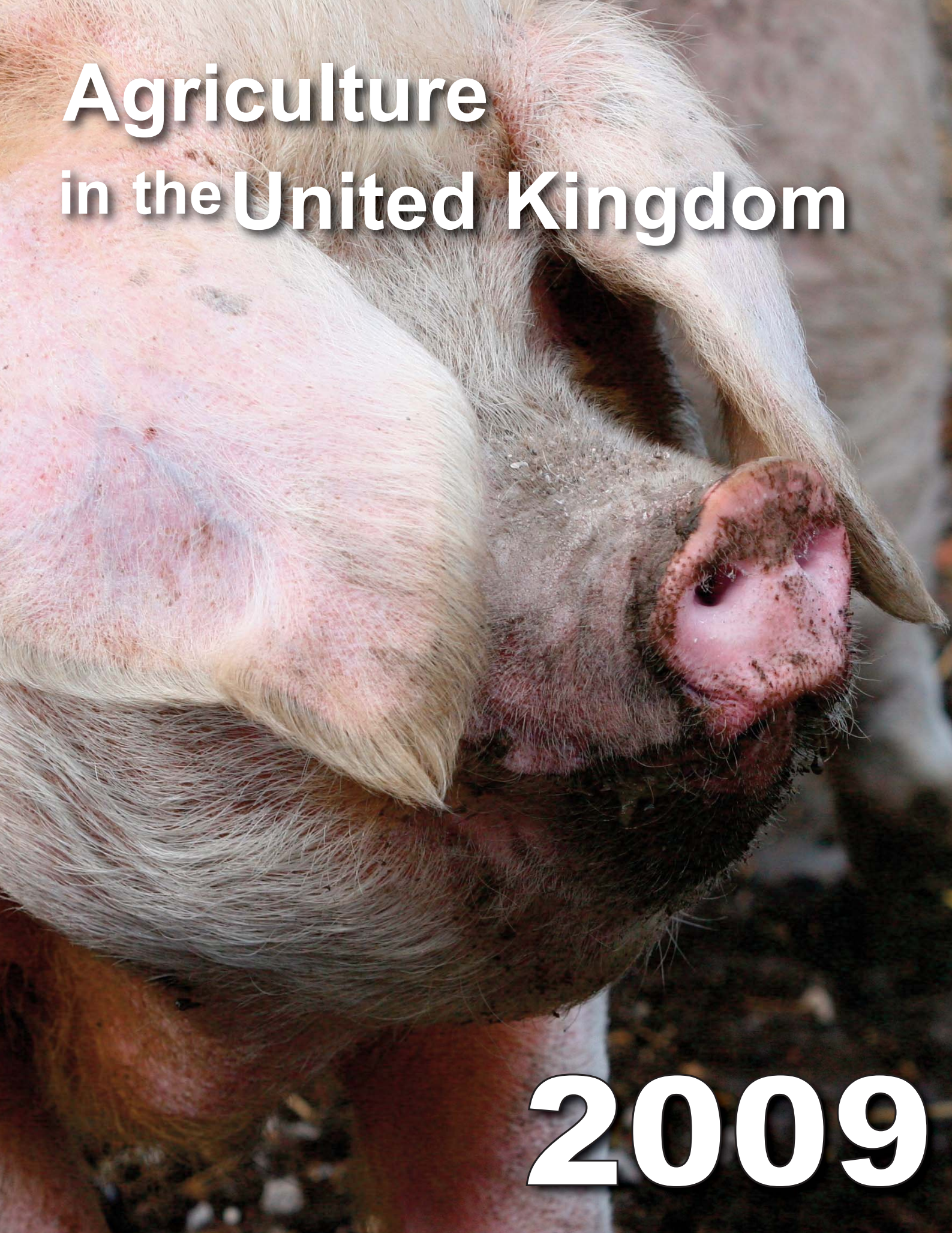
Agriculture in the United Kingdom



2009

Department for Environment, Food and Rural Affairs
Department of Agriculture and Rural Development (Northern Ireland)
The Scottish Government, Rural and Environment Research and Analysis Directorate
Welsh Assembly Government, The Department for Rural Affairs and Heritage

Agriculture in the United Kingdom 2009

Produced by:

Department for Environment, Food and Rural Affairs

Department of Agriculture and Rural Development (Northern Ireland)

Welsh Assembly Government, The Department for Rural Affairs and Heritage

The Scottish Government, Rural and Environment Research and Analysis Directorate

Contents

2009

Preface v

Legal basis; Changes; Structure of Tables; Source of data; Websites; 'Agriculture in the United Kingdom' Seminar 2010.

Chapter 1 Key Events in 2009 1

Total Income from Farming; Economic Downturn; Common Agricultural Policy; Uplands Entry Level Stewardship; Glastir; UK Food Strategy; Campaign for the Farmed Environment.

Chapter 2 Farming Income 3

Summary; Long-term trends in farming income; Prospects for farming incomes; Summary measures; Summary measures by country; Comparison of income measures in EU Member States; Comparison of agriculture in EU Member States; Farm Business Incomes by farm type; Farm income measures; Diversification.

Chapter 3 The Structure of the Industry 13

Summary; Introduction; Land use, crop areas and livestock numbers; Numbers and sizes of holdings and enterprises; Labour force in agriculture; Age of holders; Fixed capital stock.

Chapter 4 Prices 23

Summary; Data Sources; Price indices; Farm rents; Agricultural land prices.

Chapter 5 Commodities 27

Summary; General methodology note; Methodology note for cereals and potatoes; Total cereals; Wheat; Barley; Oats; Oilseed rape; Linseed; Sugar beet and sugar; Peas and beans for stockfeed; Fresh vegetables; Plants and flowers; Potatoes; Fresh fruit; Methodology note for livestock tables; Cattle and calves: beef and veal; Pigs and pigmeat; Sheep and lambs: mutton and lamb; Poultry and poultrymeat; Milk; Milk products; Hen eggs.

Chapter 6 Intermediate Consumption 51

Summary; Introduction; Oil prices; Fuels; Electricity; Fertiliser; Pesticides; Veterinary expenses; Agricultural services; Animal feed; Seeds; Maintenance: materials; Maintenance: buildings.

Chapter 7 The food chain 57

Summary; Contribution of the agri-food sector to the national economy; The food chain; Food chain employees and self–employed farmers; Trade in food, feed and drink; Self-sufficiency; Distinction between competitiveness and food security; Origins of food consumed in the United Kingdom; Farmers' share of consumers' expenditure; Changes in retail price indices.

Chapter 8 Overseas Trade 67

Summary; Introduction; Trade in food, feed and drink; Trading partners; Exports and imports; Trade in key commodities; Trade with EU 26 countries: Bacon and ham; Pork; Milk and cream; Trade with key trading partners; Lamb and mutton; Beef and veal; Poultrymeat; Poultrymeat Products; Unmilled wheat; Fresh vegetables; Fresh fruit.

Chapter 9 Accounts 79

Summary; Introduction; Total Income from Farming; Production and income account at current prices; Balance sheets; Capital account; Revaluation account; Interest; Changes in volume of capital assets.

Chapter 10 Productivity 93

Summary; Introduction; Productivity; Farm level efficiency and international comparisons; Volume indices; Labour.

Chapter 11 Public Payments 99

Summary; Direct payments made to farmers; Expenditure through trader based schemes; Rural Development Programmes 2007 - 2013; Payments made through key measures of the Rural Development Programmes 2007 - 2013; Take-up of agri-environment schemes.

Chapter 12 Organic Farming 105

Summary; Introduction; Organic and in-conversion land; Land use statistics; Numbers of organic businesses; Livestock statistics.

Chapter 13 Animal Health and Welfare 111

Summary; Introduction; Animal Health; Notifiable Diseases; Animal Welfare; On Farm Welfare.

Chapter 14 Environment 117

Summary; Introduction; Farm Structures and Production; Numbers of farms by farm type and size; Land use; Crop and milk production; Livestock numbers; Farm incomes; Uptake of stewardship schemes; Current Projects 1. Survey of Upland Farming; Input use and farm practices; Fertiliser use; Pesticide use; Water use; Farm practices; Current Projects 2. Soil Nutrient Balances; Environmental Impacts; Greenhouse gas emissions; Air quality; Water quality; Farmland birds; Current Projects 3. Campaign for the Farmed Environment; Valuing environmental impacts of agriculture.

Chapter 15 Key Statistics for EU Member States 133

Summary; Introduction; Incomes: Indicator A of the income from agricultural activity; Agricultural products: Wheat; Cows' milk; Pigmeat; Beef and veal; Sheep and goat meat; Price indices: Crop products; Animals and animal products; Total means of agricultural production.

Preface

Legal basis

1 Agriculture in the United Kingdom 2009 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 policy issues, including proposals by the European Commission in respect of the Common Agricultural Policy (CAP) and the provision of agricultural support.

Changes

2 Some of the figures now given for past years may differ from those published in preceding issues. This is because of the use of later information, changes in the scope and nature of the available data and improvements in statistical methods.

Structure of Tables

3 Most of the data are on a calendar year basis. The data for 2009 are provisional because information for 2008 was still incomplete at the time of publication and therefore an element of forecasting was required.

4 The following points apply throughout:

(a) All figures relate to the United Kingdom unless otherwise stated.

(b) In the tables

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

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

(c) 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.

(d) Where statistics are shown for the European Union (EU) as a whole they represent the present Member States in all years regardless of when they became a member.

5 Where figures are presented in real terms the measure of inflation used is the all-items Retail Price Index.

‘Agriculture in the United Kingdom’ Seminar 2010

6 The eighth annual ‘Agriculture in the United Kingdom’ Seminar takes place at the East of England Showground in Peterborough on 30 June 2010. It offers stakeholders the opportunity to discuss the prospects for farm incomes and the work of Defra statisticians.

7 The aims of the seminar are to:

- discuss the prospects for farm incomes in the medium term;
- present and discuss work currently being undertaken by Defra statisticians;
- update stakeholders on current priorities and plans for Defra statistics.

8 Contact details and a reply form are below. Further information will be placed on the Defra website at http://www.defra.gov.uk/evidence/statistics/foodfarm/general/auk/index.htm.

‘Agriculture in the United Kingdom’ Seminar 2010

Name _____ Organisation _____

Email or postal address _____

_____

_____

I would like to attend the ‘Agriculture in the United Kingdom’ seminar on 30 June 2010. Please send me further details.

Return to:

Amanda Mitchell, Defra, Room 309, Foss House, Kings Pool, 1-2 Peasholme Green, York YO1 7PX.

by post or,

confirm by email (amanda.mitchell@defra.gsi.gov.uk) or,

by telephone to the Agriculture in the United Kingdom team on 01904 455059/83.

Chapter 1 Key Events in 2009

Total Income from Farming

1 Total Income from Farming is estimated to have fallen by 6.7 per cent in current prices, or 6.2 per cent in real terms, to £4.07 billion. Total Income from Farming per full-time person equivalent fell by 8.7 per cent at current prices, or 8.1 per cent in real terms, to £20,955, but remains 50 per cent up on 2007.

Economic Downturn

2 The United Kingdom, along with other countries of the world, saw the continued impact of the economic downturn during 2009, with the United Kingdom economy just returning to growth in the final quarter. The agriculture sector continued to demonstrate its resilience to the shocks in the wider economy, and saw:

- a further weakening of the pound making exports more competitive;
- the 2009 single payment higher in sterling terms than in 2008, reflecting the decline in the £/€ exchange rate;
- a continuation of the low bank base rate kept down the cost of borrowing (despite increased margins over base rates) and agriculture's strong balance sheet contributed to the sector being much less affected by the banks tightening of lending conditions than most other sectors;
- a stability of demand for its outputs compared with other sectors of the economy, albeit with some trading down by consumers impacting on some sectors e.g. organic.

Common Agricultural Policy

3 Agreement was reached on further reform of the Common Agricultural Policy (CAP), known as the CAP Health Check, at the EU Agriculture Council in November 2008, with implementing regulations being agreed during 2009. Amongst other things this extended the decoupling of direct support, abolished the EU requirement for farmers to set land aside and introduced further simplification of the Single Payment Scheme (SPS).

4 The decoupling of nuts and protein support is being implemented regionally, with Wales, Scotland and Northern Ireland opting to decouple in 2010, whilst England will decouple in 2012. As a result of the Health Check, the 2009 scheme year was the last year of the Aid for Energy Crops.

Uplands Entry Level Stewardship

5 The Uplands Entry Level Stewardship (Uplands ELS) will replace the Hill Farm Allowance (HFA) from 2010 in England. It is designed to ensure that farmers are supported and rewarded in their efforts to maintain England's historic uplands landscape, such as the Cumbrian Fells, Dartmoor and the Peak District in England. Through the scheme, hill farmers will be rewarded for maintaining the biodiversity and natural resources of the area, which helps support the effort to fight and adapt to climate change, and for maintaining iconic features of the landscape such as dry stone walls and stone-faced hedge banks.

Glastir

6 In May 2009, the Minister for Rural Affairs announced a shift in approach to land management schemes in Wales. From 2012, the five existing agri-environment schemes will be replaced by one scheme, Glastir, which is better positioned to meet current and future environmental challenges.

UK Food Strategy

7 Food 2030 is the Government's new food strategy, published in January 2010.

The strategy is structured around six core issues for the food system:

- encouraging people to eat a healthy, sustainable diet;
- ensuring a resilient, profitable and competitive food system;
- increasing food production sustainability;
- reducing the food system's greenhouse gas emissions;
- reducing, re-using and reprocessing waste;
- increasing the impact of skills, knowledge, research and technology.

To achieve these objectives, Defra will work in partnership with a range of sectors from the food and farming industries, consumers, the third sector and EU and international organisations.

Food security is an important element of Food 2030 (http://defraweb/foodfarm/food/strategy/index.htm) and the UK Food Security Assessment (http://defraweb/foodfarm/food/security/index.htm), which was published in August 2009, sets out our current assessment of the state of our food supplies, the challenges and risks facing United Kingdom food security, along with the Government's activities to ensure the United Kingdom remains food secure.

Campaign for the Farmed Environment

7 The Campaign was formally launched on 5th November 2009. It offers an approach that enables farmers to continue to produce more, but impact less on their environment and is aimed at three key beneficiaries of set-aside: farmland birds; biodiversity of open habitats; and resource protection. It is aimed primarily at arable farmers and has developed a series of measures to complement key Environmental Stewardship (ELS) options as well as promoting the uptake of Environmental Stewardship. The full list of measures under the Campaign can be found on the Campaign's website at www.cfeonline.org.uk.

8 The Campaign unites key industry stakeholders: the National Farmers Union (NFU); the Country Land and Business Association (CLA); Farming & Wildlife Advisory Group (FWAG); Linking Environment and Farming (LEAF); Agricultural Industries Confederation (AIC); Game and Wildlife Conservation Trust (GWCT); Association of Independent Crop Consultants (AICC); and Central Association of Agricultural Valuers (CAAV). These key industry stakeholders will work in partnership with Defra and its agencies, Natural England and the Environment Agency, as well as the Royal Society for the Protection of Birds (RSPB) and other wildlife representatives.

Chapter 2 Farming Income

2009

Summary

In 2009:

- Total Income from Farming fell by 6.7 per cent at current prices, or 6.2 per cent in real terms, to £4.07 billion;
- Total Income from Farming per full-time person equivalent fell by 8.7 per cent at current prices, or 8.1 per cent in real terms, to £20,955;
- agriculture's share of national gross value added is expected to be about 0.6 per cent, similar to that in 2008;
- in real terms, farm incomes for cropping and dairy farm types are estimated to have fallen in 2009/10 in England, Scotland and Wales while incomes for livestock farms are expected to have increased.

Long-term trends in farming income (chart 2.1)

1 In 2009, Total Income from Farming in the United Kingdom is estimated to have fallen by 6.2 per cent in real terms. This is still the second highest level in real terms since 1996 and is more than double the low point in 2000, although still 44 per cent below the high point in 1995. The dramatic rise in farming's profitability in the early nineties followed the decline in the euro/sterling exchange rate after the United Kingdom left the Exchange Rate Mechanism. The equally rapid reverse in the second half of the decade was caused by increases in the exchange rate, lower world commodity prices and the impact of BSE.

Prospects for farming income (chart 2.2)

2 The future business prospects for farming will reflect the interaction of the key drivers (both long-term and short-term) which have shaped the present position. Chart 2.2 shows a projection into 2010. It should be emphasised that this type of projection has a broad margin of uncertainty; agriculture is an industry where specific events, such as disease outbreak or poor weather, can shift incomes from the underlying trend in individual years.

3 The latest projection was published in November 2009 and indicated a fall in income in 2010 with a fall in agricultural output being only partly offset by a decline in input costs and a rise in payments, coupled with a fall in the volume of labour input. Prospects for 2010 and beyond are difficult to predict. Periods of price volatility are likely to occur for the foreseeable future and sterling exchange rates will continue to have a significant impact on the fortunes of UK farmers.

Click here to obtain further data source information for this chapter

Chart 2.1 Long-term trends in farming income in real terms at 2009 prices; United Kingdom

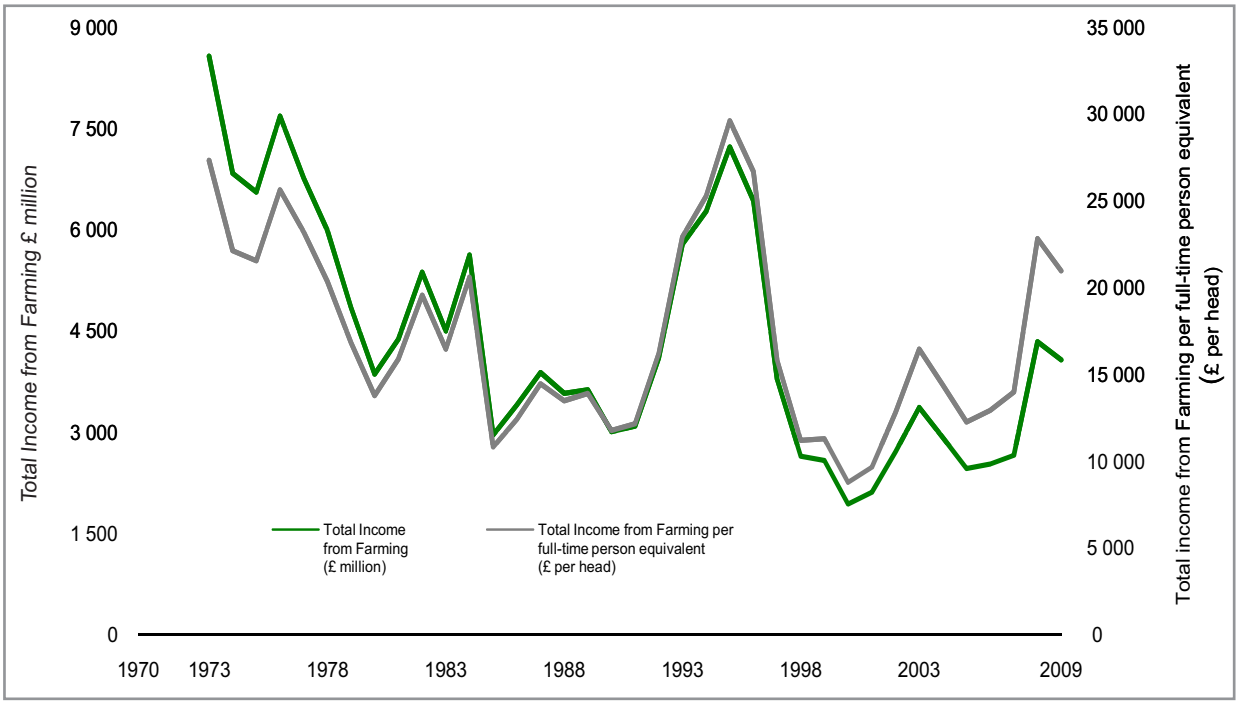
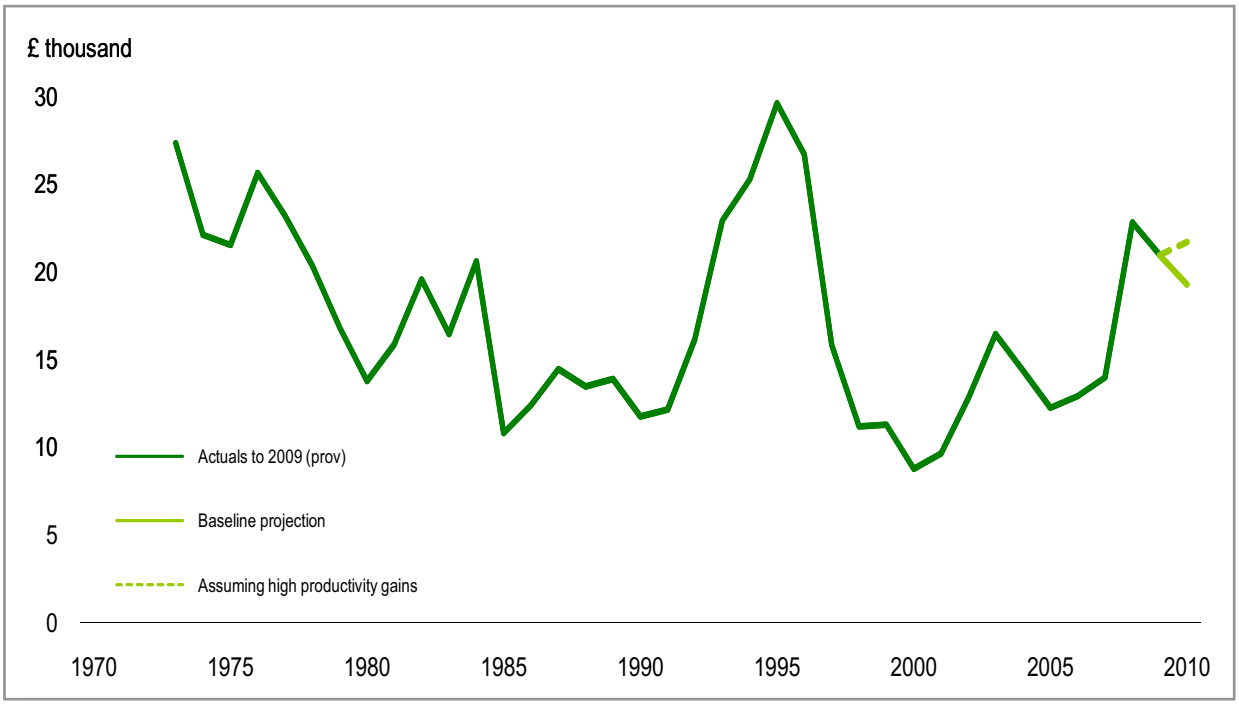


Chart 2.2 Prospects for farming income; Total Income from Farming in real terms at 2009 prices per full-time person equivalent up to 2010; United Kingdom



4 A key driver of farming incomes is productivity. The high productivity scenario within this analysis has been chosen to broadly match the growth rate seen for the leading group of Member States of the European Union.

Summary measures including Total Income from Farming (tables 2.1, 2.2)

5 Net value added at factor cost includes all subsidies but makes no allowance for interest, rent or labour costs. In 2009, net value added at factor cost was £7.4 billion, 4.4 per cent lower than in 2008, or 3.9 per cent in real terms.

6 Total Income from Farming in the United Kingdom in 2009 is estimated to have fallen by 6.7 per cent at current prices, or 6.2 per cent in real terms, to £4.07 billion. A fall in the value of output was accompanied by a fall in input costs and an increase in the value of the Single Payment. Total Income from Farming is income generated by production within the agriculture industry, including subsidies, and represents business profits and remuneration for work done by owners and other unpaid workers.

7 Compensation of employees, or labour costs, rose by 4.2 per cent in 2009, or 4.8 per cent in real terms. Income from agriculture of total labour input, which is the sum of 'Total Income from Farming' and 'compensation of employees', fell by 2.7 per cent, or 2.2 per cent in real terms. Total Income from Farming per full-time person equivalent (labelled "Total income from farming per AWU of entrepreneurial labour" in table 2.1) is estimated to have fallen by 8.7 per cent in current prices, or 8.1 per cent in real terms, to £20,955.

8 Cash flow from farming rose by 10 per cent real terms in 2009 to £4.3 billion. Cash flow reflects sales and expenditure on gross fixed capital formation and includes capital transfers paid to the industry in exchange for assets. Variations in cash flow over recent years largely reflect delays in payments made through the Single Payment Scheme.

Table 2.1 Summary measures from the aggregate agricultural account; United Kingdom

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

£ million (unless otherwise specified) Calendar years

Year	Net value added at factor cost	Income from farming				Cash flow from farming
		Total Income from Farming	Compensation of employees	Income from agriculture of total labour input	Total income from Farming per AWU entrepreneurial labour (a)	
Current prices		A	B	A + B	(£)	
1999	4 854	1 998	2 028	4 026	8 700	2 907
2000	4 278	1 541	1 900	3 441	7 000	2 655
2001	4 455	1 712	1 950	3 662	7 800	3 753
2002	4 915	2 235	1 965	4 201	10 600	2 607
2003	5 472	2 855	1 915	4 770	14 000	3 329
2004	5 293	2 550	2 004	4 554	12 600	2 576
2005	5 181	2 211	2 218	4 428	11 000	493
2006	5 387	2 344	2 271	4 615	12 000	2 741
2007	5 819	2 568	2 363	4 931	13 500	3 205
2008	7 727	4 362	2 500	6 861	22 900	3 922
2009	7 385	4 069	2 604	6 673	21 000	4 333
In real terms, 2009 prices						
1999	6 268	2 580	2 619	5 199	11 300	3 754
2000	5 367	1 933	2 384	4 317	8 800	3 331
2001	5 489	2 109	2 403	4 512	9 600	4 624
2002	5 959	2 710	2 383	5 093	12 800	3 160
2003	6 446	3 363	2 256	5 620	16 400	3 921
2004	6 056	2 918	2 293	5 211	14 400	2 947
2005	5 765	2 460	2 468	4 927	12 300	549
2006	5 809	2 527	2 449	4 976	12 900	2 956
2007	6 017	2 656	2 443	5 099	14 000	3 314
2008	7 683	4 337	2 485	6 822	22 800	3 899
2009	7 385	4 069	2 604	6 673	21 000	4 333

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

9 Gross value added (GVA) for the industry, which represents its contribution to national gross domestic product (GDP), fell by 6.4 per cent at basic prices compared to 2008.

10 The agricultural industry is expected to account for around 0.6 per cent of the national economy in 2009, measured in terms of gross value added. Since 1973, when the share was almost 3.0 per cent, the overall trend has been downwards although there have been brief recoveries when prices for agricultural commodities improved. Gross value added at basic prices fell by 0.2 percentage points in 2005 due to the introduction of the Single Payment Scheme, which is not linked to production and so is not included in gross value added.

11 The industry's share of the national workforce fell slightly to 1.6 per cent. It has declined by 31 per cent since 1996.

Summary measures by country (table 2.2)

12 Table 2.2 shows the main indicators for the agricultural industries in England, Northern Ireland, Scotland and Wales in 2009. In 2009, England accounted for about 83 per cent of gross value added for the agricultural industry in the United Kingdom, Scotland accounted for about 9.0 per cent, Northern Ireland for 4.0 per cent and Wales for 3.0 per cent.

13 The measures 'Agriculture's share of total regional employment' and 'Agriculture's share of total regional gross value added at basic prices' give an indication of the relative importance of the agricultural industry to each country. Agriculture's share of total regional employment is greatest in Northern Ireland and least in England. Similarly, agriculture's share of gross value added was greatest in Northern Ireland and least in England (2008 data).

Table 2.2 Summary measures by country

Enquiries: Graham Brown on +44 (0)1904 455084 email: graham.brown@defra.gsi.gov.uk

	Gross output at basic prices	Intermediate consumption	Gross value added at basic prices	Total Income from Farming	Agriculture's share of total regional gross value added at basic prices (a)	Agriculture's share of total regional employment (b) (c)	Agriculture's share of total gross fixed capital formation
	£ million	£ million	£ million	£ million	%	%	%
United Kingdom	19 305	12 137	7 168	4 069	0.61	1.59	1.70
England	14 568	8 591	5 977	3 058	0.56	1.40	. .
Wales	1 133	918	215	181	0.37	4.29	. .
Scotland	2 261	1 589	672	589	0.75	2.51	. .
Northern Ireland	1 343	1 039	304	243	1.20	5.71	. .

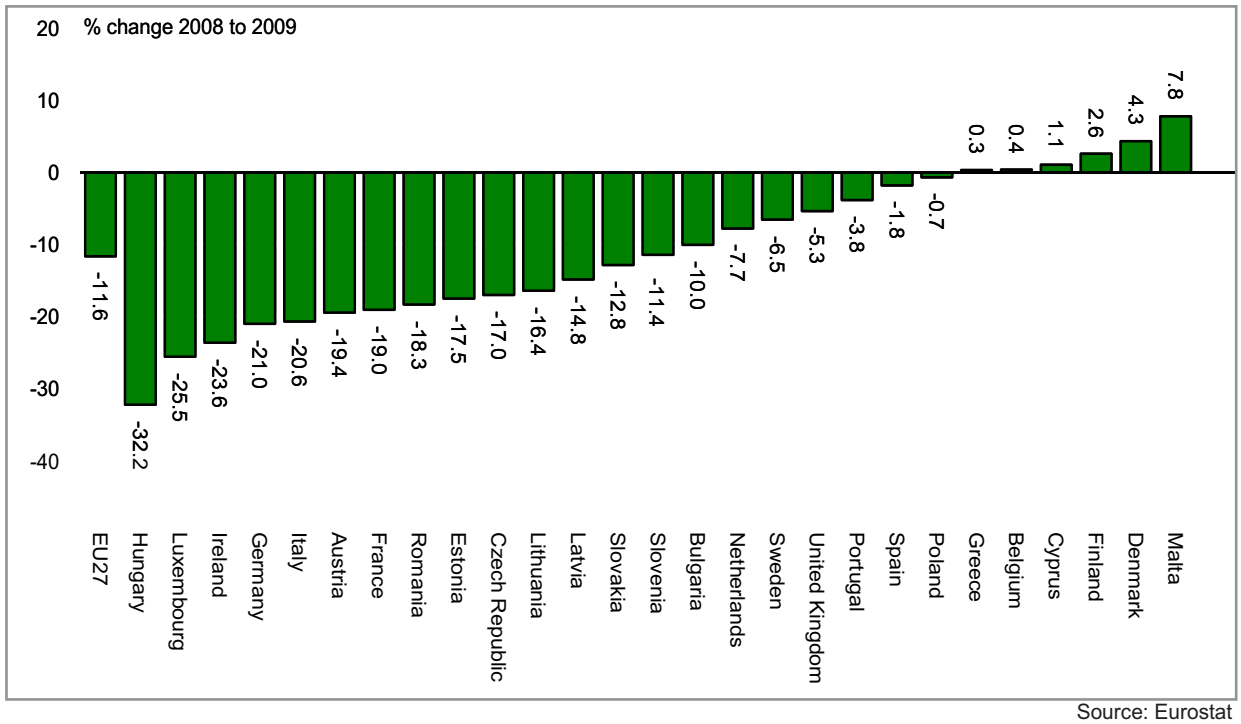
(a) Data on national and regional GVA for 2009 are not yet available. Data for 2008 are shown for illustration.
(b) The total workforce in employment consists of employees in employment, the self-employed and people in work-related government training schemes. For Northern Ireland, agriculture's percentage share is higher than that published by the Northern Ireland Department of Enterprise, Trade and Investment, which excludes part-time owners, partners, directors and spouses of farmers.
(c) The agriculture industry includes a high proportion of part-time workers. A comparison on the basis of full-time person equivalent would show lower percentages.

Comparison of income measures in EU Member States (chart 2.3, table 2.3)

14 Chart 2.3 shows estimated changes from 2008 to 2009 in income from agricultural activity across EU Member States as measured by Eurostat's preferred measure of agricultural income, Indicator A.

15 Indicator A, which is net value added at factor cost per annual work unit (or full-time person equivalent) in real terms, fell by 12 per cent in the European Union in 2009. The indicator fell in 21 Member States, including the United Kingdom where it fell by 5.3 per cent. Increases were recorded in Greece, Belgium, Cyprus, Finland, Denmark and Malta.

Chart 2.3 Changes in income across the EU: Indicator A



Source: Eurostat

16 Table 2.3 shows a medium term perspective for three measures of agricultural income calculated by Eurostat. Indicator A for the United Kingdom follows a similar trend to those for EU15 and EU 27 from 2002 until 2008 when the indicator for the United Kingdom diverged significantly from those for the EU15 and EU27 increasing by 29 per cent compared to small falls in the EU15 and EU27. In 2009, Indicator A for the United Kingdom was 37 per cent higher than in 2005, but 4.6 per cent lower in the EU15 and 0.3 per cent lower in the EU27. Indicator B, which is net agricultural entrepreneurial income in real terms per unpaid annual work unit, and Indicator C, which is net entrepreneurial income of agriculture, show similar trends to Indicator A.

Table 2.3 Eurostat income indicators

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

Index 2005 = 100

	Average of 1998 - 2000	2005	2006	2007	2008	2009
Net value added at factor cost of agriculture per total Annual Work Unit (Indicator A)						
United Kingdom	82.8	100.0	104.7	112.0	144.7	137.0
EU15	104.1	100.0	103.4	112.9	107.9	95.4
EU27	94.7	100.0	104.2	115.4	112.8	99.7
Net agricultural entrepreneurial income per unpaid Annual Work Unit (Indicator B)						
United Kingdom	81.1	100.0	105.0	111.4	167.9	156.0
EU15	111.2	100.0	104.1	118.9	106.3	85.2
EU27	. .	100.0	105.0	119.8	111.4	89.5
Net entrepreneurial income from agriculture (Indicator C)						
United Kingdom	92.5	100.0	102.3	105.5	159.0	150.9
EU15	129.9	100.0	102.0	111.7	97.0	75.9
EU27	126.3	100.0	101.9	109.6	99.0	77.5

Source: Eurostat

Comparison of agriculture in EU Member States (table 2.4)

17 Table 2.4 shows the relative importance of agriculture in the 27 Member States in 2009. France, Germany, Italy and Spain accounted for over half of the total agricultural output in the European Union in 2009 while the United Kingdom, Spain, Malta, Belgium and Sweden were expected to have the highest entrepreneurial income per full-time person equivalent (AWU).

Table 2.4 Comparison of agriculture in EU Member States for 2009

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

Country comparison at current prices and current exchange rates € million (except where otherwise stated)

	Total crop output	Total animal output	Total agricultural output (a)	Gross Value Added at basic prices	Entrepreneurial income	Total labour input (b)	Entrepreneurial income per AWU
						'000 AWU	€
Member States							
EU27	180 462	140 522	347 037	136 790	64 964	11 223	5 800
EU15	148 839	117 233	287 768	114 824	51 082	5 424	9 400
New Member States 12	31 623	23 289	59 269	21 966	13 883	5 799	2 400
Belgium	3 032	3 859	6 972	2 022	799	64	12 600
Bulgaria	1 942	1 169	3 803	1 473	1 372	400	3 400
Czech Republic	2 050	1 771	4 010	753	143	134	1 100
Denmark	2 986	4 701	8 205	1 604	-1 908	56	-34 200
Germany	21 188	19 738	42 845	12 846	4 058	536	7 600
Estonia	211	271	558	167	64	29	2 200
Greece	6 958	2 814	10 715	6 182	5 574	571	9 800
Spain	23 604	13 429	38 551	22 740	17 073	909	18 800
France	35 524	23 155	63 749	23 099	8 167	858	9 500
Ireland	1 340	3 408	5 017	952	1 134	146	7 700
Italy	24 441	14 154	42 696	22 305	4 476	1 163	3 800
Cyprus	316	309	657	302	215	26	8 300
Latvia	413	331	829	193	218	92	2 400
Lithuania	1 027	731	1 929	649	250	147	1 700
Luxembourg	116	152	290	87	29	4	8 100
Hungary	3 463	2 373	6 446	1 801	852	441	1 900
Malta	52	70	130	59	61	4	14 400
The Netherlands	11 220	8 715	22 829	7 515	1 130	182	6 200
Austria	2 675	2 806	6 052	2 418	1 544	153	10 100
Poland	10 868	10 026	21 573	8 277	7 075	2 214	3 200
Portugal	3 809	2 598	6 761	2 070	1 030	344	3 000
Romania	9 883	4 986	16 388	7 356	3 316	2 148	1 500
Slovenia	478	473	974	372	290	82	3 500
Slovak Republic	919	779	1 972	564	27	82	300
Finland	1 555	2 051	4 153	990	840	87	9 700
Sweden	1 859	2 354	4 926	1 393	759	63	12 000
United Kingdom	8 534	13 300	24 007	8 601	6 376	290	22 000

Source: Eurostat

(a) Includes agricultural services output and inseparable secondary activities.

(b) Differs from workforce in agriculture in tables 3.8 and 7.1 which is shown in thousand persons. In this table the basis is annual work units (AWU) (full-time equivalents) as opposed to persons employed.

Farm business incomes by farm type (tables 2.5, 2.6, chart 2.4)

18 Farm Business Income, is presented in Tables 2.5, 2.6 and Chart 2.4. It replaces Net Farm Income as the headline measure.

19 Estimates of Farm Business Income for 2009/10 (i.e. year ended February 2010) at current prices are shown in table 2.5 for England, Wales and Northern Ireland alongside outturn data for the previous five years. These estimates include Single Payment Scheme (SPS) receipts which are recorded as due for the appropriate accounting year, e.g. receipts of the 2009 SPS are recorded in the 2009/10 accounting year. It should be noted that forecasts of Farm Business Income are not currently produced in Scotland.

20 On average, the Single Payment receipt increased by 14 per cent in 2009 compared to the previous year as the value of sterling continued to fall against the euro. The conversion rate at the end of September 2009 was 0.9093 compared to 0.7903 at the same time the previous year.

21 Average Farm Business Incomes are expected to fall on cropping farms in 2009/10 in England. Crop enterprise output is expected to be lower due to a combination of reduced cropping area, average yields and prices for the 2009 harvest compared with 2008. Lower cereal prices towards the end of 2008, combined with the wet autumn led to farmers reducing their cropping area from the levels seen for the previous harvest. Average yields were also lower, reflecting the less favourable growing conditions along with some switching to lower yielding spring sown crops. Although some of this reduction in output is expected to be offset by lower input costs, overall Farm Business Income is forecast to fall by around 25 per cent.

22 Average Farm Business Income on dairy farms is forecast to fall in England, Wales and Northern Ireland compared with the previous year. This is largely driven by a lower average milk price, with higher prices for replacement stock also acting to reduce incomes. Dairy farms are expected to benefit to some extent from the more profitable beef sector, with higher prices received for cull and store livestock as well as any finished cattle and there is also expected to be a small reduction in costs.

23 On livestock grazing farms in both the lowland and Less Favoured Areas (LFA), incomes are predicted to increase. Continuing tight supplies have led to higher market prices for finished cattle and lambs with a positive effect on livestock enterprise output. Cull cattle and sheep prices have also continued to increase further following the firmer values seen in 2008/09. Overall input costs are expected to fall slightly, particularly for fuel and animal feed.

24 Average Farm Business Income is forecast to increase substantially in 2009/10 on specialist pig farms in England. This reflects both the high prices seen during the course of the year for finished pigs, cull sows, weaners and store pigs combined with lower prices for some key inputs, particularly feed.

25 Specialist poultry farm incomes are also expected to increase sharply in England in 2009/10. This results primarily from lower feed prices although livestock output is also forecast to rise slightly due to small increases in the prices of poultrymeat and eggs.

26 Table 2.6 shows the variation in the level of Farm Business Income, Net Farm Income and cash income across farms in the United Kingdom in 2008/09. Around a quarter of farms in the United Kingdom had a Farm Business Income of £10,000 or less whilst a further quarter had an income of more than £50,000.

27 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).

28 Chart 2.4 shows the differences in performance of farms in the United Kingdom for 2008/09. 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 13 per cent of farms failing to recover their costs.

Table 2.5 Farm business income by country and type of farm (a)

Enquiries:Selina Matthews +44 (0)20 7238 3274 email:fbs.queries@defra.gsi.gov.uk

Average farm business income per farm (£/ farm) — Accounting years ending on average in February

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (provisional)
At current prices						
England						
Cereals	29 200	29 000	45 900	73 400	69 700	52 000
General cropping	42 400	36 900	62 200	81 000	96 000	77 000
Dairy	33 100	33 600	30 800	55 100	69 400	61 500
Grazing livestock (lowland)	9 300	9 400	11 400	12 400	18 500	25 000
Grazing livestock (LFA)	16 200	15 800	10 500	10 400	17 100	24 500
Specialist pigs	25 900	30 300	24 500	6 300	59 100	146 000
Specialist poultry	86 000	93 100	100 600	139 200	47 700	89 000
Mixed	23 900	25 800	27 200	37 300	29 300	41 000
Wales						
Dairy	28 500	30 600	30 500	51 300	62 200	55 400
Grazing livestock (lowland)	11 600	10 000	21 900	19 000	24 400	28 200
Grazing livestock (LFA)	21 000	17 800	17 500	19 800	24 500	29 200
Scotland						
Cereals	-	-	36 851	65 900	42 400	-
General cropping	-	-	52 995	75 400	57 300	-
Dairy	-	-	47 165	69 600	78 400	-
Grazing livestock (LFA)	-	-	16 427	22 500	24 300	-
Mixed	-	-	31 372	37 500	44 500	-
Northern Ireland						
Dairy	24 900	28 700	27 300	58 700	37 500	26 500
Grazing livestock (LFA)	10 200	11 900	12 600	13 400	20 200	28 400

(a) The calculation of 'farm business income' has been modified and applied back through the time series as the calculation in earlier publications was incorrectly defined in terms of profit or loss on sale of fixed assets. Therefore the figures presented above will not match those published prior to 2007/08.

Table 2.6 All farm types: distribution of farm incomes by country 2008/09

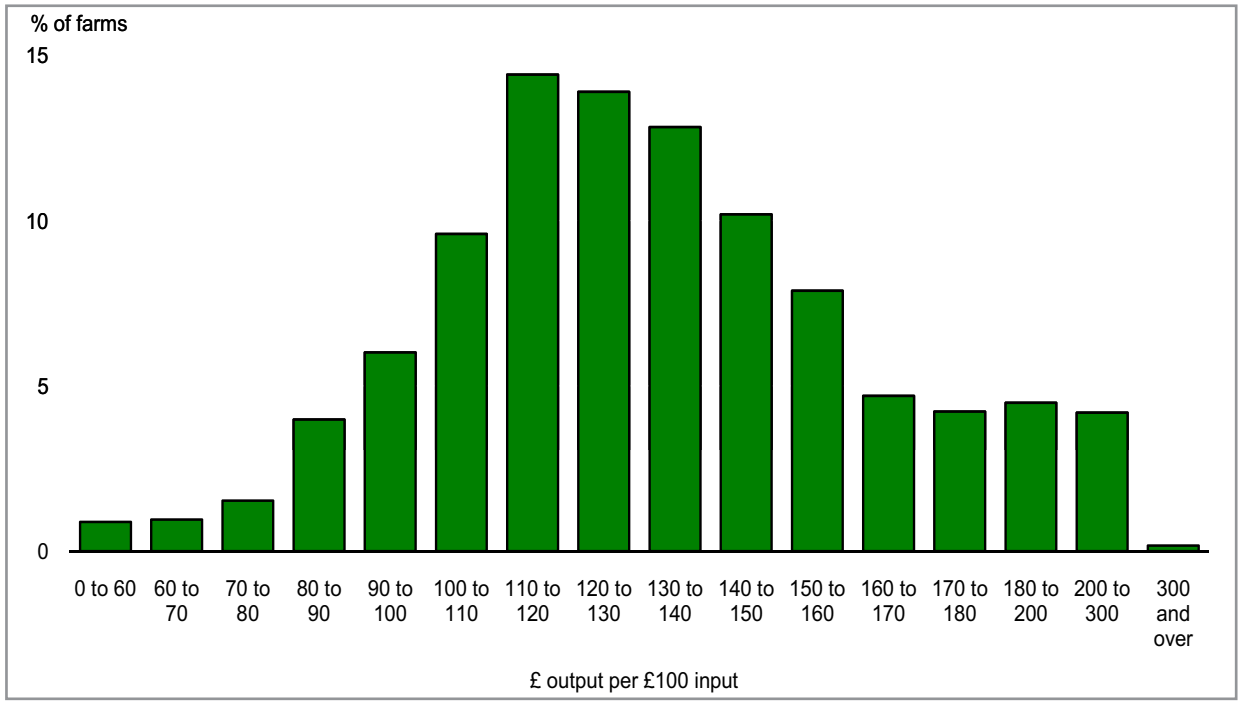
Enquiries:Selina Matthews +44 (0)20 7238 3274 email:fbs.queries@defra.gsi.gov.uk

Percentage of farms

	England	Wales	Scotland	Northern Ireland
Farm Business Income				
Less than zero	12.9	11.3	10.5	10.9
0 to less than £5,000	5.5	6.3	3.0	8.2
£5,000 to less than £10,000	6.8	7.7	10.1	9.9
£10,000 to less than £20,000	13.0	20.5	18.1	21.4
£20,000 to less than £30,000	12.5	15.1	13.5	17.0
£30,000 to less than £50,000	16.6	20.8	16.0	17.5
£50,000 and over	32.7	18.4	28.8	15.1
Average (£ thousand per farm)	50.9	31.3	38.7	27.2
Net Farm Income (a)				
Less than zero	16.4	19.0	18.9	22.2
0 to less than £5,000	9.3	8.6	6.1	9.5
£5,000 to less than £10,000	8.3	9.1	9.5	10.6
£10,000 to less than £20,000	13.5	16.7	19.8	20.3
£20,000 to less than £30,000	11.4	14.7	11.1	13.8
£30,000 to less than £50,000	14.2	17.6	13.9	11.4
£50,000 and over	26.9	14.3	20.7	12.3
Average (£ thousand per farm)	41.6	23.9	27.8	19.9
Cash Income				
Less than zero	9.0	3.3	7.6	3.0
0 to less than £5,000	4.7	4.9	3.0	4.6
£5,000 to less than £10,000	7.5	7.3	4.6	9.6
£10,000 to less than £20,000	11.3	18.4	16.3	20.7
£20,000 to less than £30,000	13.0	14.5	15.3	18.6
£30,000 to less than £50,000	17.3	27.1	18.6	16.0
£50,000 and over	37.3	24.4	34.7	27.4
Average (£ thousand per farm)	61.0	40.0	47.8	38.8

(a) Net Farm Income (NFI) is no longer the preferred measure for comparisons of farm incomes by farm type. A detailed definition of NFI can be found at https://statistics.defra.gov.uk/esg/publications/fab/2009/Appendix2.doc.

Chart 2.4 Distribution of performance across farms >0.5 SLR 2008/09; England



Farm income measures

29 **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

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

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

31 Differences and similarities

Farm Business Income

- the preferred measure for comparisons of farm type;
- covers the 12 month period March to February;
- does not include 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 UK agriculture as a whole.
- covers the calendar year;
- does not include 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.

Diversification

32 Diversification is widely held to offer considerable scope for improving the economic viability of farm businesses. It can be thought of as “the entrepreneurial use of farm resources for a non-agricultural purpose for commercial gain”. There are some obvious activities that are included as diversification such as tourism, sport, recreation and processing, and others that are not, such as the production of organic or novel crops, which while possibly reflecting a change in focus and entrepreneurial activity by the farmer, remain agricultural activities. Others such as off-farm employment or investment income are not regarded as diversified activities as they do not utilise farm resources.

33 Further information on diversification in England and Wales is available at:

http://defraweb/evidence/statistics/foodfarm/farmmanage/diversification/index.htm

http://wales.gov.uk/topics/statistics/headlines/agric2008/hdw200806242/?lang=en

Chapter 3 The Structure of the Industry

2009

Summary

In 2009 compared with 2008:

- the total area on agricultural holdings remained virtually unchanged at 17.5 million hectares;
- the total croppable area increased by 2.3 per cent to 6.2 million hectares;
- the total number of cattle fell by 0.8 per cent in 2009 to 10 million head;
- there were 4.7 million pigs in 2009, an increase of 0.2 per cent from June 2008;
- the number of sheep and lambs decreased by 3.3 per cent to 32 million;
- the total number of people employed in agriculture in the United Kingdom increased slightly by 0.7 per cent compared with 2008 to 535,000.

Introduction

1 The information in this chapter shows the size and structure of the agricultural industry in the United Kingdom. It provides information on land use and livestock numbers, on the distribution of these between holdings, on the labour force, the age of holders and on the industry's fixed capital.

2 Data in this chapter are sourced primarily from the June Surveys/Census of Agriculture carried out in the four UK countries each year. The exceptions to this are the holder age data which are sourced from the EU Farm Structure Survey and the cattle populations. Since 2005, cattle data has been sourced from the Cattle Tracing System (CTS) in England and Wales and from the equivalent APHIS system in Northern Ireland. In Scotland, cattle data continues to be sourced from agricultural surveys.

3 For more information on the June survey and for more detailed results please visit the farming statistics section on the Defra website.

Land use, crop areas and livestock numbers (tables 3.1, 3.2, charts 3.1 to 3.4)

Chart 3.1 Total area on agricultural holdings June 2009; United Kingdom

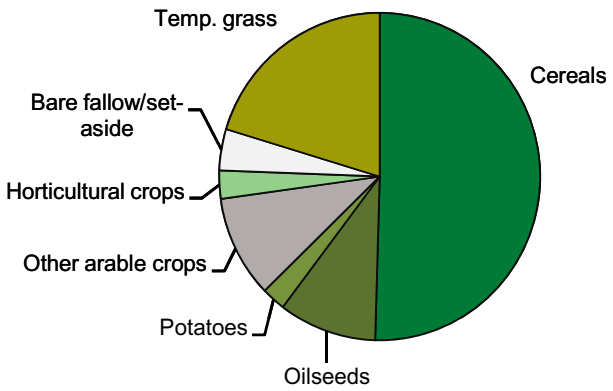
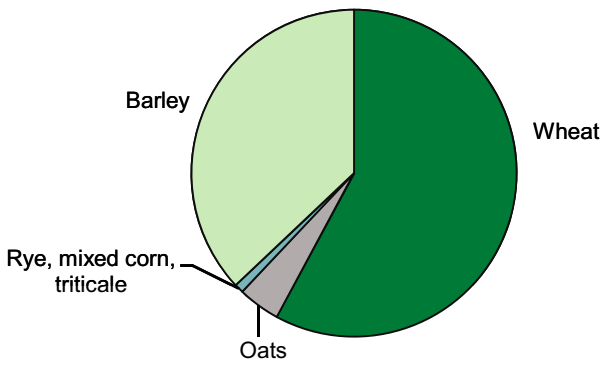


Chart 3.2 Total area of cereal crops grown June 2009; United Kingdom

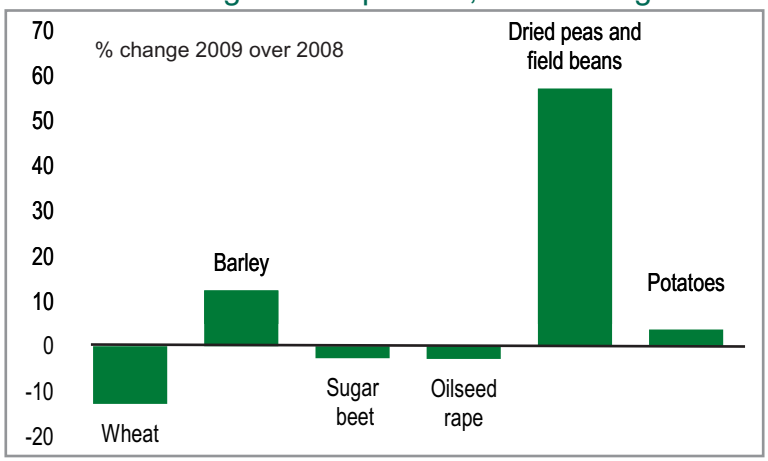


Click here to obtain further data source information for this chapter

4 At June 2009, the total area of land on agricultural holdings was 17.5 million hectares. A further 1.2 million hectares of common rough grazing land gave a total area of agricultural land in the United Kingdom of 18.8 million hectares in 2009.

5 Thirty-five per cent of the land on agricultural holdings was considered to be croppable land, i.e. land currently under crops, bare fallow or temporary grassland. As chart 3.1 shows, 50 per cent of this croppable area is occupied by cereal crops and of these cereals, wheat is the predominant crop, occupying over 58 per cent of the cereal area in June 2009.

Chart 3.3 Changes in crop areas; United Kingdom



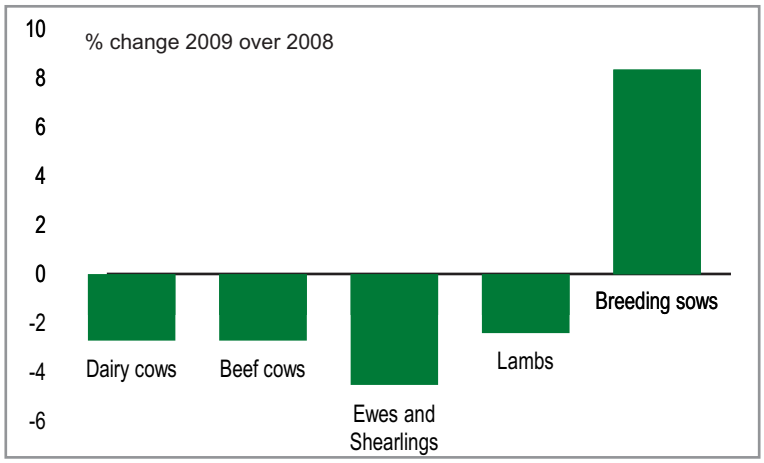
6 The area of cereals fell by 4.3 per cent between June 2008 and June 2009 to 3.1 million hectares, primarily due to a decrease of 13 per cent in the area of wheat planted. The decrease in cereals was offset by increases in other crops, such as field beans, and an increase of 31 per cent in the area of uncropped arable land. This was largely due to the difficult autumn 2008 planting conditions and the lower cereal prices.

