2007

Agriculture in the United Kingdom

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 Environment, Planning and Countryside

Agriculture in the United Kingdom 2007

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

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Preface

Legal basis

1 Agriculture in the United Kingdom 2007 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 2007 are provisional because information for 2007 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.

Websites

6 This publication may be found at http://statistics.defra.gov.uk/esg/publications/auk/default.asp. Further statistics of the Devolved Administrations can be found at:

- http://www.scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries
- http://www.dardni.gov.uk/index/dard-statistics/agricultural-statistics.htm
- http://new.wales.gov.uk/topics/statistics/?lang=en

‘Agriculture in the United Kingdom’ Seminar 2008

7 The sixth annual ‘Agriculture in the United Kingdom’ seminar takes place in York on 7 May 2008 and offers stakeholders the opportunity to discuss the prospects for farm incomes and the work of Defra statisticians.

8 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.

9 Contact details and a reply form are below. Further information will be placed on the Defra website at http://statistics.defra.gov.uk/esg/publications /auk/default.asp.

‘Agriculture in the United Kingdom’ Seminar 2008

Name _____ Organisation _____

Email or postal address _____

_____

_____

I would like to attend the ‘Agriculture in the United Kingdom’ seminar on 7 May 2008. Please send me further details.

Return to:

Alan Horsfall, Defra, 3rd Floor, Zone B1, Foss House, Kings Pool, 1-2 Peasholme Green, York YO1 7PX,

by post or

by fax (01904 455065) or

confirm by email (alan.horsfall@defra.gsi.gov.uk) or

by telephone to the Agriculture in the United Kingdom team on 01904 455083.

Chapter 1 Key Events in 2007

Total Income from Farming

1 Total Income from Farming is estimated to have risen by 10 per cent at current prices to £2.5 billion, which equates to a rise of 5.7 per cent in real terms. Total Income from Farming per full-time person equivalent rose by 13 per cent at current prices, a rise of 8.7 per cent in real terms, to £13,300.

Weather

2 There were exceptional weather conditions in 2007, notably flooding in June and July 2007 in Yorkshire and the Humberside, East Midlands, West Midlands and in the South East. Where there was severe flooding, crops and by-products such as straw were generally written off; where the flooding was less severe, yield and quality were adversely affected, especially where there were harvesting problems and delays. More generally, wet weather during the summer, when rainfall was over 150 per cent of normal levels, caused widespread levels of disease, especially potato blight and root rot in peas, increased lodging in cereals and beans, and delays in harvesting, especially of vining peas.

Animal disease

3 An outbreak of Foot and Mouth Disease (FMD) was confirmed on a premise in Surrey in August 2007 and a further seven infected premises confirmed in Surrey, Windsor and Maidenhead with the last being confirmed on 30 September. The United Kingdom gained EU disease freedom status and a return to normal trade on 31 December 2007, three months after the last infected premise was confirmed.

4 The first United Kingdom case of Bluetongue disease, caused by a virus spread by midges and which affects ruminants, was detected on 22 September. It was confirmed on 28 September that Bluetongue disease was circulating between the local animal and midge population in East Anglia. The disease spread to other parts of south and south east England.

5 The highly pathogenic strain of Avian Influenza, H5N1, was found in Suffolk in February 2007. It was determined that the outbreak had been confined to the single farm and restrictions were lifted on 12 March 2007. A second outbreak of H5N1 was found in Norfolk in November 2007 and further cases in surrounding farms confirmed. The Surveillance and Restricted Zones were lifted on 19 December 2007, and with the exception of some limited restrictions on the export of certain poultry meat, all movement restrictions were lifted.

Single Payment Scheme

6 The Rural Payments Agency (RPA) met its formal target of making 96.14 per cent of payments under the 2006 Single Payment Scheme (SPS) by 30 June 2007. Payments to which farmers in England were entitled under the Single Payment Scheme for 2007 commenced in December 2007, with formal targets of making 75 per cent of full payments, by value, by the end of March and 90 per cent by end of May 2008. Payments made by the Devolved Administrations to farmers in Scotland, Wales and Northern Ireland commenced and were mostly paid in December.

Rural Development Programme 2007-2013

7 The 2007-2013 Rural Development Programmes for England, Wales, Scotland, and Northern Ireland were agreed. The overall financial allocations for each are €2,658 million for the rural development programme for England; €747 million for the rural development programme for Wales; €1,072 million for the rural development programme for Scotland; and €402 million for the rural development programme for Northern Ireland.

