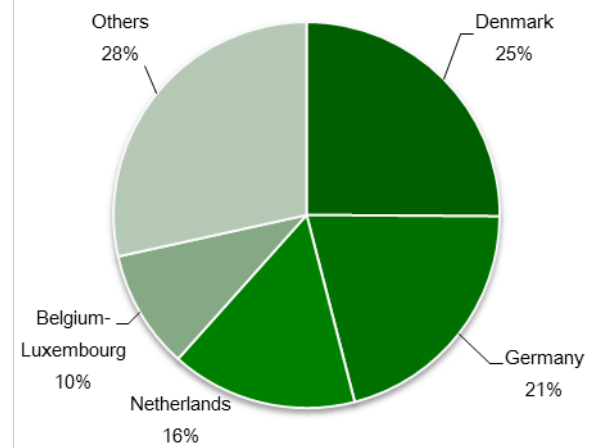


Chart 12.9 Trade with EU 27 countries; imports of pork in 2014 (provisional)



Milk and cream

19. Overall, exports of milk and cream increased between 2004 and 2014 by 315 thousand tonnes in volume to 643 thousand tonnes in 2014. This rise was not a smooth one, with peaks in 2006 of 621 thousand tonnes and of 648 thousand tonnes in 2011. Imports should be viewed in the context of overall supply, as imports only account for approximately 1% of the UK's supply of liquid drinking milk. The 2014 volume of exports exceeds imports by 433 thousand tonnes as the UK remains a solid net exporter of milk and cream. In 2014, 92% of milk and cream exports went to the Irish Republic with a further 5% exported to Belgium, Luxembourg and the Netherlands.

Chart 12.10 Trade with EU 27 countries: milk and cream

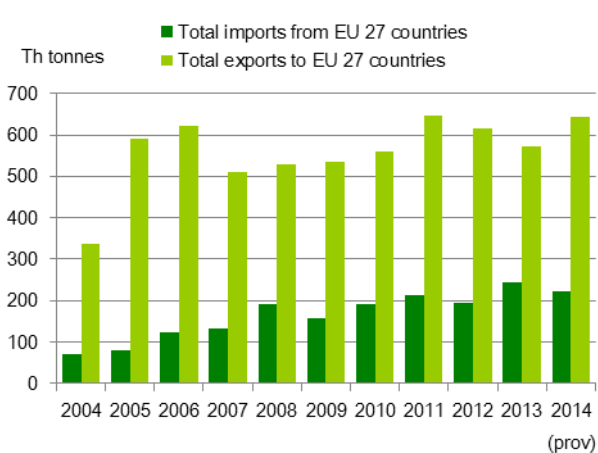
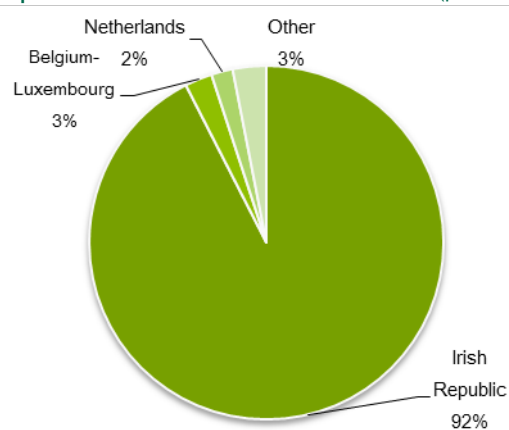


Chart 12.11 Trade with EU 27 countries: exports of milk and cream in 2014 (provisional)



## Trade with key trading partners (charts 12.12 to 12.25)

20. This section describes the volume of trade in several key commodities between the United Kingdom and all countries, both inside and outside the EU.

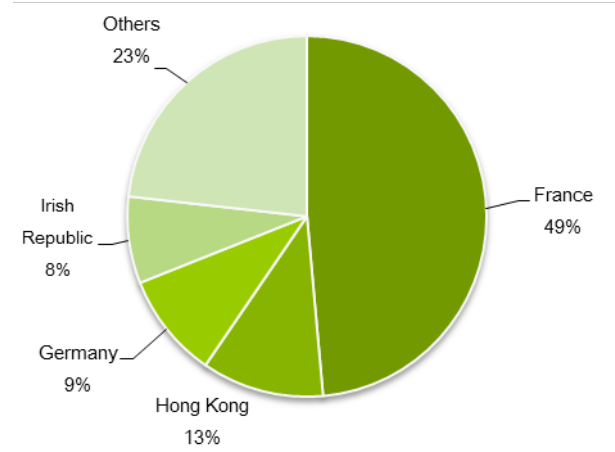
### Lamb and mutton

21. Exports of lamb and mutton fell from 98 thousand tonnes in 2000 to 30 thousand tonnes in 2001 following the ban on exports during the outbreak of foot and mouth disease in 2001. After a steady recovery exports of lamb and mutton reached 104 thousand tonnes in 2013, before falling slightly to 102 thousand tonnes in 2014. From 2011 onwards, the UK has been a net exporter of lamb and mutton with 49% going to France, 13% going to Hong Kong, 9% going to Germany and 8% going to the Irish Republic. Imports of lamb and mutton were 93 thousand tonnes in 2014, 20% lower than in 2004.

Chart 12.12 World trade: lamb and mutton



Chart 12.13 Trade with all countries: exports of lamb and mutton in 2014 (provisional)



### Beef and veal

22. Exports of beef and veal fell from 274 thousand tonnes in 1995 to 6 thousand tonnes in 1997 after an export ban was imposed between November 2005 and March 2006 following the Government’s announcement of a link between BSE and new variant CJD. Following the end of the ban, exports recovered steadily, reaching 144 thousand tonnes in 2011. In 2012 and 2013 exports of beef and veal dropped before a 6.5% rise in 2014 to 112 thousand tonnes. Imports of beef and veal rose until 2004, peaking at 281 thousand tonnes. Since 2005 imports of beef and veal have remained relatively static and were 255 thousand tonnes in 2014. The Irish Republic provided 68% of beef and veal imports while the Netherlands, Germany and Poland provided a further 14%.

Chart 12.14 World trade: beef and veal

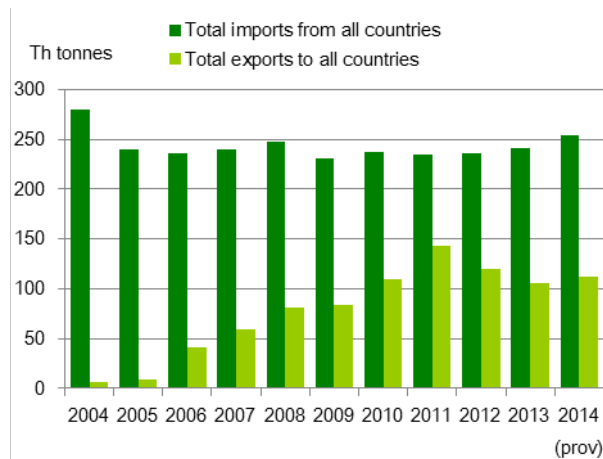
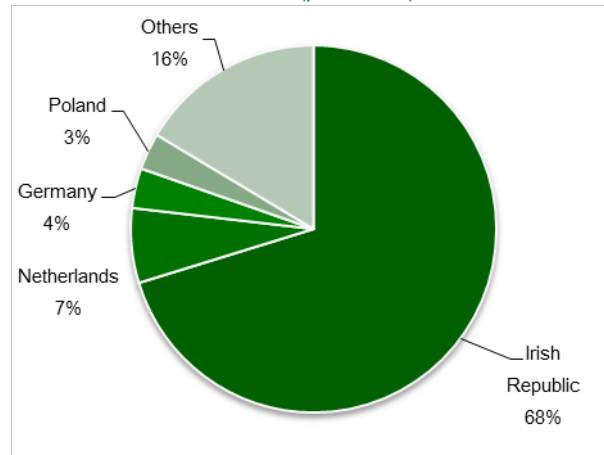


