



# Agriculture in the United Kingdom

# 2013

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 2013**

**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) 2013 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.

## Revisions

2. This publication provides a snapshot of UK agriculture. Data in this publication is only updated at time of publication. Each of the authorities release statistical notices throughout the year and much of the data in this publication will be updated, particularly the provisional data. Where appropriate each section will highlight revisions to previous published data with a brief explanation of the change.

## Structure of Tables

3. Most of the data are on calendar year basis. The data for 2013 are provisional because the information is incomplete at the time of publication and therefore an element of forecasting was required.
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 recorded member states in all the years regardless of when they became members.



# Chapter 1: Key Events

## Total Income form Farming

1. In 2013 the Total Income from Farming recovered from the dip in 2012, due to the bad weather conditions, to £5.6 billion in 2013. This is similar to the level seen in 2011 when inflation is taken into account. Similarly the Total Income from Farming per annual work unit of entrepreneurial labour (for example farmers and their partners) rose to £28,426 a 15% increase on 2012 but again comparable to the value seen in 2011.

## Common Agricultural Policy

2. Agreement was reached on the shape of the new Common Agricultural Policy. The EU legislation provides a framework and each national government still needs to choose how they implement it. In the UK this means England, Scotland, Wales and Northern Ireland will each be consulting on the reforms and may choose to implement them in different ways. It is likely to be spring 2014 at the earliest before the full details start to become clear.
3. In December Owen Paterson announced that the amount of funding transferred from farmers' direct payments to the budget for environmental and rural growth schemes will be increased from 9 to 12%.

## Bovine Tuberculosis

4. On 1 January new rules were introduced with the aim to reduce the spread of bovine tuberculosis between cattle. The measures included changes in the testing regime and cattle movement controls.
5. In England two planned pilot culls of badgers went ahead in parts of Somerset and Gloucestershire during the summer, whilst in Wales a badger vaccination programme took place.

## Agri-Tech

6. In July the government introduced its new Agri-Tech policy paper setting out how government and industry will build on the strengths of the UK sector. Along with the strategy paper there was funding amounting to £160 million with a clear focus on the implementation of new technologies with the lead taken by industry, rather than government and academics. It is a well-documented fact that the world demand for food, fuel and fibres is growing fast and the UK needs to be competitive if it wants a share of this market.

## Weather

7. In 2012 it was the wettest autumn in England and Wales since 2000 and as a result there was a reduced the area of winter sown crops planted for harvest in 2013. Winter conditions stayed longer and there was a particularly cold spring with unseasonably late snowfalls. This led to warm and sunny summer conditions that allowed crops to recover. 2013 was sunnier than average and it was the third sunniest July since 1929. In October and December there were Atlantic storms that brought rain and high winds, which caused widespread disruptions. December was the wettest month on record in Scotland since 1910.

## Chapter 2: The Structure of the Industry

### Summary

In 2013 compared with 2012:

- Poor weather conditions have led to decreases in cropped areas in 2013 with oilseed crops and cereal crops decreasing by 4.2% and 3.6% respectively. The utilised agricultural area was stable at 17.3 million hectares, accounting for 71% of land in the UK. An increase in the area of uncropped arable land has offset the decrease seen in crop areas.
- Total pig numbers have seen an increase of 9.0% from 4.5 million in 2012 to 4.9 million in 2013. This increase has been due largely to a 10% increase in fattening pigs.
- Sheep and lamb numbers rose by 2.0% to 32.9 million. Increases in both the female breeding flock and other sheep and lambs contributed to this overall increase.
- The total labour force on commercial holdings has decreased 3.6% to 464 thousand in 2013.

### 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 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. England data relate to “commercial” holdings only. The term “commercial” covers all English holdings which have more than one of the following: 5 hectares of agricultural land; 1 hectare of orchards; 0.5 hectares of vegetables; 0.1 hectares of protected crops; more than 10 cows; 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 more information on the June Survey and for more detailed results please see:

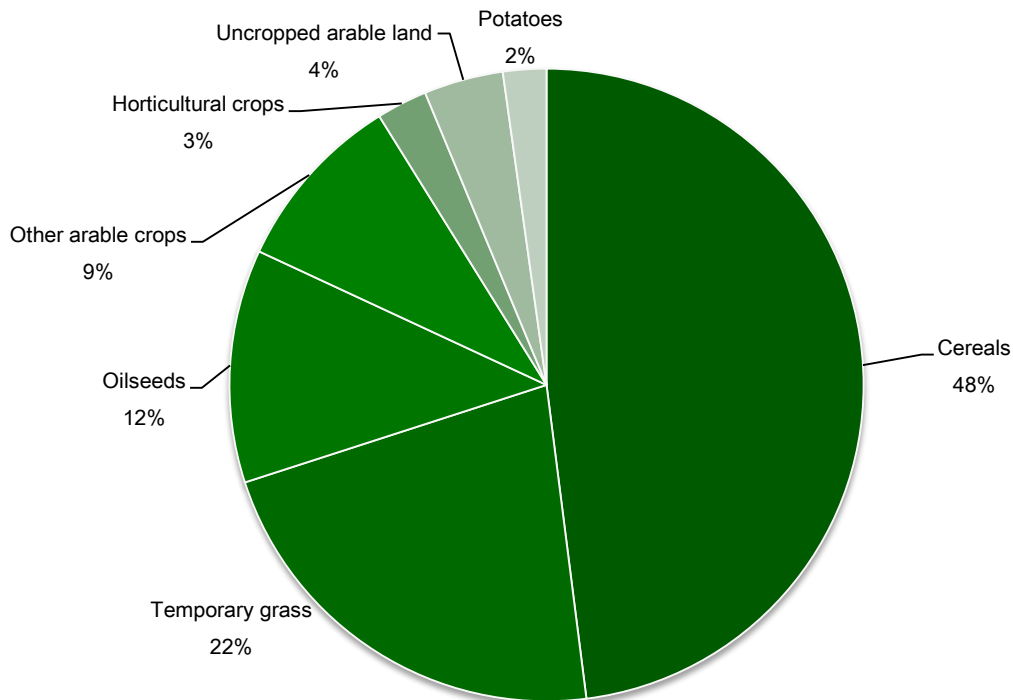
England: <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/structure-of-the-agricultural-industry>

Scotland: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/PubFinalResultsJuneCensus>.

Wales: [www.wales.gov.uk/statistics](http://www.wales.gov.uk/statistics)

Northern Ireland: [www.dardni.gov.uk/statistics](http://www.dardni.gov.uk/statistics)

Chart 2.1 Total croppable area on agricultural holdings June 2013



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

5. At June 2013 the utilised agricultural area (UAA) was 17.3 million hectares, representing 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, 48% of croppable area is planted as cereal crops. Wheat and barley are the predominant cereal crops standing at 1.6 and 1.2 million hectares respectively. There has been an increase of 66% in uncropped arable land which rose from 153 to 255 thousand hectares between 2012 and 2013. This was largely as a result of poor weather conditions leaving many farmers unable to plant crops.
7. The area of oilseed rape decreased by 5.4% to 715 thousand hectares in 2013.
8. In 2013 the planted area of cereals decreased by 3.6% to 3.0 million hectares. This is due to the poor weather conditions experienced throughout the preceding winter and spring.
9. The main dairy herd continued its long-term decline of recent years falling by 1.6% in 2013. Numbers in the beef herd also saw a decrease to 1.6 million, a decrease of 2.8%.
10. The UK population of sheep and lambs has risen by 2.0% in 2013 to almost 33 million animals. Increases in all categories of sheep at the UK level have contributed to the overall change.
11. Overall the UK pig population has seen a 9.0% increase to 4.9 million. A 10% increase in fattening pigs offsets the 0.3% decrease in breeding pigs to bring about the overall increase.
12. Poultry figures have increased by 1.6% to 163 million in 2013. The increase comes mainly from the 2.0% rise in table chickens.

## AGRICULTURE IN THE UNITED KINGDOM 2013

### Table 2.1 Agricultural land use (a)

Enquiries: Lisa Richardson on +44 (0) 1904 455075

email: farming-statistics@defra.gsi.gov.uk

Thousand hectares	At June of each year				
	2009	2010	2011	2012	2013
<b>Utilised agricultural area (UAA) (b)</b>	17 325	17 234	17 172	17 190	17 259
UAA as a proportion of total UK area	71%	71%	70%	70%	71%
<b>Total agricultural area</b>	18 296	18 282	18 263	18 349	18 449
<b>Common rough grazing</b>	1 237	1 228	1 199	1 200	1 198
<b>Total area on agricultural holdings</b>	17 060	17 054	17 064	17 149	17 250
<b>Total croppable area</b>	6 092	6 015	6 106	6 258	6 310
<b>Total crops</b>	4 607	4 610	4 673	4 748	4 665
Arable crops	4 437	4 441	4 497	4 576	4 502
Cereals	3 076	3 013	3 075	3 142	3 028
Oilseeds (includes linseed and borage)	600	686	742	785	752
Potatoes	144	138	146	149	139
Other crops	616	604	534	500	582
Horticultural crops	170	169	175	172	163
<b>Uncropped arable land (c)</b>	244	174	156	153	255
<b>Temporary grass under 5 years old</b>	1 241	1 232	1 278	1 357	1 390
<b>Total permanent grassland</b>	9 996	9 980	9 858	9 725	9 742
Grass over 5 years old	5 865	5 925	5 877	5 799	5 802
Sole right rough grazing (d)	4 131	4 055	3 981	3 926	3 940
<b>Other land on agricultural holdings</b>	972	1 059	1 100	1 166	1 198
Woodland	726	774	786	827	865
Land used for outdoor pigs	..	10	9	7	9
All other non-agricultural land	246	274	305	332	324

Sources: June Surveys of Agriculture, SAF land data

.. Data not collected

(a) Figures for England 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. In the 2009 form guidance notes for England, bird cover and game strips were for the first time explicitly stated as belonging in this category, so the 2009 figure may have captured more of this land than in previous years.

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

Table 2.2 Crop areas and livestock numbers (a)

Enquiries: Lisa Richardson on +44 (0) 1904 455075

email: farming-statistics@defra.gsi.gov.uk

	At June of each year				
	2009	2010	2011	2012	2013
<b>Crop areas</b> (thousand hectares)					
Total area of arable crops	4 437	4 441	4 497	4 576	4 502
of which: wheat	1 775	1 939	1 969	1 992	1 615
barley	1 143	921	970	1 002	1 213
oats	129	124	109	122	177
rye, mixed corn and triticale	28	29	27	26	24
oilseed rape	570	642	705	756	715
linseed	28	44	36	28	35
potatoes	144	138	146	149	139
sugar beet (not for stockfeeding)	114	118	113	120	117
peas for harvesting dry and field beans	228	210	155	120	147
maize	163	164	164	158	194
Total area of horticultural crops	170	169	175	172	163
of which: vegetables grown outdoors	125	121	129	123	116
orchard fruit (b)	22	24	24	24	23
soft fruit & wine grapes	10	10	10	9	10
outdoor plants and flowers	11	12	11	12	12
glasshouse crops	2	2	2	3	3
<b>Livestock numbers</b> (thousand head)					
Total cattle and calves	10 025	10 112	9 933	9 900	9 844
of which: cows in the dairy herd (c)	1 857	1 847	1 814	1 812	1 782
cows in the beef herd (d)	1 626	1 657	1 675	1 657	1 611
Total sheep and lambs	31 445	31 084	31 634	32 215	32 856
of which: ewes and shearlings	14 636	14 740	14 868	15 229	15 561
lambs under one year old	15 892	15 431	15 990	16 229	16 381
Total pigs	4 540	4 460	4 441	4 481	4 885
of which: sows in pig and other sows for breeding	379	360	362	357	355
gilts in pig	48	67	70	69	66
Total poultry	152 753	163 867	162 551	160 061	162 609
of which: table fowl	98 754	105 309	102 461	102 558	104 576
laying and breeding fowl	42 663	47 107	48 610	46 633	47 024
turkeys, ducks, geese and all other poultry	11 335	11 451	11 481	10 870	11 008

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

(a) Figures for England 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)

13. The number of commercial agricultural holdings in the UK has remained stable between 2010 and 2013 at 222 thousand and the total area on holdings has shown little change.

Table 2.3 Numbers of holdings by size group (a)

Enquiries: Lisa Richardson on +44 (0) 1904 455075

email: farming-statistics@defra.gsi.gov.uk

		2010		2013	
		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	106	701
	20 to under 50 hectares	43	1 425	42	1 380
	50 to under 100 hectares	34	2 405	33	2 349
	100 hectares and over	41	12 520	42	12 820
	<b>Total</b>	<b>222</b>	<b>17 054</b>	<b>222</b>	<b>17 250</b>
	Average area (hectares)		77		78
Average area on holdings with >=20 hectares			138		142
Croppable area (b)	0.1 to under 20 hectares	52	312	48	307
	20 to under 50 hectares	20	646	20	642
	50 to under 100 hectares	14	1 036	15	1 064
	100 hectares and over	18	4 021	19	4 297
	<b>Total</b>	<b>104</b>	<b>6 015</b>	<b>101</b>	<b>6 310</b>
	Average croppable area (hectares)			58	

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.

Table 2.4 Numbers of holdings by size group and country at June 2013

Enquiries: Lisa Richardson on +44 (0) 1904 455075

email: farming-statistics@defra.gsi.gov.uk

	England (a)		Wales		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	34.9	319	26.6	111	32.6	168	9.8	103	
20 to under 50 hectares	20.8	695	6.3	208	6.2	203	8.5	274	
50 to under 100 hectares	18.3	1 326	5.0	357	5.1	369	4.3	298	
100 hectares and over	27.0	6 747	4.4	883	8.9	4 867	1.9	323	
<b>Total</b>	<b>101.0</b>	<b>9 086</b>	<b>42.3</b>	<b>1 560</b>	<b>52.7</b>	<b>5 606</b>	<b>24.5</b>	<b>998</b>	
Average area (hectares)		90		37		106		41	
Average area on holdings with >=20 hectares			133		92		270		61

Source: June Surveys of Agriculture, SAF land data

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



## Labour force in agriculture (table 2.5)

14. The agricultural workforce on commercial holdings decreased by 3.6% in 2013 to 464 thousand people. There has been a decrease in all categories of labour with the exception of salaried managers. The largest decrease was seen in the seasonal, casual or gang labour category, a decrease of 8.5%.

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

Enquiries: Lisa Richardson on +44 (0) 1904 455075

email: farming-statistics@defra.gsi.gov.uk

Thousands	At June of each year				
	2009	2010	2011	2012	2013
<b>Total labour force on commercial holdings (incl. farmers and spouses)</b>	464	466	476	481	464
<b>Farmers, business partners, directors and spouses</b>	289	295	299	298	290
Full time	137	134	140	141	138
Part time (b)	152	161	159	158	152
<b>Salaried managers</b>	11	11	11	11	11
<b>Other workers</b>	164	160	166	172	162
<b>Full time</b>	63	64	64	65	63
<b>Part time (b)</b>	42	39	39	41	39
<b>Seasonal, casual or gang labour</b>	59	56	62	67	61
Male	42	40	44	48	40
Female	17	17	18	19	21

Source: June Surveys of Agriculture

.. Data not collected

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

(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)

15. Table 2.6 shows the proportion of holders by age group. The trend is towards an increase in age of holders. In 2000, almost a quarter (23%) of holders were under 45 years old and a further quarter were aged 65 or older. By 2010, almost a third of holders were aged 65 and over whilst only 14% were under 45 years old. Throughout the 2000 to 2010 period just over half (53%) of the holders were aged 45 to 64.
16. The average age of holders is defined using the median. This is the middle value when all holder ages are ranked in order. In 2010 the median age for holders in the UK was 59 years old, unchanged from 2007.

Table 2.6 Proportion of holders in each age group (a)(b)

Enquiries: Lisa Richardson on +44 (0) 1904 455075

email: farming-statistics@defra.gsi.gov.uk

	2000	2003	2005	2007	% of holders 2010 (c)
Holdings' age					
Under 35 years	5	3	3	3	3
35 - 44 years	18	15	14	12	11
45 - 54 years	26	24	23	23	25
55 - 64 years	26	29	29	29	29
65 years and over	25	29	31	33	32
Median age (years)	56	58	58	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 or institutions) do not have a holder and are therefore excluded from these figures.

(c) England 2010 figures relate to commercial holdings only.

# Chapter 3: Farming Income

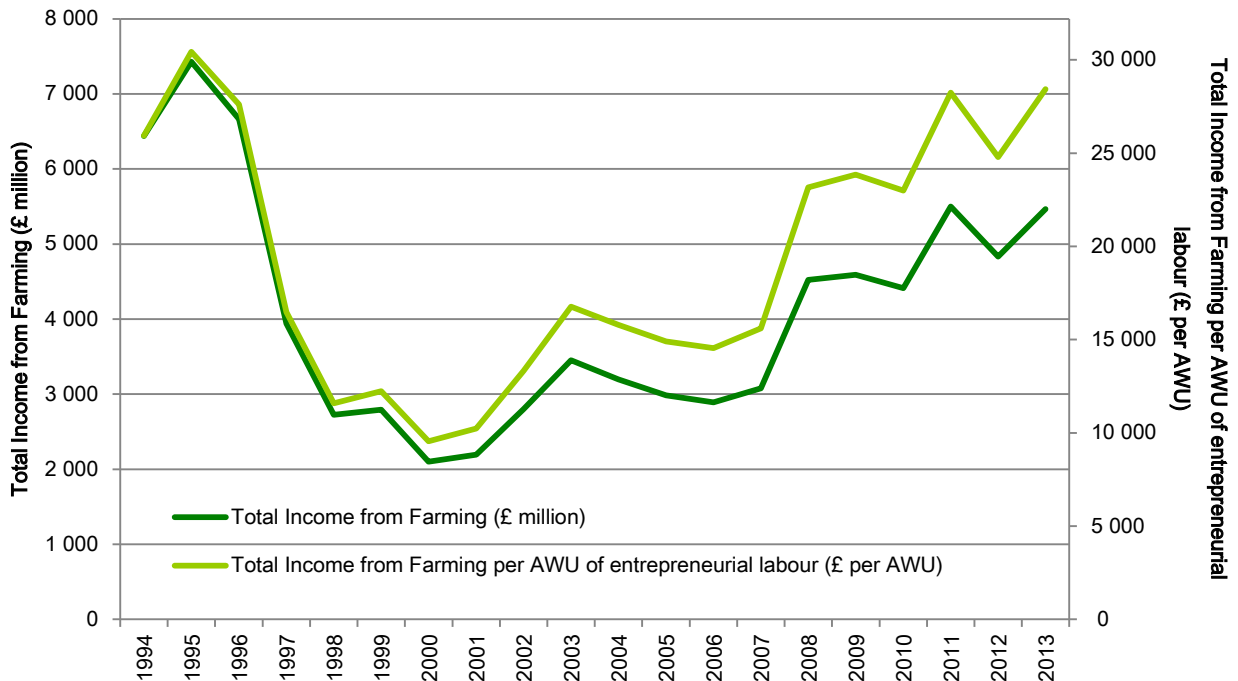
## Summary

- Total income from farming for the United Kingdom increased by 13% (£630 million) to £5.5 billion in real terms.
- Gross value added for the agricultural industry in the United Kingdom rose by 7.0%. There were increases for all countries, most notably Wales where gross value added rose by 41%.

## Long term trends in farming income

1. In real terms Total Income from Farming recovered from the fall seen in 2012 and is just 0.7% lower than the 2011 total. Total Income from Farming is now more than two and a half times higher (160%) than it was in 2000, but is still 26% less than the peak of 1995
2. Total Income from Farming per AWU of entrepreneurial labour has performed better than Total Income from Farming owing to a decline in the number of farmers and other unpaid workers. Compared to 1994 Total Income from Farming per AWU of entrepreneurial labour has increased by 10% compared to a 15% fall in Total Income from Farming.

Chart 3.1 Long-term trends in farming income in real terms at 2013 prices



Summary measures including total income from farming

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

Table 3.1 Summary measures from the aggregate agricultural accounts

Enquiries: Helen Mason on +44 (0) 1904 455096

email: helen.mason@defra.gsi.gov.uk

£ 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	(£)
2003	5 210	2 731	1 827	4 558	13 300
2004	5 159	2 589	1 894	4 483	12 800
2005	5 080	2 465	1 944	4 409	12 300
2006	5 087	2 456	1 973	4 428	12 400
2007	5 398	2 672	2 004	4 676	13 600
2008	6 794	4 055	2 067	6 122	20 800
2009	6 908	4 207	2 167	6 374	21 900
2010	6 920	4 172	2 215	6 387	21 700
2011	8 192	5 319	2 335	7 653	27 300
2012	7 729	4 756	2 355	7 111	24 400
2013	8 514	5 464	2 379	7 843	28 400
<b>In real terms, 2013 prices</b>		A	B	A + B	(£)
2003	6 585	3 452	2 309	5 762	16 800
2004	6 368	3 197	2 338	5 534	15 800
2005	6 149	2 984	2 353	5 337	14 900
2006	5 987	2 890	2 321	5 211	14 500
2007	6 214	3 076	2 307	5 383	15 600
2008	7 575	4 521	2 304	6 825	23 200
2009	7 534	4 589	2 363	6 952	23 800
2010	7 322	4 414	2 344	6 758	23 000
2011	8 472	5 501	2 414	7 915	28 200
2012	7 856	4 834	2 394	7 227	24 800
2013	8 514	5 464	2 379	7 843	28 400

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

4. 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 rose by 8.4% in real terms to £8.5 billion recovering from the 7.3% fall seen in 2012.
5. 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 risen between 2012 and 2013 by 13% (£630 million) in real terms, to £5.5 billion. However, Total Income from Farming has not fully recovered from the dip seen in 2012 as it is still 0.7% lower than 2011 in real terms.
6. 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 £2.4 billion.
7. Total Income from Farming per AWU of entrepreneurial labour is a measure of average income for the input of one person with an entrepreneurial interest in the agricultural industry who is engaged in agricultural activities on a full-time basis over an entire year. Total Income from Farming per AWU of

entrepreneurial labour is estimated to have risen by 15% in real terms to £28,400 in 2013. Total Income from Farming per AWU of entrepreneurial labour has recovered after the dip seen in 2012 and is now 0.7% higher than 2011.

## Summary measures by country

8. Table 3.2 shows main measures 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 of each country and to employment.

Table 3.2 Summary measures by country

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	2008	2009	2010	2011	2012	2013 (provisional)
<b>Gross output at basic prices £ million</b>						
United Kingdom	19 919	19 583	20 659	23 633	24 218	25 715
England	14 941	14 660	15 331	17 617	18 105	19 126
Wales	1 127	1 176	1 248	1 398	1 403	1 529
Scotland	2 443	2 401	2 565	2 910	2 966	3 138
Northern Ireland	1 408	1 345	1 515	1 707	1 744	1 921
<b>Intermediate consumption £ million</b>						
United Kingdom	12 918	12 699	13 668	14 987	15 600	16 492
England	9 299	8 985	9 745	10 781	11 117	11 802
Wales	960	978	1 060	1 096	1 148	1 172
Scotland	1 585	1 671	1 695	1 846	1 981	2 042
Northern Ireland	1 075	1 065	1 168	1 265	1 355	1 476
<b>Gross value added at basic prices £ million</b>						
United Kingdom	7 001	6 884	6 991	8 645	8 618	9 222
England	5 652	5 685	5 597	6 848	7 000	7 338
Wales	157	189	177	291	243	344
Scotland	858	730	870	1 064	985	1 096
Northern Ireland	333	280	347	442	389	445
<b>Total Income from Farming £ million</b>						
United Kingdom	4 055	4 207	4 172	5 319	4 756	5 464
England	3 106	3 298	3 112	3 945	3 680	4 120
Wales	112	144	108	220	152	218
Scotland	645	570	704	837	701	829
Northern Ireland	193	196	249	317	223	298
<b>Agriculture's share of total regional gross value added at basic prices (a) %</b>						
United Kingdom	0.53	0.54	0.53	0.64	0.62	..
England	0.51	0.52	0.50	0.59	0.60	..
Wales	0.35	0.43	0.40	0.63	0.51	..
Scotland	0.83	0.71	0.85	1.00	0.93	..
Northern Ireland	1.13	0.98	1.20	1.52	1.32	..
<b>Agriculture's share of total regional employment %</b>						
United Kingdom (b)	1.50	1.47	1.48	1.51	1.51	1.44
England (b)	1.15	1.10	1.10	1.14	1.13	1.08
Wales	4.13	4.10	4.27	4.30	4.31	3.94
Scotland	2.34	2.51	2.63	2.59	2.60	2.59
Northern Ireland	5.52	5.69	5.54	5.71	5.86	5.84

(a) Data on national and regional GVA for 2013 are not yet available.

(b) Estimates for England are based on employment on 'commercial holdings' only. Estimates for 2008 and 2009 are not directly comparable owing to a register cleaning exercise for England in 2010 that was also applied to 2009.

## AGRICULTURE IN THE UNITED KINGDOM 2013

9. Gross value added at basic price represents the results of the production activity and in 2013 this was £9.2 billion for the UK, a 7.0% increase in current prices. Gross value added at basic price is the difference between the gross output at basic price and intermediate consumption. For the UK there were increases of around 6% for both gross output at basic price and intermediate consumption.
10. Nationally the largest percentage increases in gross value added at basic price were seen in Wales, Northern Ireland and Scotland reversing their fortunes from the dip they saw in 2012.
11. In 2012 agriculture's share of UK's gross value added at basic price was 0.62% whilst the share of employment was 1.51%. There is quite a spread between the countries with the highest share of gross value added at basic price and employment in Northern Ireland at 1.32% and 5.86% respectively. The lowest contribution to gross value added at basic price is in Wales where agriculture contributes 0.51% of the total. The smallest share of employment is in England with agriculture contributing 1.13%.
12. In 2013 the share of employment in the agricultural industry fell to 1.44% in the UK a 4.4% fall. This is as a result of the agricultural workforce falling by 3.6% in 2013. For more details on the agricultural workforce see chapter 2.

## Revisions

13. These estimates will be subject to revision as more data becomes available.
14. For the first time Gross Domestic Product (GDP) deflator has been used to convert current prices into real term prices. This followed the Retail Price Index (RPI) losing its 'National Statistics' accreditation. Various options were considered and consultation with the devolved administration and the Office of National Statistics before the GDP deflator was selected.
15. Revisions have been made to historic data, including the value of outputs and intermediate consumption which resulted in changes in Gross Value Added and Total Income of Farming values. These revisions go back to 2002. For more detailed information please see the revisions section in chapter 4.
16. The Wales 2013 data may differ from that published by Welsh Government on 27 February 2014. A revised statistics notice is due to be issued by the department, the release date of which is yet to be announced.

## Comparison of income measures in EU Member States

17. Eurostat, the statistical office of the European Union, produces measures of income from agricultural activity based on data provided by Member States, see table 3.3. 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 - Index of real net agricultural entrepreneurial income, per unpaid annual work unit.
  - Indicator C - Net entrepreneurial income of agriculture.
18. Since 2005, the reference year, the agricultural industry in the United Kingdom has outperformed the industry in the European Union as a whole by all measures. Indicator A for the United Kingdom rose by 46% while that for the European Union as a whole rose by 29%; Indicator B for the United Kingdom rose by 91% and that for the European Union rose by 34 per cent; and Indicator C for the United Kingdom rose by 87% while that for the European Union rose by 2 per cent.
19. 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 estimated change between 2012 and 2013 for all Member States and the European Union (28 countries) as a whole. 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 18% for Estonia to an increase of 11% in Netherlands.

### Table 3.3 Eurostat income indicators

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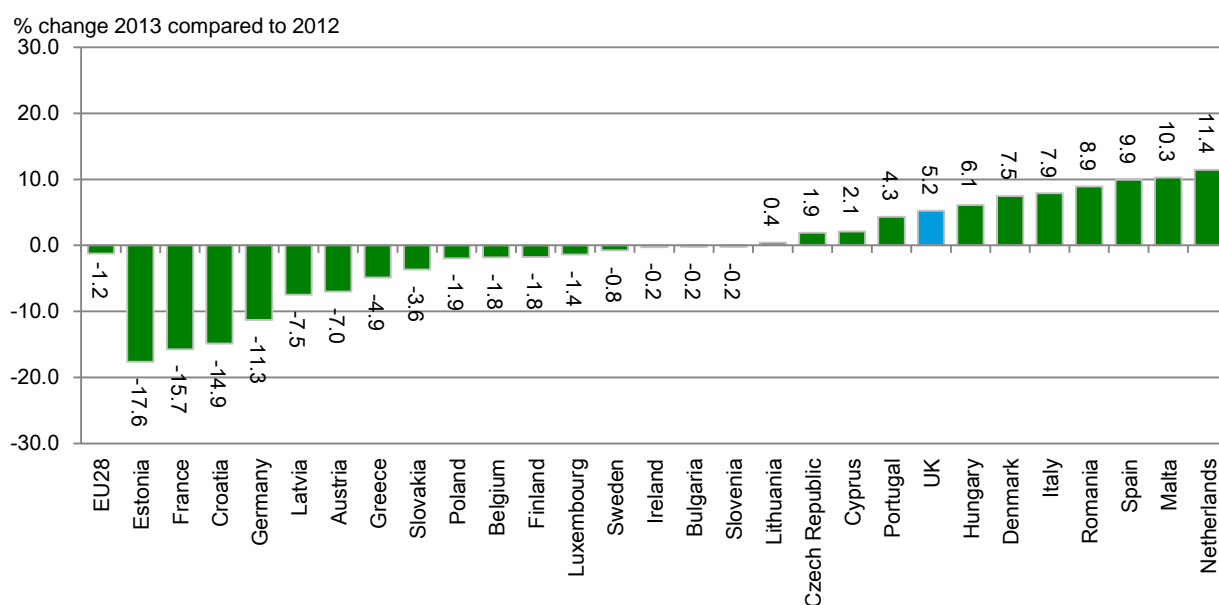
email: helen.mason@defra.gsi.gov.uk

Index 2005 = 100

	2008	2009	2010	2011	2012	2013 (estimated)
<b>Net value added at factor cost of agriculture per total Annual Work Unit (Indicator A)</b>						
United Kingdom	139.4	140.4	135.3	153.1	139.1	146.4
EU27	112.4	102.2	120.7	130.9	130.7	129.1
EU28	112.5	102.4	120.6	130.6	130.3	128.7
<b>Net agricultural entrepreneurial income per unpaid Annual Work Unit (Indicator B)</b>						
United Kingdom	174.7	179.0	170.3	205.4	177.6	191.3
EU27	111.3	95.2	124.1	139.0	138.0	134.8
EU28	111.6	95.6	123.9	138.5	137.4	134.1
<b>Net entrepreneurial income from agriculture (Indicator C)</b>						
United Kingdom	163.8	165.1	156.7	191.5	174.3	187.1
EU27	99.4	82.2	98.0	106.7	105.5	102.0
EU28	99.7	82.6	98.1	106.6	105.4	101.8

Source: Eurostat. Last update: 7 April 2014.

### Chart 3.2 Changes in incomes from agricultural activity across the EU : Indicator A



Source: Eurostat. Last update: 8 April 2014.

### Farm Business Incomes by farm type

20. Farm Business Income, is presented in tables 3.4 and 3.5. Chart 3.3 shows the distribution of performance for farms in the United Kingdom in 2012/13.
21. Estimates of Farm Business Income for 2013/14 (i.e. year ended February 2014 and harvest 2013) at current prices are shown in table 3.4 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 2013 Single Payment Scheme are recorded in the 2013/14 accounting year. Note that forecasts of Farm Business Income for 2013/14 are not produced in Scotland.
22. In England, incomes for the arable sector are expected to fall in 2013/14. This reflects the continuing impact of the wet autumn in 2012 which resulted in a switch to lower yielding spring crops for the harvest of 2013. Although yields were higher than the previous year, wheat and oilseed rape crops did

not achieve levels seen in earlier years. In addition, prices of key commodities fell as record harvests around the world caused a fall in global markets.