"Health Check" of the Common Agricultural Policy

8 The European Commission presented its proposal for a ‘health check’ of the Common Agricultural Policy (CAP) in November 2007. The Commission aims to build on the 2003 reforms, improve the way the policy operates based on the experience gathered since 2003 and make it fit for an enlarged EU of 27 Member States. Following a period of consultation, the Commission will present a proposal for legislation in spring 2008 for adoption by agriculture ministers by the end of 2008.

Chapter 2 Farming Income

Summary

In 2007:

- Total Income from Farming rose by 10 per cent, or 5.7 per cent in real terms, to £2.5 billion;
- Total Income from Farming per full-time person equivalent rose by 13 per cent at current prices, or 8.7 per cent in real terms, to £13,300;
- agriculture's share of national gross value added is expected to be about 0.5 per cent, similar to that in 2006;
- agriculture's share of national employment declined by 0.1 percentage point to 1.7 per cent;
- Eurostat Indicator A (net value added at factor cost per full-time person equivalent) is estimated to have risen by 6.0 per cent for the United Kingdom compared to 5.4 per cent for the European Union as a whole;
- the United Kingdom ranked sixth out of EU Member States in terms of gross value added per full-time person equivalent with an average of 29,000 euros;
- in real terms, average farm business income for all types of farms in England is expected to be around £44,400 in 2007/08, about 13 per cent higher in 2006/07;
- in real terms, farm incomes for cropping and dairy farm types in England are expected to have increased while incomes for livestock farms are expected to have fallen in 2007/08.

Long-term trends in farming income (chart 2.1)

1 In 2007, Total Income from Farming in the United Kingdom is estimated to have risen by 5.7 per cent in real terms. It is 40 per cent above the low point in 2000 and 64 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 incomes (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 some projections of underlying trends; it should be emphasised that these types of projection have very broad margins of uncertainty and also that 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 projections were published in October 2007 and indicate a fall in income in 2008, as a further increase in the value of output is more than offset by increases in the cost of inputs. However, prospects for 2008 are difficult to predict. High grain prices, combined with policy changes such as the removal of the set-aside requirement for the 2008 harvest, will stimulate production and lead to some moderation of

prices. However, it may take a number of years to rebuild stocks to levels that markets are comfortable with, and periods of price volatility are likely to occur for the foreseeable future. More widely there is the uncertainty of the global economy where a slowdown would be expected to lead to a dampening of commodity prices. There is also the impact of exchange rates with sterling weaker relative to the Euro than at the time the projections were put together. If sustained this would improve the position of farmers in the United Kingdom relative to their EU counterparts.

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.

Chart 2.1 Long-term trends in farming income in real terms at 2007 prices; United Kingdom