Chart 12.15 Trade with all countries: imports of beef and veal in 2014 (provisional)



### Poultry meat

23. The United Kingdom has run a long term trade deficit in poultry meat, though the trade gap by volume has narrowed between 2006, when it stood at 123 thousand tonnes, and 2013 when it had fallen to 48 thousand tonnes. Imports increased steadily from 1997, reaching a peak in 2005 of 406 thousand tonnes before fluctuating between 335 and 385 thousand tonnes until 2011 when they rose to 412 thousand tonnes. Since 2011, imports by volume fell below that level before rising by 6.4% to 423 thousand tonnes in 2014. Exports have risen steadily since 2009, when they stood at 258 thousand tonnes, to 353 thousand tonnes in 2014. The Netherlands accounted for 43% of imports in 2014 with Poland, Germany and the Irish Republic combined accounting for a further 30%.

Chart 12.16 World trade: poultry meat

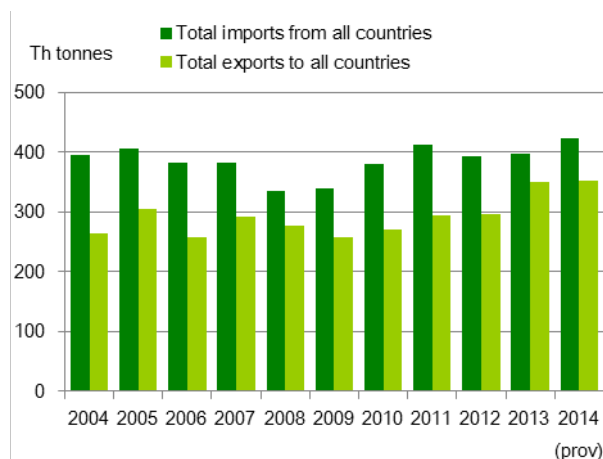
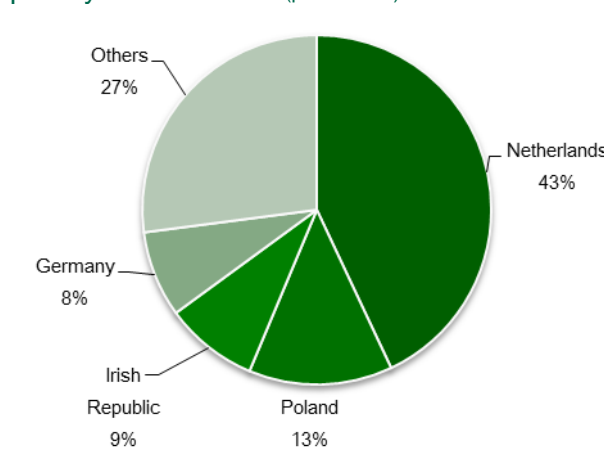


Chart 12.17 Trade with all countries: Imports of poultry meat in 2014 (provisional)





## Poultry meat Products

24. Poultry meat products include prepared, preserved, salted or cooked poultry meat. In 2014, imports were 306 thousand tonnes, up from 291 thousand tonnes in 2013, and exports were up from 42 thousand tonnes to 49 thousand tonnes in the same period. Despite this rise in exports, the year on year trade deficit remains very wide, up from 124 thousand tonnes in 2004 to 257 thousand tonnes in 2014. Thailand accounted for 41% of imports, with Brazil 13% and the Irish Republic and the Netherlands accounting for 10% each in 2014.

Chart 12.18 World trade: poultry meat products

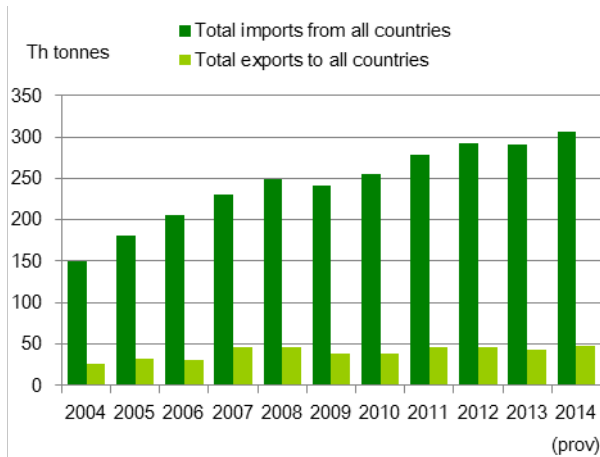
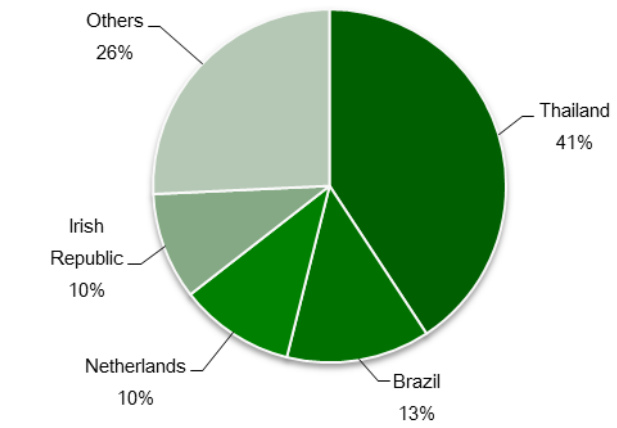


Chart 12.19 Trade with all countries: Imports of poultry meat products in 2014 (provisional)



## Unmilled wheat

Unmilled wheat is traded in large volumes and varies depending on the size and quality of the UK wheat harvest. Exports were exceptionally low in 2013 following poor UK harvests in 2012 and 2013. A good harvest in 2014 helped exports recover to 1.1 million tonnes in the 2014 calendar year. The UK was a net importer of unmilled wheat in 2012, 2013 and 2014, having been a net exporter between 2004 and 2011. The main markets for exports of unmilled wheat in 2014 were Spain (34%), Algeria (20%), the Netherlands (11%) and Portugal (10%).