23. Average Farm Business Income is expected to increase substantially on dairy farms in England, Wales and Northern Ireland reversing the trend seen in 2012/13. The increased income shown here is primarily driven by higher milk prices (around 14% in England and Wales, 20% in Northern Ireland) which are also likely to have encouraged an increase in production. Input costs are also expected to increase, particularly for feed as the late cold spring of 2013 delayed turnout and increased purchased feed requirements.
24. In England incomes on grazing livestock farms in both the Lowland and Less Favoured Areas (LFA) are expected to recover compared to the previous year. This is driven by increased output from the sheep enterprises reflecting higher values for store and finished lambs and increased numbers as stock held over from the previous year were brought to market. Whilst fat cattle prices were also higher than the previous year, throughput and carcass weights for both cull and finished cattle were lower. This reflects the poor seasonal conditions earlier in the year and low feed availability.
25. In Northern Ireland and Wales incomes on LFA grazing livestock farms are also expected to rise due to improvements in cattle and sheep prices. However incomes on lowland grazing livestock farms in Wales are expected to be broadly unchanged as the increases in the value of output are expected to be offset by increasing costs.
26. Average Farm Business Income is forecast to almost double in 2013/14 on specialist pig farms in England. Data for finished pig prices indicate an average increase of 9% whilst input costs are expected to rise only slightly.
27. On specialist poultry farms in England, higher output from both the broiler and egg laying enterprises is forecast to be partially offset by an increase in feed volume. Average incomes are therefore expected to increase by around 10% on these farms.
28. Incomes on mixed farms in England are forecast to fall by 7.9% in 2013/14 to £35,000. Although the value of livestock output is forecast to increase this is likely to be offset by lower output from the cropping enterprises. Total costs are expected to be broadly unchanged with higher feed costs offset by lower crop input costs.
29. In England the Single Farm Payment was around 2.5% higher in 2013 than in 2012. This was due to a change in the exchange rate (fall in sterling against the euro) which was partially offset by the introduction of financial discipline. In Northern Ireland, the Single Farm Payment was around 5.9% higher when compared to 2012. This higher increase for Northern Ireland is due to the fact that voluntary modulation was not applied in 2013.
30. 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 2012/13. Around a fifth of farms in Scotland and Northern Ireland failed to make a positive Farm Business Income although the proportion was lower (around 15%) in England and Wales. In Northern Ireland over 60% of farms fell into the lower income brackets (less than £20,000) compared to 40% in England and around half of farms in Wales and Scotland. At the top end of the scale almost a third of farms in England had a Farm Business Income of more than £50,000. The equivalent figure for Northern Ireland was 12%. A quarter of farms in the UK had a Farm Business Income of more than £50,000.
31. 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 over a quarter of farms in the UK failed to make a profit.
32. Chart 3.3 shows the differences in performance of farms in the United Kingdom for 2012/13. 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 20% of farms failing to recover their costs in that year.



## Revisions

33. Compared with the provisional 2012/13 results published in the 2012 edition of AUK, the outturns published here show much higher incomes for specialist pig and poultry farms. This is partly due to changes to the sample but also to the fact that the increase in feed costs was lower than expected. Differences for mixed and specialist poultry farms in England are also influenced by a change to the weighting procedure made since the provisional figures were calculated. The fall in incomes on cereal farms was greater than expected due to an underestimation for input costs, particularly seed, fertiliser and agrochemicals.

Chart 3.3 Distribution of performance across farms 2012/13

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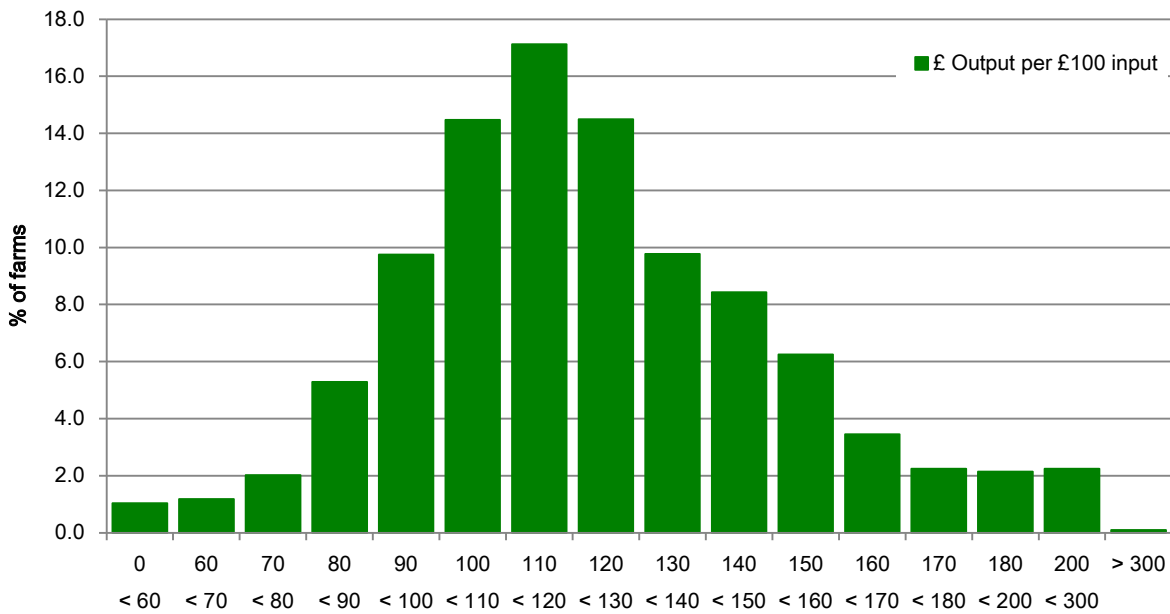


Table 3.4 Farm Business by country and type of farm

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Average farm business income per farm (£ farm) (a)	Accounting years ending on average in February				2013/14 Provisional
	2009/10	2010/11	2011/12	2012/13 (b)	
Standard Output (SO) Typology					
At current prices					
<b>England</b>					
Cereals	42 000	85 000	93 500	68 000	49 000
General cropping	66 500	111 500	100 500	91 500	84 000
Dairy	59 000	66 000	86 500	51 500	101 000
Grazing livestock (lowland)	29 000	21 500	32 000	16 500	19 000
Grazing livestock (LFA)	26 000	21 500	29 000	19 500	26 000
Specialist pigs	75 500	44 500	38 000	41 000	78 000
Specialist poultry	72 500	68 000	46 500	94 000	103 000
Mixed	33 000	51 000	74 000	38 000	35 000
<b>Wales</b>					
Dairy	47 500	57 500	68 000	45 000	84 500
Grazing livestock (lowland)	33 500	31 000	36 500	30 000	30 000
Grazing livestock (LFA)	37 000	30 000	34 500	22 500	26 500
<b>Scotland</b>					
Cereals	26 000	58 500	60 000	18 500	..
General cropping	25 500	72 500	50 500	55 000	..
Dairy	80 000	78 000	82 000	45 500	..
Grazing livestock (lowland)	39 000	42 000	33 500	18 000	..
Grazing livestock (LFA)	27 000	33 000	37 000	24 000	..
Mixed	37 000	54 000	49 000	34 500	..
<b>Northern Ireland</b>					
Dairy	20 000	51 500	58 000	28 000	63 000
Grazing livestock (LFA)	21 500	19 500	23 000	13 000	16 500
<b>United Kingdom</b>					
Cereals	40 000	81 500	91 000	63 500	..
General cropping	56 000	100 000	86 500	83 000	..
Dairy	50 000	56 000	77 500	45 000	..
Grazing livestock (lowland)	28 500	22 500	31 000	17 000	..
Grazing livestock (LFA)	28 000	26 000	31 500	20 500	..
Specialist pigs	71 500	48 500	38 000	40 000	..
Specialist poultry	72 500	68 000	41 000	94 000	..
Mixed	33 500	49 500	60 000	37 500	..
<b>ALL TYPES (Including Horticulture)</b>	<b>39 500</b>	<b>49 500</b>	<b>56 500</b>	<b>39 500</b>	<b>..</b>
In real terms (at 2012/13 prices)					
<b>United Kingdom</b>					
Cereals	45 500	88 500	94 500	63 500	..
General cropping	64 000	109 000	89 500	83 000	..
Dairy	57 000	61 000	80 500	45 000	..
Grazing livestock (lowland)	32 500	24 500	32 000	17 000	..
Grazing livestock (LFA)	32 000	28 500	32 500	20 500	..
Specialist pigs	81 500	53 000	39 500	40 000	..
Specialist poultry	82 500	74 000	42 500	94 000	..
Mixed	38 000	54 000	62 000	37 500	..
<b>ALL TYPES (Including Horticulture)</b>	<b>45 000</b>	<b>54 000</b>	<b>58 500</b>	<b>39 500</b>	<b>..</b>

(a) Figures rounded to nearest £500

(b) Weighting methodology changed to improve reliability of results for farms with poultry.

Table 3.5 All farm types: distribution of farm incomes by country 2012/13

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Percentage of farms

	England	Wales	Scotland	Northern Ireland	United Kingdom
<b>Farm Business Income</b>					
Less than zero	16	15	19	23	17
1 to less than £5,000	6	6	9	8	6
£5,000 to less than £10,001	7	10	7	12	8
£10,000 to less than £20,001	12	18	17	20	15
£20,000 to less than £30,001	12	18	9	16	12
£30,000 to less than £50,001	17	16	18	9	16
£50,000 and over	29	18	21	12	25
Average (£ thousand per farm)	47	28	30	19	39
<b>Net Farm Income</b>					
Less than zero	26	25	30	34	27
1 to less than £5,000	9	10	9	11	9
£5,000 to less than £10,001	7	13	8	12	8
£10,000 to less than £20,001	13	17	14	15	13
£20,000 to less than £30,001	11	14	7	12	11
£30,000 to less than £50,001	12	11	15	8	12
£50,000 and over	22	10	18	9	19
Average (£ thousand per farm)	34	17	21	13	28
<b>Cash Income</b>					
Less than zero	9	9	8	6	8
1 to less than £5,000	4	3	3	8	4
£5,000 to less than £10,001	6	6	7	6	6
£10,000 to less than £20,001	11	18	14	20	13
£20,000 to less than £30,001	9	14	12	13	11
£30,000 to less than £50,001	17	22	16	24	18
£50,000 and over	44	27	40	22	39
Average (£ thousand per farm)	71	40	52	37	61

## Farm income measures

34. **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.

35. **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, and paid labour *less*  
 Total consumption of fixed capital (depreciation) *less*  
 Interest.

36. 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.

# Chapter 4: Accounts

## Summary

- Total Income from Farming at current prices is estimated to have risen by £708 million (15%) to £5.5 billion between 2012 and 2013.
- The value of gross output at basic prices of the agricultural industry in the United Kingdom rose by £1.5 billion (6.2%) between 2012 and 2013 to £25.7 billion.
- The value of intermediate consumption, the goods and services consumed or used as inputs in the productive process, is estimated to have increased by £892 million (5.7%) to £16.5 billion.
- Gross value added for the agricultural industry, which appears as the difference between the value of output and the value of intermediate consumption, rose by 7.0% to £9.2 billion between 2012 and 2013.
- 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 risen by £785 million (10%) to £8.5 billion.

## Introduction

1. This chapter shows production and income accounts for agriculture in the United Kingdom. These comprise a production account with details of output and input, generation of income account and entrepreneurial account, which together form the account presented in table 4.1. 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.

## Production and income accounts at current prices

### Output

2. The value of gross output at basic prices of the agricultural industry in the United Kingdom rose by £1.5 billion (6.2%) between 2012 and 2013 to £25.7 billion. The key contributors to this were the rise in milk by £505 million, poultry by £250 million, potatoes by £210 million and barley by £199 million. In contrast oilseed rape fell by £245 million and wheat by £75 million.
3. Overall output of crops rose by £334 million to £9.3 billion, a rise of 3.7%. This increase was largely driven by the value of potatoes whose value increased by £210 million to £940 million. This increase came on the back of a poor harvest in 2012 where production was down by 4.7% due to the poor weather conditions. As a result there were fewer stocks at the end 2012 which led to reduced supplies at the start of 2013 with little change in demand. This reduced supply led to price rises of 22% in 2013 however by the end of the year stocks were replenished as the 2013 potato harvest was back to more normal levels.
4. Cereals were a mixed picture in 2013. The value of wheat output fell for the second year in a row by £75 million (3.5%) to £2.1 billion. Although there was an increase in wheat yield, overall production was down 10% as the area harvested was 19% less than in 2012. The quality of the wheat crop was better than 2012 and this saw an overall price increase of 7%. In contrast the value of barley was up £199 million to £1.1 billion. There were increased plantings of spring barley as there were difficulties in sowing autumn crops due to the wet weather / poor soil conditions at the end of 2012. The increased supplies of both malting and feed barley saw the price of barley fall by 6% in comparison to 2012. However the increased volumes of barley saw the overall value increase by 21% in 2013.

## AGRICULTURE IN THE UNITED KINGDOM 2013

5. The value of oilseed rape fell by £245 million to £741 million as both price and volume fell in 2013. Both yield (3.0 tonnes / hectare) and harvested area (715 thousand hectares) of oilseed rape were down in 2013. Prices for oilseed rape were still relatively strong in 2013 at £348 / tonne but still lower than the high prices seen in 2012.
6. Overall the total output of livestock rose by £1.1 billion to £14.2 billion, a rise of 8.5%. The key contributor to this rise was milk whose value increased by £505 million to £4.3 billion. This was a result of the high prices seen throughout the year. The average price of milk in 2012 was 28.1 pence per litre (ppl) compared to 31.6 ppl in 2013. The higher prices were due to increased demand from processors as the global demand for milk products rose in 2013.
7. The output of livestock products for meat continues to be a strong performer. The value of poultry meat continues to rise and increased by £250 million to £2.3 billion in 2013. This was due to higher prices and a small increase in the output of poultry meat. The price increase reflected the additional production costs incurred, particularly the cost of poultry feed. The pig meat value rose by £141 million, to £1.3 billion and as with poultry price was a strong contributor to the increase in value. High prices were seen in 2013 as supplies were tight, with modest increases in output being offset by increased exports and lower imports.

### Intermediate consumption

8. The value of intermediate consumption rose by £892 million to £16.5 billion, primarily due to a £740 million increase in animal feed. A cold start to 2013 led to a lack of early grass / fodder growth so cattle and sheep needed additional animal feed when they were turned out in spring. The increase in milk prices saw farmers use extra rations to maintain milk production. There was also an increase in the number of pigs (9.0%) and poultry (1.6%) which required additional feed. The additional demand for animal feed saw the price of animal feed rise by 7.4%. The value of animal feed rose to £5.6 billion in 2013.
9. The value of seeds rose by £139 million to £814 million. This was due to increased plantings, notably the increased area in spring barley. The wet harvest in 2012 along with the increased demand for seed in 2013 saw the price of seeds increase by 13% in 2013. In contrast the value of plant protection products fell by £77 million to £856 million. This was due to a reduction in use most notably the use of fungicide. The reduction in fungicide use was mainly due to the reduced areas of wheat and oilseed rape.

### Gross Value Added

10. The increase in the value of output was much greater than the increase in intermediate consumption value leading to a rise in Gross Value Added at basic prices of £604 million (7.0%) to £9.2 billion.

### Net Value Added at factor cost

11. 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 risen by £785 million (10%) to £8.5 billion.
12. 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. The value of other subsidies on production, which are direct payments received as a result of engaging in agricultural production but which are not linked to production, principally the Single Payment Scheme and agri-environment schemes, rose by £90 million to £3.3 billion, due principally to changes in the Pound and Euro exchange rate.

### Compensation of employees

13. Compensation of employees, which is total remuneration in cash or in kind payable to employees in return for work done, is estimated to have risen slightly by £23 million (1.0%) to £2.4 billion, with the increase in pay partially offset by a decrease in employment numbers.

### Total Income from Farming

14. Total Income from Farming at current prices is estimated to have risen by £709 million (15%) to £5.5 billion between 2012 and 2013. Inflation, for the first time measured by the Gross Domestic Product,

deflator increased by 1.6% during 2013. In real terms, after adjustment for inflation, Total Income from Farming is estimated to have risen by £631 million (13%).

## Revisions

15. These estimates will be subject to revision as more data becomes available.
16. For the first time Gross Domestic Product (GDP) deflator has been used to convert current prices into real term prices. This followed the Retail Price Index (RPI) losing its 'National Statistics' accreditation. Various options were considered and consultation with the devolved administration and the Office of National Statistics before the GDP deflator was selected.
17. The potato data for 2012 have been revised from £620 million to £730 million, an 18% increase. Data quality checks identified certain limitations in the methodology and source data used for estimating the tonnage of potatoes sold for human consumption, so some adjustments have been made. However it is likely that further revisions will be required as a result of an ongoing more detailed review into the data and methodology.
18. Revisions have been made to the cattle GFCF values back to 2005. The revisions were made following identification of an error in the "Number of entries into the breeding herds" figure which is a fundamental part of the overall calculations. The issue only affected the cattle category and only from 2005 onwards. Several minor methodological improvements (to improve transparency and consistency between other published statistical data) have also been made which have caused very slight changes to the results for 2011 and 2012.
19. Fertiliser data has changed back to 2002 due to errors found when this data was reviewed. Values in previous notices overstated the value of fertiliser by 0.9% to 5.1%. The value for 2012 was revised down by 4.4% from £1.6 billion to £1.5 billion.

## AGRICULTURE IN THE UNITED KINGDOM 2013

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

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.



Table 4.1 Production and income accounts at current prices

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email: helen.mason@defra.gsi.gov.uk

£ million	2010	2011	2012	2013 (provisional)
<b>Output at market prices (a)</b>				
1 Output of cereals	2 292	3 218	3 205	3 374
of which: wheat	1 668	2 305	2 160	2 085
barley	557	815	926	1 125
oats	63	93	114	158
2 Output of industrial crops	1 051	1 524	1 356	1 173
of which: oilseed rape	674	1 110	986	741
protein crops	127	103	98	123
sugar beet	197	251	227	266
other industrial crops	30	32	29	18
3 Output of forage plants	189	186	146	217
4 Output of vegetables and horticultural products	2 260	2 264	2 304	2 411
of which: fresh vegetables	1 263	1 218	1 253	1 314
plants and flowers	997	1 047	1 051	1 097
5 Output of potatoes (including seeds)	622	717	730	940
6 Output of fruit	585	604	573	596
7 Output of other crop products including seeds	436	471	640	578
<b>Total crop output (sum 1 - 7)</b>	<b>7 435</b>	<b>8 984</b>	<b>8 954</b>	<b>9 288</b>
8 Output of livestock	7 306	8 169	8 645	9 168
primarily for meat	6 108	6 904	7 242	7 750
of which: cattle	2 154	2 573	2 792	2 889
pigs	978	1 070	1 139	1 281
sheep	979	1 149	1 020	1 036
poultry	1 799	1 904	2 075	2 325
gross fixed capital formation	1 198	1 265	1 404	1 418
of which: cattle	714	631	877	878
pigs	8	8	8	6
sheep	295	413	316	337
poultry	181	213	203	196
9 Output of livestock products	3 973	4 387	4 486	5 073
of which: milk	3 329	3 738	3 767	4 271
eggs	561	559	662	718
<b>Total livestock output (8 + 9)</b>	<b>11 279</b>	<b>12 556</b>	<b>13 131</b>	<b>14 241</b>
10 Other agricultural activities	927	1 039	1 039	1 055
11 Inseparable non-agricultural activities	990	1 026	1 074	1 110
<b>12 Output (at market prices) (sum 1 to 11)</b>	<b>20 630</b>	<b>23 605</b>	<b>24 198</b>	<b>25 694</b>
13 Total subsidies (less taxes) on product (b)	29	28	20	21
<b>14 Gross output at basic prices (12 + 13)</b>	<b>20 659</b>	<b>23 633</b>	<b>24 218</b>	<b>25 715</b>

continued

## AGRICULTURE IN THE UNITED KINGDOM 2013

Table 4.1 continued

£ million	2010	2011	2012	2013 (provisional)
<b>Intermediate consumption</b>				
15 Seeds	640	660	675	814
16 Energy	1 216	1 371	1 420	1 483
of which: electricity and fuels for heating	357	369	386	414
motor and machinery fuels	859	1 002	1 033	1 069
17 Fertilisers	1 339	1 589	1 525	1 488
18 Plant protection products	762	809	933	856
19 Veterinary expenses	405	410	426	441
20 Animal feed	4 072	4 481	4 868	5 608
of which: compounds	2 255	2 614	2 876	3 290
straights	1 353	1 348	1 424	1 594
feed produced and used on farm or purchased from other farms	464	519	568	724
21 Total maintenance	1 367	1 442	1 467	1 490
of which: materials	846	900	903	919
buildings	520	541	564	572
22 Agricultural services	927	1 039	1 039	1 055
23 FISM	154	176	191	176
24 Other goods and services (c)	2 787	3 011	3 057	3 081
<b>25 Total intermediate consumption (sum 15 to 24)</b>	<b>13 668</b>	<b>14 987</b>	<b>15 600</b>	<b>16 492</b>
<b>26 Gross value added at market prices (12 - 25)</b>	<b>6 962</b>	<b>8 618</b>	<b>8 598</b>	<b>9 201</b>
<b>27 Gross value added at basic prices (14 - 25)</b>	<b>6 991</b>	<b>8 645</b>	<b>8 618</b>	<b>9 222</b>
28 Total consumption of Fixed Capital	3 430	3 815	4 007	3 913
of which: equipment	1 445	1 589	1 698	1 680
buildings	840	865	906	886
livestock	1 145	1 362	1 403	1 347
cattle	679	791	875	866
pigs	8	8	8	7
sheep	291	358	300	269
poultry	167	205	220	206
<b>29 Net value added at market prices (26 - 28)</b>	<b>3 532</b>	<b>4 803</b>	<b>4 590</b>	<b>5 288</b>
<b>30 Net value added at basic prices (27 - 28)</b>	<b>3 561</b>	<b>4 830</b>	<b>4 611</b>	<b>5 309</b>
31 Other taxes on production	- 111	- 121	- 121	- 125
32 Other subsidies on production (b)	3 471	3 483	3 240	3 330
<b>33 Net value added at factor cost (30 + 31 + 32)</b>	<b>6 920</b>	<b>8 192</b>	<b>7 729</b>	<b>8 514</b>
34 Compensation of employees	2 215	2 335	2 355	2 379
35 Rent	366	373	426	451
36 Interest (d)	167	165	192	220
<b>37 Total Income from Farming (33 - 34 - 35 - 36)</b>	<b>4 172</b>	<b>5 319</b>	<b>4 756</b>	<b>5 464</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.

Table 4.2 Changes in outputs and inputs

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£ million

	Current price value		Changes %		
	2012	2013	value	volume	price
<b>Output at market prices (a)</b>					
1 Output of cereals	3 205	3 374	5	2	3
of which: wheat	2 160	2 085	- 3	- 10	8
barley	926	1 125	21	28	- 5
oats	114	158	39	54	- 10
2 Output of industrial crops	1 356	1 173	- 14	- 7	- 7
of which: oilseed rape	986	741	- 25	- 17	- 10
protein crops	98	123	26	24	- 100
sugar beet	227	266	17	16	1
other industrial crops	29	18	- 37	-	- 37
3 Output of forage plants	146	217	49	46	2
4 Output of vegetables and horticultural products	2 304	2 411	5	-	4
of which: fresh vegetables	1 253	1 314	5	3	2
plants and flowers	1 051	1 097	4	- 3	7
5 Output of potatoes (including seeds)	730	940	29	7	21
6 Output of fruit	573	596	4	7	- 2
7 Output of other crop products including seeds	640	578	- 10	- 9	- 1
<b>Total crop output (sum 1 - 7)</b>	<b>8 954</b>	<b>9 288</b>	<b>4</b>	<b>1</b>	<b>3</b>
8 Output of livestock	8 645	9 168	6	1	5
primarily for meat	7 242	7 750	7	-	7
of which: cattle	2 792	2 889	3	- 3	7
pigs	1 139	1 281	12	3	9
sheep	1 020	1 036	2	3	- 1
poultry	2 075	2 325	12	3	9
gross fixed capital formation	1 404	1 418	1	2	- 1
of which: cattle	877	878	-	- 4	5
pigs	8	6	- 23	- 9	- 16
sheep	316	337	7	30	- 18
poultry	203	196	- 3	- 7	4
9 Output of livestock products	4 486	5 073	13	1	12
of which: milk	3 767	4 271	13	1	13
eggs	662	718	8	3	5
<b>Total livestock output (8 + 9)</b>	<b>13 131</b>	<b>14 241</b>	<b>8</b>	<b>1</b>	<b>7</b>
10 Other agricultural activities	1 039	1 055	2	-	2
11 Inseparable non-agricultural activities	1 074	1 110	3	2	1
<b>12 Output (at market prices) (sum 1 to 11)</b>	<b>24 198</b>	<b>25 694</b>	<b>6</b>	<b>1</b>	<b>5</b>
13 Total subsidies (less taxes) on product (b)	20	21	3	- 3	6
<b>14 Gross output at basic prices (12 + 13)</b>	<b>24 218</b>	<b>25 715</b>	<b>6</b>	<b>1</b>	<b>5</b>

continued

## AGRICULTURE IN THE UNITED KINGDOM 2013

Table 4.2 continued

£ million

	Current price value		Changes %		
	2012	2013	value	volume	price
<b>Intermediate consumption</b>					
15 Seeds	675	814	21	8	12
16 Energy	1 420	1 483	4	4	1
of which: electricity and fuels for heating	386	414	7	-	7
motor and machinery fuels	1 033	1 069	3	5	- 2
17 Fertilisers	1 525	1 488	- 2	1	- 4
18 Plant protection products	933	856	- 8	- 10	2
19 Veterinary expenses	426	441	4	1	3
20 Animal feed	4 868	5 608	15	8	7
of which: compounds	2 876	3 290	14	6	8
straights	1 424	1 594	12	4	8
feed produced and used on farm or purchased from other farms	568	724	27	27	-
21 Total maintenance	1 467	1 490	2	-	1
of which: materials	903	919	2	-	2
buildings	564	572	1	1	1
22 Agricultural services	1 042	1 050	1	- 1	2
23 FISM	191	176	- 8	-	- 8
24 Other goods and services (c)	3 057	3 081	1	- 1	2
<b>25 Total intermediate consumption (sum 15 to 24)</b>	<b>15 600</b>	<b>16 492</b>	<b>6</b>	<b>3</b>	<b>3</b>
<b>26 Gross value added at market prices (12 - 25)</b>	<b>8 598</b>	<b>9 201</b>	<b>7</b>	<b>- 2</b>	<b>9</b>
<b>27 Gross value added at basic prices (14 - 25)</b>	<b>8 618</b>	<b>9 222</b>	<b>7</b>	<b>- 2</b>	<b>9</b>
28 Total consumption of Fixed Capital	4 007	3 913	- 2	- 2	-
of which: equipment	1 698	1 680	- 1	- 2	1
buildings	906	886	- 2	- 3	1
livestock	1 403	1 347	- 4	- 1	- 3
cattle	875	866	- 1	- 3	2
pigs	8	7	- 11	- 5	- 7
sheep	300	269	- 10	11	- 19
poultry	220	206	- 6	- 9	4
29 Net value added at market prices (26 - 28)	4 590	5 288	15	- 2	17
30 Net value added at basic prices (27 - 28)	4 611	5 309	15	- 2	17
31 Other taxes on production	- 121	- 125	3	..	..
32 Other subsidies on production (b)	3 240	3 330	3	..	..
33 Net value added at factor cost (30 + 31 + 32)	7 729	8 514	10	..	..
34 Compensation of employees	2 355	2 379	1	..	..
35 Rent	426	451	6	..	..
36 Interest (d)	192	220	14	..	..
<b>37 Total Income from Farming (33 - 34 - 35 - 36)</b>	<b>4 756</b>	<b>5 464</b>	<b>15</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.

# Chapter 5: Productivity

## Summary

### Over the longer term

- Over the longer period, total factor productivity has increased by 20% since 1988. The volume of final output has remained largely unchanged while the volume of all inputs and entrepreneurial labour fell by 18%.
- Total factor productivity stayed relatively unchanged during the mid-80s to mid-90s, increased by 18% between 1997 and 2005 and has since remained mostly level with year to year variations.

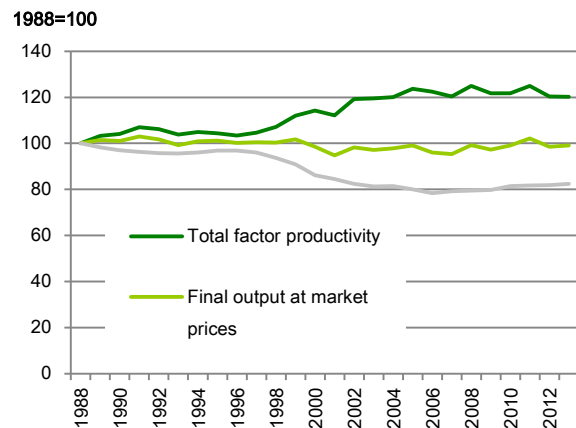
### In 2013

- Total factor productivity of the agricultural industry in the United Kingdom is estimated to have marginally fallen (0.1%) between 2012 and 2013.
- The volume of final output at market prices rose by 0.5%; however this increase was more than offset by a 0.7% rise in the volume of all inputs and entrepreneurial labour used in the production process.
- Total factor productivity fell for the second year in a row following a 3.7% fall in 2012.

## Total factor productivity

1. A key measure of agriculture's economic performance and a key component of its competitiveness is its productivity, that is, how efficiently the agricultural industry uses the resources that are available to turn inputs into outputs. It is a key measure of the economic sustainability of United Kingdom farming and food, an important driver of farm incomes and an essential foundation for the environmental and social contributions which farming and food make.
2. Measuring productivity is not straightforward and comparisons need to be interpreted carefully because of both practical problems in obtaining robust data and because productivity performance, is often shaped by factors outside farmers' control, such as climate or disease outbreaks.
3. The headline measure, total factor productivity, shows the volume of output leaving the industry per unit of all inputs including fixed capital and labour. It encompasses all businesses engaged in farming activities, including specialist contractors. Labour productivity measures the volume of net value added per unit of all labour (paid and entrepreneurial) and is a key component of total factor productivity.

Chart 5.1 Agricultural productivity



## Long term trends

4. While weather conditions or other factors such as disease outbreaks may have short term impact on agricultural productivity, it is developments in productivity over a longer period that constitute one of the main drivers of agricultural income. Productivity growth means that more value is added in production and more income is available to be distributed.
5. Over the longer period, the volume of final output has remained largely unchanged between 1988 and 2013 while the volume of all inputs and entrepreneurial labour fell by 18%, leading to total factor productivity increasing by 20%. Total factor productivity stayed relatively unchanged during the mid-80s to mid-90s, increased by 18% between 1997 and 2005 and has since remained mostly level with year to year variations.
6. During 1997 to 2005 the increase in total factor productivity was due to a sharp reduction in the volume of inputs. There was a 30% reduction in both fertiliser and energy use as well as a 26% reduction in labour whilst the volume of final outputs fell by just 1.5%.
7. Between 1997 and 2005, an additional 350,000 hectares of less productive arable land was taken out of production as part of the set-aside scheme. In 2001 foot and mouth disease hit the UK. Following the outbreak not all the farmers restocked and some stopped farming. For those that remained in livestock farming there was a notable improvement in productivity. Despite a 20% fall in the dairy herd between 1997 and 2005 there was only a 2.0% fall in total milk production. Similar improvements were seen over this period in the sheep industry with 18% fall in the breeding flock and only a 1.5% fall in the production of meat. Similar improvements were not seen in the pig industry where there was 40% reduction in both the pig herd and pig meat production. There were also financial pressures on farmers as total income from farming fell by 24% in real terms between 1997 and 2005.

## Latest figures

8. Total factor productivity of the agricultural industry in the United Kingdom is estimated to have fallen by 0.1% between 2012 and 2013. Compared to 2012 there was an increase of 0.5% in the volume of outputs but a larger increase of 0.7% in the volume inputs.
9. This is the second year in a row that total factor productivity has fallen. The effects of the poor weather in 2012 also impacted on the 2013 figures. Autumn planting for wheat and oilseed rape were down and the lack of forage crops produced in 2012 led to increased volumes of animal feed used in 2013.