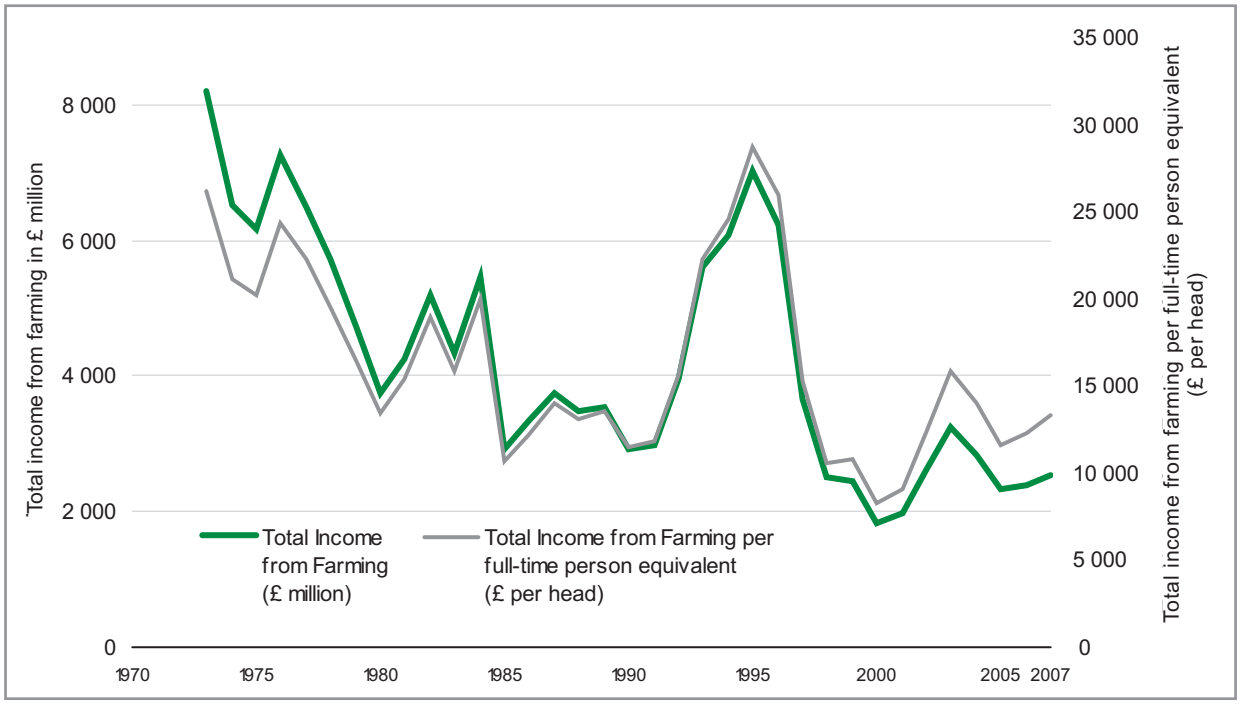
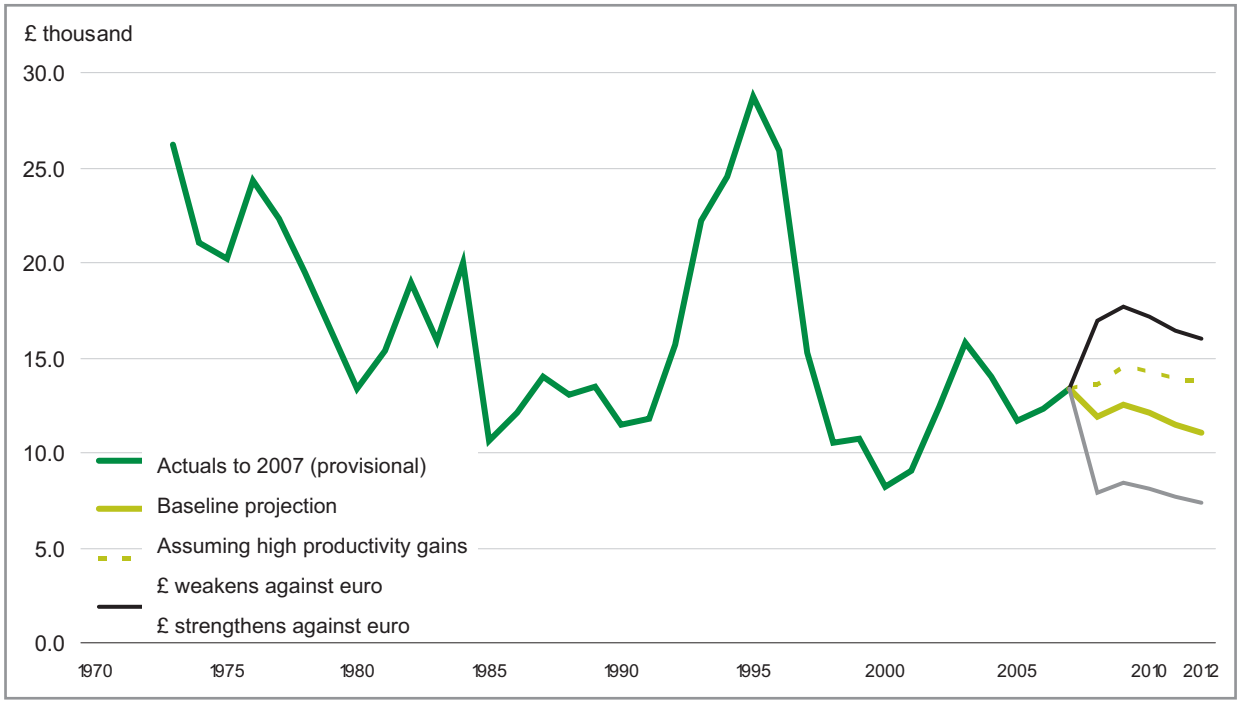


Chart 2.2 Prospects for farming incomes; Total Income from Farming in real terms at 2007 prices per full-time person equivalent up to 2012; United Kingdom



2007

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 2007, net value added at factor cost was £5.8 billion, 7.6 per cent higher than in 2006 (3.2 per cent in real terms).