Chart 12.20 World trade: unmilled wheat

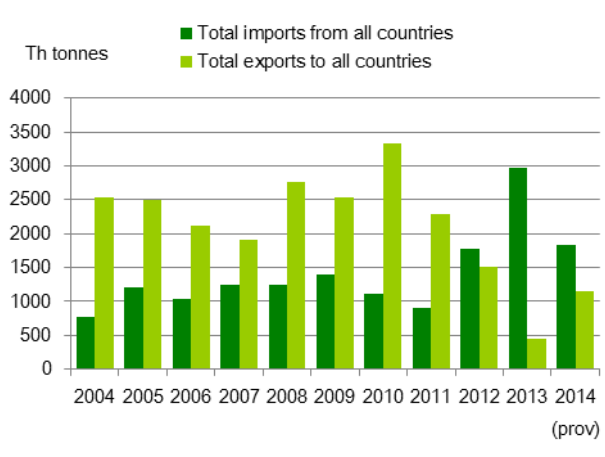
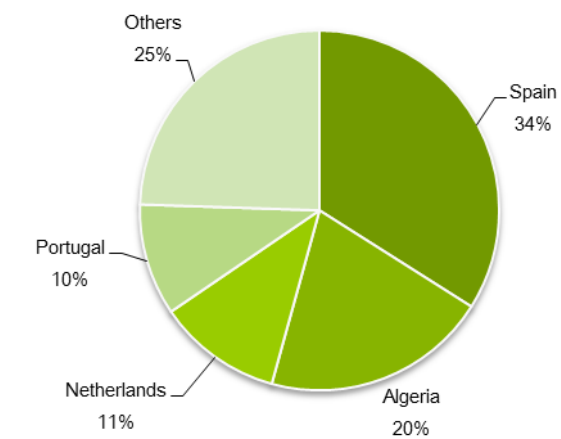


Chart 12.21 Trade with all countries: exports of unmilled wheat in 2014 (provisional)



### Fresh vegetables

25. The United Kingdom runs a large trade deficit in fresh vegetables. Imports have risen virtually every year between 2004 and 2008. The following year showed a decline of 6.8% which was short-lived as 2010 showed a small increase and this continued through into 2013 when levels reached 2.2 million tonnes, more than double the 1994 total, before imports fell by 46 thousand tonnes in 2014 to just under 2.2 million tonnes, a decrease of 2.0% since 2013. Exports increased by 47.5% to 119 thousand tonnes in the same period, resulting in a narrowing of the trade gap by volume for the first time since 2006. In 2014, 39% of all fresh vegetables imports came from Spain, 30% from the Netherlands with France and the Irish Republic contributing 4% each and Poland 3%.

Chart 12.22 World trade: fresh vegetables

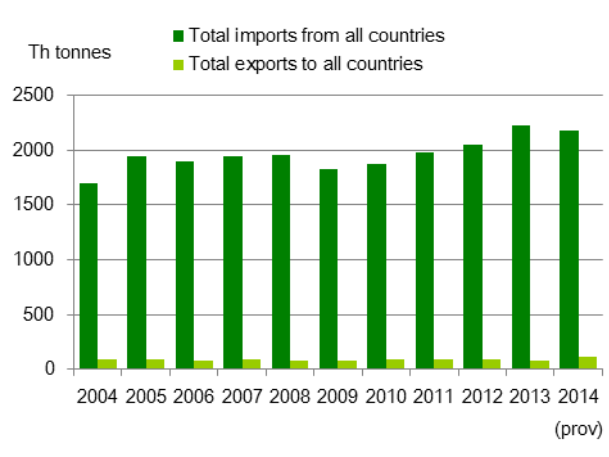
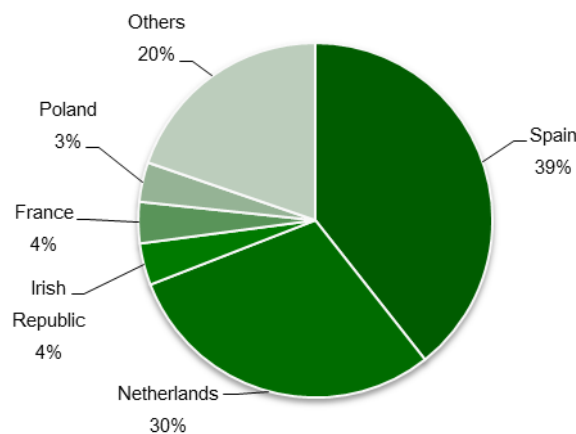


Chart 12.23 Trade with all countries: imports of fresh vegetables in 2014 (provisional)



### Fresh fruit

26. Imports of fresh fruit have historically been far in excess of exports and stood at an all-time high of 3.6 million tonnes in 2014. Exports increased, in general, between 2004 and 2011, reaching a high of 149 thousand tonnes in 2011, before falling to 109 thousand tonnes in 2012 and bouncing back up to 143 thousand tonnes in 2013. This volatile pattern continued into 2014, when exports fell to 98 thousand tonnes in volume, or just 2.7% of imports. In 2014 Spain was the largest single source of imports contributing 17%, followed by Costa Rica and South Africa which each provided 9%, followed by Colombia and the Netherlands, 7% each.

Chart 12.24 World trade: fresh fruit

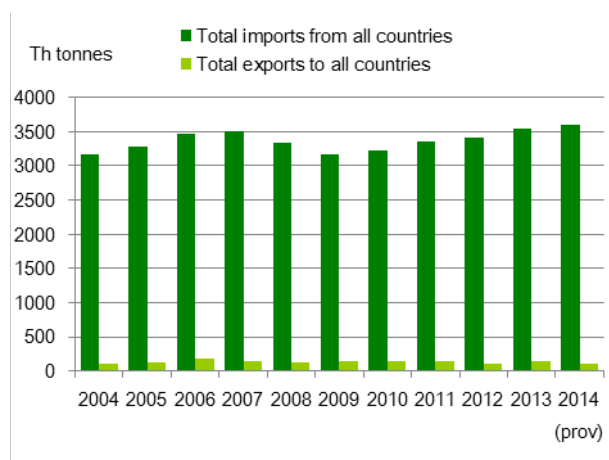
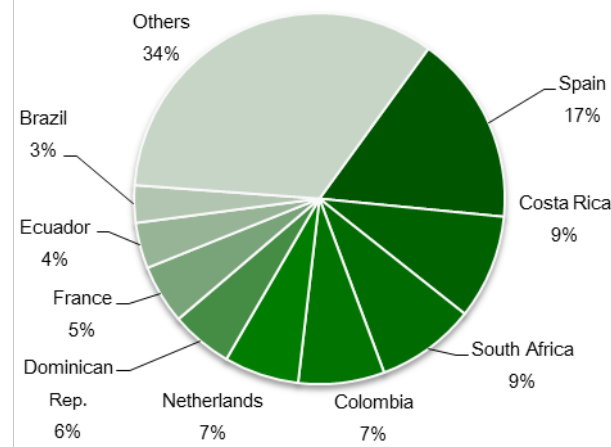


Chart 12.25 Trade with all countries: imports of fresh fruit in 2014 (provisional)