**Table 5.1 Productivity**

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	2009	2010	2011	2012	2013 (provisional)
<b>Volume indices 2010 = 100</b>					
Final output at market prices (gross output less transactions within the industry)	98.1	100.0	103.0	99.4	99.9
All inputs (including fixed capital, paid and entrepreneurial labour)	98.1	100.0	100.3	100.6	101.2
Total factor productivity (a)	100.0	100.0	102.7	98.8	98.7
Labour productivity (net value added at market prices per AWU of all labour) (b)	100.8	100.0	110.3	94.9	94.6
<b>Labour volumes (c); annual work unit (thousand)</b>					
Entrepreneurial labour	192	192	195	195	192
Paid labour	100	99	101	101	100
Total labour force	292	291	296	296	292

(a) Final output per unit of all inputs (including fixed capital and labour).

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

(c) Volume of paid labour relating to agricultural work only and excluding time spent on the construction of farm buildings.

## Outputs

10. Crop output recovered slightly in 2013 following the poor harvest in 2012 a result of the difficult weather conditions. Cereals were a mixed picture, the volume of barley output rose by around a third compared to 2012 as spring plantings increased following problems in sowing autumn crops due to the wet weather conditions. In comparison the volume of output of wheat fell by 10%, with a reduction in the area harvested offsetting any improvements in yield and quality.
11. The volume of oilseed rape output fell by 17% between 2012 and 2013. Due to the poor planting conditions in the autumn of 2012 the harvested area was down by 12% and the yields were at their lowest since 2004.
12. The volume of output of potatoes rose by 6.8%, with the 2013 potato harvest back to normal levels and stocks replenished following the difficulties seen in 2012.
13. Output volumes of forage crops rose by 45% in 2013 as they bounced back strongly after the drop seen in 2012.
14. The output volume of fruit also recovered after the fall in 2012 and rose by 6.5% in 2013; however the volumes are not back to the levels seen in 2011.
15. Overall there was a 0.9% increase in livestock output with increases seen in most sectors. The exception being cattle with production lower as feed availability and higher costs affected weights.

## Inputs

16. Additional feed was required in 2013 due to limited forage stocks caused by the poor forage harvest in 2012, as well as poor early season grass/fodder growth, increased pig and poultry numbers and the need for extra rations to maintain milk production following milk price rises. This led to a 7.8% increase in the volume of animal feed in 2013.
17. Increased spring plantings and drilling resulted in an increase in seed inputs in 2013 compared to 2012 when autumn plantings were affected by the poor weather.
18. In contrast use of plant protection products fell by 10% due to the improved weather conditions and a reduced area of wheat and oilseed rape crops.

## Revisions

19. 2010 is the base year for total factor productivity, previously 2005 was the base year.
20. Potato data for 2012 have been revised upwards due to data quality checks identifying certain limitations in the methodology and source data used to estimate the volumes of potatoes. It is likely further revisions will be required as a result of more detailed review into the data and methodology.
21. Revisions have been made to the cattle GFCF values back to 2005. Revisions were made following identification of an error in the “number of entries into the breeding herd” figure which is a fundamental part of the overall calculations.
22. Fertiliser data has changed back to 2002 due to errors found when this data was reviewed.

Table 5.2 Output and input volume indices

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

email: nick.olney@defra.gsi.gov.uk

Indices 2010 = 100

	2009	2010	2011	2012	2013 (provisional)
<b>Outputs at market prices</b>					
1 Output of cereals	102.5	100.0	100.8	91.5	93.6
wheat	95.5	100.0	101.9	89.2	79.9
barley	122.5	100.0	98.9	97.7	124.6
2 Output of industrial crops (a)	98.4	100.0	118.3	105.7	98.4
oilseed rape	85.7	100.0	123.7	114.6	95.4
protein crops	117.2	100.0	76.0	55.5	68.9
sugar beet	129.6	100.0	130.3	111.7	129.1
3 Output of forage plants	106.7	100.0	96.0	77.2	112.3
4 Output of vegetables and horticultural products	96.3	100.0	97.6	97.4	97.8
fresh vegetables	96.2	100.0	98.1	93.9	96.8
plants and flowers	96.4	100.0	97.1	101.6	99.0
5 Output of potatoes (including seeds)	118.3	100.0	112.1	97.9	104.5
6 Output of fruit	99.9	100.0	101.3	93.0	99.1
7 Output of other crop products including seeds	104.7	100.0	99.3	140.6	128.0
<b>Total crop output</b>	<b>101.4</b>	<b>100.0</b>	<b>103.1</b>	<b>97.9</b>	<b>98.9</b>
8 Output of livestock	96.1	100.0	102.3	103.0	103.7
primarily for meat	96.7	100.0	102.9	102.8	103.2
cattle	95.4	100.0	102.8	101.7	98.2
pigs	95.6	100.0	107.1	108.9	112.1
sheep	108.1	100.0	105.9	101.1	104.1
poultry	100.0	100.0	100.0	100.0	100.0
gross fixed capital formation	92.8	100.0	99.1	103.9	106.2
cattle	90.7	100.0	88.5	106.4	101.6
pigs	90.1	100.0	108.8	124.5	113.7
sheep	96.1	100.0	119.5	100.7	130.9
poultry	96.6	100.0	104.1	97.8	90.9
9 Output of livestock products	96.2	100.0	101.3	98.9	100.2
milk	97.5	100.0	101.5	99.9	100.5
eggs	92.9	100.0	98.7	57.5	84.2
<b>Total livestock and livestock product output</b>	<b>96.1</b>	<b>100.0</b>	<b>101.9</b>	<b>101.6</b>	<b>102.5</b>
10 Other agricultural activities	95.5	100.0	109.8	107.7	107.2
11 Inseparable non-agricultural activities	96.8	100.0	98.2	100.5	102.9
<b>12 Total output at market prices</b>	<b>98.0</b>	<b>100.0</b>	<b>102.5</b>	<b>100.4</b>	<b>101.4</b>
13 Total subsidies (less taxes) on product	..	..	..	..	..
<b>14 Gross output at basic prices</b>	<b>98.0</b>	<b>100.0</b>	<b>102.5</b>	<b>100.4</b>	<b>101.3</b>

continued



Table 5.2 continued

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Indices 2010 = 100

	2009	2010	2011	2012	2013 (provisional)
<b>Intermediate consumption</b>					
15 Seeds	104.4	100.0	104.5	109.3	117.6
16 Energy	102.6	100.0	95.6	95.7	99.2
electricity and fuels for heating	100.5	100.0	94.5	93.9	93.7
motor and machinery fuels	103.5	100.0	96.1	96.3	101.3
17 Fertilisers	88.4	100.0	103.2	97.9	99.3
18 Pesticides	91.5	100.0	106.4	126.2	113.7
19 Veterinary expenses	102.4	100.0	99.4	101.7	102.7
20 Animal feed	94.5	100.0	92.1	93.8	101.1
compounds	93.6	100.0	97.3	102.9	109.3
straights	90.9	100.0	85.6	81.4	84.3
feed produced and used on farm or purchased from other farms	109.1	100.0	85.6	86.4	109.8
21 Total maintenance (b)	98.7	100.0	99.7	99.5	99.7
materials	97.4	100.0	101.4	100.2	100.2
buildings	101.0	100.0	97.1	98.2	98.8
22 Agricultural services	95.5	100.0	109.8	107.8	107.2
23 FISIM	94.4	100.0	95.7	96.4	96.4
24 Other goods and services (b) (c)	102.5	100.0	102.5	102.1	101.1
<b>25 Total intermediate consumption</b>	<b>97.2</b>	<b>100.0</b>	<b>99.0</b>	<b>100.1</b>	<b>102.6</b>
<b>26 Gross value added at market prices</b>	<b>99.5</b>	<b>100.0</b>	<b>109.4</b>	<b>101.2</b>	<b>99.4</b>
<b>27 Gross value added at basic prices</b>	<b>99.5</b>	<b>100.0</b>	<b>109.3</b>	<b>101.1</b>	<b>99.3</b>
<b>Consumption of Fixed Capital</b>					
equipment	97.0	100.0	106.6	110.6	108.8
buildings (b)	100.8	100.0	100.7	99.8	96.7
livestock	97.0	100.0	109.4	107.7	106.3
cattle	93.2	100.0	112.2	111.3	108.0
pigs	93.8	100.0	114.1	125.9	120.0
sheep	109.8	100.0	104.0	96.0	106.5
poultry	93.3	100.0	107.9	113.8	103.0
<b>28 Total consumption of Fixed Capital</b>	<b>98.0</b>	<b>100.0</b>	<b>106.2</b>	<b>107.0</b>	<b>105.0</b>
<b>29 Net value added at market prices</b>	<b>101.2</b>	<b>100.0</b>	<b>112.2</b>	<b>96.7</b>	<b>95.0</b>
<b>30 Net value added at basic prices</b>	<b>101.1</b>	<b>100.0</b>	<b>112.1</b>	<b>96.6</b>	<b>94.9</b>

(a) Includes straw and minor crops.

(b) Landlords' expenses are included within total maintenance, other goods and services and total consumption of fixed capital of buildings.

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

## Chapter 6: Prices

### Summary

In 2013 compared with 2012:

- The average producer price of agricultural products rose by 5.8%.
- The average price of crop products rose is 3.5%, with potato prices rising 28%.
- The average price of livestock and livestock products rising 7.5%, with pig prices rising 9.7 %; milk prices having risen 13% and eggs prices rising 5.4%.
- The average price of agricultural inputs rose by 2.8%.
- The average price of livestock feeding stuffs rose 8.5%
- The average price of fertiliser fell by 9.6%

### 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 2013

3. The annual index for outputs has risen 5.8% compared to 2012. The annual index for inputs rose by 2.8% compared to 2012
4. The annual animal product index was 12% higher than in 2012 due to the increased prices for milk, eggs and wool clip
5. Chart 6.1 shows how cereal prices changed over the year. Prices were high at the start of the year when supplies were low but fell with the advent of the 2013 global harvest when increased production was seen.
6. Chart 6.2 shows a similar picture for animal feeding stuffs price in 2013. Animal feeding stuffs increased by 8.5% in 2013. This was due to high prices seen at the start of 2013 when supplies were short due to the poor harvest in 2012.
7. The annual index for fertiliser was 10% lower than in 2012.

Chart 6.1 Comparison monthly cereal price index 2012 and 2013 (2010=100)

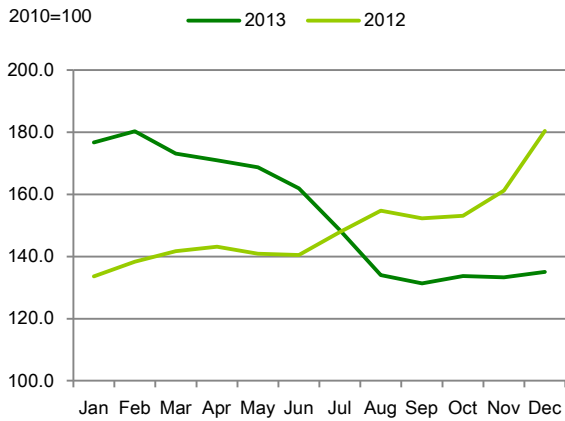
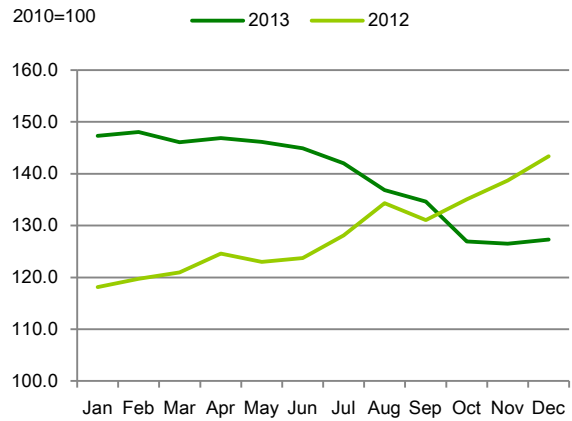


Chart 6.2 Comparison monthly animal feeding stuffs price index 2012 and 2013 (2010=100)



8. The annual potato price index rose by 28% in 2013. This was due to the weather affected harvested in 2012 which led to high prices as supplies were low. Following a better harvest in 2013 prices returned to normal. See Chart 6.3.
9. Chart 6.4 shows how the price of milk fluctuated in 2013. Monthly milk prices throughout the year remained firm, reflecting the competition for supplies between major milk purchasers.

Chart 6.3 Comparison of monthly potato price index 2012 and 2013 (2010=100)

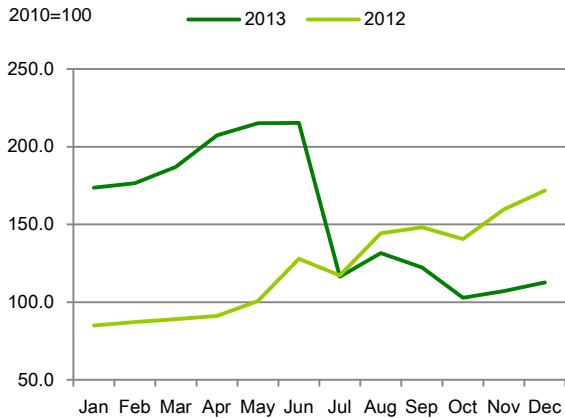


Chart 6.4 Comparison of monthly milk price index 2012 and 2013 (2010=100)

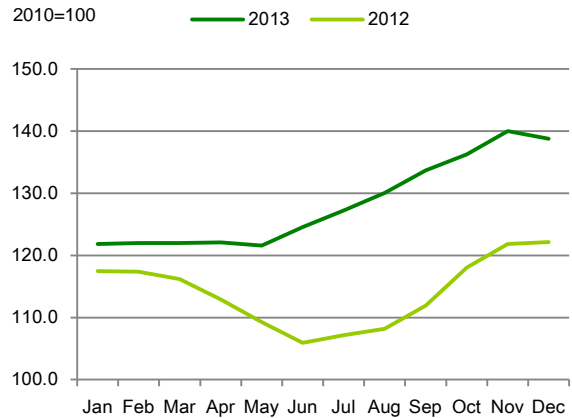


Table 6.1 Price indices for outputs and inputs

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2010=100

	2009	2010	2011	2012	2013
<b>All Outputs</b>	95.0	100.0	113.1	118.7	125.5
<b>Crop products</b>	89.1	100.0	118.1	124.2	128.5
Cereals	89.6	100.0	144.8	149.7	153.1
Wheat	90.5	100.0	141.7	144.3	151.9
Barley	88.0	100.0	150.3	160.9	154.4
Oats	82.7	100.0	177.8	190.1	173.7
Potatoes	86.6	100.0	107.1	121.9	155.7
Industrial Crops	93.5	100.0	131.2	129.3	122.0
Oilseed Rape	91.5	100.0	143.3	139.1	127.0
Sugar Beet	99.0	100.0	96.5	101.7	108.0
Forage plants	84.1	100.0	112.6	106.2	114.8
Fresh Vegetables	87.8	100.0	92.7	108.6	110.5
Fresh Fruit	95.6	100.0	98.7	103.7	104.8
Flowers and plants	86.6	100.0	101.4	110.3	109.7
Other crop products	103.7	100.0	93.3	98.7	98.7
<b>Animals and animal products</b>	99.3	100.0	109.5	114.7	123.3
Animals (for slaughter & export)	100.8	100.0	109.6	114.6	120.0
Cattle and calves	104.9	100.0	116.4	129.3	137.7
Pigs	103.1	100.0	102.1	106.3	116.7
Sheep and lambs	91.1	100.0	112.3	105.1	102.0
All Poultry	99.5	100.0	102.9	105.0	109.3
Animal products	96.9	100.0	109.4	114.8	128.5
Milk	96.1	100.0	111.0	113.8	128.2
Eggs	105.7	100.0	99.9	124.0	130.8
<b>All Inputs</b>	95.9	100.0	112.2	113.8	117.0
<b>All goods and services currently consumed in agriculture</b>	95.7	100.0	113.9	116.1	119.7
Seeds	105.0	100.0	105.8	98.5	110.2
Energy and lubricants	88.3	100.0	118.2	122.4	123.4
Fertilisers and soil improvers	102.3	100.0	130.4	125.2	113.1
Plant protection products	102.8	100.0	99.8	97.0	98.8
Veterinary services	88.0	100.0	102.0	103.5	106.1
Animal feeding stuffs	95.4	100.0	120.7	128.5	139.4
Straight feeding stuffs	90.1	100.0	122.9	135.7	147.6
Compound feeding stuffs	98.9	100.0	119.2	123.7	134.0
Maintenance of Materials	95.8	100.0	104.9	106.5	108.3
Maintenance of Buildings	93.8	100.0	107.4	109.8	110.1
Other goods and services	93.3	100.0	106.0	107.2	109.6
<b>Goods and services contributing to investment</b>	96.9	100.0	103.6	101.7	102.9
Materials	97.3	100.0	103.0	99.1	100.4
Buildings	95.2	100.0	105.8	107.4	107.7
Other (Engineering and soil improvement operations)	97.9	100.0	102.5	104.5	107.2

## Farmers' share of food items

10. In 2013 the farmgate share of the retail price of a basket of items covering staples of agricultural production was 36%, down 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.
11. 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 325 units, which means it accounts for 33 % of the basket.
12. 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.
13. In 2013, the farmgate share fell notably for onions and cabbages, although these have been volatile in recent years possibly reflecting weather affected yields. It also fell for all meat products possibly reflecting increased feed costs due to poor weather conditions.

**Table 6.2 Farmers' share of the value of a basket of food items (a)**

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		Farmgate share in 1988 %	Farmgate share in 2000 %	Farmgate share in 2013 %	% change in share 1988/2013	Weight in 2013 basket
<b>Farmers' share of basket</b>		47	35	36	1	
<b>Farm gate product</b>	<b>Retail product</b>					
apples	dessert apples per kg	55	40	44	12	5
beef	untrimmed beef (b) per kg	67	44	52	17	181
carrots	carrots per kg	30	38	47	24	10
cabbages	cabbage, hearts, per kg	38	39	25	-36	5
chicken	oven ready roasting chicken, fresh or chilled per kg	47	37	35	-5	137
eggs	Free range eggs per dozen (c)	28	29	29	0	55
lamb	untrimmed lamb (b) per kg	65	43	49	13	72
onions	onions per kg	25	19	14	-23	8
pork	untrimmed pork (b) per kg	57	47	36	-23	96
potatoes	old loose white potatoes per kg	24	27	25	-6	56
tomatoes	tomatoes per kg	48	41	39	-6	8
wheat	white loaf sliced, 800g	16	10	11	15	41
milk	whole milk (d)	38	28	31	8	325

(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).

## Revisions

The Agricultural Price Index was rebased with 2010 as the base year. New weights have been calculated for each of the items based on their 2010 usage. Slight changes to the data series will be seen when compared to 2005 base year price series due to the change in weights. The most notable changes between the price series for the two base years are found in Industrial crops, Vegetables and horticultural products and Fruit price series. These changes are due to increases or decreases in the weights associated with a particular crop. For example, the weight attributed to oilseed rape has increased significantly since 2005, due to increased production in that time. Changes to the monthly distribution of weights for crops will also affect the overall price series.

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Revisions were made to data for motor fuels, other fertilisers, fungicides, insecticides, other plant protection products, veterinary service, maintenance of materials, plant and machinery for cultivation, farm machinery and installations, tractors, other vehicles and engineering and soil improvement operations. Changes will be noticed in the data back to 2012.

Prices for wool clip have been revised back to 2011 as new prices are available.

# Chapter 7: Crops

## Summary

In 2013:

- The 2012/13 season featured a late wet 2012 harvest which delayed autumn planting of arable crops. The wet weather continued through the winter and was followed by a cold spring which delayed crop development and also affected spring drilling. Temperatures rose from late April and it was relatively dry in early summer, although cooler than usual. In July there was a period of fine dry weather and the conditions over the key period for the arable harvest were favourable with particularly rapid progress made in late August/early September when there was a long period of dry settled weather. In general the conditions generally reduced pest and disease pressure although weed control was more difficult.
- The UK wheat harvest was affected by poor planting conditions in 2012 and a cold spring in 2013. This resulted in the second successive below average production, mainly due to a reduced area. Although the quality was better than 2012, the reduced production total meant that the UK was again a net importer of wheat. Barley production was up by 28% due to an increased area and yield. Oats production increased to 964 thousand tonnes, the highest figure for over 30 years due to a large increase in area, especially spring plantings. The value of production of wheat was down 1.4% on the previous year to £2.1 billion whereas the value of production for barley and oats increased by 21% to £1.1 billion and by 39% to £158 million respectively.
- The autumn drilling conditions particularly impacted oilseed rape plantings and establishment with a higher proportion of crops requiring re-drilling in the spring. The value of production of the oilseed rape crop fell 25% to £741 million, contributed by lower production, down 17%, and reduced prices for the 2013 crop.
- There was strong recovery in the production of the sugar beet crop after the poor yields achieved in 2012, with production up 16% and the value of production up 17% respectively to £266 million.
- Similarly production of potatoes in 2013 was closer to more typical levels after the poor 2012 harvest when yields were severely affected by the poor weather. The overall value of sales for 2013 was just slightly lower than in 2012 as higher prices compensated reduced supply. However the overall value of production for all potatoes increased more significantly, due mainly to the increased value of stocks where the tonnage of stocks increased to more typical levels after the low of 2012.
- The value of production of all fresh vegetables was up 5.0% to £1.3 billion. Production as a percentage of total new supply for use in the United Kingdom was 55%, marginally lower than 2012.
- The value of production of all fresh fruit was up 4.0% to £596 million. Production as a percentage of total new supply for use in the United Kingdom remained at 10%, unchanged from 2012.
- The value of production of plants and flowers was up 4.4% to £1.1 billion.

## Cereals (tables 7.1 to 7.4)

1. The area of wheat decreased by 19% whereas barley increased by 21% and oats increased by 45%. Overall wheat yields were 11% higher than last year but below the five year average. There was a large variation in yields, with those on well drained soils performing well but factors such as soil compaction, poor soil structure, late drilling and a higher proportion of spring wheat having an adverse effect. Barley yields were better than the five year average which may be due to planting on heavier soils normally used for wheat. Difficult weather conditions led to many farmers resorting to planting more spring sown crops to replace winter sown varieties this was due to a combination of the delayed

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2012 harvest and a wet winter. There were concerns that yields would be adversely affected by the wet winter and a cold spring but better conditions in July enabled most crops to recover. For wheat the harvest started in early August with rapid progress from late August through to early September due to ideal weather conditions. The final crops were harvested in late September with a slower rate of clearance due to reduced daylight hours and more unsettled weather. The barley harvest was more protracted due to the wide planting window between February and late May which led to crop ripening over a period of weeks.

2. The overall quality of the crops showed a recovery from 2012 with higher specific weights, for wheat the specific weight was 77.0kg/hl compared to 69.9kg/hl in 2012 and similar to 2009 and 2010. The proportion of wheat samples meeting the full specifications for bread wheat in 2013 was 38% compared to only 3% in 2012. Due to the poor quality of the 2012 crop millers were using a higher than normal proportion of imported wheat for most of 2013 and it took until October / November for the switch back to more usual proportions of domestic milling wheat to occur. Demand for animal feed was especially strong in the first half of 2013 but the availability of plentiful supplies of competitively priced barley, maize and oats meant that wheat usage was less than 2012. Demand for malting barley from the malting and distilling sector remained strong throughout 2013.
3. Cereal prices were generally below 2012 values, underpinned by increased global cereal production. The exception was milling wheat where prices were higher as supplies were tight. The feed sector was characterised by the greater use of competitively priced maize and the large barley and oats crop also put pressure on prices. The price of feed oats in particular fell sharply towards the end of the year.
4. The value of production of wheat was £2.1 billion, 3.5% lower than in 2012, due mainly to a fall in harvested production of 10%. The value of production of barley increased by 21% to £1.1 billion. The value of production of oats increased by 39% to £158 million. The increased value of production of barley and oats was due to increases in the volume of harvested production.

### Straw

5. Total cereal straw production for 2013 is estimated to be 8.1 million tonnes, with an increase in the proportion of barley straw and decrease in proportion of wheat straw compared to 2012. Total cereal straw production in 2013 is down by 9.5% compared to the high production in 2012, but is higher than the five year average and the quality of the cereal straw was good.

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

6. The 2013 area of oilseed rape was down 5.4% on the high of 2012 to 715 thousand hectares. The late 2012 harvest and wet conditions delayed autumn drilling, particularly affecting oilseed rape where crops were drilled late or not at all. Cold, wet conditions through the autumn resulted in poor establishment, exacerbated by high slug activity, and over winter pigeon grazing meant that many crops were abandoned and re-drilled in the spring. The crop yield was also relatively low at 3.0 tonnes per hectare compared to a more typical 3.4 tonnes per hectare. The higher proportion of spring oilseed rape, with typically lower yields, difficult establishment and delayed early development accounted for the lower yield. Harvest progress for oilseed rape was more protracted than for cereals despite improved summer weather, due to a wide range of crop maturity as a result of late drilling and an extended flowering period. Consequently production was just 2.1 million tonnes, 17% lower than production in 2012.
7. Prices remained relatively strong, averaging £348 per tonnes but 10% lower than 2012 and 2011. Prices in the first half of 2013 for the 2012 crop were strong due to tight UK and EU supplies but came under pressure in the second half of the year with improved global prospects. The overall value of production in 2013 was £741 million, 25% lower than in 2012.
8. The area of linseed increased by 24% in 2013 to 35 thousand hectares. It tends to be grown on contract but the difficult autumn drilling conditions may have influenced planting decisions of this spring sown crop also. Yields were around average after the very low yield achieved in 2012, so resulted in production being up 49% to 62 thousand tonnes. The quality of the linseed was good and the value of production was up 49% to £24 million.



### Sugar beet (table 7.7)

9. With good growing conditions through a mild winter, the crop yield in 2013 recovered to 72 tonnes per hectare compared 61 tonnes per hectare achieved in 2012 when the lower levels of sunshine and high rainfall impacted on the yield. The quality of the sugar beet has been good and sugar content high. The crop area has remained stable for a number of years since the restructuring of the industry. Consequently production was up 16% in 2013. Prices were marginally higher in 2013, so the value of production increased by 17% to £266 million. 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)

10. The area of field peas increased by 21% compared to 2012 but was still 52% lower than the 2009 crop area. The increase in area combined with a more typical yield meant that production for animal feed stood at 48 thousand tonnes, an increase of 86% on 2012. The value of production for field peas increased 74% to £10 million. The 2013 harvest was not delayed and the majority of crops were harvested before lodging and rain damage occurred. The quality of field peas was variable with some bleaching of later harvested crops. There were few reports of staining and most crops had good colour. The area of field beans was 23% higher than last year at 118 thousand hectares. Despite a small reduction in yield, production increased by 19% on 2012 to 378 thousand tonnes and the value of production of field beans increased 22% to £90 million due to higher prices.

### Fresh vegetables (table 7.9)

11. The overall value of production of all vegetables has shown an increase of 5.0% on 2012 to £1.3 billion. This was driven by increases for cabbage, up by £12 million and in particular onions, up by £37 million. Several markets had limited supply, driving up prices for onions early in 2013.
12. Calabrese value was reduced by £32m, bringing it more in line with previous years, as in 2012 wet weather affected supply, pushing up prices at key times. Tomatoes have also had a notable increase in value due to a combination of increased area and yields and high prices early in the year. Production as a percentage of total new supply for use in the United Kingdom for all fresh vegetables was 55% which was 1.8% down on 2012. This change was largely driven by increased imports.

### Plants and flowers (table 7.10)

13. The overall value of production in the ornamental sector was up 4.4% to £1.1 billion in 2013 despite an underlying pattern of slow and patchy trading conditions across the hardy nursery stock market. Growers selling into the retail sector were affected by the cold, late spring; the lack of footfall through garden centres during this critical trading period resulted in reduced sales and unsold stock.
14. After the cold spring, the cut flower industry benefitted from high demand, and good crop quality with low wastage. The area of narcissi planted increased slightly in 2013, with one of the best dry bulb yields for several years, with improved bulb quality.
15. The value of flowers/bulbs and protected stock saw increases of 19.2% and 6.4% respectively, while the value of hardy ornamental nursery stock (including Christmas trees) increased by 2.7%.

### Potatoes (table 7.11)

16. In 2012 the production of main crop potatoes was down 26% to just 4.7 million tonnes and the lowest production in the last 30 years where the weather conditions badly impacted on the crop. Stocks at the end of December 2012 were consequently much lower than usual. Although production was much reduced in 2012, this reduced the level of oversupply and the tonnage sold for human consumption was not reduced to the same extent as the overall production. Production recovered in 2013 to 5.7 million tonnes, up 22% but not quite reaching the more typical 6.2 million tonnes seen between 2008 and 2011.
17. However there still resulted significant price increases for the 2012 crop which reached £290 per tonne for main crop potatoes sold in May 2013. However prices for main crop potatoes from the 2013 harvest dropped significantly and were £149 per tonne in December 2013. Annual average prices for

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all potatoes were around £172 per tonne in 2012 but in 2013 increased by 20% to £206 per tonne. Imports of potatoes in both 2012 and 2013 were also significantly higher due to reduced UK supplies.

18. The overall value of sales for 2013 was marginally lower than in 2012 at £796 million as higher prices compensated reduced supply. However the overall value of production for all potatoes increased more significantly, by around 29%, due to the increased value of stocks where the tonnage of stocks increased to more typical levels after the low of 2012. It should be noted that some limitations to the methodology for potatoes have been identified and require further investigation. Further refinement to the methodology and source data may result in some revision of these valuation figures so they should be treated with some caution.

### Fresh fruit (table 7.12)

19. The value of fruit production was up 4.0% between 2012 and 2013, from £573 million to £596 million. The volume of fruit produced in 2013 was up 6.1% to 388 thousand tonnes, with plums contributing much of the increase along with blackcurrants, which recovered from reduced production in 2012.

The value of dessert apples increased by £3 million thanks to better yields than 2012. The value of soft fruit production suffered with timings of crops and reduced harvesting times, resulting in gluts and heavy discounting. Strawberries and raspberries were down £6 million and £7 million respectively. Production as a percentage of total new supply for use in the United Kingdom remained at 10%, unchanged from 2012.

### Revisions

20. Small revisions have been made to the stocks figures for barley back to 2002 as a result of revised data and corrected methodology.
21. There have been revisions to the potato data for 2012. Some data inconsistency and more detailed investigations has identified some limitations in the methodology and source data used for estimating the tonnage of potatoes sold for human consumption, so some adjustments have been made. A level of 'oversupply' that generally exists for potatoes, means that the tonnage of crops sold for human consumption was not impacted to such an extent as the overall 2012 production. However it is likely that further refinement will be required as a result of an ongoing more detailed review into the data and methodology.
22. There has been some revision to the unit price and value of production figures for sugar beet for 2001/2 to 2005/6 to take account of the grower share of the total £13.9 million EU levy reimbursement payment secured by British Sugar over this time period.
23. Minor revisions have been made to the data for vegetables back to 2004 as a result of updated figures being supplied for Scotland and Northern Ireland. Minor revisions to the data for fruit back to 2006 are due to updated methodology for some items.