7 The main dairy herd fell by 2.7 per cent between 2008 and 2009 to 1.9 million animals. The beef herd also fell by 2.7 per cent to 1.6 million animals in June 2009.

8 The size of the total sheep flock fell by 3.3 per cent between June 2008 and June 2009 to 32 million animals. The number of lambs fell by 2.4 per cent to 16.2 million.

9 The female pig breeding herd has increased by 5.9 per cent to 445,000 animals in June 2009. The poultry breeding flock increased by 6.0 per cent to 9.6 million birds.

Chart 3.4 Changes in livestock numbers; United Kingdom



2009

Table 3.1 Agricultural land use; United Kingdom

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email: jennie.blackburn@defra.gsi.gov.uk

Thousand hectares — At June of each year

	2005	2006	2007	2008	2009
Total agricultural area	18 486	18 770	18 692	18 697	18 752
Common rough grazing	1 236	1 241	1 238	1 238	1 238
Total area on agricultural holdings	17 250	17 529	17 453	17 459	17 513
Total croppable area	6 313	6 197	6 215	6 070	6 212
Total crops	4 421	4 397	4 440	4 735	4 695
Arable crops (a)	4 251	4 231	4 271	4 565	4 523
Cereals	2 919	2 864	2 885	3 274	3 133
Oilseeds (includes linseed) (b)	564	605	687	621	613
Potatoes	137	140	140	144	149
Other crops	631	623	559	527	628
Horticultural crops	170	166	169	170	172
Uncropped arable land (c) (d)	699	663	599	194	254
Temporary grass under 5 years old (e)	1 193	1 137	1 176	1 141	1 262
Total permanent grassland	10 065	10 458	10 284	10 395	10 259
Grass over 5 years old	5 711	5 967	5 965	6 036	6 085
Sole right rough grazing (f)	4 354	4 491	4 319	4 359	4 174
Other land on agricultural holdings	872	874	954	994	1 043
Woodland	583	606	663	705	779
All other land	289	268	291	289	264

Source: June Surveys/Census of Agriculture

(a) Includes crops grown on previous set-aside land for England from 2005 to 2007.
(b) The oilseeds total also includes borage for England from 2008 onwards.
(c) Includes uncropped set-aside land for 2007 and earlier years.
(d) 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.
(e) This rise is due to a break in Scotland's series resulting in a 115 thousand hectare increase in temporary grass area and does not reflect a genuine trend.
(f) Also includes mountains, hills or moorland.

Table 3.2 Crop areas and livestock numbers; United Kingdom

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email:jennie.blackburn@defra.gsi.gov.uk

At June of each year

		2005	2006	2007	2008	2009
Crop areas (thousand hectares)						
Total area of arable crops		4 251	4 231	4 271	4 565	4 523
of which:	wheat (a)	1 867	1 836	1 830	2 080	1 814
	barley	938	881	898	1 032	1 160
	oats	90	121	129	135	131
	oilseed rape	519	568	674	598	581
	linseed	45	36	13	16	29
	potatoes	137	140	140	144	149
	sugar beet (not for stockfeeding)	148	130	125	120	116
	peas for harvesting dry and field beans	239	231	161	148	233
	maize	131	137	146	153	166

continued

Table 3.2 continued

		2005	2006	2007	2008	2009
Total area of horticultural crops (thousand hectares)		170	166	169	170	172
of which:	vegetables grown outdoors	121	119	121	122	124
	orchard fruit (b)	23	23	23	24	24
	soft fruit & wine grapes	9	10	10	10	10
	outdoor plants and flowers	14	12	13	13	12
	glasshouse crops	2	2	2	2	2
Livestock numbers (thousand head)						
Total cattle and calves (c)		10 770	10 579	10 304	10 107	10 025
of which:	dairy cows	1 998	1 979	1 954	1 909	1 857
	beef cows	1 751	1 737	1 698	1 670	1 626
Total sheep and lambs		35 416	34 722	33 946	33 131	32 038
of which:	ewes and shearlings	16 935	16 637	16 064	15 616	14 912
	lambs under one year old	17 488	17 058	16 855	16 574	16 177
Total pigs		4 862	4 933	4 834	4 714	4 724
of which:	sows in pig and other sows for breeding	403	401	398	365	396
	gilts in pig	67	67	57	55	50
Total poultry		173 909	173 081	167 667	166 200	159 288
of which:	table fowl	111 475	110 672	109 794	109 859	102 759
	laying fowl	29 544	28 632	27 321	25 940	26 757
	growing pullets	10 928	9 625	8 936	9 313	8 356
	fowls for breeding	8 561	9 273	11 461	9 068	9 609
	turkeys, ducks, geese and all other poultry	13 400	14 879	10 154	12 019	11 807

Source: June Surveys/Census of Agriculture

(a) Includes crops grown on set-aside land for England for 2006 and 2007.

(b) Includes non-commercial orchards.

(c) From 2005 onwards, the cattle figures were sourced from the Cattle Tracing System (CTS) in England and Wales, the equivalent APHIS system in Northern Ireland and survey data in Scotland and are therefore not directly comparable with earlier years.

Numbers and sizes of holdings and enterprises (tables 3.3 to 3.7)

10 As table 3.3 shows, the number of agricultural holdings has increased from 305 thousand in 2003 to almost 327 thousand in 2008. This increase is not necessarily a genuine increase in the levels of agricultural activity and has been caused by various contributing factors, mainly in England. There have been large increases in holdings registering for animal tracing purposes, particularly following the Foot & Mouth disease outbreak in 2001. Also, in 2005 with the introduction of the Single Payment Scheme, large numbers of holdings were registered to enable farmers to make subsidy claims. It is also possible that holdings have been splitting into smaller units and this, combined with more "hobby" farms being registered, means that large increases are seen, particularly of smaller holdings. As table 3.3 shows, the average farmed area has fallen from 57 hectares to 54 hectares, backing up these trends.

Table 3.3 Numbers of holdings by size group; United Kingdom

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email: jennie.blackburn@defra.gsi.gov.uk

At June of each year

		2003		2008	
		Number of holdings (thousand)	SLR (thousand)	Number of holdings (thousand)	SLR (thousand)
Size of holding (SLR) (a)	under 1 Standard Labour Requirements (SLR)	227.6	46.2	255.8	49.0
	1 to under 2 SLR	34.2	49.2	31.2	44.6
	2 to under 3 SLR	17.6	43.1	15.5	38.1
	3 to under 5 SLR	15.3	58.3	14.1	54.0
	5 SLRs and over	10.0	102.9	10.0	96.6
	Total	304.8	299.7	326.8	282.4
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (c) (thousand)	Hectares (thousand)
Total area on holdings	under 20 hectares	178.7	873.7	198.1	925.8
	20 to under 50 hectares	47.3	1 565.6	48.9	1 619.5
	50 to under 100 hectares	36.7	2 623.4	36.0	2 567.4
	100 hectares and over	42.0	12 162.4	41.5	12 345.3
	Total	304.8	17 224.8	324.5	17 458.0
	Average area (hectares)		56.5		53.8
	Average area on holdings with >=20 hectares		129.7		130.8
Croppable area (b)	0.1 to under 20 hectares	73.4	424.5	67.5	373.8
	20 to under 50 hectares	23.0	787.0	21.9	739.5
	50 to under 100 hectares	15.3	1 126.0	14.8	1 090.1
	100 hectares and over	16.2	3 458.0	15.8	3 864.1
	Total	128.0	5 795.6	119.9	6 067.5
	Average croppable area (hectares)		45.3		50.6

Source: June Surveys/Census of Agriculture

(a) Standard Labour Requirement (SLR) is defined as the theoretical number of workers required to run a holding, based on its cropping and livestock activities.

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

(c) The number of holdings uses 2008 data for Northern Ireland, Wales & Scotland but 2007 data for England. The sample size in England was too small in 2008 to generate robust estimates of holding counts. However, the areas and livestock numbers are all based on 2008 data.

Table 3.4 Numbers of holdings and land areas / livestock numbers by size group; United Kingdom

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email: jennie.blackburn@defra.gsi.gov.uk

At June of each year

		2003		2008	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (a) (thousand)	Hectares (thousand)
Cereals	0.1 to under 15 hectares	20.8	158.6	18.9	131.9
	15 to under 30 hectares	11.0	254.5	10.6	241.9
	30 to under 50 hectares	8.3	342.0	7.9	344.8
	50 to under 100 hectares	10.2	742.2	9.3	748.9
	100 hectares and over	8.3	1 559.4	7.8	1 806.7
	Total	58.7	3 056.5	54.4	3 274.3
	Average cereal area (hectares)		52.1		60.2
Oilseed rape	0.1 to under 10 hectares	1.7	14.5	2.8	16.0
	10 to under 20 hectares	3.2	54.8	3.3	49.8
	20 to under 30 hectares	2.5	68.6	2.6	62.3
	30 to under 50 hectares	2.6	104.4	3.0	122.2
	50 hectares and over	2.6	218.0	3.7	347.8
	Total	12.7	460.2	15.5	598.1
	Average oilseed rape area (hectares)		36.3		38.6

continued

Table 3.4 continued

		2003		2008	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (a) (thousand)	Hectares (thousand)
Sugar beet	0.1 to under 10 hectares	2.8	16.2	2.1	15.3
	10 to under 20 hectares	2.1	30.0	1.3	23.6
	20 hectares and over	2.6	115.7	1.5	80.7
	Total	7.4	162.0	4.9	119.6
	Average sugar beet area (hectares)		21.8		24.3
Potatoes	0.1 to under 2 hectares	4.4	2.5	3.3	2.1
	2 to under 5 hectares	1.8	7.2	1.2	4.8
	5 to under 10 hectares	2.1	17.8	1.8	14.2
	10 to under 20 hectares	2.1	32.1	2.0	32.3
	20 hectares and over	1.8	85.4	1.8	90.3
	Total	15.6	144.9	10.0	143.7
	Average potato area (hectares)		9.3		14.4
		2005 (b)		2008	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (a) (thousand)	Number of livestock (thousand)
Dairy cows (b)(c)	1 to 9 dairy cows	9.0	22.6	9.0	23.5
	10 to 49	5.5	167.2	4.3	124.0
	50 to 99	7.5	544.5	5.9	430.0
	100 and over	7.8	1 263.2	7.7	1 331.2
	Total	29.8	1 997.4	26.8	1 908.6
	Average number of dairy cows		67.0		71.1
	Average number of dairy cows on holdings with >=10 dairy cows		94.8		105.6
Beef cows (b)(d)	1 to 9 beef cows	25.2	100.7	28.0	120.5
	10 to 19	13.0	177.5	13.0	185.0
	20 to 29	8.0	189.1	7.6	184.4
	30 to 49	8.7	328.0	8.0	303.9
	50 and over	10.2	955.1	9.3	875.8
	Total	65.1	1 750.4	65.9	1 669.7
	Average number of beef cows		26.9		25.3
	Average number of beef cows on holdings with >=10 beef cows		54.7		54.8
Female sheep breeding flock	1 to 19 breeding sheep	15.5	153.1	15.6	156.5
	20 to 49	13.6	467.0	13.2	465.8
	50 to 124	17.1	1 445.7	17.0	1 573.0
	125 to 499	23.3	6 107.8	19.9	5 507.7
	500 and over	9.7	9 405.8	8.2	7 913.0
	Total	79.3	17 579.3	73.9	15 616.1
	Average number of female breeding sheep		221.7		211.2
Female pig breeding herd	1 to 4 breeding pigs	2.4	6.0	2.4	6.5
	5 to 24	1.1	14.1	1.3	16.3
	25 to 99	0.7	43.0	0.6	36.7
	100 and over	1.2	453.6	1.0	360.9
	Total	5.4	516.7	5.4	420.4
	Average number of female breeding pigs		95.1		78.1
Fattening pigs (e)	1 to 9 fattening pigs	2.5	10.1	3.3	15.8
	10 to 49	1.2	28.9	1.5	39.6
	50 to 299	1.1	173.1	1.0	162.9
	300 to 999	1.2	722.9	1.1	642.8
	1,000 and over	1.0	2 107.7	1.0	2 127.4
	Total	6.8	3 042.7	7.9	2 988.4
	Average number of fattening pigs		451.8		376.5

continued

Table 3.4 continued

		2005 (b)		2008	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (a) (thousand)	Number of livestock (thousand)
Broilers	1 to 9,999 broilers	1.8	703.3	2.0	589.9
	10,000 to 99,999	0.7	32 880.2	0.6	31 815.8
	100,000 and over	0.3	83 172.3	0.4	77 453.2
	Total	2.9	116 755.8	3.1	109 858.9
	Average number of broilers		39 616		35 834
Laying hens and pullets	1 to 999 laying hens and pullets	21.6	850.4	27.4	1 168.3
	1,000 to 4,999	0.4	1 272.0	0.6	1 469.4
	5,000 to 19,999	0.4	5 751.6	0.4	5 650.7
	20,000 and over	0.2	29 685.3	0.3	26 964.5
	Total	22.6	37 559.4	28.7	35 252.9
	Average number of laying hens and pullets		1 658		1 230

Source: June Surveys/Census of Agriculture. Also Cattle Tracing System/APHIS (for cattle data)

(a) The number of holdings uses 2008 data for Northern Ireland, Wales & Scotland but 2007 data for England. The sample size in England was too small in 2008 to generate robust estimates of holding counts. However, the areas and livestock numbers are all based on 2008 data.

(b) Since 2005, cattle data for England, Wales & Northern Ireland has been sourced from the Cattle Tracing System. Therefore, results for earlier years are not directly comparable so 2005 results have been shown here as the earliest figure for direct comparison.

(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.

(e) Fattening pigs over 20kg liveweight (excludes barren sows).

Table 3.5 Numbers of holdings by size group and country at June 2008

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email: jennie.blackburn@defra.gsi.gov.uk

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Total SLR (thousand)	Number of holdings (thousand)	Total SLR (thousand)	Number of holdings (thousand)	Total SLR (thousand)	Number of holdings (thousand)	Total SLR (thousand)
Size of holding (Standard Labour Requirements) (a)								
under 1 SLR	164.8	32.0	29.7	5.2	41.3	5.2	20.0	6.7
1 to under 2 SLR	20.9	29.6	3.7	5.4	3.5	5.1	3.2	4.5
2 to under 3 SLR	9.9	24.1	2.3	5.6	2.1	5.2	1.3	3.1
3 to under 5 SLR	8.5	32.6	2.1	7.9	2.5	9.5	1.0	3.9
5 SLRs and over	6.4	67.6	1.1	8.4	2.0	16.9	0.5	3.6
Total	210.5	185.9	38.9	32.5	51.4	41.8	26.0	21.9
	Number of holdings (b) (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total farmed area								
Under 20 hectares	133.1	544.7	23.3	110.9	30.9	158.9	10.8	111.3
20 to under 50 hectares	27.2	908.7	6.6	221.0	6.2	202.7	8.9	287.1
50 to under 100 hectares	21.3	1 526.3	5.0	355.7	5.3	386.4	4.3	299.0
100 hectares and over	26.6	6 359.4	3.9	767.1	9.1	4 898.9	1.9	320.0
Total	208.2	9 339.0	38.9	1 454.7	51.5	5 646.9	26.0	1 017.4
Average farmed area (hectares)		44.9		37.4		109.6		39.1

Source: June Surveys/Census of Agriculture

(a) Standard Labour Requirement (SLR) is defined as the theoretical number of workers required to run a holding, based on its cropping and livestock activities.

(b) The number of holdings uses 2008 data for Northern Ireland, Wales & Scotland but 2007 data for England. The sample size in England was too small in 2008 to generate robust estimates of holding counts. However, the areas are all based on 2008 data.

Table 3.6 Numbers of holdings and land areas by Less Favoured Area designation at June 2008 (a)

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email:jennie.blackburn@defra.gsi.gov.uk

	England		Wales		Scotland		Northern Ireland	
	LFA	Non-LFA	LFA	Non-LFA	LFA	Non-LFA	LFA	Non-LFA
	(thousand hectares)		(thousand hectares)		(thousand hectares)		(thousand hectares)	
Farmed area on holdings								
Under 20 hectares	91.4	453.3	85.3	25.6	114.5	44.5	80.8	30.5
20 to under 50 hectares	153.2	755.4	166.2	54.8	144.0	58.7	206.8	80.3
50 to under 100 hectares	246.6	1 279.6	277.5	78.2	248.6	137.8	203.0	96.0
100 hectares and over	1 045.1	5 314.3	645.9	121.2	4 279.0	619.9	220.4	99.5
Total farmed area	1 536.4	7 802.6	1 174.8	279.9	4 786.1	860.9	711.1	306.3
	England		Wales		Scotland		Northern Ireland	
	LFA	Non-LFA	LFA	Non-LFA	LFA	Non-LFA	LFA	Non-LFA
	Number of holdings (thousands)		Number of holdings (thousands)		Number of holdings (thousands)		Number of holdings (thousands)	
Number of holdings								
Under 20 hectares	20.6	114.2	17.9	5.4	21.3	9.6	7.6	3.3
20 to under 50 hectares	4.6	22.7	5.0	1.6	4.4	1.8	6.5	2.5
50 to under 100 hectares	3.5	17.8	3.9	1.1	3.4	1.9	3.0	1.4
100 hectares and over	3.9	22.6	3.2	0.7	6.3	2.8	1.2	0.6
Total number of holdings	32.7	177.4	30.0	8.8	35.4	16.1	18.2	7.8

Source: June Surveys/Census of Agriculture and departmental definitions of LFA boundaries

(a) Less Favoured Areas (LFAs) were established in 1975 as a means to provide support to mountainous and hill farming areas. The present LFAs in England are subdivided into two areas. The more environmentally challenging areas within the LFA are classed as 'Severely Disadvantaged Areas' (SDA). The remainder is classified as 'Disadvantaged Areas' (DA).

Table 3.7 Numbers of holdings by farm type and country 2008 (a)

Enquiries: Jennie Blackburn on +44 (0)1904 455091 email: jennie.blackburn@defra.gsi.gov.uk

Thousands

	England	Wales	Scotland	Northern Ireland
Dairy	10.1	2.2	1.4	3.4
Grazing Livestock (Less Favoured Areas)	13.0	12.8	13.9	14.6
Grazing Livestock (Lowland)	32.8	2.6	1.8	4.4
Cereals	24.2	0.4	3.8	0.6
General Cropping	8.1	0.1	2.2	0.3
Specialist Pigs	2.6	0.1	0.2	0.1
Specialist Poultry	6.8	0.7	1.8	0.4
Horticulture	9.0	0.4	1.0	0.3
Mixed	9.4	1.1	2.3	0.9
Other	94.5	18.4	22.9	1.0
Total	210.5	38.9	51.4	26.0

Source: June Surveys/Census of Agriculture

(a) Farm type is classified by the predominant farming activity taking place on the holding based on an economic measure of profitability (Standard Gross Margin SGM). The farm type is defined as the activity which contributes more than two thirds of the total SGM for the holding.

Labour force in agriculture (table 3.8)

11 The total labour force at June 2009 is estimated to have increased by 0.7 per cent since 2008 to 535 thousand. This includes a 1.3 per cent increase in the number of principal farmers (defined as farmers, business partners, directors and spouses working on the holding) to 347 thousand.

Table 3.8 Agricultural labour force; United Kingdom

Enquiries: Jennie Blackburn +44 (0)1904 455091 email: jennie.blackburn@defra.gsi.gov.uk

Thousands

	2005	2006	2007	2008	2009
Total labour force (incl. farmers and spouses)	540.7	534.4	526.2	531.0	534.5
Farmers, Business partners, Directors and Spouses	350.7	350.4	344.2	343.1	347.4
Full time	154.4	152.2	145.6	146.3	147.9
Part time (a)	196.3	198.2	198.6	196.8	199.5
Salaried managers	15.7	14.6	15.4	15.1	12.2
Other Workers	174.3	169.4	166.6	172.8	174.9
Full time	67.5	63.9	62.5	66.0	66.3
Male	57.2	53.6	52.2	54.7	54.5
Female	10.3	10.4	10.3	11.3	11.7
Part time (a)	41.7	41.4	45.3	45.1	46.9
Male	24.5	24.3	28.0	27.9	29.0
Female	17.2	17.1	17.3	17.2	17.9
Seasonal, Casual or Gang Labour	65.1	64.1	58.9	61.7	61.7
Male	46.4	44.4	41.0	43.2	43.6
Female	18.7	19.6	17.9	18.6	18.1

Source: June Surveys/Census of Agriculture.

(a) Part-time is defined as less then 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 3.9)

12 The average age of farm holders in 2007 was 59 years old, ranging from 54 to 60 years old across the different farm types. The average age is derived using the median measure - the middle value when all holder ages are ranked in order. This median age compares to a median of 58 years in 2005, with a range of 55 to 60 years between farm types. It can be seen that the youngest holders are on dairy farms, these farms having a median age of 55 years in 2005 and 54 in 2007. The older holders tend to be on the ‘other farm type’ (specialist grass, horses and unclassified holdings) having a median age of 60 years for both 2005 and 2007. This data has been sourced from the EU Farm Structure Survey and 2007 is the latest data available. This data will next be collected in 2010.

Table 3.9 Holders' age by farm type; United Kingdom (a)(b)

Enquiries: Helen Theakston +44 (0)1904 456406 email: helen.theakston@defra.gsi.gov.uk

Thousand persons

	Farm Type								
	Cereals	General Cropping	Horticulture	Pigs and Poultry	Dairy	Cattle and Sheep (LFA and lowland)	Mixed	Other	All Types
2005									
Holders age									
Under 35 years	0.6	0.4	0.1	0.3	0.7	3.4	0.5	2.5	8.6
35 - 44 years	3.4	1.9	1.2	1.8	3.9	11.9	2.5	11.3	37.7
45 - 54 years	6.0	3.0	2.2	2.9	5.9	19.0	4.0	21.3	64.3
55 - 64 years	7.5	3.6	2.9	3.3	6.2	22.8	4.9	28.0	79.1
65 years and over	7.5	3.6	2.3	2.9	4.2	25.4	3.7	34.6	84.2
Total	25.0	12.4	8.8	11.2	20.8	82.5	15.6	97.7	274.0
Median age (Years)	58	58	58	57	55	58	57	60	58
2007									
Holders age									
Under 35 years	0.5	0.2	0.1	0.2	0.6	3.1	0.3	2.6	7.5
35 - 44 years	2.8	1.1	0.9	1.5	3.1	11.6	1.8	12.1	34.7
45 - 54 years	6.4	2.3	2.0	2.3	5.7	18.8	3.6	25.3	66.4
55 - 64 years	8.1	2.7	2.7	3.0	5.0	23.2	3.8	33.8	82.3
65 years and over	8.8	2.5	2.4	2.8	3.8	25.7	3.5	43.0	92.5
Total	26.6	8.8	8.1	9.8	18.1	82.4	13.0	116.7	283.4
Median age (Years)	59	58	59	58	54	58	57	60	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) The data excludes holdings such as limited companies where there is no single holder.

Fixed capital stock (table 3.10)

13 Agriculture's total volume of fixed capital stock is estimated to be unchanged at the end of 2009 compared to the end of 2008 but 10 per cent lower than the average for 1998 to 2000. The capital stock of 'buildings and works' has declined since the mid-1990s. That for 'plant and machinery' has declined since the mid-1990s but shows an increase in recent years. The capital stock of vehicles has been fairly constant since the mid-1990s with an upturn in recent years.

14 Table 3.10 provides information on the volume of gross stock of fixed capital (excluding land and livestock) available to the agricultural industry. The figures are shown before allowing for consumption of fixed capital and give a broad indication of how this aspect of the industry's productive capacity has changed over the years.

Table 3.10 Fixed capital stock of agriculture; United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084 email: graham.brown@defra.gsi.gov.uk

Indices 2000 = 100

	At year end				
	2005	2006	2007	2008	2009 (provisional)
Gross capital stock (excludes livestock capital assets)					
Buildings and works	92.2	91.5	90.7	90.3	89.5
Plant and machinery	92.5	91.1	91.6	93.6	94.7
Vehicles	101.3	100.5	101.3	104.0	105.0
Total	92.8	91.9	91.7	92.3	92.3

Chapter 4 Prices

2009

Summary

In 2009 compared with 2008:

- the average producer price of agricultural products fell by 5.0 per cent;
- the average price of crop products fell by 15 per cent;
- the average price of livestock and livestock products rose by 2.0 per cent;
- the average price of agricultural inputs fell by 5.0 per cent;
- the average price of fertiliser fell by 15 per cent;
- the average price of energy and lubricants fell by 17 per cent.

Data Sources

1 This chapter presents price indices for agricultural products and inputs, average farm rent prices and average prices for sales of agricultural land.

2 The price indices for agricultural products and inputs reflect observed market prices. They are constructed using fixed annual weights relating to 2005. The price changes presented in table 9.2 are based on current production and may differ from the price movements presented here.

3 The average farm rent prices are based on results from the Farm Business Survey conducted in each country. Data for Scotland is currently unavailable due to an ongoing review of the data source.

4 The average prices for sales of agricultural land are obtained from data on land transfers collected by the Valuation Office Agency in Great Britain and the Valuation and Lands Agency in Northern Ireland. Only a very small proportion of the total area of farmland in the United Kingdom is sold in any particular year. The average price of land sold can therefore be subject to considerable variation from year to year and, in the case of unweighted averages shown here, may vary with size and type of lot sold in the year concerned. Land price data for Scotland are not currently being collected.

Click here to obtain further data source information for this chapter

Price indices (table 4.1, chart 4.1)

5 The average producer price of agricultural products in the United Kingdom was 5.0 per cent lower in 2009 than in 2008. It is 7.0 per cent above the peak in 1995 and 48 per cent above the low point in 2000. In 2008, the average price for crop products fell by 15 per cent. The average price for cereals fell by 27 per cent, that for fresh vegetables fell by 2.5 per cent and that for potatoes fell by 20 per cent. The average price for livestock and livestock products rose by 1.8 per cent.

Chart 4.1 Price indices for agricultural products and inputs; United Kingdom

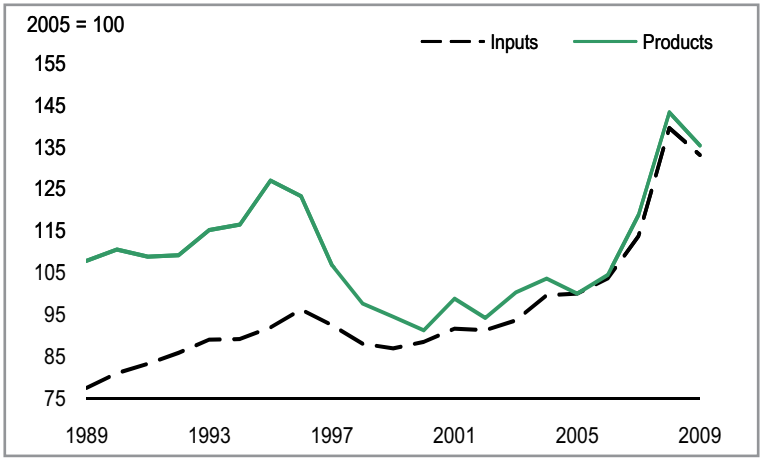


Table 4.1 Price indices for products and inputs; United Kingdom

Enquiries: Julie Rumsey on +44 (0)1904 455249 email: julie.rumsey@defra.gsi.gov.uk

Indices (a) 2005 = 100 Calendar years

	2005	2006	2007	2008	2009 (provisional)
Producer prices for agricultural products (b)	100.0	104.5	118.8	143.3	135.4
of which:					
Crop products:	100.0	109.4	133.6	153.7	131.2
cereals (including seeds)	100.0	111.8	166.7	207.1	150.6
industrial crops	100.0	106.7	108.2	152.4	132.5
forage crops	100.0	95.2	128.6	145.6	147.9
fresh vegetables	100.0	108.2	122.1	117.5	114.0
potatoes	100.0	130.5	145.9	153.6	123.6
fresh fruit	100.0	104.1	107.4	126.4	124.6
seeds	100.0	100.2	118.3	126.4	126.4
flowers and plants	100.0	103.4	110.1	115.1	115.7
other crop products	100.0	100.5	113.3	119.4	119.4
Livestock and livestock products:	100.0	101.0	108.5	136.0	138.4
livestock (for slaughter and export)	100.0	103.5	105.5	133.2	144.7
milk	100.0	97.2	112.2	140.4	127.9
eggs	100.0	104.0	118.3	140.4	144.0
other livestock products	100.0	87.7	106.7	130.5	122.1
Prices of agricultural inputs:	100.0	103.6	113.8	139.6	133.1
of which:					
Currently consumed in agriculture:	100.0	103.8	115.3	145.5	136.8
livestock feedingstuffs	100.0	104.6	129.7	167.3	153.7
seeds	100.0	90.5	100.3	110.4	109.4
fertilisers and soil improvers	100.0	105.4	119.8	270.3	228.5
plant protection products	100.0	101.8	103.7	105.8	105.2
maintenance and repair of plant and machinery	100.0	105.8	109.9	116.3	121.5
energy, lubricants	100.0	112.2	117.9	158.2	132.1
maintenance and repair of buildings	100.0	106.3	114.1	122.3	121.9
veterinary services	100.0	106.9	108.4	103.9	104.6
other goods and services	100.0	102.6	107.9	113.6	116.1
Contributing to agricultural investment (c):	100.0	103.0	106.7	111.0	115.2
machinery and other equipment	100.0	104.5	110.3	117.6	121.9
transport equipment	100.0	100.1	99.4	99.6	106.5
buildings	100.0	105.9	113.0	120.3	120.5
engineering and soil improvement operations	100.0	102.1	107.3	112.0	116.6

(a) Indices covering an aggregation of commodities are weighted annual averages with weights based on the values of output of the respective commodities in 2005.

(b) These indices reflect prices received by producers but exclude direct subsidies.

(c) Covers the purchase and maintenance of capital items, but excludes stocks.

6 The average price of agricultural inputs was 4.5 per cent lower in 2009 than in 2008 and 45 per cent higher than in 1995. The average price of inputs that are currently consumed in agriculture fell by 6.0 per cent and for those inputs which contribute to agricultural investment, the average price rose by 3.8 per cent. The average price of livestock feedingstuffs fell by 7.0 per cent and the average price for seeds fell by 0.9 per cent in 2009. The average price of fertiliser and soil improvers fell by 15 per cent in 2009.

7 Since 2005 the average price of agricultural outputs has changed in line with the average price of agricultural inputs, rising and falling at about the same rate. Fuel and cereal prices fell in 2009, the weakness of sterling against the euro dampened their impact on retail prices.

Farm rents (table 4.2)

8 A review was carried out in 2009 to determine the best source of farm rents data in Defra. It concluded that the Farm Business Survey should become the main source of data and that the Tenanted Land Survey (the previous source of data) should be discontinued. Results shown in table 4.2 for England and Wales are from the Farm Business Survey. Results for Northern Ireland continue to be sourced from the Northern Ireland Farm Business Survey. A methodological review of the Scottish Tenanted Land Survey is currently underway and results will be made available once the review is complete.

9 United Kingdom estimates cannot be provided until Scottish rent data is available. In England average farm rent prices for agreements over a year in length increased from £140 per hectare in 2007 to £148 per hectare in 2008 (5.6 per cent). The average rent price of full agricultural tenancies also increased, rising from £130 per hectare in 2007 to £136 per hectare in 2008.

Table 4.2 Farm rents

Enquiries: Jennie Blackburn on +44 (0)1904 455332 email: farming-statistics@defra.gsi.gov.uk

Average rent price (£ per hectare)

		2004	2005	2006	2007	2008	% change 2007/08
England (a)	Full Agricultural Tenancies only	123	129	132	130	136	5.1
	All agreements over a year (b)	140	138	140	140	148	5.6
Wales (a)	Full Agricultural Tenancies only	..	..	113	104	100	-4.1
	All agreements over a year (b)	..	..	124	148	157	6.1
Scotland (c)		..	..	..	..	..	..
Northern Ireland (d)		165	158	165	162	171	5.6

(a) Rent data for England and Wales is sourced from the Farm Business Survey. Figures for 2008 refer to results from the 2008/09 Farm Business Survey.

(b) This relates to agreements lasting a year or more and comprises Full Agricultural Tenancy agreements and Farm Business Tenancy agreements.

(c) The Tenanted Land Survey (TLS) in Scotland is currently undergoing a methodological review. Results will be made available once the review has been completed.

(d) In Northern Ireland, virtually all land is let in 'conacre', i.e. nominally short-term lettings (for 11 months or 364 days), although in practice some can be extended beyond this. The estimates are based on results from the Northern Ireland Farm Business Survey.

Agricultural land prices (table 4.3, chart 4.2)

10 Prices for commercial farmland increased sharply in 2007 and 2008 but fell during the first half of 2009 (Surveyors are reporting that large scale commercial farmers are still keen to expand production, particularly onto neighbouring farms), while residential (lifestyle) farmland demand continued to fall sharply. Farmland prices have broadly doubled over the last ten years, though this in part reflects wider demand from lifestyle buyers during the economic boom. Upland prices are thought to have followed similar trends, albeit at a lower level, to other land types.

Chart 4.2 Prices of agricultural land (all sales) at 2006 prices

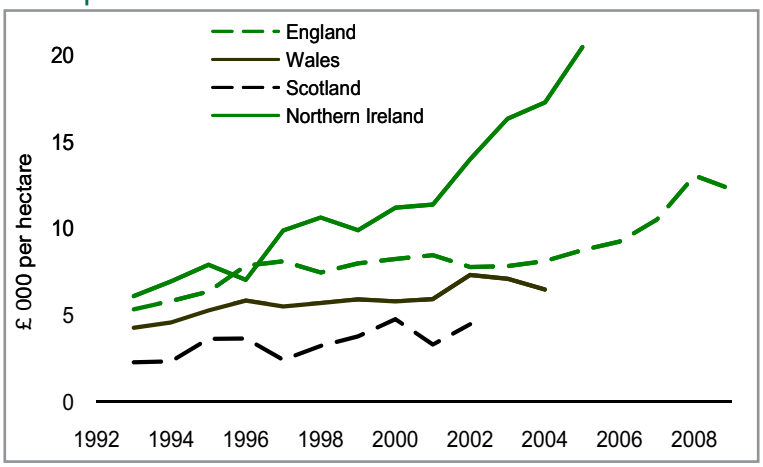


Table 4.3 Agricultural land prices

Enquiries: Julie Rumsey on +44(0)1904 455249 email: julie.rumsey@defra.gsi.gov.uk

£ per hectare of all sales (a) Calendar years

	Average of 1998-2000	2004	2005	2006	2007	2008
England (c)	6 630	7 654	8 486	9 249	10 974	14 152
Wales	4 867	6 107	. .	. .	. .	. .
Scotland	3 305	. .	. .	. .	. .	. .
Northern Ireland (b)	8 882	16 286	19 837	. .	. .	. .

(a) These series, based on Valuation Office data, exclude land sold for non-agricultural purposes. Also excluded are: sales of less than 5 hectares in England, Wales and Scotland and sales of less than two hectares in Northern Ireland. However, in Northern Ireland sales of less than 5 hectares have been excluded for years 2003 - 2005.

(b) For Northern Ireland there is a delay, thought to average about 3 months, between the date on which a sale is agreed and the date on which it is included in the analysis.

(c) England Data for 2005 and 2006 is estimated.

Chapter 5 Commodities

Summary

In 2009, compared with 2008, the value of production at market prices for:

- wheat fell by 29 per cent to £1.6 billion;
- barley fell by 16 per cent to £687 million;
- oilseed rape fell by 23 per cent to £478 million;
- sugar beet rose by 16 per cent to £241 million;
- fresh vegetables fell by 4.4 per cent to £1.1 billion;
- plants and flowers rose by 9.8 per cent to £877 million;
- potatoes fell by 16 per cent to £644 million;
- fresh fruit rose by 4.8 per cent to £571 million;
- beef and veal rose by 6.4 per cent to £2.2 billion;
- pigmeat rose by 17 per cent to £1.0 billion;
- mutton and lamb rose by 21 per cent to £962 million;
- poultrymeat was unchanged at £1.6 billion;
- milk and milk products fell by 9.7 per cent to £3.1 billion;
- eggs rose by 1.1 per cent to £526 million.

General methodology note

1 In 2005, eleven subsidy schemes directly linked to production of commodities were replaced with one single farm payment under the Single Payment Scheme. As the Single Payment Scheme is decoupled from production it is inappropriate to include it in the value of production of commodities. As such to enable comparison with previous years, all comments in the text on value of production have been made on a 'value of production at market prices' basis, excluding all subsidies and levies where applicable. An additional line showing the value of production at market prices has been incorporated into the statistical tables where appropriate.

Methodology note for cereals and potatoes

2 There has been a revision to the potato data, following a methodological change to the figures for Scotland. The revisions have been backdated to 1997. In the past the Scottish Government's Agriculture Department had substantially under-estimated the proportion of maincrop potatoes that were seed potatoes. This was due to the seed potato yields used, which were a fixed apportionment of the ware potato yield. Updated information from an external source gave a more accurate measure of seed potato production in Scotland. As a consequence, estimates of ware potato production for Scotland have fallen by an equivalent level but the total potato production is roughly in line with past estimates. There has been no change to the price data used in the calculations.

Click here to obtain further data source information for this chapter

3 A methodological improvement for cereal valuation estimates was initially implemented in 2007 for the calculation of average prices for cereals which in turn are used to estimate the value of production. This was done in order to make better use of all price data collected under the Corn Returns Act in order to take fuller account of forward buying of cereals. For this reason the prices shown and quoted will not directly correlate with spot market prices or price series based purely on fixed contract purchases which are more commonly published. This change in approach was particularly relevant in 2007 and 2008 given the very sharp changes in prices that occurred during these years. The approach requires some assumptions to be made about the likely delivery month for some contracts and assumptions on both the delivery month and prices for other contracts. Some refinements to the assumption on prices were made in 2009 for those contracts where prices are not reported which results in some revisions to the prices and valuation estimates which have been backdated to 2000. This is viewed as the best compromise currently which attempts to make best use of all of the corn returns volume and price information.

Total cereals (table 5.1)

4 The area of cereals planted decreased by 4.3 per cent in 2009 to 3.1 million hectares. Crop yields also decreased, resulting in a decrease in overall production of 9.3 per cent to just over 22 million tonnes of grain. Planting conditions in the autumn of 2008 were difficult and cereal prices were weaker which discouraged plantings in favour of higher spring plantings for barley, oilseed rape, linseed and beans.

5 Yields of all cereal crops were lower than in 2008, in particular the yield for wheat. This was a result of the difficult planting conditions for autumn 2008 and along with a delayed start to the 2009 harvest due to the later maturity of crops following the cold weather early in the year and above average rainfall at the end of June and beginning of July. However, following on the experience of the wet harvest of 2007, farmers moved quickly to get the harvest in once the weather cleared in order to protect the quality of crops. The quality of barley harvested early was generally excellent, providing plentiful supplies of malting quality barley grain. The quality of wheat was more variable. The protein content of the crop was higher than 2008 but lower than the three year average.

Table 5.1 Total cereals; United Kingdom

Enquiries: Karen Stark on +44 (0)1904 455076 email: karen.p.stark@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production						
Area (thousand hectares)	3 302	2 915	2 859	2 884	3 274	3 134
Volume of harvested production	22 960	21 001	20 838	19 130	24 283	22 037
Value of production (£ million) (a)	2 393	1 434	1 507	1 949	3 156	2 353
Value of production at market prices (£ million)	1 651	1 434	1 507	1 949	3 156	2 353
Supply and use						
Production	22 960	21 001	20 838	19 130	24 283	22 037
Imports from: the EU	1 846	2 129	1 861	1 660	1 537	1 698
the rest of the world	876	539	655	1 102	1 057	774
Exports to: the EU	3 815	3 097	2 680	2 362	3 016	3 126
the rest of the world	1 464	208	65	78	446	180
Total new supply	20 402	20 364	20 610	19 452	23 414	21 202
Change in farm and other stocks	- 109	- 356	- 43	-1 026	2 974	748
Total domestic uses	20 512	20 720	20 652	20 479	20 440	20 454
Production as % of total new supply for use in UK	112	103	101	98	104	104

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

6 Average spot prices in 2009 were lower than the high prices of autumn 2007 through to spring 2008. For the early part of 2009 cereals prices increased but they were not sustained throughout the whole of the year. The total value of production at market prices of all cereals was £2.4 billion, 25 per cent lower than in 2008. The total value of sales of wheat, barley and oats decreased by 9.5 per cent in 2009 to £2.1 billion. Prices reflected on world markets, attributable to various factors including increased global demand for food, feed and fuel use, and high world stock levels.

Wheat (table 5.2)

7 The area of wheat in 2009 decreased by 13 per cent. Yield was adversely affected by poor soil structure following the wet harvest in 2008, late drilling, and then the dry spring. Yields were around 4.0 per cent lower compared to the record yields achieved in 2008, and overall production was down by 17 per cent to 14.4 million tonnes. The majority of the wheat area was harvested in good conditions and overall quality was better than the 2008 crop, although protein levels were variable.

8 Prices for milling wheat from January to July were between £140 per tonne and £150 per tonne, after which they declined quite steeply to end the year to just below £120 per tonne. A similar pattern was observed for feed wheat with prices declining from around £115 per tonne up to July, to around £95 per tonne in December. The overall annual price in 2009 was £122 per tonne for milling wheat, down £30 per tonne or 20 per cent. For feed wheat this was £108 per tonne, down £19 per tonne or 15 per cent on 2008. The overall value of production of wheat in 2009 decreased by 29 per cent to £1.6 billion. The value of sales was down 11 per cent to £1.6 billion compared with 2008.

9 Imports of wheat increased by 13 per cent in 2009. Primarily this was as a result of the reduced availability of higher quality domestic wheat for milling from the 2008 harvest but also market conditions. Exports of wheat in 2009 decreased by 12 per cent as a result of lower United Kingdom production and availability from the 2009 harvest. The total new supply of wheat grain available for domestic use was 15 per cent lower than in 2008. However overall domestic use increased by 1.4 per cent. A 1.3 per cent decrease in use by millers was offset by a 6.6 per cent increase in use for feed. In 2009 use of wheat for animal feed returned to more typical levels in response to lower prices compared to 2008. When feed manufacturers used a lower cereal incorporation rate and a smaller proportion of wheat for compound feed production, substituting wheat for maize in feed rations for the first half of 2008 due to the high wheat prices.

Table 5.2 Wheat; United Kingdom

Enquiries: Karen Stark on +44 (0)1904 455076 email: karen.p.stark@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production						
Area (thousand hectares)	1 993	1 867	1 836	1 830	2 080	1 814
Yield (tonnes per hectare)	7.9	8.0	8.0	7.2	8.3	7.9
Volume of harvested production	15 673	14 863	14 755	13 221	17 227	14 379
Value of production (£ million) (a)	1 587	1 018	1 066	1 325	2 245	1 590
of which: sales	1 062	946	990	1 343	1 784	1 585
subsidies (b)	448	-	-	-	-	-
on farm use	61	86	83	100	138	126
change in stocks	16	- 13	- 7	- 119	323	- 121
Value of production at market prices (£ million) (c)	1 139	1 018	1 066	1 325	2 245	1 590
Prices (average prices weighted by volumes of sales (£ per tonne))						
Milling wheat	80	76	76	109	152	122
Feed wheat	71	66	72	99	127	108

continued

Table 5.2 continued

Thousand tonnes (unless otherwise specified) — Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Supply and use							
Production		15 673	14 863	14 755	13 221	17 227	14 379
Imports from:	the EU	638	688	569	625	645	810
	the rest of the world	569	487	459	613	603	595
Exports to:	the EU	3 054	2 444	2 094	1 903	2 389	2 270
	the rest of the world	524	22	22	9	376	160
Total new supply		13 303	13 572	13 667	12 547	15 709	13 354
Change in farm and other stocks		210	- 138	36	- 928	2 185	- 367
Total domestic uses		13 093	13 710	13 631	13 475	13 525	13 721
of which:	flour milling	5 664	5 641	5 616	5 673	6 123	6 042
	animal feed	6 332	7 002	6 867	6 611	6 233	6 647
	seed	324	254	254	311	322	270
	other uses and waste	773	813	894	880	846	761
Production as % of total new supply for use in UK		118	110	108	105	110	108
% of home grown wheat in milling grist		82	82	84	83	80	80

Wheat (Crop Years: July-June); United Kingdom

Thousand tonnes (unless otherwise specified) — Crop years: July-June

		2004/05	2005/06	2006/07	2007/08	2008/09
Production and output						
Volume of harvested production		15 473	14 863	14 755	13 221	17 227
Value of production (£ million) (a)		1 546	1 022	1 216	1 668	2 008
of which:	sales	1 014	934	1 124	1 565	1 861
	subsidies (b)	447	-	-	-	-
	on farm use	91	85	85	119	141
	change in stocks	- 6	2	7	- 16	6
Value of production at market prices (£ million) (c)		1 099	1 022	1 216	1 668	2 008

(a) Excludes farm saved seed.
(b) Includes arable area payments but excludes set-aside payments and is net of taxes.
(c) Excluding subsidies and taxes.

Barley (table 5.3)

10 There was a 12 per cent increase in the area of barley grown in 2009. The increased area was almost exclusively due to a 22 per cent increase in spring sown barley. Winter sown barley was down 1.3 per cent due to the difficult autumn planting conditions. Yields for winter barley were adversely affected by harvest losses, particularly due to brackling where the seed head drops before harvest. Yields were better for spring barley which showed a slight increase in 2009. Overall yields were slightly lower but with the area increase resulted in a 10 per cent increase in the volume of production. The quality of the 2009 crop was generally very good and malting barley specifications were largely met.

11 Prices for premium barley and malting barley were strong between January and July, typically around £145 per tonne. This was influenced by the high proportion of malting barley which was bought forward when prices were higher. From August prices fell sharply and ended the year at around £100 per tonne. The prices for feed barley were around £100 per tonne through to July, after which they fell to around £80 per tonne at the end of the year. The premium for malting barley reduced through the year and feed barley has been purchased at a £15 per tonne discount to feed wheat consistently throughout the year. The overall value of barley production decreased by 16 per cent to £687 million. The value of sales was down to £486 million, down 3.6 per cent on 2008.

Table 5.3 Barley; United Kingdom

Enquiries: Karen Stark on +44 (0)1904 455076 email: karen.p.stark@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production							
Area (thousand hectares)		1 187	938	881	898	1 032	1 160
Yield (tonnes per hectare)		6.0	5.9	5.9	5.7	6.0	5.8
Volume of harvested production		6 565	5 495	5 239	5 079	6 144	6 769
Value of production (£ million) (a)		730	380	384	555	817	687
of which:	sales	336	257	259	395	504	486
	subsidies (b)	260	-	-	-	-	-
	on farm use	150	136	142	178	208	157
	change in stocks	- 15	- 14	- 18	- 17	105	43
Value of production at market prices (£ million) (c)		470	380	384	555	817	687
Prices (average prices weighted by volumes of sales (£ per tonne))							
Malting barley		80	78	80	124	153	123
Feed barley		74	65	70	106	118	87
Supply and use							
Production		6 565	5 495	5 239	5 079	6 144	6 769
Imports from:	the EU	104	84	94	95	107	120
	the rest of the world	24	-	9	3	11	10
Exports to:	the EU	685	612	539	408	489	810
	the rest of the world	940	186	27	63	70	20
Total new supply		5 067	4 781	4 776	4 706	5 704	6 069
Change in farm and other stocks		- 330	- 181	- 194	- 140	766	1 055
Total domestic uses		5 397	4 962	4 970	4 846	4 938	5 014
of which:	brewing/distilling	1 901	1 723	1 683	1 732	1 774	1 627
	animal feed	3 258	3 057	3 115	2 922	2 961	3 168
	seed	193	143	135	155	160	173
	other uses and waste	45	39	38	37	43	46
Production as % of total new supply for use in UK		130	115	110	108	108	112

Barley (Crop Years: July-June); United Kingdom

Thousand tonnes (unless otherwise specified) Crop years : July-June

		2004/05	2005/06	2006/07	2007/08	2008/09
Production and output						
Volume of harvested production		5 816	5 495	5 239	5 079	6 144
Value of production (£ million) (a)		613	386	417	640	743
of which:	sales	270	238	268	430	573
	subsidies (b)	232	-	-	-	-
	on farm use	130	144	148	216	171
	change in stocks	- 18	4	-	- 7	-
Value of production at market prices (£ million)		381	386	417	640	743

(a) Excludes farm saved seed.
(b) Includes arable area payments but excludes set-aside payments and is net of taxes.
(c) Excluding subsidies and taxes.

12 The absolute level of barley imports is relatively low but in 2009 these increased by 10 per cent to 130 thousand tonnes. Exports increased by a substantial 49 per cent to 830 thousand tonnes, consistent with increased availability of the produced crop. The total new supply available for domestic use increased by 6.4 per cent. Overall total domestic use of barley increased by 1.5 per cent in 2009. Use by the malting and brewing sector decreased by 8.3 per cent whilst use for animal feed increased by 7.0 per cent. The increased use of cereal grain in feed rations in 2009 was in response to the reduced cereal prices, especially compared to the high prices seen for the first half of 2008. This has particularly favoured feed barley which has been trading at a significant discount to feed wheat since March 2009.

Oats (table 5.4)

13 There was a 3.0 per cent decline in the area planted in 2009 compared to 2008 that combined with a small decrease in yield to produce an overall 3.4 per cent decline in the volume of production in 2009 to 757 million tonnes.

14 For the period January to August 2009 milling oat prices averaged £100 per tonne per month. Feed oat prices for the same period were very similar averaging £98 per tonne. From September prices dropped and for the last 4 months of the year were around £91 per tonne for milling oats and around £94 per tonne for feed oats. The average price for 2009 for both milling oats and feed oats was £97 per tonne. The value of production of oats decreased by 19 per cent to £73 million; the value of sales was £52 million, down 10 per cent on 2008.

15 The total new supply of oats was up 4.8 per cent. Total domestic use of oats was down by just 0.4 per cent or 3 thousand tonnes in 2009. Use of oats by the milling sector was up by 3 thousand tonnes whilst use for animal feed was down by 5 thousand tonnes.

Table 5.4 Oats; United Kingdom

Enquiries: Karen Stark on +44 (0)1904 455076 email: karen.p.stark@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production						
Area (thousand hectares)	100	90	121	129	135	131
Yield (tonnes per hectare)	6.0	5.8	6.0	5.5	5.8	5.8
Volume of harvested production	589	528	728	712	784	757
Value of production (£ million) (a)	61	34	54	66	90	73
of which: sales:	25	26	33	47	58	52
subsidies (b)	22	-	-	-	-	-
on farm use	13	12	15	19	23	19
change in stocks	1	- 3	6	-	9	1
Value of production at market prices (£ million) (c)	40	34	54	66	90	73
Prices (average prices weighted by volumes of sales (£ per tonne))						
Milling oats	67.1	65.0	74.7	93.6	114.1	96.8
Feed oats	66.0	65.8	77.0	92.5	114.9	97.0
Supply and use						
Production	589	528	728	712	784	757
Imports from: the EU	10	32	49	53	46	20
the rest of the world	1	-	-	1	-	-
Exports to: the EU	65	27	30	32	119	32
the rest of the world	-	-	8	6	-	-
Total new supply	534	533	747	734	711	745
Change in farm and other stocks	16	- 38	116	41	23	60
Total domestic uses	523	571	631	693	688	685
of which: milling	266	343	383	418	420	423
animal feed	236	212	220	246	245	240
seed	18	17	17	18	19	18
other uses and waste	3	- 1	12	10	4	4
Production as % of total new supply for use in UK	110	99	97	97	110	102

(a) Excludes farm saved seed.
(b) Includes arable area payments but excludes set-aside payments and is net of taxes.
(c) Excluding subsidies and taxes.

Oilseed rape (table 5.5)

16 2009 saw a fall in the area of oilseed rape of 2.8 per cent. Most winter oilseed rape was drilled later than normal in autumn 2008 and some crops had very poor establishment and severe damage from pigeons over the winter. The worst crops were unviable and replaced in the spring, resulting in increased spring plantings. Average yields for winter oilseed rape were higher in 2009, due in part to improved control of sclerotinia, whilst yields for the spring oilseed rape were lower. However overall yields were slightly higher in 2009 compared to 2008. This combined with the fall in area to give a 1.1 per cent reduction in the volume of production to 1.9 million tonnes.

17 Market prices were on average around £245 per tonne, 22 per cent lower than in 2008 meaning that the overall value of production fell significantly from £618 to £478 million pounds, some 23 per cent.

18 Imports of oilseed rape from inside and outside of the EU in 2009 were more than two times those of 2008, continuing the trend seen for the previous year. Exports of oilseed rape remained in decline over the same period, with a 46 per cent fall seen between 2008 and 2009, preceded by a 17 per cent fall between 2007 and 2008. Most of the imports were sourced from Germany, France and Denmark whilst most exports went to the Netherlands and France.

Table 5.5 Oilseed rape; United Kingdom

Enquiries: Richard Thompson on +44 (0)1904 455301 email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production						
Area (thousand hectares)	491	594	575	681	598	581
Yield (tonnes per hectare)	3.0	3.2	3.3	3.1	3.3	3.4
Volume of harvested production	1 487	1 898	1 890	2 108	1 973	1 951
of which:						
Production not on set-aside land:						
Area (thousand hectares)	419	519	500	602	598	581
Yield (tonnes per hectare) (a)	3.0	3.3	3.4	3.2	3.3	3.4
Production (a)	1 271	1 706	1 674	1 900	1 973	1 951
Production on set-aside land:						
Area (thousand hectares)	72	75	75	80	-	-
Yield (tonnes per hectare)	2.9	2.5	2.9	2.6	-	-
Production	216	192	216	208	-	-
Value of production (£ million) (b)	345	261	310	422	618	478
of which: sales	206	248	312	404	609	480
subsidies (c)	146	. .	. .	. .	-	-
change in stocks	- 7	13	- 2	18	9	- 2
Value of production at market prices (£ million) (d)	199	261	310	422	618	478
Supply and use						
Production	1 487	1 898	1 890	2 108	1 973	1 951
Imports from: the EU	270	47	132	63	175	339
the rest of the world	42	-	-	-	-	56
Exports to: the EU	140	168	179	264	217	116
the rest of the world	60	4	15	-	2	3
Total new supply	1 599	1 773	1 829	1 907	1 930	2 227
Production as % of total new supply for use in UK	92	107	103	111	102	88

(a) These figures are on the basis of a standard (9%) moisture content.