# Chapter 13: The Food Chain

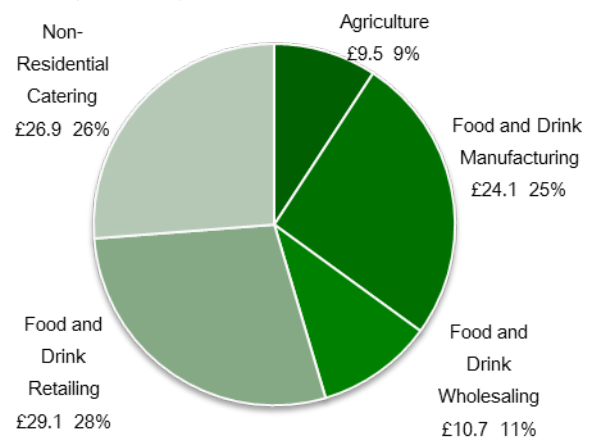
## Summary

- In 2013, the agri-food sector in the United Kingdom accounted for a total estimated Gross Value Added (GVA) of £103 billion or 6.8% of national GVA, up from 6.7% in 2012. The wholesaling sector increased 11.1%, followed by manufacturing at 9.2% and retailing at 6.7%.
- Employment in the agri-food sector rose 3.4% over the 12 month period to the fourth quarter of 2014 to around 3.8 million. The largest increase was in non-residential catering, rising by 106,000 employees (7.2%).
- Total factor productivity of the UK food chain beyond the farmgate is unchanged between 2012 and 2013. It has been rising gradually since 2002. Benchmarking against a wider economy measure shows that the average annual growth in the food chain between 2003 and 2013 was 0.4% compared to 0.2% in the wider economy.
- Excluding the effect of price rises, consumers' expenditure decreased 0.1% in 2014 and remains 5.8% lower than the start of the economic downturn in 2007. Expenditure on food eaten out decreased 0.3% in 2014, whilst expenditure on household food decreased 0.2%.

## Contribution of the agri-food sector to the national economy (chart 13.1, table 13.1)

1. In 2013, the agri-food sector contributed £103 billion to the economy, around 6.8% of the national GVA. Within this, manufacturing, retailing and non-residential catering accounted for around one quarter each. Food wholesaling covers 10.4% of the sector and agriculture made the smallest contribution at 9.2%.
2. Comparing 2013 with 2012, the manufacturing and wholesale sectors of the food industry saw increases in productivity, while the non-residential catering sector saw a decrease. [Productivity](#) of the post-farmgate food chain has increased since 2000 in excess of the wider economy.

Chart 13.1 Gross Value Added of the agri-food sector (£ billion)



Source: Annual Business Survey (ONS) and Aggregate Agricultural Accounts (Defra).

Table 13.1 Agri-food sector contribution to the national economy

Enquiries: David Lee on +44 (0) 207 238 4852

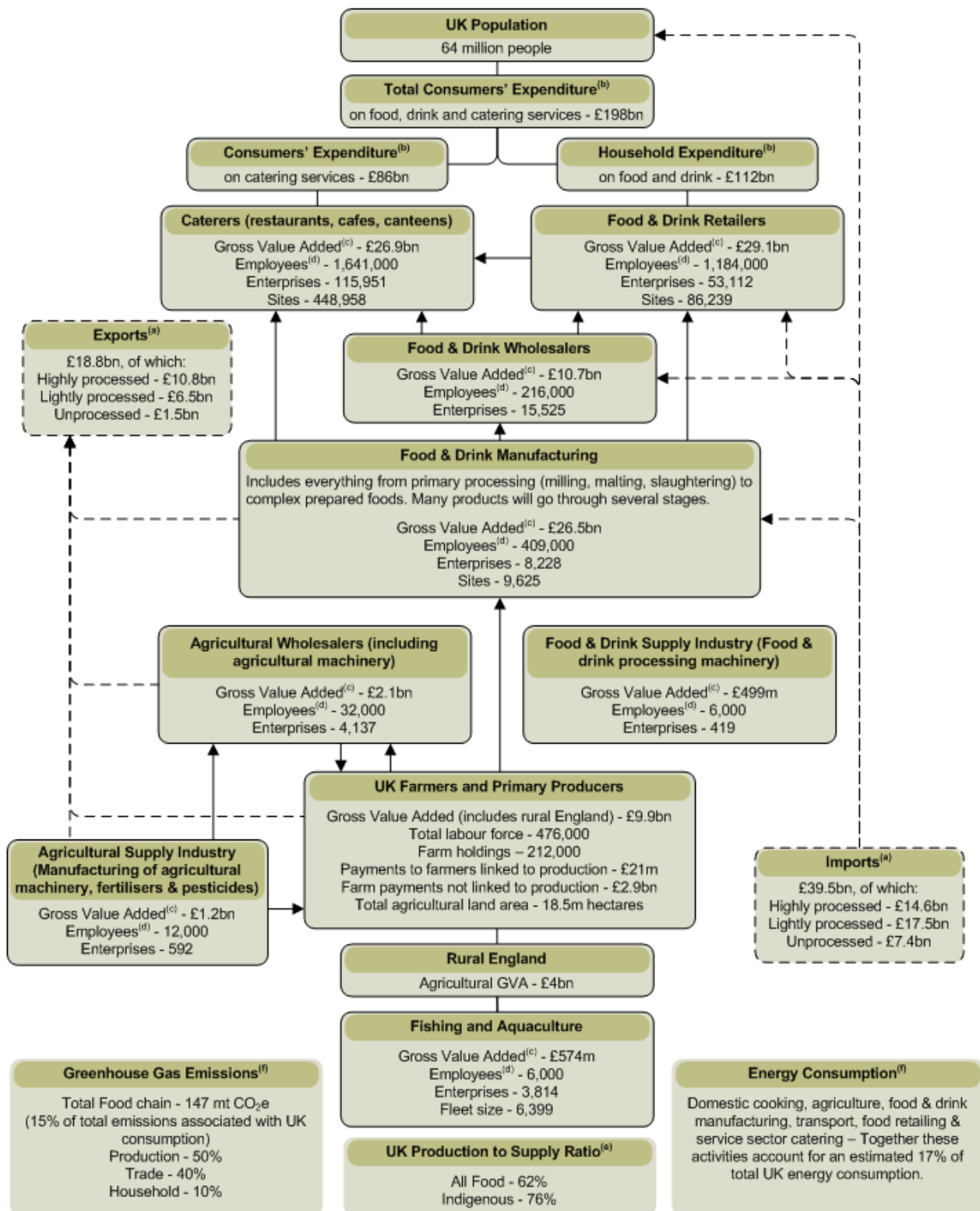
 email: [david.lee@defra.gsi.gov.uk](mailto:david.lee@defra.gsi.gov.uk)

£ million (unless otherwise specified)