Table 7.1 Total cereals

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Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	3 075	3 013	3 076	3 142	3 029
Volume of harvested production	21 618	20 946	21 484	19 515	20 083
<b>Value of production (£ million) (a)</b>	<b>2 338</b>	<b>2 292</b>	<b>3 218</b>	<b>3 205</b>	<b>3 374</b>
<b>Supply and use</b>					
Production	21 618	20 946	21 484	19 515	20 083
Imports from: the EU	1 677	1 535	1 361	2 520	3 942
the rest of the world	814	678	707	844	1 143
Exports to: the EU	3 274	3 945	2 908	1 827	1 030
the rest of the world	176	518	238	317	420
Total new supply	20 660	18 696	20 406	20 735	23 719
Change in farm and other stocks	84	- 2 342	36	- 794	1 648
Total domestic uses	20 576	21 038	20 370	21 529	22 071
<b>Production as % of total new supply for use in the UK</b>	<b>105</b>	<b>112</b>	<b>105</b>	<b>94</b>	<b>85</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

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	1 775	1 939	1 969	1 992	1 615
Yield (tonnes per hectare)	7.9	7.7	7.8	6.7	7.4
Volume of harvested production	14 076	14 878	15 257	13 261	11 921
<b>Value of production (£ million) (a)</b>	1 562	1 668	2 305	2 160	2 085
of which : sales	1 546	1 716	2 202	2 228	1 922
on farm use	108	80	71	139	188
change in stocks	- 92	- 128	32	- 207	- 25
<b>Prices (£ per tonne)</b>					
Milling wheat	122	123	174	169	195
Feed wheat	108	111	148	163	172
<b>Supply and use</b>					
Production	14 076	14 878	15 257	13 261	11 921
Imports from : the EU	780	642	493	1 358	2 490
the rest of the world	610	469	409	427	476
Exports to : the EU	2 378	2 908	2 125	1 282	413
the rest of the world	156	427	162	221	35
Total new supply	12 932	12 654	13 872	13 543	14 439
Change in farm and other stocks	- 810	- 1 231	359	- 843	415
<b>Total domestic uses</b>	13 742	13 885	13 513	14 386	14 024
of which : flour milling	6 067	6 458	6 123	6 306	6 486
animal feed	6 557	6 389	6 268	6 801	6 628
seed	290	295	299	304	295
other uses and waste	828	742	823	975	616
<b>Production as % of total new supply for use in the UK</b>	109	118	110	98	83
% of home grown wheat in milling grist	80	86	89	84	68

(a) Excludes farm saved seed

Table 7.3 Barley

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

email: allan.howsam@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	1 143	921	970	1 002	1 213
Yield (tonnes per hectare)	5.8	5.7	5.7	5.5	5.9
Volume of harvested production	6 668	5 252	5 494	5 522	7 092
<b>Value of production (£ million) (a)</b>	701	557	815	926	1 125
of which : sales	440	459	561	645	674
on farm use	191	206	272	284	319
change in stocks	69	- 108	- 19	- 3	132
<b>Prices (£ per tonne)</b>					
Malting barley	125	108	162	187	175
Feed barley	88	98	145	162	147
<b>Supply and use</b>					
Production	6 668	5 252	5 494	5 522	7 092
Imports from: the EU	120	115	129	162	193
the rest of the world	10	-	-	-	2
Exports to : the EU	850	940	724	494	464
the rest of the world	19	91	76	96	385
Total new supply	5 929	4 336	4 823	5 094	6 438
Change in farm and other stocks	838	- 1 037	- 289	34	1 059
<b>Total domestic uses</b>	5 091	5 373	5 112	5 059	5 371
of which : brewing/distilling	1 628	1 656	1 788	1 837	1 868
animal feed	3 246	3 533	3 135	3 001	3 314
seed	171	145	150	182	150
other uses and waste	45	38	39	40	47
<b>Production as % of total new supply for use in the UK</b>	112	121	114	108	110

(a) Excludes farm saved seed

## AGRICULTURE IN THE UNITED KINGDOM 2013

### Table 7.4 Oats

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

email: allan.howsam@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	129	124	109	122	177
Yield (tonnes per hectare)	5.8	5.5	5.6	5.1	5.5
Volume of harvested production	744	685	613	627	964
<b>Value of production (£ million) (a)</b>	72	63	93	114	158
of which : sales	51	53	76	78	85
on farm use	20	17	26	31	30
change in stocks	1	- 8	- 8	5	42
<b>Prices (£ per tonne)</b>					
Milling oats	97	93	149	180	172
Feed oats	97	92	157	189	145
<b>Supply and use</b>					
Production	744	685	613	627	964
Imports from: the EU	19	19	34	64	66
the rest of the world	-	-	-	-	-
Exports to: the EU	32	73	23	11	17
the rest of the world	1	-	-	-	-
Total new supply	731	631	624	680	1 013
Change in farm and other stocks	55	- 74	- 33	16	174
<b>Total domestic uses</b>	676	705	657	664	839
of which : milling	419	445	472	474	507
animal feed	233	240	167	163	308
seed	18	17	15	25	18
other uses and waste	5	3	3	3	5
<b>Production as % of total new supply for use in the UK</b>	102	109	98	92	95

(a) Excludes farm saved seed

Table 7.5 Oilseed rape

Enquiries: Lindsay Holmes on +44 (0) 1904 455563

email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	570	642	705	756	715
Yield (tonnes per hectare)	3.4	3.5	3.9	3.4	3.0
Volume of harvested production	1 912	2 230	2 758	2 557	2 128
<b>Value of production (£ million)</b>	476	674	1 110	986	741
of which : sales	487	640	1 025	1 017	801
change in stocks	- 12	34	85	- 31	- 60
<b>Prices (average weighted by volume of sales (£ per tonne))</b>	248.7	302.3	402.3	385.7	348.2
<b>Supply and use</b>					
Production	1 912	2 230	2 758	2 557	2 128
Imports from: the EU	401	159	64	18	148
the rest of the world	21	9	0	0	29
Exports to: the EU	50	262	659	1 057	429
the rest of the world	3	2	-	-	2
Total new supply	2 281	2 134	2 164	1 518	1 875
<b>Production as % of total new supply for use in the UK</b>	84	105	127	168	114

Table 7.6 Linseed

Enquiries: Lindsay Holmes on +44 (0) 1904 455563

email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	28	44	36	28	35
Yield (tonnes per hectare)	2.0	1.6	2.0	1.5	1.8
Volume of harvested production	54	72	71	42	62
<b>Value of production (£ million)</b>	17	23	27	16	24
of which : sales	16	22	27	17	23
change in stocks	1	1	-	- 1	1
<b>Supply and use</b>					
Production	54	72	71	42	62
Imports from: the EU	6	10	8	12	11
the rest of the world	2	2	2	2	2
Exports to: the EU	36	47	49	52	37
the rest of the world	-	-	-	-	-
Total new supply	26	37	31	4	38
<b>Production as % of total new supply for use in the UK</b>	212	192	226	1145	163

Table 7.7 Sugar beet

Enquiries: Lindsay Holmes on +44 (0) 1904 455563

email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar years				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	114	118	113	120	117
Yield (tonnes per hectare)	74.0	55.1	75.4	60.7	72.1
Volume of harvested production	8 457	6 527	8 504	7 291	8 430
Value of production (£ million)	246	197	251	227	266
Sugar content (%)	18.0	16.9	18.4	17.0	17.3
<b>Prices (average market price (£ per adjusted tonne) (a))</b>	<b>29.1</b>	<b>30.1</b>	<b>29.6</b>	<b>31.2</b>	<b>31.6</b>
<b>Sugar (refined basis)</b>					
Production (b)	1 280	995	1315	1144	1320
Imports from: the EU	246	404	396	406	422
the rest of the world	1 091	926	832	648	691
Exports to: the EU	387	225	154	163	135
the rest of the world	149	285	154	93	98
Total new supply	2 081	1 814	2 235	1 943	2 200
<b>Production as % of total new supply for use in the UK</b>	<b>62</b>	<b>55</b>	<b>59</b>	<b>59</b>	<b>60</b>

(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

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Peas for harvesting dry (a)</b>					
Area (thousand hectares)	27	23	12	11	13
Yield (tonnes per hectare)	3.6	3.5	4.1	2.4	3.7
Volume of harvested production	98	81	49	26	48
<b>Value of production (£ million)</b>	<b>12</b>	<b>12</b>	<b>8</b>	<b>6</b>	<b>10</b>
<b>Field beans</b>					
Area (thousand hectares)	186	168	125	96	118
Yield (tonnes per hectare)	3.7	3.5	3.4	3.3	3.2
Volume of harvested production	688	580	419	317	378
<b>Value of production (£ million)</b>	<b>83</b>	<b>92</b>	<b>72</b>	<b>74</b>	<b>90</b>

(a) The figures presented here cover only that part of the crop which is harvested dry (about 80 to 90 per cent of total production) and used for stockfeed. The remainder is included in UK fresh vegetables, Table 7.9



Table 7.9 Fresh vegetables

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

email: julie.dobson@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)		Calendar year				
		2009	2010	2011	2012	2013
		(provisional)				
<b>Production</b>						
Area (thousand hectares):		133	134	135	128	131
of which:	grown in the open (a) (b)	132	134	134	127	130
	protected (c)	1	1	1	1	1
<b>Value of production (£ million):</b>		<b>1 093</b>	<b>1 272</b>	<b>1 228</b>	<b>1 260</b>	<b>1 323</b>
of which:	grown in the open	814	941	920	949	1 004
	protected	278	331	309	311	320
Selected crops:	cabbages	64	71	79	54	66
	carrots	112	115	114	126	132
	cauliflowers	44	48	45	53	44
	calabrese	59	60	56	87	55
	lettuces	124	147	143	157	156
	mushrooms	104	113	119	114	115
	onions	50	109	85	60	97
	tomatoes	90	116	95	97	105
<b>Prices (farm gate price (£ per tonne))</b>						
Selected crops:	cauliflowers	410	435	444	591	503
	tomatoes	1 035	1 288	1 052	1 165	1 119
<b>Supply and use (d)</b>						
Total production		2 661	2 784	2 638	2 510	2 608
<b>Imports from:</b>	the EU	1 578	1 620	1 718	1 805	1 971
	the rest of the world	245	252	258	244	265
<b>Exports to:</b>	the EU	72	89	84	81	76
	the rest of the world	6	6	5	4	5
Total new supply		4 406	4 560	4 525	4 473	4 764
<b>Production as % of total new supply for use in the UK</b>		60	61	58	56	55

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

email: joanne.gardiner@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares) (a):	18	18	18	19	20
Value of production (£ million)	879	996	1 048	1 051	1 097
of which: flowers and bulbs in the open (b)	35	33	38	37	44
hardy plants and flowers nursery stock	563	648	684	699	718
protected crops	280	314	326	315	335
<b>Trade (£ million)</b>					
Imports					
Bulbs	58	63	95	90	85
Cut flowers	564	605	628	653	663
Foliage	35	41	35	38	36
Indoor plants	110	121	112	107	127
Outdoor plants	48	43	59	55	58
Trees	66	63	68	63	62
Other	39	41	42	47	46
<b>Total Imports (exc. Channel Islands)</b>	<b>921</b>	<b>977</b>	<b>1 039</b>	<b>1 053</b>	<b>1 079</b>
Exports					
Bulbs	9	10	13	11	9
Cut flowers	19	16	22	14	26
Foliage	1	1	1	1	1
Indoor plants	6	6	6	5	4
Outdoor plants	3	3	4	4	5
Trees	2	2	3	3	4
Other	10	11	10	10	12
<b>Total Exports</b>	<b>51</b>	<b>49</b>	<b>59</b>	<b>47</b>	<b>61</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: Lindsay Holmes on +44 (0) 1904 455563

email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)	Calendar year				
	2009	2010	2011	2012	2013 (provisional)
<b>Production</b>					
Area (thousand hectares)	144	138	146	149	139
of which : early	15	11	13	12	12
maincrop	129	127	133	136	127
Yield (tonnes per hectare)	44	44	43	31	41
of which : early	15	23	23	15	16
maincrop	48	46	45	33	43
Volume of harvested production	6 396	6 056	6 310	4 658	5 685
of which : early	236	251	294	192	191
maincrop	6 160	5 805	6 016	4 466	5 494
End of year stocks	3 022	2 635	2 746	2 216	2 787
<b>Value of production (£ million)</b>	681	622	717	730	940
of which : sales	612	659	680	800	796
change in stocks	53	- 56	16	- 93	118
<b>Prices (average price paid to registered producers (£ per tonne))</b>					
early potatoes	149	226	160	299	272
maincrop potatoes	130	138	146	165	201
all potatoes	132	144	148	172	206
<b>Supply and use</b>					
Total production	6 396	6 056	6 310	4 658	5 685
<b>Imports</b>	1 606	1 568	1 672	1 861	2 347
of which : early potatoes	121	105	121	79	119
maincrop potatoes	145	128	119	359	479
processed (raw equivalent)	1 324	1 319	1 404	1 396	1 710
seed	16	16	28	27	39
<b>Exports</b>	424	509	555	479	480
of which : raw	166	239	265	169	170
processed (raw equivalent)	168	172	168	191	191
seed	91	97	123	119	118
Total new supply	7 609	7 115	7 427	6 041	7 552
Change in stocks	404	- 387	111	- 530	572
<b>Production as % of total new supply for use in the UK</b>	84	85	85	77	75

Table 7.12 Fresh fruit

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

email: julie.dobson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified)		Calendar year				
		2009	2010	2011	2012	2013 (provisional)
<b>Production</b>						
Area (thousand hectares):		28	28	29	29	29
	of which: orchard fruit (a)	18	19	19	19	19
	soft fruit (b)	10	10	10	10	10
End year stocks (c)		70	66	64	58	78
<b>Value of production (£ million) (d):</b>		570	585	604	573	596
	of which: orchard fruit	147	144	153	151	179
	soft fruit	375	392	399	364	351
	of which: sales	567	586	606	577	580
	change in stocks (c)	4	- 2	- 1	- 4	16
Selected crops:	dessert apples	63	64	68	70	73
	culinary apples	46	40	44	46	47
	pears	10	15	16	15	13
	raspberries	111	103	111	97	90
	strawberries	221	239	245	223	218
<b>Prices (farm gate price (£ per tonne))</b>						
Selected crops:	dessert apples	516	509	533	604	551
	culinary apples	428	362	390	530	557
	pears	512	488	483	580	578
	raspberries	7 072	6 461	7 161	6 198	6 494
	strawberries	2 245	2 496	2 407	2 356	2 308
<b>Supply and use</b>						
Total production		403	419	423	366	388
Imports from:	the EU	1 056	1 156	1 283	1 332	1 368
	the rest of the world	2 136	2 089	2 080	2 091	2 193
Exports to:	the EU	153	141	148	108	145
	the rest of the world	1	2	2	2	2
Total new supply		3 440	3 520	3 637	3 679	3 803
Change in stocks		6	- 4	- 2	- 5	20
Total domestic uses		3 434	3 524	3 639	3 684	3 783
<b>Production as % of total new supply for use in the UK</b>		12	12	12	10	10

(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 2013, compared with 2012, the value of production for:

- Beef and veal rose by 3.5% to £2.9 billion (excluding subsidies).
  - Pig meat rose by 12% to £1.3 billion.
  - Mutton and lamb rose by 1.5% to £1.0 billion.
  - Poultry meat rose by 12% to £2.3 billion.
  - Milk and milk products rose by 13% to £4.3 billion.
  - Eggs rose by 8.5% to £718 million.
1. There were increased values of production in all livestock sectors in 2013. High volumes of production (with the exception of cattle), combined with high prices through the year, have led to these increases in value.

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

2. In 2013 prime cattle slaughterings were the lowest since Defra records began and with poor weather and low feed availability leading to lower carcass weights, home fed production fell by 4.0% to 842 thousand tonnes. The value of production, however, increased as tight supplies encouraged higher prices.

### Pigs and pig meat (table 8.2)

3. In 2013 pig meat production rose by 1.3%, with continued productivity increases and higher clean pig carcass weights. Pig prices however, reached an unprecedented high during 2013, leading to an increase in the value of production of 12%. In contrast, costs have fallen substantially; so many producers are back in the black for the first time since mid-2010.

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

4. Despite slightly lower carcass weights, mutton and lamb home fed production rose in 2013, as better weather conditions resulted in a more normal marketing pattern, following the disruptions in 2012. With prices remaining strong the value of home-fed production rose by 1.5%.

### Poultry and poultry meat (table 8.4)

5. Total production of poultry meat rose in 2013 as the sector expanded and increased its market share, at a time of growing consumer demand. With the broiler sector seeing further increases in production and this coupled with the strong prices, helped to increase the total value of the poultry sector by 12%.

### Milk (table 8.5)

6. Milk production increased by 0.7% in 2013 despite a minor fall in dairy cow numbers. Poor weather conditions in the first half of the year impacted on the quality and quantity of forage, resulting in lower yields and milk production. Improved weather conditions through the second half of the year helped to offset the low production levels of the first half of the year.

Despite a minor increase in milk availability, there was a significant increase in the value of production for 2013. Monthly milk prices throughout the year remained firm, reflecting the competition for supplies between major milk purchasers. The average milk price (including bonus payments) for the year was 31.6 pence per litre, which was 13% higher than the average price for 2012. Profit margins will have been affected by the higher animal feed usage through the first half of the year, although high milk prices and improved weather conditions for the second half of the year will have had a positive impact on profitability.

### Hen eggs (table 8.6)

7. 2013 saw the value of egg production increase by 8.5% to £718 million, a result of higher production and pricing throughout the year. Egg production was 4.5% higher than 2012 and egg prices were 4.3% higher than 2012. The first half of the year saw production up by approximately 6% on 2012, followed by a slight fall in production during the second half of the year.

2013 saw intensive egg production regain some of the market share it had previously lost to free range production, while organic and barn production continued at relatively low levels. Average poultry feed prices for 2013 were higher than in 2012, although this will have been offset by the higher producer prices across the year.

### Revisions

8. Figures in these tables for 2013 are provisional and subject to revision. We will provide information about any revisions we make to previously published information in this publication and the associated datasets.
9. The only revisions which have been made to the 2012 data are 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 revisions are insignificant.

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

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

email: ben.drummond@defra.gsi.gov.uk

Thousand tonnes (unless otherwise stated)

	2009	2010 (g)	2011	2012	2013 (provisional)
<b>Population</b>					
Total cattle and calves (thousand head at June)	10 025	10 112	9 933	9 900	9 844
of which: dairy cows	1 857	1 847	1 814	1 812	1 782
beef cows	1 626	1 657	1 675	1 657	1 611
<b>Production (a)</b>					
Total home-fed marketings (thousand head)	2 476	2 678	2 824	2 652	2 594
of which: steers, heifers and young bulls	1 946	2 063	2 090	1 930	1 892
calves	43	61	92	80	93
cows and adult bulls	487	554	642	641	610
Average dressed carcass weight (kg):					
steers, heifers and young bulls	342	347	345	347	342
calves	33	38	45	49	45
cows and adult bulls	315	320	316	311	307
Production (dressed carcass weight):					
home-fed production	823	897	931	877	842
Value of production (£ million)	2 155	2 176	2 595	2 812	2 910
of which: value of home-fed production (a)	2 130	2 220	2 653	2 761	2 837
subsidies (b)	23	22	22	20	21
change in work-in-progress (c)	9	- 55	- 74	36	61
less imported livestock	8	11	6	5	9
plus breeding animals exported	..	..	..	..	..
Value of production at market prices (£ million) (d)	2 131	2 154	2 573	2 792	2 889
<b>Prices</b>					
Store cattle (£ per head):					
Hereford/cross bull calves	165.5	148.1	156.2	195.8	183.1
Beef/cross yearling steers	639.3	638.6	670.9	814.0	824.8
Finished cattle (pence per kg liveweight): All prime cattle	154.6	147.2	169.3	189.9	204.4
<b>Supply and use (thousand tonnes, dressed carcass weight) (e)</b>					
Home-fed production (a)	823	897	931	877	842
Imports from:					
the EU (f)	218	225	221	223	224
the rest of the world	80	82	81	82	82
Exports to:					
the EU	96	125	164	135	122
the rest of the world	3	4	6	7	5
Total new supply	1 022	1 076	1 062	1 040	1 019
Home-fed production as % of total new supply for use in the UK	81%	83%	88%	84%	83%

(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) 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

Thousand tonnes (unless otherwise specified)

	2009	2010 (e)	2011	2012	2013 (provisional)
<b>Population</b>					
Total pigs (thousand head at June)	4 540	4 460	4 441	4 481	4 885
of which: sows in pig and other sows for breeding	379	360	362	357	284
gilts in pig	48	67	70	69	66
<b>Production (a)</b>					
Total home-fed marketings (thousand head)	8 557	(f)	(f)	9 763	9 790
of which: clean pigs	8 348	8 642	9 234	9 486	9 526
sows and boars	209	(f)	(f)	277	264
Average dressed carcass weight (kg):					
clean pigs	78	78	78	78	79
sows and boars	152	155	151	150	147
Production (dressed carcass weight):					
home-fed production (a)	681	710	759	781	791
Value of production (£ million)	968	978	1 070	1 139	1 281
of which: value of home-fed production	972	978	1 067	1 142	1 272
change in work in progress (b)	- 6	- 2	- 2	- 4	8
less imported livestock	..	..	..	..	..
plus breeding animals exported	3	3	6	2	2
<b>Prices (pence per kg deadweight)</b>					
Clean pigs	145.7	141.7	144.8	150.2	165.5
<b>Supply and use of pigmeat (carcass weight equivalent) (c)</b>					
Home-fed production (a)	681	710	759	781	791
Imports from:					
the EU (d)	804	802	771	719	712
the rest of the world	12	12	11	10	10
Exports to:					
the EU	109	145	154	140	153
the rest of the world	26	25	39	43	54
Total new supply	1 362	1 354	1 347	1 327	1 306
Home-fed production as % of total new supply for use in the UK	50%	52%	56%	59%	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



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

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

email: ben.drummond@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified)

	2009	2010 (h)	2011	2012	2013 (provisional)
<b>Population</b>					
Total sheep and lambs (thousand head at June)	31 445	31 084	31 634	32 215	32 856
of which: ewes and shearlings	14 636	14 740	14 868	15 229	15 561
lambs under one year old	15 892	15 431	15 990	16 229	16 381
<b>Production (a)</b>					
Total home-fed marketings (thousand head)	15 911	14 440	15 007	14 221	15 019
of which: clean sheep and lambs	13 692	12 480	12 956	12 347	12 904
ewes and rams	2 219	1 961	2 051	1 874	2 115
Average dressed carcass weight (kg):					
clean sheep and lambs	19	19	19	19	19
ewes and rams	25	25	26	26	26
Production (dressed carcass weight):					
home-fed production (a)	313	287	301	286	300
Value of production (£ million)	967	979	1 149	1 020	1 036
of which: value of home-fed production	977	981	1 139	1 012	1 039
change in work in progress (b)	- 6	- 1	9	9	- 4
less imported livestock	4	2	-	-	-
plus breeding animals exported	-	-	-	-	-
<b>Prices</b>					
Store sheep (£ per head): (d)					
Lambs, hoggets and tegs	46.5	59.3	60.3	67.5	49.2
Finished sheep (pence per kg estimated dressed carcass weight) (e):					
Great Britain	360.4	389.6	432.9	411.3	415.1
Northern Ireland	322.3	340.6	403.9	356.1	375.6
<b>Supply and use (dressed carcass weight) (f)</b>					
Home-fed production (a)	313	287	301	286	300
Imports from:					
the EU (g)	21	19	16	16	18
the rest of the world	122	109	93	90	102
Exports to:					
the EU	105	101	110	107	118
the rest of the world	1	1	1	1	1
Total new supply	350	313	299	283	301
Home-fed production as % of total new supply for use in the UK	89%	92%	101%	101%	100%

(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) Excluding subsidies and taxes.

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

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

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

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

(h) 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

Thousand tonnes (unless otherwise specified)

	2009	2010	2011	2012	2013 (provisional)
<b>Population</b>					
Number (thousand head at June):	152 753	163 867	162 551	160 061	162 609
of which: table fowl	98 754	105 309	102 461	102 558	104 576
laying and breeding fowl	42 663	47 107	48 610	46 633	47 024
turkeys, ducks, geese and all other poultry	11 335	11 451	11 481	10 870	11 008
<b>Production</b>					
Slaughterings (millions):	868	933	931	952	976
of which: fowls	839	904	899	919	945
turkeys	15	16	17	18	18
ducks & geese	14	14	15	15	14
Production (carcase weight) (a):	1 459	1 570	1 559	1 609	1 662
of which: chickens and other table fowls	1 220	1 323	1 297	1 322	1 388
boiling fowls (culled hens)	50	53	56	58	55
turkeys	157	162	171	196	187
ducks & geese	32	31	35	34	32
Value of production (£ million):	1 590	1 799	1 904	2 075	2 325
of which: fowls	1 241	1 382	1 444	1 562	1 783
change in work in progress in fowls (b)	- 31	2	- 5	- 4	11
turkeys, ducks, geese	301	320	367	416	417
exports of live poultry	83	96	99	103	87
hatching eggs for export	29	31	33	40	71
less live poultry imported	12	15	18	15	9
less hatching eggs imported	21	17	17	26	33
<b>Prices (average producer prices (pence per kg carcase weight)):</b>					
Chickens and other table fowls	101.3	104.0	110.9	117.7	128.0
Boiling fowls (culled hens)	9.3	9.4	9.7	9.2	9.0
Turkeys	143.6	144.6	156.7	161.5	169.3
Ducks	218.1	250.4	263.3	274.0	290.3
Geese	555.4	588.5	616.6	616.1	616.8
<b>Supply and use (carcase weight) (a)</b>					
Production (a)	1 459	1 570	1 559	1 609	1 662
Imports from:					
the EU	388	442	483	454	449
the rest of the world	32	33	32	26	30
Exports to:					
the EU	218	206	205	203	213
the rest of the world	35	62	86	80	91
Total new supply	1 627	1 776	1 784	1 807	1 838
Production as % of total new supply for use in the UK	90%	88%	87%	89%	90%

(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

Million litres (unless otherwise specified)

	2009	2010	2011	2012	2013 (provisional)
<b>Population and yield</b>					
Dairy herd (annual average, thousand head) (a)	1 867	1 850	1 815	1 806	1 797
Average yield per dairy cow (litres per annum)	7 031	7 273	7 528	7 442	7 535
<b>Production</b>					
Milk from the dairy herd (b)	13 128	13 453	13 665	13 444	13 539
Milk from the beef herd (b)	7	7	7	7	7
less on farm waste and milk fed to stock	135	116	115	111	114
Volume for human consumption	13 001	13 344	13 557	13 339	13 431
Value of production (£ million)	3 123	3 329	3 738	3 767	4 271
of which: raw milk leaving farm (c)	3 055	3 259	3 674	3 712	4 214
raw milk processed on farm (d)	68	69	64	55	58
<b>Prices (average price received by milk producers, net of delivery charges (pence per litre)) (f)</b>					
Farmgate price of milk excluding bonus payments	23.7	24.7	27.3	28.0	31.6
Farmgate price of milk including bonus payments	23.7	24.7	27.4	28.1	31.6
<b>Supply and use</b>					
Production	13 135	13 460	13 672	13 451	13 546
Imports	75	88	102	129	132
Exports	433	417	481	466	473
Total new supply	12 777	13 131	13 292	13 113	13 205
of which:					
for liquid consumption	6 626	6 836	6 892	6 816	6 802
for manufacture	5 699	6 112	6 260	6 089	6 261
of which: butter	242	246	267	298	337
cheese	3 369	3 529	3 710	3 722	3 661
cream	248	254	243	245	251
condensed milk (g)	308	279	300	289	290
milk powder	999	1 139	1 130	926	1 060
other	535	665	610	610	663
dairy wastage and stock change	293	45	3	74	6
other uses (h)	158	138	138	133	137
Production as a % of new supply	103	103	103	103	103

(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) Excluding subsidies and taxes/levies.

(f) No deduction is made for superlevy.

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

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

Table 8.6 Hen eggs

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

email: leigh.riley@defra.gsi.gov.uk

Million dozen (unless otherwise specified)		Calendar years				
		2009	2010	2011	2012	2013 (provisional)
<b>Population</b>						
Number of laying fowl (thousands)		42 663	47 107	48 610	46 633	47 024
<b>Production</b>						
Volume of production of eggs		864	944	937	918	960
of which:						
eggs for human consumption		751	826	821	797	829
eggs for hatching		101	105	103	105	107
other (a)		13	13	13	16	23
Value of production of eggs for human consumption (£ million) (b)		531	561	559	662	718
<b>Prices (pence per dozen)</b>						
Weighted average of eggs graded in the UK (c)		70.7	68.0	68.1	83.1	86.6
<b>Supply and use</b>						
UK production of eggs for human consumption		751	826	821	797	829
of which:						
eggs sold in shell		597	673	664	654	695
eggs processed		154	152	158	143	134
Imports from (d):						
the EU		147	135	126	162	152
the rest of the world		1	1	1	1	1
Exports to (d):						
the EU		9	8	10	19	23
the rest of the world		-	-	1	-	-
Total new supply		890	953	937	941	958
Production as % of total new supply for use in the UK		84%	87%	88%	85%	87%

(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 2013, oil prices, which influence the cost of some inputs such as fuels, electricity and fertilisers, averaged \$108 per barrel.
- In 2013, the value of the energy used by the agricultural industry is estimated to be just under £1.5 billion, an increase of 4.5% compared to 2012.
- The cost of animal feed is the largest item of expenditure recorded in the production and income account reaching a total value of £5.4 billion in 2013.

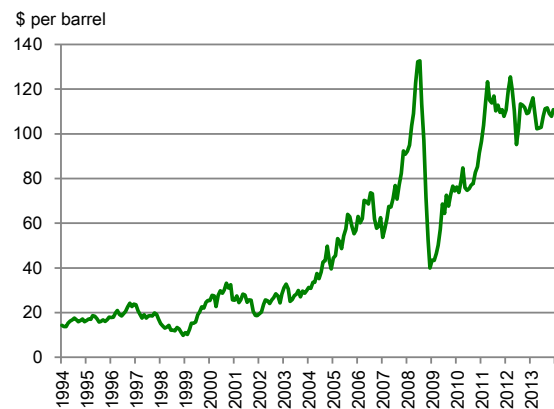
## Introduction

1. In recent years, increases in crude oil prices led to greater concerns for the impact of high oil prices on the margins and profitability of agricultural businesses, which are dependent on products derived from petroleum, notably fuels. Some inputs, such as fuels, electricity and fertilisers are closely linked to the oil price while others are not and trends for these are shaped by other factors.

2. Chart 9.1 shows the trend in Europe Brent crude oil prices since 1994. The price began to rise in 2002 culminating in 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 \$110 dollars per barrel level. In 2013 crude oil averaged \$108 per barrel.

Chart 9.1 Europe Brent Spot Price FOB



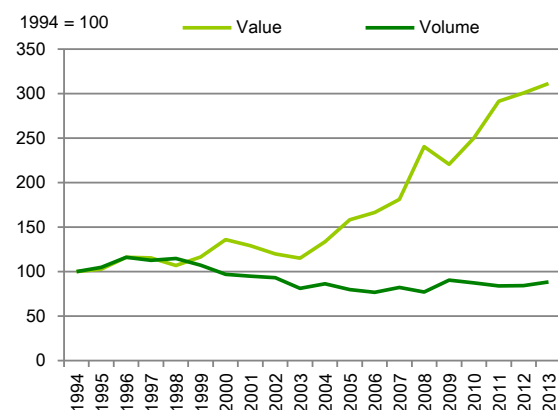
Source: US Energy Information Administration

## Energy

3. The cost of energy, particularly motor and machinery fuels is heavily influenced by trends in oil prices. The total value of energy used within the agricultural industry in the UK is estimated to be just under £1.5 billion in 2013, one and half times higher than 1994.

4. Chart 9.2 shows that the value of motor and machinery fuels used by the agricultural industry is over three times more than in 1994. It is estimated that the value of motor and machinery fuel steadied somewhat in 2013, with a more modest increase of 3.5% to just under £1.1 billion compared to 2012. The increase is largely a result of the extra remedial cultivation

Chart 9.2 Motor and machinery fuels



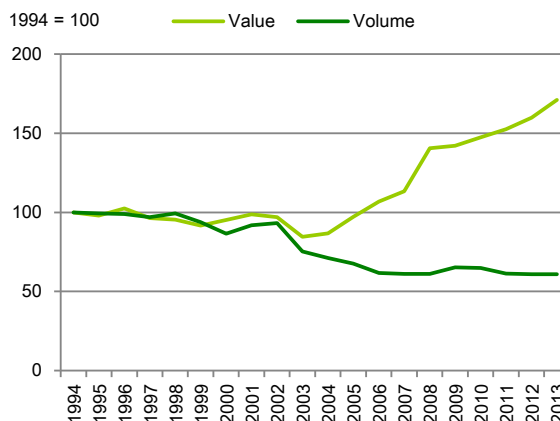
works carried out for both autumn and spring sown crops because of the poor soil conditions due to the poor weather in 2012.