(b) Value of production is calculated taking into account the price for oilseed rape produced not on set-aside with an average oil content of 43 per cent.

(c) Includes arable area payments but excludes set-aside payments.

(d) Excluding subsidies and taxes.

Linseed (table 5.6)

19 The area of linseed increased by a substantial 77 per cent in 2009, to 29 thousand hectares. This was encouraged by improved prices for the 2008 crop and difficult 2008 autumn planting conditions which resulted in increased spring plantings for several crops, including linseed. Yields were also favourable so overall resulted in an increase in the volume of production of 90 per cent to 56 thousand tonnes.

20 Between September and October 2009 spot prices rose significantly as a result of imported Canadian linseed being withdrawn from sale due to the presence of illegal genetically modified variants. This has been incorporated into the price data which is used to construct the valuation estimate but the average annual price for linseed was around 10 per cent lower in 2009. The overall value of production at market prices increased by 71 per cent to £18 million.

Table 5.6 Linseed; United Kingdom

Enquiries: Richard Thompson on +44 (0)1904 455301 email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production						
Area (thousand hectares)	129	45	36	13	16	29
Yield (tonnes per hectare)	1.1	1.8	1.4	1.6	1.8	1.9
Volume of harvested production	163	84	50	20	30	56
of which:						
Production not on set-aside land:						
Area (thousand hectares)	127	42	33	11	16	29
Yield (tonnes per hectare) (a)	1.1	1.9	1.4	1.6	1.8	1.9
Production (a)	159	78	44	17	30	56
Production on set-aside land:						-
Area (thousand hectares)	2	3	4	2	-	-
Yield (tonnes per hectare) (a)	1.5	1.6	1.5	1.4	-	-
Production (a)	4	5	6	2	-	-
Value of production (£ million)	78	16	8	4	10	18
of which: sales	19	15	8	5	10	17
subsidies (b)	60	. .	. .	. .	-	-
change in stocks	-	1	- 1	- 1	-	1
Value of production at market prices (£ million) (c)	18	16	8	4	10	18
Supply and use						
Production	163	84	50	20	30	56
Imports from: the EU	2	3	4	6	9	5
the rest of the world	13	-	2	1	1	2
Exports to: the EU	67	63	22	20	13	26
the rest of the world	2	-	-	-	-	-
Total new supply	108	24	33	6	27	37
Production as % of total new supply for use in UK	- 14	346	152	318	111	153

(a) These figures are based on a standard (9%) moisture content.
(b) Includes arable area payments but excludes set-aside payments.
(c) Excluding subsidies and taxes.

Sugar beet and sugar (table 5.7)

21 The area of sugar beet in 2009 decreased slightly by 0.5 per cent to 119 thousand hectares. However record yields were achieved, 10 per cent higher than the previous high in 2008, as a result of favourable drilling conditions and continued good growing conditions throughout the whole season. As such the production of sugar beet rose by 9.0 per cent to 8.3 million tonnes in 2009. Average market prices rose by 6.0 per cent with an overall rise in the value of production of 16 per cent to £241 million. Imports and exports in 2009 were lower than in 2008 but the total new supply was very much in line with 2008 at 2 million tonnes. Production as a percentage of total new supply for use in the United Kingdom rose by 4.0 per cent to 64 per cent.

22 Agreement was reached on major reform of the sugar regime in November 2005 and the new European Union sugar regime came into effect on 1 July 2006. The main provision was to cut EU prices by 36 per cent over a four year period alongside a voluntary restructuring scheme aimed at reducing EU production by around 6 million tonnes. This was followed by further changes to the sugar restructuring scheme in 2007. As a consequence there has been some consolidation of UK sugar production around British Sugar's most productive factories in Lincolnshire, Norfolk and Suffolk. Production at Allscott factory in Shropshire and at the York factory has ceased.

Table 5.7 Sugar beet and sugar; United Kingdom

Enquiries: Richard Thompson on +44 (0)1904 455301 email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Sugar beet						
Area (thousand hectares)	181	148	131	125	120	119
Yield (adjusted tonnes per hectare)	54.5	58.5	56.6	53.8	63.8	69.9
Volume of harvested production	9 889	8 687	7 400	6 733	7 641	8 330
Value of production (£ million)	277	279	178	162	208	241
Sugar content %	17.20	17.40	16.63	17.96	17.65	18.00
Prices (average market price (£ per adjusted tonne) (a)	28.0	32.1	24.1	24.0	27.3	28.9
Sugar (refined basis)						
Production (b)	1 437	1 341	1 157	1 049	1 192	1 280
Imports from: the EU	142	221	234	197	220	224
the rest of the world	1 135	1 104	1 099	1 109	1 186	1 017
Exports to: the EU	131	120	183	414	462	406
the rest of the world	564	668	679	143	138	115
Total new supply	2 019	1 879	1 627	1 798	1 998	2 000
Production as % of total new supply for use in UK	71	71	71	58	60	64

(a) Average price for all sugar beet, including transport allowance and bonuses.

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

Peas and beans for stockfeed (table 5.8)

23 The area of dried peas, which are predominantly grown for stockfeed, increased by 32 per cent whilst the area of dried beans increased by 61 per cent. The area of field beans had declined substantially in 2007 and 2008; the area planted in 2009 at 190 thousand hectares is the highest level recorded, back up to similar levels seen in 2006. The increase was mainly through higher spring planting of field beans. This was encouraged by difficult planting conditions for autumn 2008 and low cereal prices at this time. Yields of field peas were very high whilst the yield of field beans was slightly lower than average. Consequently the volume of production of dried peas and beans increased by 65 and 37 per cent respectively or 41 per cent overall. However, prices for field peas and beans were lower in 2009 compared to 2008. Consequently the combined value of production for peas and beans for stockfeed rose by 21 per cent to £103 million in 2009.

Table 5.8 Peas and beans harvested dry; United Kingdom

Enquiries: Anna Moore on +44 (0)1904 456371 email: anna.moore@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Peas for harvesting dry (a)						
Area (thousand hectares)	77	41	37	26	21	28
Yield (tonnes per hectare)	4.0	3.8	3.3	3.1	4.0	5.0
Volume of harvested production	275	156	122	80	85	141
Value of production (£ million)	44	13	10	14	12	17
of which: sales	21	13	10	14	12	17
subsidies (b)	24	-	-	-	-	-
Value of production at market prices (£ million) (c)	21	13	10	14	12	17
Field beans						
Area (thousand hectares)	116	184	184	123	118	190
Yield (tonnes per hectare)	4.0	3.8	3.4	3.0	4.5	3.8
Volume of harvested production (a)	419	705	617	375	526	722
Value of production (£ million)	69	58	52	65	73	86
of which: sales	32	58	52	65	73	86
subsidies (b)	37	-	-	-	-	-
Value of production at market prices (£ million) (c)	32	58	52	65	73	86

(a) The figures presented here cover only that part of the crop which is harvested dry (about 80% to 90% of total production) and largely used for stockfeed. The remainder is included in UK fresh vegetables, table 5.9.
(b) Includes arable area payments but excludes set-aside payments; includes protein crop premium from 2004.
(c) Excluding subsidies and taxes.

Fresh vegetables (table 5.9)

24 2009 saw the area of fresh vegetables in the United Kingdom rise by 6.2 per cent to 125 thousand hectares, the largest area since 2003 as a result of additional cropping capacity coming on-stream. Canning peas and peas harvested dry between them saw a significant increase of over 4 thousand hectares of the total increase of 7 thousand hectares.

25 Prices for the four largest vegetables by quantity showed mainly decreases, including cauliflowers down around 5.0 per cent and carrots down around 1.0 per cent in 2009. The value of production of carrots fell by 6.8 per cent to £117 million and cauliflowers fell by 11 per cent to £46 million. Additionally cabbages decreased by 10 per cent to £63 million, lettuces fell by 12 per cent to £98 million and tomatoes fell by 5.4 per cent down to £91 million. Conversely a small increase in the value of production was observed for mushrooms, and peas were up by nearly 10 per cent to £51 million. This resulted in the total value of production falling by 4.4 per cent to £1.06 billion.

Table 5.9 Fresh vegetables; United Kingdom

Enquiries: Richard Thompson on +44 (0)1904 455301 email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production							
Area (thousand hectares):		148	121	120	119	117	125
of which:	grown in the open (a) (b)	146	120	119	118	117	124
	protected (c)	1	1	1	1	1	1
		943	912	997	1 066	1 104	1 055
of which:	grown in the open	628	665	738	801	824	776
	protected	315	248	259	265	280	279
of which:	subsidies (d)	6	. .	. .	. .	. .	. .
Selected crops:	cabbages	54	58	60	65	70	63
	carrots	85	94	100	122	126	117
	cauliflowers	40	46	41	48	52	46
	lettuces	93	84	108	95	111	98
	mushrooms	164	104	99	106	104	105
	peas	56	41	39	34	46	51
	tomatoes	72	69	83	86	96	91
Value of production at market prices (£ million) (e)		937	912	997	1 066	1 104	1 055
Prices (farm gate price (£ per tonne))							
Selected crops:	cauliflowers	233.9	344.4	331.1	390.8	450.9	426.8
	tomatoes	640.9	870.8	989.7	1 009.8	1 080.3	1 037.7
Supply and use (f)							
Total production		2 912	2 710	2 597	2 470	2 586	2 597
Supplies from the Channel Islands		16	8	8	8	8	8
Imports from:	the EU	1 095	1 736	1 683	1 685	1 698	1 595
	the rest of the world	152	204	210	263	258	244
Exports to:	the EU	86	57	71	69	62	70
	the rest of the world	3	31	12	19	18	8
Total new supply		4 086	4 570	4 415	4 337	4 471	4 366
Production as % of total new supply for use in the UK		71	59	59	57	58	59

(a) Includes peas harvested dry for human consumption.
(b) Areas relate to field areas multiplied by the number of crops in the year.
(c) Excludes area of mushrooms from 1992.
(d) Arable area payments for peas harvested dry.
(e) Excluding subsidies and taxes.
(f) Trade figures relate to fresh produce where distinguishable.

Plants and flowers (table 5.10)

26 The area used for production of plants and flowers decreased by 5.1 per cent in 2009 to 19 thousand hectares. The overall total value of production increased by 9.8 per cent to £877 million.

27 The value of production of the relatively small flowers and bulbs sector increased by 5.1 per cent to £37 million. The area of narcissus, the United Kingdom's major flower and bulb crop, remained relatively stable. However the bulb prices increased again this year due to a strong demand for exports. Outdoor flower prices remained relatively static, although the proportion of higher value crops such as paeonies and delphiniums continued to increase.

28 The value of production of ornamental hardy nursery stock increased by 4.2 per cent to £535 million. There was a slight reduction in the production area for most nursery stock lines but retail sales were good, prompted by favourable weather and consumer spending in favour of garden and leisure products. A large part of the increase for this sector was due to the increased value of the production of Christmas trees.

29 The value of production of protected plants and flowers increased by 22 per cent to £304 million due to improved sales and production compared with 2008. Spring sales were exceptional though later on in the year poor weather adversely influenced trading at times. The 'grow your own' trend through the media coverage led to a large surge in sales of young vegetable plants. Cut flowers saw a modest increase in demand, notably for pinks and column stocks where prices were similar or slightly up compared with 2008.

Table 5.10 Plants and flowers; United Kingdom

Enquiries: Karen Stark on +44 (0)1904 455076 email: karen.p.stark@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production						
Area (thousand hectares) (a):	20	20	18	19	20	19
Value of production (£ million)	682	778	751	782	799	877
of which: flowers and bulbs in the open (b)	35	33	35	33	36	37
hardy plants and flowers nursery stock	376	473	460	487	514	535
protected crops	272	272	257	262	250	304
Trade (£ million)						
Imports						
bulbs	35	53	52	53	58	58
cut flowers	336	522	552	559	573	558
foliage	18	25	28	35	35	27
indoor plants	86	105	104	104	107	110
outdoor plants	27	69	66	69	51	52
trees	29	64	71	72	81	65
other	18	31	36	35	41	42
Total Imports (exc. Channel Islands)	548	869	909	928	945	912
Exports						
bulbs	8	7	8	10	10	10
cut flowers	15	22	23	17	17	22
foliage	3	2	2	3	3	1
indoor plants	1	2	2	2	2	6
outdoor plants	3	4	4	3	3	3
trees	1	2	2	2	3	3
other	2	5	6	7	10	9
Total Exports	32	44	47	45	48	54

(a) Areas relate to field areas multiplied by the number of crops in the year.
(b) Including forced flower bulbs.

Potatoes (table 5.11)

30 In 2009 the area of potatoes planted in the United Kingdom was 5 thousand hectares higher than in 2008. With a marginal increase in average yields, this resulted in a 4.5 per cent increase in the volume of potatoes harvested to 6.4 million tonnes. The growing conditions were generally favourable and few problems were reported at harvesting. With average prices for all potatoes down 17 per cent on 2008, the overall value of production fell 16 per cent to £644 million.

31 Imports of potatoes into the United Kingdom were down 5.0 per cent whereas exports out of the United Kingdom were up 5.0 per cent. This meant that the overall net trade remained largely unchanged. The production as a percentage of total new supply for use in the United Kingdom was 84 per cent in 2009, up 2.0 per cent on to 2008.

2009

Table 5.11 Potatoes; United Kingdom

Enquiries: Richard Thompson on +44 (0)1904 455301 email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production							
Area (thousand hectares)		169	137	140	140	144	149
of which:	early	15	12	11	16	17	17
	maincrop	155	124	129	124	127	132
Yield (tonnes per hectare):		38.8	43.7	40.8	39.7	42.8	43.1
of which:	early	20.9	14.3	15.7	12.5	13.3	13.6
	maincrop	40.6	46.6	43.0	43.1	46.7	47.0
Volume of harvested production		6 577	5 979	5 727	5 564	6 145	6 423
of which:	early	303	179	177	198	224	234
	maincrop	6 274	5 800	5 550	5 367	5 921	6 189
End year stocks		3 358	2 858	2 448	2 182	2 618	3 016
Value of production (£ million)		617	531	638	684	767	644
of which:	sales	624	527	675	714	689	584
	on farm seed use	16	13	16	9	13	11
	change in stocks	- 22	- 9	- 53	- 38	66	50
Prices (average price paid to registered producers (£ per tonne) (a)							
	early potatoes	119.9	140.8	193.7	153.0	206.8	148.8
	maincrop potatoes	109.3	95.9	125.0	141.4	143.8	118.0
	all potatoes	110.7	101.7	129.4	144.3	151.6	126.0
Supply and use							
Total production		6 577	5 979	5 727	5 564	6 145	6 423
Supplies from the Channel Islands		41	38	31	33	26	31
Imports		1 190	1 387	1 404	1 544	1 705	1 621
of which:	early	180	122	92	195	162	115
	maincrop	151	166	126	148	258	179
	processed (raw equivalent)	837	1 082	1 177	1 185	1 267	1 309
	seed	22	17	9	16	18	17
Exports		362	397	628	380	388	407
of which:	raw	168	117	172	154	125	143
	processed (raw equivalent)	113	190	360	131	171	166
	seed	81	90	96	95	92	98
Total new supply		7 447	7 006	6 533	6 762	7 487	7 667
Change in stocks		- 226	- 89	- 409	- 266	435	398
Total domestic uses		7 672	7 095	6 943	7 028	7 052	7 269
of which:	used for human consumption	6 112	5 868	5 674	5 691	5 513	5 497
	seed for home crops (including seed imports)	447	387	386	335	338	329
	support buying	. .	. .	. .	. .	. .	. .
	chats, waste and retained stockfeed	1 114	840	883	1 001	1 197	1 429
Production as % of total new supply for use in the UK		88	85	88	82	82	84

UK potatoes (Crop Years: June-May)

Thousand tonnes (unless otherwise specified) Crop years: June-May

		Average of 1998-2000	2004/05	2005/06	2006/07	2007/08	2008/09 (provisional)
Production							
Volume of harvested production		6 894	6 246	5 979	5 727	5 564	6 145
Value of production (£ million)		610	590	586	730	702	690
of which:	sales	599	562	574	736	709	641
	on farm seed use	12	20	14	3	15	13
	change in stocks	-	8	- 2	- 9	- 22	36
Prices (average realised return (£ per tonne)) (a)		105.6	106.2	109.4	143.6	148.1	139.0

(a) Takes account of support buying, seed sales and sacks where appropriate.

Fresh Fruit (table 5.12)

32 The area of orchard fruit and soft fruit remained stable between 2008 and 2009. The overall value of production increased by 4.8 per cent to £571 million, primarily driven by the soft fruit sector. Favourable spring weather led to most top fruit setting a good crop. Orchards in the South East were affected by dry conditions in the late summer and early autumn in marked contrast to the orchards in the West where it was much wetter until the end of August. The bulk of the apple and pear crop was picked during good weather conditions. Overall the value of production of orchard fruit increased by 1.1 per cent to £146 million.

33 The value of production of strawberries increased by 8.4 per cent to £231 million and raspberries increased by 6.1 per cent to £110 million. Overall there was a 6.9 per cent increase in the value of production of all soft fruit to £384 million. The recent trend for a rise in area and production continued into 2009. The warm and sunny spring led to an earlier start to the season than in 2008 with prices paid to producers significantly increased until peak picking in mid-June.

Table 5.12 Fresh fruit; United Kingdom

Enquiries: Richard Thompson +44 (0)1904 455301 email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Production							
Area (thousand hectares):		35	28	28	27	28	28
of which:	orchard fruit (a)	26	19	19	18	18	18
	soft fruit (b)	9	9	9	10	10	10
End year stocks (c)		82	90	59	69	64	69
Value of production (£ million) (d):		250	388	383	467	545	571
of which:	orchard fruit	105	117	117	141	145	146
	soft fruit	134	239	232	292	359	384
of which:	sales	243	384	399	462	548	568
	change in stocks (c)	6	4	- 16	6	- 3	3
Selected crops:	dessert apples	47	49	56	52	64	62
	culinary apples	27	32	42	51	56	45
	pears	9	8	11	8	10	12
	raspberries	33	73	70	91	104	110
	strawberries	82	137	136	168	213	231
Prices (farm gate price (£ per tonne))							
Selected crops:	dessert apples	425.0	418.6	433.6	488.0	540.2	513.0
	culinary apples	268.5	316.5	378.7	373.0	452.1	427.9
	pears	371.6	348.9	391.9	386.9	504.0	509.6
Supply and use (e)							
Total production		311	363	392	406	408	415
Imports from:	the EU	1 293	1 312	1 361	1 264	1 175	1 070
	the rest of the world	1 398	1 992	2 128	2 268	2 169	2 110
Exports to:	the EU	68	119	177	146	128	142
	the rest of the world	4	1	1	2	1	1
Total new supply		2 932	3 546	3 704	3 791	3 623	3 452
Change in stocks		- 11	9	- 31	9	- 5	5
Total domestic uses		2 943	3 537	3 735	3 782	3 628	3 447
Production as % of total new supply for use in the UK		10	10	10	11	11	12

(a) Includes field area of commercial orchards only.
(b) Excludes area of wine grapes.
(c) Stocks relate to apples and pears.
(d) Includes glasshouse fruit.
(e) Trade figures relate to fresh produce where distinguishable.

Methodology note for livestock tables (tables 5.13, 5.14 and 5.15)

34 Two measures of production are shown in tables 5.13, 5.14 and 5.15. Gross indigenous production is a measure of animal production commonly used in other European Union Member States and is therefore useful for making international comparisons. It is measured as total slaughterings for the food chain plus all live exports minus all live imports of breeding and non-breeding livestock. Home-fed production includes imports and exports of non-breeding animals only, i.e. it is measured as total slaughterings for the food chain plus live exports (non-breeding) minus live imports (non-breeding).

Table 5.13 Cattle and calves, beef and veal; United Kingdom

Enquiries: Sarah Thompson on +44 (0)1904 455097 email: sarah.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise stated) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Population						
Total cattle and calves (thousand head at June) (a)	11 359	10 770	10 579	10 304	10 107	10 025
of which: dairy cows	2 405	1 998	1 979	1 954	1 909	1 857
beef cows	1 905	1 751	1 737	1 698	1 670	1 626
Production (b)						
Total home-fed marketings (thousand head)	2 339	2 409	2 702	2 724	2 669	2 595
of which: steers, heifers and young bulls	2 248	2 276	2 208	2 155	2 013	2 035
calves	86	111	125	108	91	44
cows and adult bulls	4	22	370	461	566	516
Average dressed carcase weight (kg) (c):						
steers, heifers and young bulls	307	331	330	342	339	340
calves	31	26	29	32	31	32
cows and adult bulls	258	345	311	317	314	314
Production (dressed carcase weight):						
home-fed production	693	765	852	888	866	856
gross indigenous production	690	755	844	879	860	841
Value of production (£ million)	1 936	1 663	1 627	1 669	2 117	2 223
of which: value of home-fed production	1 085	1 381	1 591	1 666	2 092	2 225
subsidies (d)	839	197	68	47	49	24
change in work-in-progress (e)	14	86	- 30	- 44	- 21	- 19
less imported livestock	2	2	2	1	3	7
plus breeding animals exported	. .	. .	. .	-	-	-
Value of production at market prices (£ million) (f)	1 097	1 465	1 559	1 622	2 068	2 200
Prices						
Store cattle (£ per head) (g):						
Hereford/cross bull calves (h)	91.9	81.5	73.4	93.0	119.5	166.4
Beef/cross yearling steers (i)	383.7	429.0	444.1	480.9	539.3	639.3
Finished cattle (pence per kg liveweight): All prime cattle	89.4	102.2	110.6	112.3	144.8	154.6
Over Thirty Month Scheme, Older Cattle Disposal Scheme, Selective Cull and Calf Processing Aid Scheme (j)						
Over Thirty Month Scheme:						
prime cattle throughput (thousand head)	68	27	1	. .	. .	. .
cull cattle throughput (thousand head)	878	683	49	. .	. .	. .
receipts (£ million)	255	178	13	. .	. .	. .
Older Cattle Disposal Scheme:						
throughput (thousand head)	. .	. .	150	127	126	. .
receipts (£ million)	. .	. .	37	28	29	. .
Supply and use (thousand tonnes, dressed carcase weight) (k)						
Home-fed production (b)	693	765	852	888	866	856
Imports from: the EU (l) (m)	117	205	198	204	216	202
the rest of the world	61	82	72	75	79	74
Exports to: the EU (m)	9	14	52	76	99	93
the rest of the world	-	-	-	1	1	2
Total new supply	861	1 037	1 069	1 090	1 061	1 037
Home-fed production as % of total new supply for use in UK	81%	74%	80%	81%	82%	83%

See over page for footnotes

Table 5.13 continued

(a) From 2007, the cattle figures were sourced from the Cattle Tracing System (CTS) in England and Wales, the equivalent APHIS system in Northern Ireland and survey data in Scotland and are therefore not directly comparable with earlier years. To see comparable data for 2005-2007 please go to http://defraweb/evidence/statistics/foodfarm/landuselivestock/junesurvey/documents/june_uk.pdf.

(b) Measures of marketings, production and value exclude all cattle removed from the food chain. Payments to producers for the Over Thirty Month Scheme, the Older Cattle Disposal Scheme and the Calf Processing Aid Scheme are included as subsidies directly linked to the production, i.e. coupled payments. Payments under the Selective Cull Scheme are not included as the payments are for the replacement of capital assets.

(c) Average dressed carcase weight of animals fed and slaughtered in the United Kingdom.

(d) Comprising variable premium, calf subsidy, hill livestock compensatory allowances, suckler cow premium, beef special premium, deseasonalisation premium, extensification payments, slaughter premium and Scottish Beef Calf Scheme. Includes payments made under the Over Thirty Month Scheme, Calf Processing Aid Scheme and the Older Cattle Disposal Scheme.

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

(f) Excluding subsidies and taxes.

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

(h) 1998-2000 1st quality Hereford/cross bull calves. From January 2002, Hereford/cross bull calves.

(i) 1998-2000, Hereford/cross, Charolais/cross, Limousin/cross, Simmental/cross, Belgian blue/cross, other continental/cross, other beef/dairy cross, other beef/beef cross. From January 2002, Hereford/cross, Continental/cross, others.

(j) Cattle slaughtered under these schemes are not included within the volume of production. Receipts for the Over Thirty Month Scheme, Calf Processing Aid Scheme and the Older Cattle Disposal Scheme are included as subsidies. Selective Cull Scheme payments are not included in the production and income account.

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

(l) Includes meat from finished animals imported live from the Irish Republic.

(m) Adjusted, as necessary, for unrecorded trade in live animals.

Cattle and calves: beef and veal (table 5.13)

35 The value of production at market prices of beef and veal rose by 6.4 per cent in 2009 to £2.2 billion due to increased cattle prices. The finished cattle prices averaged 154.6 pence per kg, a rise of 6.7 per cent on 2008. Prime cattle marketings rose to 2,035 thousand head, 1.1 per cent higher than in 2008, but marketings of calves fell by 52 per cent to 44 thousand head. Overall home-fed production of beef and veal fell by 1.2 per cent, resulting in the supply of beef and veal falling by 2.3 per cent to 1,037 thousand tonnes. Home-fed production accounted for 83 per cent of new supplies in 2009, compared with 82 per cent in 2008.

Pigs and pigmeat (table 5.14)

36 The value of home-fed production of pigmeat rose by 17 per cent to £1.0 billion in 2009. Prices were higher throughout the year, resulting in an average clean pig price of 145.8 pence per kg, 19.5 pence higher than 2008. Marketings of clean pigs fell slightly, with average clean pig carcase weights rising slightly to 77 kg.

37 Home-fed production of pigmeat, at 706 thousand tonnes, was only slightly higher than 2008 resulting in new supply of pigmeat remaining virtually unchanged at 1,367 thousand tonnes. Home-fed production accounted for 52 per cent of new supplies in 2009, showing no change when compared with 2008.

Table 5.14 Pigs and pigmeat; United Kingdom

Enquiries: Sarah Thompson on +44 (0)1904 455097 email:sarah.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Population							
Total pigs (thousand head at June)		7 304	4 862	4 933	4 834	4 714	4 724
of which:	sows in pig and other sows for breeding	605	403	401	398	365	396
	gilts in pig	87	67	67	57	55	50
Production							
Total home-fed marketings (thousand head)		14 379	8 709	8 727	9 076	8 994	8 954
of which:	clean pigs	14 007	8 494	8 518	8 858	8 752	8 743
	sows and boars	372	215	209	218	242	211
Average dressed carcase weight (kg) (a):							
	clean pigs	70	75	75	76	76	77
	sows and boars	145	156	153	151	151	149
Production (dressed carcase weight):							
	home-fed production	1 026	669	667	707	705	706
	gross indigenous production	1 027	670	668	706	705	706
Value of production (£ million)		822	677	685	736	865	1 015
of which:	value of home-fed production	835	671	678	733	867	1 010
	change in work in progress (b)	- 17	- 1	- 1	- 1	- 4	3
	less imported livestock	. .	. .	. .	. .	. .	. .
	plus breeding animals exported	4	6	8	4	2	2
Prices (pence per kg deadweight)							
Clean pigs		84.5	102.9	104.2	107.1	126.3	145.8
Supply and use of pigmeat (carcase weight equivalent) (c)							
Home-fed production		1 026	669	667	707	705	706
Imports from:	the EU (d) (e)	530	836	837	864	801	776
	the rest of the world	4	6	7	5	12	11
Exports to:	the EU (e)	226	101	110	113	133	108
	the rest of the world	27	12	10	12	17	18
Total new supply		1 306	1 398	1 391	1 451	1 368	1 367
Home-fed production as % of total new supply for use in the UK		78%	48%	48%	49%	52%	52%

(a) Average dressed carcase weight of animals fed and slaughtered in the United Kingdom.

(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. Boneless meat has been converted to bone-in weights.

(d) Includes meat from finished animals imported from the Irish Republic.

(e) Adjusted, as necessary, for unrecorded trade in live animals.

Sheep and lambs, mutton and lamb (table 5.15)

38 The value of production of sheepmeat at market prices rose by 21 per cent to £962 million. Clean sheep marketings rose by 5.9 per cent in 2009, with average carcase weights showing little change. Home-fed production fell by 5.2 per cent to 314 thousand tonnes with imports rising by 4.2 per cent to 141 thousand tonnes and exports rising by 2.7 per cent to 97 thousand tonnes. Overall new supply fell by 3.8 per cent to 358 thousand tonnes. Home-fed production accounted for 88 per cent of new supplies in 2009, compared with 89 per cent in 2008.

Table 5.15 Sheep and lambs, mutton and lamb; United Kingdom

Enquiries: Sarah Thompson on +44 (0)1904 455097 email:sarah.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Population						
Total sheep and lambs (thousand head at June)	43 797	35 416	34 722	33 946	33 131	32 038
of which: ewes and shearlings	21 056	16 935	16 637	16 064	15 616	14 912
lambs under one year old	21 696	17 488	17 058	16 855	16 574	16 177
Production						
Total home-fed marketings (thousand head)	20 004	16 539	16 590	16 036	16 989	15 977
of which: clean sheep and lambs	17 748	14 300	14 279	13 791	14 617	13 759
ewes and rams	2 256	2 238	2 311	2 245	2 372	2 218
Average dressed carcase weight (kg) (a):						
clean sheep and lambs	18	19	19	19	19	19
ewes and rams	29	28	28	27	24	25
Production (dressed carcase weight):						
home-fed production	382	337	334	329	332	314
gross indigenous production	382	337	334	329	332	314
Value of production (£ million)	959	686	709	641	798	962
of which: value of home-fed production	619	691	712	638	824	985
subsidies (b)	351	. .	. .	. .	. .	. .
change in work in progress (c)	- 6	- 5	5	7	- 23	- 19
less imported livestock	5	-	7	4	3	4
plus breeding animals exported	-	-	-	-	-	-
Value of production at market prices (£ million) (d)	608	686	709	641	798	962
Prices						
Store sheep (£ per head): (e)						
Lambs, hoggets and tegs	31.5	30.5	30.7	30.3	33.6	46.6
Finished sheep (pence per kg estimated dressed carcase weight) (f):						
Great Britain	203.9	250.0	258.5	236.8	297.6	360.3
Northern Ireland	191.0	223.8	230.8	226.0	273.4	322.6
Supply and use (dressed carcase weight) (g)						
Home-fed production	369	337	334	329	332	314
Imports from: the EU (h) (i)	19	20	21	21	20	21
the rest of the world	125	113	119	116	115	120
Exports to: the EU (i)	135	93	94	76	94	97
the rest of the world	1	1	1	1	1	1
Total new supply	375	376	379	390	372	358
Home-fed production as % of total new supply for use in UK	99%	85%	90%	84%	89%	88%

(a) Average dressed carcase weight of animals fed and slaughtered in the United Kingdom.

(b) Comprising variable premium, hill livestock compensatory allowances and sheep annual premium.

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

(d) Excluding subsidies and taxes.

(e) Average prices at representative markets in England and Wales, excluding prices at autumn hill sheep sales. Category changes: 1998-2000, 1st quality lambs, hoggets and tegs. From January 2002, lambs, hoggets and tegs.

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

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

(h) Includes meat from finished animals imported from the Irish Republic.

(i) Adjusted, as necessary, for unrecorded trade in live animals.

Poultry and poultrymeat (table 5.16)

39 The value of production of poultrymeat saw little change in 2009 at £1.6 billion. Approximately 80 per cent of the value of poultrymeat comes from the production of chicken, other table fowl and boiling fowl. The volume of poultry meat production remained steady at 1.5 million tonnes.

Table 5.16 Poultry and poultrymeat; United Kingdom

Enquiries: Sarah Thompson on +44 (0)1904 455097 email: Sarah.Thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Population							
Number (thousand head at June)		166 672	173 909	173 081	167 667	166 200	159 288
of which:	chickens and other table fowls	101 852	111 475	110 672	109 794	109 859	102 759
	birds in the laying flock (a)	29 143	29 544	28 632	27 321	25 940	26 757
	growing pullets	9 634	10 928	9 625	8 936	9 313	8 356
	fowls for breeding	10 030	8 561	9 273	11 461	9 068	9 609
	turkeys, ducks, geese & all other poultry	16 012	13 400	14 879	10 154	12 019	11 807
Production							
Slaughterings (millions):		855	903	886	874	862	866
of which:	fowls	806	864	849	842	831	837
	turkeys	30	19	18	16	16	15
	ducks & geese	19	19	19	17	15	14
Production (carcase weight) (b):		1 540	1 570	1 512	1 467	1 464	1 459
of which:	chickens and other table fowls	1 168	1 283	1 237	1 212	1 213	1 217
	boiling fowls (culled hens)	54	51	53	52	56	55
	turkeys	275	192	178	165	160	155
	ducks & geese	43	45	44	38	35	32
Value of production (£ million):		1 320	1 300	1 233	1 249	1 578	1 563
of which:	fowls	860	945	895	943	1 189	1 211
	change in work in progress in fowls (c)	- 10	- 15	- 7	- 36	22	- 22
	turkeys, ducks, geese	412	293	272	276	295	299
	exports of live poultry	52	76	72	65	70	80
	hatching eggs for export	16	20	16	17	23	25
	less live poultry imported	5	6	5	7	10	14
	less hatching eggs imported	4	13	10	10	11	17
Prices (average producer prices (pence per kg carcase weight)):							
Chickens and other table fowls		73.1	73.2	71.9	77.4	97.5	99.1
Boiling fowls (culled hens)		10.8	11.6	10.7	10.3	10.4	9.8
Turkeys		122.3	109.6	105.4	121.8	134.9	143.7
Ducks		168.3	162.8	169.5	176.6	204.8	217.9
Geese		279.2	491.1	468.2	498.9	615.2	555.4
Supply and use (carcase weight) (b)							
Production		1 540	1 570	1 512	1 467	1 464	1 459
Imports from:	the EU	311	400	411	430	377	361
	the rest of the world	29	84	40	31	29	32
Exports to:	the EU	120	206	163	268	255	220
	the rest of the world	66	55	70	25	24	34
Total new supply		1 694	1 793	1 730	1 634	1 593	1 597
Production as % of total new supply for use in the UK		91%	88%	87%	90%	92%	91%

(a) Hens and pullets kept mainly for producing eggs for eating.

(b) Does not include offal or trade in preserved or prepared poultry meat.

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

40 In 2009, the average producer price for broilers rose by 1.7 per cent to 99.1 pence per kg carcase weight and the average producer price for turkeys increased by 6.5 per cent to 143.7 pence per kg. The duck average producer prices also rose, by 6.4 per cent, whilst the geese producer price fell by 9.7 per cent. The average producer price for boiling fowl was also lower than the year previous, declining by 5.4 per cent.

41 Total imports fell by 3.4 per cent to 393 thousand tonnes in 2009 and exports fell by 8.5 per cent to 254 thousand tonnes. Total new supply of poultrymeat remained virtually unchanged at 1.6 million tonnes carcase weight. United Kingdom production accounted for 91 per cent of new supplies in 2009, compared with 92 per cent in 2008.

Milk (table 5.17)

42 Production of milk from the dairy herd decreased by 0.8 per cent to 13.2 billion litres in 2009. The average farmgate milk price fell by 9.0 per cent to 23.6 pence per litre, and the average price of milk and milk products sold directly from farm to the consumer remained at similar levels to 2008 at 51 pence per litre. There was no superlevy charge in 2009 as milk production in the United Kingdom was under the national quota limit in the 2008/09 quota year.

43 The total value of milk and milk products produced for human consumption, at market prices, fell by 9.7 per cent in 2009 to £3.1 billion. The value of raw milk sold from farms to dairy companies for processing into pasteurised drinking milk, cheese, butter and other milk products was £3.0 billion, 98 per cent of the total value of milk and milk products. The value of milk processed on farm for sale direct to the consumer was £0.1 billion.

Table 5.17 Milk; United Kingdom

Enquiries: Leigh Riley on +44 (0)1904 455095 email: Leigh.Riley@defra.gsi.gov.uk

Million litres (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009
Population and yield						
Dairy herd (annual average, thousand head) (a)	2 420	2 011	1 992	1 970	1 918	1 864
Average yield per dairy cow (litres per annum)	5 906	6 986	6 977	6 913	6 943	7 084
Production						-
Milk from the dairy herd (b)	14 288	14 052	13 902	13 619	13 319	13 208
Milk from the beef herd (b)	7	7	7	7	7	7
less on farm waste and milk fed to stock	281	220	198	184	181	200
Volume for human consumption	14 014	13 839	13 711	13 442	13 145	13 014
Value of production (£ million)	2 585	2 592	2 497	2 823	3 447	3 114
of which: raw milk leaving farm (c)	2 514	2 523	2 432	2 752	3 368	3 036
raw milk processed on farm (d)	82	69	65	72	79	78
subsidies	22	. .	. .	. .	. .	. .
less levies	18	1	. .	. .	. .	. .
Value of production at market prices (£ million) (e)	2 596	2 592	2 497	2 823	3 447	3 114
Prices (average price received by milk producers, net of delivery charges (pence per litre) (f)						
Farmgate price of milk excluding bonus payments	18.2	18.5	17.9	20.7	25.9	23.6
Farmgate price of milk including bonus payments	18.2	18.5	18.0	20.7	25.9	23.6

continued

Table 5.17 continued

Million litres (unless otherwise specified) — Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (Provisional)
Supply and use (g)						
Production	14 295	14 059	13 909	13 626	13 326	13 215
Imports	112	46	33	57	49	83
Exports	428	626	617	538	559	446
Total new supply	13 980	13 478	13 325	13 146	12 816	12 852
of which:						
for liquid consumption	6 816	6 652	6 734	6 724	6 678	6 640
for manufacture	6 771	6 490	6 266	6 085	5 840	5 705
of which: butter	280	266	241	248	229	246
cheese	3 207	3 705	3 779	3 561	3 635	3 444
cream	237	302	321	285	249	245
condensed milk (h)	589	351	303	300	332	301
milk powder	1 902	1 294	1 187	1 232	933	949
other	555	571	435	459	461	520
dairy wastage and stock change	59	86	100	127	92	281
other uses (i)	333	250	225	210	206	225
Production as a % of new supply	102%	104%	104%	104%	104%	103%

(a) From 2005 the dairy herd is defined as dairy cows over two years of age with offspring. Until 2004 the dairy herd was defined as cows and heifers in milk plus cows in calf but not in milk, kept mainly for producing milk or rearing calves for the dairy herd.
(b) Excludes suckled milk.
(c) Value of raw milk sold to other businesses 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) Aggregated data from surveys run by Defra, RERAD and DARD, NI, on the utilisation of milk by dairies.
(h) Includes condensed milk used in the production of chocolate crumb and in the production of machine skimmed milk.
(i) Includes farmhouse consumption, milk fed to stock and on farm waste. Excludes suckled milk.

Milk Products (table 5.18)

44 Production of butter rose by 7.4 per cent in 2009 to 119 thousand tonnes. Both imports and exports increased by 11 per cent, and the overall new supply of butter increased by 5.7 per cent to 179 thousand tonnes. At the end of 2009, intervention stocks of butter stood at 5 thousand tonnes. United Kingdom production accounted for 67 per cent of new supplies of butter in 2009, compared with 66 per cent in 2008.

45 Production of cheese in 2009 fell by 5.7 per cent to 365 thousand tonnes. Imports also fell by 2.4 per cent, while exports increased by 17 per cent, resulting in a 6.6 per cent fall in new supply to 673 thousand tonnes. United Kingdom production accounted for 54 per cent of new supplies of cheese in both 2008 and 2009.

46 Production of milk powders in 2009 increased by 5.0 per cent to 99 thousand tonnes. Imports rose by 0.7 per cent to 66 thousand tonnes, and exports fell by 27 per cent to 72 thousand tonnes. At the end of 2009, intervention stocks of skimmed milk powder stood at 16 thousand tonnes, and the new supply of milk powder increased by 25 per cent to 77 thousand tonnes.

Table 5.18 Milk products; United Kingdom

Enquiries: Leigh Riley on +44 (0)1904 455095 email: Leigh.Riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Butter (a)						
Production (b)	137	130	117	120	111	119
Imports	112	129	147	103	81	90
Export	56	45	36	32	24	26
Intervention stock change	3	- 6	2	- 3	-	5
Total new supply	190	219	226	195	169	179
Production as % of total new supply for use in the UK	72%	59%	52%	62%	66%	67%
Cheese						
Production (b)	360	391	400	378	387	365
Imports	263	353	378	403	422	411
Exports	58	96	104	97	88	103
Total new supply	564	648	673	684	720	673
Production as % of total new supply for use in the UK	64%	60%	59%	55%	54%	54%
Cream - fresh, frozen, sterilized						
Production (b)	240	306	327	291	255	252
Imports	10	30	37	43	55	61
Exports	95	93	94	78	62	66
Total new supply	155	244	270	256	247	248
Production as % of total new supply for use in the UK	155%	125%	121%	113%	103%	102%
Condensed milk (c)						
Production	177	143	113	109	110	103
Imports	14	33	45	41	39	37
Exports	49	4	6	6	3	4
Total new supply	142	172	152	144	146	136
Production as % of total new supply for use in the UK	125%	83%	74%	76%	75%	76%
Milk powders (d)						
Production	199	122	114	117	94	99
Imports	24	78	51	61	66	66
Exports	169	102	96	105	98	72
Intervention stock change	- 15	- 11	- 6	-	-	16
Total new supply	69	109	75	72	62	77
Production as % of total new supply for use in the UK	310%	112%	152%	162%	152%	128%

(a) Includes butterfat and oil, dehydrated butter and ghee.

(b) Includes farmhouse manufacture.

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

(d) Includes full cream powder, whole milk powder, partially skimmed milk powder and skimmed milk powder.

Hen eggs (table 5.19)

47 The value of production of eggs for human consumption in 2009 increased by 1.1 per cent to £526 million. The number of eggs produced for human consumption fell by 1.0 per cent to 747 million dozen. Production of eggs sold in shell accounted for 75 per cent of the total number of eggs produced for human consumption, with eggs sold for processing accounting for the other 25 per cent. The average price of eggs graded in the United Kingdom rose by 2.2 per cent to 70.5 pence per dozen. United Kingdom egg production accounted for 79 per cent of new supplies of eggs in 2009, unchanged from 2008.

Table 5.19 Hen eggs; United Kingdom

Enquiries: Leigh Riley on +44 (0)1904 455095 email: Leigh.Riley@defra.gsi.gov.uk

Million dozen (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Population and yield						
Number of fowls laying eggs for eating (millions) (a)	31	31	30	29	30	30
Average yield per layer (number of eggs per bird per year)	290	304	300	298	298	297
Production						
Volume of production of eggs	848	884	853	832	868	863
of which: eggs for human consumption	741	772	743	720	754	747
eggs for hatching	95	98	97	99	98	100
hatching eggs for export	4	6	5	5	8	8
waste	7	8	7	7	8	7
Value of production of eggs for human consumption (£m) (b)	272	349	362	410	520	526
Prices (pence per dozen)						
Weighted average of eggs graded in the UK (c)	36.7	45.2	48.7	56.9	69.0	70.5
Supply and use						
UK production of eggs for human consumption	741	772	743	720	754	747
of which: eggs sold in shell	589	583	554	540	565	560
eggs processed	152	190	189	181	189	187
Imports from (d): the EU	61	135	168	203	219	212
the rest of the world	2	2	2	2	1	2
Exports to (d): the EU	16	13	18	17	24	18
the rest of the world	2	-	-	-	-	-
Total new supply	786	896	895	909	951	942
Production as % of total new supply for use in the UK	94%	86%	83%	79%	79%	79%

(a) Population is implied from gross production and average yield and hence differs from the census figures in table 3.2.

(b) The value of eggs for hatching is not included in this table, as the value is included in the value of poultry (table 5.16).

(c) Represents the price paid by packers to producers in the United Kingdom, excluding bonus, and takes accounts of all egg systems - laying cages, free range and organic.

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

Chapter 6 Intermediate Consumption

2009

Summary

- Crude oil prices, which peaked at over $140 per barrel in July 2008 before falling rapidly to under $40 per barrel by the end of the year, rose to over $70 per barrel in 2009;
- expenditure on fuels has risen by over 700 per cent in current prices since 1973 to about £680 million despite usage falling by almost 60 per cent;
- the cost of electricity has risen by over 740 per cent since 1973 to about £340 million;
- expenditure on fertiliser rose significantly in 2008 to about £1.13 billion before falling slightly to £1.11 billion; the volume purchased has declined by over 50 per cent since 1997;
- expenditure on pesticides rose by over 25 times between 1973 and 1997 and is now about £670 million;
- veterinary expenses were estimated to be about £340 million and the cost of agricultural services, which has risen noticeably since 2006, is estimated to be about £840 million;
- expenditure on animal feed fell in 2009 to about £3.5 billion while the cost of seeds and planting stock is estimated to be about £780 million.

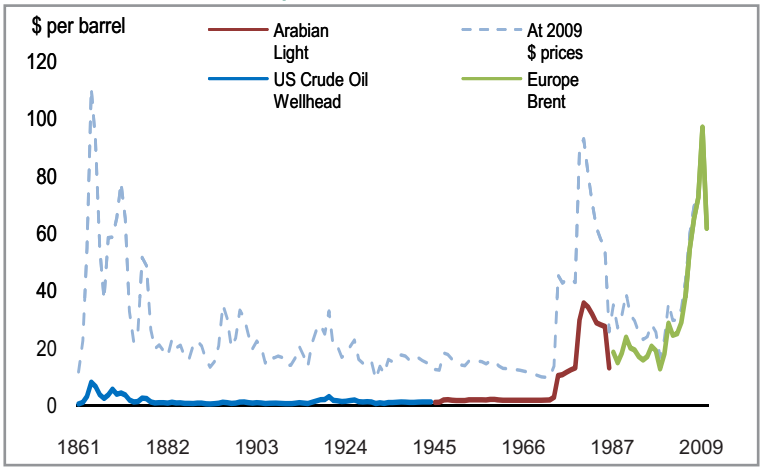
Introduction

1 In recent years, increases in crude oil prices have led to increased 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. This chapter presents long-term trends in crude oil prices and intermediate consumption as recorded in the production and income account (see chapter 9). Intermediate consumption represents the consumption of goods and services, e.g. fuels, feed, seeds, fertiliser, plant protection products. 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.

Oil prices (chart 6.1)

2 Chart 6.1 shows the historic trend in crude oil prices and the equivalent at 2009 prices in dollars. Prices rose from under $5 per barrel in the early 1970s to over $140 per barrel in July 2008 before falling rapidly to below $40 per barrel at the end of the year. The price then rose to over $70 per barrel in 2009.

Chart 6.1 Crude oil price 1861 - 2009



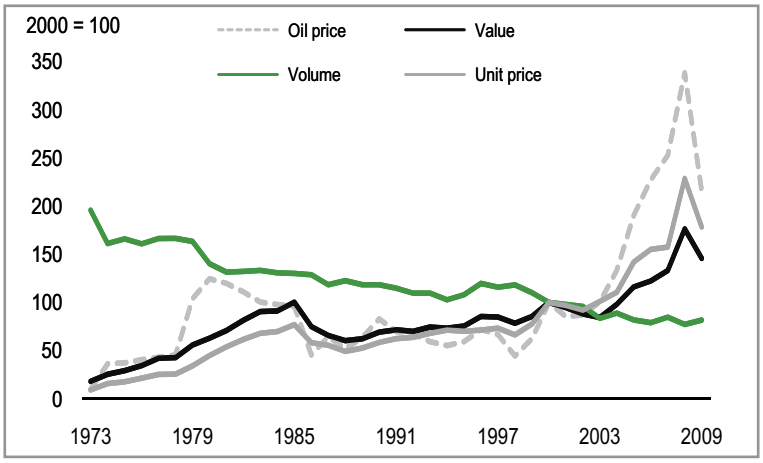
Source: Energy Information Administration, U.S. Department of Energy, BP Statistical Review of World Energy 2008, US Bureau of Labour Statistics

Click here to obtain further data source information for this chapter

Fuels (chart 6.2, 6.3)

3 The average unit price of machinery fuel is influenced by the trend in oil prices, although the oil price is more volatile. Expenditure on fuels has followed the trend in the unit price and has risen by over 700 per cent since 1973 with noticeable peaks in 1985 and in 2008. Total expenditure in 2009 is estimated to be about £680 million, a fall of 17 per cent compared to 2008, reflecting the fall in oil price. There has been a long-term declining trend in the volume of fuels purchased, which has fallen by almost 60 per cent since 1973.

Chart 6.2 Fuels; United Kingdom



Source: Aggregate agricultural account

4 The price of red diesel mirrored movement in the oil price in 2009 falling from over 70 pence per litre in July 2008 to about 44 pence per litre in January 2009 and then rising to 50 pence per litre at the end of the year.

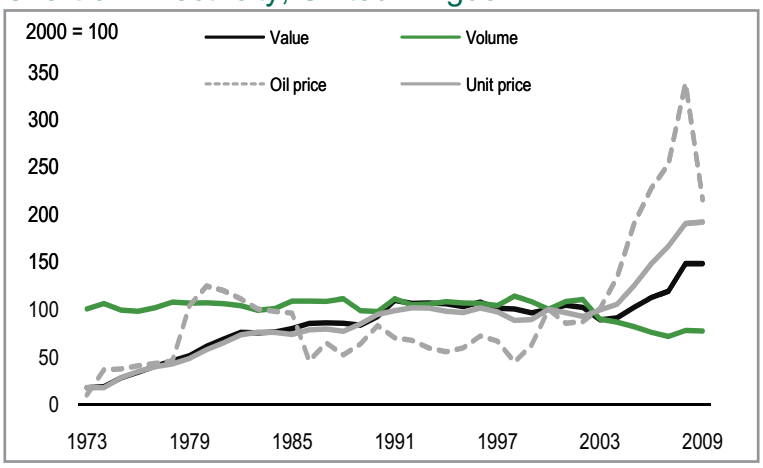
Chart 6.3 Red diesel prices; United Kingdom

Source: Derived from DECC weekly fuel prices

Electricity (chart 6.4)

5 This represents power and fuel, mainly electricity, used primarily for stationary activities, such as the operation of facilities and dairies, and is a significant source of energy. The volume used remained fairly constant from 1973 until 2002, but then noticeably declined. Total expenditure has closely followed the trend in the unit price and has risen by over 740 per cent since 1973, to about £340 million in 2009.

Chart 6.4 Electricity; United Kingdom

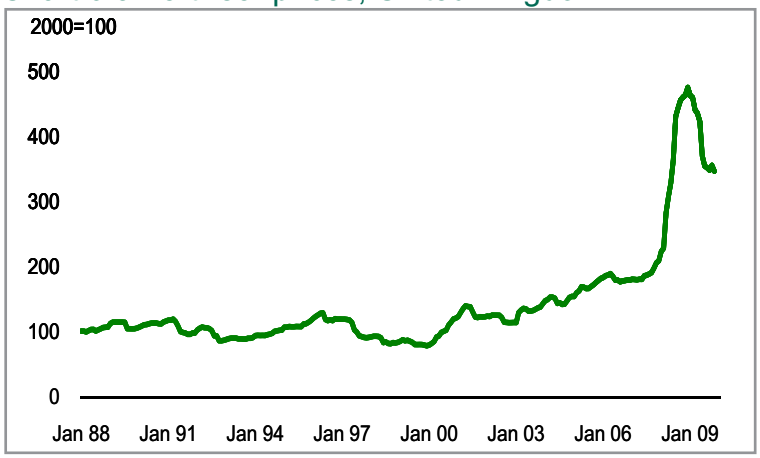


Source: Aggregate agricultural account

Fertiliser (chart 6.5, 6.6)

6 The price of fertiliser rose significantly in 2008, driven by an increase in the price of natural gas, which is linked to the oil price, and to global demand growing at a faster rate than world supply. The production of fertiliser is an energy intensive manufacturing process in which gas is used to synthesise atmospheric nitrogen. High fuel prices also impact on delivery costs.

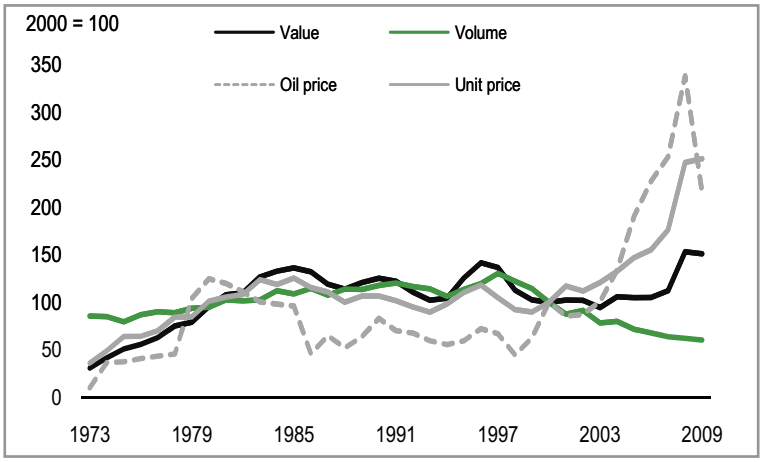
Chart 6.5 Fertiliser prices; United Kingdom



Source: Defra Aggregate agricultural account

7 The volume of fertiliser purchased rose gradually from 1973 as the area of land under tillage increased. It peaked in 1997 and since has fallen by over 50 per cent. Total expenditure has largely followed the trend in the unit price, diverging from it after 2000 and increasing significantly in 2008 to about £1.13 billion before falling in 2009 to £1.11 billion.