	2010	2011	2012	2013	2014 (provisional)
<b>Agri-food sector's contribution to total economy gross value added</b>					
at current prices					
Agriculture	6 879	8 681	8 648	9 451	9 922
Food Manufacturing	24 606	25 048	24 277	26 499	..
Food Wholesaling	8 962	9 586	9 620	10 688	..
Food Retailing	26 263	27 268	27 301	29 128	..
Food Non-Residential Catering	22 348	24 988	26 747	26 927	..
% of national gross value added (current prices)	6.4	6.6	6.5	6.7	..
<b>Workforce in the food sector (thousand persons)</b>					
Agriculture	424	432	439	426	428
Food Manufacturing	374	370	367	370	385
Food Wholesaling	214	210	230	222	225
Food Retailing	1 143	1 147	1 140	1 148	1 147
Food Non-Residential Catering	1 381	1 378	1 405	1 464	1 570
% of total workforce in employment	13.3	13.4	13.4	13.4	13.4
<b>Trade in food, feed and drink (in real terms at 2013 prices)</b>					
Imports of food, feed and drink	36 209	38 661	38 875	40 921	39 555
% of total UK imports	8.8	9.1	8.8	9.7	9.5
Exports of food, feed and drink	17 038	19 122	18 807	19 239	18 881
% of total UK exports	5.8	6.0	6.2	5.5	6.1
<b>UK Food Production to Supply Ratio ('Self-Sufficiency')</b>					
% of all food	61	64	63	60	62
% of indigenous type food	75	78	77	73	76
<b>Household final consumption expenditure on food and alcoholic drinks</b>					
at current prices	171 281	180 396	188 355	196 544	198 348
of which:					
household food	82 805	86 436	90 931	95 883	94 451
food eaten out	48 582	50 931	51 857	53 363	54 776
alcoholic drinks	39 894	43 029	45 567	47 298	49 121
at constant 2010 prices (£ million)	180 920	180 396	180 656	182 450	182 352
of which:					
household food	87 439	86 436	88 185	89 609	89 427
food eaten out	50 919	50 931	49 388	49 417	49 271
alcoholic drinks	42 562	43 029	43 083	43 424	43 654
% of total household final consumption expenditure	18.0	18.3	18.4	18.5	18.0
of which:					
household food	8.7	8.8	8.9	9.0	8.6
food eaten out	5.1	5.2	5.1	5.0	5.0
alcoholic drinks	4.2	4.4	4.5	4.5	4.4
<b>Producer prices for agricultural products (2010 = 100)</b>					
100.0	100.0	113.1	118.7	125.7	114.5
<b>Consumer price index (2010 = 100):</b>					
food	100.0	105.5	108.9	113.3	113.1
alcoholic drinks	100.0	105.8	108.8	112.6	113.0
all items	100.0	104.5	107.4	110.2	111.8

Sources: Annual Business Survey (ONS), Aggregate Agricultural Accounts (Defra), Labour Force Survey GB Q3 2014 (ONS), Overseas Trade Statistics (HMRC), Consumer Price Indices (ONS).

Chart 13.2: Economic summary of the Food Chain – Fourth quarter 2014



(a) Overseas trade data is provisional for full year 2014 from HM Revenue and Customs. (Data may not equal total due to rounding). Dashed lines indicate main trade flows.

(b) Consumers' expenditure, properly known as household final consumption expenditure, is provisional from the Office for National Statistics for full year 2014 and is calculated at current prices. (Data may not equal total due to rounding).

(c) Gross value added (GVA) is the difference between the value of goods and services produced and the cost of raw materials and other inputs used up in production. GVA figures are from the Annual Business Survey and are provisional data for full year 2013, which is calculated at basic prices (market prices less taxes plus subsidies).

(d) Agricultural wholesaling includes an estimate of employment of wholesalers of agricultural machinery from the Annual Business Survey. (Employee data is rounded.)

(e) UK Production to Supply Ratio (formerly known as the "Self-Sufficiency" Ratio). The UK sources food from diverse stable countries (with 29% of food coming from the European Free Trade Area), and imports can make up for domestic supply shortages.

(f) UK greenhouse gas emissions and energy consumption data does not relate to Q4 2014. Energy consumption does not take into account energy embedded in food that is imported, nor does it subtract energy that went into producing food that is exported. Therefore the 17% of energy consumption cannot be directly compared to the 15% of GHG emissions.

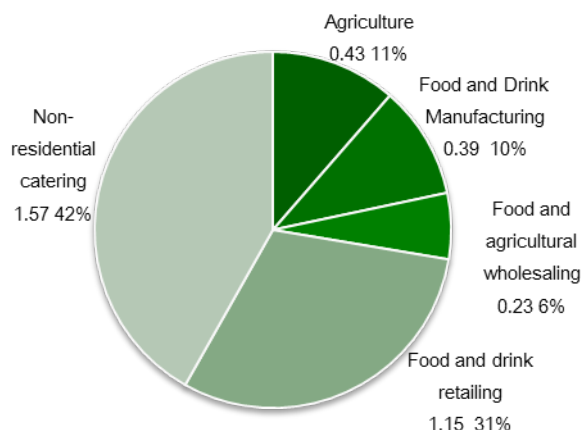
### The food chain (chart 13.2)

- In 2014, the food supply chain in the United Kingdom as a whole received £177 billion, which came from spending by consumers in the United Kingdom, plus exports less imports of agricultural commodities and processed food and drink products (assuming that imports and exports directly to and from consumers are negligible). Chart 13.2 shows the largest elements of the food chain from agriculture as a primary producer through food manufacturing and retail trade to consumers' expenditure.

### Agri-food sector employees and self-employed farmers (chart 13.3)

- In the third quarter of 2014, the agri-food sector employed 3.75 million people, or 13% of all employees in Great Britain. This proportion has been broadly the same since 2001. Agriculture accounts for less than half a million employees or 11% of the agri-food sector (chart 13.3).

Chart 13.3 Agri-food sector employees and self-employed farmers (millions)



Source: Labour Market Trends (ONS) and June Survey of Agricultural and Horticultural Holdings (Defra).

- In the twelve months to September 2014, employment in the agri-food sector increased by 3.4%, largely due to an increase in non-residential catering (7.2%). There were also increases in manufacturing (4.0%), wholesaling (1.6%) and agriculture (0.3%). Employment across the whole economy increased 3.3% over the same period.
- Employment in the agri-food sector has risen 4.1% since 2000. Changes in the proportions of each of the sectors since that time show that employment in agriculture and manufacturing reduced by 23% and 20% respectively, while non-residential catering, retailing, and wholesaling increased by 25%, 5.2% and 1.9% respectively.

### Food manufacturing

- Gross value added in the food manufacturing sector increased 9.2% in 2013 due to the decreases in input volumes being greater than the decreases in output volumes. Food manufacturing productivity has risen gradually since 2000 with an increase of 0.4 per cent since 2012, and an increase of 10 per cent since 2000.

### Food wholesaling

- Gross value added in the food wholesaling sector rose in 2013 (11%). At £10.7 billion in 2013, it is 92% higher than in 2000. Food and drink wholesale has had the largest gains in productivity (0.5 per cent) in the food chain since 2012 with labour volume dropping by 4 per cent. The increase in productivity in 2013 was due to decreases in input volumes being larger than the falls in the output volumes.

### Food retailing

- Food retailing gross value added was £29.1 billion in 2013, 6.7% up on 2012. Food retail productivity in 2013 was 1.0 per cent higher than 2012. Productivity rose due to a decrease in purchases (2.8 per cent). Food prices were on average 3.8 per cent higher in 2013 than in 2012. Productivity of food retail is largely unchanged from its level in 2000 apart from a small dip around 2002. Productivity in 2013 was up unchanged on 2012.

### Non-residential catering

- Non-residential catering gross value added has been on a long-term upward trend despite a dip in 2009. In 2012 gross value added increased 0.7% to £26.9 billion, 34% higher than in 2009. Non-residential catering in 2013 showed a 2.4 per cent decrease in productivity. Productivity peaked in 2004 and declined to its lowest point in 2009. After year on year increases seen in 2010 and 2011, a

5.8 per cent increase in labour contributed to the fall in productivity for 2013. Catering output is more related to the state of the economy than other sectors of the food chain, which affects productivity. Labour inputs are also a higher proportion of total inputs, so increases in labour can also affect productivity.