5. The largest contributor to the total value of motor and machinery fuels is the cost of red diesel. Chart 9.3 shows the average monthly red diesel prices since January 1994. It is noticeable prices have risen since 2003, reaching a peak of 76.3 pence per litre in 2012. In 2013 prices fell back slightly.
6. The value of electricity and fuels for heating used principally for stationary activities, such as facility operations and dairies, is also recorded in the production and income accounts (see chapter 4).
7. Chart 9.4 shows the trends in the value of electricity and fuels for heating. Since 2002 usage declined before increasing towards the end of the decade. As with motor and machinery fuels the value of electricity and fuels for heating has risen sharply since 2003. In 2013 consumption is estimated to have risen by 7.0% to £414 million. Despite some energy efficiencies with older buildings being replaced, extra heating fuel was required during the cold spring and more energy used in the warmer weather to keep produce cool, i.e. horticulture.

Chart 9.3 Red diesel price



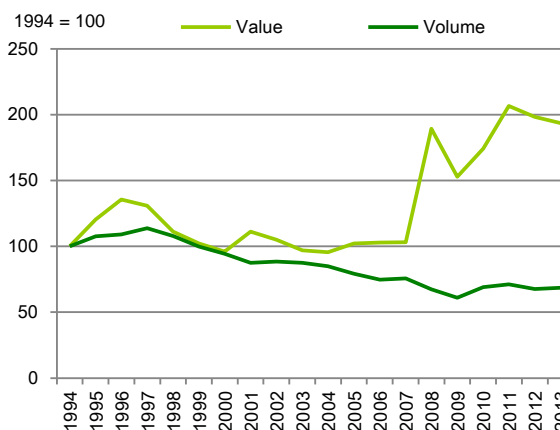
Chart 9.4 Electricity and fuels for heating



Fertiliser

8. 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.
9. Chart 9.5 showed that although usage has significantly decreased since the mid-90s, the value of the fertiliser used has risen driven by movements in prices. In 2013 the value of fertiliser decreased to its lowest level since 2010, a fall of 2.4%, mainly due to the reduction in crop areas.

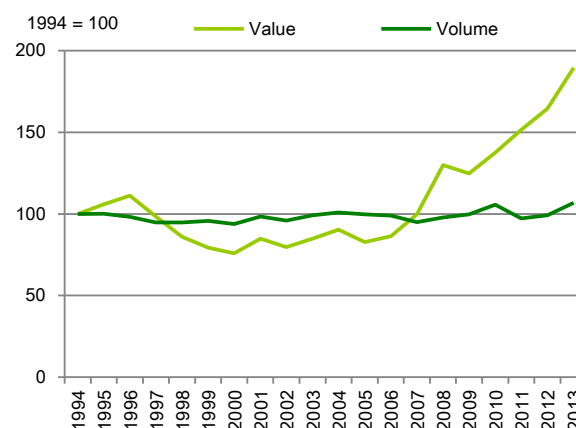
Chart 9.5 Fertiliser



Animal feed

10. The cost of animal feed is the largest item of expenditure recorded in the production and income account. Usage has remained broadly level since 1994 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. The value fell sharply after 1996 but has more than doubled between 2005 and 2013, reflecting increases in cereal prices.

Chart 9.6 Animal feed



11. The total value of all purchased animal feed rose by 14% between 2012 and 2013 to £5.4 billion, due to a combination of increased usage and increased feed prices. The total amount of all purchased animal feed rose by 7.0% to 22.8 million tonnes. Total compound feed production increased by 6.4%, including a 6.6% increase to cattle feed and a 15% increase to sheep feed. These increases were due mainly to poor weather at the beginning of 2013, resulting in livestock being housed indoors for longer than usual. The weather conditions also affected the availability of forage and the need to replace this with compound feed. In addition, increased milk prices have led to increased use of dairy cattle compounds. The use of straight concentrates increased by 3.2%.

Table 9.1 Animal feed (a)

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

email: tom.johnson@defra.gsi.gov.uk

Thousand tonnes (unless specified otherwise)

Calendar years

	2009	2010	2011	2012	2013 (provisional)
<b>Compounds (b)</b>					
cattle	4 485	4 680	4 584	4 895	5 216
calves	204	213	218	248	256
pigs	1 464	1 580	1 621	1 829	1 827
poultry (c)	3 559	3 828	3 759	3 861	4 015
sheep	745	859	765	836	966
<b>Total compounds plus imports less exports</b>	<b>10 373</b>	<b>11 064</b>	<b>10 766</b>	<b>11 377</b>	<b>12 105</b>
Straight concentrates (d)	7 254	7 840	6 876	6 663	6 879
Non-concentrates (e)	525	525	525	525	525
Inter/intra farm transfer	3 335	3 053	2 512	2 775	3 320
<b>Total all purchased animal feed (f)</b>	<b>21 487</b>	<b>22 482</b>	<b>20 679</b>	<b>21 339</b>	<b>22 829</b>
<b>Value of purchased animal feed (£ million) (g)</b>	<b>3 529</b>	<b>3 912</b>	<b>4 331</b>	<b>4 755</b>	<b>5 421</b>

(a) Including direct inter-farm and intra-farm transfer

(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) Maize for stockfeed is not included in this total.

(g) See table 4.1 for a breakdown of this total. Maize for stockfeed is not included in this total.

## Revisions

12. There are revisions to compound feed data in 2012 due to Defra carrying out a register exercise to obtain data from smaller mills that were not previously surveyed. There are also revisions to the straight concentrates, Inter/Intra farm transfer sales; total all purchased animal feed and value of purchased animal feed categories. This is due to a combination of revised usage data and revised price data becoming available.

13. Revisions have been made to fertiliser data back to 2002 due to errors when the data were reviewed.

# Chapter 10: Public Payments

## Summary

### In 2013

- Total direct payments were £3.4 billion, 2.8% higher than 2012
- The Single Payment Scheme contributed £2.7 billion, a rise of 3.4%
- Payments linked to agri-environment schemes was £535 million.
- Payments under the Less Favoured Area Support Scheme fell to £94 million

## Payments

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. For the first time the 2013 figure includes an adjustment for financial discipline (2.45%)

**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 provisional
Single Payment Scheme (£ million)	2 405	2 475	2 313	2 592	2 980	2 798	2 805	2 583	2 672
Exchange rate (€/£) (a)	0.68	0.68	0.70	0.79	0.91	0.86	0.87	0.80	0.84
Financial discipline (%)	..	..	..	..	..	..	..	..	2.45

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

2. 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 which will continue to their expiry date and are closed to new entrants.
3. The current RDPE ends on 31 December 2013 and the new RDPE will not be able to start until January 2015. It is intended to have transitional arrangements in place for 2014.
4. 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 drawing to a close.
5. The principal Welsh agri-environment scheme is Glastir, which was introduced in 2012 and replaces Tir Cynnal, Tir Gofal and support for organic farming. Those who previously claimed under Tir Mynydd are expected to claim through Glastir as well.
6. 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. The target was to have 42% of agricultural land under environmental enhancement agreements by 2013. The scheme is currently closed to new entrants and a new scheme is being developed for 2014.

7. 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 2013 as both the Countryside Management and Environmentally Sensitive Areas schemes drew to a conclusion
8. Payments under the Less Favoured Area Support Scheme fell by £26 million in 2013 to £94 million. This fall was mainly due to the Welsh Tir Mynydd scheme closing in 2012. Those who previously claimed under Tir Mynydd are expected to claim through Glastir. Currently we are unable to identify payments relating to less favoured areas within Glastir.

Chart 10.1 Direct Payments made to farmers

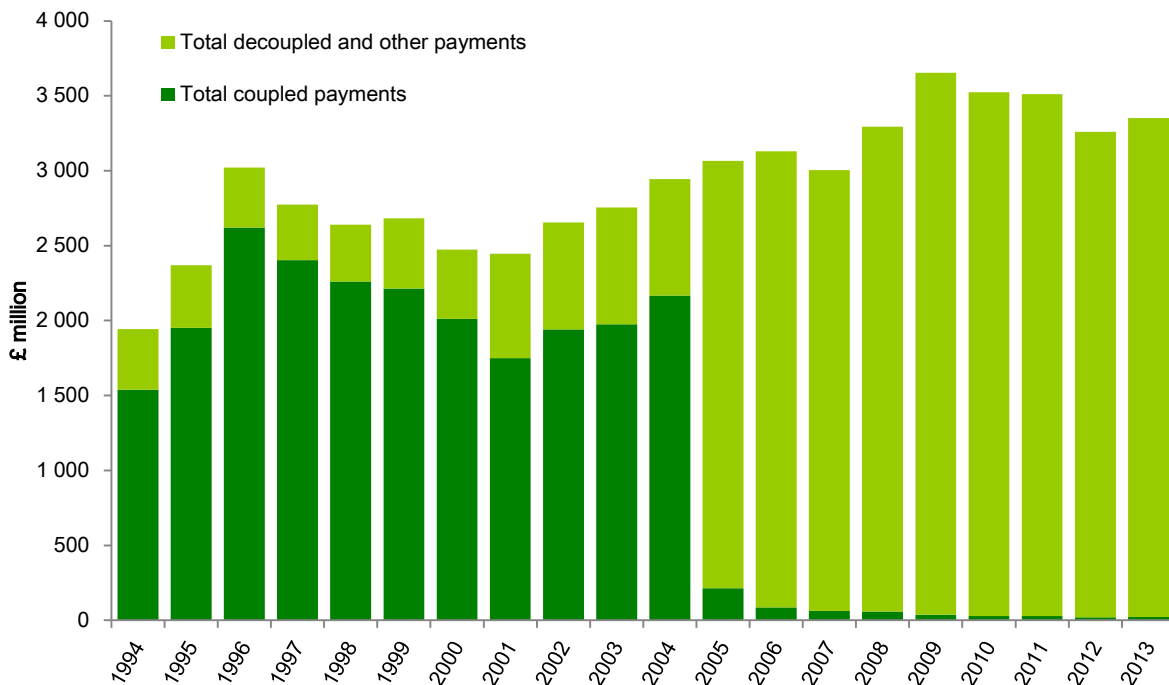


Table 10.2 Direct payments to farmers

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

email: nick.olney@defra.gsi.gov.uk

£ million	2009	2010	2011	2012	2013
					(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
<b>Total coupled payments</b>	<b>37</b>	<b>29</b>	<b>28</b>	<b>20</b>	<b>21</b>
<b>Decoupled and other payments (not linked to production)</b>					
Single Payments Scheme	2 980	2 798	2 805	2 583	2 672
Agri-environment schemes (b)	479	515	536	516	535
Less Favoured Areas support schemes	135	138	123	120	94
Animal disease compensation (c)	22	17	18	20	20
Other (d)	1	27	1	-	10
<b>Total decoupled and other payments</b>	<b>3 616</b>	<b>3 495</b>	<b>3 483</b>	<b>3 240</b>	<b>3 330</b>
<b>Total direct payments less levies</b>	<b>3 654</b>	<b>3 524</b>	<b>3 511</b>	<b>3 260</b>	<b>3 351</b>
Capital transfers and other payments not included in the production and income account	56	37	39	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 2013

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

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£ 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>	<b>..</b>	<b>..</b>	<b>21</b>	<b>..</b>	<b>21</b>
<b>Decoupled payments (not linked to production)</b>					
Single Payment Scheme	1 717	251	445	259	2 672
Less Favoured Areas support schemes (a)	3	..	66	25	94
Agri. environment schemes					
Environmental Stewardship / Countryside Stewardship Schemes	391	..	..	..	391
Rural Priorities / Land Manager Options	..	..	41	..	41
Tir Glasdir / Tir Gofal / Tir Cynnal	..	51	..	..	51
Countryside Management Scheme	..	..	..	20	20
Organic Aid & Organic Farming Schemes	-	4	-	-	4
Environmentally Sensitive Areas Schemes	20	-	-	6	25
Sites and Areas of Special Scientific Interest	-	2	2	-	3
Other (b)	-	-	5	4	10
Animal disease compensation	12	3	-	5	20
<b>Total decoupled payments</b>	<b>2 142</b>	<b>310</b>	<b>559</b>	<b>319</b>	<b>3 330</b>
<b>Total direct payments</b>	<b>2 142</b>	<b>310</b>	<b>580</b>	<b>319</b>	<b>3 351</b>

(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

9. There are four rural development programmes in the United Kingdom, covering England, Wales, Scotland and Northern Ireland.
10. Table 10.4 shows details of payments made through two key measures of these programmes: Less Favoured Areas and Agri-Environment.
11. 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 10.4 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

		2009	2010	2011	2012	2013 (provisional)
<b>Less Favoured Areas and Areas with Environmental Restrictions measure</b>						
England:	Hill Farm Allowance / Uplands Transitional Payment (a)	24	24	8	6	3
Wales:	Tir Mynydd (b)	25	25	25	24	..
Scotland:	Less Favoured Areas Support Scheme	63	64	66	65	66
Northern Ireland:	Less Favoured Areas Compensatory Allowance	23	25	24	25	25
<b>Agri. Environment and Animal Welfare measure</b>						
England:	Organic Farming Scheme	-	-	..	..	..
	Countryside Stewardship Scheme	83	71	53	37	21
	Environmentally Sensitive Areas Scheme	42	48	39	30	20
	Environmental Stewardship Scheme	227	266	321	339	370
Wales:	Organic Farming Scheme	7	4	4	4	4
	Tir Cymen	..	..	..	..	..
	Tir Gofal	34	29	27	24	12
	Environmentally Sensitive Areas Scheme	2	-	-	-	-
	Tir Cynnal	8	7	7	7	4
	Glastir (c)	..	..	..	7	35
Scotland:	Organic Aid Scheme	3	2	2	-	-
	Countryside Premium Scheme	2	1	-	-	-
	Rural Stewardship Scheme	13	8	4	1	-
	Environmentally Sensitive Areas Scheme	3	1	1	-	-
	Land Management Contract Scheme	18	17	7	-	-
	Land Managers Options	-	1	4	6	6
	Rural Priorities	4	22	32	32	34
Northern Ireland:	Organic Farming Scheme	-	-	-	-	-
	Countryside Management Scheme	16	23	20	19	20
	New Environmentally Sensitive Areas Scheme (d)	6	8	8	6	6

(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

12. 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.

Table 10.5 Agri-environment schemes – area under schemes

Enquiries: Elizabeth Finch on +44 (0) 01904 455823

email: elizabeth.finch@defra.gsi.gov.uk

	31 December				
	2009	2010	2011	2012	2013
thousand hectares					
<b>England</b>					
Organic Farming Scheme	1	-	-	-	-
Countryside Stewardship Scheme	372	268	172	100	36
Environmentally Sensitive Areas Scheme	462	417	341	269	92
Environmental Stewardship Scheme					
Entry Level Scheme (a)	5 322	5 584	5 607	6 094	6 514
Higher Level Scheme (b)	442*	809*	882	1 047	1 276
<b>Wales</b>					
Organic Farming/Organic Farming Conversion Scheme (c)	126	132	130	132	51
Tir Cymen/Tir Gofal (d)	377	381	378	372	358
Environmentally Sensitive Areas Scheme	26	8	7	-	-
Tir Cynnal	281	279	245	253	297
Glastir (e)					
All Wales Element	..	..	..	155**	203
Tageted Element	..	..	..		29
Glastir Commons	..	..	..	23**	34
<b>Scotland</b>					
Organic Aid Scheme (f)	115	94	34	4	2
Countryside Premium Scheme/Rural Stewardship Scheme (f)	239	118	36	-	-
Environmentally Sensitive Areas Scheme (f)	174	51	49	9	1
Land Management Contracts (f)	424	56	-	-	-
Land Managers Options	50	238	328	405	387
Rural Priorities	268	617	834	1 122	1 158
<b>Northern Ireland</b>					
Organic Farming Scheme (g)	7	5	3	2	1
Countryside Management Scheme (g)	352	351	333	350	295
Environmentally Sensitive Areas Scheme (h)	109	108	107	103	91

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

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

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

(d) Now closed; all agreements will expire by end of 2013.

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

(f) Land is gradually being moved into Rural Priorities and Land Managers Options.

(g) Commenced on 1/1/2009 under 2007-2013 NIRDP; existing agreements under the 2000-2006 NIRDP continue to be honoured.

(h) Commenced under NI RDP 2000-2006; existing agreements continue to be honoured.

\*Figures slightly amended since last publication

\*\*Glastir figures were previously 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) 01904 455823

email: elizabeth.finch@defra.gsi.gov.uk

Rounded to nearest hundred agreements

31 December

	2009	2010	2011	2012	2013
<b>England</b>					
Organic Farming Scheme	-	-	-	-	-
Countryside Stewardship Scheme	10 600	8 500	6 500	3 700	1 300
Environmentally Sensitive Areas Scheme	7 100	6 500	5 700	3 600	1 400
Environmental Stewardship Scheme:					
Entry Level Scheme (a)	40 200	41 000	41 600	44 700	48 200
Higher Level Scheme (b)	4 300	6 900	8 500	10 900	13 300
<b>Wales</b>					
Organic Farming/Organic Farming Conversion Scheme (c)	1 000	1 000	1 000	1 000	600
Tir Cymen/Tir Gofal (d)	3 200	3 100	3 000	3 000	2 800
Environmentally Sensitive Areas Scheme	200	-	-	-	-
Tir Cynnal	4 400	4 200	3 900	3 800	3 700
Glastir (e)					
All Wales Element	..	..	..	1700**	1 900
Targeted Element	..	..	..		300
Glastir Commons	..	..	..	100**	100
<b>Scotland</b>					
Organic Aid Scheme (f)	400	300	200	-	-
Countryside Premium Scheme/Rural Stewardship Scheme (f)	3 900	2 000	500	-	-
Environmentally Sensitive Areas Scheme (f)	900	200	200	-	-
Land Management Contracts (f)	5 700	1 900	-	-	-
Land Managers Options	1 300	3 500	4 600	4 900	5 000
Rural Priorities	1 500	3 200	4 500	5 800	5 900
<b>Northern Ireland</b>					
Organic Farming Scheme (g)	100	100	-	-	-
Countryside Management Scheme (g)	9 400	9 400	9 000	9 300	7 500
Environmentally Sensitive Areas Scheme (h)	3 100	3 000	3 000	2 900	2 500

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

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

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

(d) Now closed; all agreements will expire by end of 2013.

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

(f) Land is gradually being moved into Rural Priorities and Land Managers Options.

(g) Commenced on 1/1/2009 under 2007-2013 NIRDP; existing agreements under the 2000-2006 NIRDP continue to be honoured.

(h) Commenced under NI RDP 2000-2006; existing agreements continue to be honoured.

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

## All Common Agricultural Policy payments by funding stream

13. 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

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

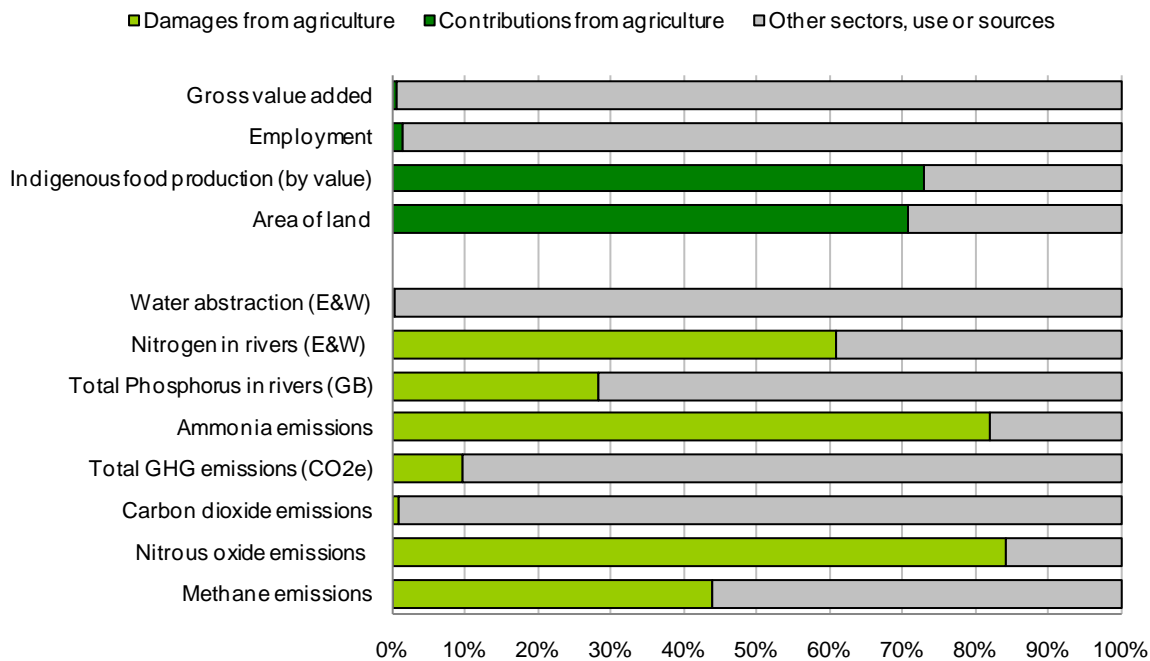
## Summary

- Agriculture accounts for 71% of land in the United Kingdom. Land management practices help to shape the landscape and may also have profound impacts on soils, water bodies, air quality, biodiversity, and ecosystem services.
- The key drivers of change in terms of environmental pressures from land management practices continue to be:
  - declines in the number of livestock, specifically ruminants, and
  - reductions in fertiliser applications, particularly to grassland.
- Between 2000 and 2012 the soil nutrient balances for nitrogen and phosphorus are estimated to have fallen by 17% and 25%, respectively, representing a reduction in the surpluses of nutrients that can potentially be lost to the environment.
- Between 1990 and 2012 nitrous oxide emissions from agriculture are estimated to have fallen by 20% and methane emissions from agriculture are estimated to have fallen by 21%.
- Between 1990 and 2012 ammonia emissions from agriculture are estimated to have fallen by 26%.
- In 2012 the UK farmland bird index was half (50%) its 1970 level. The index has remained stable since 2010.

## Introduction

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 chemicals) influence the quality, composition and availability of habitats and may negatively impact on biodiversity, air, water and soils. These effects may be detrimental to important regulating services, such as pollination, pest and disease regulation, water and soil quality, and climate regulation.
3. 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. The CAP reforms, and in particular the decoupling of subsidy payments from production, have been instrumental to these drivers of change. In addition, as a result of these reforms agriculture has become more responsive to market conditions and this may also impact on environmental pressures.
4. This chapter provides an overview of the environmental impacts of agriculture.

Chart 11.1 Agriculture’s relative contribution to the economy and the environment

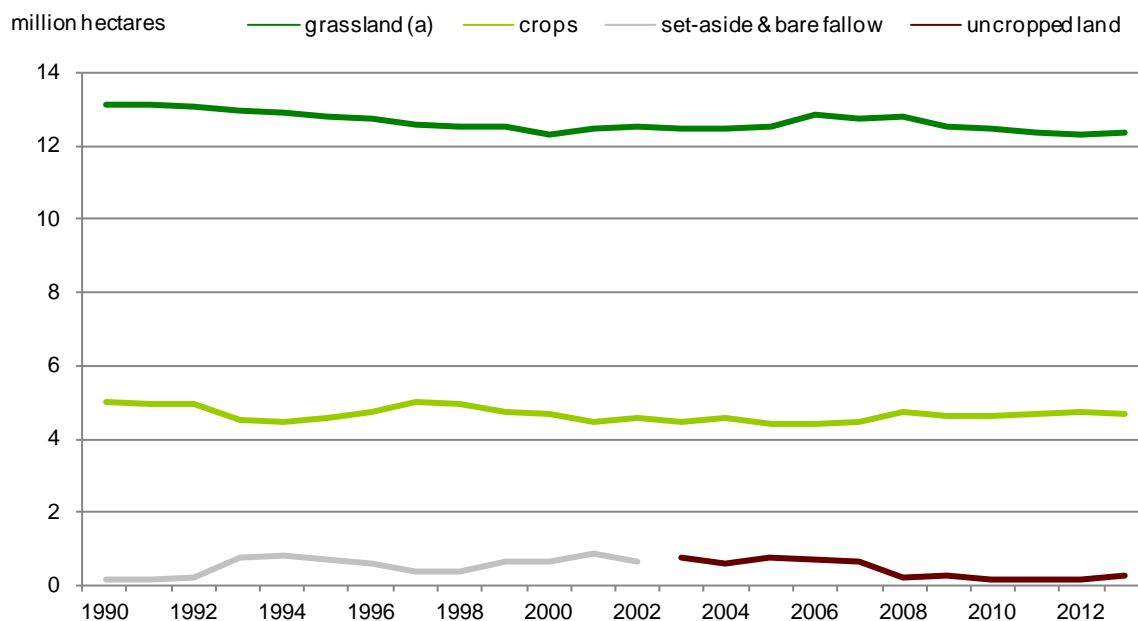


Source: Collated by Defra

### Land Use

- Between 1990 and 2013 agricultural land use has remained relatively stable (Chart 11.2) with little change in the proportion of land used for grassland (71%) 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 2012 and 2013 the area of uncropped land increased due to poor weather conditions leaving many farmers unable to plant crops.

Chart 11.2 Agricultural land use



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

Source: Defra



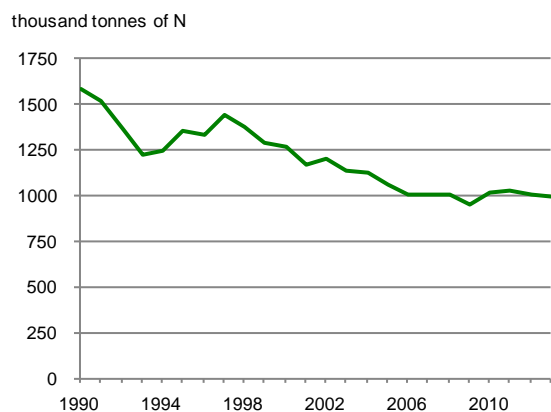
## Agri-environment Schemes

- Agri-environment schemes provide an incentive to farmers to adopt land management and farm practices that are beneficial to the environment. There are a range of schemes in operation across the United Kingdom with each country implementing their own schemes.
- The number of agreements and areas of land within individual schemes operating within the United Kingdom are detailed in Chapter 10. In 2013 farms within agri-environment schemes accounted for around 56% of the Utilised Agricultural Area. The long-term trend shows that the area of land within agri-environment schemes has increased from around 2,400 thousand hectares in 2000 to almost 9,700 thousand hectares in 2013.

## Fertiliser use

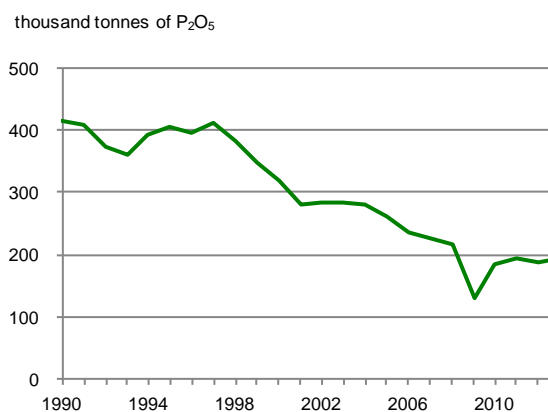
- Nitrogen and phosphorus are two of the key nutrients required for crop growth. A deficit of these nutrients impacts on crop yields and therefore levels of production. The main sources of these nutrients are mineral fertilisers and organic fertilisers (e.g. manures and slurries from livestock). Losses 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).
- Between 1990 and 2013 the quantity of nitrogen from mineral fertiliser use decreased by 37% due to a reduction in application rates on grassland. Over the same period the quantity of phosphate from mineral fertiliser use decreased by 53% due to reductions in application rates on both grassland and crops (Charts 11.3 and 11.4). Yearly fluctuations are influenced by fertiliser prices, crop prices, crop type and weather related issues during the growing season, e.g. the drop in 2009 was related to high fertiliser prices.

Chart 11.3 Quantities of Nitrogen (N) applied from mineral fertiliser use



Source: BSFP, Defra, AIC

Chart 11.4 Quantities of Phosphate ( $P_2O_5$ ) applied from mineral fertiliser use



Source: BSFP, Defra, AIC

- For Great Britain between 1990 and 2012 the overall mineral nitrogen application rate on cropped land remained in the range of 145-150 kg/ha. In 2013 this fell to 136 kg/ha due to a very wet 2012 autumn impacting on autumn drillings and the survival of crops through the winter. This resulted in more spring sown crops (different varieties as well as timing) which generally require less fertiliser. For grassland, nutrient application rates have always been lower than for cropped land. Between 1990 and 2013 there has been a downward trend in the overall mineral nitrogen application rate on grassland and in 2013 this was 59 kg/ha. A reduction in total cattle numbers is considered to be a contributing factor.
- Overall mineral phosphate application rates on cropped land have declined between 1990 and 2013 to now stand at 28 kg/ha. The overall phosphate application rate on grassland has also declined over this time to stand at 9 kg/ha in 2013.

Further information is available in the annual report of the British Survey of Fertiliser Practice 2013,

which can be found at: <https://www.gov.uk/government/publications/british-survey-of-fertiliser-practice-2013>

### Soil nutrient balances

12. 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.
13. Provisional estimates for 2012 show that the nitrogen balance for the UK was a surplus of 92 kg/ha of managed agricultural land. Whilst this represents a 3.3% increase compared with 2011, the overall long-term trend is downwards as there has been a 19 kg/ha reduction in the nitrogen balance since 2000 (-17%). The UK phosphorus balance was estimated to be a surplus of 7.5 kg/ha of managed agricultural land in 2012. Again, whilst this represents an increase of 14% compared with 2011, since 2000 the phosphorus balance has reduced by 2.5 kg/ha which is a reduction of 25%.
14. The main drivers for change in the long-term reductions in the soil nutrient balances have been decreases in the application of mineral fertilisers and manure production due to lower livestock numbers. The short-term increase has been mainly driven by climatic conditions. Poor planting/growing conditions have reduced the amounts of nutrients removed up by harvested crops and grazed pasture, i.e. reduced 'offtake'.

Further information concerning soil nutrient balances can be found at:

<https://www.gov.uk/government/publications/statistics-notice-uk-and-england-soil-nutrient-balances-2012>

### Water quality

15. High levels of nitrogen and phosphorus in agricultural soils increase the risk of their transportation to water bodies through drainflow (rainfall) events, soil erosion and leaching. 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>, however this estimate may also include phosphorus from septic tanks<sup>3</sup>.
16. Due to the implementation of the Water Framework Directive a revised approach to monitoring of water quality across the UK was introduced in 2009. As a result there are no long-term comparative data available at this time. New indicators are being developed to conform to the new reporting system which classifies water bodies according to their chemical and ecological status; phosphorus concentrations in water bodies contribute to the ecological classification. According to Environment Agency figures from 2013, pollution from agriculture was cited as the likely cause in 31% of known failures to achieve Good Ecological Status for water bodies in England.

### Water use

17. 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. In 2012, in England and Wales agriculture accounted for 0.3% of recorded water abstractions by volume; the majority was used in the south and east of England.
18. Levels of water abstraction are highly variable from year to year being greatly influenced by annual rainfall, particularly during the growing season. In 2012 the recorded agricultural abstraction rate in England and Wales was 74 million cubic metres per year. This was 48% lower than 2011 and was

<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.

attributed to the wet weather conditions.

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

## Greenhouse gas emissions

19. In 2012 agriculture accounted for 9.8% of total greenhouse gas emissions in the UK. The three greenhouse gasses emitted by agriculture are nitrous oxide, methane and carbon dioxide.
20. Agriculture is the major source of both nitrous oxide and methane emissions in the UK accounting for 84% of total nitrous oxide emissions and 44% of total methane emissions in 2012. In contrast agriculture only accounted for 0.9% of total carbon dioxide emissions in the UK.
21. Around 90% of agricultural nitrous oxide emissions come from soils, particularly as a result of fertiliser applications. Between 1990 and 2012, nitrous oxide emissions from agriculture are estimated to have fallen by 20% which is consistent with trends in fertiliser usage over the same period.
22. Almost 70% of methane emissions from agriculture arise from enteric fermentation (digestive processes) in ruminating animals with manure management practices accounting for the remaining 30%. Between 1990 and 2012 methane emissions from agriculture are estimated to have fallen by 21% mainly as a result of decreasing livestock numbers, particularly cattle.

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

23. 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 2012 agriculture accounted for 82% of the UK's ammonia emissions.
24. Almost 50% of ammonia emissions from agriculture come from cattle. Between 1990 and 2012 ammonia emissions from agriculture are estimated to have fallen by 26% due to reductions in cattle numbers and fertiliser use.