Chart 6.6 Fertiliser; United Kingdom

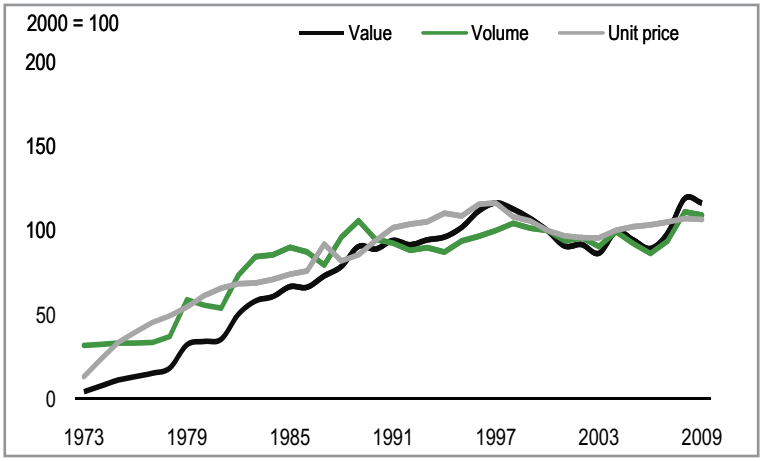


Source: Defra Agricultural Price Index

Pesticides (chart 6.7)

8 Oil and gas are also used in the production of many herbicides and pesticides as raw materials and energy although use is relatively small compared to that for the manufacture of fertiliser. Prices during the 1990s were in part shaped by exchange rate movements. The volume rose from 1973, peaking in 1989 and then declined before rising again in 2007 and 2008. Total expenditure has largely followed the trend in the volume and is now about £670 million.

Chart 6.7 Pesticides; United Kingdom

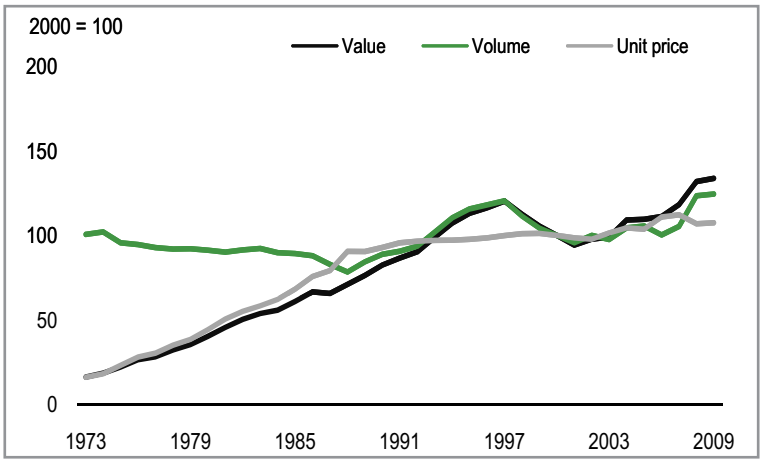


Source: Defra Aggregate agricultural account

Veterinary expenses (chart 6.8)

9 The volume of veterinary expenses declined gradually from 1973 to 1988, rose to a peak in 1997 due in part to trends in profitability in the 1990s, and then declined to 2000. The volume rose significantly in 2008. Total expenditure rose steadily from 1973 to 1997 before declining to 2001 and then resuming a rising trend. It is now about £340 million.

Chart 6.8 Veterinary expenses; United Kingdom

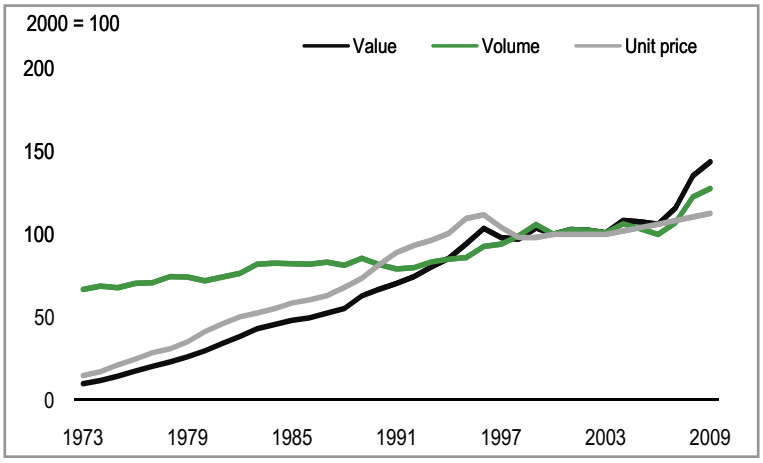


Source: Aggregate agricultural account

Agricultural services (chart 6.9)

10 The volume of agricultural services, such as contract work and machinery rental, shows a constant upward trend reflecting increasing use of contractors on farm for operations such as planting, tilling, chemical applications, discing and harvesting. Total expenditure also shows an upward trend mirroring the trend in volume, and is now about £840 million.

Chart 6.9 Agricultural services; United Kingdom

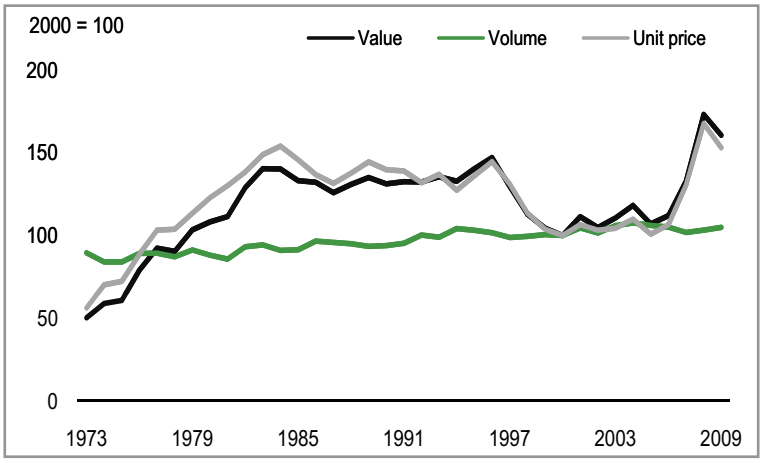


Source: Aggregate agricultural account

Animal feed (chart 6.10, table 6.1)

11 The cost of animal feed is the largest item of expenditure recorded in the production and income account. Total expenditure rose steeply from 1973 to 1984 but levelled out after the introduction of milk production quota in 1984. It fell sharply after 1996, largely as a result of the fall in commodity prices which were shaped by exchange rates and world prices, and a fall in the volume of feed for pigs that mirrored the decline in the pig herd, before levelling out from 2000 to 2006 at around £2.4 billion

Chart 6.10 Animal feed; United Kingdom



Source: Aggregate agricultural account

12 The total cost of all purchased animal feed rose sharply between 2006 and 2008 to £3.7 billion but fell by 7.3 per cent to £3.5 billion in 2009. This reflected the fall in cereals prices, particularly wheat, where prices had started to fall towards the end of 2008 and continued falling into 2009. Prices also fell in the straight concentrates sector.

13 The total production of all purchased feed increased by 1.6 per cent in 2009 to 21.4 million tonnes. Total compound feed production fell by 1.8 per cent in 2009 compared to 2008. The fall in the production of compounds for cattle feed is in line with the decline in cattle populations and the availability of good quality forage from the 2009 harvest. The fall in the production of compounds for pig feed by 5.5 per cent is consistent with farmers leaving the industry, partly as a result of the higher feed costs seen in 2007. However the figures for pig feed indicate a slight recovery of the compound feed market in 2009 following a 10 per cent reduction in 2008. Poultry feed compounds remained similar to 2008. Compounds for the production of sheep feed fell by 3.2 per cent for 2009 compared with 2008. This fall is in keeping with the decline in sheep populations.

14 The use of straight concentrates increased by 5.0 per cent. Increases were seen in the use of protein crops, in particular field beans and field peas. The straights concentrate figure includes production of poultry feed by the integrated poultry units where there was a 5.5 per cent increase in the amount of feed wheat used. Inter/intra farm transfer of feed increased by 5.8 per cent.

Table 6.1 Animal feed; United Kingdom

Including direct inter-farm and intra-farm transfer

Enquiries: Karen Stark on +44 (0)1904 455076 email: karen.p.stark@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Compounds:						
cattle	3 952	4 181	4 485	4 544	4 598	4 488
calves	191	185	188	201	212	197
pigs	2 444	1 586	1 640	1 708	1 540	1 456
poultry (a)	3 123	3 267	3 278	3 509	3 527	3 530
other	776	704	828	725	767	742
Total (b)	10 350	9 800	10 283	10 570	10 533	10 348
Straight concentrates (c)	6 304	7 733	7 180	6 634	7 008	7 358
Non-concentrates (d)	526	525	525	525	525	525
Inter/intra farm transfer	3 168	3 549	3 402	3 008	2 953	3 124
Total all purchased animal feed	20 348	21 606	21 390	20 738	21 019	21 355
Value of purchased animal feed (£ million) (e)	2 290	2 316	2 424	2 876	3 749	3 476

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

(b) Includes imports, less exports.

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

(d) 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.

(e) See Table 9.1 for a breakdown of this total.

Chapter 7 The Food Chain

2009

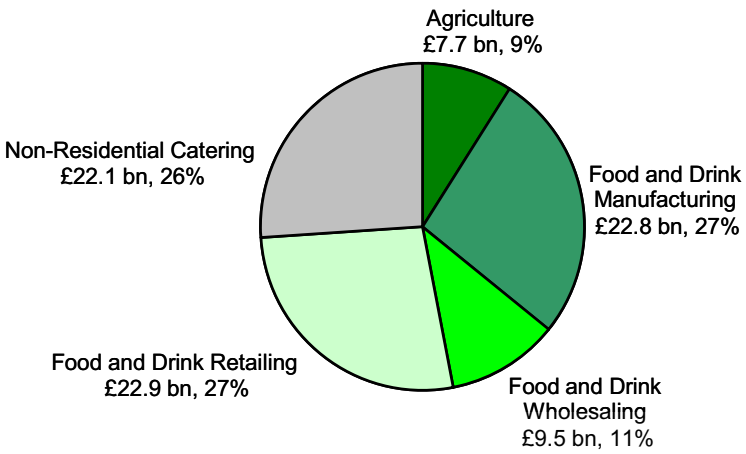
Summary

- In 2008 the agri-food sector in the United Kingdom accounted for a total estimated gross value added (GVA) of almost £85 billion or 6.7 per cent of national GVA;
- in 2008 consumers' expenditure on household food rose by 8.6 per cent due to food price rises and is provisionally estimated to have risen by 4.1 per cent in 2009, but expenditure on non-residential catering is provisionally estimated to have fallen 3.3 per cent in 2009;
- employment in the agri-food sector as a whole fell by 0.4 per cent to just over 3.6 million over the 12 month period to the third quarter of 2009, with a fall of 19 thousand in non-residential catering and a rise of 5.5 thousand in food and drink retailing;
- the value of imports of food, feed and drink increased by 14 per cent in 2008 to over £31.6 billion, this compares with a 12 per cent increase in exports, and resulted in a widening of the trade gap in food, feed and drink to £18.4 billion;
- in 2009 the farmgate share of the price of a basket of items covering staples of agricultural production was 36 per cent and despite the large shifts in commodity prices and food retail prices over the last two and half years the farmers' share of the retail price of food has remained stable;
- in total food prices rose 20 per cent between August 2007 and February 2009, with average annual food inflation at 4.5 per cent in 2007, 9.2 per cent in 2008 and 5.3 per cent in 2009.

Contribution of the agri-food sector to the national economy (chart 7.1, table 7.1)

1 In 2008 the agri-food sector in the United Kingdom accounted for a total estimated gross value added of almost £85 billion or 6.7 per cent of national GVA. This represented an increase of 5.9 per cent on 2007 with increases being seen in all areas of the sector. Food manufacturing, non residential catering and food retailing are all about the same size in terms of gross value added. Food and drink wholesaling and agriculture are the smallest sub-sectors in terms of gross value added, accounting for 11 per cent and 9.0 per cent respectively. Gross value added of agriculture is estimated to have risen by 35 per cent in 2008, while that of food retailing rose by 5.2 per cent.

Chart 7.1 Gross value added by the agri-food sector 2008; United Kingdom



Source: Annual Business Inquiry (ONS) and Defra

Click here to obtain further data source information for this chapter

Table 7.1 Agri-food sector contribution to the national economy; United Kingdom

Enquiries: Jim Holding on +44 (0)1904 455069 email: jim.holding@defra.gsi.gov.uk

£ million (unless otherwise specified) Calendar years

		Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Agri-food sector's contribution to total economy gross value added							
at current prices	Agriculture	6 846	5 124	5 220	5 676	7 658	7 169
	Food manufacturing (a)	18 467	21 097	21 279	21 797	22 751	. .
	Food wholesaling (a)	6 155	7 430	9 066	9 156	9 490	. .
	Food retailing (a)	18 002	19 782	21 054	21 791	22 925	. .
	Food non-residential catering (a)	14 246	20 864	21 343	21 817	22 121	. .
% of national gross value added (current prices)		8	6.8	6.8	6.6	6.7	-
Workforce in the food sector (thousand persons)							
	Agriculture (b) (c)	584	490	484	477	482	486
	Food manufacturing (c)	483	411	400	399	392	387
	Food wholesaling (c)	222	211	211	212	213	212
	Food retailing (c)	1 064	1 196	1 152	1 147	1 151	1 157
	Food non-residential catering (c)	1 241	1 417	1 397	1 399	1 388	1 370
% of total workforce in employment		. .	14.3	13.9	13.8	13.7	14.1
Trade in food, feed and drink (in real terms at 2008 prices)							
Imports of food, feed and drink (d) (e)		22 023	26 211	26 929	27 719	31 648	. .
% of total UK imports		9	8.4	7.8	8.6	9.2	. .
Exports of food, feed and drink (d) (e)		11 545	11 122	11 390	11 856	13 239	. .
% of total UK exports		5.2	4.7	4.3	5.2	5.3	. .
Self-sufficiency							
% of all food		67.2	60.1	59.2	60.0	60.7	59.0
% of indigenous type food		81.1	73.1	72.2	73.1	73.6	72.5
Household final consumption expenditure on food and alcoholic drinks							
at current prices		122 447	155 256	158 973	164 411	173 604	175 121
of which:	household food	56 943	67 138	69 510	72 313	78 520	81 717
	food eaten out	31 910	46 279	47 421	48 905	51 502	49 792
	alcoholic drinks	33 594	41 839	42 042	43 193	43 582	43 612
at constant 2005 prices (£ million)		138 014	155 256	154 989	154 530	153 159	146 744
of which:	household food	60 739	67 138	67 916	67 557	67 341	65 693
	food eaten out	39 060	46 279	46 121	45 972	46 423	43 675
	alcoholic drinks	38 214	41 839	40 952	41 001	39 395	37 375
% of total household final consumption expenditure		21.1	19.8	19.5	19.1	19.4	20.1
of which:	household food	9.8	8.6	8.5	8.4	8.8	9.4
	food eaten out	5.5	5.9	5.8	5.7	5.8	5.7
	alcoholic drinks	5.8	5.3	5.1	5.0	4.9	5.0
Producer prices for agricultural products (2003 = 100)		94.2	99.7	104.2	118.4	142.9	135.0
Retail price index (2003 = 100):							
	food	95.0	101.8	104.0	108.8	118.8	125.1
	alcoholic drinks	92.0	103.9	106.4	109.6	113.9	118.1
	all items	91.7	105.9	109.3	113.9	118.5	117.9

(a) Results from the Annual Business Inquiry (ONS). 2008 data is provisional.

(b) Results from 1998 are not consistent with previous years, due to changes in the labour questions on the June Agricultural and Horticultural Census, and due to revisions made to English and Welsh results. This series now includes spouses of farmers, partners and directors, which were not previously available.

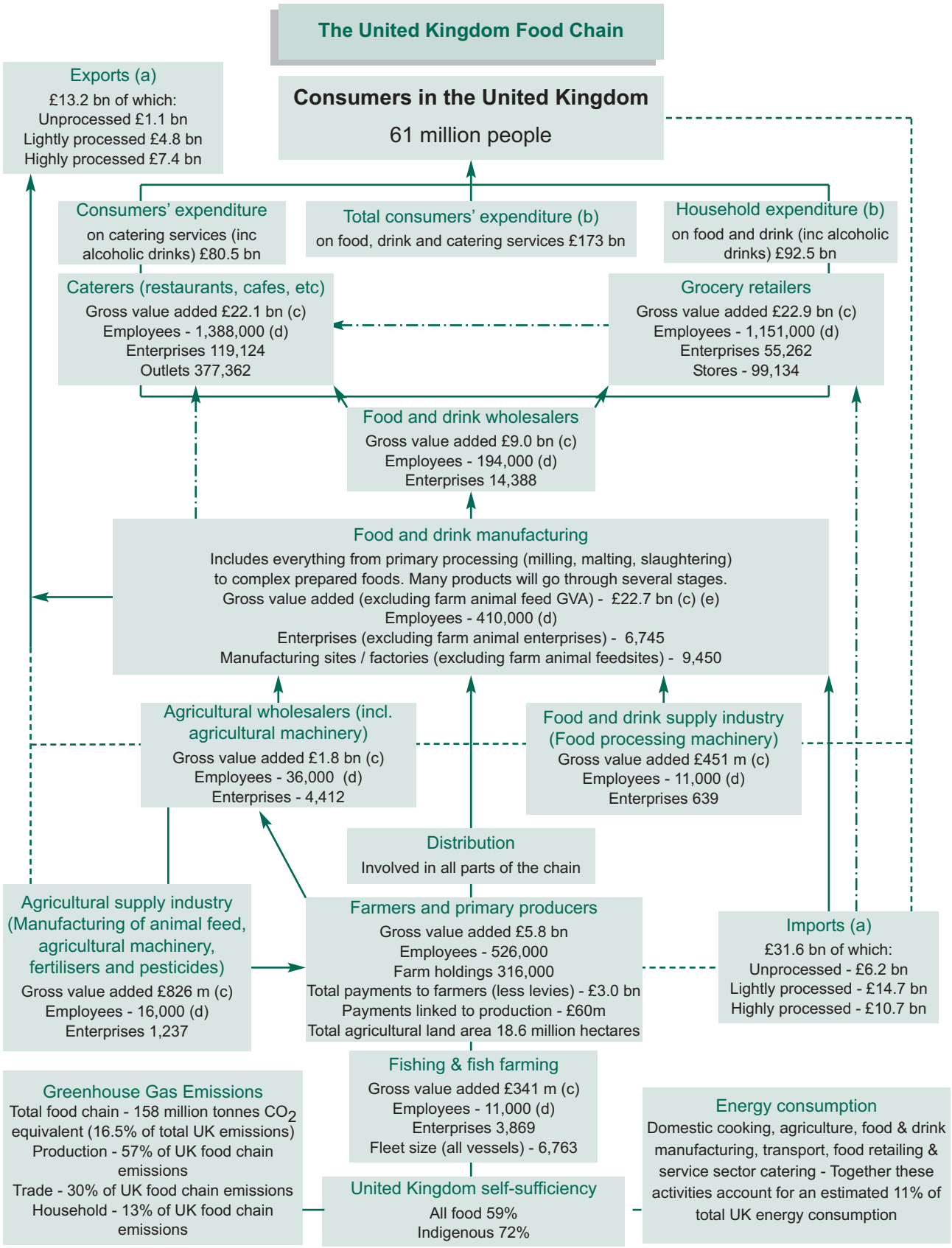
(c) Results are for the third quarter of the year and from Labour Force Survey (ONS) for GB.

(d) This aggregate covers Standard International Trade Classification divisions 01-09, 11, 22 and Section 4.

(e) The figures for 1993 onwards are Overseas Trade Statistics (OTS), based on data collected by HM Revenue and Customs. Data shown has been adjusted to 2008 prices using the all items RPI index.

2009

Chart 7.2 The food chain; United Kingdom



(a) Overseas trade data is provisional for the full year 2008 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 of National Statistics for the full year 2008 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 provided and the cost of raw materials and other inputs used up in production. GVA figures are from the Office of National Statistics and is provisional data for full year 2007, which is calculated at basic prices (market prices less taxes plus subsidies).

continued

Chart 7.2 Continued

(d) Employee data for food and drink wholesalers, grocery retailers, and caterers, is for Great Britain only and is for Q3 2009 from the Office of National Statistics. An estimate of employment by wholesalers of agricultural machinery from the annual business inquiry has been added. Employee data is rounded.
(e) GVA for food manufacturing does not include farm animal feed, which is included in the agricultural supply industry. This figure therefore does not match that shown in table 7.1.

The food chain (chart 7.2)

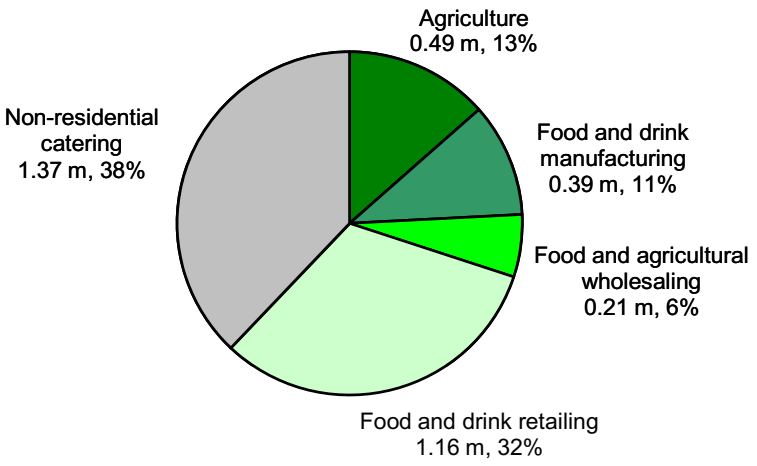
2 In 2009, the food supply chain in the United Kingdom as a whole received £155 billion which came from spending by consumers in the United Kingdom, plus exports less imports of agricultural commodities and processed food and drink products (assuming that imports and exports directly to and from consumers are negligible). Chart 7.2 shows the largest elements of the food chain from agriculture as a primary producer through food manufacturing and retail trade to consumers' expenditure.

- in 2009 the consumers' expenditure component is provisionally estimated to be 0.9 per cent higher than in 2008 with a 4.2 per cent drop in quantities purchased (here quantity includes changes in quality);
- in 2008 consumers' expenditure on household food rose by 8.6 per cent due to food price rises and is provisionally estimated to have risen by 4.1 per cent in 2009;
- in 2008 consumers' expenditure on alcoholic drinks (on and off licence) rose by 0.9 per cent reflecting an increase in prices and a drop of 3.9 per cent in quantities purchased. In 2009 expenditure is provisionally estimated to have been much the same as in 2008 with a fall in quantities purchased of 5.1 per cent;
- in 2008 consumers' expenditure on catering, (excluding alcoholic drinks), rose by 5.3 per cent reflecting an increase in prices and a 1.0 per cent increase in quantity. In 2009 expenditure is provisionally estimated to have been 3.3 per cent lower, with a drop in quantity of 5.9 per cent.

Food chain employees and self–employed farmers (chart 7.3)

3 The agri-food sector provided a total of just over 3.6 million jobs in the third quarter of 2009, 14 per cent of all employees in Great Britain. Of these, a little less than half a million were employed in agriculture. Chart 7.3 shows how the different parts of the sector make up this total.

Chart 7.3 Employees in the agri-food sector Q3 2009; Great Britain



Source: Labour market trends (ONS) and Defra

4 Employment in the agri-food sector as a whole fell by 0.4 per cent to just over 3.6 million over the 12 month period to the third quarter of 2009, while employment for the whole economy fell by 2.8 per cent. Employment in agriculture rose by around 0.8 per cent while food manufacturing saw employment fall by 1.1 per cent. The reduction of employment in food manufacturing is in line with long term trends. With consumers' expenditure on catering falling by 3.3 per cent, employment in the non-residential catering sector fell by 19 thousand in 2009. Employment in food and drink retailing increased in 2009 with the addition of 5.5 thousand employees.

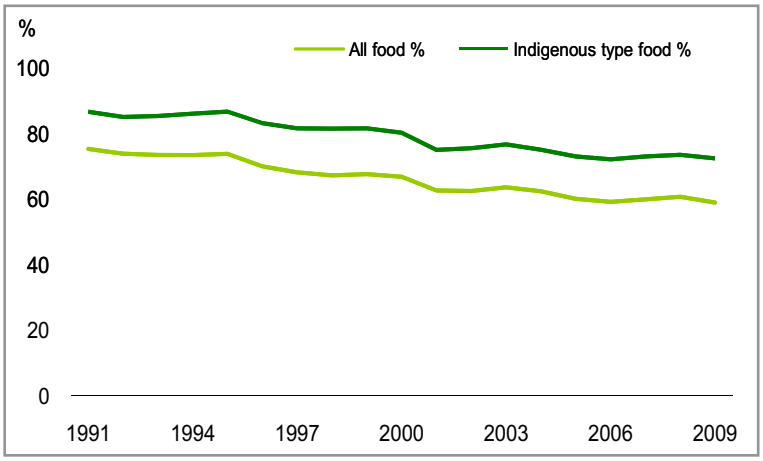
Trade in food, feed and drink (table 7.1)

5 The value of imports of food, feed and drink was over £31.6 billion in 2008, an increase of 14 per cent from 2007. The value of exports of food, feed and drink rose by 12 per cent over the same period to £13.2 billion. The trade gap in food, feed and drink widened in 2008 by 14 per cent to £18.4 billion.

Self-sufficiency (chart 7.4)

6 Self-sufficiency, which is calculated as the farm-gate value of raw food production divided by the value of raw food for human consumption is provisionally estimated to be 59 per cent for all food in 2009 and 72 per cent for indigenous type food. This compares with 61 per cent and 74 per cent respectively in 2008. This slight decrease on 2008 is a result of decreases in the value of domestically produced milk, oilseed and cereals, and a widening of the trade gap in food. The Self-Sufficiency figures for 2008 in table 7.1 are slightly lower than those published in AUK 2008. This is due to data which was provisional in 2008 being finalised in time for AUK 2009 and a revision of the factors used to convert the value of trade into the farmgate value of the raw food. The revision to the factors reduced the ratio by 0.1 percentage points in 2008.

Chart 7.4 Self sufficiency; United Kingdom



7 Over the last 50 years self-sufficiency has been significantly and consistently below 100 per cent. The growth towards a peak in the 1980s reflected the influence of the Common Agricultural Policy (CAP) on agriculture in the United Kingdom. From 1995, self-sufficiency has gradually declined, with the series for all food and for indigenous food following near identical patterns.

8 The commodities which contributed most to the decline since 1995 were beef, pork and milk products:

- the fall in beef self-sufficiency was due to reduced domestic production resulting from a combination of the BSE export ban and the Over Thirty Month Scheme;
- the fall in pork self-sufficiency was due to imports from the Netherlands and Denmark displacing domestic production as a result of the impact of currency movements and disease on the competitiveness of production in the United Kingdom;
- the fall in self-sufficiency for milk products was mainly due to a rise in cheese and butter imports from the EU (primarily France, the Irish Republic, Denmark and the Netherlands) where the impact of currency movements reduced relative United Kingdom competitiveness.

Distinction between competitiveness and food security

9 The self-sufficiency ratio provides a very broad indicator of the ability of United Kingdom agriculture to meet consumer demand, which can also be 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. Defra's food security assessment is available at:

http://statistics.defra.gov.uk/esg/reports/foodsecurity/default.asp.

It involves a complex set of factors and risks affecting availability, affordability and accessibility. The key points on self-sufficiency and food security from this paper are that diversity of supply enhances security, that self-sufficiency fails to insulate a country against many possible disruptions to its supply chain, and that production potential is more relevant at the EU level where self sufficiency is over 90 per cent.

UK agriculture contributes to food security:

- through its contribution to global supply;
- by increasing consumer confidence in food and food safety through participation in consumer assurance schemes and effectively managing disease risks;
- by directly influencing availability and affordability.

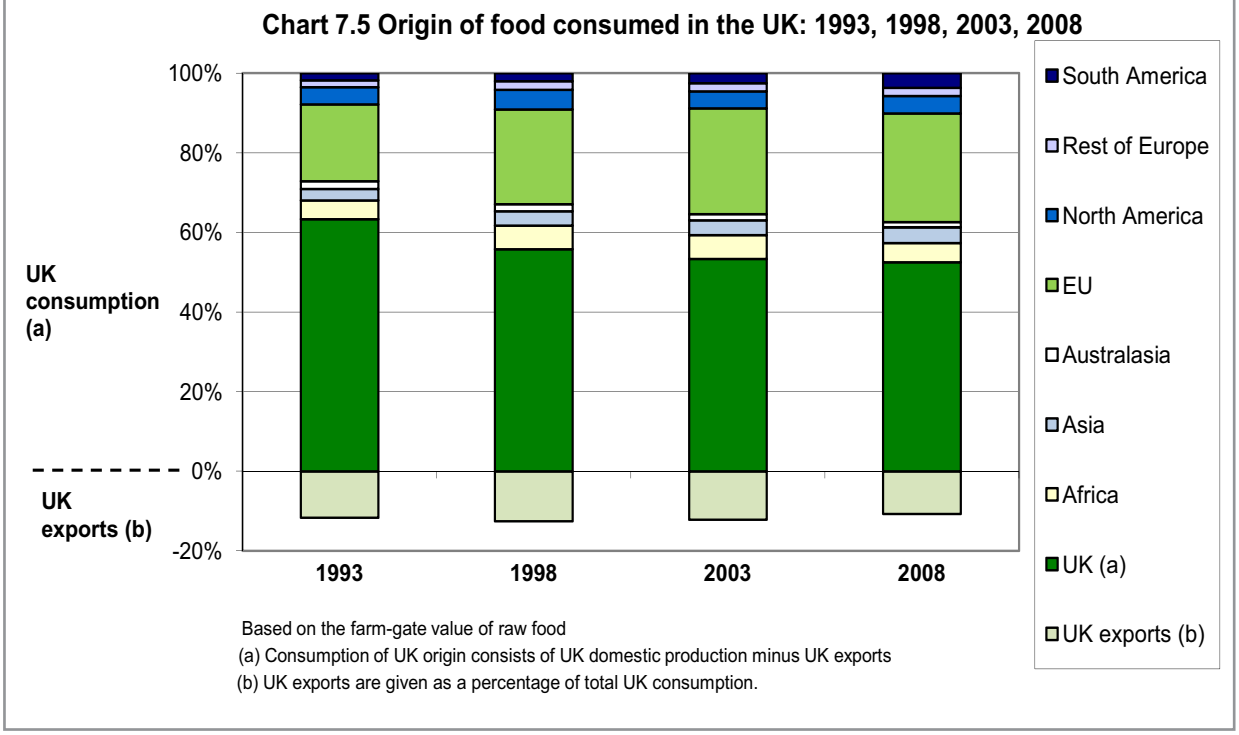
None of the main reasons behind the overall decline in self sufficiency since 1995 can be considered as having a negative impact on food security in the United Kingdom.

Origins of food consumed in the United Kingdom (chart 7.5)

10 Chart 7.5 includes the proportion of United Kingdom food consumption that is produced in the United Kingdom. This should not be confused with the measure of United Kingdom Self-Sufficiency in Food given in chart 7.4. Chart 7.5 looks purely at the breakdown of food that the United Kingdom actually consumes.

Self-Sufficiency (chart 7.4) 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 Self-Sufficiency calculations has been adjusted to take account of the balance of trade in the important inputs into agriculture.

Chart 7.5 Origin of food consumed in the United Kingdom



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.

Farmers' share of consumers' expenditure (table 7.2, charts 7.6, 7.7)

11 In 2009 the farmgate share of the price of a basket of items covering staples of agricultural production was 36 per cent. This is 22 per cent less (or 11 percentage points less) than the farmgate share in 1988. However, since 1998 the farmgate share has remained relatively constant. The absolute level of the farmgate share is sensitive to precisely which retail products are chosen for the basket; some have a greater amount of added value beyond the farmgate and it would therefore be expected that the share accounted for by the farmer would be lower.

12 Table 7.2 shows the items in the basket and how the farmers' share has changed for each. They are weighted according to their value to farmers in the United Kingdom. Milk accounts for over 30 per cent of the basket.

Table 7.2 Farmers' share of the value of a basket of food items (a); United Kingdom

Enquiries: Jim Holding on +44 (0)1904 455069 e-mail: jim.holding@defra.gsi.gov.uk

		Farmgate share in 1988 %	Farmgate share in 2009 %	% change in share 1988/2009	Weight in basket 2009
Farmers' share of basket		47	36	- 22	
Farm gate product	**Retail product**				
apples	dessert apples per kg	55	42	- 24	6
beef	untrimmed beef (b) per kg	67	50	- 26	190
carrots	carrots per kg	30	42	38	12
cabbages	cabbage, hearts, per kg	38	36	- 6	6
chicken	oven ready roasting chicken, fresh or chilled per kg	47	38	- 19	121
eggs	free range eggs per dozen (d)	28	29	3	53
lamb	untrimmed lamb (b) per kg	65	53	- 19	87
onions	onions per kg	25	21	- 17	5
pork	untrimmed pork (b) per kg	57	40	- 29	99
potatoes	old loose white potatoes per kg	24	17	- 26	59
tomatoes	tomatoes per kg	48	42	- 11	9
wheat	white loaf sliced, 800g	16	7	- 59	49
milk	whole milk (c)	38	31	- 19	304

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

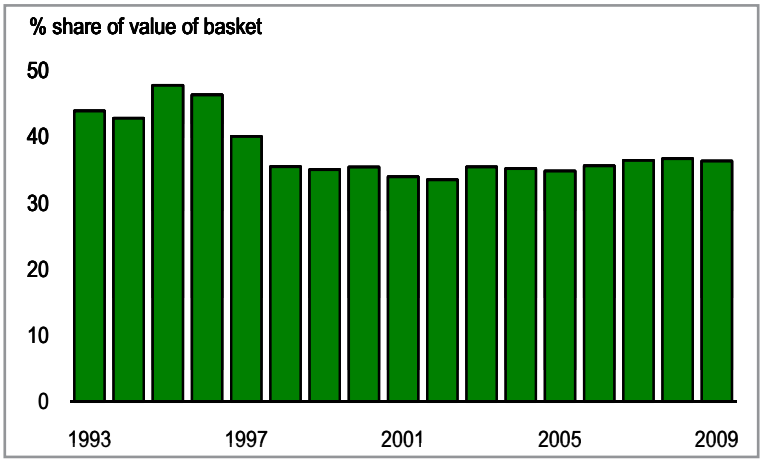
(d) Farmgate share in 1988 is based on non-free range size 2 eggs.

13 Despite the large shifts in commodity prices and food retail prices over the last two and half years the farmers' share of the retail price of food has remained stable. Farmgate prices have benefitted from the weakening of sterling against the Euro with Gross Value Added for agriculture rising 35 per cent in 2008. Meanwhile retail food prices rose 20 per cent and have not fallen back.

14 In 2009:

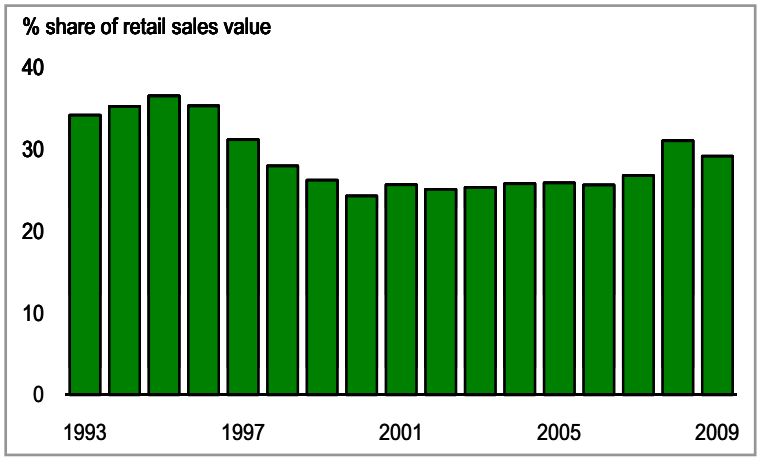
- the farmgate share for milk dropped down to 31 per cent, roughly its level between 2004 and 2006;
- the farmgate share of wheat fell to under 7.0 per cent, its lowest level in recent times;
- the farmgate share fell for tomatoes, potatoes, carrots and cabbages;
- the farmgate share rose for pork and lamb, but was hardly changed for beef.

Chart 7.6 Farmgate share of retail prices for a basket of items; United Kingdom



15 Chart 7.7 shows a related analysis; the farmgate share of total household food sales. This analysis compares the estimates of the value of farmgate output with estimates of consumers' expenditure on all household food, including highly processed foods. This approach differs because it encompasses all purchased food and therefore incorporates changes due to consumers changing their types of purchase. In particular, it will over time include a higher share of food items incorporating greater processing or value added beyond the farmgate. This explains why farmers receive a lower share of the total household food sales than of the basket of household food items. In the second half of the nineties farm incomes tumbled and the farmers' share dropped from 36 to 24 per cent. Since 2000 farmers have seen a gradual increase in their percentage share of the retail sales value. In 2008 the farmgate share of total household food sales rose by over 4 percentage points to 31 per cent as prices rose. In 2009 it fell back slightly to 29 per cent.

Chart 7.7 Farmgate share of total household sales; United Kingdom

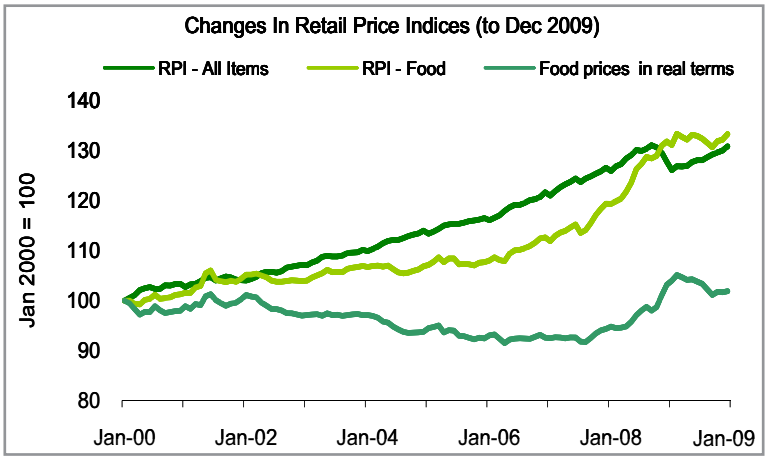


Sources: Consumers' expenditure on household food is from the Office for National Statistics (ONS), consumers' expenditure on food eaten out is a Defra estimate, value of farm gate output from Defra's aggregate agriculture account self sufficiency in food.

Changes in retail price indices (chart 7.8)

16 Food prices started rising in August 2007 and finally peaked in February 2009. They then remained relatively stable over the course of 2009. In total food prices rose by 20 per cent, with average annual food inflation at 4.5 per cent in 2007, 9.2 per cent in 2008 and 5.3 per cent in 2009. Since 2006 bread, cereals, biscuits and cakes, beef, lamb, pork, poultry, fish, butter, cheese, eggs, milk, tea, sugar and preserves, potatoes and vegetables have all risen in price by more than 20 per cent.

Chart 7.8 Changes in retail price indices; United Kingdom



Source: Retail Price Index (ONS)

17 Food prices rose in response to rises in commodity prices, the rise in fuel prices and the weakening of sterling, which makes imported food more expensive. Whilst fuel and cereal prices fell back from their peaks in spring 2008 sterling remains weak.

18 The all items RPI increased until September 2008. In October 2008 prices started to fall and fell by 3.3 per cent by March 2009 before rising back to roughly where they started in September 2008. Meanwhile food prices continued rising until February 2009 and then remained roughly stable through to the end of 2009. At the end of 2009 food prices in real terms were 1.9 per cent above their level in January 2000.

Chapter 8 Overseas Trade

2009

Summary

In 2008:

- the value of food, feed and drink exports was £13.2 billion, a rise of 12 per cent on 2007 in real terms;
- the value of food, feed and drink imports increased by 14 per cent in real terms to £31.6 billion;
- the trade gap in food, feed and drink widened by 16 per cent in real terms to £18.4 billion;
- principal destinations for exports were the Irish Republic (19 per cent), France (12 per cent), Spain (8.0 per cent), USA (7.0 per cent) and Germany (6.0 per cent);
- the most important trade partners for imports were the Netherlands (13 per cent), France (12 per cent), Irish Republic (9.0 per cent), Germany (8.0 per cent) and Spain (6.0 per cent).

Introduction

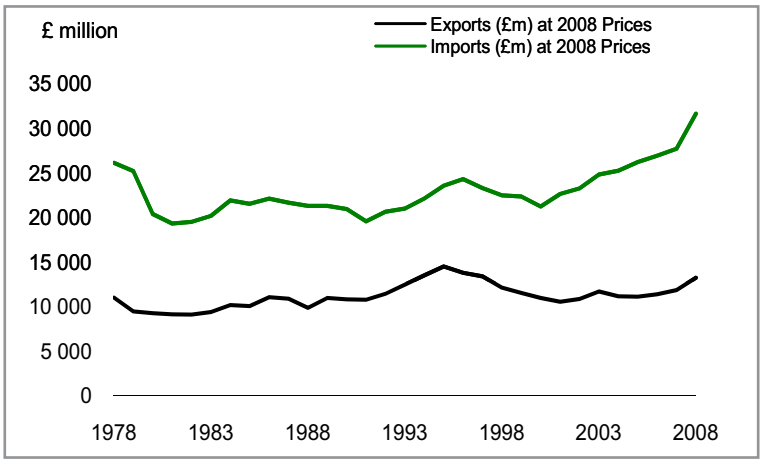
1 The Overseas Trade Statistics presented in this chapter are based on data collected by HM Revenue and Customs and are compiled from returns made by importers and exporters. Before the completion of the Single Market in the European Union at the end of 1992, all overseas trade data for the United Kingdom 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 5 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 8.1, table 8.1)

3 The value of exports of food, feed and drink was 13 per cent higher in real terms in 2008 than in 1999. This is a consequence of the combination of the strength of sterling, disease related issues, and world commodity prices. The value of imports was 29 per cent higher in real terms in 2008 than in 1999. As a consequence, the trade gap in food, feed and drink widened by 41 per cent in real terms between 1999 and 2008 to £18 billion.

Chart 8.1 Trade in food, feed and drink at 2008 prices; United Kingdom



Click here to obtain further data source information for this chapter

4 Table 8.1 shows the value of trade at 2008 prices. The value of food, feed and drink exports was £13.2 billion in 2008, 12 per cent up in real terms on 2007 when it stood at £12 billion, while the value of food, feed and drink imports was £31.6 billion in 2008, 14 per cent higher in real terms than in 2007, when it stood at £27.7 billion. As a result, the trade gap in food, feed and drink widened by 16 per cent in real terms between 2007 and 2008. All categories except fish have seen a rise in exports with the largest

Table 8.1 Trade in food, feed and drink by SITC division (at 2008 prices); United Kingdom

Enquiries: Joanne Gardiner on +44 (0)1904 455681 email:joanne.gardiner@defra.gsi.gov.uk

£ million Calendar years

SITC Division Code	Title	Average of 1997-99	2004	2005	2006	2007	2008
Exports							
01	Meat	1 013.9	767.4	814.0	822.8	867.5	1 161.2
02	Dairy	960.7	899.9	805.9	787.8	839.6	876.9
03	Fish	958.1	1 019.1	1 051.0	1 023.7	1 021.2	1 009.5
04	Cereals	1 741.8	1 427.4	1 387.5	1 341.4	1 412.3	1 754.1
05	Fruit and Veg	566.5	584.4	576.2	631.9	623.3	689.8
06	Sugar	577.9	431.4	381.4	405.9	406.0	444.0
07	Coffee, tea, etc.	855.9	696.8	700.8	728.3	761.5	867.7
08	Animal feed	487.0	362.7	352.6	394.3	443.6	527.0
09	Misc.	712.7	821.9	819.6	841.8	810.3	893.3
11	Drink	4 089.5	3 881.7	3 924.0	4 064.3	4 260.0	4 570.5
22 + S4	Oils	390.1	269.4	309.4	347.9	410.3	444.8
	Total	12 354.0	11 162.2	11 122.3	11 390.3	11 855.6	13 238.8
Imports							
01	Meat	2 893.1	4 073.0	4 163.8	4 254.8	4 245.7	4 691.6
02	Dairy	1 531.3	1 901.4	1 954.2	2 019.2	1 946.9	2 302.1
03	Fish	1 667.2	1 696.1	1 897.9	2 084.1	2 073.6	2 210.7
04	Cereals	1 563.3	1 679.1	1 690.5	1 689.0	2 000.3	2 466.0
05	Fruit and Veg	5 455.2	5 867.5	6 313.9	6 479.1	6 623.1	7 202.3
06	Sugar	1 026.3	1 032.8	1 072.8	1 050.9	1 010.6	1 165.2
07	Coffee, tea, etc.	1 679.1	1 422.1	1 546.5	1 601.0	1 670.8	1 955.3
08	Animal feed	959.0	1 067.4	1 038.6	1 100.6	1 115.1	1 429.6
09	Misc.	1 226.5	1 331.0	1 325.6	1 369.8	1 596.7	1 947.5
11	Drink	3 487.5	4 112.5	4 164.5	4 129.6	4 174.0	4 375.4
22+S4	Oils	1 221.8	1 060.9	1 042.7	1 150.6	1 262.3	1 902.1
	Total	22 710.4	25 243.9	26 210.8	26 928.5	27 719.2	31 647.9

Defra's aggregate 'Food, Feed and Drink' is composed of the following divisions from the Standard International Trade Classification:

01	Meat: meat from cattle, sheep, pigs, goats, poultry, horses etc. Preparations including blood, juices, sausages, livers, offal.
02	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.
03	Fish: All types of edible marine life excluding mammals, fresh, frozen, processed, prepared or preserved.
04	Cereals: includes rice, wheat, barley, oats, maize, grain sorghum and preparations including sweet biscuits, waffles, gingerbread, uncooked/unstuffed pasta.
05	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.
06	Sugar: includes both natural sugar and sugar confectionery (but not chocolate or cocoa), both natural and artificial honey, and liquorice.
07	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.
08	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.
09	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.

nominal increase being seen in Cereals which also showed the largest percentage increase. The increase in the value of cereal exports was a combination of increased price and increased volume. Categories which drove the increase in imports were oils, which showed 51 per cent increase, animal feed which increased by 28 per cent, cereals and miscellaneous (mostly ingredients for the food processing industry) which rose by 23 and 22 per cent respectively.

Trading partners (charts 8.2, 8.3)

5 Principal destinations of food, feed and drink exports to the European Union in 2008 were the Irish Republic (£2.5 billion), France (£1.6 billion), Spain (£1 billion) and Germany (£814 million). The principal European Union countries from which food, feed and drink were imported into the United Kingdom in 2008 were the Netherlands (£4.2 billion), France (£3.7 billion), the Irish Republic (£2.7 billion) and Germany (£2.6 billion).

6 Principal non-EU destinations of food, feed and drink exports in 2008 were the USA (£898 million), Singapore (£220 million) and Canada (£200 million) while the main non-EU countries from which food, feed and drink were imported into the United Kingdom were Brazil (£964 million), the USA (£895 million), and Australia (£574 million).

Exports and imports (charts 8.4, 8.5)

7 Between 1999 and 2008, at 2008 prices:

- the value of exports of highly processed foods and drink, such as confectionery, canned meats, jams, alcoholic drinks and ice cream, increased by 14 per cent;
- the value of exports of lightly processed foods and drink, i.e. goods that retain their raw recognisable form, such as meat, cheese and butter, powdered milk, flour and sugar, rose by 16 per cent;
- the value of exports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, increased by 14 per cent.

Chart 8.2 Exports in food, feed and drink by country of destination 2008; United Kingdom

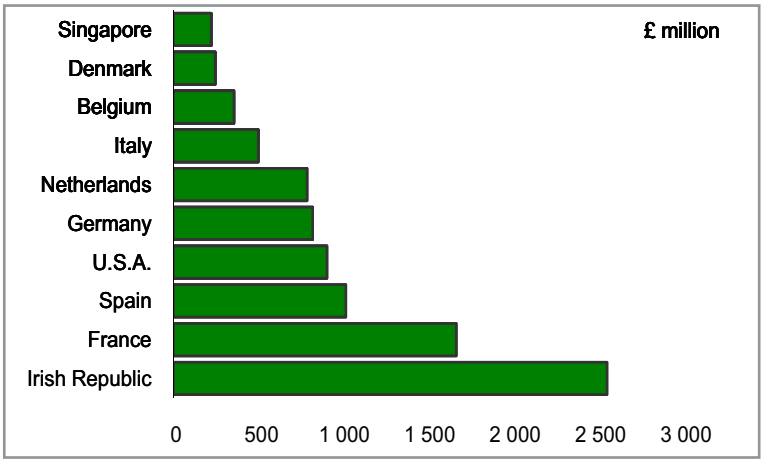


Chart 8.3 Imports in food, feed and drink by country of despatch 2008; United Kingdom

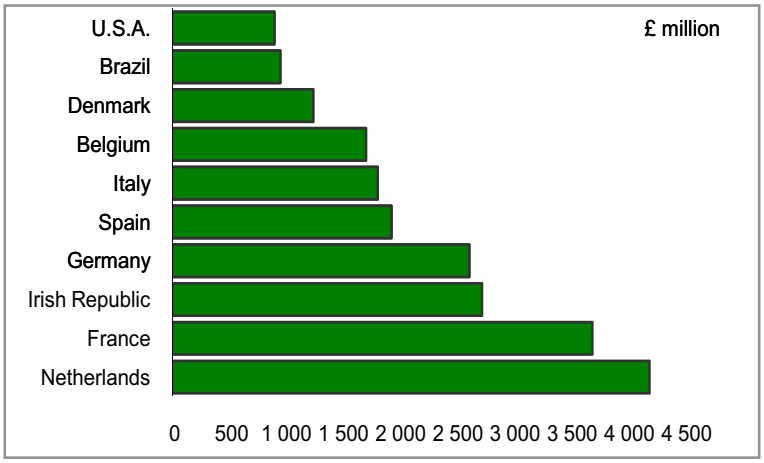
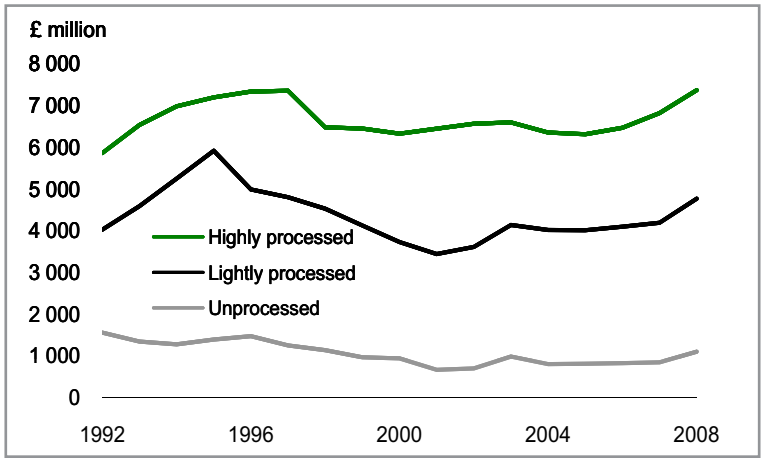


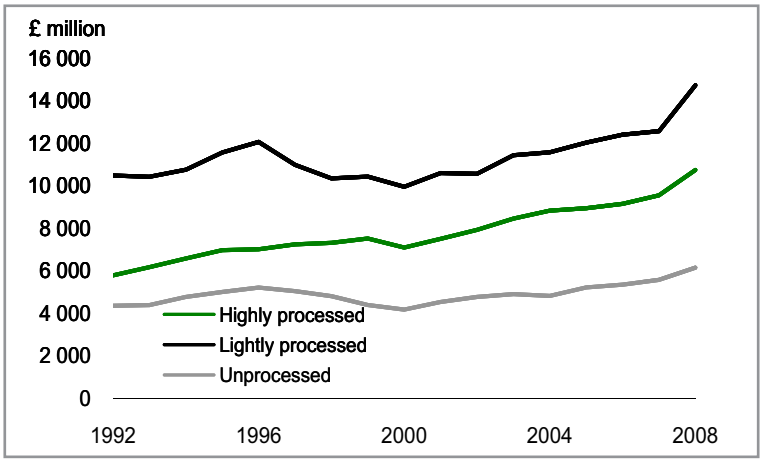
Chart 8.4 Exports of food, feed and drink by degree of processing at 2008 prices; United Kingdom



8 Between 1999 and 2008, at 2008 prices:

- the value of imports of highly processed foods and drink increased by 43 per cent;
- the value of imports of lightly processed foods and drink increased by 41 per cent;
- the value of imports of unprocessed commodities increased by 40 per cent.

Chart 8.5 Imports of food, feed and drink by degree of processing at 2008 prices; United Kingdom



Trade in key commodities (table 8.2, 8.3)

9 Between 1999 and 2008, at 2008 prices:

- the value of exports of whisky increased by 13 per cent to £3.1 billion; the value of wine imports increased by 14 per cent to £2.9 billion;
- the value of exports of lamb and mutton decreased by 2.0 per cent (exports were banned during the outbreak of foot and mouth disease in 2001 but partially recovered in 2002 and 2003);
- the value of beef and veal exports showed a massive increase of 732 per cent (the pattern of beef exports reflects the export ban on beef between March 1996 and November 2005) and the value of imports increased by 88 per cent;
- the value of pork imports nearly doubled while exports declined by 31 per cent over the same period reflecting the fall in pig production in the United Kingdom and the ban imposed during the outbreak of foot and mouth disease in 2001;
- the value of poultrymeat imports increased by 11 per cent while the value of exports increased by 4.0 per cent;
- the value of breakfast cereal imports increased by 160 per cent while the value of exports fell by 3.0 per cent;
- the value of cheese exports increased by 59 per cent while imports increased by 46 per cent.