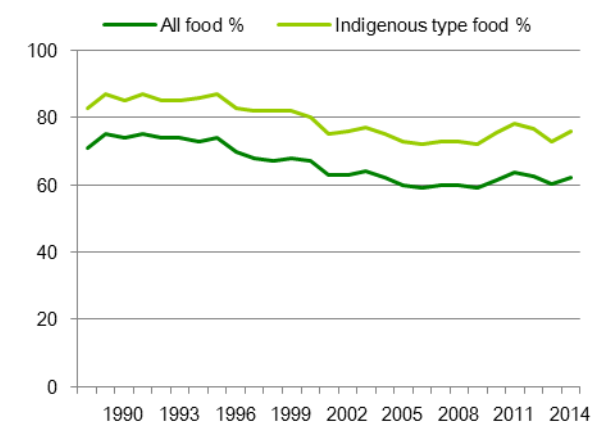
### Trade in food, feed and drink (table 13.1)

11. In 2014 the value of food, feed and drink exports was £18.9 billion, a decrease of 1.9% on 2013. In 2014 the value of food, feed and drink imports decreased by 3.3% to £39.6 billion in real terms, resulting in the trade gap in food, feed and drink of 4.7%, £20.7 billion in real terms. See Chapter 13 for more detail on overseas trade.

### Food production to supply ratio (chart 13.4)

12. Food Production to Supply Ratio (commonly referred to as the “Self Sufficiency Ratio”), is calculated as the farm-gate value of raw food production divided by the value of raw food for human consumption, and is estimated to be 62% for all food in 2014 and 76% for indigenous type food. This compares with 60% and 73% respectively in 2013.
13. The food production to supply ratio increased slightly in 2014. The overall farm gate value of United Kingdom food production was hardly changed. For milk there was an 8% increase worth £337 million in the farm gate value of home production. For potatoes there was a 29% drop worth £284 million to the farm gate value of potatoes returning to normal levels after a high value in 2013.

Chart 13.4 Food production to supply ratio



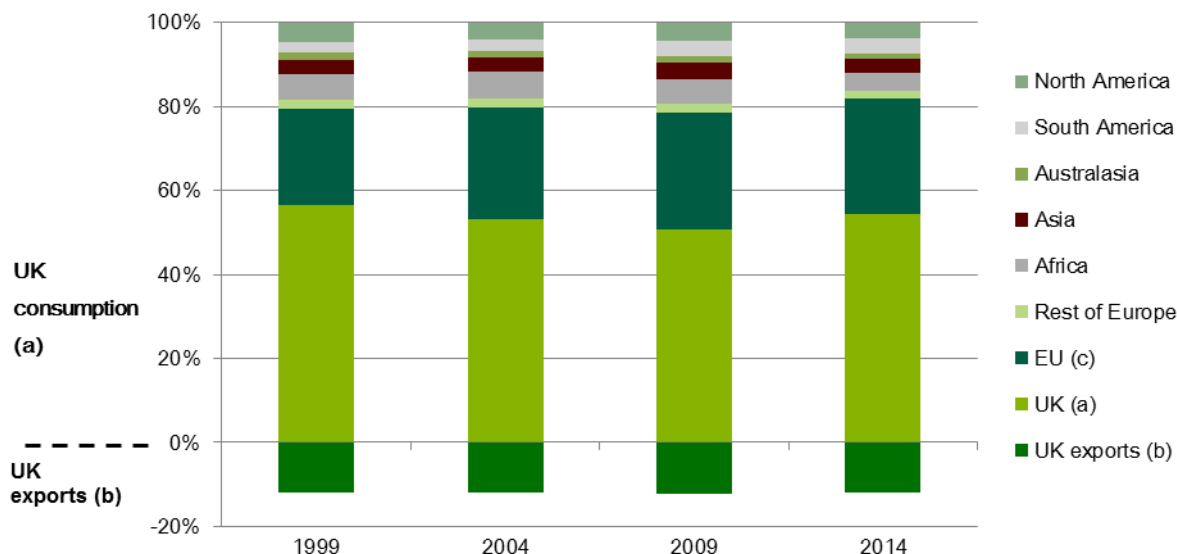
### Distinction between competitiveness and food security

14. The food production to supply ratio provides a very broad indicator of the ability of United Kingdom agriculture to meet consumer demand - also described as competitiveness. The ratio is not an appropriate measure of “food security” since it fails to account for many dimensions of this complex issue.
15. A detailed analysis is given in the Defra publication [‘UK Food Security Assessment’](#).
16. The key points on food production to supply ratio and food security from this paper are:
  - Diversity enhances security. The United Kingdom sources foods from diverse stable countries, mainly European countries, and imports can make up for domestic supply shortages (see Chart 13.5).
  - A high food production to supply ratio fails to insulate a country against many possible disruptions to its supply chain.
  - Production potential is more relevant at European Union level than United Kingdom level, and the European Union as a whole has a food production to supply ratio of around 90%.
  - Further trade liberalisation is unlikely to affect food security within the European Union.

### Origins of food consumed in the United Kingdom (chart 13.5)

17. Chart 13.5 includes the proportion of United Kingdom food consumption that is produced in the United Kingdom. This should not be confused with the Food Production to Supply Ratio given in Chart 13.4. Chart 13.5 looks purely at the breakdown of food that the United Kingdom actually consumes.
18. The Food Production to Supply Ratio (Chart 13.4) considers all United Kingdom food production, including food that the United Kingdom exports instead of consuming. A further, much smaller difference is that the United Kingdom food production used in the food production to supply ratio calculations has been adjusted to take account of the balance of trade in important inputs into agriculture.

Chart 13.5 Origins of food consumed in the United Kingdom: 1999, 2004, 2009, 2014

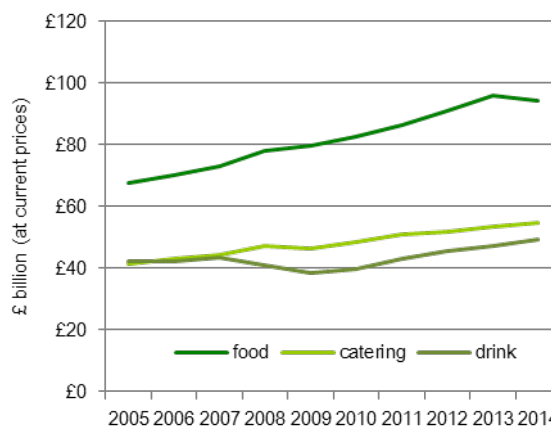


Based on the farm-gate value of raw food.  
 (a) Consumption of UK origin consists of UK domestic production minus UK exports.  
 (b) UK exports are given as a percentage of total UK consumption.  
 (c) Membership of the EU increased between 2002 and 2013, from 15 to 28 countries.

### Consumers' expenditure (chart 13.6)

19. Consumer expenditure on food, drink and catering increased by 0.9% in 2014 to £198 billion. Household food expenditure fell 1.5% while expenditure on alcoholic drinks rose 3.9% in 2014. At current prices, which incorporate inflation (see chart 13.6), consumers spent 23% more overall in 2014 than in 2007 (the last year before the recession started); 'food' saw the biggest increase at 29%. Excluding the effects of inflation, consumers spent 5.8% less overall in 2014 than in 2007, 2.6% less on food, 13% less on eating out and 3.4% less on alcoholic drinks.