Further information on total ammonia emissions can be found at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/266489/Emissions\\_of\\_a\\_ir\\_pollutants\\_statistical\\_release\\_2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/266489/Emissions_of_a_ir_pollutants_statistical_release_2013.pdf)

## Pesticide usage

25. 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 non-target terrestrial and aquatic species.
26. 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 England between 2010 and 2012 the total pesticide application rate on cereals increased by 6.7% largely due to an increase in the weight of herbicides applied.

Further information on pesticide usage in England from 1988 to 2012 can be found at: <https://www.gov.uk/government/statistical-data-sets/agri-environment-indicators>

## Farmland bird index

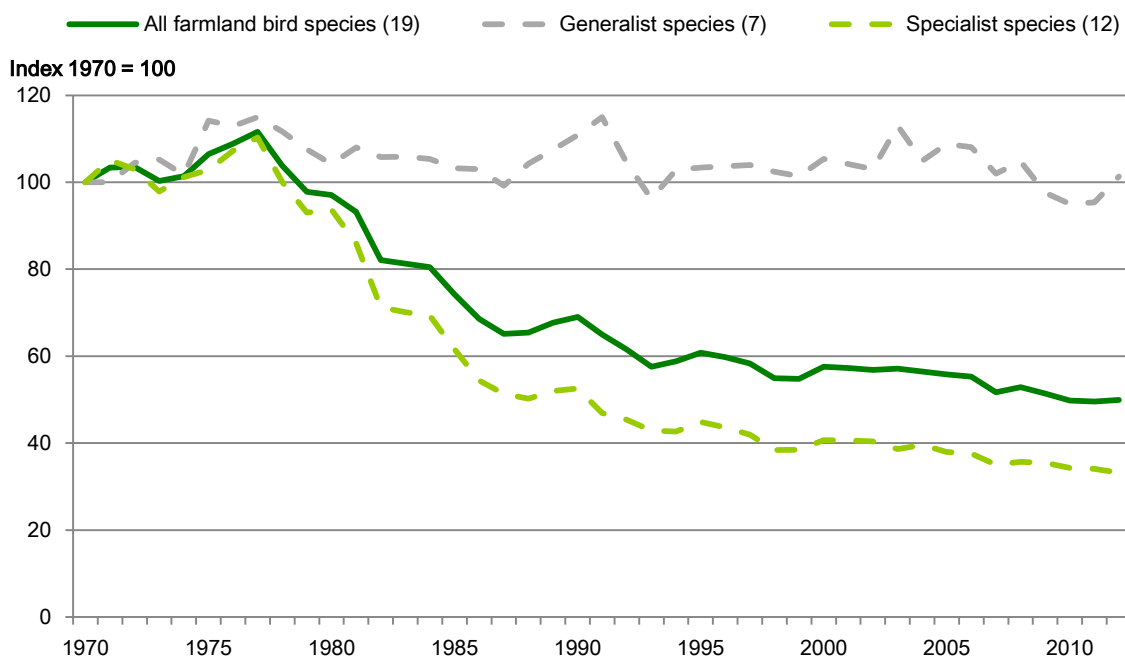
27. Bird populations are considered to be a good indicator of the general state of wildlife as they have a wide habitat distribution, they are near the top of the food chain and there are long-term datasets available. Agriculture provides valuable resources in terms of winter food, spring forage and 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

## AGRICULTURE IN THE UNITED KINGDOM 2013

farmland bird populations, the situation is complex with other pressures such as weather effects and disease pressures adversely impacting on some species.

28. 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 11.5). Between 1970 and 2012, populations of farmland specialists declined by 67% whereas farmland generalists have increased by 1.3%. Since 2010 the farmland bird index has remained stable at about half (50%) of its 1970 level.

Chart 11.5 Farmland Bird Index



Source: BTO/RSPB

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

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/251176/Wild\\_birds\\_1970-2012\\_UK\\_FINAL.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/251176/Wild_birds_1970-2012_UK_FINAL.pdf)

# Chapter 12: Organic Farming

## Summary

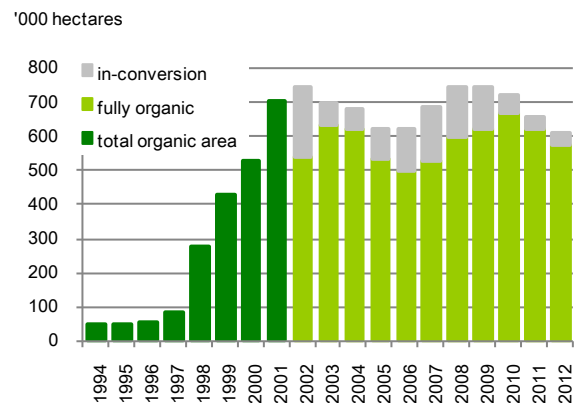
In 2012:

- The area of land managed as fully organic in the UK fell, for a second year since 2010, by 7.7% between 2011 and 2012. Land under organic conversion fell by 13% between 2011 and 2012, slowing the rate of decrease from 27% between 2010 and 2011.
- Permanent and temporary pasture still makes up the greatest percentage of organically managed land (both fully organic and in-conversion land), covering 85% of the total for the UK. Cereals continue to cover the next greatest land area with 8.0% of the total, followed by vegetables (including potatoes) with 2.0%.
- England has the majority of organically managed land in the UK with 53% of the total area for 2012, followed by Scotland with 25%, Wales with 20% and Northern Ireland with 2.0%. Within England, nearly half of all organic land falls within the South West region with 48% of the area for England, followed by the South East (including London) with 15%.
- The number of organic producers and processors continued the downward trend since 2008 during 2012, falling by 6.4% to 6,458. The rate of decline has increased from a fall of 4.9% in 2011.

## Introduction

1. Organic farming is a method of farming that requires farmers to operate to a system based on ecological principles and which imposes strict limitations on the inputs that can be used in order to minimise damage to the environment and wildlife. Emphasis is placed on natural methods of production and pest control.
2. Defra works with the various organic certification bodies in the United Kingdom to collect and publish data on the organic sector. Each year, certifier bodies visit their registered farms to carry out annual inspections. During these inspections, certifiers record the crop areas and numbers of livestock present on the organic holding on that day. The data collected during these inspections is sent to Defra each January. Due to the nature of the inspections, the data is collected at varying times through the year. Therefore, the data presented in this chapter do not give an exact snapshot of organic farming at any specific time of year, so this should be considered when interpreting the results. The column headers in the following tables relate to the year in which the data was gathered.

Chart 12.1 Organically managed land; United Kingdom (a)



(a) The split between in-conversion and fully organic land is not available before 2002.

Table 12.1 Organic and in-conversion land by region

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

email: Julian.groom@defra.gsi.gov.uk

Thousand hectares

	2008	2009	2010	2011	2012
<b>Land, in-conversion</b>					
North East	9.8	6.5	4.0	2.9	2.7
North West	3.8	3.4	2.4	1.4	1.1
Yorkshire & Humberside	3.8	2.7	0.9	0.7	0.6
East Midlands	3.7	3.1	1.0	0.5	0.6
West Midlands	8.2	5.7	2.1	1.8	1.4
Eastern	4.8	4.1	1.4	1.0	0.7
South East (inc. London)	10.4	7.3	4.3	3.7	3.1
South West	46.5	34.7	13.6	13.5	8.9
England	91.1	67.6	29.8	25.4	19.2
Wales	49.5	36.8	4.0	2.4	1.5
Scotland	6.2	12.0	12.6	5.1	8.0
Northern Ireland	2.3	3.0	4.4	4.0	3.6
United Kingdom	149.1	119.4	50.8	36.9	32.2
<b>Land, fully organic</b>					
North East	25.6	26.8	30.6	28.1	27.3
North West	21.2	19.8	20.0	16.4	15.5
Yorkshire & Humberside	10.9	11.9	13.8	12.5	9.9
East Midlands	12.2	14.4	16.3	15.2	15.5
West Midlands	29.7	32.0	35.4	28.9	30.6
Eastern	13.2	14.2	17.3	15.8	14.1
South East (inc. London)	47.2	51.6	54.1	51.4	46.5
South West	123.9	140.4	174.6	157.2	145.5
England	284.0	311.2	362.0	325.6	304.8
Wales	75.1	88.6	118.8	120.4	118.4
Scotland	225.1	209.3	176.3	164.8	143.7
Northern Ireland	10.1	10.3	10.4	8.3	6.6
United Kingdom	594.4	619.3	667.6	619.1	573.4
<b>Total UK organic land (in-conversion &amp; fully organic)</b>	<b>743.5</b>	<b>738.7</b>	<b>718.3</b>	<b>656.0</b>	<b>605.7</b>

Source: Organic certifier bodies collated by Defra statistics

Table 12.2 Organic and in-conversion land areas by use

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

email: Julian.groom@defra.gsi.gov.uk

Thousand hectares

	2008	2009	2010	2011	2012
<b>Land, in-conversion</b>					
Cereals	9.9	6.5	2.2	1.2	1.5
Other crops	2.5	2.1	0.7	0.4	0.3
Fruit & nuts (nuts not included in Mar 03)	0.4	0.3	0.2	0.2	0.1
Vegetables (including potatoes)	2.0	1.6	0.5	0.3	0.3
Herbs & ornamentals (included nuts in Mar 03)	0.6	0.8	1.0	0.5	0.3
Temporary pasture	31.0	19.6	7.3	5.8	5.5
Permanent pasture (a)	96.0	82.7	35.7	24.4	22.0
Woodland	2.7	2.6	1.9	1.7	1.0
Unutilised land	3.9	3.2	1.3	2.5	1.3
<b>Total</b>	<b>149.1</b>	<b>119.4</b>	<b>50.8</b>	<b>36.9</b>	<b>32.2</b>
<b>Land, fully organic</b>					
Cereals	47.3	53.4	54.7	51.3	46.4
Other crops	8.7	9.1	10.2	8.9	8.1
Fruit & nuts (nuts not included in Mar 03)	1.5	1.9	2.0	2.0	2.0
Vegetables (including potatoes)	17.7	17.3	17.4	15.4	12.0
Herbs & ornamentals (included nuts in Mar 03)	4.9	4.9	5.2	5.7	5.5
Temporary pasture	98.8	106.6	117.5	110.3	100.6
Permanent pasture (a)	398.3	413.0	443.3	410.5	383.6
Woodland	3.2	4.6	6.2	6.6	6.4
Unutilised land	14.0	8.4	11.0	8.4	8.8
<b>Total</b>	<b>594.4</b>	<b>619.3</b>	<b>667.6</b>	<b>619.1</b>	<b>573.4</b>

Source: Organic certifier bodies collated by Defra statistics

(a) Includes rough grazing.

Table 12.3 Organic producers and / or processors (a) – regional breakdown

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

email: Julian.groom@defra.gsi.gov.uk

Number of businesses

	2008	2009	2010	2011	2012
North East	179	167	160	152	137
North West	367	333	315	301	273
Yorkshire & Humberside	330	308	302	278	262
East Midlands	449	422	408	383	366
West Midlands	555	507	494	476	442
Eastern	551	529	515	481	456
South East (inc. London)	1 041	1 024	984	975	950
South West	2 002	1 988	1 953	1 851	1 706
<b>England</b>	<b>5 474</b>	<b>5 278</b>	<b>5 131</b>	<b>4 897</b>	<b>4 592</b>
Wales	1 230	1 176	1 166	1 119	1 080
Scotland	889	820	737	679	611
Northern Ireland	303	293	253	234	204
<b>United Kingdom</b>	<b>7 896</b>	<b>7 567</b>	<b>7 287</b>	<b>6 929</b>	<b>6 487</b>

Source: Organic certifier bodies collated by Defra statistics

(a) Processors can include abattoirs, bakers, storers and wholesalers. The recorded location depends on the address registered with the certifier bodies and so larger businesses may be recorded at their headquarters.

Table 12.4 Numbers of organic crop / livestock producers and processors 2012 (a)

## AGRICULTURE IN THE UNITED KINGDOM 2013

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

email: Julian.groom@defra.gsi.gov.uk

### Number of businesses

	No. crop producers	No. crop producers and processors	No. livestock producers	No. livestock producers and processors
North East	97	3	76	2
North West	125	6	93	1
Yorkshire & Humberside	108	5	78	2
East Midlands	157	8	119	5
West Midlands	255	12	172	11
Eastern	162	10	70	9
South East (inc. London)	359	23	180	11
South West	1194	63	784	49
<b>England</b>	<b>2 457</b>	<b>130</b>	<b>1 572</b>	<b>90</b>
Wales	928	24	767	18
Scotland	394	3	285	3
Northern Ireland	134	0	119	0
<b>United Kingdom</b>	<b>3913</b>	<b>157</b>	<b>2743</b>	<b>111</b>

Source: Organic certifier bodies collated by Defra statistics

(a) Mixed organic holdings will be recorded under both the crop and livestock headings above, so the above numbers cannot be added together to get total producers / processors by region as this will lead to double counting. For totals please see Table 12.3.

### Table 12.5 Organic and in-conversion livestock numbers (a)

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

email: Julian.groom@defra.gsi.gov.uk

### Thousand head

	2008	2009	2010	2011	2012
Cattle	320	331	350	335	290
Sheep (b)	n/a	885	981	1 162	1 152
Pigs	71	49	47	53	35
Poultry	4 363	3 959	3 871	2 838	2 458
Other livestock (c)	5	3	5	5	4

Source: Organic certifier bodies collated by Defra statistics

(a) Certification bodies record production data at various times of the year, so figures should be treated with care as they will not represent an exact snapshot of organic livestock farming.

(b) We are unable to provide full historical data for sheep as there are inaccuracies in the historical data.

(c) "Other Livestock" includes goats, farmed deer, horses, camelids and any livestock not recorded elsewhere.



# Chapter 13: Overseas Trade

## Summary

### In 2013:

- The value of food, feed and drink exports was £18.9 billion, a 1.0% increase on 2012.
- The value of food, feed and drink imports also increased by 4.0% in real terms to £40.2 billion.
- The trade gap in food, feed and drink widened by 6.7% in real terms to £21.3 billion.
- Principal destinations for exports were the Irish Republic (18%), France (11%), USA (10%) and the Netherlands (7.2%).
- The most important trade partners for imports remained the Netherlands (6.2%), France (5.6%), Irish Republic (4.7%), Germany (4.6%) and Spain (3.2%).
- Whisky was the largest value food, feed and drink export, totalling £4.4 billion in 2013. Whilst this is a slight decrease of 2.9% on the very high 2012 value in real terms, it is still 11% higher than in 2010 and a 42% increase over the 10 year period between 2004 and 2013.
- Fresh fruit and vegetables remain the highest value categories for imports, together totalling £5.0 billion in 2013 which is a 6.5% increase on 2012.
- Egg exports in 2013 were valued at £90 million; this is an increase of 47% compared to 2012 and doubles the value over the 10 year period between 2004 and 2013.
- Salmon exports increased by 26% in 2013 and have showed continued growth since 2009.
- Wheat imports for 2013 were up 60% leading to the second year running where imports were higher than exports. Poor planting conditions led to the lowest area planted in decades, which reduced the supply available for export. These were at their lowest at £86 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; 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.

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

3. The value of exports of food, feed and drink was 46% higher in real terms in 2013 than in 2004. This is a consequence of the combination of the increased strength of sterling, disease related issues, and world commodity prices. The value of imports was 37% higher in real terms in 2013 than in 2004. As a consequence, the trade gap in food, feed and drink has widened by 30% in real terms between 2004 and 2013, to £21 billion.
4. Table 13.1 shows the value of trade at 2013 prices. The value of food, feed and drink exports was £18.9 billion in 2013, 1.0% up in real terms on 2012 when it stood at £18.7 billion, while the value of food, feed and drink imports was £40.2 billion in 2013, a 4.0% increase in real terms on 2012, when it stood at £38.7 billion. All categories except oils/fats, cereals, sugar and beverages have seen an increase in exports, the largest nominal increase being seen in dairy which showed a 14% increase. Oils/fats exports showed the largest percentage decrease at 27% although 2012 was an exceptionally high year compared with previous years. Cereals exports decreased by 6.8% and sugar by 4.5%. For imports, cereals were up 16% as there was a shortage of quality milling wheat due to the poor UK harvest of 2012, then further complications of another small crop and the delayed harvest in 2013.

Chart 13.1 Trade in food, feed and drink at 2013 prices; United Kingdom

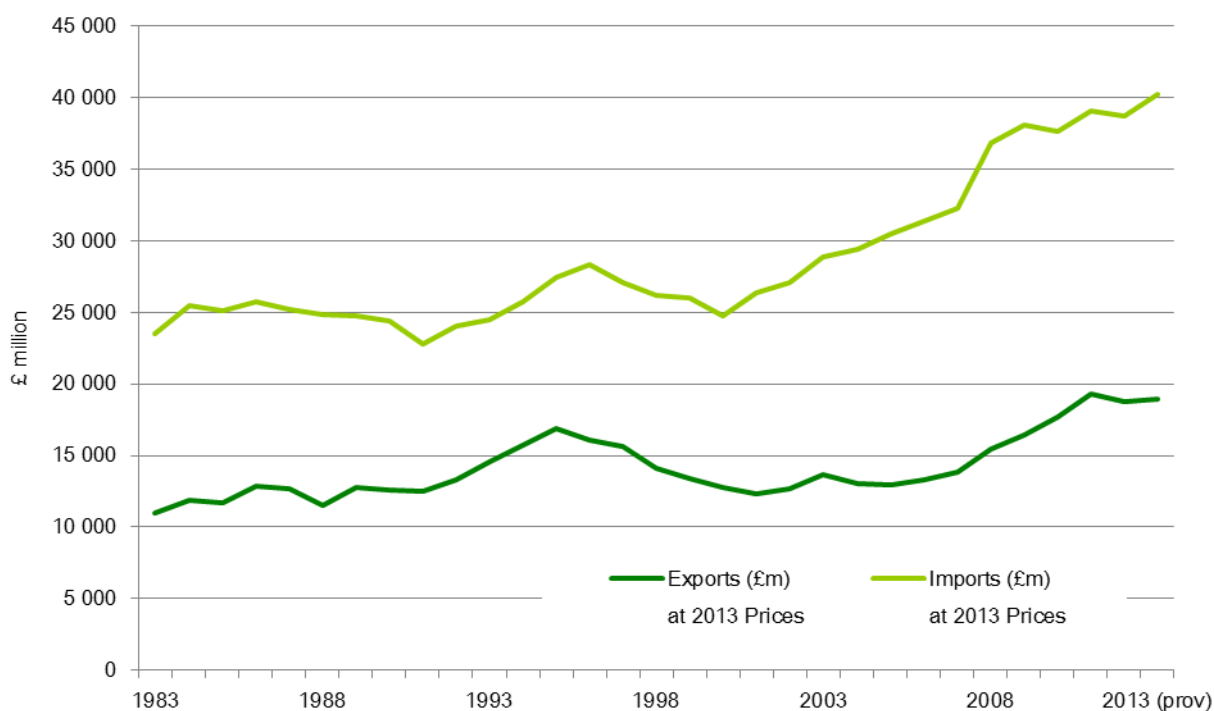


Table 13.1 Trade in food, feed and drink by SITC division (at 2013 prices); United Kingdom

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

email: joanne.gardiner@defra.gsi.gov.uk

£ million		Calendar year									
SITC Division		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Code	Type	(prov)									
<b>Exports</b>											
01	Meat & Meat Preps	893	948	958	1 010	1 352	1 445	1 567	1 780	1 631	1 670
02	Dairy & Eggs	1 048	938	917	978	1 021	979	1 159	1 325	1 203	1 375
03	Fish & Fish Preps	1 187	1 224	1 192	1 189	1 175	1 365	1 505	1 557	1 386	1 465
04	Cereals & Cereal Preps	1 662	1 616	1 562	1 644	2 042	2 076	2 161	2 158	1 998	1 863
05	Fruit and Veg & Preps	680	671	736	726	803	887	906	937	876	957
06	Sugar & Sugar Preps	502	444	473	473	517	529	492	405	392	375
07	Coffee, tea, cocoa, spices etc.	811	816	848	887	1 010	1 036	1 128	1 160	1 182	1 235
08	Animal feed	422	411	459	516	614	684	723	748	841	933
09	Misc. edible preps	957	954	980	943	1 040	1 166	1 222	1 252	1 250	1 401
11	Beverages	4 520	4 569	4 732	4 960	5 322	5 767	6 263	7 218	7 010	6 941
22 + S4	Oils/fats & Oilseeds	314	360	405	478	518	486	592	770	949	696
<b>Total</b>		<b>12 997</b>	<b>12 950</b>	<b>13 262</b>	<b>13 804</b>	<b>15 414</b>	<b>16 420</b>	<b>17 718</b>	<b>19 310</b>	<b>18 718</b>	<b>18 910</b>
<b>Imports</b>											
01	Meat & Meat Preps	4 742	4 848	4 954	4 943	5 463	5 822	5 681	6 094	5 828	5 868
02	Dairy & Eggs	2 214	2 275	2 351	2 267	2 680	2 748	2 764	2 745	2 758	2 943
03	Fish & Fish Preps	1 975	2 210	2 427	2 414	2 574	2 548	2 522	2 721	2 649	2 755
04	Cereals & Cereal Preps	1 955	1 968	1 967	2 329	2 871	2 888	2 636	2 707	3 070	3 567
05	Fruit and Veg & Preps	6 832	7 352	7 544	7 712	8 386	8 438	8 527	8 598	8 462	8 980
06	Sugar & Sugar Preps	1 203	1 249	1 224	1 177	1 357	1 407	1 307	1 356	1 319	1 418
07	Coffee, tea, cocoa, spices etc.	1 656	1 801	1 864	1 945	2 277	2 710	2 798	2 977	2 798	2 711
08	Animal feed	1 243	1 209	1 281	1 298	1 665	1 813	1 910	1 801	1 837	2 086
09	Misc. edible preps	1 550	1 543	1 595	1 859	2 268	2 561	2 397	2 585	2 605	2 718
11	Beverages	4 788	4 849	4 808	4 860	5 094	5 206	5 263	5 282	5 314	5 235
22+S4	Oils/fats & Oilseeds	1 235	1 214	1 340	1 470	2 215	1 913	1 849	2 175	2 052	1 941
<b>Total</b>		<b>29 392</b>	<b>30 518</b>	<b>31 354</b>	<b>32 274</b>	<b>36 849</b>	<b>38 054</b>	<b>37 654</b>	<b>39 041</b>	<b>38 691</b>	<b>40 222</b>

source: HMRC

Defra's aggregate 'Food, Feed and Drink' 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, Feed and Drink' 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 13.2, 13.3)

5. Principal destinations of food, feed and drink exports to the European Union in 2013 were the Irish Republic (£3.4 billion), France (£2.0 billion), Netherlands (£1.4 billion) and Germany (£1.3 billion). The principal European Union countries from which food, feed and drink were imported into the United Kingdom in 2013 were the Netherlands (£5.0 billion), France (£4.5 billion), the Irish Republic (£3.8 billion) and Germany (£3.7 billion).
6. Principal non-EU destinations of food, feed and drink exports in 2013 were the USA (£2.0 billion), Singapore (£400 million) and Hong Kong (£327 million) while the main non-EU countries from which food, feed and drink were imported into the United Kingdom were the USA (£1.1 billion), Brazil (£803 million) and Thailand (£723 million).

Chart 13.2 Exports in food, feed and drink by country of destination 2013; United Kingdom

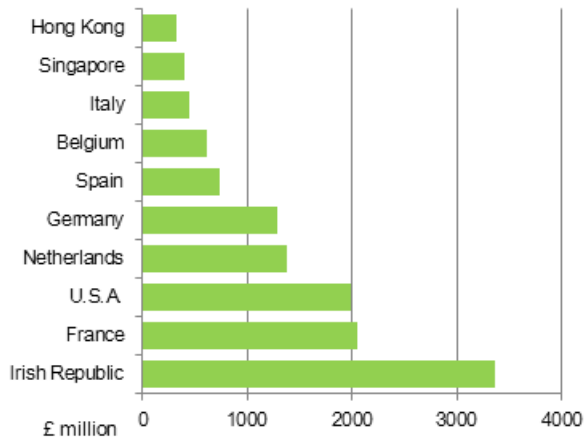
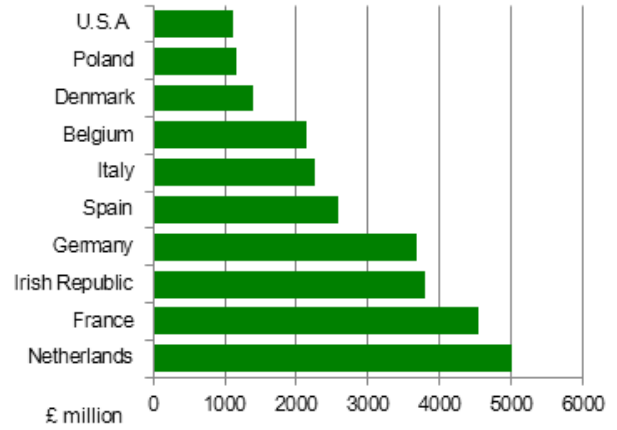
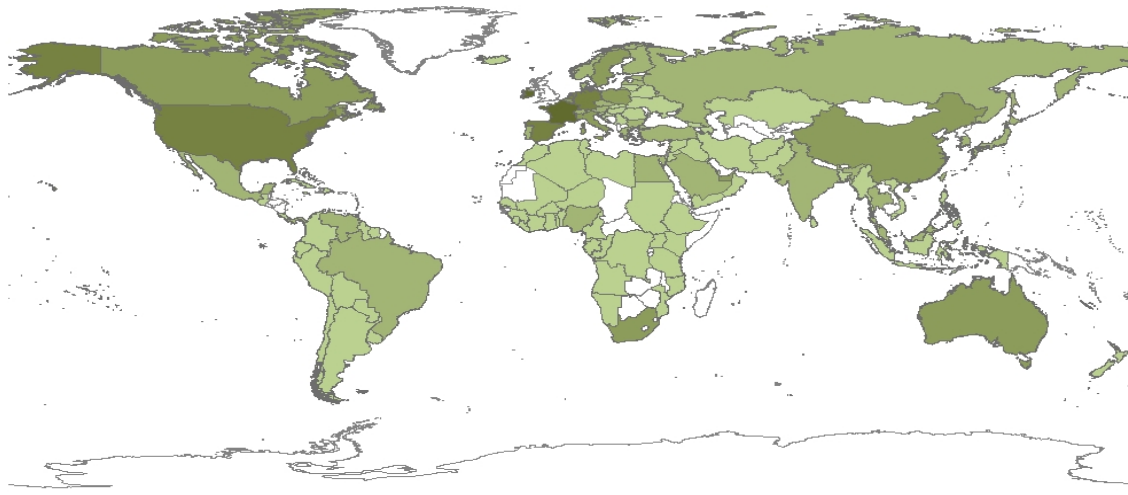


Chart 13.3 Imports in food, feed and drink by country of dispatch 2013; United Kingdom



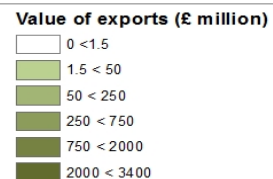
Map 13.1 Global exports 2013

Value (£ million) of UK exports of food, feed and drink by country of destination: 2013



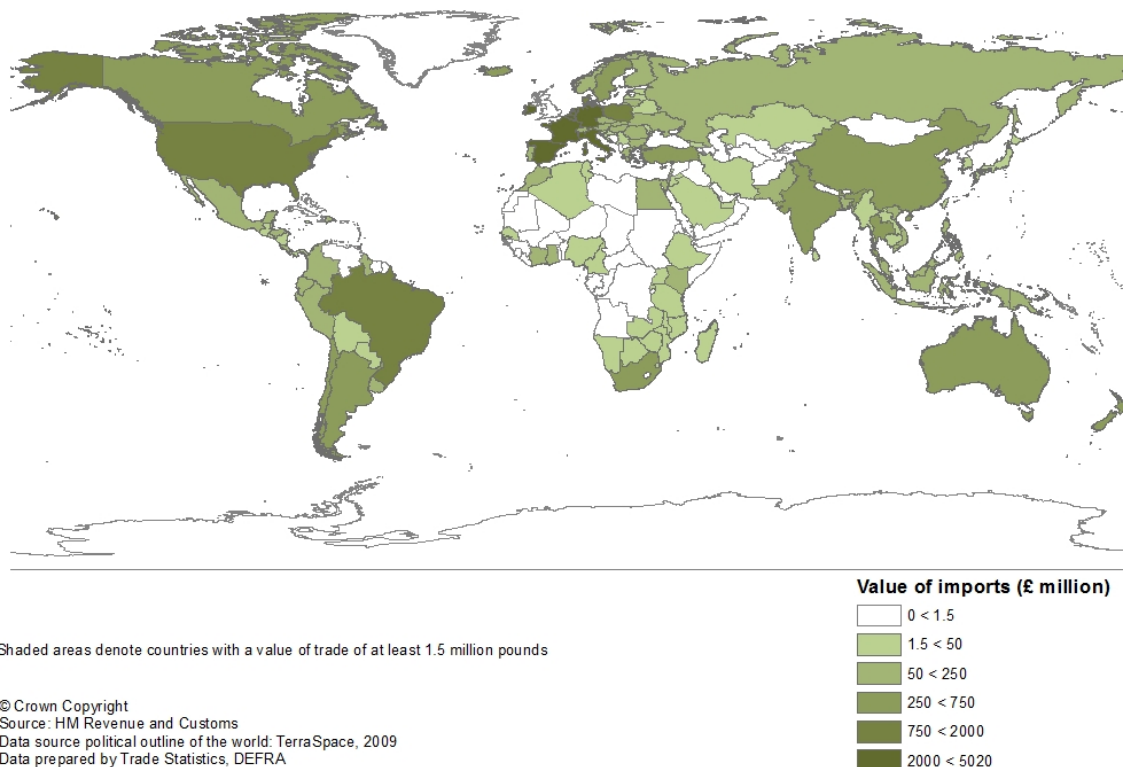
Shaded areas denote countries with a value of trade of at least 1.5 million pounds

© Crown Copyright  
 Source: HM Revenue and Customs  
 Data source political outline of the world: TerraSpace, 2009  
 Data prepared by Trade Statistics, DEFRA



## Map 13.2 Global imports 2013

Value (£ million) of UK imports of food, feed and drink by country of dispatch: 2013



## Exports and imports (charts 13.4, 13.5)

7. Over the 10 year period between 2004 and 2013, at 2013 prices:

- The value of exports of highly processed foods and drink, such as confectionery, canned meats, jams, alcoholic drinks and ice cream, increased by 50%.
- The value of exports of lightly processed foods and drinks, i.e. goods that retain their raw recognisable form, such as meat, cheese and butter, powdered milk, flour and sugar, rose by 37%.
- The value of exports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, increased by 52%

8. Over the 10 year period between 2004 and 2013, at 2013 prices:

- The value of imports of highly processed foods and drink increased by 40%.
- The value of imports of lightly processed foods and drinks increased by 32%.
- The value of imports of unprocessed commodities increased by 42%.