6 Total Income from Farming in the United Kingdom in 2007 is estimated to have risen by 10 per cent at current prices, or by 5.7 per cent in real terms, to £2.5 billion. It is income generated by production within the agriculture industry, including subsidies, and represents business profits plus remuneration for work done by owners and other unpaid workers. It is calculated as: gross output at basic prices (market prices plus subsidies on product); plus other subsidies less taxes on production; less total intermediate consumption, total consumption of fixed capital (depreciation), paid labour, rent and interest.

7 Compensation of employees, or labour costs, rose by 3.7 per cent in 2007 due to a continuing fall in the labour force (but dropped in real terms by 0.5 per cent). Income from agriculture of total labour input, which is the sum of 'Total Income from Farming' and 'compensation of employees', rose by 7.0 per cent, or 2.6 per cent in real terms. Total Income from Farming per full-time person equivalent ("Total income from farming per AWU of entrepreneurial labour" in table 2.1) is estimated to have risen by 13 per cent in current prices, or by 8.7 per cent in real terms, to £13,300.

8 Cash flow from farming increased in real terms in 2007, by 2.7 per cent, to £4.8 billion as it includes late payments from the Single Payment Scheme 2006. 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 payment of Single Payment.

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

		Income from farming				
	Net value added at factor cost	Total Income from Farming	Compensation of employees	Income from agriculture of total labour input	Total income from farming per AWU of entrepreneurial labour (a)	Cash flow from farming
Current prices		A	B	A + B	(£)	
1998	4 882	1 968	1 975	3 943	8 300	2 740
1999	4 833	1 970	2 028	3 999	8 600	2 880
2000	4 252	1 499	1 900	3 399	6 800	2 618
2001	4 420	1 661	1 950	3 610	7 600	3 725
2002	4 930	2 228	1 966	4 193	10 600	2 595
2003	5 473	2 839	1 915	4 755	13 900	3 327
2004	5 313	2 558	2 004	4 562	12 600	2 576
2005	5 135	2 171	2 201	4 372	10 800	438
2006	5 390	2 303	2 271	4 574	11 800	4 435
2007 (provisional)	5 802	2 538	2 356	4 894	13 300	4 750
In real terms, 2007 prices		A	B	A + B	(£)	
1998	6 191	2 496	2 505	5 001	10 600	3 475
1999	6 036	2 461	2 533	4 995	10 800	3 597
2000	5 158	1 818	2 305	4 124	8 300	3 176
2001	5 266	1 978	2 323	4 301	9 100	4 438
2002	5 780	2 612	2 305	4 916	12 400	3 042
2003	6 236	3 235	2 182	5 417	15 800	3 791
2004	5 880	2 830	2 218	5 048	14 000	2 851
2005	5 526	2 337	2 368	4 705	11 600	471
2006	5 620	2 402	2 368	4 770	12 300	4 625
2007 (provisional)	5 802	2 538	2 356	4 894	13 300	4 750

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

9 Gross value added for the industry, which represents its contribution to national gross domestic product (GDP) rose by 9.0 per cent at basic prices or 9.5 per cent at market prices, compared to 2006.

10 The agricultural industry is expected to account for around 0.5 per cent of the national economy in 2007, 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.

11 The industry's share of the workforce remains at 1.7 per cent. Since 1973, there has been a shift in the composition of the labour force with the proportion of part-time workers rising from 25 per cent to 57 per cent of the total.

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 2007. In 2007, England accounted for about 64 per cent of Total Income from Farming for the United Kingdom, Scotland accounted for about 25 per cent, Northern Ireland for 9.0 per cent and Wales for 2.0 per cent.

13 The measure 'Agriculture's share of total regional employment' gives an indication of the relative importance of the agricultural industry to each country. Agriculture's share of employment was greatest in Northern Ireland where it accounted for 5.8 per cent, and least in England where it accounted for 1.3 per cent.

Table 2.2 Summary measures by country in 2007

Enquiries: Sarah Harriss on +44 (0)1904 455084 sarah.harriss@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	15 782	10 028	5 753	2 538	0.47	1.68	1.14
England	11 435	6 979	4 455	1 631	0.44	1.33	. .
Wales	1 005	862	143	46	0.29	4.10	. .
Scotland	2 112	1 310	802	628	0.74	2.52	. .
Northern Ireland	1 230	877	353	233	0.96	5.82	. .