Table 8.2 Trade in key commodities in real terms at 2008 prices; United Kingdom

Enquiries: Joanne Gardiner on +44 (0)1904 455681 email: joanne.gardiner@defra.gsi.gov.uk

£ million Calendar years

		Average of 1997-99	2004	2005	2006	2007	2008
Whisky	Imports	64.3	104.9	111.8	123.8	102.3	107.4
	Exports	2 933.7	2 647.6	2 704.1	2 739.6	2 990.9	3 128.1
Wine	Imports	2 351.1	2 698.9	2 635.4	2 532.5	2 669.4	2 851.5
	Exports	159.5	136.2	143.9	185.8	217.0	236.5
Cheese	Imports	810.2	932.6	955.2	960.6	967.3	1 195.2
	Exports	170.2	231.9	245.6	250.1	250.8	281.3
Poultrymeat	Imports	669.9	850.4	851.3	764.7	806.7	786.5
	Exports	237.9	223.2	233.3	174.1	208.3	217.5
Poultrymeat products	Imports	200.1	360.3	412.1	470.9	495.6	603.2
	Exports	70.4	89.8	99.9	94.5	129.7	136.0
Beef and veal	Imports	404.5	702.9	652.5	677.3	637.6	740.5
	Exports	20.7	23.1	28.5	99.9	130.6	213.2

continued

Table 8.2 continued

£ million — Calendar years

		Average of 1997-99	2004	2005	2006	2007	2008
Wheat, unmilled	Imports	181.2	107.4	151.1	144.2	216.4	319.8
	Exports	421.4	239.1	222.4	206.9	240.4	403.8
Lamb and mutton	Imports	291.6	325.7	326.6	305.7	290.4	313.3
	Exports	300.7	217.4	239.1	252.4	190.0	262.2
Pork	Imports	267.6	571.8	660.1	740.0	697.0	672.9
	Exports	280.0	106.2	116.6	108.0	91.7	132.2
Breakfast cereals	Imports	57.2	109.3	116.5	112.2	119.7	145.6
	Exports	353.7	326.4	339.2	342.1	326.0	352.8
Milk and cream	Imports	74.8	38.9	40.5	49.8	54.7	78.9
	Exports	180.0	161.3	193.3	193.3	190.2	199.6
Bacon and ham	Imports	572.2	630.3	590.7	596.6	585.8	687.4
	Exports	23.9	39.6	31.0	28.0	31.4	71.8
Butter	Imports	290.3	320.8	346.2	363.0	237.6	233.6
	Exports	166.3	68.2	81.9	65.0	68.8	54.8
Eggs and egg products	Imports	43.0	98.5	86.3	99.0	110.7	132.4
	Exports	32.7	37.7	30.7	26.4	26.2	38.3
Fresh vegetables	Imports	1 185.1	1 522.6	1 706.7	1 667.5	1 710.8	1 739.2
	Exports	48.0	51.8	53.6	52.6	51.0	54.2
Fresh fruit	Imports	1 925.8	2 031.9	2 164.1	2 258.7	2 235.6	2 392.0
	Exports	52.7	74.7	92.9	117.1	83.2	85.5

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 fresh, chilled or frozen carcase meat, cuts and offal (inc. liver).
Poultry meat products	includes prepared, preserved, salted or cooked poultrymeat 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, dried legumes and processed vegetables.
Fresh fruit	excludes jams, juices, dried and processed fruit

Note: Definitions of 'fresh vegetables' and 'fresh fruit' used have been revised in 2009 to be consistent with those used for AUK Chapter 5.

Table 8.3 Trade in key commodities by volume; United Kingdom

Enquiries: Joanne Gardiner on +44 (0)1904 455681 email: joanne.gardiner@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) — Calendar years

		Average of 1997-99	2004	2005	2006	2007	2008
Whisky (million litres)	Imports	15.4	14.6	13.5	16.9	14.4	15.6
	Exports	270.9	273.4	284.1	302.0	326.3	308.1
Wine (million litres)	Imports	931.5	1 333.7	1 315.1	1 260.1	1 308.9	1 288.9
	Exports	34.7	21.8	21.4	32.3	47.7	43.7
Cheese	Imports	257.6	334.7	352.9	378.1	402.9	421.8
	Exports	55.9	93.3	96.3	104.2	97.2	88.4
Poultrymeat	Imports	271.5	396.4	406.4	381.7	383.4	335.5
	Exports	217.5	265.5	304.6	258.7	291.8	278.3
Poultrymeat products	Imports	63.7	150.2	180.3	206.0	230.4	248.6
	Exports	23.5	26.6	33.0	31.3	46.4	45.5
Beef and veal	Imports	138.9	280.6	239.9	235.7	240.1	247.5
	Exports	5.5	6.5	8.9	41.2	59.4	81.3

continued

Table 8.3 continued

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1997-99	2004	2005	2006	2007	2008
Wheat, unmilled	Imports	1 203.3	776.4	1 200.7	1 028.1	1 238.4	1 248.3
	Exports	3 593.8	2 528.2	2 494.8	2 116.5	1 911.1	2 765.7
Lamb and mutton	Imports	118.7	116.2	110.1	113.8	114.1	111.9
	Exports	108.5	76.7	85.2	87.1	68.8	86.8
Pork	Imports	171.9	383.5	432.0	458.8	462.9	393.5
	Exports	227.1	84.3	91.5	94.7	98.6	117.9
Breakfast cereals	Imports	33.3	68.6	83.3	92.7	91.8	103.0
	Exports	172.7	156.2	171.5	174.8	165.3	160.3
Milk and cream	Imports	171.9	70.8	79.0	123.8	133.5	192.7
	Exports	248.9	339.4	592.2	621.3	513.2	532.5
Bacon and ham	Imports	233.6	301.7	283.4	264.0	277.5	292.7
	Exports	7.0	13.2	10.6	10.2	11.9	31.4
Butter	Imports	109.5	113.7	128.6	147.1	103.2	81.4
	Exports	65.1	34.8	45.1	35.7	31.7	23.8
Eggs and egg products	Imports	23.4	67.1	78.7	78.4	93.1	95.3
	Exports	19.8	15.1	13.7	13.1	11.9	14.0
Fresh vegetables	Imports	1 237.1	1 700.3	1 940.1	1 893.1	1 947.3	1 956.7
	Exports	83.3	92.7	87.6	82.7	87.9	79.9
Fresh fruit	Imports	2 645.0	3 175.2	3 283.7	3 470.1	3 510.2	3 326.2
	Exports	70.9	105.0	119.8	176.8	147.1	128.1

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 fresh, chilled or frozen carcase meat, cuts and offal (inc. liver).
Poultry meat products	includes prepared, preserved, salted or cooked poultrymeat 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, dried legumes and processed vegetables.
Fresh fruit	excludes jams, juices, dried and processed fruit.

Note: Definitions of 'fresh vegetables' and 'fresh fruit' used have been revised in 2009 to be consistent with those used for AUK Chapter 5.

Trade with EU 26 countries (charts 8.6 to 8.11)

10 This section describes the volume of trade in 3 key commodities between the United Kingdom and the other 26 Member States of the European Union (the EU 26 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 26 countries have been far in excess of exports for many years, although total exports increased by 164 per cent to 40 thousand tonnes in 2008. This rise was driven by increases in exports to Denmark, Spain, the Netherlands and the Irish Republic. Total imports have fluctuated a little but have shown a mostly upward trend in the 2000's and stood at 292 thousand tonnes in 2008. In 2008, the Netherlands and Denmark provided 83 per cent of all imported bacon and ham.

Chart 8.6 Trade with EU 26 countries; bacon and ham

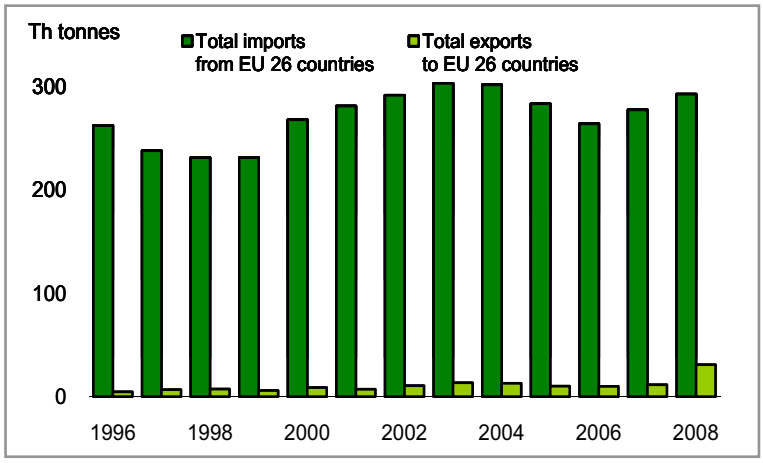
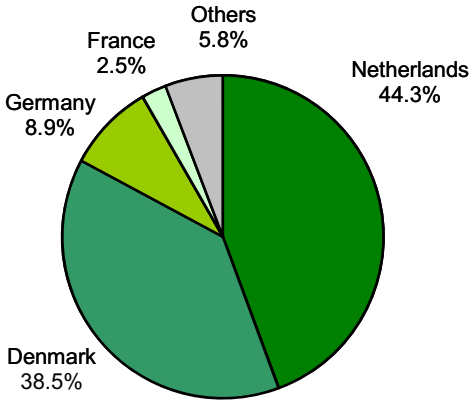


Chart 8.7 Trade with EU 26 countries; imports of bacon and ham 2008



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, they have shown a small year on year increase since 2004 reaching 95 thousand tonnes in 2008; this is 43 per cent down on the 2000 level. Although imports have been consistently much higher than their pre-2001 levels there was a decrease in 2008 to 384 thousand tonnes. Denmark accounted for 39 per cent of the imports of pork in 2008 with a further 35 per cent contributed by Germany, the Netherlands and the Irish Republic.

Chart 8.8 Trade with EU 26 countries; pork

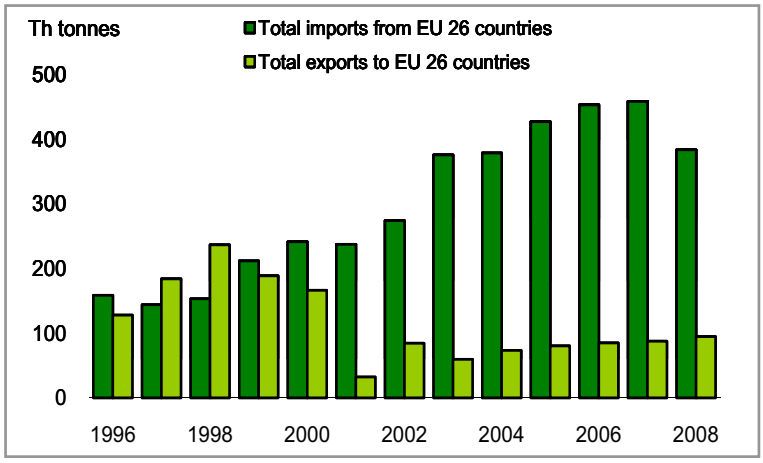
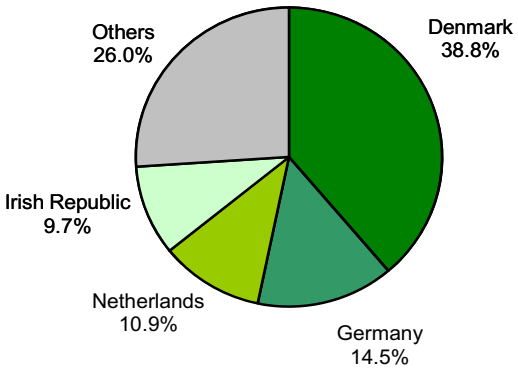


Chart 8.9 Trade with EU 26 countries; imports of pork 2007



Milk and cream

13 Imports of milk and cream have been increasing for several years and the 2008 figure of 193 thousand tonnes is nearly four times the 2003 total. Exports have risen sharply since 2001, reaching 528 thousand tonnes in 2008; this outweighs imports by almost three to one. In 2008, 88 per cent of milk and cream exports went to the Irish Republic with a further 9.0 per cent exported to Belgium, Luxembourg and Germany.

Chart 8.10 Trade with EU 26 countries; milk and cream

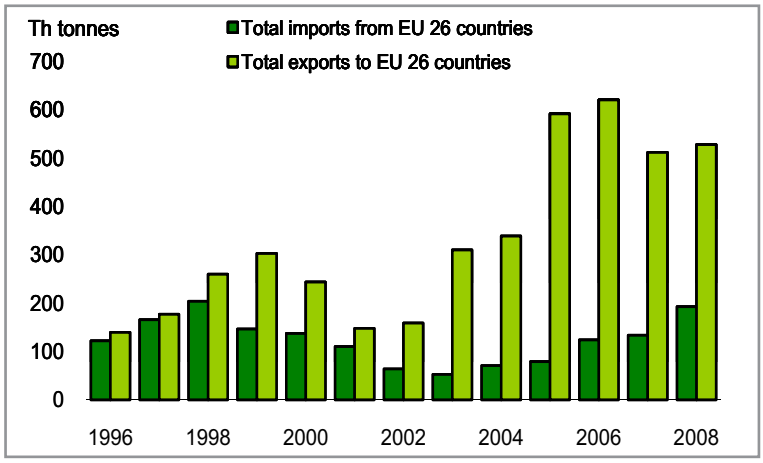
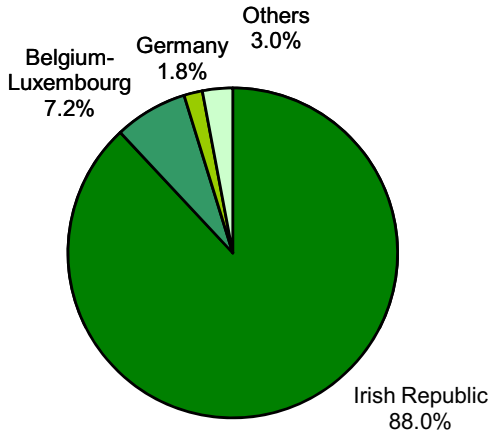


Chart 8.11 Trade with EU 26 countries; exports of milk and cream 2008



Trade with key trading partners (charts 8.12 to 8.25)

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 recovery to 87.1 thousand tonnes in 2006. In 2007 exports fell back to 68.8 thousand tonnes but increased in 2008 to 87 thousand tonnes. Imports have remained steady at around 110 thousand tonnes for the last decade. Seventy per cent of all lamb and mutton exported in 2008 went to France, with a further 16 per cent going to Belgium, Luxembourg, Germany and the Irish Republic.

Chart 8.12 World trade; lamb and mutton

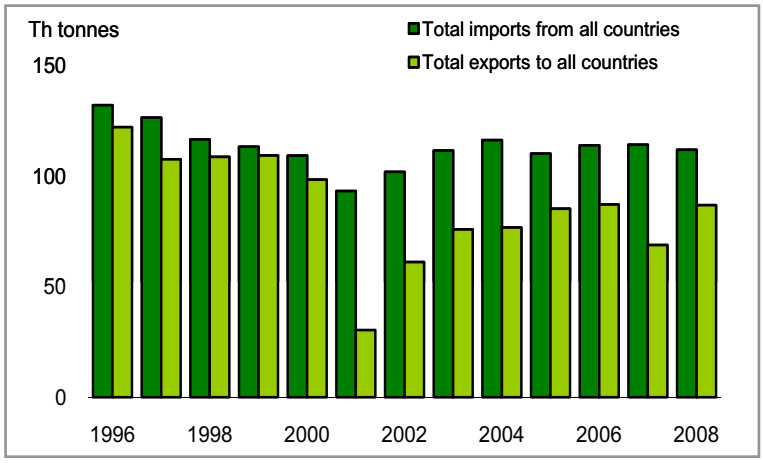
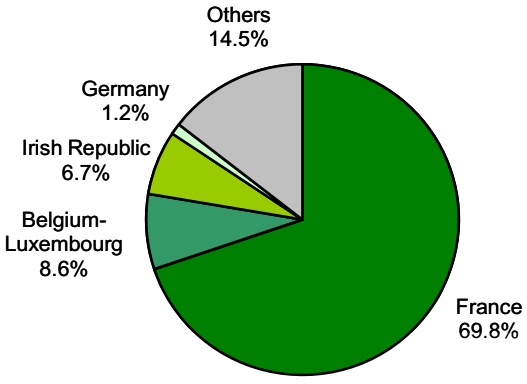


Chart 8.13 Trade all countries; exports of lamb and mutton 2008

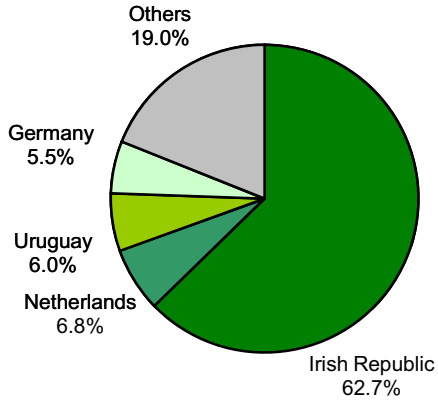


Beef and veal

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 here over that period are 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 continue to show signs of recovery though the 2008 level of 81 thousand tonnes still stands a long way below the 1995 level of 274 thousand tonnes. Imports rose during the export ban and are currently about twice the level of imports before the ban. The Irish Republic accounted for 63 per cent of the imports in 2008 with the Netherlands, Uruguay and Germany accounting for a further 18 per cent. Imports from Brazil which accounted for 11 per cent in 2007 dropped to 6.0 per cent in 2008 reflecting an overall drop in beef exports from that country for the first time in a decade.

Chart 8.14 World trade; beef and veal

Chart 8.15 Trade all countries; imports of beef and veal 2008



Poultrymeat

17 The United Kingdom has run a long term trade deficit in poultrymeat. Imports have increased steadily from 1993 reaching 336 thousand tonnes in 2008. The Netherlands accounted for 45 per cent of imports in 2008 with France, Germany, Poland and the Irish Republic accounting for a further 34 per cent.

Chart 8.16 World trade; poultrymeat

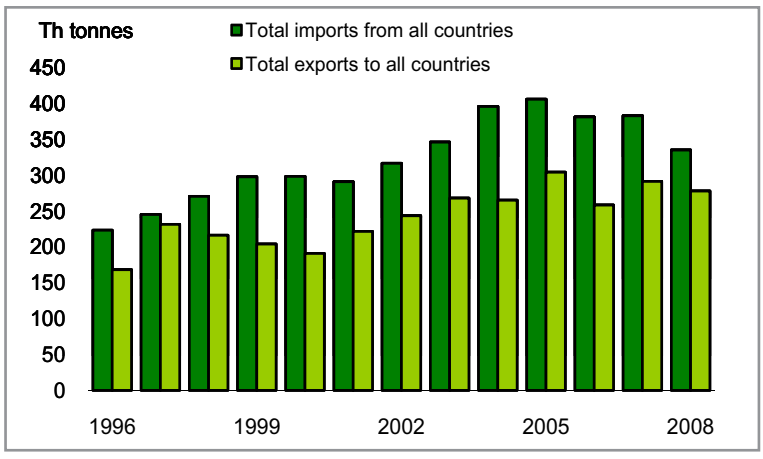
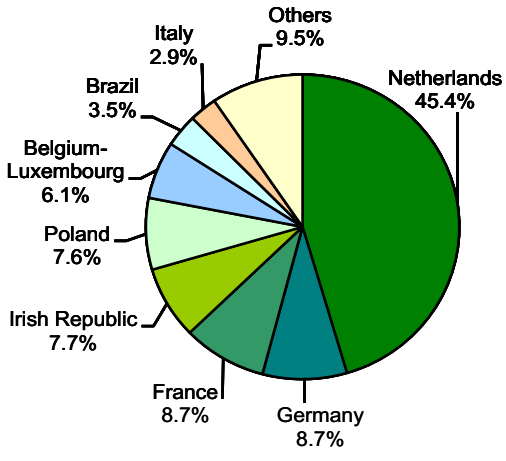


Chart 8.17 Trade all countries; imports of poultrymeat 2008



Poultrymeat Products

18 Poultry meat products include prepared, preserved, salted or cooked poultrymeat. At 249 thousand tonnes, imports of poultrymeat products were around 5 times the level of exports in 2008. This reflects an increasing year on year trade deficit. Thailand accounted for 46 per cent of imports with the Netherlands and the Irish Republic having the next largest shares accounting for 16 per cent each.

Chart 8.18 World trade; Poultrymeat products

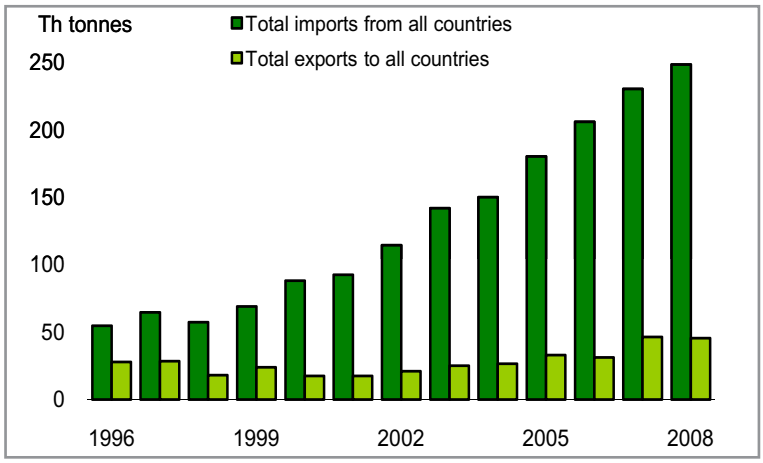
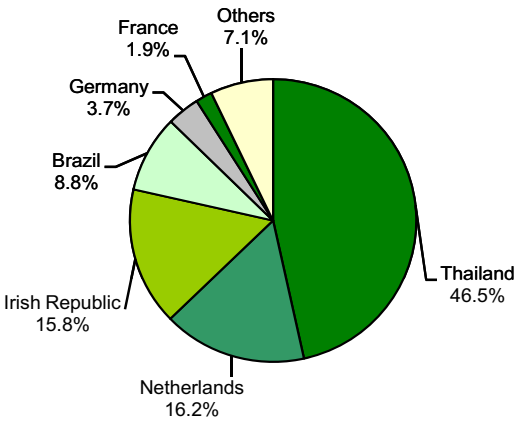


Chart 8.19 Trade with countries; Poultrymeat products 2008



Unmilled wheat

19 Exports of unmilled wheat have comfortably exceeded imports every year from 1993 apart from 2001 and 2002. In these two years exports fell to almost the same level as imports due to a poor 2001 harvest, caused by severe flooding in the previous winter. After a record wheat harvest in 2008 exports stood at 2.8 million tonnes, of which just over a quarter went to Spain. A further 38 per cent went to the Netherlands, Portugal and the Irish Republic.

Chart 8.20 World trade; unmilled wheat

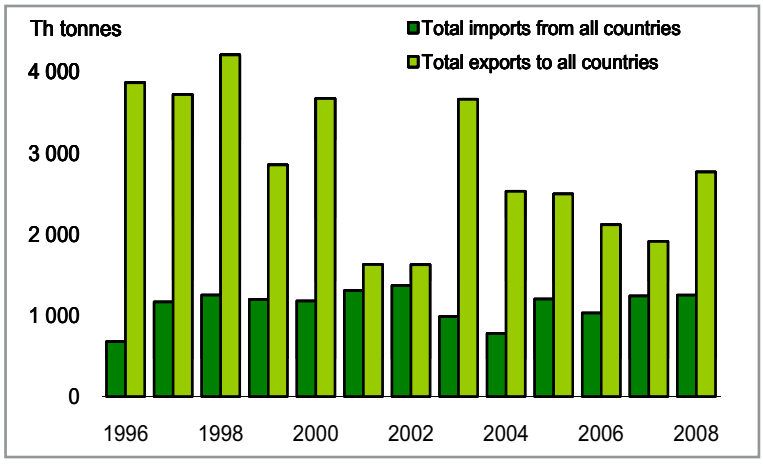
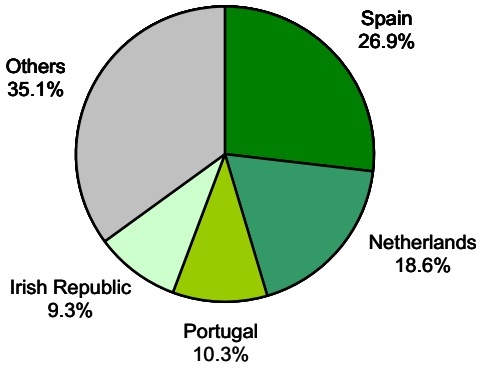


Chart 8.21 Trade all countries; Exports of unmilled wheat 2008



Fresh vegetables

20 The United Kingdom runs a large and steadily increasing trade deficit in fresh vegetables. Imports have risen virtually every year for over a decade reaching 2.0 billion tonnes in 2008, almost double the 1994 total. Exports have declined to 80 thousand tonnes since a peak of 113 thousand tonnes in 2002. In 2008, 37 per cent of all fresh vegetables imports came from Spain and 30 per cent from the Netherlands with France having the next largest share at 102 thousand tonnes, 5.0 per cent.

Chart 8.22 World trade; fresh vegetables

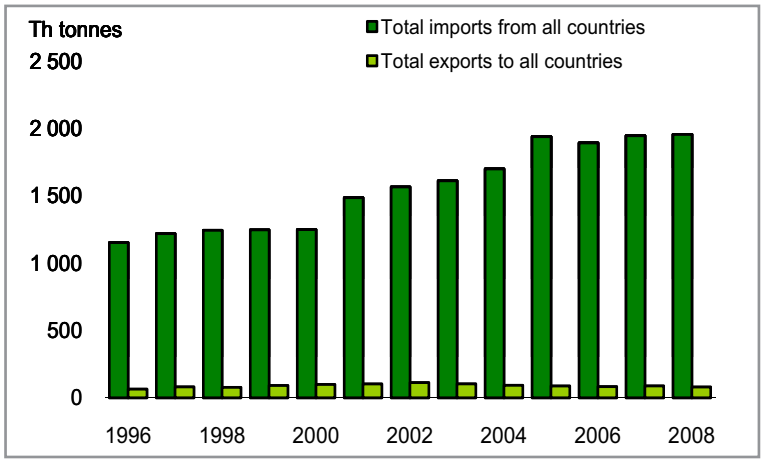
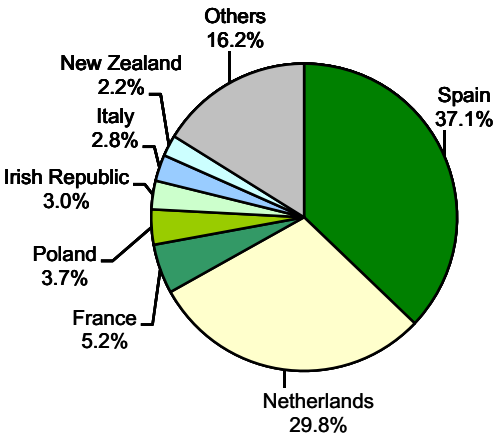


Chart 8.23 Trade all countries; imports of fresh vegetables 2008



Fresh fruit

21 Imports of fresh fruit have historically been far in excess of exports and stood at 3.3 billion tonnes in 2008. Exports have seen higher levels in recent years but represent just 4.0 per cent of imports. Spain was the largest single source of imports with 14 per cent in 2008. The top three sources of imports (Spain, South Africa and Costa Rica) provided a total 35 per cent of imports, which demonstrates the diversity of supply of fresh fruit.

Chart 8.24 World trade; fresh fruit

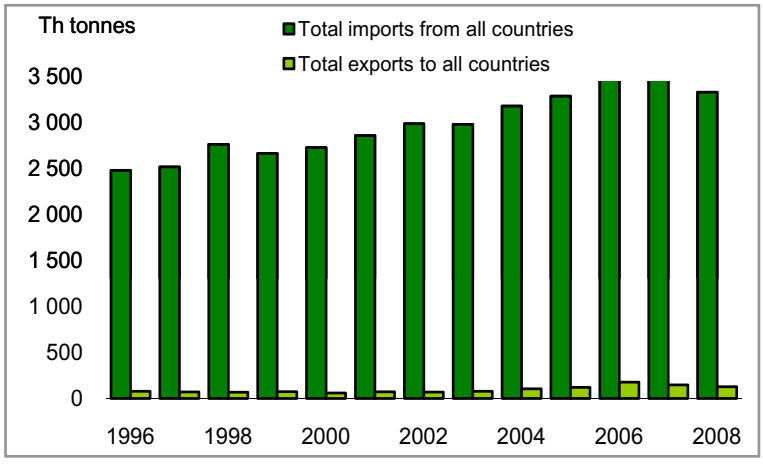
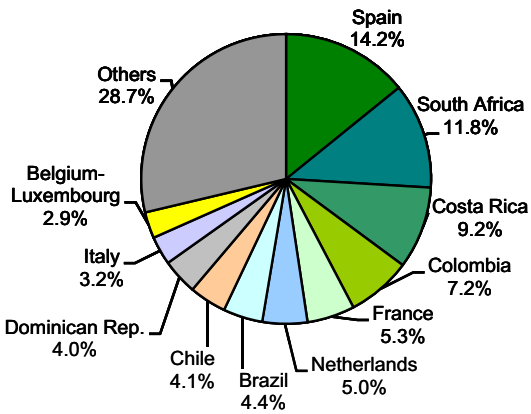


Chart 8.25 Trade all countries; imports of fresh fruit 2008



Chapter 9 Accounts

Summary

In 2009:

- Total Income from Farming is estimated to have fallen by 6.7 per cent in current prices, or 6.2 per cent in real terms, to £4.07 billion. A fall in the value of output was partially offset by a drop in input costs and an increase in the value of Single Payments;
- the value of total output at market prices fell by 3.1 per cent to £19.3 billion;
- the value of intermediate consumption fell by 1.2 per cent to £12.1 billion;
- gross value added at market prices fell by 6.2 per cent to £7.1 billion;
- net value added at factor cost fell by 4.4 per cent to £7.4 billion;
- labour costs rose by 4.2 per cent while rents fell by 2.2 per cent;
- net interest paid fell by 25 per cent as falling interest rates offset a rise in lending.

At market prices, the value of output of:

- cereals was £2.4 billion, 25 per cent lower than in 2008 as a result of lower prices, particularly for wheat and barley;
- oilseed rape fell by 23 per cent to £475 million as a result of high prices;
- sugar beet rose by 16 per cent to £241 million;
- fresh vegetables fell by 4.4 per cent to £1.1 billion;
- plants and flowers rose by 9.8 per cent to £877 million;
- potatoes fell by 16 per cent to £644 million;
- fresh fruit rose by 4.8 per cent to £571 million;
- livestock production rose by 8.6 per cent to £7.1 billion;
- milk production fell by 9.7 per cent to £3.1 billion;
- egg production rose by 1.1 per cent to £526 million.

In 2008:

- net worth rose by 13 per cent or 12 per cent in real terms, to £203 billion;
- total assets increased by 12 per cent and liabilities increased by 9.3 per cent.

Click here to obtain further data source information for this chapter

Introduction

1 This chapter shows a sequence of inter-related accounts for agriculture including current accounts, accumulation accounts and balance sheets. These accounts conform to internationally agreed accounting principles required by both the United Kingdom's National Accounts and by Eurostat, the statistical office of the European Union.

2 The production and income account provides details of the industry's outputs, inputs and generation of income; the balance sheets show the total assets and liabilities for agriculture at the end of each calendar year, together with their net worth; and the accumulation accounts analyse the various components of change in the assets and liabilities of agriculture and record changes in net worth. The net worth shown in the balance sheets incorporates changes due to all of the accumulation accounts.

Total Income from Farming

3 Total Income from Farming (TIFF) in the United Kingdom is estimated to have fallen in 2009 by 6.7 per cent in current prices, or by 6.2 per cent in real terms, to £4.07 billion. In real terms, TIFF remains below the high levels of the mid nineties but is now double the low point of 2000.

4 Total Income from Farming is income generated by production within the agriculture industry, including subsidies. It represents business profits and remuneration for work done by owners and other unpaid workers. It is sensitive to small percentage changes in the values of outputs and inputs. This sensitivity, the provisional nature of the figures for the latest year, and revisions made to previously published figures for earlier years as methodology or data sources improve, all need to be borne in mind when using the figures.

5 When Total Income from Farming was published in Agriculture in the United Kingdom 2008, the data for 2008 were provisional because information for 2008 was incomplete and an element of forecasting was required. Subsequently, the estimate of Total Income from Farming for 2008 has been revised upwards by £905 million (26 per cent).

6 Significant revisions were made to output (up £138 million, or 0.7 per cent) due to improved methodology for price data for cereals and complete data for the year replacing an element of forecasting, and to intermediate consumption (down £702 million, or 5.4 per cent) due to actual data replacing forecasts, in particular for animal feed and fertilisers.

Production and income account at current prices (tables 9.1, 9.2, charts 9.1, 9.2)

7 In 2009 the total value of output at market prices fell by 3.1 per cent to £19.3 billion. This fall masked significant variation between sectors with the value of cereals, potatoes and milk down by 25 per cent, 16 per cent and 9.7 per cent respectively, while the value of livestock rose by 8.6 per cent. The value of fruit output rose by 4.8 per cent, plants and flowers rose by 9.8 per cent and fresh vegetables fell by 4.4 per cent.

8 The value of intermediate consumption fell too, by 1.2 per cent with the costs of fuels, animal feed, pesticides and fertiliser falling by 17 per cent, 7.3 per cent, 2.2 per cent and 1.4 per cent respectively, offsetting increased costs elsewhere.

9 Gross value added for the agricultural industry, which represents its contribution to national GDP, fell by 6.2 per cent at market prices. Consumption of fixed capital rose by 7.3 per cent leading to a 15 per cent fall in net value added at market prices.

10 The Single Payment, introduced in 2005, is not included as output as it is decoupled from production. However, Single Payment is included in Total Income from Farming, in accordance with National Accounting conventions. Other subsidies on production, i.e. all subsidies not linked to production including the Single Payment, totalled £3.6 billion in 2009.

11 Net value added at factor cost is the best measure of value added by the industry because it includes all subsidies, the bulk of which following the introduction of the Single Payment Scheme in 2005 are no longer included in output. It makes no allowance for interest, rent or labour costs. In 2009, net value added at factor cost was £7.4 billion, a 4.4 per cent fall compared to 2008.

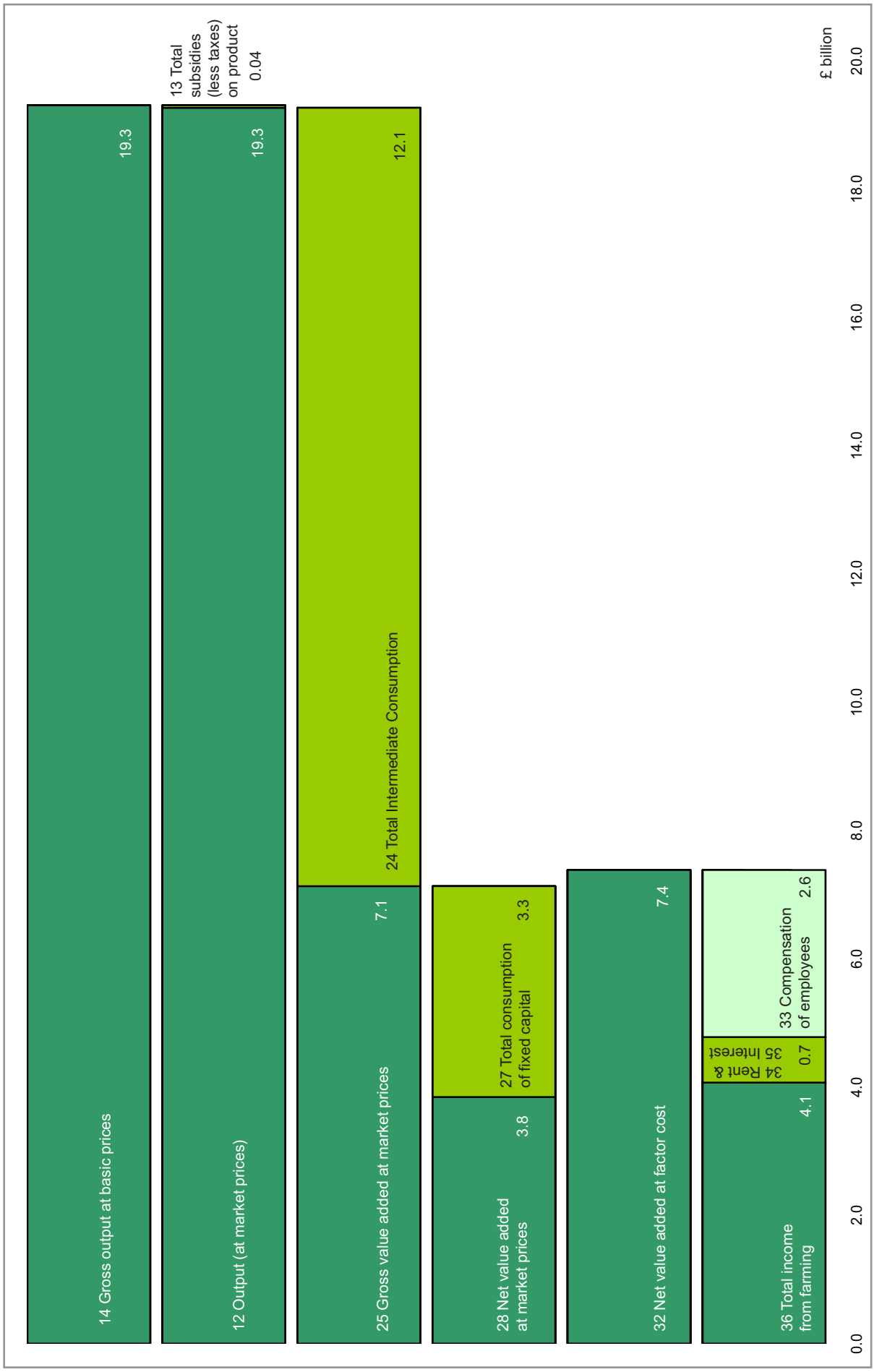
12 Total Income from Farming is derived by deducting interest, rent and compensation of employees from net value added at factor cost. Compensation of employees rose by 4.2 per cent while rent costs and interest payments fell by 2.2 per cent and 25 per cent respectively leading to a 6.7 per cent fall in Total Income from Farming.

Definition of terms used in tables 9.1 and 9.2

The following list is provided to aid the user with the terms used in tables 9.1 and 9.2

Terms	Table 9.1 reference number	Definition
Agricultural industry		All activities taking place within businesses that carry out any 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.
Intermediate consumption	24	Consumption of goods and services, e.g. feed, seeds, fertiliser, pesticides.
Gross value added	25	Gross output less intermediate consumption.
Consumption of fixed capital	27	The reduction in value (at current prices) of capital assets used in the production process, e.g. buildings, plant, machinery, vehicles and livestock.
Net value added	29	Gross value added at basic prices less consumption of fixed capital.
Compensation of employees	30	The full costs of employees to the business including national insurance contributions.
Other subsidies on production	33	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	31	Net value added at basic prices plus other subsidies (less taxes) on production
Total Income from Farming (TIFF)	36	Income to those with an entrepreneurial interest in the agricultural industry, e.g. farmers, partners, spouses and most other family workers.

Chart 9.1 Main components of the production and income account in 2009 (£ billion); United Kingdom



2009

Chart 9.2 Changes in value of outputs and inputs between 2008 and 2009 (£ million)

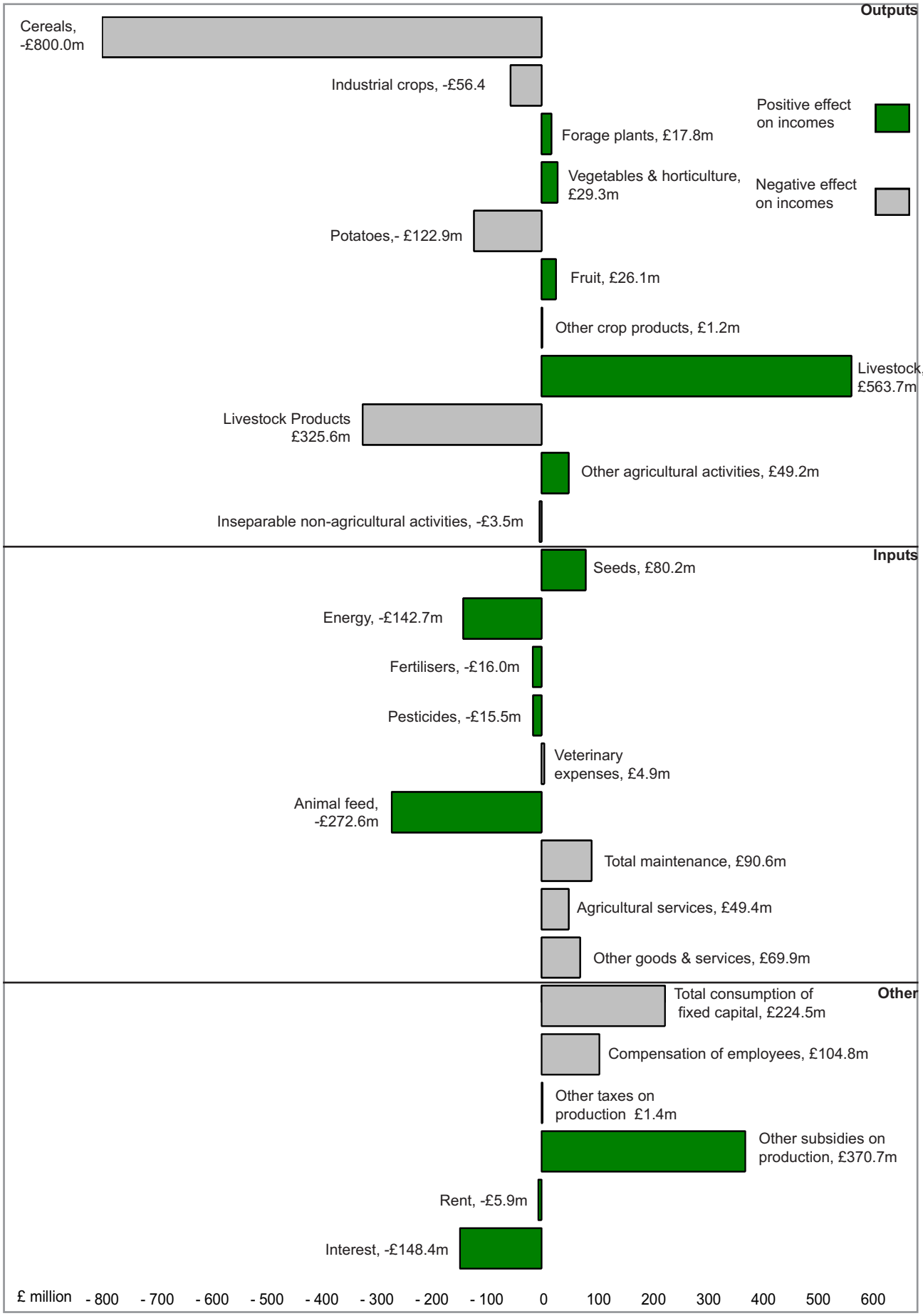


Table 9.1 Production and income account at current prices; United Kingdom

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

£ million — Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Output at market prices (a)						
1 Output of cereals	1 658	1 435	1 506	1 949	3 153	2 353
wheat	1 139	1 018	1 066	1 325	2 245	1 590
rye	9	1	1	2	2	2
barley	470	380	384	555	817	687
oats and summer cereal mixtures	39	35	54	66	87	73
other cereals	1	1	1	1	1	2
2 Output of industrial crops	777	814	732	769	1 164	1 108
oil seeds	217	277	315	427	628	493
oilseed rape	199	261	307	422	618	475
other oil seeds	18	16	8	4	10	17
sugar beet	277	279	178	162	208	241
other industrial crops	283	258	238	181	328	375
fibre plants	2	1	1	-	1	-
hops	12	5	4	4	4	4
other industrial crops (b)	269	252	233	176	323	370
3 Output of forage plants	76	95	86	106	110	128
4 Output of vegetables and horticultural products	1 619	1 690	1 748	1 848	1 903	1 933
fresh vegetables	937	912	997	1 066	1 104	1 055
plants and flowers	682	778	751	782	799	877
5 Output of potatoes (including seeds)	636	531	638	684	767	644
6 Output of fruit	249	388	383	467	545	571
7 Output of other crop products including seeds	40	52	48	43	45	46
Total crop output (sum 1 - 7)	5 054	5 005	5 141	5 868	7 687	6 782
8 Output of livestock	4 460	4 908	5 094	5 231	6 576	7 140
primarily for meat	3 998	4 299	4 362	4 431	5 500	5 929
cattle	1 097	1 465	1 559	1 622	2 068	2 200
pigs	822	677	685	736	865	1 015
sheep	608	686	709	641	798	962
poultry	1 320	1 300	1 233	1 249	1 578	1 563
other animals	150	171	176	183	190	189
gross fixed capital formation	462	609	732	800	1 077	1 211
cattle	232	361	447	493	784	813
pigs	6	6	8	5	6	9
sheep	92	111	146	153	124	201
poultry	132	131	131	149	162	188
9 Output of livestock products	2 914	3 009	2 918	3 286	4 019	3 693
milk	2 596	2 592	2 497	2 823	3 447	3 114
eggs	272	349	362	410	520	526
raw wool	23	20	11	12	10	10
other animal products	23	48	48	41	41	43
Total livestock output (8 + 9)	7 374	7 918	8 012	8 517	10 595	10 833
10 Other agricultural activities	684	639	624	680	795	844
agricultural services	589	631	623	680	794	844
leasing out quota	96	9	1	-	-	-
11 Inseparable non-agricultural activities	447	678	726	771	812	809
12 Output (at market prices) (sum 1 to 11)	13 559	14 240	14 502	15 835	19 889	19 268
of which:						
transactions within the agricultural industry						
feed wheat	61	86	83	100	138	126
feed barley	150	136	142	178	208	157
feed oats	13	12	15	19	23	19
seed potatoes	16	13	16	9	13	11
straw	238	210	191	137	267	308
contract work	589	631	623	680	794	844
leasing of quota	96	9	1	-	-	-
total capital formation in livestock	462	609	732	800	1 077	1 211
13 Total subsidies (less taxes) on product (c)	2 162	212	85	59	57	37
14 Gross output at basic prices (12 + 13)	15 721	14 452	14 587	15 895	19 946	19 305

continued

Table 9.1 continued

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Intermediate consumption						
15 Seeds	500	662	580	608	704	784
16 Energy	639	779	831	897	1 166	1 023
electricity	228	235	259	274	341	341
fuels	412	544	573	623	825	682
17 Fertilisers	775	774	775	827	1 130	1 114
18 Pesticides	618	547	518	571	690	674
19 Veterinary expenses	271	280	284	302	337	342
20 Animal feed (d)	2 290	2 316	2 424	2 876	3 749	3 476
compounds	1 403	1 318	1 426	1 702	2 186	2 095
straights	663	764	758	877	1 194	1 079
feed purchased from other farms	224	234	241	297	369	302
21 Total maintenance (e)	992	995	1 014	1 077	1 141	1 232
materials	683	653	656	688	723	779
buildings	309	342	358	389	418	452
22 Agricultural services	589	631	623	680	794	844
23 Other goods and services (e)(f)	2 200	2 345	2 319	2 379	2 578	2 648
24 Total intermediate consumption (sum 15 to 23)	8 875	9 328	9 367	10 218	12 289	12 137
25 Gross value added at market prices (12 - 24)	4 684	4 912	5 135	5 617	7 600	7 131
26 Gross value added at basic prices (14 - 24)	6 846	5 124	5 220	5 676	7 658	7 168
27 Total consumption of Fixed Capital	2 510	2 659	2 677	2 711	3 061	3 285
equipment	1 305	1 204	1 194	1 206	1 260	1 363
buildings (e)(g)	691	676	685	696	708	725
livestock	514	779	798	809	1 093	1 197
cattle	268	490	499	503	745	756
pigs	8	7	7	6	7	8
sheep	103	151	162	157	188	268
poultry	135	132	129	142	153	165
28 Net value added at market prices (25 - 27)	2 174	2 253	2 458	2 906	4 539	3 845
29 Net value added at basic prices (26 - 27)	4 336	2 465	2 543	2 966	4 597	3 883
30 Other taxes on production	- 91	- 102	- 99	- 102	- 106	- 104
31 Other subsidies on production (c)	437	2 818	2 943	2 956	3 236	3 607
32 Net value added at factor cost (29 + 30 + 31)	4 682	5 181	5 387	5 819	7 727	7 385
33 Compensation of employees (h)	1 968	2 218	2 271	2 363	2 500	2 604
34 Rent	238	220	237	255	274	268
rent paid (i)	319	305	326	352	369	367
rent received (j)	- 81	- 85	- 89	- 97	- 95	- 99
35 Interest (k)	624	533	536	634	592	444
36 Total income from farming (32 - 33 - 34 - 35)	1 851	2 211	2 344	2 568	4 362	4 069

(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) Includes straw and minor crops.

(c) “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.

(d) For years prior to 1992 the split between compounds and straights was derived from the split present in later years.

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

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

(g) A more empirically based methodology for calculating landlords' consumption of fixed capital was introduced in 2000. The new series has been linked with the old one using a smoothing procedure for the transition year of 1996.

(h) Excludes the value of work done by farm labour on own account capital formation in buildings and works.

(i) Rent paid on all tenanted land (including 'conacre' land in Northern Ireland) less landlords' expenses, landlords' consumption of fixed capital and the benefit value of dwellings on that land.

(j) Rent received by farming landowners from renting of land to other farmers less landlords' expenses. This series starts in 1996 following a revision to the methodology of calculating net rent.

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

Table 9.2 Changes in outputs and inputs; United Kingdom

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

£ million Calendar years

	Current price value		Changes %		
	2008	2009	value	volume	price
Output at market prices (a)					
1 Output of cereals	3 153	2 353	- 25	- 9	- 18
wheat	2 245	1 590	- 29	- 15	- 16
rye	2	2	- 4	-	- 4
barley	817	687	- 16	10	- 24
oats and summer cereal mixtures	87	73	- 16	- 4	- 13
other cereals	1	2	35	55	- 13
2 Output of industrial crops	1 164	1 108	- 5	1	- 6
oil seeds	628	493	- 22	- 4	- 18
oilseed rape	618	475	- 23	- 6	- 18
other oil seeds	10	17	68	90	- 12
sugar beet	208	241	16	9	6
other industrial crops	328	375	14	4	10
fibre plants	1	-	- 74	- 75	3
hops	4	4	-	-	-
other industrial crops (b)	323	370	15	4	10
3 Output of forage plants	110	128	16	30	- 11
4 Output of vegetables and horticultural products	1 903	1 933	2	- 2	3
fresh vegetables	1 104	1 055	- 4	1	- 5
plants and flowers	799	877	10	- 5	16
5 Output of potatoes (including seeds)	767	644	- 16	1	- 17
6 Output of fruit	545	571	5	6	- 1
7 Output of other crop products including seeds	45	46	3	- 13	18
Total crop output (sum 1 - 7)	7 687	6 782	- 12	- 3	- 9
8 Output of livestock	6 576	7 140	9	- 3	12
primarily for meat	5 500	5 929	8	- 2	10
cattle	2 068	2 200	6	- 1	7
pigs	865	1 015	17	1	16
sheep	798	962	21	- 4	26
poultry	1 578	1 563	- 1	- 3	2
other animals	190	189	- 1	-	- 1
gross fixed capital formation	1 077	1 211	12	- 11	26
cattle	784	813	4	- 19	28
pigs	6	9	42	-	43
sheep	124	201	62	6	52
poultry	162	188	16	16	-
9 Output of livestock products	4 019	3 693	- 8	- 1	- 7
milk	3 447	3 114	- 10	- 1	- 9
eggs	520	526	1	1	1
raw wool	10	10	- 5	- 4	- 1
other animal products	41	43	4	6	- 1
Total livestock output (8 + 9)	10 595	10 833	2	- 2	5
10 Other agricultural activities	795	844	6	4	2
agricultural services	794	844	6	4	2
leasing out quota	-	-	- 44	- 60	39
11 Inseparable non-agricultural activities	812	809	-	-	-
12 Output (at market prices) (sum 1 to 11)	19 889	19 268	- 3	- 2	- 1
of which:		-			
transactions within the agricultural industry					
feed wheat	138	126	- 9	8	- 16
feed barley	208	157	- 24	5	- 28
feed oats	23	19	- 18	1	- 19
seed potatoes	13	11	- 16	- 2	- 14
straw	267	308	16	4	11
contract work	794	844	6	4	2
leasing of quota	-	-	- 44	- 60	39
total capital formation in livestock	1 077	1 211	12	- 11	26
13 Total subsidies (less taxes) on product (c)	57	37	- 36	10	. .
14 Gross output at basic prices (12 + 13)	19 946	19 305	- 3	- 2	- 1

continued

Table 9.2 continued

	Current price value		Changes %		
	2008	2009	value	volume	price
Intermediate consumption					
15 Seeds	704	784	11	- 1	13
16 Energy	1 166	1 023	- 12	4	. .
electricity	341	341	-	- 1	1
fuels	825	682	- 17	6	- 22
17 Fertilisers	1 130	1 114	- 1	- 3	2
18 Pesticides	690	674	- 2	- 2	- 1
19 Veterinary expenses	337	342	1	1	1
20 Animal feed (d)	3 749	3 476	- 7	-	- 7
compounds	2 186	2 095	- 4	- 2	- 2
straights	1 194	1 079	- 10	1	- 11
feed purchased from other farms	369	302	- 18	6	- 23
21 Total maintenance (e)	1 141	1 232	8	7	1
materials	723	779	8	5	3
buildings	418	452	8	9	- 1
22 Agricultural services	794	844	6	4	2
23 Other goods and services (e)(f)	2 578	2 648	3	2	-
24 Total intermediate consumption (sum 15 to 23)	12 289	12 137	- 1	1	- 2
25 Gross value added at market prices (12 - 24)	7 600	7 131	- 6	- 8	2
26 Gross value added at basic prices (14 - 24)	7 658	7 168	- 6	- 8	1
27 Total consumption of Fixed Capital	3 061	3 285	7	- 4	12
equipment	1 260	1 363	8	3	5
buildings (e)(g)	708	725	3	- 1	4
livestock	1 093	1 197	9	- 14	27
cattle	745	756	1	- 21	28
pigs	7	8	22	- 11	36
sheep	188	268	43	- 6	52
poultry	153	165	8	15	- 6
28 Net value added at market prices (25 - 27)	4 539	3 845	- 15	- 10	- 6
29 Net value added at basic prices (26 - 27)	4 597	3 883	- 16	- 10	- 6
30 Other taxes on production	- 106	- 104	- 1	1	- 2
31 Other subsidies on production (c)	3 236	3 607	11	. .	. .
32 Net value added at factor cost (29 + 30 + 31)	7 727	7 385	- 4	. .	. .
33 Compensation of employees (h)	2 500	2 604	4	- 4	9
34 Rent	274	268	- 2	. .	. .
rent paid (i)	369	367	-	. .	. .
rent received (j)	- 95	- 99	4	. .	. .
35 Interest (k)	592	444	- 25	. .	. .
36 Total income from farming (32 - 33 - 34 - 35)	4 362	4 069	- 7	. .	. .