Chart 13.4 Exports in food, feed and drink by degree of processing at 2013 prices; United Kingdom

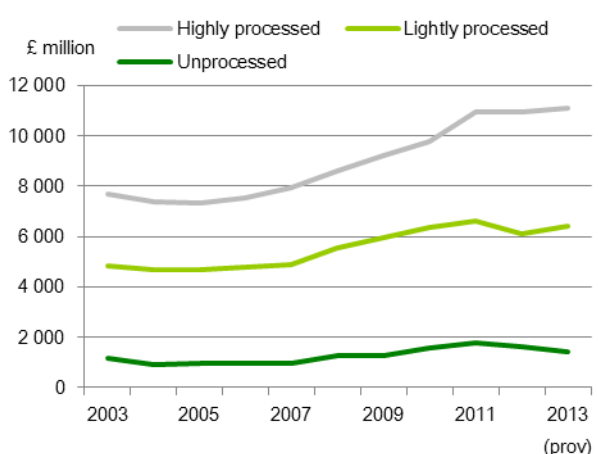
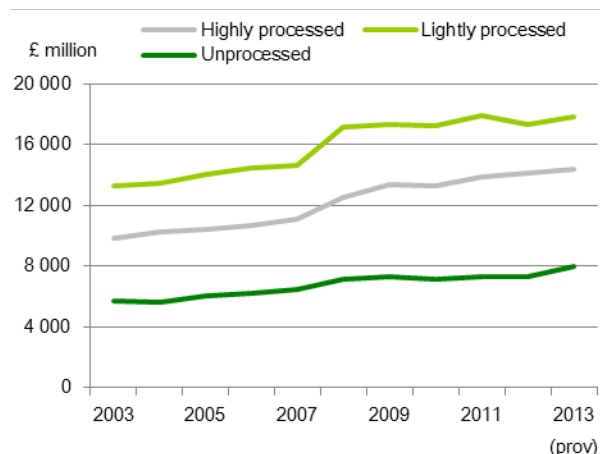


Chart 13.5 Imports in food, feed and drink by degree of processing at 2013 prices; United Kingdom



### Trade in key commodities (tables 13.2, 13.3)

9. Over the 10 year period between 2004 and 2013, at 2013 prices:

- Generally the value of exports across the range of different commodities has increased. The notable exceptions were unmilled wheat and poultry meat products. In 2012 we saw the decline of unmilled wheat exports to £279 million, with the weather conditions having an adverse impact on the UK wheat crop, requiring higher levels of imports of higher quality wheat, particularly for milling and also reducing exports. This has had a big knock on effect for 2013 where although the UK produced a good quality crop it was much smaller than previous years pushing exports down even further to £86 million.
- The value of exports of whisky, which represents the highest valued individual food, feed and drink item, has shown continued growth up to 2012. There was a small decrease in 2013 (on the back of a very high 2012) but exports were still valued at £4.4 billion, an increase of 42% over this 10 year period.
- The value of exports of eggs showed a significant increase of 47% to £90 million in 2013 on 2012, this was a result of higher production and pricing throughout the year. Poultry meat exports also increased 17% in 2013 compared to 2012. Salmon exports increased by 26% in 2013 and have showed continued growth since 2009.
- Generally the value of imports across the range of different commodities has increased over this 10 year period. The exceptions were butter and bacon and ham which have declined by 15% and 12% respectively.
- The value of wine imports, which is the single highest valued food, feed and drink item, increased by 2.3% to £3.2 billion over this 10 year period;
- The value of fresh fruit and vegetables imports combined accounted for £5.0 billion in 2013; this is an increase of 21% over this 10 year period;
- The value of imports of poultrymeat has remained flat at £992 million while the value of exports has increased by 32% to £344 million;
- The value of cheese exports increased by 64% while imports increased by 34% over this period.

Table 13.2 Trade in key commodities in real terms at 2013 prices; United Kingdom

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£ million		Calendar year									
	SITC Division Code	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 (provisional)
Whisky	Imports	122	130	144	119	125	141	141	134	135	164
	Exports	3 083	3 149	3 190	3 482	3 642	3 756	3 938	4 452	4 496	4 368
Wine	Imports	3 142	3 069	2 949	3 108	3 320	3 223	3 294	3 231	3 314	3 197
	Exports	159	168	216	253	275	380	479	578	458	447
Cheese	Imports	1 086	1 112	1 118	1 126	1 392	1 389	1 368	1 349	1 354	1 451
	Exports	270	286	291	292	328	331	381	430	420	443
Poultrymeat	Imports	990	991	890	939	916	1 001	1 065	1 148	1 000	992
	Exports	260	272	203	243	253	270	292	326	295	344
Poultry meat products	Imports	419	480	548	577	702	735	768	848	827	855
	Exports	105	116	110	151	158	142	141	153	141	126
Beef and veal	Imports	818	760	789	742	862	841	861	912	893	942
	Exports	27	33	116	152	248	302	371	465	400	373
Wheat, unmilled	Imports	125	176	168	252	372	300	225	241	414	661
	Exports	278	259	241	280	470	357	508	438	279	86
Lamb and mutton	Imports	379	380	356	338	365	446	428	438	380	383
	Exports	253	278	294	221	305	370	358	398	363	386
Pork	Imports	666	769	862	812	783	745	734	770	711	740
	Exports	124	136	126	107	154	135	167	182	195	218
Breakfast cereals	Imports	127	136	131	139	170	212	192	196	193	183
	Exports	380	395	398	380	411	484	410	405	371	375
Milk and cream	Imports	45	47	58	64	92	89	115	127	121	142
	Exports	188	225	225	221	232	229	276	316	260	259
Bacon and ham	Imports	734	688	695	682	800	896	804	720	668	645
	Exports	46	36	33	37	84	60	50	63	38	39
Butter	Imports	374	403	423	277	272	280	320	341	310	316
	Exports	79	95	76	80	64	67	90	136	105	145
Eggs and egg products	Imports	115	100	115	129	154	180	156	139	195	180
	Exports	44	36	31	31	45	53	52	51	61	90
Fresh vegetables	Imports	1 773	1 987	1 942	1 992	2 025	2 008	2 116	1 990	1 923	2 087
	Exports	60	62	61	59	63	76	83	77	74	72
Fresh fruit	Imports	2 366	2 520	2 630	2 603	2 785	2 854	2 810	2 819	2 786	2 929
	Exports	87	108	136	97	100	111	113	106	83	111
Salmon (inc. smoked)	Imports	57	109	178	174	175	231	250	268	260	345
	Exports	236	206	249	235	245	340	437	514	455	575

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 (inc. poultry offal)	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

Table 13.3 Trade in key commodities by volume; United Kingdom

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Thousand tonnes (unless otherwise specified)		Calendar year									
	SITC Division Code	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 (provisional)
Whisky (million litres pure alcohol)	Imports	15	13	17	14	16	16	17	16	15	23
	Exports	273	284	302	326	308	311	305	361	345	353
Wine (million litres)	Imports	1 334	1 315	1 260	1 309	1 289	1 295	1 365	1 371	1 326	1 317
	Exports	22	21	32	48	44	58	90	88	80	95
Cheese	Imports	335	353	378	403	422	419	436	414	444	469
	Exports	93	96	104	97	88	105	113	124	126	125
Poultrymeat	Imports	396	406	382	383	335	340	381	412	292	293
	Exports	265	305	259	292	278	258	270	295	46	42
Poultry meat products	Imports	150	180	206	230	249	241	255	279	394	397
	Exports	27	33	31	46	46	38	38	46	297	351
Beef and veal	Imports	281	240	236	240	247	231	238	235	236	238
	Exports	7	9	41	59	81	83	110	144	120	105
Wheat, unmilled	Imports	776	1 201	1 028	1 238	1 248	1 390	1 111	902	1 785	2 965
	Exports	2 528	2 495	2 117	1 911	2 766	2 533	3 335	2 287	1 503	448
Lamb and mutton	Imports	116	110	114	114	112	116	101	88	86	98
	Exports	77	85	87	69	87	96	89	96	95	104
Pork	Imports	383	432	459	463	393	360	363	373	349	352
	Exports	84	92	95	99	118	104	131	144	154	181
Breakfast cereals	Imports	69	83	93	92	103	110	105	108	102	98
	Exports	156	171	175	165	160	171	158	161	150	146
Milk and cream	Imports	71	79	124	133	193	158	193	215	194	245
	Exports	339	592	621	513	532	539	561	648	617	575
Bacon and ham	Imports	302	283	264	277	293	323	313	280	258	250
	Exports	13	11	10	12	31	21	24	34	15	14
Butter	Imports	114	129	147	103	81	96	102	100	104	105
	Exports	35	45	36	32	24	27	27	36	38	45
Eggs and egg products	Imports	67	79	78	93	95	90	75	68	100	95
	Exports	15	14	13	12	14	23	24	17	18	28
Fresh vegetables	Imports	1 700	1 940	1 893	1 947	1 957	1 823	1 871	1 975	2 049	2 237
	Exports	93	88	83	88	80	78	95	89	85	81
Fresh fruit	Imports	3 175	3 284	3 470	3 510	3 326	3 175	3 229	3 347	3 408	3 542
	Exports	105	120	177	147	128	153	142	149	109	146
Salmon (inc. smoked)	Imports	17	30	44	48	47	53	50	57	63	69
	Exports	65	49	54	60	57	71	83	96	100	111

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 (inc. poultry offal)	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



## Trade with EU 27 countries (charts 13.6 to 13.11)

10. 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

11. 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 10 years with the exception of 2009 & 2010 when they went up to 323 and 313 thousand tonnes respectively. They have since continued to decline and total imports stood at 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 2013 exports decreased by 13% to 13 thousand tonnes.

Chart 13.6 Trade with EU 27 countries: bacon and ham

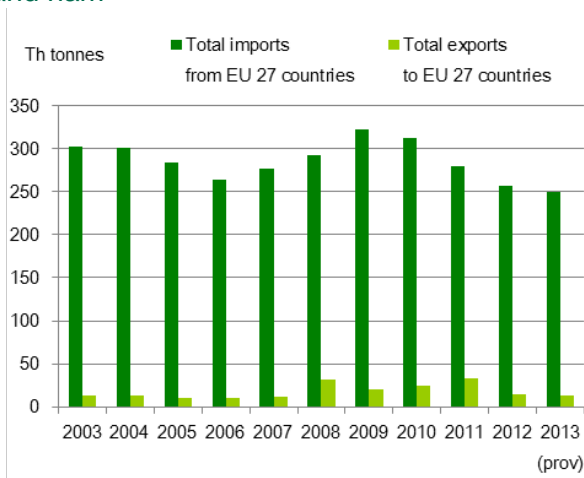
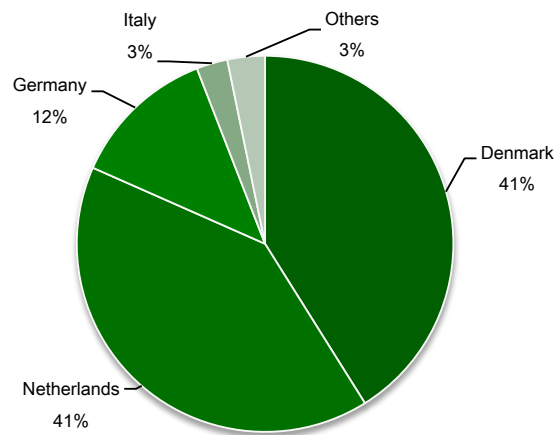


Chart 13.7 Trade with EU 27 countries: imports of bacon and ham (prov)



Pork

12. Since the ban on exports during the outbreak of foot and mouth disease in 2001, exports have been much lower than their pre-2001 levels. However on average they have shown a small year on year increase since 2004 and in 2013 stood at 128 thousand tonnes; whilst this is a 14% increase on 2012, it is still 23% down on the 2000 level. Imports have shown continual gradual increases, peaking in 2007 at 458 thousand tonnes. There was a decline in 2008, since which levels have remained relatively stable and in 2013 stood at 350 thousand tonnes. Denmark accounted for 25% of the imports of pork in 2013, Germany 22% with a further 25% contributed by the Netherlands and Belgium-Luxembourg.

Chart 13.8 Trade with EU 27 countries; pork

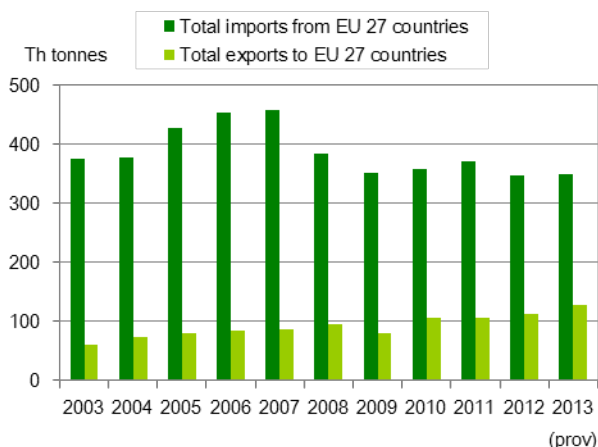
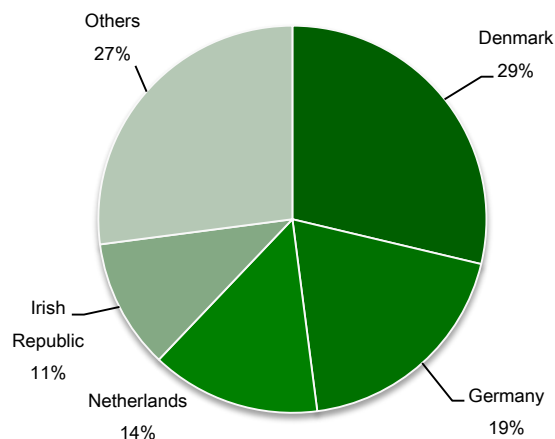


Chart 13.9 Trade with EU 27 countries; imports of pork 2013 (prov)



Milk and cream

13. Imports of milk and cream increased between 2004 and 2008, dipping in 2009 before picking up again up to a peak level of 245 thousand tonnes in 2013. Imports should be viewed in the context of overall supply - imports only account for approximately 2% of UK supply of liquid drinking milk. From 2004 exports rose sharply reaching a high of 620 thousand tonnes in 2006 after which they fell back before steadily rising to a peak of 647 thousand tonnes in 2011. The 2013 figure of 573 tonnes is 2.9% lower than 2012 but still outweighs imports more than double. In 2013, 89% of milk and cream exports went to the Irish Republic with a further 6.5% exported to Belgium, Luxembourg and the Netherlands.

Chart 13.10 Trade with EU 27 countries: milk and cream

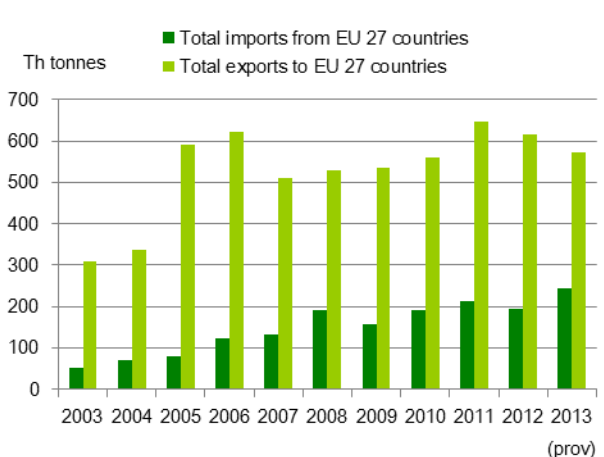
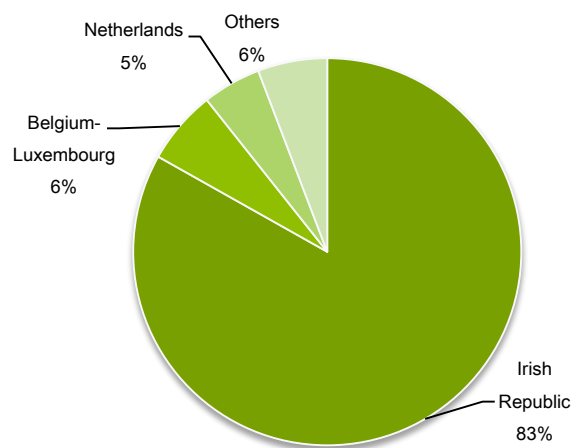


Chart 13.11 Trade with EU 27 countries: exports of milk and cream 2013 (prov)



## Trade with key trading partners (charts 13.12 to 13.25)

14. 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

15. The ban on exports during the outbreak of foot and mouth disease explains the dip in exports in 2001, followed by a continued recovery reaching 104 thousand tonnes in 2013, similar to typical exports between 1997 and 2000 prior to the ban. The majority, 52%, of all lamb and mutton exported in 2013 went to France, with a further 28% going to Hong Kong, Germany, Belgium-Luxembourg. In 2012 imports decreased to their lowest level recorded since 1993, but increased by 14% in 2013 to 98 thousand tonnes.

Chart 13.12 World trade: lamb and mutton

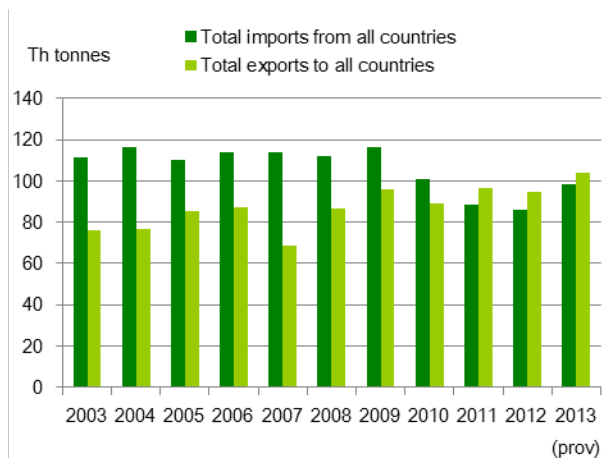
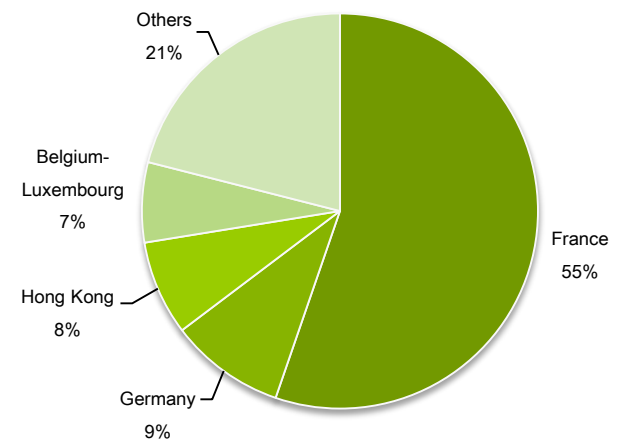


Chart 13.13 Trade with all countries: exports of lamb and mutton 2013 (prov)



Beef and veal

16. Following the Government's announcement of a link between BSE and new variant CJD, exports of beef originating in the United Kingdom were banned between March 1996 and November 2005. The small amounts of exports seen over that period were of beef and veal of non-UK origin which have been imported into the United Kingdom and then exported. Following the end of the ban, exports have continued to show signs of recovery reaching a high of 144 thousand tonnes in 2011. Although 2013 showed a decrease of 12% on last year, levels remain strong at 105 thousand tonnes, but still stand a long way below the 1995 level of 274 thousand tonnes. Imports rose during the export ban, peaking in 2004 at 281 thousand tonnes before declining to 240 thousand tonnes in 2005. Since then, imports have remained fairly static and were 238 thousand tonnes in 2013. The Irish Republic accounted for 67% of the imports in 2013 with the Netherlands, Germany and Poland accounting for a further 13%.

Chart 13.14 World trade: beef and veal

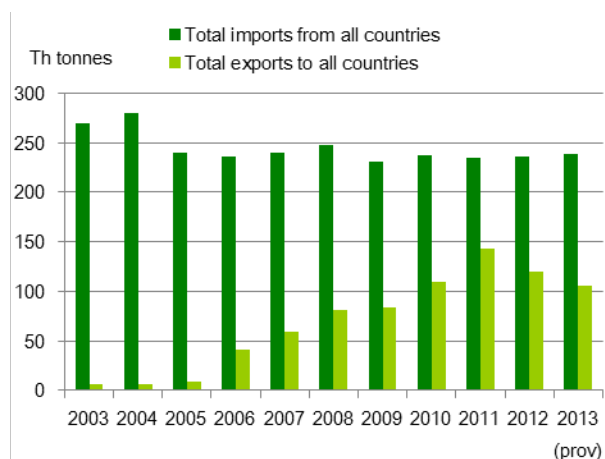
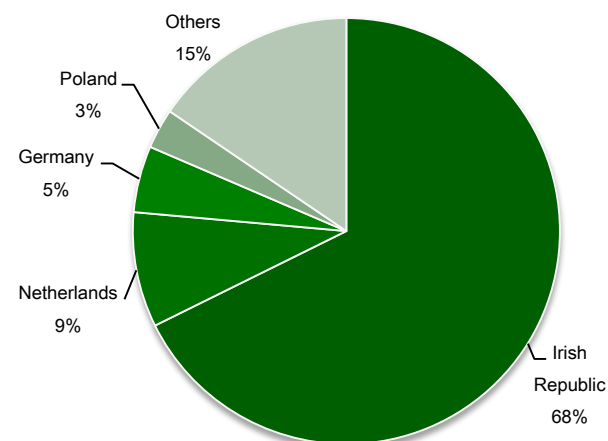


Chart 13.15 Trade with all countries: imports of beef and veal 2013 (prov)



Poultry meat

17. The United Kingdom has run a long term trade deficit in poultrymeat. Imports have increased steadily from 1993 reaching an initial peak in 2005 of 406 thousand tonnes before declining again to 2009 but have since increased remaining at relatively stable levels with exports at 397 thousand tonnes in 2013. The Netherlands accounted for 45% of imports in 2013 with Poland, Germany and the Irish Republic accounting for a further 28%.

Chart 13.16 World trade: poultry meat

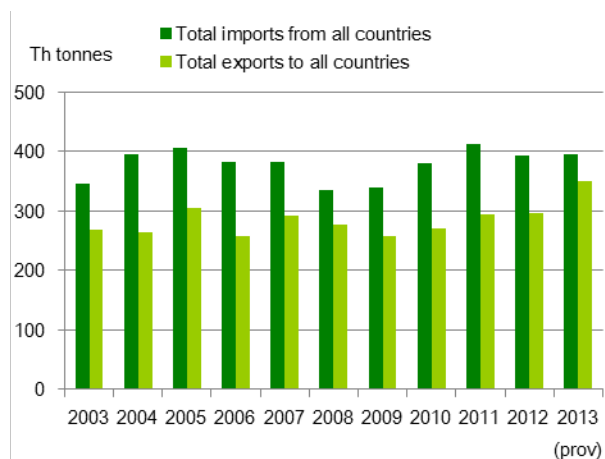
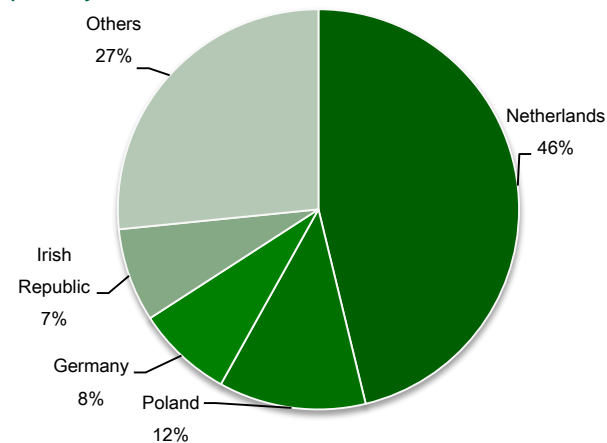


Chart 13.17 Trade with all countries: Imports of poultry meat 2013 (prov)



## Poultry meat Products

18. Poultry meat products include prepared, preserved, salted or cooked poultrymeat. At 293 thousand tonnes, imports of poultrymeat products were around 7 times the level of exports in 2013. This reflects an increasing year on year trade deficit. Thailand accounted for 40% of imports with the Irish Republic, Netherlands and Brazil accounting for a further 32% in similar proportions.

Chart 13.18 World trade: poultry meat products

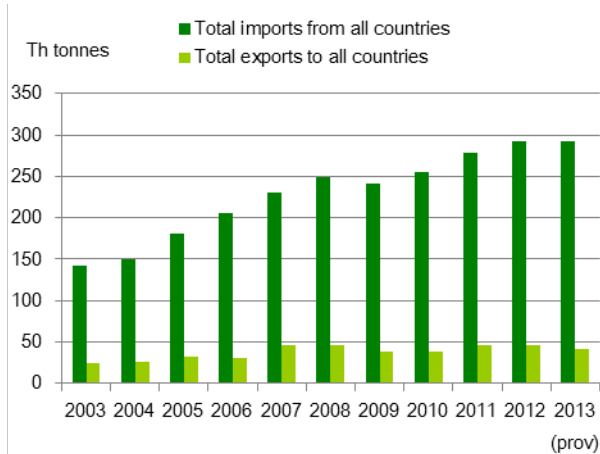
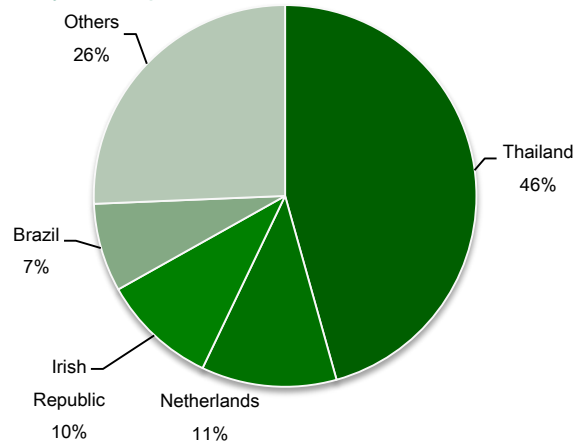


Chart 13.19 Trade with all countries: Imports of poultry meat products 2013 (prov)



## Unmilled wheat

19. Exports of unmilled wheat have comfortably exceeded imports every year from 1993 onwards with the exception of 2001 and 2002. In these two years exports fell to almost the same level as imports due to a poor 2001 UK harvest, caused by severe flooding in the previous winter. This was again the case in 2012 when production was relatively low and the quality of the wheat was poor. This was exacerbated by another low production in 2013 although the quality of the wheat was good. Demand for imports for milling and also feed increased and in 2013 reached a record level of 3.0 million tonnes. Imports were sourced from Germany (33%), France (25%) and Canada (12%). In 2013 exports stood at 448 thousand tonnes, a 70% decrease on 2012, as a result of lower production and availability. Of this 448 thousand tonnes, 53% went to the Netherlands and a further 30% went to the Spain, Portugal and Irish Republic.

Chart 13.20 World trade: unmilled wheat

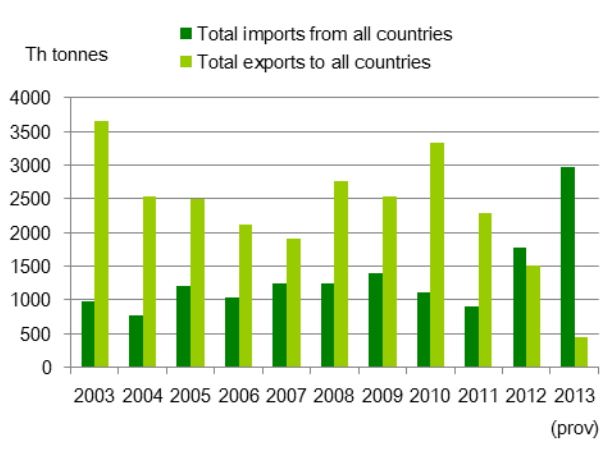
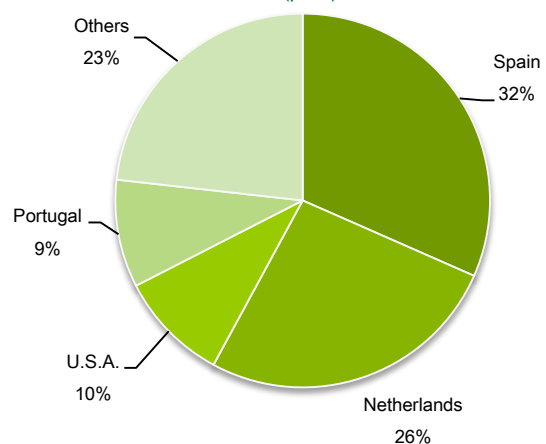


Chart 13.21 Trade with all countries: exports of unmilled wheat 2013 (prov)



Fresh vegetables

20. The United Kingdom runs a large and steadily increasing trade deficit in fresh vegetables. Imports have risen virtually every year up to 2008. The following year showed a small decline of 7.0% which was short lived as 2010 showed a small increase and this continued through into 2013 where levels reached 2.2 million tonnes, more than double the 1994 total. Exports stood at 81 thousand tonnes in 2013, showing a 4.0% decrease on 2012 but within the typical range since 2005 but well below the peak seen in 2002 of 113 thousand tonnes. In 2013, 39% of all fresh vegetables imports came from Spain and 31% from the Netherlands with France, Poland and the Irish republic combined having the next largest share at 11%.

Chart 13.22 World trade: fresh vegetables

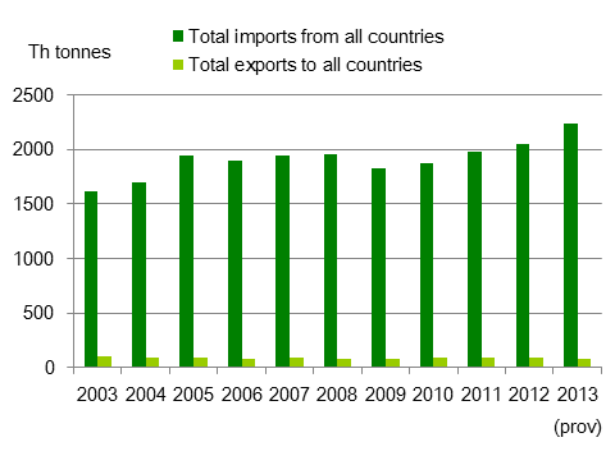
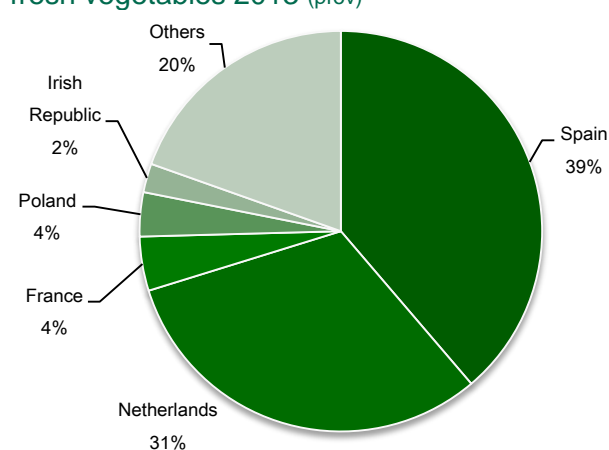


Chart 13.23 Trade with all countries: imports of fresh vegetables 2013 (prov)



Fresh fruit

21. Imports of fresh fruit have historically been far in excess of exports and stood at 3.5 billion tonnes in 2013. Exports have increased since 2004 and reached a high of 149 thousand tonnes in 2011 but still represent just 3.0% of imports. A more representative 2013 stands at 146 thousand tonnes which is an increase of 34% on a low 2012. Spain was the largest single source of imports with 16% in 2013. The top three sources of imports (Spain, South Africa and Costa Rica) provided a total 34% of imports, which demonstrates the diversity of supply of fresh fruit.