Chart 13.6 Consumers' expenditure on food, drink and catering



Source: Consumer Trends, (ONS).  
 Food includes non-alcoholic drinks; Drink is alcoholic drinks.



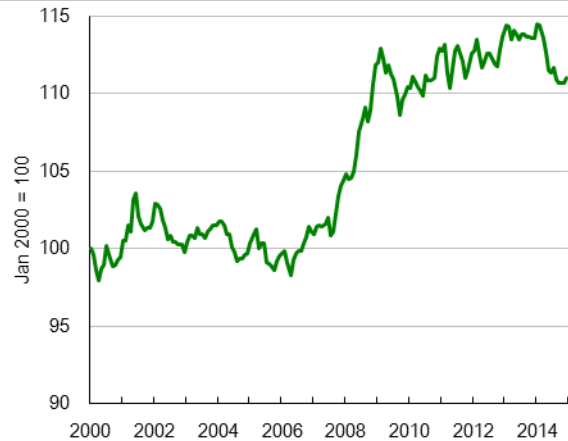
## Changes in consumers price indices (chart 13.7)

20. Historically (1975 to 2000) food prices tended to rise more slowly than general inflation, as measured by the Retail Price Index (RPI). Food prices in real terms were fairly stable between 2000 and 2007, as measured by the Consumer Price Index (CPI), before rising by 12% and then returning to real terms stability from 2009 onwards. In March 2014, food prices were in real terms 11% above those of 2000.

21. Averaged over 2014 the annual rate of food inflation (including non-alcoholic drinks) was -0.2% as measured by the Consumer Price Index. This compares with a general inflation rate of 1.5% over the same period.

22. Between March 2014 and March 2015, all categories of food showed falls in price. The largest annual price drops were for oils and fats up by 7.6%; vegetables including potatoes up 6.1% and other food products up by 5.8%.

Chart 13.7 Changes in the food price index (in constant prices)



Source: Consumer Price Index (ONS).

# Chapter 14: Key Statistics for EU Member States

## Summary

For the EU-28 member states:

- In 2014 the United Kingdom was the largest producer of sheep meat and goat meat, accounting for around 40% of EU production.
- UK was the third largest producer of wheat (2013), milk and beef and veal in 2014 in the EU behind France and Germany.
- In 2014 almost a quarter of all pig meat production came from Germany.

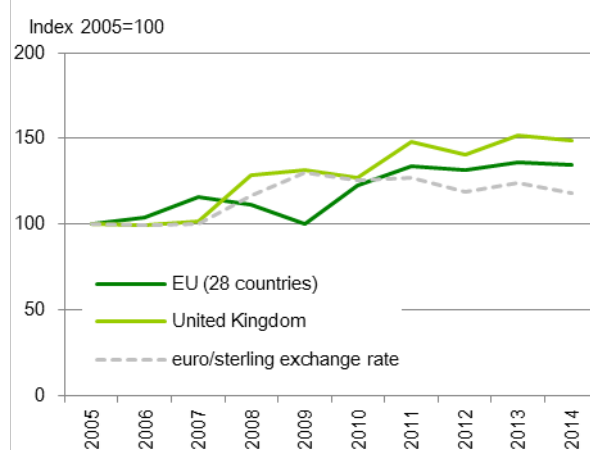
## Introduction

1. This chapter presents simple analyses of agriculture in the European Union to enable comparison of the United Kingdom with other Member States and with the European Union. The source of the data is the Eurostat website at <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home> where a range of data is available. Eurostat is the statistical office of the European Union. Its task is to provide the European Union with statistics at a European level that enables comparisons between countries and regions.

## Agricultural income (chart 14.1)

2. Eurostat’s favoured measure of agricultural income is Indicator A: Index of the real income of factors in agriculture, per annual work unit.
3. This indicator corresponds to the real (i.e. deflated) net value added at factor cost of agriculture, per total annual work unit. Net value added at factor cost is calculated by subtracting from the value of agricultural output at basic prices the value of intermediate consumption, the consumption of fixed capital, and adding the value of the (other) subsidies less taxes on production. The detailed data can be found at the Eurostat website.
4. Chart 14.1 shows indices for Indicator A for the United Kingdom and the European Union (28 countries), including the euro/sterling exchange rate which influences agricultural income in the United Kingdom. Indicator A for the United Kingdom rose by 49% between 2005 and 2014 compared to 35% for the European Union as a whole.

Chart 14.1 Indicator A of the income from agricultural activity (a)



Source: Eurostat

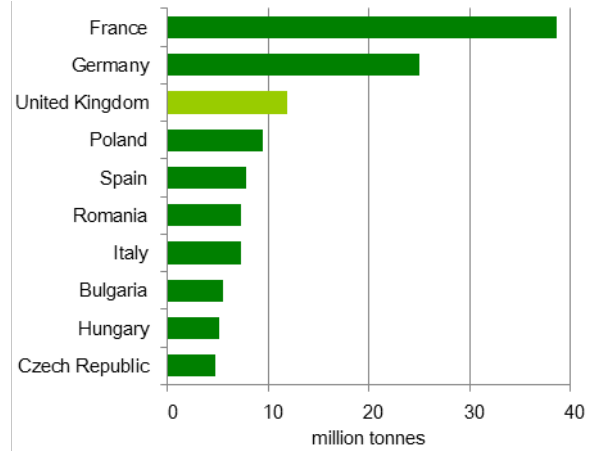
(a) 2014 forecast data for Member States whereas 1<sup>st</sup> estimate for United Kingdom

## Agricultural production

### Wheat (chart 14.2)

5. Chart 14.2 shows the quantity of common wheat and durum wheat produced by the top 10 producing Member States in 2013; data for 2014 is not yet available.
6. France was the largest producer of wheat in the European Union, producing just over 38.6 million tonnes in 2013, followed by Germany (25.0 million tonnes) and the United Kingdom (11.9 million tonnes). These three countries produced over half of wheat output in the European Union in 2013.

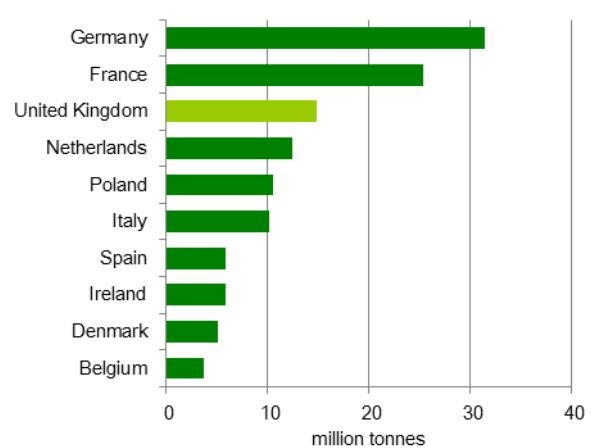
Chart 14.2 Production of wheat 2013



### Cows' milk (chart 14.3)

7. Chart 14.3 shows the quantity of cows' milk produced by the top 10 producing Member States in 2014.
8. Germany was the largest producer of cows' milk in the European Union, producing 31.4 million tonnes in 2014, followed by France (25.3 million tonnes). The United Kingdom produced 14.8 million tonnes, followed by the Netherlands (12.5 million tonnes) and Poland (10.6 million tonnes).