(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) Includes straw and minor crops.

(c) “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.

(d) For years prior to 1992 the split between compounds and straights was derived from the split present in later years.

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

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

(g) A more empirically based methodology for calculating landlords' consumption of fixed capital was introduced in 2000. The new series has been linked with the old one using a smoothing procedure for the transition year of 1996.

(h) Excludes the value of work done by farm labour on own account capital formation in buildings and works.

(i) Rent paid on all tenanted land (including 'conacre' land in Northern Ireland) less landlords' expenses, landlords' consumption of fixed capital and the benefit value of dwellings on that land.

(j) Rent received by farming landowners from renting of land to other farmers less landlords' expenses. This series starts in 1996 following a revision to the methodology of calculating net rent.

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

Balance sheets (table 9.3)

13 The value of net worth rose by 13 per cent (12 per cent in real terms) to £203 billion. The total value of assets rose by 13 per cent (12 per cent in real terms) to £215 billion while total liabilities rose 10 per cent (9.0 per cent in real terms) to £12 billion.

14 At current prices, net of depreciation and excluding the value of quota, the value of fixed assets rose by 13 per cent to £204 billion, due mostly to a similar increase in the value of land and buildings, which forms the greater part of the total. The value of current assets rose by 15 per cent to £11.6 billion. Long and medium-term liabilities rose by 16.7 per cent to £6 billion while short-term liabilities rose by 4.7 per cent to £6 billion.

Table 9.3 Aggregate balance sheets for agriculture; United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084 graham.brown@defra.gsi.gov.uk

£ million — As at December each year

	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
At current prices						
Assets						
Fixed: (a)						
Land and buildings (b)	87 739	110 910	120 851	142 648	167 097	188 766
Plant, machinery and vehicles	8 139	7 019	7 151	7 271	7 656	8 358
Breeding livestock	3 852	4 014	4 020	4 183	5 726	6 646
Total fixed	99 731	121 942	132 022	154 102	180 478	203 770
Current:						
Trading livestock	2 361	2 644	2 360	2 485	2 424	3 034
Crops and stores	2 475	2 251	2 055	2 200	2 788	3 140
Debtors, cash deposits	3 869	4 681	4 885	4 695	4 835	5 403
Total current	8 705	9 577	9 301	9 380	10 047	11 577
Total assets	108 435	131 518	141 323	163 482	190 525	215 348
Liabilities						
Long and medium-term:						
AMC and SASC (c)	1 330	1 317	1 363	1 482	948	1 069
Building societies and institutions	335	476	474	490	541	754
Bank loans	2 173	2 379	2 352	2 531	2 981	3 546
Family loans	390	533	557	534	481	558
Other	191	261	382	539	176	57
Total long and medium-term	4 420	4 966	5 128	5 575	5 127	5 983
Short-term:						
Leasing	167	139	121	93	98	89
Hire purchase	563	698	630	713	853	975
Trade credit	1 232	1 330	1 390	1 495	1 625	1 862
Bank overdrafts	2 823	2 877	3 533	3 252	3 068	2 988
Other	152	134	124	95	138	139
Total short-term	4 937	5 179	5 799	5 648	5 783	6 052
Total liabilities	9 357	10 144	10 927	11 223	10 910	12 036
Net worth	99 078	121 374	130 396	152 259	179 615	203 312
In real terms (as deflated by the retail price index):						
Indices 2000 = 100						
Total assets	101	105	110	122	137	153
Total liabilities	97	94	99	98	91	100
Net worth	101	106	111	124	141	158

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

(b) Values of land and buildings are not directly comparable with data prior to 1993.

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

Capital account (table 9.4)

15 The capital account in table 9.4 shows estimates of changes in the assets held by the agricultural sector in the United Kingdom. The value of gross fixed capital formation fell slightly by 0.1 per cent to £3.5 billion in 2009 compared to 2008. Consumption of fixed non-livestock assets rose by 6.2 per cent to £2.1 billion.

16 Capital formation and capital consumption in livestock measure the value of output due to the production and depreciation of breeding animals, mainly dairy cows, beef cows, ewes, sows and egg laying poultry. In 2009, the value of capital formation in livestock rose by 12 per cent to £1.2 billion. Consumption of fixed capital in livestock, which is approximated by assuming that all depreciation takes place at the time animals leave the breeding herds, rose by 9.5 per cent to £1.2 billion, led by an increase of 43 per cent in capital consumption in sheep.

17 Changes in inventories contribute to income. Stocks of crops fell by £26 million in 2009. The value of work-in-progress livestock fell by £82 million.

18 Estimates for 2008 published in Agriculture in the United Kingdom 2008 were provisional as information for 2008 was incomplete and an element of forecasting was required. These estimates have now been revised as later data is now available. Gross fixed capital formation has been revised downwards by £11 million (0.3 per cent) while consumption of fixed capital has been revised upwards by £28 million (0.9 per cent). A significant revision was made to changes in inventories, which was revised downwards by £191 million (32 per cent) owing to later availability of information. Total Income from Farming for 2008 has been revised upwards by £905 million (26 per cent).

Table 9.4 Accumulation accounts; United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084 graham.brown@defra.gsi.gov.uk

£ million — Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Capital account						
Gross fixed capital formation	1 764	2 392	2 650	3 003	3 488	3 485
Acquisitions less disposals of non-livestock assets:	1 302	1 782	1 918	2 203	2 411	2 274
buildings and works	421	687	748	736	853	759
plant and machinery	709	876	963	1 247	1 319	1 286
vehicles	171	219	207	221	240	228
Capital formation in livestock (a):	462	609	732	800	1 077	1 211
cattle	232	361	447	493	784	813
sheep	92	111	146	153	124	201
pigs	6	6	8	5	6	9
poultry	132	131	131	149	162	188
Consumption of fixed capital	2 510	2 659	2 677	2 711	3 061	3 285
Non-livestock assets:	1 996	1 880	1 880	1 902	1 967	2 088
buildings and works	691	676	685	696	708	725
plant and machinery	1 087	994	985	998	1 044	1 121
vehicles	218	210	209	208	216	242
Livestock (b):	514	779	798	809	1 093	1 197
cattle	268	490	499	503	745	756
sheep	103	151	162	157	188	268
pigs	8	7	7	6	7	8
poultry	135	132	129	142	153	165
Changes in inventories	- 62	- 21	- 174	- 277	399	- 108
stocks of crops	- 21	- 22	- 91	- 151	510	- 26
work-in-progress livestock	- 41	1	- 83	- 126	- 111	- 82
Total Income from Farming	1 851	2 211	2 344	2 568	4 362	4 069
Other capital grants and payments not included in the production and income account	38	87	74	74	158	62

(a) Capital formation in livestock is estimated by valuing the number of entries to the breeding herds at the entry price less the disposal price.

(b) Consumption of fixed capital in livestock is estimated by valuing the disposals from the breeding herds at the entry price less the disposal price.

Revaluation account (table 9.5)

19 Revaluation or holding gains, measures the change in value between the time of production and the end of the accounting period due to changes in price, and is estimated at £542 million for 2009. The value of work-in progress for production of non-breeding livestock and for replacement animals rose mainly due to cattle. The value of work-in-progress for crop production fell in 2009 by £68 million. Revaluation is not included in the production and income account and therefore does not contribute to income.

20 The value of work-in-progress production of livestock has been revised upwards for 2008 by £4 million (1.0 per cent) while the value of replacement animals for breeding herds has been revised upwards by £44 million (13 per cent). The value of work-in-progress production of crops has been revised downwards by £151 million.

Table 9.5 Revaluation account; United Kingdom

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

£ million — Calendar years

	2005	2006	2007	2008	2009 (provisional)
Livestock production work-in-progress (non-breeders)					
cattle	- 222	153	- 34	427	217
sheep	- 33	- 11	- 20	71	80
pigs	48	75	- 90	11	28
poultry (a)	- 2	- 4	23	24	8
Total	- 209	212	- 121	533	332
Replacement animals for breeding herds					
cattle	- 83	305	1	315	243
sheep	- 14	- 5	- 9	31	34
pigs	1	1	- 2	-	-
Total	- 96	301	- 9	346	278
Crop production work-in-progress					
wheat	- 53	107	428	- 139	- 31
barley	- 3	21	93	- 26	3
potatoes	35	111	50	- 97	- 38
other crops (b)	10	28	81	- 24	- 3
Total	- 12	267	651	- 286	- 68
Total holding gains	- 316	781	521	594	542

(a) Broilers, ducks, geese and turkeys.
(b) Oats, oilseeds, apples and pears.

Interest (table 9.6)

21 Total interest charges payable on farmers' borrowings for agricultural purposes including land purchases, less interest received on short-term deposits, is estimated to be £444 million in 2009, a fall of 25 per cent compared to 2008, as an increase in borrowing was offset by a fall in interest rates.

22 The estimate of interest charges for 2008 has been revised downwards by £33 million (6.0 per cent) as elements of forecasting included in the provisional estimates have been replaced by actual data.

Table 9.6 Interest; United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084 email: graham.brown@defra.gsi.gov.uk

£ million (unless otherwise specified) Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Interest rates						
average bank base lending rate in the UK	6.2%	4.6%	4.6%	5.5%	4.6%	0.6%
average rate of interest on bank advances to agriculture	8.5%	6.6%	6.6%	7.5%	6.6%	. .
Interest charges (all lending to the farm business) on:						
bank advances	447	377	384	449	425	. .
AMC and SASC loans (a)	111	77	72	85	90	. .
instalment credit	56	57	54	73	70	. .
leased assets	11	5	5	7	7	. .
other credit (b)	45	59	64	77	62	. .
less interest earned on money held on short-term deposit	49	42	43	57	61	. .
Total	624	533	536	634	592	444

(a) Agricultural Mortgage Company (AMC) and Scottish Agricultural Securities Corporation (SASC).
(b) Interest paid on other institutional credit and that from private sources.

Changes in volume of capital assets (table 9.7)

23 The volume of gross fixed capital formation fell by 9.8 per cent with both livestock and non-livestock assets showing falls in volumes of 11 per cent and 9.2 per cent respectively. The volume of consumption of fixed capital also fell in 2009, by 4.3 per cent. Consumption of fixed capital in livestock fell by 14 per cent in 2009 while consumption of fixed capital in non-livestock assets rose by 1.4 per cent.

Table 9.7 Changes in volume of capital assets; United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084 email: graham.brown@defra.gsi.gov.uk

Indices 2000 = 100 Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Total volume of gross fixed capital formation						
Gross fixed capital formation:	107.2	123.0	129.5	143.7	153.9	138.8
non livestock:	106.2	139.9	147.9	166.9	178.0	161.6
buildings and works	116.6	174.2	185.4	177.9	201.7	178.1
plant and machinery	103.0	123.3	133.4	169.7	174.7	161.8
vehicles	97.5	128.6	120.1	128.9	135.7	120.9
livestock	110.8	90.3	94.1	99.7	107.9	96.2
Total volume of capital consumption						
Consumption of fixed capital	101.3	91.7	88.6	87.3	92.7	88.7
non livestock:	102.8	93.3	92.5	91.0	95.0	96.3
buildings and works	103.7	94.9	96.7	93.5	102.3	101.3
plant and machinery	102.6	90.9	88.7	88.3	89.8	91.7
vehicles	100.6	100.3	98.5	97.5	98.2	103.9
livestock	95.7	85.0	77.2	76.2	83.8	72.5

Chapter 10 Productivity

Summary

In 2009, compared to 2008:

- total factor productivity fell by 3.3 per cent;
- the volume of final output at market prices fell by 2.1 per cent;
- the volume of all inputs including entrepreneurial labour, rose by 1.2 per cent;
- the total labour force expressed in annual work units (or full-time person equivalent) rose by 1.8 per cent;
- labour productivity as measured by net value added at market prices per annual work unit fell by 12 per cent.

Over the longer term:

- since 1973, total factor productivity for agriculture has grown by 51 per cent, the volume of final output at market prices has increased by 23 per cent and the volume of all inputs has fallen by 19 per cent.

Introduction

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 Productivity measures are based on the ratio of the volume of outputs and the volume of inputs. However, 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, particularly in agriculture, is often shaped by factors outside farmers' control, such as climate, topography and location.

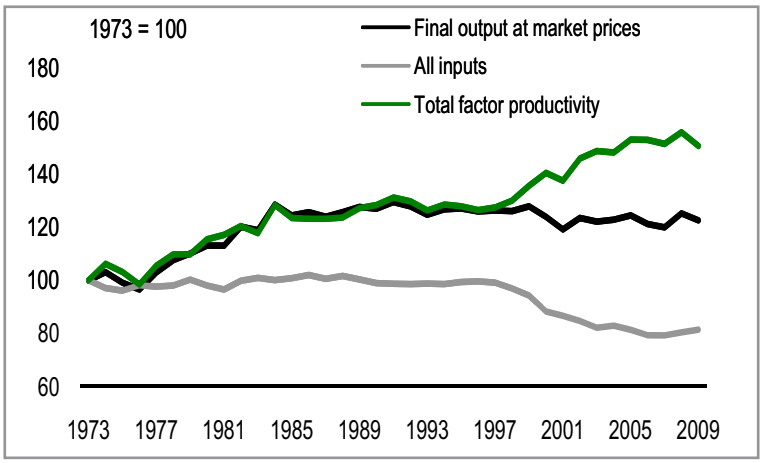
3 The headline measure, total factor productivity, shows the volume of output leaving the industry per unit of all inputs including fixed capital and labour. It encompasses all businesses engaged in farming activities, including specialist contractors. Labour productivity measures the volume of net value added per unit of all labour (paid and entrepreneurial) and is a key component of total factor productivity.

4 Volume indices for outputs refer to production at market prices, i.e. excluding subsidies.

Click here to obtain further data source information for this chapter

Productivity (chart 10.1, table 10.1)

Chart 10.1 Productivity; United Kingdom



5 Total factor productivity fell by 3.3 per cent in 2009 as the volume of final output (gross output at market prices less transactions in the industry) fell by 2.1 per cent and the volume of all inputs (including fixed capital, paid and entrepreneurial labour) rose by 1.2 per cent. Over the longer term, since 1973, total factor productivity of the agriculture industry in the United Kingdom has increased by 51 per cent. The volume of final output has increased by 23 per cent while the volume of all inputs has fallen by 19 per cent.

6 Labour productivity in 2009, as measured by net value added per annual work unit, fell by 12 per cent but was still almost five times its value in 1973.

Table 10.1 Productivity; United Kingdom

Enquiries: Christine Holleran on +44 (0)1904 455080 email: christine.holleran@defra.gsi.gov.uk

Volume indices 2000 = 100 Calendar Years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Final output at market prices (gross output less transactions within the industry)	101.6	100.4	97.8	96.8	101.1	98.9
All inputs (including fixed capital, paid and entrepreneurial labour)	105.6	92.2	89.8	89.8	91.1	92.2
Net value added at market prices per AWU of all labour (a)	85.1	150.7	154.5	145.0	162.9	143.8
Total factor productivity (b)	96.4	108.9	108.9	107.8	110.9	107.2

(a) An annual work unit (AWU) represents the equivalent of an average full-time person engaged in agriculture.
(b) Final output per unit of all inputs (including fixed capital and labour).

Farm level efficiency and international comparisons.

7 A Defra research project is updating comparisons of efficiency across farm types and geographies (including selected EU Member States) and identifying the characteristics of farms that are found to be the most efficient. Results will be published along with previous research:

https://statistics.defra.gov.uk/esg/reports/productivity research/default.asp.

Volume indices (table 10.2)

8 In 2009, the volume of output of:

- cereals fell by 8.6 per cent due mainly to a significant fall in the volume of wheat (-15 per cent) that was only partly offset by a 10 per cent increase in the volume of barley;
- industrial crops rose by 0.9 per cent with a 5.8 per cent fall in oilseed rape being offset by an increase of 90 per cent in the volume of other oilseeds and a rise of 9.0 per cent for sugar beet;
- forage plants rose by 30 per cent;
- vegetables and horticultural products fell by 1.8 per cent with an increase of 0.9 per cent in output of fresh vegetables being offset by a 5.2 per cent fall in the output of plants and flowers;
- potatoes rose by 1.1 per cent;
- fruit rose by 5.7 per cent;
- livestock production fell by 3.3 per cent;
- livestock products fell by 0.7 per cent; eggs rose by 0.5 per cent while milk fell by 1.0 per cent;
- other agricultural activities, almost entirely agricultural services, rose by 4.1 per cent;
- inseparable non-agricultural activities fell by 0.4 per cent.

Table 10.2 Output and input volume indices; United Kingdom

Enquiries: Christine Holleran on +44 (0)1904 455080 email:christine.holleran@defra.gsi.gov.uk

Indices 2000 = 100 Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Outputs at market prices						
1 Output of cereals	96.0	89.5	88.6	81.5	102.6	93.7
wheat	93.8	89.7	88.7	79.6	103.0	87.0
rye	103.0	86.4	86.4	86.4	86.4	86.4
barley	102.0	87.5	83.7	81.5	97.2	107.2
oats and summer cereal mixtures	92.0	83.1	114.4	111.7	122.7	118.4
other cereals	78.5	104.2	104.1	87.2	99.5	154.7
2 Output of industrial crops	110.4	103.4	96.2	87.1	103.3	104.2
oil seeds	137.6	167.2	161.5	178.9	183.8	176.3
oilseed rape	129.2	165.5	163.1	183.8	188.0	177.1
other oil seeds	381.3	195.9	116.5	46.0	69.4	131.7
sugar beet	108.9	95.7	81.5	74.2	84.2	91.7
other industrial crops	99.5	75.1	72.4	45.8	76.1	79.2
fibre plants	126.0	31.7	32.5	16.1	26.8	6.7
hops	114.8	61.9	51.1	51.1	51.1	51.1
others (a)	98.8	75.7	73.3	45.9	77.0	80.4
3 Output of forage plants	96.6	113.4	100.8	71.8	87.2	113.6
4 Output of vegetables and horticultural products	100.9	95.4	89.7	89.4	91.5	89.8
fresh vegetables	103.9	91.9	89.8	86.5	89.0	89.8
plants and flowers	97.2	100.4	90.0	93.8	95.3	90.4
5 Output of potatoes (including seeds)	107.4	98.5	93.3	89.4	95.5	96.5
6 Output of fruit	104.0	148.5	149.7	176.5	182.8	193.2
7 Output of other crop products including seeds	97.7	123.6	111.5	100.7	106.5	92.9
Total crop output	101.3	98.3	94.1	90.4	102.9	100.0
8 Output of livestock	104.5	97.7	96.1	97.2	97.9	94.7
primarily for meat	103.8	99.3	96.9	97.2	96.5	94.9
cattle	101.4	118.9	114.0	116.7	114.7	113.8
pigs	115.1	77.0	76.9	80.9	80.0	81.0
sheep	102.8	89.9	89.7	89.3	86.8	83.3

continued

Table 10.2 continued

Indices 2000 = 100

	Average of 1998-2000	2005	2006	2007	2008	2009
poultry	100.5	99.1	95.9	91.6	93.4	90.3
other animals	100.2	99.6	99.0	99.3	99.1	99.1
gross fixed capital formation	110.8	90.3	94.1	99.7	107.9	96.2
cattle	108.2	97.6	98.6	101.1	120.4	97.6
pigs	126.9	79.5	96.9	88.6	99.7	99.3
sheep	147.9	116.3	138.4	153.3	106.7	113.6
poultry	99.7	69.6	69.4	79.1	86.3	100.3
9 Output of livestock products	101.2	101.8	100.6	98.3	96.9	96.2
milk	101.1	99.6	98.7	96.8	94.6	93.7
eggs	101.1	115.2	111.3	108.6	115.5	116.1
raw wool	105.6	87.9	79.5	73.4	70.6	67.6
other animal products	106.2	173.7	173.9	137.8	112.9	119.4
Total livestock output	103.1	99.4	97.9	97.7	97.6	95.3
10 Other agricultural activities	108.9	96.2	92.0	98.4	112.7	117.3
agricultural services	101.7	103.3	100.0	107.0	122.6	127.6
leasing out quota	192.6	15.9	1.6	0.7	0.7	0.3
11 Inseparable non-agricultural activities	93.8	116.1	118.7	119.4	119.1	118.7
12 Output (at market prices)	102.4	99.5	97.1	95.9	101.2	98.9
of which:						
transactions within the agricultural industry						
feed wheat	139.8	215.6	194.4	168.8	180.3	195.3
feed barley	103.3	99.8	97.6	86.1	80.5	84.3
feed oats	100.7	97.1	110.9	111.2	106.2	107.6
seed potatoes	127.2	131.2	138.2	53.1	76.5	75.1
straw	99.0	71.2	68.0	39.8	70.1	73.2
contract work	101.7	103.3	100.0	107.0	122.6	127.6
leasing of quota	192.6	15.9	1.6	0.7	0.7	0.3
total capital formation in livestock	110.8	89.6	93.4	99.0	107.1	95.4
13 Total subsidies (less taxes) on product	. .	. .	. .	. .	. .	. .
14 Gross output at basic prices	102.7	100.1	97.6	96.4	101.7	99.5
Intermediate consumption						
15 Seeds	110.0	92.6	100.0	112.7	108.0	106.8
16 Energy	108.7	81.9	78.1	80.4	77.3	80.2
electricity	107.3	81.7	75.9	71.5	77.8	77.2
fuels	109.5	81.9	79.0	84.6	77.2	81.7
17 Fertilisers	112.1	71.4	67.6	63.7	62.0	60.1
18 Pesticides	101.9	92.3	86.4	93.8	111.1	109.2
19 Veterinary expenses	105.2	105.6	100.2	105.3	123.4	124.5
20 Animal feed	101.7	105.6	105.4	103.8	105.4	105.3
compounds	104.9	99.5	104.4	107.6	106.9	105.0
straights	93.2	111.5	103.3	96.3	103.1	104.5
feed purchased from other farms	111.0	125.7	120.5	106.5	104.6	110.8
21 Total maintenance (b)	107.9	86.1	83.4	86.0	86.4	92.0
materials	107.2	78.7	75.2	77.7	77.6	81.6
buildings	109.4	103.4	102.9	105.6	107.0	116.9
22 Agricultural services	101.7	103.3	100.0	107.0	122.6	127.6
23 Other goods and services (b) (c)	109.5	99.0	94.9	92.7	96.1	98.3
24 Total intermediate consumption	106.2	95.0	92.7	93.5	96.1	97.3
25 Gross value added at market prices	95.6	108.4	105.9	100.7	111.2	102.7
26 Gross value added at basic prices	98.4	108.2	105.6	100.4	110.7	102.3
27 Total consumption of Fixed Capital	101.3	91.7	88.6	87.3	92.7	88.7
equipment	102.3	92.4	90.3	89.8	91.2	93.6
buildings (b)	103.7	94.9	96.7	93.5	102.3	101.3
livestock	95.7	85.0	77.2	76.2	83.8	72.5
cattle	91.5	92.2	79.1	75.1	84.0	66.6
pigs	115.7	68.3	66.5	69.3	75.3	67.3
sheep	93.4	86.2	86.7	85.1	88.6	83.3
poultry	105.1	67.6	67.4	76.9	83.9	96.7
28 Net value added at market prices	89.6	132.9	131.5	120.7	137.4	123.5
29 Net value added at basic prices	96.9	122.3	120.5	110.7	125.6	113.2

(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.

9 The volume of consumption of:

- seeds fell by 1.1 per cent;
- power and fuel, mainly electricity, used primarily for stationary activities, fell by 0.8 per cent while machinery fuel rose by 5.9 per cent;
- fertilisers fell by 3.0 per cent;
- pesticides fell by 1.7 per cent;
- veterinary expenses rose by 0.8 per cent;
- animal feeds fell slightly by 0.1 per cent, mainly due to a fall of 1.8 per cent in compound feeds;
- maintenance rose by 6.6 per cent;
- agricultural services rose by 4.1 per cent.

Labour (table 10.3)

10 The total cost of paid labour rose by 4.2 per cent to £2.6 billion in 2009 as the average wage and the volume of paid labour both increased. The total labour force rose by 1.8 per cent; entrepreneurial labour rose by 2.1 per cent while paid labour rose by 1.1 per cent. The total labour force has fallen by half since 1973 reflecting the outflow of labour from the industry. Since 1973, paid labour has fallen by 64 per cent while entrepreneurial labour has fallen by 38 per cent.

Table 10.3 Costs and volumes of labour engaged in agricultural work (a); United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084 email: graham.brown@defra.gsi.gov.uk

					Calendar Years	
	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Paid labour costs (£ million) (b)	1 968	2 218	2 271	2 363	2 500	2 604
Annual work unit (thousand) (c)						
Entrepreneurial labour	228	201	196	190	190	194
Paid labour	129	97	91	91	94	95
Labour force	357	297	287	281	285	290

(a) This table shows the cost and volume of paid labour relating to agricultural work only and excludes time spent on the construction of farm buildings

(b) Includes payments in kind to workers and employer and employee National Insurance contributions, redundancy payments, Workers Pension Scheme (up to 1990) and the cost of trainees.

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

Chapter 11 Public Payments

2009

Summary

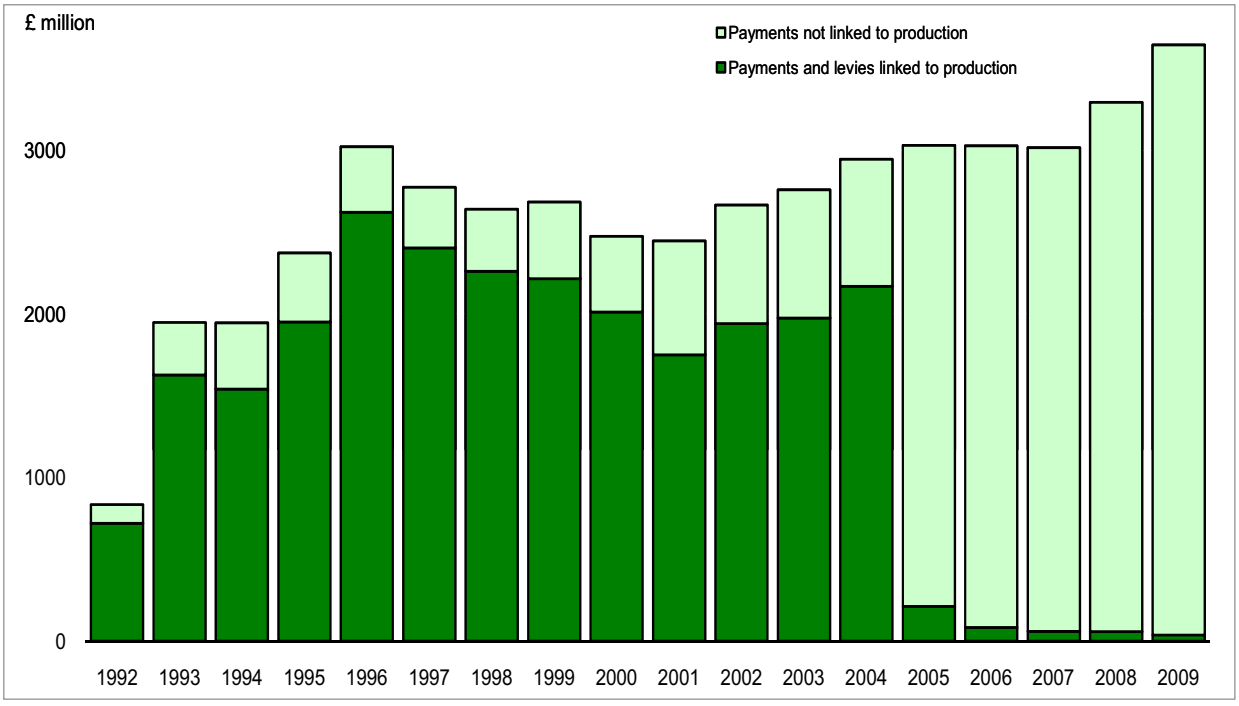
In 2009:

- direct payments made to farmers totalled £3.64 billion, an 11 per cent increase on 2008;
- payments not linked to production, including the Single Payment Scheme, are expected to rise by 12 per cent to £3.61 billion;
- payments linked to production totalled £37 million, a 36 per cent decrease from 2008;
- payments under the Less Favoured Areas Scheme totalled £138 million, which was similar to 2008;
- payments under the agri-environment schemes totalled £497 million, a 1.3 per cent increase on 2008.

Direct payments made to farmers (chart 11.1, table 11.1, table 11.2)

1 Direct payments made to farmers less levies, as recorded in the production and income account (see table 9.1) totalled £3.64 billion in 2009. This was made up of £37 million of payments linked to production and £3.61 billion of payments not linked to production but which farmers may receive by virtue of engaging in agriculture, such as the Single Payment Scheme, less favoured area support schemes, agri-environment schemes and animal disease compensation.

Chart 11.1 Direct payments made to farmers; United Kingdom



Click here to obtain further data source information for this chapter

2 Payments linked to production decreased by 36 per cent to £37 million in 2009. This was largely due to the ending of the Older Cattle Disposal Scheme on 31 December 2008. Other schemes linked to production include Area Payments for Nuts, Aid for Energy Crops and the Protein Crop Premium.

3 Following the CAP Health Check in November 2008, the decoupling of nuts and protein support is being implemented regionally, with Wales, Scotland and Northern Ireland opting to decouple in 2010, whilst England will decouple in 2012. As a result of the Health Check, the 2009 scheme year was the last year of the Aid for Energy Crops.

4 Decoupled payments, including the Single Payment Scheme and other payments made to farmers by virtue of being engaged in agricultural activities, increased by 12 per cent to £3.61 billion in 2009.

Table 11.1 Direct payments to farmers and levies recorded in the production and income account; United Kingdom

Shows payments after deduction for modulation where appropriate.

Enquiries: Alan Horsfall on +44 (0)1904 455083 email: alan.horsfall@defra.gsi.gov.uk

£ million — Calendar years

	Average of 1998-2000	2005	2006	2007	2008	2009 (provisional)
Payments and levies linked to the production of agricultural products						
Crop subsidies						
Arable area payments	1 013	. .	. .	. .	. .	. .
Other crop subsidies (a)	14	16	17	13	8	13
Livestock subsidies						
Beef special premium	192	. .	. .	. .	. .	. .
Suckler cow premium	182	. .	. .	. .	. .	. .
Slaughter premium	. .	. .	. .	. .	. .	. .
Over Thirty Month Scheme/Older Cattle Disposal Scheme	255	178	50	28	29	-
Beef national envelope	. .	. .	. .	. .	. .	. .
Scottish beef calf scheme	. .	19	18	19	21	24
Sheep annual premium	254	. .	. .	. .	. .	. .
Sheep national envelope	. .	. .	. .	. .	. .	. .
Other livestock subsidies	245	. .	. .	. .	. .	. .
Dairy subsidies (b)	. .	. .	. .	. .	. .	. .
less Levies:						
Milk superlevy	- 18	- 1	. .	. .	. .	. .
Total coupled payments	**2 162**	**212**	**85**	**59**	**57**	**37**
Payments not linked to production						
Single Payments Scheme	. .	2 365	2 367	2 311	2 580	2 950
Agri-environment schemes	125	288	376	460	490	497
Less Favoured Areas support schemes (c)	. .	146	183	133	140	138
Animal disease compensation (d)	13	20	17	21	26	22
Extensification schemes	110	. .	. .	. .	. .	. .
Rural World Premium	57	. .	. .	. .	. .	. .
Arable area payments setaside	128	. .	. .	. .	. .	. .
Other (e)	3	. .	. .	31	-	-
Total decoupled and other payments	**437**	**2 818**	**2 943**	**2 956**	**3 236**	**3 607**
Total payments less levies	**2 599**	**3 030**	**3 028**	**3 015**	**3 293**	**3 644**
Capital transfers and other payments not included in the production and income account	38	87	74	74	158	62

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

(b) Dairy premium and additional dairy premium.

(c) Tir Mynydd in Wales, Less Favoured Area Compensatory Allowance Scheme in Northern Ireland, Less Favoured Areas Support Scheme in Scotland and Hill Farm Allowance in England.

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

(e) Deseasonalisation premium (1996-98); Additional support for hillfarmers in England, Welsh light lambs scheme, Scottish ewe scheme and Scottish sheep welfare scheme (2007).

5 Payments made through the Single Payment Schemes were estimated to total £2.95 billion in 2009 after deductions for modulation. This was largely due to a 15 per cent rise in the value of the euro against sterling compared to 2008. The production and income account shown in Chapter 9 is prepared on an accruals basis and payments through the Single Payment Scheme are therefore recorded in the year in which the claim was made rather than in the year when payments are made.

6 Payments made through Agri-Environment Schemes are estimated to total £497 million, a similar level to 2008.

7 Payments to farmers under the less favoured areas support schemes (Hill Farm Allowance in England, Tir Mynydd in Wales, Less Favoured Areas Support Scheme in Scotland and Less Favoured Areas Compensatory Allowance in Northern Ireland) are expected to stay at similar levels to 2008.

Table 11.2 Payments to farmers by country in 2008

Shows payments after deduction for modulation where appropriate

Enquiries: Alan Horsfall on +44 (0)1904 455083 email: alan.horsfall@defra.gsi.gov.uk

£ million Calendar year

	England	Wales	Scotland	Northern Ireland	United Kingdom
Payments and levies linked to the production of agricultural products					
Crop subsidies					
Protein Crop Premium; Area Aid for Nuts; Energy Crops Aid.	8	-	-	-	8
Livestock subsidies					
Over Thirty Month Scheme / Older Cattle Disposal Scheme	15	3	6	5	29
Scottish Beef Calf Scheme	. .	. .	21	. .	21
Total coupled payments	**23**	**3**	**27**	**5**	**57**
Payments not linked to production					
Single Payment Scheme	1 630	251	443	255	2 580
Less Favoured Areas support schemes (a)	27	30	59	22	140
Agri-environment schemes					
Environmental Stewardship / Countryside Stewardship Schemes	307	. .	. .	. .	307
Countryside Premium / Rural Stewardship / Land Management Contracts Schemes	. .	. .	41	. .	41
Tir Cymen / Tir Gofal / Tir Cynnal	. .	28	. .	. .	28
Countryside Management Scheme	. .	. .	. .	19	19
Organic Aid & Organic Farming Schemes	1	6	5	-	12
Environmentally Sensitive Areas Schemes	53	2	6	8	69
Sites and Areas of Special Scientific Interest	9	2	3	-	14
Animal disease compensation	9	7	-	9	26
Other	-	-	-	-	-
Total decoupled and other payments	**2 036**	**326**	**560**	**313**	**3 236**
Total subsidies less levies and taxes	**2 059**	**330**	**587**	**317**	**3 293**

(a) Tir Mynydd in Wales, Less Favoured Area Compensatory Allowance Scheme in Northern Ireland, Less Favoured Areas Support Scheme in Scotland and Hill Farm Allowance in England.

Expenditure through trader based schemes (table 11.3)

8 Actual expenditure, as recorded in the Rural Payments Agency (RPA) resource account for the year ended 31 March 2009, shows that internal market trader based schemes fell by 73 per cent to £23.5 million compared to 2008. This was predominantly due to a large reduction in support for sugar and isoglucose.

Table 11.3 Expenditure through trader based schemes; United Kingdom

Enquiries: Alan Horsfall on +44 (0)1904 455083 email: alan.horsfall@defra.gsi.gov.uk

£ million	Financial years	
	2007/08	2008/09 (provisional)
Trader based - Internal market		
Horticulture	17.5	19.7
Milk & Milk products	2.1	0.5
Protein & textile plants	1.1	1.1
School milk	0.5	0.8
Sugar and Isoglucose	63.9	0.0
Other	1.8	1.4
Total	**87.0**	**23.5**
Trader based - External market		
Milk & Milk products	1.3	0.3
Processed Goods	6.3	2.8
Sugar and Isoglucose	-39.0	19.0
Other	0.5	1.0
Total	**-30.9**	**23.1**

Source: RPA annual report and accounts 2008 - 2009, pp 62-63

Rural Development Programmes 2007 - 2013 (tables 11.4 to 11.5)

9 There are four rural development programmes in the United Kingdom, covering England, Wales, Scotland and Northern Ireland, for the period 2007 – 2013.

10 Table 11.4 shows the overall budgets allocated to each of these programmes and the element that is funded by the European Agricultural Fund for Rural Development (EAFRD).

11 Table 11.5 shows the budget allocation by axis.

Table 11.4 Overall budget and share of EU funding

	Total	Of which EAFRD
Rural Development Programme for England 2007-2013	€ 5 187 million	€ 3 217 million
Rural Development Programme for Wales 2007-2013	€ 991 million	€ 377 million
Rural Development Programme for Scotland 2007-2013	€ 2 133 million	€ 676 million
Rural Development Programme for Northern Ireland 2007-2013	€ 647 million	€ 328 million

Source: European Commission

Table 11.5 Budget allocation by axis

		England	Wales	Scotland	Northern Ireland
Axis 1:	Improving the competitiveness of the agricultural and forestry sector	€ 448 m	€ 122 m	€ 306 m	€ 44 m
Axis 2:	Improving the environment and the countryside	€ 4 183 m	€ 722 m	€ 1 469 m	€ 205 m
Axis 3:	The quality of life in rural areas and diversification of the rural economy	€ 334 m	€ 94 m	€ 248 m	€ 79 m (a)
Axis 4:	Leader	€ 220 m	€ 47 m	€ 108 m	€ 79 m (a)

Source: European Commission

(a) All of Axis 3 funding will be delivered through the Leader approach in Northern Ireland.

12 Further information on the rural development programmes may be found at:

http://www.defra.gov.uk/rural/rdpe/

http://www.scotland.gov.uk/Topics/farmingrural/SRDP

http://wales.gov.uk/topics/environmentcountryside/farmingandcountryside/ruraldevelopment/?lang=en

http://www.dardni.gov.uk/index/rural-development/nirdp2007-2013.htm

Payments made through key measures of the Rural Development Programmes 2007 - 2013 (table 11.6)

13 Table 11.6 shows details of payments made through two key measures of the rural development programme; Less Favoured Areas and Agri-Environment, adopted by each of the countries of the United Kingdom.

14 Total payments made through these measures of the rural development programmes in 2008 rose by 6.9 per cent compared to 2007, to £612 million, with £140 million in payments on Less Favoured Areas schemes and £472 million on Agri-Environment schemes.

Table 11.6 Payments made through key measures of the rural development programmes

Enquiries: Alan Horsfall on +44 (0)1904 455083 email:alan.horsfall@defra.gsi.gov.uk

£ Million Calendar Years

		2004	2005	2006	2007	2008
Less Favoured Areas						
England:	Hill Farm Allowance	34.9	27.3	27.2	27.2	27.2
Wales:	Tir Mynydd	35.7	35.8	34.8	23.7	29.7
Scotland:	Less Favoured Areas Support Scheme	60.7	61.0	100.3	61.0	61.0
Northern Ireland:	Less Favoured Areas Compensatory Allowance	22.1	21.8	21.0	21.0	22.0
Agri-Environment						
England:	Organic Farming Scheme	6.5	4.6	2.6	2.3	0.5
	Countryside Stewardship Scheme	103.3	117.4	106.5	94.2	84.9
	Environmentally Sensitive Areas Scheme	64.5	69.8	63.8	56.4	53.3
	Environmental Stewardship Scheme	. .	. .	84.3	170.3	222.0
Wales:	Organic Farming Scheme	1.9	2.3	2.0	2.5	6.0
	Tir Gofal	16.9	19.1	18.3	25.2	22.0
	Environmentally Sensitive Areas Scheme	7.0	5.3	5.4	3.7	1.9
	Tir Cynnal	. .	. .	6.2	5.7	6.3
Scotland:	Organic Aid Scheme	3.5	2.5	2.5	5.1	5.3
	Rural Stewardship Scheme	11.3	12.3	20.8	24.9	18.0
	Environmentally Sensitive Areas Scheme	9.7	8.2	6.3	5.1	5.9
	Land Management Contract Scheme	. .	14.5	22.0	20.0	20.0
Northern Ireland:	Organic Farming Scheme	0.1	0.3	0.4	0.6	0.3
	Countryside Management Scheme	5.6	5.8	10.2	16.9	18.5
	New Environmentally Sensitive Areas Scheme (a)	5.7	4.9	4.8	7.4	7.7

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

Take-up of agri-environment schemes (tables 11.7 to 11.8)

14 Agri-environment schemes require farmers to demonstrate good environmental practice. Tables 11.7 and 11.8 show the take-up of agri-environment schemes by area of land under management agreements and by the number of agreement holders. Due to the differing requirements of schemes, care should be taken when making comparisons.

Table 11.7 Agri-environment schemes; area under agreements

Enquiries: Alan Horsfall on +44 (0)1904 455083 email: alan.horsfall@defra.gsi.gov.uk

Thousand Hectares as at 31 December

	2004	2005	2006	2007	2008	2009
England						
Organic Farming Scheme	143	141	68	25	13	1
Countryside Stewardship Scheme	570	531	514	474	442	372
Environmentally Sensitive Areas Scheme	653	616	582	546	503	462
Environmental Stewardship Scheme						
Entry Level Scheme (a)	31	1 375	3 921	4 725	5 024	5 609
Higher Level Scheme	. .	. .	83	175	291	453
Wales						
Organic Farming / Maintenance Schemes	55	68	81	76	121	126
Tir Cymen/Tir Gofal	115	406	429	439	329	377
Environmentally Sensitive Areas Scheme	171	127	77	78	65	26
Tir Cynnal	. .	223	223	273	293	281
Scotland						
Organic Aid Scheme	269	167	127	124	117	115
Countryside Premium Scheme/Rural Stewardship Scheme	250	363	461	477	314	239
Environmentally Sensitive Areas Scheme	815	688	530	351	268	174
Land Management Contracts / Land Managers Options	. .	391	439	437	488	492
Northern Ireland						
Organic Farming Scheme	5	6	10	6	6	7
Countryside Management Scheme	116	118	318	317	315	352
New Environmentally Sensitive Areas Scheme (b)	126	131	141	131	122	109

(a) Includes Entry Level Pilot Scheme and Organic Entry Level Scheme.

(b) 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.

Table 11.8 Agri-environment schemes; number of agreement holders

Enquiries: Alan Horsfall on +44 (0)1904 455083 email: alan.horsfall@defra.gsi.gov.uk

Rounded to nearest hundred as at 31 December

	2004	2005	2006	2007	2008	2009
England						
Organic Farming Scheme	1 800	1 700	800	300	100	-
Countryside Stewardship Scheme	17 800	16 700	15 600	13 400	12 000	10 600
Environmentally Sensitive Areas Scheme	13 000	11 500	9 600	8 600	7 800	7 100
Environmental Stewardship Scheme:						
Entry Level Scheme (a)	300	12 500	28 500	34 300	37 300	42 500
Higher Level Scheme	. .	. .	1 200	2 000	2 900	4 300
Wales						
Organic Farming Scheme	600	700	800	800	900	1 000
Tir Cymen/Tir Gofal	3 000	3 200	3 300	3 200	2 900	3 200
Environmentally Sensitive Areas Scheme	2 300	1 700	1 000	1 000	800	200
Tir Cynnal	. .	3 400	3 400	4 200	4 400	4 400
Scotland						
Organic Aid Scheme	600	500	400	400	400	400
Countryside Premium Scheme/Rural Stewardship Scheme	2 900	4 600	6 200	6 400	5 400	3 900
Environmentally Sensitive Areas Scheme	2 800	2 400	2 000	1 600	1 200	900
Land Management Contracts / Land Managers Options	. .	4 800	5 800	5 800	6 700	6 900
Northern Ireland						
Organic Farming Scheme	100	100	100	100	100	100
Countryside Management Scheme	2 900	5 200	8 900	8 800	8 700	9 400
New Environmentally Sensitive Areas Scheme (b)	4 400	3 500	4 300	3 900	3 400	3 100

(a) Includes Entry Level Pilot Scheme and Organic Entry Level Scheme.

(b) 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.

Chapter 12 Organic Farming

2009

Summary

In 2008:

- the total area of land that was organically managed (either fully organic or in-conversion) increased by 9.0 per cent to 743 thousand hectares compared to 682 thousand hectares in 2007;
- permanent and temporary pasture accounted for 84 per cent of organically managed land in the United Kingdom;
- half of organically managed land in the United Kingdom was in England, covering 375 thousand hectares;
- sixty-nine per cent of producers and/or processors were located in England;
- the southwest region of England had the highest proportion of both crop and livestock producers in the UK with 29 per cent and 27 per cent respectively;
- there were 320 thousand cattle, 1,178 thousand sheep, 71 thousand pigs, 4,363 thousand poultry and 5 thousand other livestock being reared organically in the United Kingdom.

Introduction

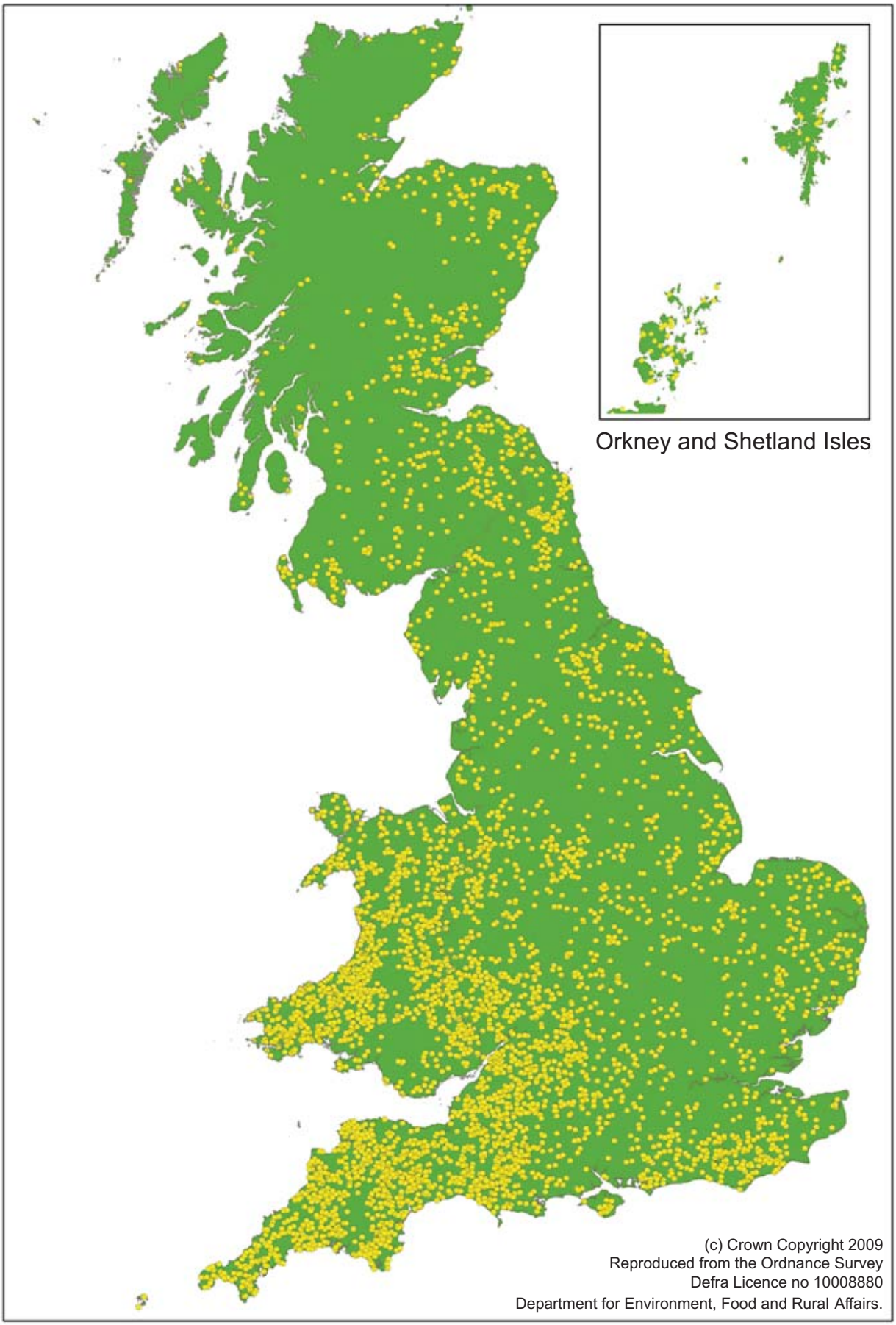
1 Organic farming is a method of farming that requires farmers to operate to a system based on ecological principles and which imposes strict limitations on the inputs that can be used in order to minimise damage to the environment and wildlife. Emphasis is placed on natural methods of production and 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 does not give an exact snapshot of organic farming at any specific time of year so this should be considered when interpreting the results.

3 Since the previous edition of Agriculture in the United Kingdom there has been a review of published organic data and following on from this there has been some adjustment to the way in which yearly data is labelled. As mentioned above, organic data is collected throughout the year and supplied to Defra the following January. The existing method for labelling the yearly data meant that data collected throughout 2008 would be labelled January 2009. It was thought that this method was slightly mis-leading as this could imply that the data provided represents the state of organic production at that given point in time. The revised method means that data collected during 2008 and supplied at the end of January 2009 will now be labelled 2008. All yearly data has been re-labelled accordingly.

Click here to obtain further data source information on this chapter

Map 12.1 Distribution of registered organic producers in Great Britain; 2008

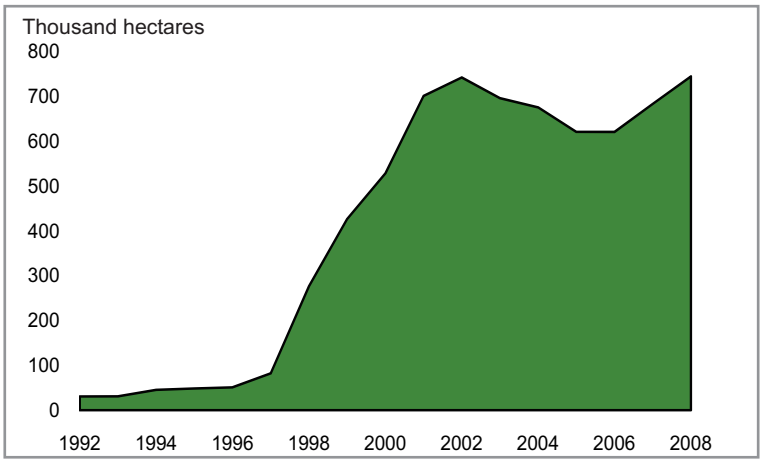


Organic and in-conversion land (map 12.1, table 12.1, chart 12.1)

4 The total area of land that was organically managed, either fully organic or in-conversion, increased by 9.0 per cent to 743 thousand hectares in 2008 compared to 682 thousand hectares in 2007.

5 The area of in-conversion land fell by 5.6 per cent between 2007 and 2008 to 149 thousand hectares while the area of fully organic land rose by 13 per cent to 594 thousand hectares. Of the total organically managed land in the United Kingdom, 80 per cent was fully organic in 2008.

Chart 12.1 Organically managed land; United Kingdom



6 In 2008, permanent and temporary pasture accounted for 84 per cent of organically managed land in the United Kingdom. The remainder was made up of cereals and other crops, vegetables including potatoes, woodland and other uses.

7 Fifty per cent of the United Kingdom's organically managed land is in England covering 375 thousand hectares, 31 per cent is in Scotland, 17 per cent in Wales and 1.7 per cent in Northern Ireland. The South West region has the largest area of organic land (170 thousand hectares) in England.