Chart 13.24 World trade: fresh fruit

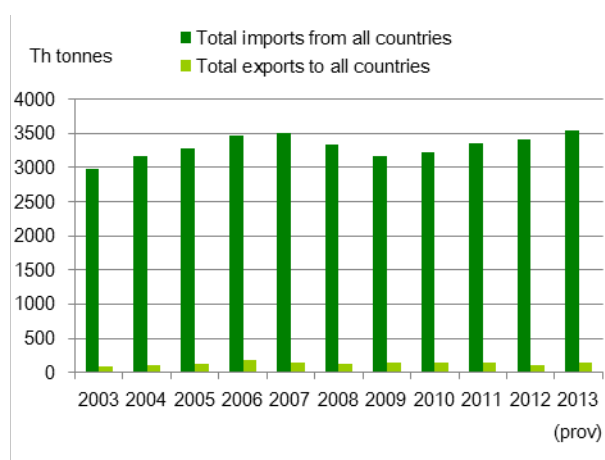
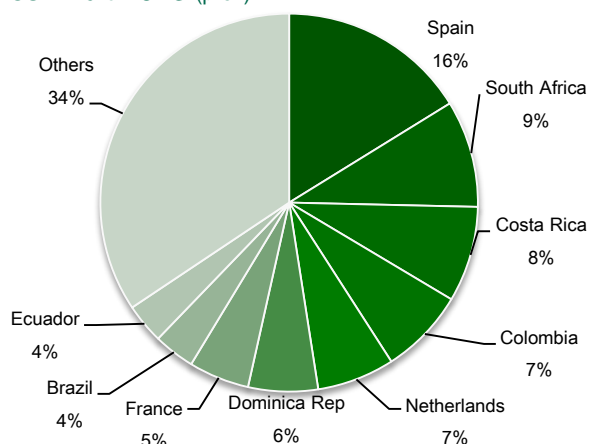


Chart 13.25 Trade with all countries: imports of fresh fruit 2013 (prov)



# Chapter 14: The Food Chain

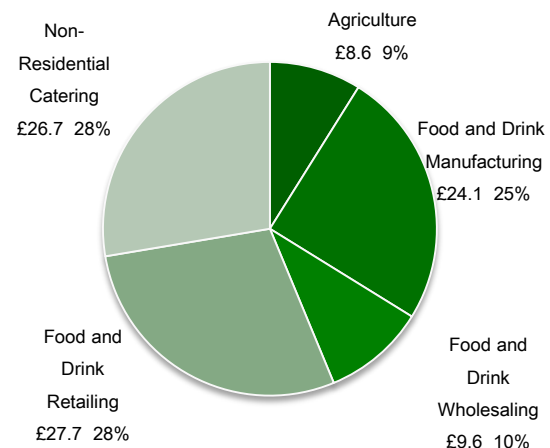
## Summary

- In 2012, the agri-food sector in the United Kingdom accounted for a total estimated Gross Value Added (GVA) of £97 billion or 7.1% of national GVA, down from 7.2% in 2011. The non-residential catering sector increased 6.5%, followed by retailing at 3.0%. The manufacturing sector showed a decrease in GVA of 6.1%.
- Employment in the agri-food sector fell 1.1% over the 12 month period to the third quarter of 2013 to around 3.6 million. The largest decrease was in agriculture, falling by 18 thousand employees (4.1%).
- In 2012, total factor productivity in the food sector excluding agriculture stabilised, having risen gradually since 2002. Benchmarking against a wider economy measure shows the average annual growth in the food sector between 2002 and 2012 was 0.7% compared to 0.2% in the wider economy.
- Excluding the effect of price rises, consumers' expenditure increased 0.9% in 2013 but remains 6.1% lower than the start of the economic downturn in 2007. Expenditure on household food increased 1.6% in 2013, whilst expenditure on food eaten out decreased 2.7%.

## Contribution of the agri-food sector to the national economy (chart 14.1, table 14.1)

1. In 2012, the agri-food sector contributed £97 billion to the economy, around 7% of the national GVA. Within this, manufacturing, retailing and non-residential catering accounted for around one quarter each. Food wholesaling covers 10.0% of the sector and agriculture made the smallest contribution at 9.0%.
2. Comparing 2012 and 2011, the retail and wholesale sectors saw year on year increases in productivity, whilst manufacturing and non-residential catering saw small decreases. The catering sector appears to have increased labour intensity, which may mean a better quality service is not being reflected. [Productivity](#) of the post-farmgate food chain has increased since 2000 in excess of the wider economy.

Chart 14.1 Contribution of the agri-food sector to the national economy (£ billion)



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

Table 14.1 Agri-food sector contribution to the national economy

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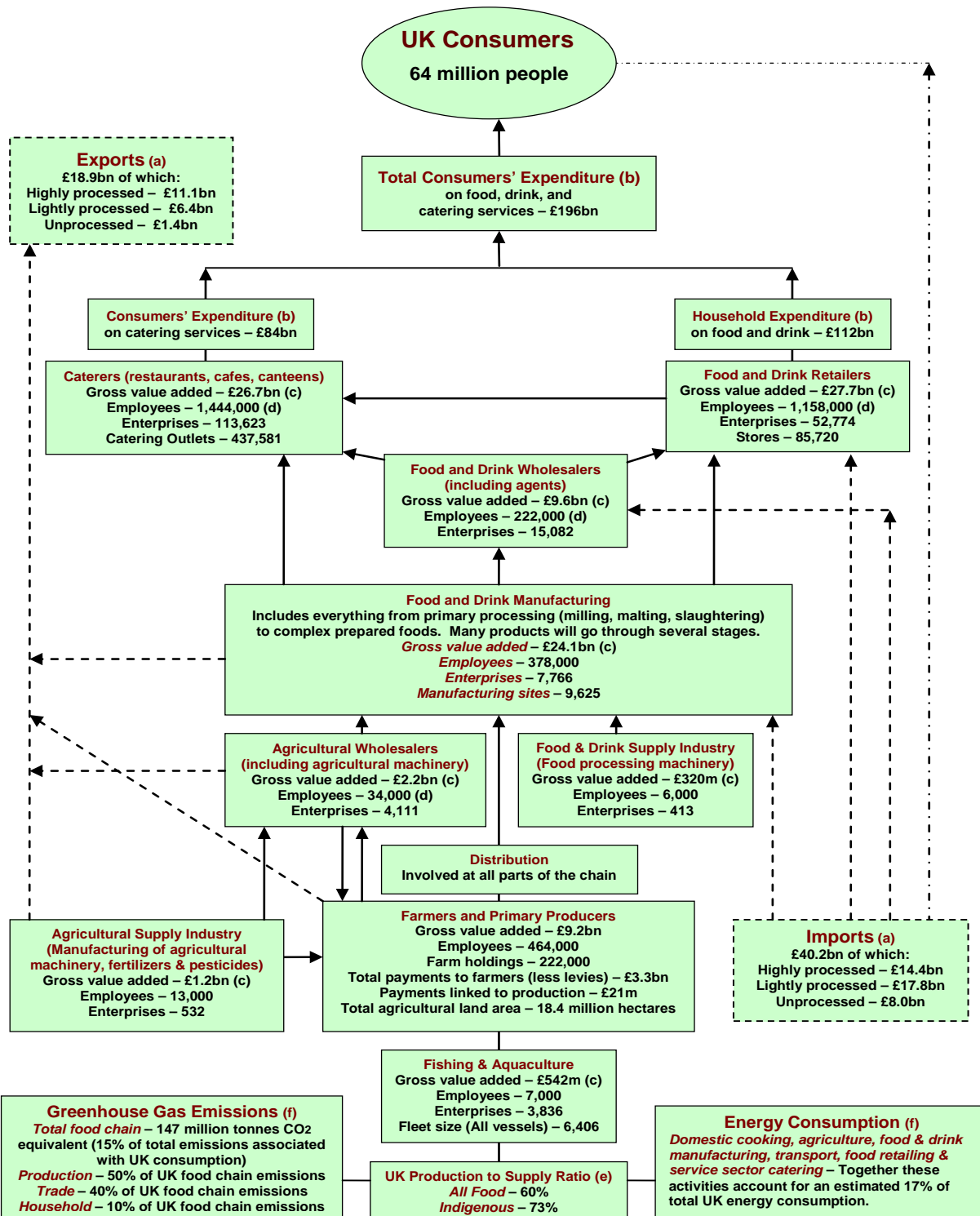
£ million (unless otherwise specified)

	2009	2010	2011	2012	2013 (provisional)
<b>Agri-food sector's contribution to total economy gross value added</b>					
at current prices					
Agriculture	6 884	6 991	8 645	8 618	9 222
Food Manufacturing	24 456	24 606	25 670	24 097	..
Food Wholesaling	8 545	8 962	9 633	9 604	..
Food Retailing	25 209	26 263	26 848	27 661	..
Food Non-Residential Catering	20 144	22 348	25 111	26 732	..
% of national gross value added (current prices)	6.8	6.9	7.2	7.1	–
<b>Workforce in the food sector (thousand persons)</b>					
Agriculture	421	426	434	440	422
Food Manufacturing	373	371	376	365	365
Food Wholesaling	218	218	216	232	231
Food Retailing	1 189	1 139	1 138	1 134	1 127
Food Non-Residential Catering	1 419	1 380	1 403	1 420	1 408
% of total workforce in employment	13.5	13.3	13.4	13.5	13.0
<b>Trade in food, feed and drink (in real terms at 2012 prices)</b>					
Imports of food, feed and drink	38 054	37 654	39 041	38 691	40 222
% of total UK imports	10.5	9.2	9.2	9.2	9.8
Exports of food, feed and drink	16 420	17 718	19 310	18 718	18 910
% of total UK exports	6.2	6.0	6.1	6.0	6.2
<b>UK Food Production to Supply Ratio ('Self-Sufficiency')</b>					
% of all food	59	61	63	62	60
% of indigenous type food	72	76	78	77	73
<b>Household final consumption expenditure on food and alcoholic drinks</b>					
at current prices	164 883	171 458	180 191	188 084	195 893
of which:					
household food	79 851	82 917	86 599	90 757	95 389
food eaten out	46 396	48 621	50 706	51 838	53 318
alcoholic drinks	38 636	39 920	42 886	45 489	47 186
at constant 2010 prices (£ million)	169 358	171 458	170 613	170 737	172 357
of which:					
household food	82 429	82 917	82 028	83 361	84 471
food eaten out	47 471	48 621	48 373	47 057	47 193
alcoholic drinks	39 458	39 920	40 212	40 319	40 693
% of total household final consumption expenditure	18.8	18.6	18.9	19.1	19.0
of which:					
household food	9.1	9.0	9.1	9.2	9.2
food eaten out	5.3	5.3	5.3	5.3	5.2
alcoholic drinks	4.4	4.3	4.5	4.6	4.6
<b>Producer prices for agricultural products (2010 = 100)</b>	95.0	100.0	113.2	118.6	125.4
<b>Consumer price index (2010 = 100):</b>					
food	96.7	100.0	105.5	108.9	113.0
alcoholic drinks	96.9	100.0	105.8	108.8	112.6
all items	96.8	100.0	104.5	107.4	110.2

Sources: Annual Business Survey (ONS), Aggregate Agricultural Accounts (Defra), Labour Force Survey GB Q3 2013 (ONS), Overseas Trade Statistics (HMRC), Consumer Price Indices (ONS).



Chart 14.2: Economic summary of the Food Chain – Fourth quarter 2013



(a) Overseas trade data is provisional for full year 2013 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 2013 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 is provisional data for full year 2012, which is calculated at basic prices (market prices less taxes plus subsidies).

(d) Employee data for grocery retailers is for Great Britain only and is for Q4 2013 from the Office for National Statistics. Food and drink wholesaling, and agricultural wholesaling includes an estimate of employment by food and drink wholesaling agents, and 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 28% 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 2013. 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.

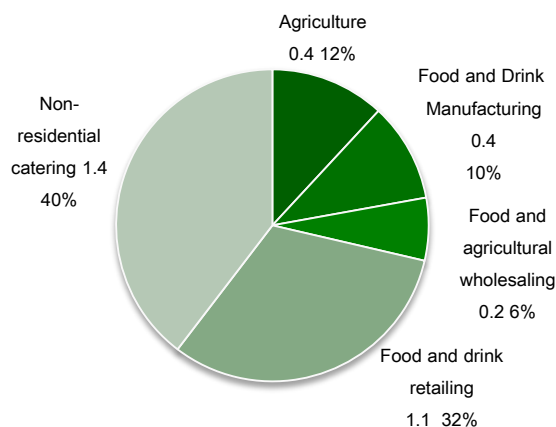
### The food chain (chart 14.2)

- In 2013, the food supply chain in the United Kingdom as a whole received £175 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 14.2 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 14.3)

- In the third quarter of 2013, the agri-food sector employed 3.55 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 12% of the agri-food sector (chart 14.3).

Chart 14.3 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 2013, employment in the agri-food sector decreased by 1.1%, largely due to a decrease in agriculture (4.1%). There were small decreases in non-residential catering (0.8%), retailing (0.6%) and wholesaling (0.4%). Only manufacturing remained unchanged. Employment across the whole economy increased 1.7% over the same period.

- Employment in the agri-food sector has fallen 1.5% since 2000. Changes in the proportions of each of the sectors since that time show that employment in agriculture and manufacturing each reduced by 24%, while non-residential catering, wholesaling and retailing increased by 12%, 4.7% and 3.5% respectively.

### Food manufacturing

- Gross value added in the food manufacturing sector decreased 6.1% in 2012 due to the decreases in input volumes being greater than the decreases in output volumes. Compared to the other food chain sectors, it has had the largest gain in productivity since 2000 with an average annual increase of 1.0%. Employment figures for quarter three 2013 show a 17% reduction over the last decade but are unchanged on quarter three 2012.

### Food wholesaling

- Gross value added in the food wholesaling sector fell slightly in 2012 (0.3%), although it remains on an upward trend since 2000. At £9.6 billion in 2012, it is 73% higher than in 2000. Excluding agriculture, it is the smallest contributor to the agri-food sector gross value added at 9.9%. Employment in this sector fell 0.4% in 2012, equating to around 1 thousand employees. Productivity has been on an upward trend since 2000 with average annual increases of 0.8%. The increase in 2012 was 0.2%.

### Food retailing

- Food retailing gross value added was £27.7 billion in 2012, 3.0% up on 2011. Retail is the second largest sector of the food chain after non-residential catering and provides 36% of agri-food sector employment. Employment in this sector fell by 6 thousand employees (0.5%), in the year to September 2013. Productivity of food retail is largely unchanged from its level in 2000 apart from a small dip around 2002. Productivity in 2012 was up 1.0% on 2011. Food prices increased by an average of 3.1% over the same period.

### 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 6.5% to £26.7 billion, 21% higher than in 2008.

Employment decreased 2.0% in the year to September 2013 equating to 28 thousand employees. Non-residential catering accounts for 45% of all agri-food sector employment. Productivity of catering fell 1.6% in 2012 after two successive years of growth.

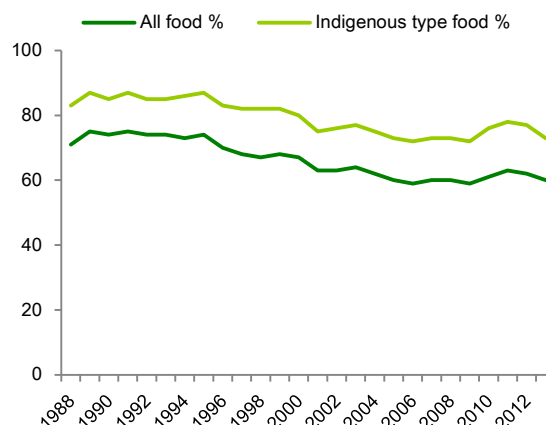
### Trade in food, feed and drink (table 14.1)

11. In 2013 the value of food, feed and drink exports was £18.9 billion, an increase of 1.0% on 2012.
12. In 2013 the value of food, feed and drink imports increased by 4.0% to £40.2 billion in real terms, resulting in the trade gap in food, feed and drink widening by 6.7% to £21.3 billion in real terms.

### Food production to supply ratio (chart 14.4)

13. 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, is estimated to be 60% for all food in 2013 and 73% for indigenous type food. This compares with 62% and 77% respectively in 2012.

Chart 14.4 Food production to supply ratio



14. The Food Production to Supply Ratio figures for 2012 in Table 14.1 are slightly higher than those published in AUK 2012. This is due to provisional trade data being finalised.
15. The food production to supply ratio has decreased slightly in 2013. The overall value of United Kingdom food production increased by 8.0%. The scale of the adjustment to home production for inputs (such as feed and seed) was much greater in 2013 due to significant increases in imports and reduction in exports of these inputs. This was the main factor behind the slight decrease in the ratio over 2012.
16. There was a 13% increase in the value of home production of milk in 2013. Competition for supplies kept milk prices firm throughout the year, with the annual average price 13% higher than in 2012.
17. Reduced UK supply of potatoes led to a 20% increase in annual average prices in 2013 and consequently an increase in the value of production of 29%.
18. Increased poultry meat production and growing demand leading to increased prices, resulted in the value of poultry meat production rising to a record level in 2013, at £2.2bn.
19. The 2010 Food Production to Supply Ratio figure for ‘Indigenous food’ has been revised from 75 to 76% and the 2009 figure for ‘All food’ has been revised from 58 to 59%, due to the incorporation of updated revaluation factors for import and export data.

### Distinction between competitiveness and food security

20. 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.
21. A detailed analysis is given in the Defra publication ‘UK Food Security Assessment’ available at: <http://archive.defra.gov.uk/foodfarm/food/security/index.htm>.
22. The key points on food production to supply ratio and food security from this paper are:

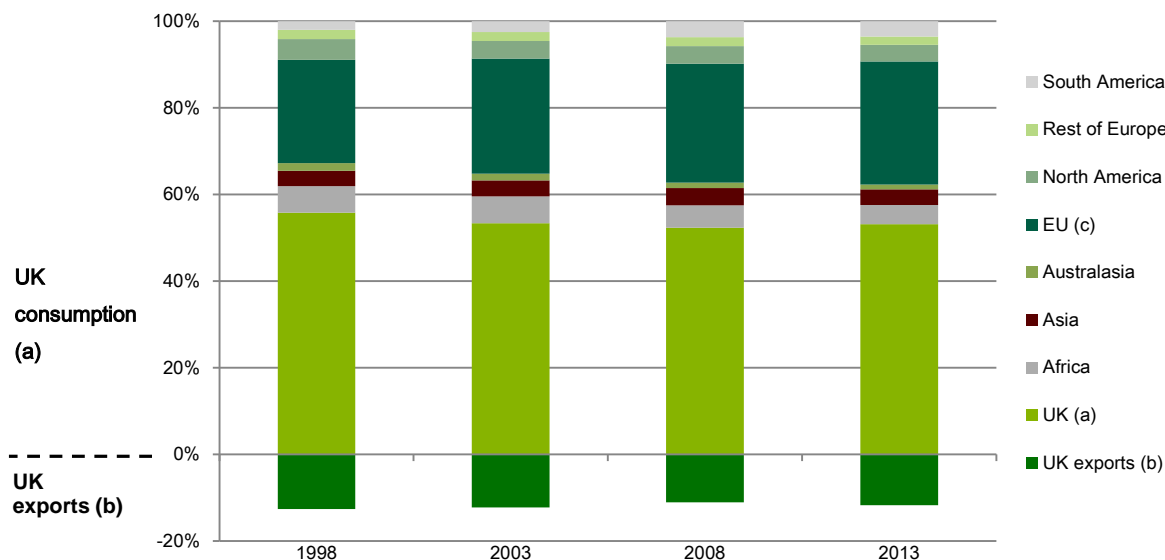
## AGRICULTURE IN THE UNITED KINGDOM 2013

- 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 14.5).
- 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 14.5)

23. Chart 14.5 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 14.4. Chart 14.5 looks purely at the breakdown of food that the United Kingdom actually consumes.
24. The Food Production to Supply Ratio (Chart 14.4) 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 14.5 Origins of food consumed in the United Kingdom: 1998, 2003, 2008, 2013



Based on the farm-gate value of raw food.

(a) Consumption of UK origin consists of UK domestic production minus UK exports.

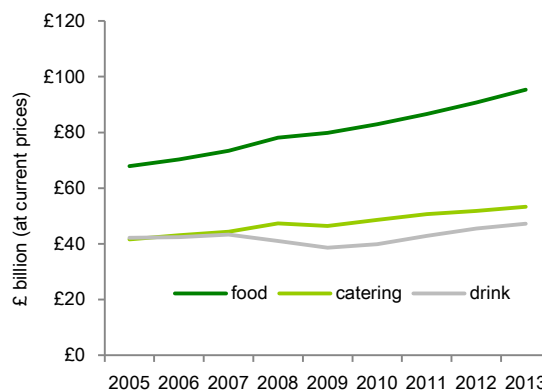
(b) UK exports are given as a percentage of total UK consumption.

(c) Membership of the EU increased between 2002 and 2007, from 15 to 27 countries.

## Consumers' expenditure

25. Consumer expenditure on food, drink and catering continued to rise despite the economic downturn. There was a 4.2% increase in 2013 to £196 billion. Household food expenditure rose 5.1% and expenditure on alcoholic drinks rose 3.7% in 2013. At current prices, which incorporate the higher food prices, consumers spent 22% more overall in 2013 than in 2007 (the last year before the recession started); 'food' saw the biggest increase at 30%. Excluding the effects of inflation, consumers spent 6.1% less overall in 2013 than in 2007, 3.0% less on food, 10% less on eating out and 6.9% less on alcoholic drinks.

Chart 14.6 Consumers' expenditure on food, drink and catering

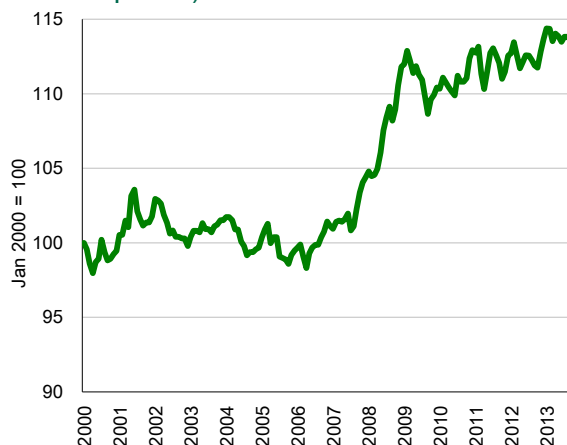


Source: Consumer trends, (ONS).  
Food includes non-alcoholic drinks; Drink is alcoholic drinks.

## Changes in consumers price indices (chart 14.7)

26. 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 14% above those of 2000.

Chart 14.7 Changes in the food price index (in constant prices)



Source: Consumer Price Index (ONS).

27. Averaged over 2013 the annual rate of food inflation (including non-alcoholic drinks) was 3.8% as measured by the Consumer Price Index. This compares with a general inflation rate of 2.6% over the same period. The annual rate of food inflation exceeded all items in the CPI for eleven out of the twelve months of 2013.
28. Between March 2013 and March 2014, the largest annual price rises were for fish up by 5.4%; oils and fats up by 4.0%; confectionery up 4.0% and meat up by 3.3%.

# Chapter 15: Key Statistics For EU Member States

## Summary

- Agricultural income as measured by Eurostat’s Indicator A has risen by 46% in the United Kingdom between 2005 and 2013 compared to 29% for the European Union as a whole.
- France was the largest producer of wheat in the European Union in 2012 and of beef and veal in 2013. Germany was the largest producer of cows’ milk and pig meat in 2013. The United Kingdom was the largest producer of sheep meat and goat meat in 2013.
- The producer price index for total agricultural production for the United Kingdom has risen by 74% between 2005 and 2012 compared to 36% for the European Union as a whole. The purchase price index for the total means of agricultural production for the United Kingdom has risen by 60% between 2005 and 2012 compared to 44% for the European Union as a whole.

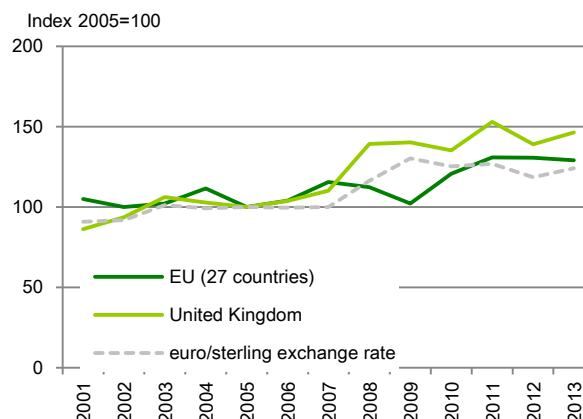
## Introduction

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

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.

Chart 15.1 Indicator A of the income from agricultural activity



Source: Eurostat

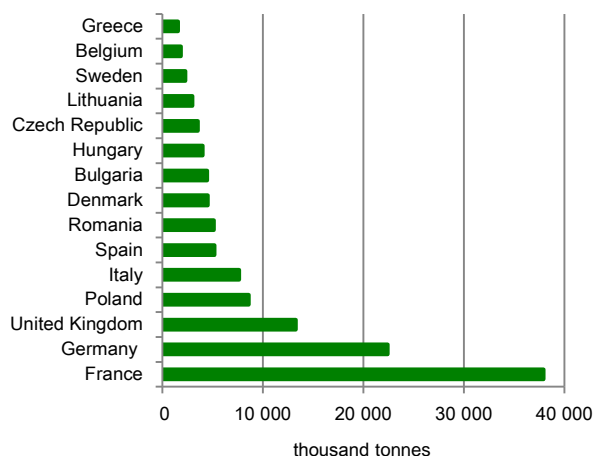
4. Chart 15.1 shows indices for Indicator A for the United Kingdom and the European Union (27 countries). The euro/sterling exchange rate, which influences agricultural income in the United Kingdom, is also shown. Indicator A for the United Kingdom rose by 46% between 2005 and 2013 compared to 29% for the European Union as a whole. As of July 2013 there are 28 countries in the European Union however this made little difference to the index, for comparison EU (27 countries) are used due to availability of data.

## Agricultural production

### Wheat

5. Chart 15.2 shows the quantity of common wheat and durum wheat produced by the top 15 producing Member States in 2012; data for 2013 is not yet available.
6. France was the largest producer of wheat in the European Union, producing just under 38,000 thousand tonnes in 2012, followed by Germany (22,409 thousand tonnes) and the United Kingdom (13,261 thousand tonnes). These three countries produced over half of wheat output in the European Union in 2012.

Chart 15.2 Production of wheat 2012

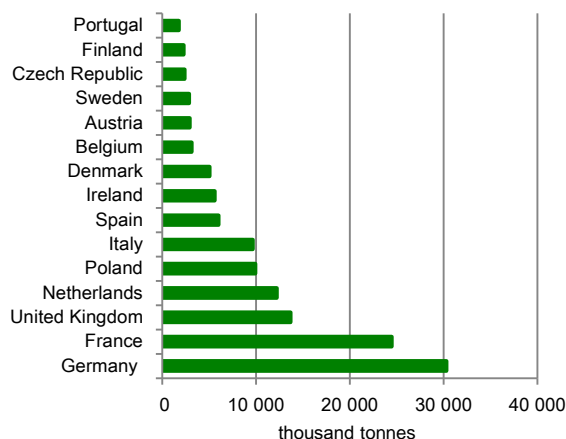


Source: Eurostat

### Cows' milk

7. Chart 15.3 shows the quantity of cows' milk produced by the top 15 producing Member States in 2013.
8. Germany was the largest producer of cows' milk in the European Union, producing just over 30,000 thousand tonnes in 2013, followed by France (24,453 thousand tonnes). The United Kingdom produced 13,687 thousand tonnes, followed by the Netherlands (12,207 thousand tonnes), Poland (9,921 thousand tonnes) and Italy (9,657 thousand tonnes).

Chart 15.3 Production of cows' milk

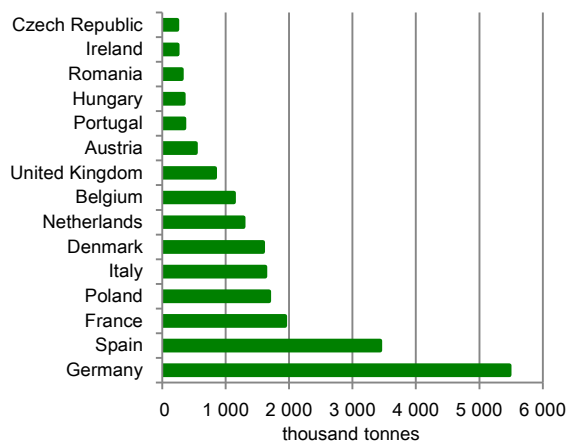


Source: Eurostat

### Pig meat

9. Chart 15.4 shows the quantity of pig meat produced by the top 15 producing Member States in 2013.
10. Germany was also the largest producer of pig meat in the European Union, producing almost 5,500 thousand tonnes in 2013 followed by Spain (3,439 thousand tonnes). The United Kingdom produced 833 thousand tonnes. Germany and Spain produced around 40% of pig meat in the European Union in 2013.

Chart 15.4 Production of pig meat

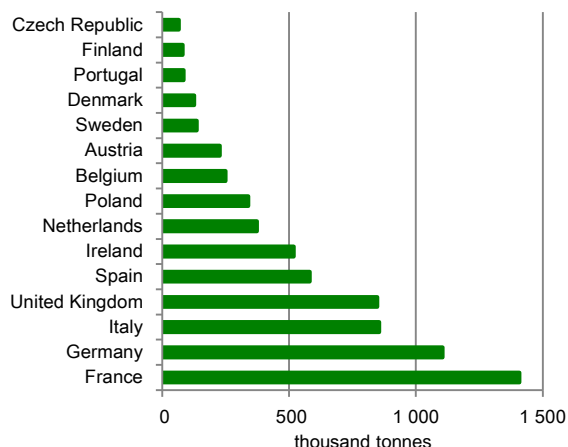


Source: Eurostat

Beef and veal

- 11. Chart 15.5 shows the production of beef and veal in 2013.
- 12. France was the largest producer of beef and veal in the European Union, producing just over 1,400 thousand tonnes in 2013, followed by Germany (1,106 thousand tonnes), Italy (855 thousand tonnes) and the United Kingdom (848 thousand tonnes). These four countries produced about 60% of all beef and veal in the European Union in 2013.

Chart 15.5 Production of beef and veal

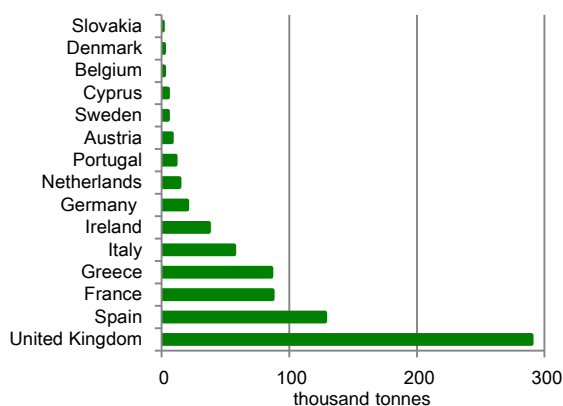


Source: Eurostat

Sheep and goat meat

- 13. Chart 15.6 shows the production of sheep meat and goat meat in 2013.
- 14. The United Kingdom was the largest producer of sheep meat and goat meat in the European Union in 2013, producing 290 thousand tonnes, followed by Spain (128 thousand tonnes). France produced 87 thousand tonnes, followed by Greece (86 thousand tonnes) and Italy (57 thousand tonnes). The United Kingdom and Spain produced over half of all sheep meat and goat meat in the European Union in 2013.

Chart 15.6 Production of sheep meat and goat meat

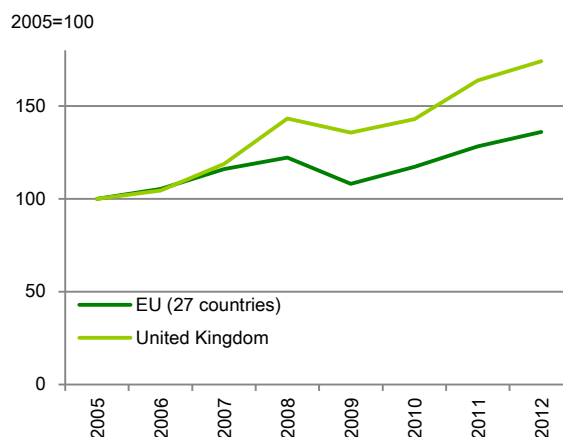


Source: Eurostat

Price Indices

- 15. Chart 15.7 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.
- 16. 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 15.7 Producer price indices, total agricultural production

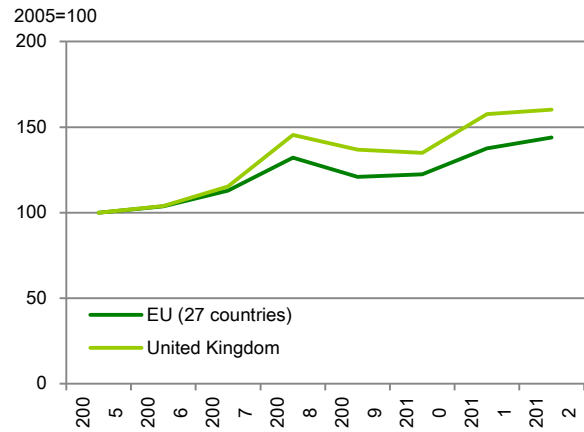


Source: Eurostat



17. Chart 15.8 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.
18. 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 15.8 Producer price indices, total means of agricultural production



Source: Eurostat

## Revisions

Figures for 2013 are provisional and may be subject to revision. There are minor amendments to the Agricultural Income index following updates to data obtained from Eurostat. Production of sheep and goat meat figures have been revised due to incorrect use of animal numbers rather than tonnage of meat.