(a) Data on national and regional GVA for 2007 are not yet available. Data for 2006 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.

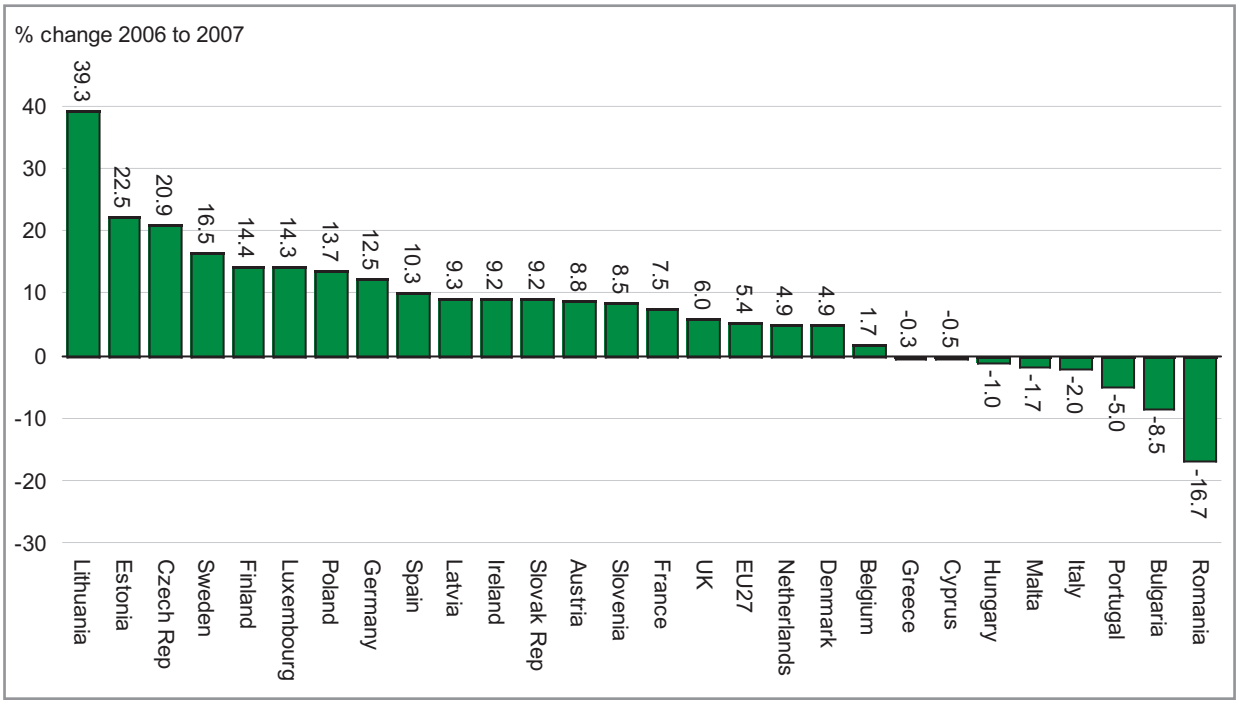
Comparison of income measures in EU Member States (chart 2.3, table 2.3)

14 Chart 2.3 shows estimated changes from 2006 to 2007 in income from agricultural activity across EU Member States as measured by Eurostat's Indicator A. The figures quoted are estimates published by Eurostat in March 2008.

15 Net value added at factor cost per annual work unit (or full-time person equivalent) in real terms, Indicator A, was estimated to have risen by 5.4 per cent in the EU27 in 2007 following an increase of 3.3

per cent in 2006. This growth was the result of agricultural output increasing by 4.3 per cent in real terms, due mainly to increases in the output values of crop production (7.8 per cent), partly offset by an increase in the value of intermediate consumption of goods and services (5.8 per cent), due mainly to higher prices. Consumption of fixed capital ('depreciation') fell slightly (0.3 per cent). The value of all subsidies fell by 2.8 per cent. Agricultural factor income rose by 3.1 per cent compared to 2006, which when combined with a further fall in agricultural labour input (-2.2 per cent), gives rise to the increase of 5.4 per cent in Indicator A.The strongest growth in incomes were observed in Lithuania (39.3 per cent), Estonia (22.5 per cent), the Czech Republic (20.9 per cent) and Sweden (16.5 per cent) and the largest falls in Romania (-16.7 per cent), Bulgaria (-8.5 per cent) and Portugal (-5.0 per cent).