Table 12.1 Total UK organic land (in-conversion & fully organic)

Enquiries: Sarah Harriss on +44 (0)1904 455407 email: organic-stats@defra.gsi.gov.uk

Thousand hectares

	2004	2005	2006	2007	2008
Land, in-conversion					
North East	4.6	6.6	6.9	4.8	9.8
North West	2.5	3.2	1.8	3.3	3.8
Yorkshire & Humberside	1.3	2.3	3.4	4.1	3.8
East Midlands	1.2	2.4	2.1	3.1	3.7
West Midlands	2.4	3.2	4.0	5.7	8.2
Eastern	2.4	2.6	3.6	5.3	4.8
South West	9.1	22.0	31.6	48.2	46.5
South East (inc. London)	5.4	10.7	13.2	14.6	10.4
England	28.8	53.2	66.5	89.0	91.1
Wales	8.6	12.8	15.4	30.9	49.5
Scotland	13.7	16.7	35.2	34.8	6.2
Northern Ireland	1.6	3.2	4.0	3.2	2.3
United Kingdom	52.7	86.0	121.1	157.9	149.1
Land, fully organic					
North East	25.3	29.3	22.6	25.8	25.6
North West	19.8	18.9	19.4	20.4	21.2
Yorkshire & Humberside	8.6	9.0	9.0	9.6	10.9
East Midlands	13.4	13.2	12.5	13.2	12.2
West Midlands	26.8	27.0	26.3	28.2	29.7
Eastern	10.3	11.8	10.8	12.7	13.2
South West	90.5	94.0	93.4	106.3	123.9
South East (inc. London)	34.9	35.2	35.8	42.5	47.2
England	229.6	238.4	229.9	258.7	284.0
Wales	55.6	58.0	63.5	65.1	75.1
Scotland	331.6	231.2	200.1	193.1	225.1
Northern Ireland	5.0	6.3	5.1	7.3	10.1
United Kingdom	621.8	533.9	498.6	524.3	594.4
Total UK organic land (in-conversion & fully organic)	674.5	619.9	619.8	682.2	743.5

Source: Organic Certifier Bodies collated by Defra Statistics

Land use statistics (table 12.2)

8 Temporary and permanent pasture account for 84 per cent of organically managed land in the United Kingdom. Cereals cover the next greatest land area with 7.7 per cent and then vegetables covering just 2.7 per cent of all organic land.

Table 12.2 Organic and in-conversion land use; United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455407 email: organic-stats@defra.gsi.gov.uk

Thousand hectares

	2004	2005	2006	2007	2008
Land, in-conversion					
cereals	4.1	10.3	11.9	13.2	9.9
other crops	2.7	3.5	3.4	3.5	2.5
fruit & nuts	-	-	-	-	-
vegetables (including potatoes)	1.3	1.3	2.1	2.6	2.0
herbs & ornamentals	-	-	-	-	0.6
temporary pasture	10.4	15.9	22.9	34.2	31.0
set aside	1.3	1.4	1.1	-	-
permanent pasture (a)	27.2	47.5	72.1	93.6	96.0
woodland	0.6	3.5	4.2	5.6	2.7
non cropping	2.9	1.1	2.3	3.3	1.9
other	1.7	1.1	-	-	-
unknown	-	-	0.8	1.1	1.7
Total	52.7	86.0	121.1	157.9	149.1
Land, fully organic					
cereals	35.1	37.4	35.5	38.4	47.3
other crops	10.2	7.3	6.8	7.8	8.7
fruit & nuts	1.5	1.5	1.6	1.6	1.5
vegetables (including potatoes)	12.7	12.4	13.5	14.3	17.7
herbs & ornamentals	-	0.6	0.6	-	4.9
temporary pasture	80.3	82.0	79.8	90.9	98.8
set aside	4.6	2.3	1.3	-	-
permanent pasture (a)	467.8	380.9	350.5	358.4	398.3
woodland	5.2	3.3	4.0	5.9	3.2
non cropping	1.3	2.4	4.0	4.7	4.4
other	2.4	3.2	-	-	1.0
unknown	-	-	0.6	1.4	8.6
Total	621.8	533.9	498.6	524.3	594.4

Source: Organic Certifier Bodies collated by Defra Statistics

(a) Includes rough grazing.

Numbers of organic businesses (tables 12.3 and 12.4)

9 There were 7,896 organic producesr and/or processors in 2008. Sixty-nine per cent of organic producers and/or processors are located in England, 16 per cent in Wales, 11 per cent in Scotland and 3.8 per cent in Northern Ireland. Over half of producers and/or processors in England are located in the southwest and southeast of the country.

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

Enquiries: Sarah Harriss on +44 (0)1904 455407 email: organic-stats@defra.gsi.gov.uk

Number of businesses

	2004	2005	2006	2007	2008
North East	104	129	161	173	179
North West	289	311	332	367	367
Yorkshire & Humberside	271	279	319	356	330
East Midlands	401	416	446	487	449
West Midlands	452	478	520	556	555
Eastern	485	508	556	574	551
South West	1 378	1 532	1 732	1 961	2 002
South East (inc. London)	877	901	939	1042	1041
England	4 257	4 554	5 005	5 516	5 474
Wales	755	800	835	953	1230
Scotland	809	792	911	860	889
Northern Ireland	217	267	292	302	303
United Kingdom	6 038	6 413	7 043	7 631	7 896

Source: Organic Certifier Bodies collated by Defra Statistics

(a) Processers 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 crop / livestock organic producers and processors 2008 (a)

Enquiries: Sarah Harriss on +44 (0)1904 455407 email: organic-stats@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	116	6	73	4
North West	167	10	99	8
Yorkshire & Humberside	139	10	81	7
East Midlands	202	11	126	8
West Midlands	344	12	185	11
Eastern	226	14	80	9
South West	1 376	73	810	64
South East (inc. London)	416	33	186	26
England	2 986	169	1 640	137
Wales	1 033	20	788	12
Scotland	557	13	367	8
Northern Ireland	217	1	192	0
United Kingdom	4 793	203	2 987	157

Source: Organic Certifier Bodies collated by Defra Statisitics

(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.

Livestock statistics (tables 12.5)

10 There were 320 thousand cattle, 1,178 thousand sheep, 71 thousand pigs, 4,363 thousand poultry and 5 thousand other livestock being reared organically in the United Kingdom in 2008.

Table 12.5 Estimates of organic and in-conversion livestock numbers (a); United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455407 email: organic-stats@defra.gsi.gov.uk

Thousand head

	2004	2005	2006	2007	2008
Cattle	174.8	214.3	244.8	250.4	319.6
Sheep	571.6	691.0	747.3	863.1	1 178.3
Pigs	43.7	30.0	32.9	50.4	71.2
Poultry	2 431.6	3 439.5	4 421.3	4 440.7	4 362.9
Goats	0.5	0.5	0.6	0.5	-
Other livestock	1.2	1.5	4.3	3.4	4.4

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.

Chapter 13 Animal Health and Welfare

Summary

- The rate of confirmed incidence of bovine tuberculosis (bTB) in Great Britain during 2008 was higher than in 2007 at 4.7 per cent compared to 4.0 per cent. However, provisional data for January to November 2009 shows the incidence rate to be lower than 2008 levels.
- At the end of 2008, 91 per cent of the cattle herds in Great Britain were considered officially bTB free, this was virtually unchanged on 2007.
- The UK was free of Avian Influenza in 2009.
- The Bluetongue virus situation was static in 2009. Vaccination of animals was ongoing in Great Britain, but there were no new cases and no evidence of the disease circulating.

Introduction

1 The aim of this section is to provide a focus on key, high profile issues and notifiable diseases, and to sign post readers to more detailed information and statistics on a wide range of animal health and welfare issues, across the UK.

2 The Animal Health and Welfare Strategy, published in June 2004, sets an overarching direction for the future of Animal Health and Welfare in Great Britain: (http://www.defra.gov.uk/foodfarm/policy/animalhealth/index.htm). The Great Britain strategy is implemented at a devolved national level, reflecting the individual circumstances in each country. However, all administrations are working towards the Great Britain vision of improved animal health and welfare and the aim of developing a new partnership, in which a lasting and continuous improvement to animal health and welfare can be made.

3 During 2006, the Department of Agriculture and Rural Development in Northern Ireland (DARD) published its Animal Health and Welfare Strategy (http://www.dardni.gov.uk/animal-health-and-welfare-strategy.pdf). This reflects Northern Ireland's relative geographical position within Ireland but is consistent with the principles of the Great Britain strategy.

Animal Health (chart 13.1 and table 13.1)

4 Animal Health and Welfare within Great Britain is comprehensively reported through the Chief Veterinary Officer's (CVO) report published annually at: http://defraweb/corporate/about/who/cvo/report.htm.

5 DARD in Northern Ireland publishes animal health bulletins on a regular basis via the internet at: http://www.dardni.gov.uk/index/dard-statistics.

Notifiable Diseases

6 Bovine Tuberculosis (bTB) continues to be a disease affecting the national herd, predominantly in the South-West and West Midlands in England, and in the south of Wales. Statistics on bTB are based on data from Vetnet (the Animal Health Database) and compiled three months in arrears. At the time of writing annual results for 2009 are not yet available. Table 13.1 shows results for 2008, broken down by region and country, plus total results for 2007. The Defra bTB website can be found at: http://defraweb/foodfarm/farmanimal/diseases/atoz/tb/index.htm.

Click here to obtain further data source information for this chapter

7 During 2008, 56,583 tests were carried out on unrestricted herds in Great Britain, compared with 56,667 tests in 2007. The number of new herd incidents in Great Britain increased from 4,193 in 2007 to 4,986 in 2008 (up 19 per cent). Infection was confirmed in 2,633 of these new incidents (up 15 per cent on the previous year).

8 The confirmed new bTB incidence rate is calculated as "number of confirmed incidents" divided by "number of unrestricted tests". In 2008, this gives a confirmed new incidence rate of 4.7 per cent, which can be interpreted as "for every 100 tests in unrestricted cattle herds, an average of 4.7 new confirmed incidents were detected". This is an increase from 2007 when 4.0 per cent of tests resulted in a new confirmed incident.

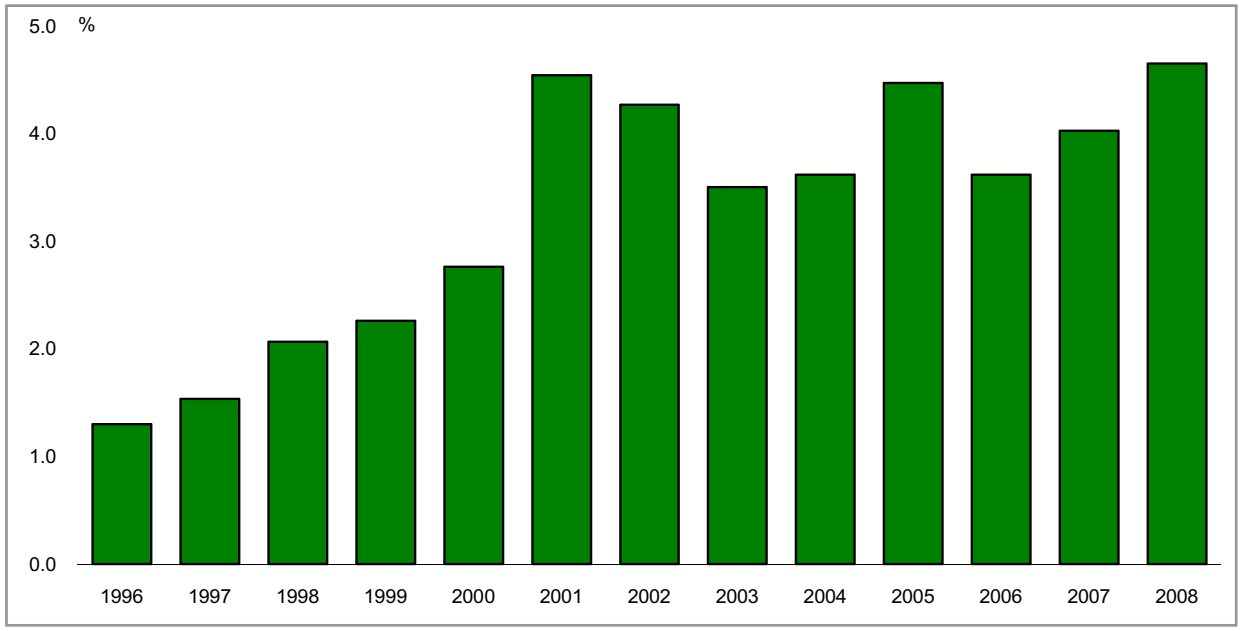
9 With the exception of 2001 and 2002, which were affected by the outbreak of foot and mouth disease, the confirmed incidence rate of bTB in Great Britain has been slowly increasing over the past twenty years. The incidence rate in 2008 at 4.7 per cent, was the highest rate of the last twenty years though still in line with the general trend. However, provisional data for the period January to September 2009 showed the incidence rate to be lower than 2008 levels.

10 A total of 7,928 cattle herds were under restrictions due to a bTB incident at some time during 2008 in Great Britain, compared with 6,588 herds in 2007. This figure includes new herd incidents plus any incidents disclosed in previous years and still unresolved in 2008. At the end of 2008, a total of 7,629 cattle herds were under bTB restrictions. This figure included herds subject to restrictions for reasons other than a bTB incident (e.g. an overdue tuberculin test). At the end of 2008, 91 per cent of the cattle herds in Great Britain were considered officially bTB free, this was virtually unchanged compared to 2007.

11 Scotland has had a low and relatively stable incidence of (bTB) for many years. New incidents have largely arisen as a result of cattle introduced from elsewhere in the United Kingdom and the Republic of Ireland. With no evidence of disease persisting in Scotland in a wildlife reservoir or from chronically infected herds, Scotland was granted Officially Tuberculosis Free status on 15 October 2009. More information on this can be found at:

http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/animal-welfare/Diseases/SpecificDisease/bTB/OTFStatus/ImplementationPlan

Chart 13.1 Confirmed new incidence rate of bTB in Great Britain



Note: 2001 and 2002 data should be treated with caution; testing was focussed on the most 'at-risk' herds during and in the months after FMD, therefore these years contain a bias in the incidence rates.

Table 13.1 Bovine tuberculosis:summary statistics for the testing of animals and herds 2008

Enquiries: Michael Chatten on +44 (0)1904 45 5098 email : michael.j.chatten@defra.gsi.gov.uk

SVS Region/Country	West Region, England	North Region, England	East Region, England	England total	Wales total	Scotland total	Great Britain total 2008	Great Britain total 2007 (a)	Northern Ireland total 2008 (a)	Northern Ireland total 2007
Cattle herds										
1. Total number of cattle herds registered on Vetnet	22 134	23 841	12 089	58 064	13 667	13 854	85 585	86 658	26 780	25 187
2. ...of which were under TB2 restrictions because of a TB incident at some time during the reporting period (b)	5 002	658	303	5 963	1 895	70	7 928	6 588	. .	. .
TB tests carried out (in year to date)										
3. Total number of unrestricted herd tests	22 469	11 370	5 635	39 474	12 202	4 907	56 583	56 667	26 880	27 250
4. Total number of cattle tested	3 303 023	1 006 500	327 771	4 637 294	1 408 492	266 151	6 311 937	5 855 994	1 592 213	1 640 552
TB incidents (started in year to date)										
5. Total new herd TB incidents	3 053	472	221	3 746	1 193	47	4 986	4 193	1 274	1 264
6. ...of which are considered confirmed new TB incidents (i.e. CNIs)	1 774	241	65	2 080	541	12	2 633	2 283	859	881
7. ...of which are considered unconfirmed TB incidents	1 141	215	138	1 494	562	31	2 087	1 895	415	383
8. ...of which are still unclassified TB incidents (pending culture results)	138	16	18	172	90	4	266	15	-	-
Animals slaughtered (In year to date, excluding any reactors awaiting slaughter on the date of the data download)										
9. As Reactors (inc. IRx3)	21 371	3 015	1 652	26 038	10 542	432	37 012	26 069	8 390	7 299
10. As Inconclusive Reactors (IRs)	389	24	74	487	230	22	739	577	. .	. .
11. As Direct Contacts (DCs)	446	406	78	930	1 271	21	2 222	1 558	611	589
12. Slaughterhouse cases reported to the SVS (of which confirmed)	783 (451)	168 (109)	59 (36)	1 010 (596)	77 (26)	26 (10)	1 113 (632)	842 (510)	1 301 (638)	1 133 (699)
Herds under TB2 restrictions at the end of the month (due to a TB incident, overdue TB test, etc)										
13. Herds under movement restriction on 31 December.	4 064	864	674	5 602	1 848	179	7 629	7 880	. .	. .

(a) Figures for Great Britain and Northern Ireland should not be added to arrive at totals for the United Kingdom because of differences in methodology.

(b) The term TB2 refers to a TB2 restriction notice. The notice sets out which premises are affected by movement restrictions due to a bTB outbreak.

12 Constant disease surveillance work is carried out by all United Kingdom Government veterinary departments, monitoring not only known threats but also new and emerging diseases.

13 The last outbreak of avian influenza (AI) occurred in Oxfordshire in June 2008. In November 2008 the UK became officially free from AI, according to the rules laid down by the World Organisation for Animal Health (OIE). The latest news and information on AI can be found at:

http://defraweb/foodfarm/farmanimal/diseases/atoz/ai/index.htm.

14 The first case of Bluetongue Virus (BTV) recorded in the UK was detected in September 2007. From May 2008 there has been voluntary vaccination of animals in England and Wales, and from November 2008 compulsory vaccination of animals in Scotland, though the latter was suspended in October 2009. Consequently the whole of Great Britain has been declared a protection zone for the BTV8 strain. The disease situation in 2009 was static, there were no new cases and no evidence of the disease circulating. Northern Ireland has remained free of BTV. BTV is a disease of ruminants, including sheep, cattle, deer, camelids and goats. It does not affect humans. The latest news and information on BTV can be found at:

http://defraweb/foodfarm/farmanimal/diseases/atoz/bluetongue/factsheet.htm

15 There were two cases of contagious equine metritis (CEM) recorded in 2009. CEM is a venereally transmitted bacterial disease of horses. The first case in July was in a competition stallion recently imported from mainland Europe. There was no onward transmission of the disease from this animal, which was successfully treated and re-exported. The second case in October was found in a mare also imported two years previously. The two cases were not thought to be connected. Further information on CEM can be found at:

http://defraweb/foodfarm/farmanimal/diseases/atoz/cem/index.htm.

Animal Welfare

16 Defra, the Scottish Government, the Welsh Assembly Government and the Department of Agriculture and Rural Development have an important and active role in developing national and EU legislation and in educating livestock keepers in standards of welfare. Farm premises; farming practices including animal transportation; markets and slaughterhouses are all assessed against legal requirements, and enforcement used where necessary. Inspections carried out against the EU requirements and welfare codes contribute to animal welfare surveillance, along with targeted Animal Health (AH) agency visits and scanning visits by AH, Meat Hygiene Service (MHS) and Veterinary Laboratories Agency (VLA). In Northern Ireland many of these checks fall to the Veterinary Service (VS).

17 Visits are made as part of programmed compliance checks or where the livestock keeper has requested an inspection (“compliance” or “elective” respectively). Where an allegation of poor welfare has been made, a visit is undertaken as a matter of urgency and these are referred to as “complaint” visits. Targeted visits are undertaken where there is possible cause for concern for the welfare for livestock. Targeted and complaint inspection results are reported jointly in the statistics that are produced.

18 The CVO Report provides fuller details of these inspections along with in depth analysis and commentary, and should be regarded as the main reference point.

On Farm Welfare (charts 13.2 to 13.4)

19 Animal Health carried out 10,601 welfare inspections at 3,989 visits during 2009 (2.7 inspections per visit) on farms in Great Britain to check that farms were operating within legislation. At these visits, assessments are made covering a wide range of issues from disease treatment, feed and water, freedom of movement, housing, staffing and records. The results of these inspections are depicted in the following charts, by enterprise type.

20 Results from on farm welfare assessments show that there was a high level of compliance on farms in Great Britain, with 96 per cent of assessments achieving either full compliance with legislation and code, or full compliance with legislation. Overall 1 per cent of assessments revealed a level of non compliance which was deemed to cause 'unnecessary pain, unnecessary distress' (UPUD).

Chart 13.2 Assessments of the welfare of animals on-farm in GB during complaint, targeted, cross-compliance targeted and cross-compliance scored risk visits between 1st January and 31st December 2009

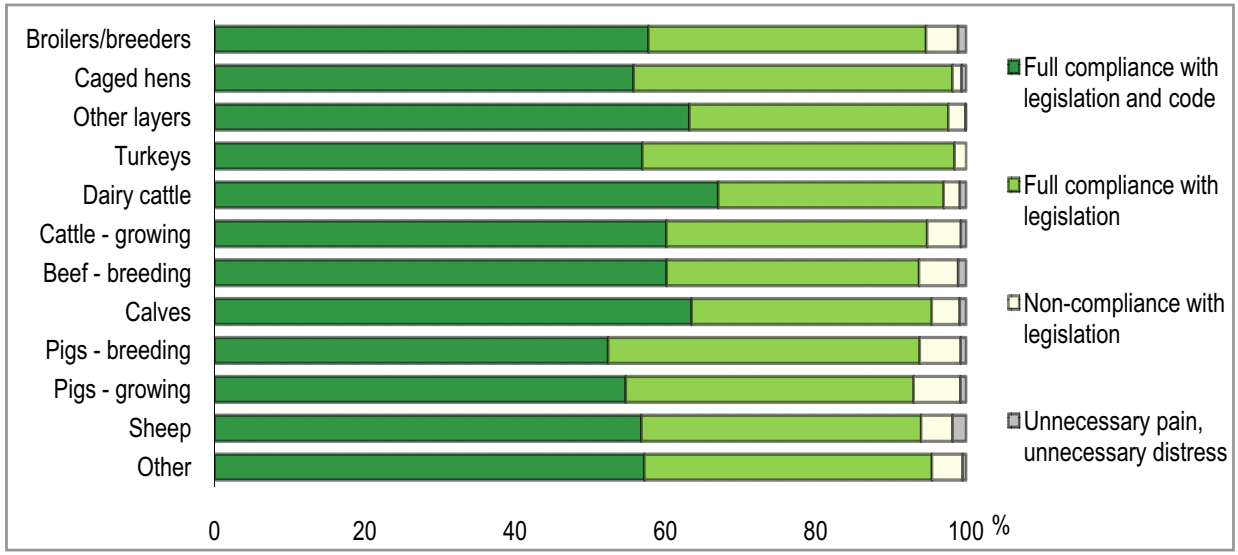
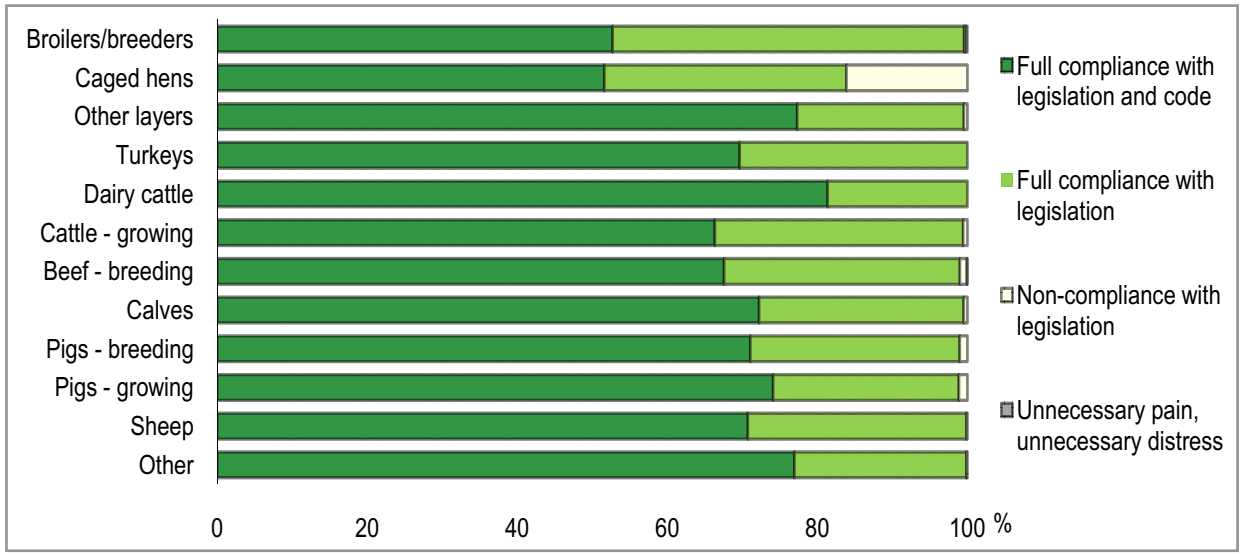


Chart 13.3 Assessments of the welfare of animals on-farm in GB during programme, elective and cross-compliance random visits between 1st January and 31st December 2009



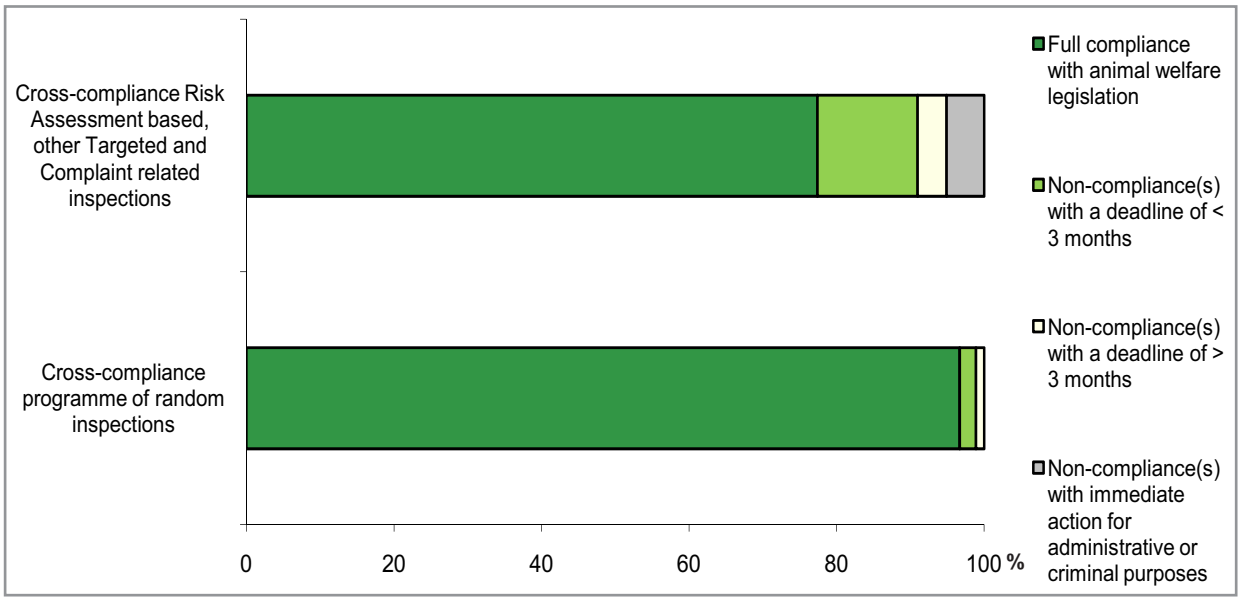
21 Where visits are based on complaints, cross compliance checks, or are targeted, 5.0 per cent of the visits to farms in Great Britain showed non-compliance with legislation or UPUD. This is a reduction from the 7.0 per cent seen in 2008, and 13 per cent in both 2005 and 2006. The percentage of elective and programmed visits showing non-compliance or UPUD was down from the 1.0 per cent seen in 2008, to approximately 0.4 per cent in 2009.

22 During 2009, the Veterinary Service in Northern Ireland (NI) carried out 753 welfare inspections on farms. Of this total, 88 per cent were complaint, targeted, or cross compliance inspections (where herds are identified as being "at risk") with the remaining 12 per cent programmed or random cross compliance checks.

23 Of the random inspections in Northern Ireland, 97 per cent achieved an overall assessment of compliance with legislation. Non-compliance needing corrective action relating to housing, animal treatment (with action required within 3 months) or that associated with staff training, record keeping, or frequency of inspection (with time given for improvements), was found on 3 per cent of visits. No assessments identified a serious welfare problem requiring immediate action, with respect to application of administrative or criminal penalties.

24 Of the complaint and targeted visits in Northern Ireland, 77 per cent achieved compliance with legislation, 23 per cent showed levels of non-compliance needing corrective action, whilst 5.0 per cent of visits were assessed as showing a serious welfare problem requiring immediate action with respect to application of administrative or criminal penalties. Due to changes in the way Northern Ireland data is reported it is no longer possible to chart results by species.

Chart 13.4 Results of VS assessments of the welfare of animals on farm in Northern Ireland during complaint, targeted and cross compliance (risk) visits between 1st January and 31st December 2009



Chapter 14 Environment

Summary

- Agricultural activities cover about three quarters of the United Kingdom land area;
- over 8 million hectares of farmland in the United Kingdom are managed under agri-environment schemes;
- the use of nitrate fertilisers fell by 5.0 per cent between 2007 and 2008;
- the use of phosphate fertilisers fell by 10 per cent between 2007 and 2008;
- total levels of pesticide use on cereals fell by 13 per cent between 2006 and 2008;
- between 2007 and 2008 agricultural emissions of methane fell by 2.4 per cent and of nitrous oxide by 0.3 per cent;
- ammonia emissions from agriculture reduced by 5.0 per cent between 2007 and 2008;
- nitrate levels in rivers in England remained unchanged between 2007 and 2008;
- phosphate levels in rivers in England fell slightly between 2007 and 2008;
- the index of farmland bird populations in the United Kingdom showed a slight increase between 2007 and 2008, reversing the trend of a long term decline.

Introduction (chart 14.1)

1 Agricultural activities in the United Kingdom cover around three quarters of the land area and produce around two-thirds of our food. The agricultural sector is made up of over 300 thousand holdings varying widely in size and type, employing a range of different farming practices in areas including the way in which livestock are kept, the use of inputs such as soil and water as well as nutrient, land and waste management. The interaction between these practices and the local environmental characteristics affect the nature and extent to which farming activities impact on the environment. However, these effects are significant and complex, farming activities can give rise to both positive and negative impacts and operate at local, regional, national and global levels.

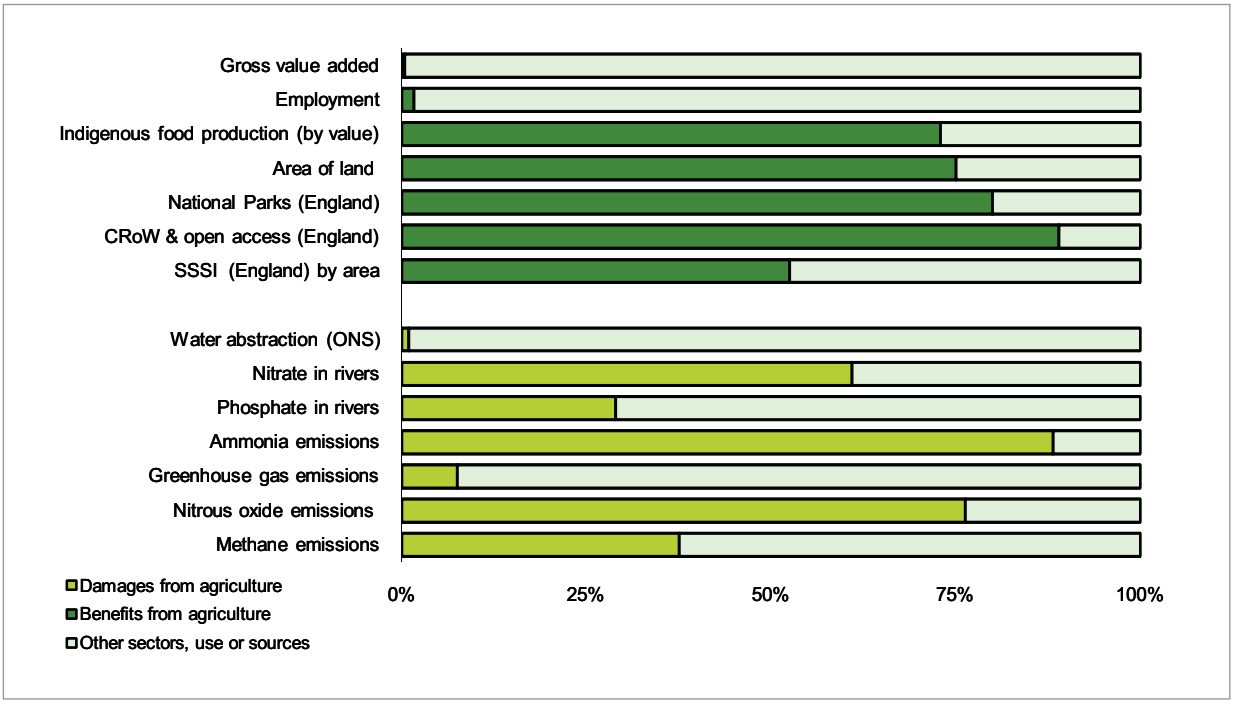
2 External factors that affect farming such as CAP reform, exchange rates and market prices, influence decision making at a farm business level. These decisions determine what commodities are produced and shape the farm structures that support that production. Such factors can also influence decisions about entering environmental stewardship schemes as well as day-to-day management decisions and a wide range of farm practices. These combine to have a substantial effect on the overall environmental impacts at a farm level.

3 This chapter brings together a range of data on farming's size and structure, the commodities it produces, the farm practices and inputs used and the resulting environmental impacts. Where possible a time series is presented to show the current state and long term trends. Data are presented for the United Kingdom where these are available. Some of the charts are taken from existing suites of performance indicators and in these cases are only available for England.

4 Chart 14.1 summarises the environmental impacts of United Kingdom agriculture in the context of the overall United Kingdom situation (or England where stated). It includes the agricultural contribution to: the United Kingdom economy; land protection and conservation; resources; pollution and emissions. It is intended to indicate the relative contribution of farming in different areas but as different baselines are used for comparison, the figures should not be directly compared. The latest available data are used, the sources and units of which can be found in the specific tables and charts elsewhere in this publication.

5 This chapter also provides some case studies of recently completed or current projects related to farming's environmental impacts.

Chart 14.1 Environmental profile of the agricultural sector; United Kingdom



Farm Structures and production

6 The size and structure of the farming industry and what it produces has a fundamental bearing on its environmental impacts. A range of farm practices, including uptake of environmental stewardship schemes, will influence the environmental impacts but much will also depend upon the mix of commodities produced and the farm structures that support that production. This section presents a number of statistics on farm structures and production as broad indicators of the environmental pressures from agriculture.

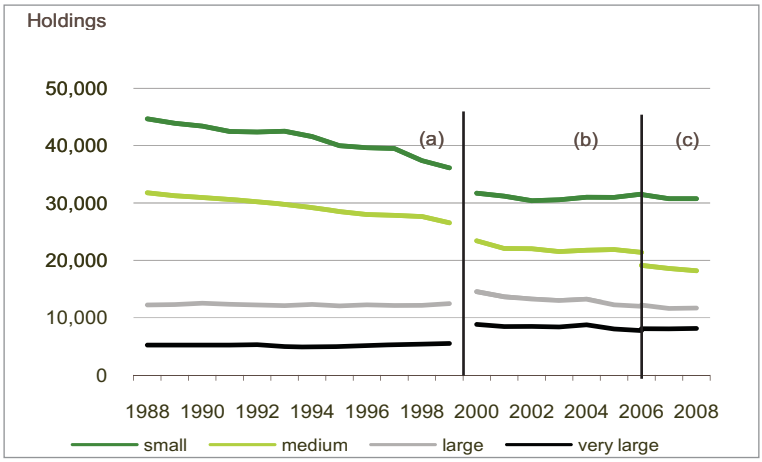
Number of farms by farm type and size (charts 14.2 and 14.3)

7 Charts 14.2 and 14.3 show the breakdown of farms in England by farm size and farm type. The size and type of farm can have a significant bearing on the environmental impacts of the farm business. Large farms can benefit from economies of scale and be more profitable, but may lead to more intensive production with a loss of crop diversity and very little land left out of production. However, more efficient businesses may also be more effective in their use of inputs, with reductions in the associated environmental costs. Specialisation can also bring economic advantages but with a potentially reduced diversity in the farmed landscape. More details are available in Chapter 3.

Land use (chart 14.4)

8 Agricultural land use is a key determinant of environmental impact. The type of vegetation covering land used for agriculture, whether crop, grass, or rough grazing, determines the habitat structure over the majority of the land surface in the UK, and is a major influence on the landscape. Chart 14.4 shows the change in areas of arable land and grassland. The total area of uncropped land fell sharply in 2008, reflecting high cereal prices and the setting of a zero rate of set-aside, but has since then recovered slightly. Uncropped land can provide a variety of environmental benefits, particularly in terms of providing habitats and food for a range of wildlife. More details on land use are available in chapter 3 .

Chart 14.2 Numbers of holdings by farm size (excluding very small holdings <9600SGM); England



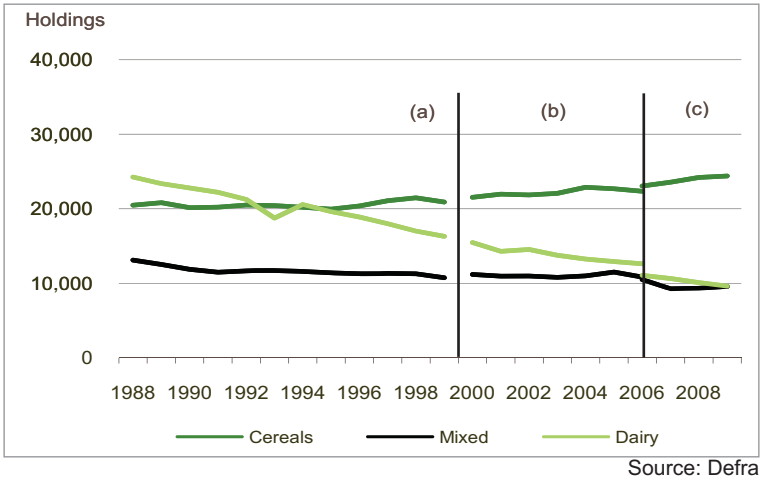
Source: Defra

(a) 1988 SGMs main holding only

(b) 2000 SGMs all holdings, June Survey data only

(c) 2000 SGMs all holdings, June Survey data for all but cattle - now sourced from Cattle Tracing System

Chart 14.3 Numbers of holdings by selected farm type; England



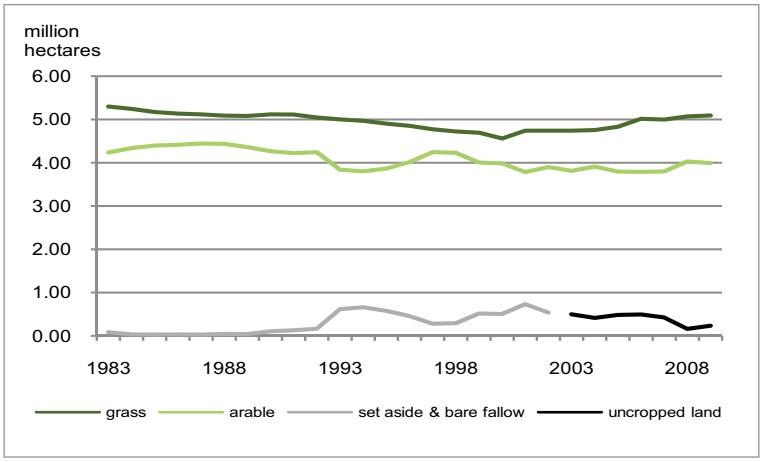
Source: Defra

(a) 1988 SGMs main holding only

(b) 2000 SGMs all holdings, June Survey data only

(c) 2000 SGMs all holdings, June Survey data for all but cattle - now sourced from Cattle Tracing System

Chart 14.4 Land Use

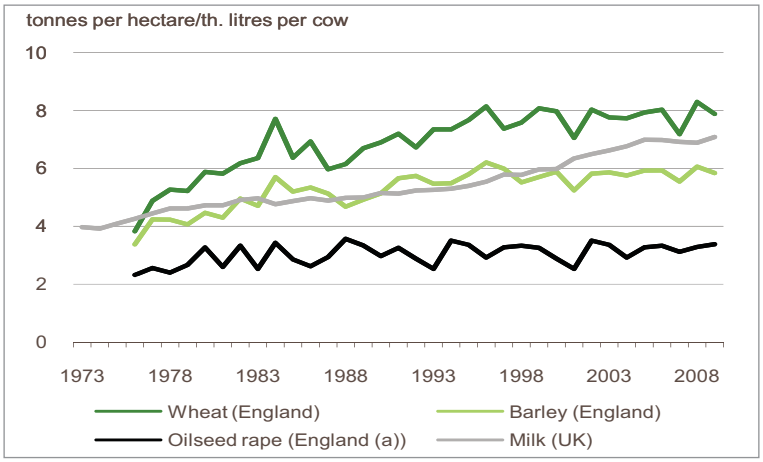


Source: Defra

Crop and milk production (chart 14.5)

9 Commodity yields are linked with farm business profitability. Chart 14.5 shows the average yields for four key commodities; wheat, barley, oilseed rape and milk. More details on yields and production can be found in Chapter 5.

Chart 14.5 Average Commodity Yields; England & UK



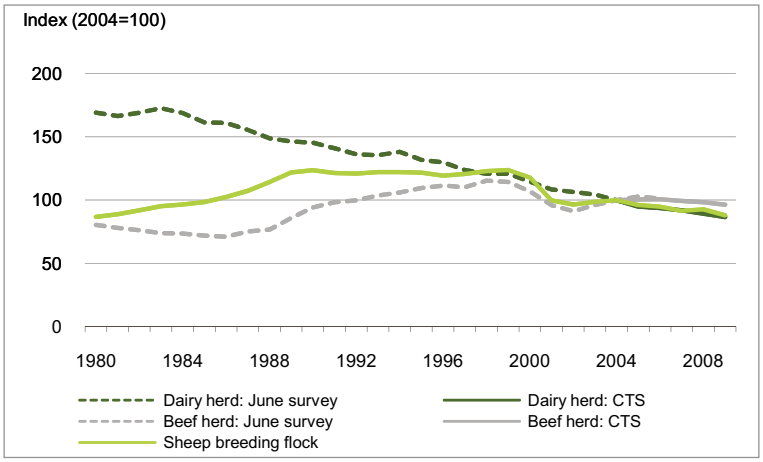
Source: Defra

(a) includes yields of oilseed rape grown on set-aside land between 2004 and 2007. Set-aside requirements ended in autumn 2007

Livestock numbers (chart 14.6)

10 The rearing of livestock has a range of impacts on the environment both beneficial and detrimental. Grazing is essential in the maintenance of certain habitats of high biodiversity value, and both the presence of livestock and the effects of grazing contribute to the landscape. However, overgrazing is detrimental, and livestock can cause problems of soil compaction, erosion and nutrient pollution. Cattle, in particular, are a major source of methane, a greenhouse gas. Chart 14.6 shows the long term trends in livestock numbers for beef cattle, dairy cattle and sheep. More details are available in Chapter 5 .

Chart 14.6 Livestock numbers; England

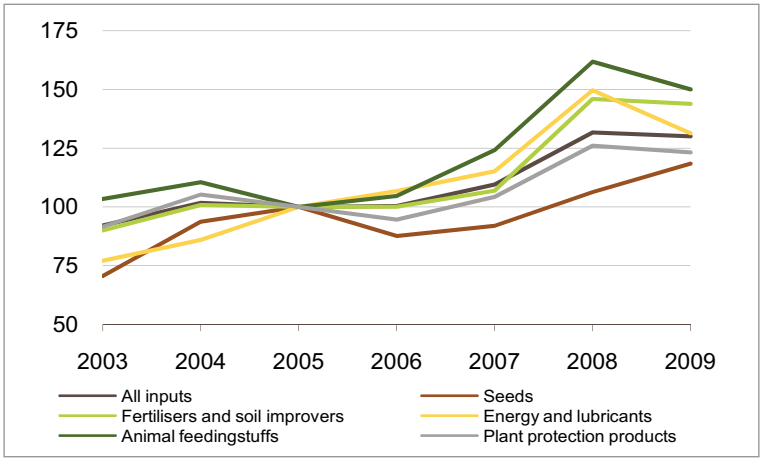


Source: Defra

Farm incomes (charts 14.7 and 14.8)

11 The relationship between farm incomes, farm decision making and environmental impacts is complex and acts in a number of directions. Commodity prices will affect decisions on cropping and the use of inputs and will impact on farm incomes. Investment will be influenced by profit margins and, potentially, the single farm payment.

Chart 14.7 Input prices (Index 2005 = 100); UK



Source: Defra

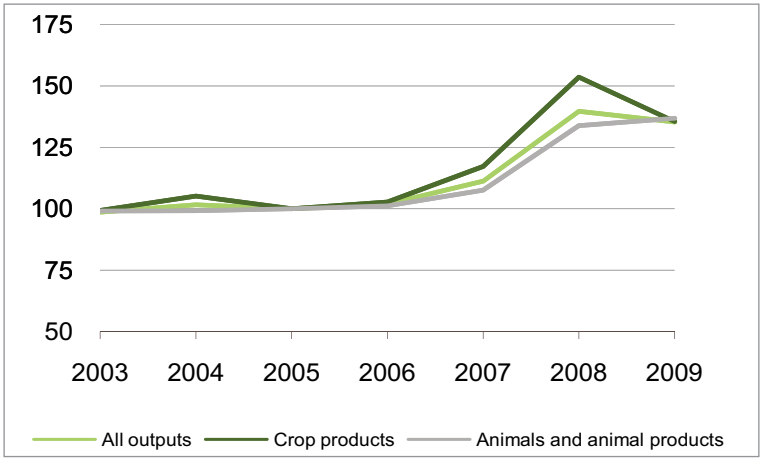
Farm Incomes (continued)

12 Agri-environment schemes may become less attractive if commodity prices and farm incomes are high. Chart 2.1 (chapter 2) shows long term trends in farming income. Input prices affect use of key inputs such as fertilisers and pesticides whilst the value of outputs will directly influence decisions on production and farm management. Charts 14.7 and 14.8 show the long term trend in the prices of key inputs and outputs. More details can be found in Chapter 2.

Uptake of stewardship schemes (charts 14.9 and 14.10)

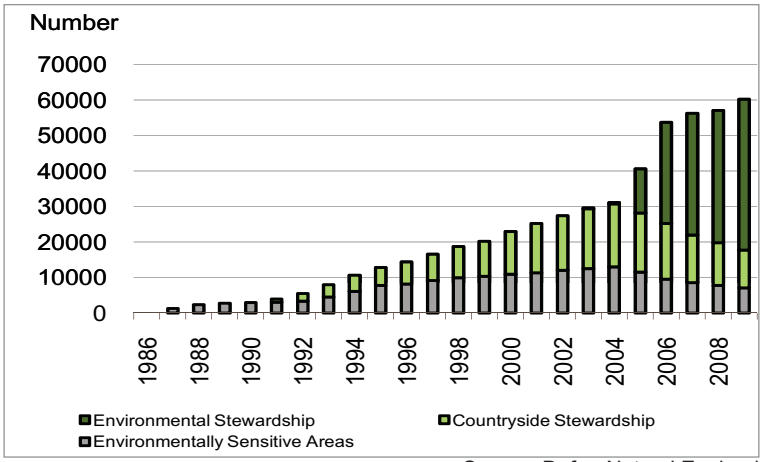
13 As a result of CAP reforms, changes were made in 2005 to the way subsidies are paid to farmers. To receive single farm payment, farmers are required to keep land in good agricultural and environmental condition by meeting specified cross compliance criteria. Further support for environmental issues comes from various environmental stewardship schemes. Chart 14.9 shows the total numbers of farms that have entered environmental stewardship agreements and Chart 14.10 the total area of farm land covered by these agreements. More details on Stewardship Schemes and other support are available in Chapter 11.

Chart 14.8 Output prices (Index 2005 = 100); UK



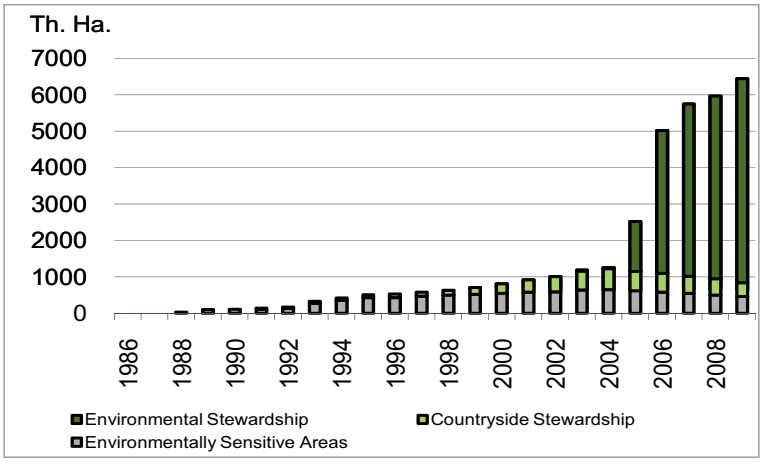
Source: Defra

Chart 14.9 Agri-environment Schemes - Number of agreements; England



Source: Defra, Natural England

Chart 14.10 Agri-environment Schemes - Area under Schemes; England



Source: Defra, Natural England

Current Projects: 1. Survey of Upland Farming

Farming in the uplands has been an area of increasing interest, reflecting concerns about possible destocking and the environmental consequences. A targetted Farm Practices Survey of upland farms in England was run in March 2009 in order to provide evidence of attitudes, intentions and changing practices in order to provide reliable data on which to judge the extent to which changes are taking place or the likelihood of their occurrence.

Survey methodology

The Farm Practices Survey 2009 – uplands and other Less Favoured Areas (LFAs) survey form was sent to approximately 2,000 holdings in March 2009. The survey was completed on a voluntary basis but still achieved a response rate of just over 50%.

This survey targeted Single Payment Scheme (SPS) claimants with land within the LFA. In 2008, there were 19,200 farm businesses that claimed SPS and had at least one parcel of land within the LFA.

Key Results

Agri-environment schemes

- *71% (±3%) of upland farmers had land within environmental schemes. 39% (±3%) had Entry Level Stewardship (ELS) agreements (or its organic equivalent), 37% (±3%) had either existing Environmentally Sensitive Area (ESA) or Countryside Stewardship (CS) agreements, 9% (±2%) had Higher Level Stewardship (HLS) agreements and 5% (±1%) had other environmental agreements (e.g. Wildlife Enhancement Scheme).*

- *82% (±5%) of those with existing ESA or CS agreements would be interested in joining another scheme. 47% (±6%) expressed an interest in joining HLS, 25% (±5%) in joining ELS and 18% (±4%) in other unspecified schemes (including those run by National Parks).*

Moorland and other grazing

- *In the last 4 years, 36% (±5%) of upland farmers have reduced or stopped grazing on moorland. The most common reasons given for change were environmental schemes (64% ±9%) and economics of hill stock (37% ±9%). The greatest reductions were in the South West Moors.*

The future

- *Almost all upland farmers (95%) feel that maintaining the traditional upland way of life is either very important (60% ±3%) or important (35% ±3%).*

- *82% (±3%) of upland farmers agree that maintaining the environment is "vital to the future of upland farming" and/or "part of the process of upland farming". Those least likely to agree with either of these statements, tended to be aged at least 65 years or for whom the farm is a hobby/lifestyle choice.*

- *The most important challenges for upland farmers were market prices (76% ±3% of upland farmers), changes to Single Payment Scheme payments (65% ±3%), the impact of new regulations (65% ±3%), input costs (59% ±3%) and the level of environmental payments (47% ±3%). Farms classed as "mainly moorland" were much more likely to see the level of environmental payments and the impact of new regulations as challenges than those with better quality grassland.*

A summary of the results was published on 30th June 2009 (http://www.defra.gov.uk/evidence/statistics/foodfarm/enviro/farmpractice/documents/FPS2009uplands.pdf) and a more detailed narrative report was published on 13th October 2009 (http://www.defra.gov.uk/evidence/statistics/foodfarm/enviro/observatory/research/documents/UplandsFPS_report09.pdf)

Further Work

Further research is being undertaken to add depth to the understanding of attitudes and likely responses of Upland farmers in England to potential changes in income resulting from policy changes. The contractors (CCRI & FERA) will undertake a mix of economic analysis and ecological modelling based on 80 in-depth farm visits using a range of policy scenarios. The study specifically seeks insights from farmers with an objective to view issues from a farm business and practice perspective. The results will be available in June 2010.

Input use and farm practices

Fertiliser use (charts 14.11 and 14.12)

14 Mineral fertilisers are a major source of nutrient input on the majority of agricultural land, although a considerable proportion also receives organic manures. Nutrient input, particularly nitrogen, is the biggest determinant of yield and also has major impacts on crop/sward structure and botanical composition. Nutrient losses to ground and surface waters can cause pollution affecting biodiversity (through eutrophication) and the quality of drinking water. Gaseous losses as ammonia and nitrous oxide also cause air pollution, contributing to eutrophication of sensitive habitats and climate change.

15 Nitrogen fertiliser use (chart 14.11) and phosphate fertiliser use (chart 14.12) show a similar fluctuating pattern but with an underlying decline in fertiliser use in Great Britain, nitrogen by 36 per cent and phosphate by 49 per cent over 20 years. Fertiliser is generally applied at a higher rate on arable land than grass land. The fall in fertiliser use is mainly due to a reduction in application rates on grass, where the rate has fallen by over a third in 10 years, there has also been a reduction in the area of tillage since a peak in 1997.

16 Between 2007 and 2008 use of nitrogen fertilisers fell by 5 per cent and use of phosphate fertilisers fell by 10 per cent.