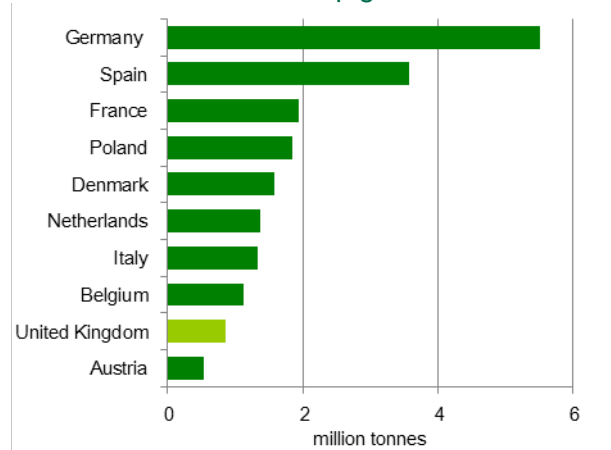
Chart 14.3 Production of cows' milk



### Pig meat (chart 14.4)

9. Chart 14.4 shows the quantity of pig meat produced by the top 10 producing Member States in 2014.
10. Germany was also the largest producer of pig meat in the European Union, producing 5.5 million tonnes in 2014 followed by Spain (3.6 million tonnes). Germany and Spain produced around 40% of pig meat in the European Union in 2014. The United Kingdom produced 0.9 million tonnes.

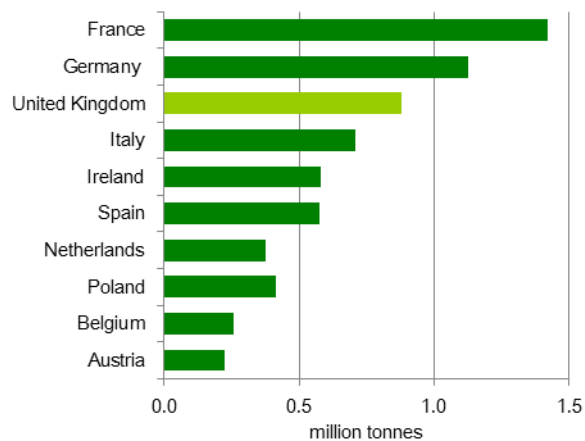
Chart 14.4 Production of pig meat



Beef and veal (chart 14.5)

- 11. Chart 14.5 shows the quantity of beef and veal produced by the top 10 producing Member States in 2014.
- 12. France was the largest producer of beef and veal in the European Union, producing 1.4 million tonnes in 2014, followed by Germany (1.1 million tonnes) and the United Kingdom (0.9 million tonnes). These three countries produced nearly half of all beef and veal in the European Union in 2014.

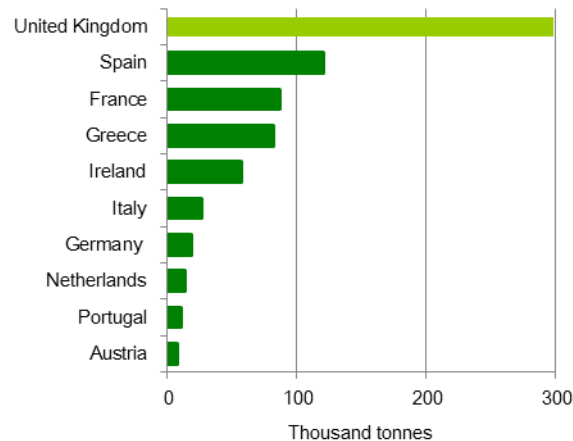
Chart 14.5 Production of beef and veal



Sheep and goat meat (chart 14.6)

- 13. Chart 14.6 shows the production of sheep meat and goat meat by the top 10 producing Member States in 2014.
- 14. The United Kingdom was the largest producer of sheep meat and goat meat in the European Union in 2014, producing 299 thousand tonnes or 40% of all the sheep and goat meat in the European Union in 2014. Spain 121 thousand tonnes, France 87 thousand tonnes and Greece 82 thousand tonnes produced a further 40% of the sheep and goat meat in the European Union in 2014.

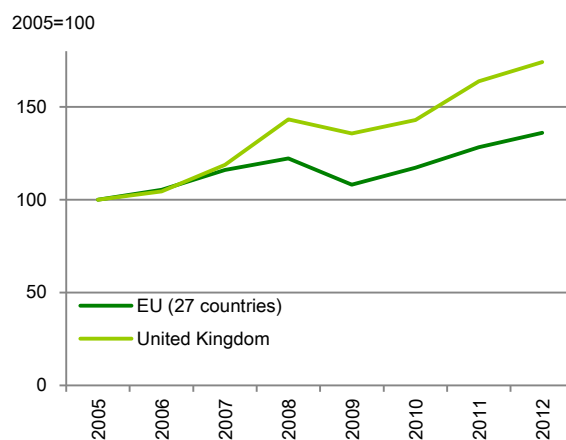
Chart 14.6 Production of sheep and goat meat



Price Indices (charts 14.7 and 14.8)

- 15. The data shown in Chart's 14.7 and 14.8 show data to 2012, the latest year for which data is published by the European Statistical Office.
- 16. Chart 14.7 shows producer price indices for total agricultural production for the United Kingdom and the European Union (27 countries). These indices give information on the trends in the producer price of agricultural production as a whole. The sub-indices were weighted by the values of sales in 2005.
- 17. The index for the United Kingdom has risen by 74 per cent between 2005 and 2012, the latest year for which data are available, compared to 36% for the European Union as a whole.

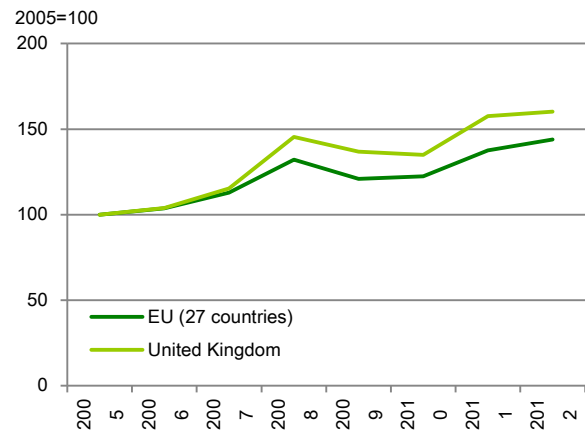
Chart 14.7 Producer price indices, total agricultural production



Source: Eurostat

18. Chart 14.8 shows purchase price indices for the total means of agricultural production for the United Kingdom and the European Union (27 countries). The indices in this table give information on the trends in the purchase price of the means of agricultural production as a whole. The sub-indices were weighted by the values of purchases in 2005.
19. The index for the United Kingdom has risen by 60% between 2005 and 2012, the latest year for which data are available, compared to 44% for the European Union as a whole.

Chart 14.8 Producer price indices, total means of agricultural production



Source: Eurostat

## Revisions

20. There are minor amendments to the Agricultural Income index following updates to data obtained from Eurostat.