Chart 14.11 Nitrogen (N) fertiliser use in Great Britain 1984 to 2008

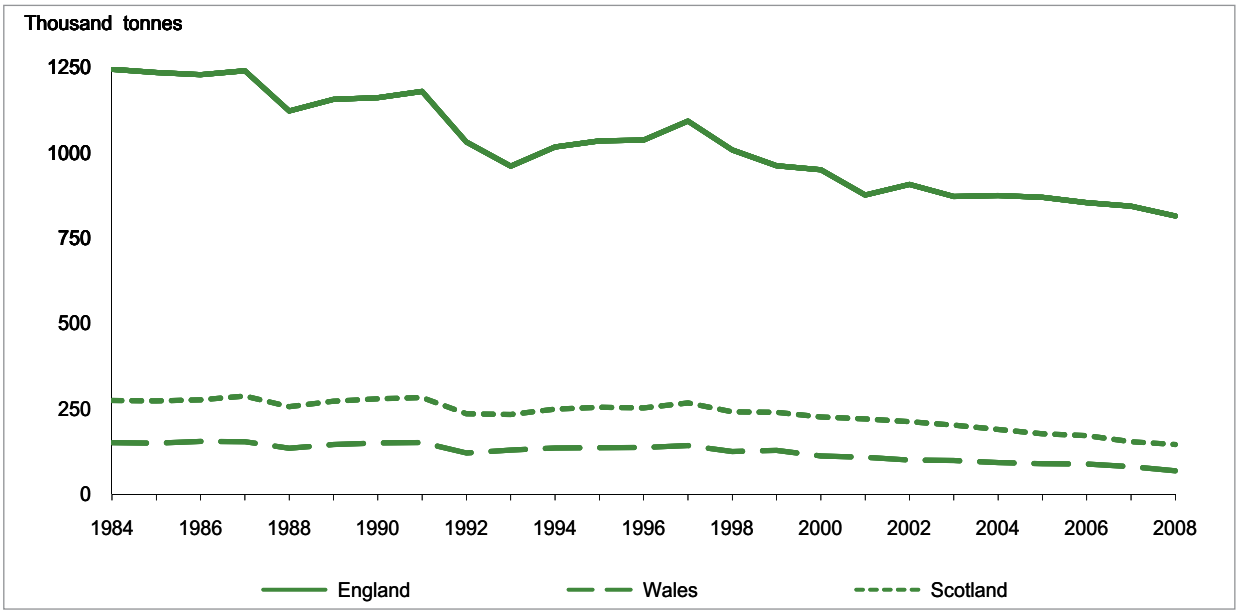
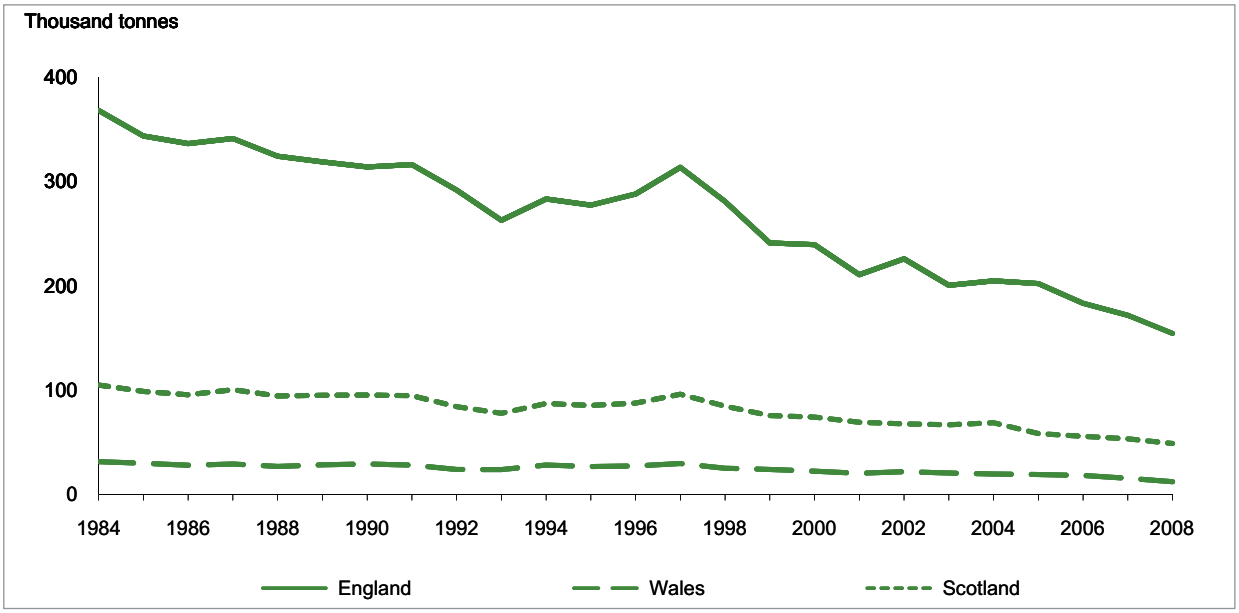


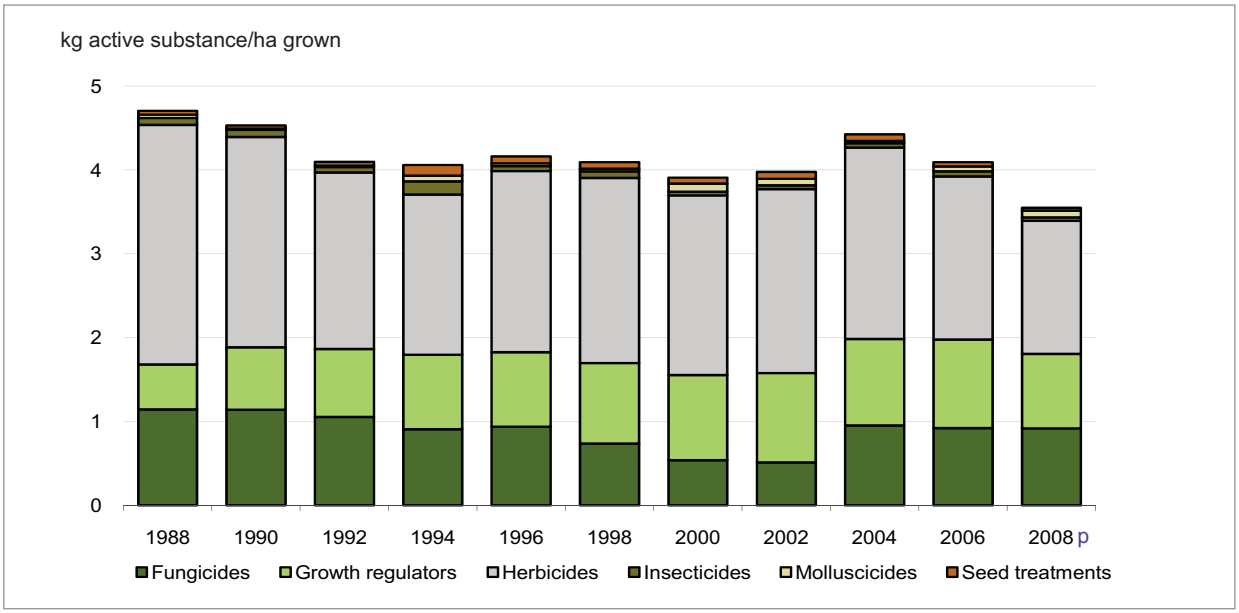
Chart 14.12 Phosphate (P_2O_5) fertiliser use in Great Britain 1984 to 2008



Pesticide Use (chart 14.13)

17 Pesticides include a range of plant protection products to manage pests and disease and include growth regulators. The majority of pesticides are used on cereals and chart 14.13 shows the levels of usage of different pesticides on cereals between 1998 and 2008. Total levels of pesticide use on cereals fell by 13 per cent between 2006 and 2008.

Chart 14.13 Pesticide use on cereals 1988 to 2008; England

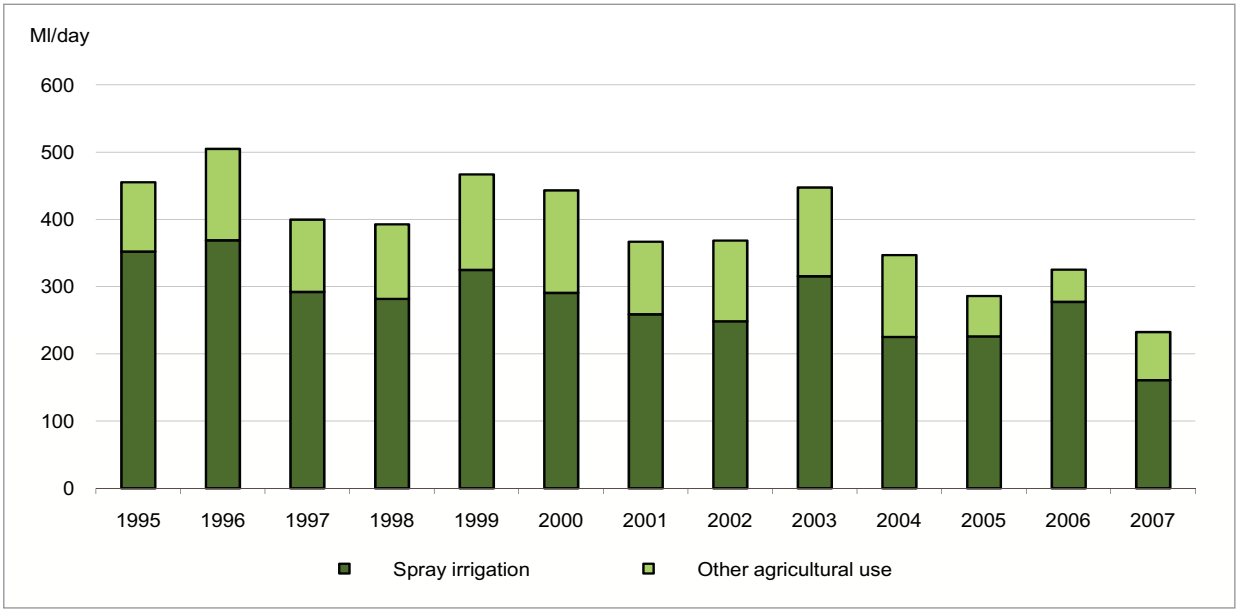


Source: Fera (Pesticide Usage Survey)

Water use (chart 14.14)

18 River water and groundwater are important resources for agriculture. Water used for agriculture represents about 2.0 per cent of the total water abstracted. Agricultural use of water can have both positive and negative contributions to flooding, soil erosion and the recharge of aquifers. Although agriculture accounts for a relatively small proportion of the total water abstracted, much of the water used in agriculture is in the south and east of England; areas of particular pressure for water resources. Chart 14.14 shows levels of water abstracted for agricultural use in England and Wales. The volume of water abstracted for agricultural use fell by 28 per cent between 2006 and 2007.

Chart 14.14 Water abstracted for agricultural use 1995 to 2007; England & Wales



Source: Environment Agency

Farm practices (tables 14.1 and 14.2)

19 Whilst the level of input use affects the environmental impacts of farming there are also a number of farm practices that are important. These practices range from management plans, equipment and methods used for applying inputs (pesticides, fertilisers). Good farm practice has the potential to produce "win-wins" whereby environmental benefits can be achieved at the same time as reducing costs and/or increasing yields.

20 Table 14.1 shows the extent of use of precision technology. Such technologies facilitate optimal use of farm inputs, reducing costs, maximising yields and reducing the environmental impacts.

21 Table 14.2 shows the number of farms that carry out nutrient testing of soils. Soil testing provides valuable information on the nutrient needs and the spatial variation between and within fields. This helps to determine the optimum levels to apply for maximum yields.

Table 14.1 Percentage of holdings using precision farming technology 2009; England

Enquiries: Helen Theakston on +44 (0)1904 456406 email:farming-statistics@defra.gsi.gov.uk

	% of holdings						
	GPS	Soil Mapping	Yield Mapping	Variable Rate Application	Telemetry	Guidance	Auto Steering
Farm size							
Small	7%	11%	6%	10%	0%	7%	3%
Medium	14%	14%	8%	14%	1%	13%	6%
Large	25%	23%	13%	24%	2%	23%	13%
All farms	11%	14%	7%	13%	1%	11%	6%
Region							
North East	7%	11%	6%	15%	0%	9%	3%
North West & Merseyside	4%	7%	3%	8%	0%	1%	1%
Yorkshire & The Humber	8%	16%	8%	13%	0%	8%	4%
East Midlands	19%	23%	10%	17%	1%	20%	10%
West Midlands	7%	10%	5%	9%	0%	6%	3%
East of England	23%	20%	12%	21%	3%	22%	15%
South East	14%	18%	12%	19%	2%	12%	8%
South West	6%	8%	3%	8%	0%	7%	1%
All farms	11%	14%	7%	13%	1%	11%	6%
Farm type							
Cereals	23%	26%	16%	23%	2%	22%	13%
Other crops	21%	26%	12%	24%	2%	22%	13%
Pigs & poultry	4%	3%	3%	7%	0%	4%	1%
Dairy	10%	11%	3%	11%	0%	6%	1%
Grazing livestock (LFA)	2%	5%	0%	2%	0%	1%	0%
Grazing livestock (Lowland)	0%	3%	2%	4%	0%	1%	1%
Mixed	6%	13%	6%	14%	0%	9%	2%
All farms	11%	14%	7%	13%	1%	11%	6%

(a) Minimum number of holdings used: 1,392. Results are for all those who answered the question.

Source: Defra (Farm Practices Survey 2009)

Table 14.2 Nutrient testing of soil 2009; England

Enquiries: Helen Theakston on +44 (0)1904 456406 email:farming-statistics@defra.gsi.gov.uk

	% of holdings		
	Regularly test nutrient content of soil	Do not regularly test nutrient content of soil	Not applicable
Farm size			
Small	62%	30%	8%
Medium	75%	19%	5%
Large	87%	12%	1%
All farms	68%	25%	6%
Region			
North East	63%	32%	4%
North West & Merseyside	51%	39%	9%
Yorkshire & The Humber	69%	26%	6%
East Midlands	76%	19%	4%
West Midlands	65%	27%	8%
East of England	90%	7%	2%
South East	66%	26%	8%
South West	61%	30%	9%
All farms	68%	25%	6%
Farm type			
Cereals	94%	5%	1%
Other crops	94%	5%	1%
Pigs & poultry	33%	21%	46%
Dairy	77%	23%	1%
Grazing livestock (LFA)	27%	61%	12%
Grazing livestock (Lowland)	37%	50%	13%
Mixed	79%	19%	2%
All farms	68%	25%	6%

Source: Defra (Farm Practices Survey 2009)

Current Projects 2: Soil Nutrient Balances

A methodology for calculating soil nutrient balances has been developed by OECD and adopted by Eurostat. Soil nutrient balances provide a method for estimating the nutrient loadings of nitrogen and phosphorus to agricultural soils. The estimates take into account the full range of nutrient inputs from manures, mineral fertilisers etc. and the offtake from crop and fodder production and livestock grazing. Whilst a shortage of nutrients can limit the productivity of agricultural soils, a surplus of these nutrients poses a serious environmental risk. Losses of nutrients to the environment can impact on air quality (ammonia emissions), water quality (Nitrogen & Phosphate levels in rivers) and climate change (nitrous oxide emissions). A soil nutrient balance estimate, expressed as a loading of nitrogen or phosphorus per hectare of managed farmland can be used as an indicator of the environmental risks. It provides a high level measure which can be used to monitor long term trends and to make meaningful comparisons between countries or between different regions within a country.

A project, funded by Eurostat assessed the overall approach, evaluated the effectiveness of the current spreadsheet system, checked the quality of the data currently compiled for the UK estimates and improved the overall reliability of the balance sheets. The project report is available on the Defra website at: http://www.defra.gov.uk/evidence/statistics/foodfarm/enviro/observatory/research/documents/nutrientbalance.pdf

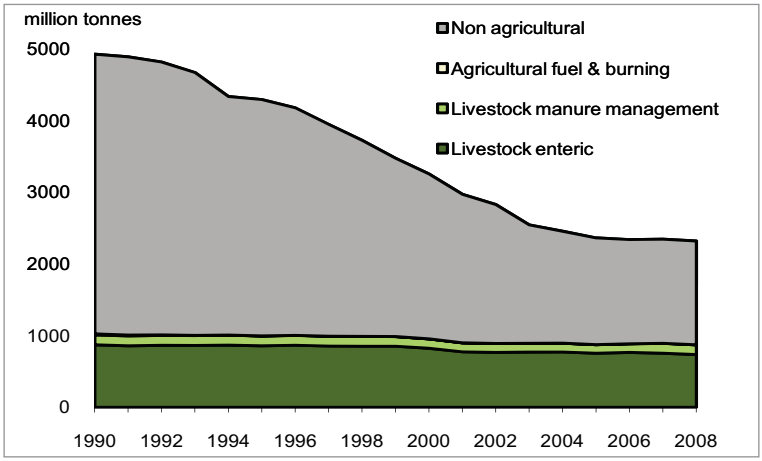
A further project is currently in progress to take forward several of the priority areas identified in the Eurostat funded project. These include: Improving data sources in key areas; reviewing and joining up information systems and models in related areas and; building the capacity to produce estimates at flexible geographic units to better meet policy needs.

Environmental Impacts

Greenhouse gas emissions (charts 14.15 and 14.16)

22 Carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) are greenhouse gases and their emissions contribute to climate change. Methane and nitrous oxide have relatively greater impacts on climate change with global warming potentials 21 and 310 times greater than carbon dioxide. Greenhouse gas emissions from agriculture account for around 7.0 per cent of the UK total. While carbon dioxide from agriculture accounts for less than 1.0 per cent of the UK total, in the case of methane (CH_4) agriculture accounted for 38 per cent of UK emissions in 2008 (Chart 14.15). The main agricultural source of methane emissions is enteric fermentation in ruminating animals. There has been a 12 per cent fall over the last 10 years, reflecting a general reduction in livestock numbers.

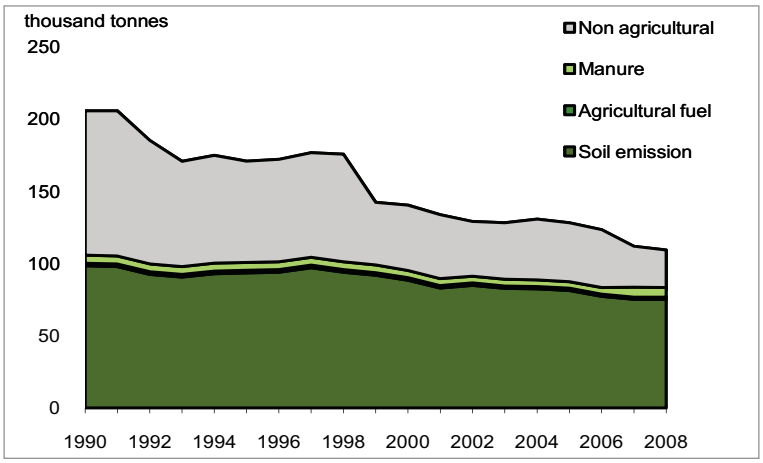
Chart 14.15 Methane emissions by source 1990 to 2008; United Kingdom



Source: AEA Energy & Environment, Department of Energy and Climate Change

23 Chart 14.16 shows the UK emissions of nitrous oxide (N_2O) from agriculture and that from all other sources. The main agricultural source of emissions of nitrous oxides is from the oxidation of the nitrogen in fertilisers, accounting for 69 per cent of all UK nitrous oxide emissions. The fall in these emissions since the late 1990s reflects a reduction in fertiliser use (see chart 14.11 on fertiliser use).

Chart 14.16 Nitrous oxide emissions by source 1990 to 2008; United Kingdom

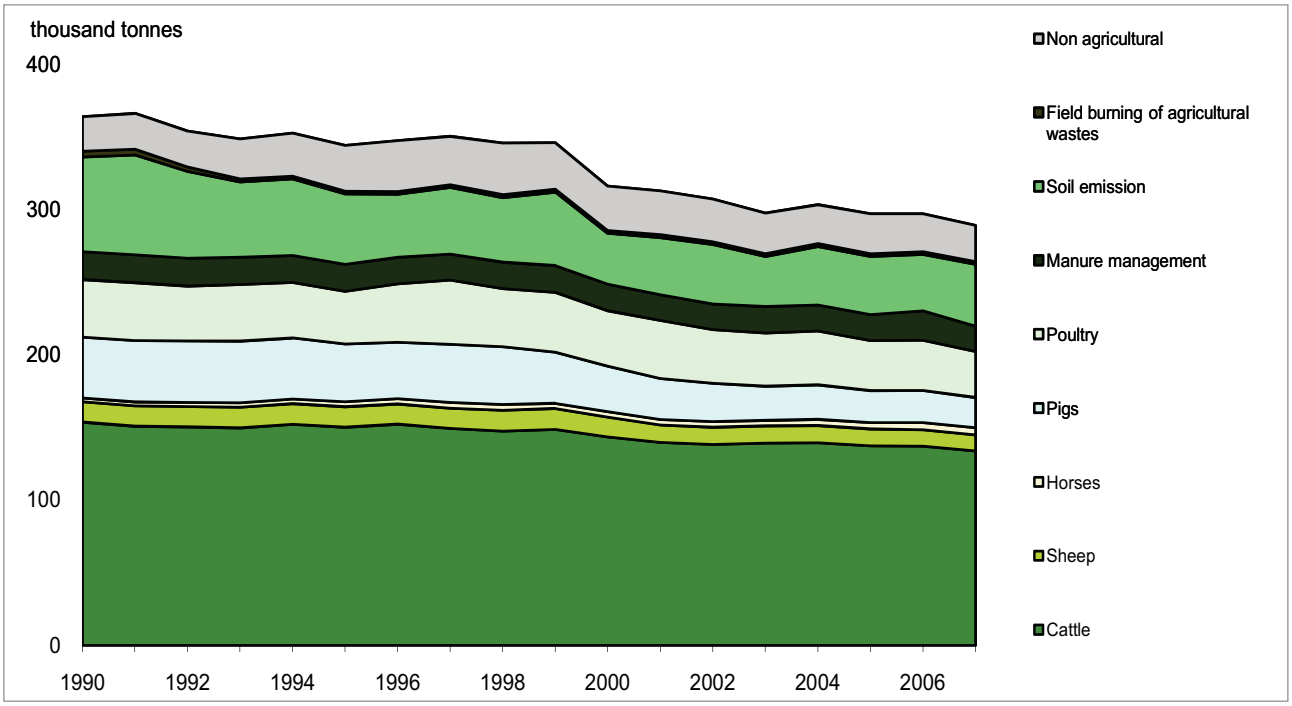


Source: AEA Energy & Environment, Department of Energy and Climate Change

Air quality (chart 14.17)

24 Chart 14.17 shows ammonia (NH_3) emissions by source. Emissions from agriculture have reduced by 17 per cent during the last 10 years and now account for 88 per cent of the UK total. Emissions arise predominately from livestock housing and from the spreading of animal manure (each accounting for around a quarter of the total from agriculture), with the majority of emissions associated with cattle. Inorganic nitrogen fertilisers are also a source of ammonia emissions, accounting for around 12 per cent of the total from agriculture. Urea fertiliser, in particular, is associated with a much greater ammonia emission than other fertiliser types and the relative proportion of urea to total fertiliser applied (largely influenced by relative costs) is responsible for much of the year to year variability in the 'soil emission' apparent in chart 14.17. The trend for falling emissions over the last 10 years is largely due to declining livestock numbers and fertiliser use.

Chart 14.17 Ammonia emissions by source 1990 to 2007; United Kingdom



Source: AEA Energy & Environment, eDigest of Environmental Statistics

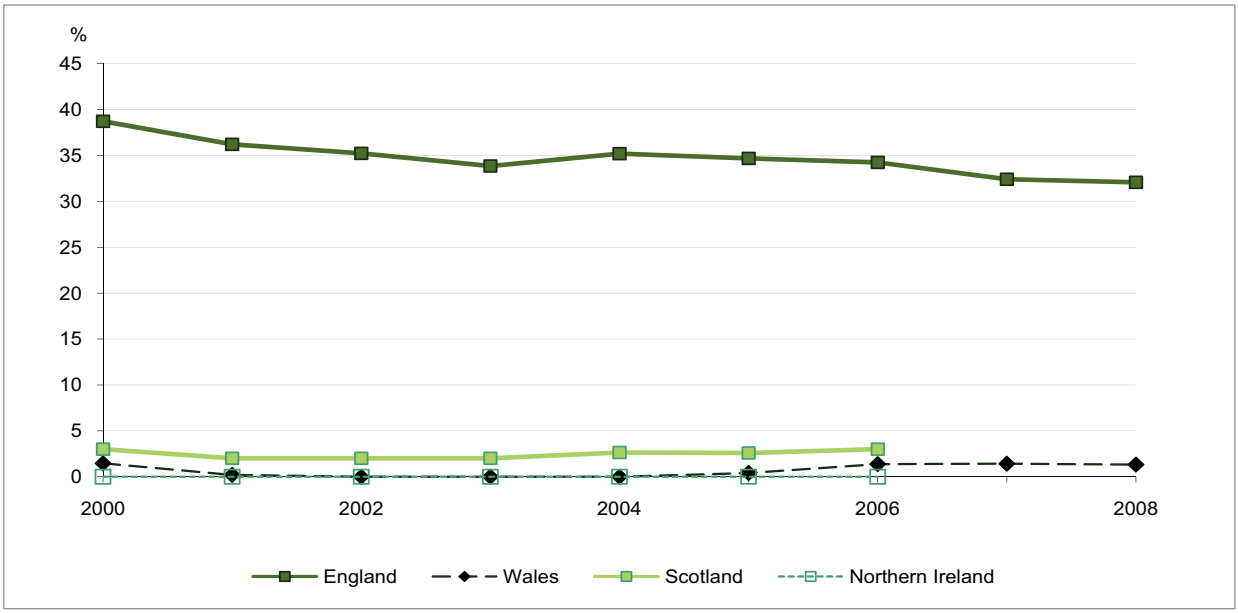
Water quality (charts 14.18 and 14.19)

25 Agriculture accounts for around 60 per cent of the nitrate in rivers (ADAS report 2004). Chart 14.18 shows the proportion of river lengths where nitrate levels exceed 30 mg NO_3 per litre. In Northern Ireland, Wales and Scotland these remain low. In England levels have fallen overall since 2000 (although 2004 showed an increase) reflecting the decrease in fertiliser use (chart 14.11 and paragraph 15).

26 High levels of phosphate in freshwater can cause eutrophication, which affects the ecological balance of the water environment leading to excessive plant growth. Agriculture accounts for around 29 per cent of phosphates in river water (White and Hammond 2006). Further information can be found at: http://www.environment-agency.gov.uk/, http://www.sepa.org.uk/ and http://www.doeni.gov.uk/. Chart 14.19 shows the proportion of river lengths where phosphate levels exceed 0.1 mg per litre.

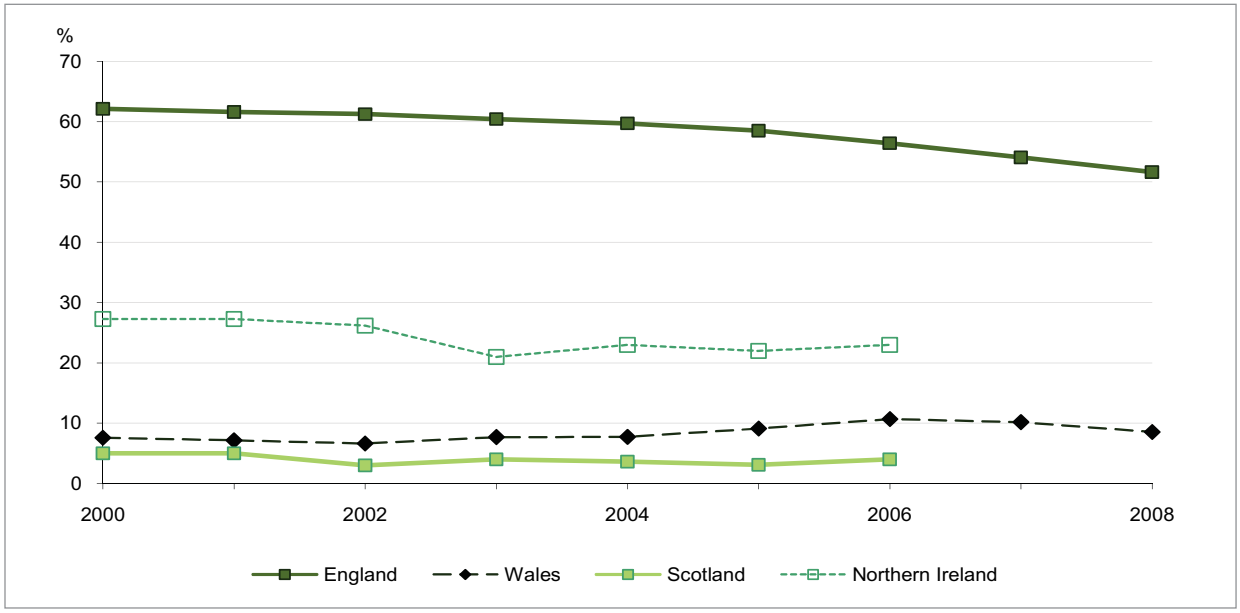
27 The water quality monitoring used in these charts is being changed for the Water Framework Directive (WFD) and from 2007 there is no updated compatible data across the UK for nitrates and phosphates in water.

Chart 14.18 Per cent of river length nitrate levels >30mgNO_3/l 2000 - 2008; United Kingdom



Source: Environment Agency, Scottish Environment Protection Agency, Environment and Heritage Service, e-Digest of Environmental Statistics

Chart 14.19 Per cent of river length phosphate levels >0.1mgP/l 2000 - 2008; United Kingdom

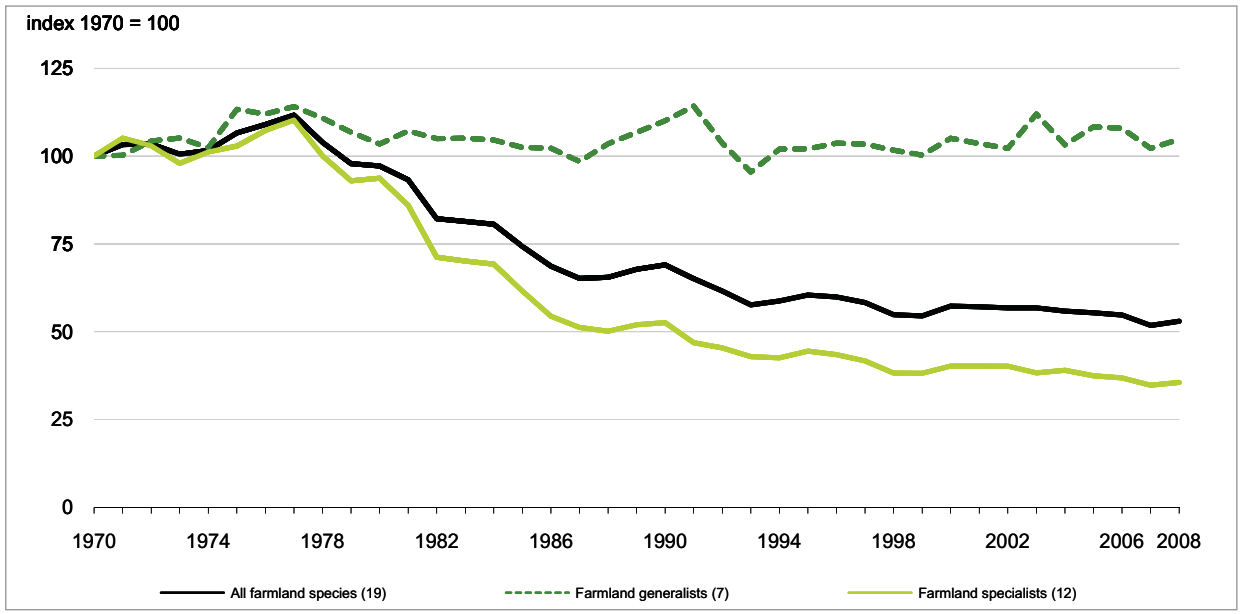


Source: Environment Agency, Scottish Environment Protection Agency, Environment and Heritage Service, e-Digest of Environmental Statistics

Farmland birds (chart 14.20)

28 Bird populations are considered good indicators of the state of wildlife more generally since they have a wide habitat distribution and are near the top of the food chain. Chart 14.20 shows the trends since 1970. Changes in the bird population reflect changes in habitat diversity and within the food chain and the chart shows that, while populations of farmland generalist species have remained fairly stable since 1970, populations of farmland specialists (those that breed or feed mainly or solely on farmland) had declined by over 60 percentage points by the late 1990s. They have continued to decline, albeit at a slower rate, since 2000 and are now at their lowest level. Further information can be found on the Observatory webpages.

Chart 14.20 Farmland bird index; United Kingdom



Source:Defra / RSPB / BTO

Current Projects: 3. Campaign for the Farmed Environment

The Campaign for the Farmed Environment, whose development has been led by the farming industry aims to retain and exceed the environmental benefits formerly provided by set-aside. It encourages farmers to adopt management practices voluntarily along the themes of resource protection, farmland biodiversity and farmland birds. The Campaign provides farmers with the opportunity to choose how they might make adaptations to their farming practices to deliver significant environmental benefits whilst having the minimum impact on their business efficiency. The Campaign has developed voluntary measures that will provide environmental benefits to support the three key themes.

A number of targets have been set for the Campaign, some of them linked to Environmental Stewardship Schemes which are already delivering environmental benefits. A comprehensive monitoring programme has been developed to assess whether these targets are being met and whether the environmental outcomes expected from the voluntary measures are being realised.

The first stage of the monitoring programme was to run a Baseline Survey in November 2009. The aim was to establish the areas of uncropped land and land under environmental management in the 2008/09 crop year prior to the launch of the Campaign. Results were published in early February. Further monitoring will record the increased areas of land under environmental management in response to the Campaign. Changes in awareness of and attitude to the Campaign will also be monitored.

The key results for holdings in England are:

Familiarity with the Campaign
Just over half of arable holdings indicated that they were aware of the Campaign for the Farmed Environment to a certain degree. Of this, 15% of holdings indicated that they were fully aware of the implications of the Campaign for their farms. 31% of holdings indicated that they had heard of the Campaign but were not aware of its details and 15% indicated they had no awareness of the Campaign at all.

Intention to sign up to the Campaign
Around 63% of holdings indicated that they are not yet sure if they will sign up to the Campaign. The most common reason given was that they were unaware of the Campaign (43%). For holdings indicating that they will not be signing up to the Campaign the most common reason given was that they were focussing on maximising productivity (26%).

Land area not in production (outside of agri-environment schemes)
Fifity-one per cent of all arable holdings indicated that they left cultivable land out of production during the 2008/09 crop year that was not part of a formal agri-environment scheme.
A total of 157,000 hectares of cultivable land was estimated to be out of production during the 2008/09 crop year.

Land under some form of environmental management (outside of agri-environment schemes)
A total of 174,000 hectares of land was estimated to be under some form of environmental management in the 2008/09 crop year.

More details about the Campaign for the Farmed Environment can be found at: http://www.cfeonline.org.uk/
The full Statistical Notice can be found on the Defra website.

Valuing environmental impacts of agriculture

29 This chapter presents data on some of the physical impacts of farming on the environment. These impacts can be positive as well as negative and many of the impacts are external to farming so that the costs or benefits are met by other sectors or the general public. By estimating or inferring values for these physical impacts, they can be compared with each other and aggregated to give a measure of the overall impact. Bringing together monetised valuations into a coherent framework provides a set of environmental accounts for agriculture.

30 Table 14.3 shows the environmental account for agriculture for the United Kingdom as a time series from 2001 to 2008 in current prices. United Kingdom and country breakdowns of the account, in current prices, constant prices and as an index are published on the Defra website together with further information on the background and continued development of the account at http://www.defra.gov.uk/evidence/economics/foodfarm/reports/envacc/index.htm

Table 14.3 Environmental Account for Agriculture Current Price 2001 - 2008 United Kingdom

Enquiries: Barbara Norton on +44 (0)1904 455577 email: Sustainablefarming.statistics@defra.gsi.gov.uk

£ million		2001	2002	2003	2004	2005	2006	2007	2008
Benefits									
Landscape	*semi-natural habitats*	482	495	499	516	536	571	586	621
	linear features	26	26	27	27	28	29	30	31
	Total Landscape	507	521	526	544	565	600	616	652
Biodiversity	*Habitats (A/SSSIs)*	314	320	329	378	410	453	496	559
	Species	543	549	565	573	584	596	587	625
	Total Biodiversity	858	869	894	951	994	1 049	1 083	1 183
Other benefits	*Waste sink*	23	23	26	28	34	37	41	46
	Total benefits	1 388	1 413	1 446	1 523	1 592	1 685	1 741	1 881
Damages/costs									
Water quality	*Estuarine*	3	3	3	3	3	3	4	4
	Lake	23	24	24	25	25	27	28	29
	Marine	2	2	1	1	1	-	2	2
	River	69	68	71	71	68	66	55	52
	Total water quality	98	97	100	101	98	97	88	87
Water pollution	*pollution incidents*	1	1	1	1	1	1	1	1
Water abstraction	*Abstraction*	44	46	57	46	38	46	35	36
Drinking water	*clean up costs*	75	105	108	99	98	105	93	75
Flooding	*flooding from agriculture*	205	208	214	220	227	234	244	254
	Total water	422	457	480	466	462	482	460	452
Other damages	*Waste*	7	7	8	8	8	8	9	9
	Soil erosion	9	9	10	10	10	11	11	12
GHG emissions	*Carbon dioxide*	77	81	87	92	96	99	104	107
	Methane	312	327	356	384	404	434	466	489
	Nitrous oxide	456	492	521	559	594	613	648	676
	Soil carbon accumulation (grassland)	- 116	- 129	- 136	- 155	- 167	- 182	- 178	- 195
	Soil carbon loss (arable)	248	263	286	307	330	356	390	412
	Total GHG	977	1 033	1 114	1 187	1 258	1 321	1 431	1 488
Air quality	*Ammonia*	410	410	409	432	433	449	457	476
	other air emissions	158	159	155	150	142	134	125	114
	Total air quality	568	568	565	582	575	583	582	590
	Total damages	1 983	2 075	2 175	2 253	2 313	2 405	2 492	2 550
Total benefits less damages		- 596	- 662	- 729	- 730	- 720	- 719	- 751	- 669

Chapter 15 Key Statistics for EU Member States

2009

Summary

In 2009:

- income from agricultural activity in the United Kingdom as measured by Indicator A was 37 per cent higher than in 2005, while for the EU27 it was 0.3 per cent lower.

In 2009, of the EU27 Member States:

- the United Kingdom produced the third largest quantity of wheat;
- was the ninth largest producer of pigmeat;
- was the fourth largest producer of beef and veal;
- was the largest producer of sheep and goat meat.

In 2008, of the EU27 Member States:

- the United Kingdom was the third largest producer of cows' milk.

Between 2000 and 2008:

- producer prices for crop products rose by 64 per cent in the United Kingdom and by 36 per cent in the EU27;
- producer prices for animals and animal products rose by 50 per cent in the United Kingdom and by 22 per cent in the EU27;
- purchase prices for the means of agricultural production rose by 63 per cent in the United Kingdom and by 40 per cent in the EU27.

Introduction

1 This chapter presents simple analyses of agriculture in the European Union to enable comparison of the United Kingdom with other Member States. The source of the data is the Eurostat website where a range of data is available free of charge. The Eurostat website may be found at http://ec.europa.eu/eurostat.

2 Eurostat is the Statistical Office of the European Communities situated in Luxembourg. Its task is to provide the European Union with statistics at European level that enable comparisons between countries and regions. Eurostat itself does not collect data; this is done in Member States by their statistical authorities who verify and analyse national data and send them to Eurostat. Eurostat's role is to consolidate the data and ensure they are comparable, using harmonized methodology.

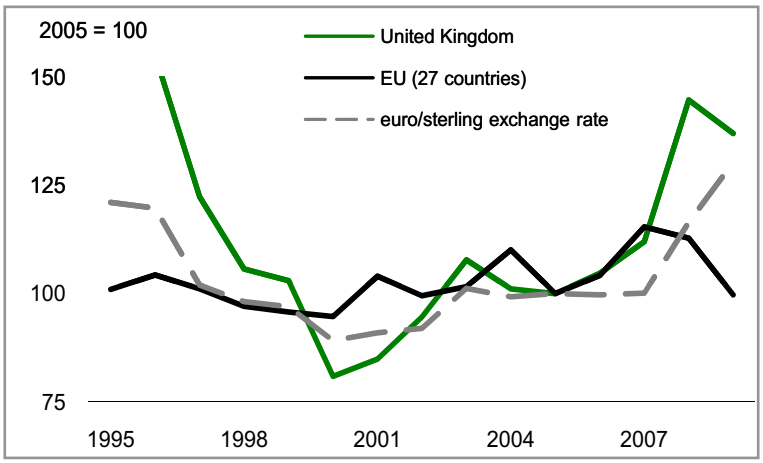
Incomes

Indicator A of the income from agricultural activity

3 Chart 15.1 shows Indicator A, a measure of the average income obtained from agriculture, for the United Kingdom and the EU27. An index showing the trend in the euro/sterling exchange rate is also shown.

4 Incomes from agricultural activity in the United Kingdom as measured by Indicator A have risen by 37 per cent since 2005 while those in the EU 27 are 0.3 per cent lower.

Chart 15.1 Indicator A of the income from agricultural activity



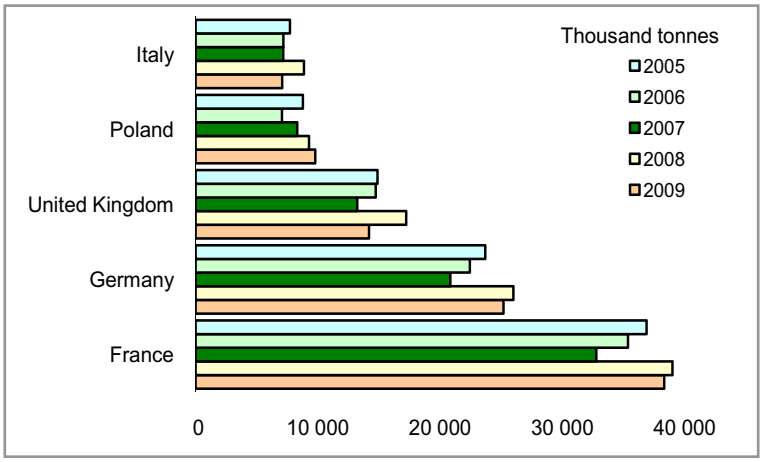
Agricultural products

Wheat

5 Chart 15.2 shows the quantities of wheat produced by the top five producing Member States in 2005 to 2009. This is the production of common wheat and durum wheat.

6 In 2009, the United Kingdom ranked third in the quantity of wheat produced behind France and Germany having produced about 10 per cent of the total for the EU27.

Chart 15.2 Production of wheat

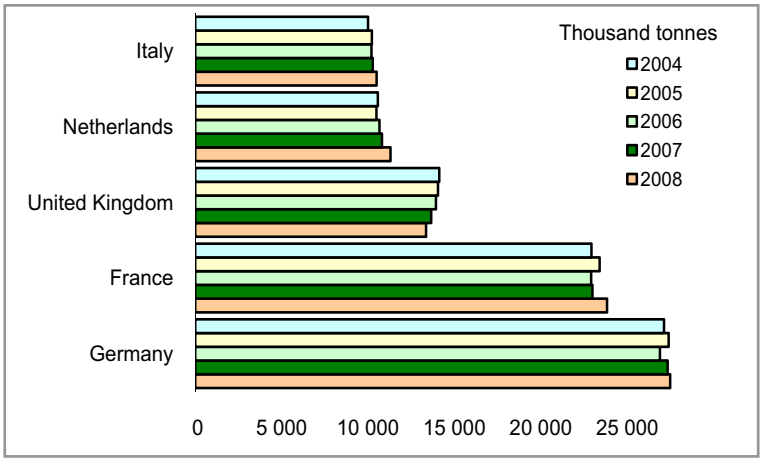


Cows' milk

7 Chart 15.3 shows the proportions of cows' milk collected by the top five producing Member States in 2004 to 2008. This is cows' milk collected from farms by approved dairies and excludes milk consumed on farm, sold direct to consumers and used for cattle feed.

8 In 2008, the United Kingdom ranked third in the quantity of cows' milk collected behind Germany and France having produced about 10 per cent of the total for the EU27.

Chart 15.3 Production of cows' milk

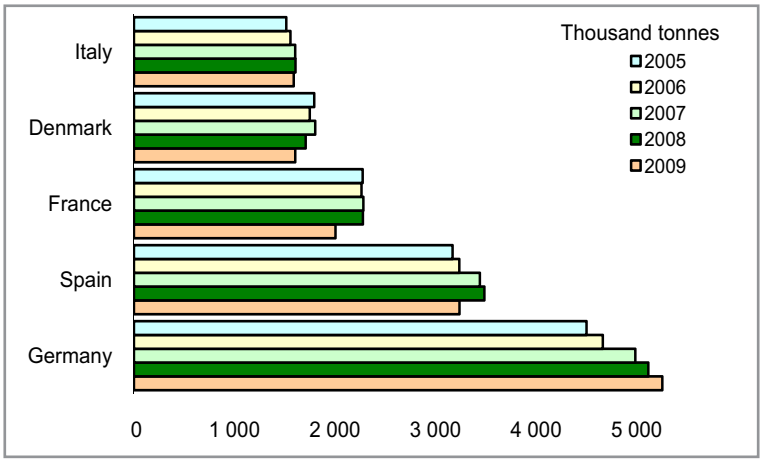


Pigmeat

9 Chart 15.4 shows the quantities of pigmeat produced by the top five producing Member States in 2005 to 2009. This is the total carcase weight of pigs slaughtered in slaughterhouses and on the farm whose meat is declared fit for human consumption.

10 In 2009, the United Kingdom ranked ninth in the quantity of pigmeat produced with about 3.6 per cent of the total for the EU27.

Chart 15.4 Production of pigmeat

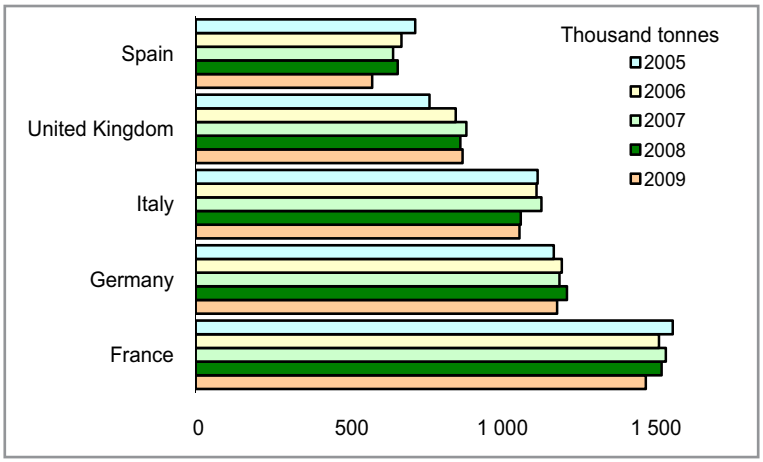


Beef and veal

11 Chart 15.5 shows the proportions of beef and veal produced by the top five producing Member States in 2004 to 2008. This is the carcase weight of bovine animals (calves, bullocks, bulls, heifers and cows) slaughtered in slaughterhouses and on the farm whose meat is declared fit for human consumption.

12 In 2008, the United Kingdom ranked fourth in the quantity of beef and veal produced behind France, Germany and Italy, having produced about 11 per cent of the total for the EU27.

Chart 15.5 Production of beef and veal

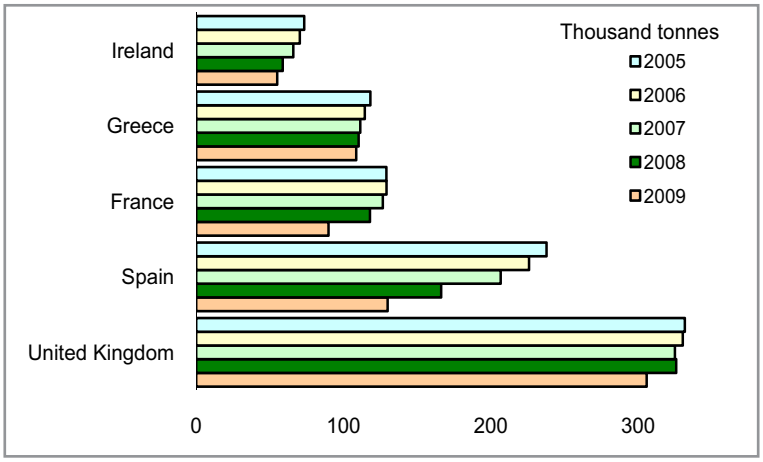


Sheep and goat meat

13 Chart 15.6 shows the proportions of sheep and goat meat produced by the top five producing Member States in 2004 to 2008. This is the carcase weight of sheep, including lambs, and goats slaughtered in slaughterhouses or elsewhere whose meat is declared fit for human consumption.

14 In 2008, the United Kingdom was the largest producer of sheep and goat meat in the European Union having produced about 30 per cent of the total for the EU27.

Chart 15.6 Production of sheep and goat meat



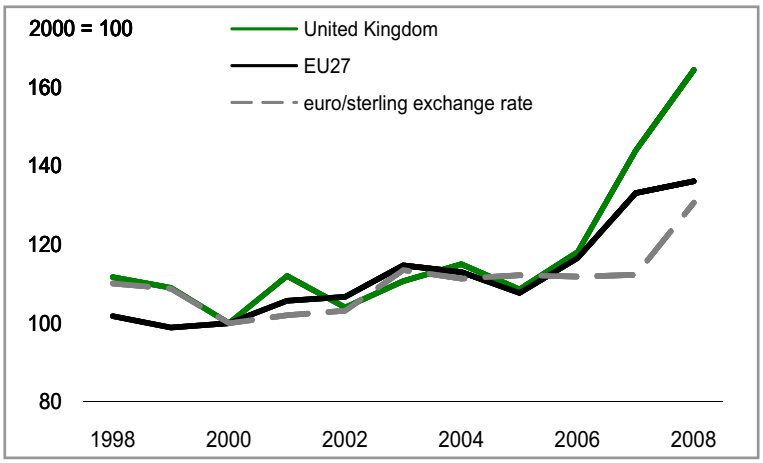
Price indices

Crop products

15 The indices in Chart 15.7 shows the trends in the nominal producer prices of crop products as a whole. The sub-indices were weighted by the values of sales in 2000. An index showing the trend in the euro/sterling exchange rate is also shown.

16 Crop prices in the United Kingdom rose by 67 per cent between 2000 and 2008 while those in the EU25 rose by 31 per cent. Producer prices in the United Kingdom are heavily influenced by the euro/sterling exchange rate.

Chart 15.7 Producer Price Indices: Crop products

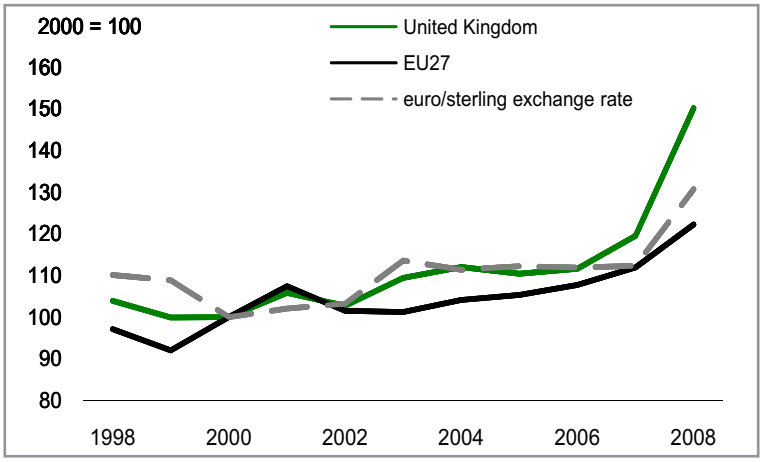


Animals and animal products

17 The indices in Chart 16.8 shows the trends in the nominal producer prices of animal and animal products as a whole and in the euro/sterling exchange rate.

18 Animal and animal products prices in the United Kingdom rose by 52 per cent between 2000 and 2008 while those in the EU25 have risen by 20 per cent. Producer prices in the United Kingdom are heavily influenced by the euro/sterling exchange rate.

Chart 15.8 Producer Price Indices: Animals and animal products

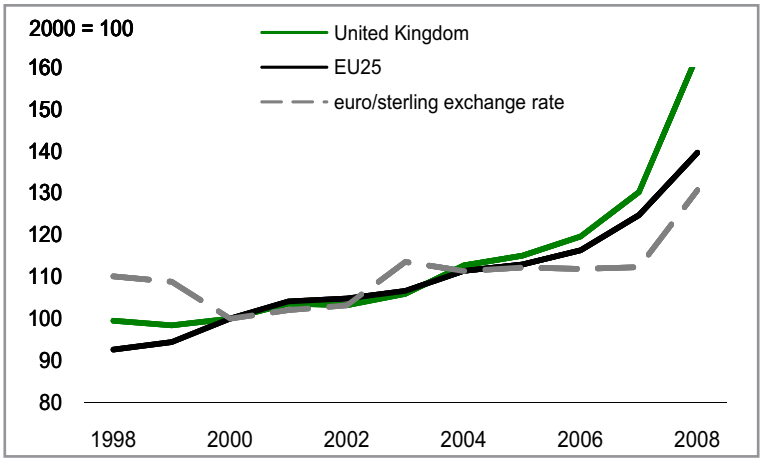


Total means of agricultural production

19 The indices in Chart 16.9 shows the trends in nominal purchase prices of the means of agricultural production as a whole and in the euro/sterling exchange rate.

20 Purchase prices of the means of agricultural production in the United Kingdom have risen by 64 per cent between 2000 and 2008 while those in the EU25 have risen by 45 per cent. Purchase prices of the means of agricultural production in the United Kingdom are less heavily influenced by the euro/sterling exchange rate.

Chart 15.9 Purchase Price Indices: Total means of agricultural production



AGRICULTURE IN THE UNITED KINGDOM 2009

Agriculture in the United Kingdom 2009 is the twenty-second in a series which succeeded the Annual Review of Agriculture White Paper. It provides information on the economic conditions of the United Kingdom agriculture industry.
The Government will draw on this information when considering policy issues, including proposals by the European Commission in respect of the Common Agricultural Policy (CAP) and the provision of agricultural support.