Chart 2.3 Changes in income across the EU: Indicator A



Source: Eurostat Statistics in Focus 24/2008

16 Table 2.3 compares Indicator A, Indicator B and Indicator C for the United Kingdom, EU15 and EU27 to 2007. Between 2003 and 2007, Indicator A rose by 6.0 per cent in the United Kingdom, by 6.4 per cent in the EU15 and by 5.8 per cent in the EU27. Indicator B rose by 8.1 per cent in the United Kingdom; it is not available for the EU as a whole but is available for most other Member States. Indicator C rose by 5.1 per cent in the United Kingdom, by 6.1 per cent in the EU15 and by 5.7 per cent in the EU27.

Table 2.3 Eurostat income indicators

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

Index 2000 = 100

	Average of 1996-98	2003	2004	2005	2006	2007
Net value added at factor cost of agriculture per total Annual Work Unit (Indicator A)						
United Kingdom	126.2	133.3	125.2	119.0	126.8	134.4
EU15	101.8	99.5	100.8	95.1	97.7	103.9
EU27	. .	106.8	116.2	105.8	109.6	116.0
Net agricultural entrepreneurial income per unpaid Annual Work Unit (Indicator B) (a)						
United Kingdom	176.9	176.6	156.2	134.1	142.9	154.4
Net entrepreneurial income from agriculture (Indicator C)						
United Kingdom	192.0	163.8	143.9	122.2	126.7	133.1
EU15	114.2	92.8	92.7	79.0	79.8	84.6
EU27	109.9	93.6	99.9	83.8	85.0	89.8

Source: Eurostat

(a) Indicator B for EU 15, EU25 and EU 27 not available.

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 2007. These are estimates based on provisional economic accounts for agriculture submitted to Eurostat by Member States at the end of January 2008.

18 France, Italy, Germany and Spain were estimated to account for about 60 per cent of the total value of crop output in the European Union in 2007. These four countries were also the main producers in the livestock sector and were estimated to have accounted for about 50 per cent of the total value of livestock output in the European Union.

19 In terms of gross value added per annual work unit, the United Kingdom ranks sixth behind the Netherlands, Denmark, Belgium, France and Luxembourg, with an average of 29,000 euros per full-time person equivalent (AWU).

Table 2.4 Comparison of agriculture in EU Member States for 2007

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	Gross Value Added at basic prices	Entrepreneurial income	Total labour input (a) '000 AWU	Gross Value Added per AWU €
Member States							
EU27	187 280	140 218	351 520	151 126	85 218	12 125	12 500
EU15	156 583	118 612	295 358	129 116	70 862	5 639	22 900
Austria	3 019	2 836	6 373	2 760	2 067	158	17 500
Belgium	3 459	3 799	7 335	2 353	1 270	70	33 600
Bulgaria	1 527	1 227	3 283	1 257	1 084	625	2 000
Cyprus	300	302	632	338	51	21	16 500
Czech Republic	2 344	1 718	4 291	1 177	479	144	8 200
Denmark	3 294	4 873	8 731	2 523	369	58	43 200
Estonia	283	290	641	269	173	37	7 400
Finland	1 876	2 058	4 282	1 075	1 000	91	11 900
France	37 336	23 077	65 292	28 012	14 223	901	31 100
Germany	22 497	20 565	44 901	14 512	6 702	560	25 900
Greece	7 157	2 780	10 764	6 576	5 835	601	10 900
Hungary	3 775	2 247	6 584	2 329	1 247	505	4 600
Ireland	1 613	4 046	5 933	1 917	2 123	153	12 500
Italy	25 939	13 999	43 807	24 561	7 988	1 162	21 100
Latvia	556	370	1 049	389	385	130	3 000
Lithuania	1 030	892	2 033	726	367	124	5 900
Luxembourg	98	165	285	123	82	4	31 500
Malta	48	70	126	57	57	4	14 000
Netherlands	11 522	9 103	22 940	8 986	3 030	187	48 200
Poland	10 727	8 716	20 173	8 288	6 726	2 292	3 600
Portugal	3 731	2 586	6 617	2 412	1 507	399	6 000
Romania	8 600	4 386	14 192	6 134	3 377	2 431	2 500
Slovakia	968	816	2 026	594	96	86	6 900
Slovenia	539	572	1 131	453	314	88	5 100
Spain	24 347	14 296	40 202	23 702	19 065	939	25 200
Sweden	2 204	2 188	5 019	1 396	845	74	19 000
United Kingdom	8 491	12 242	22 878	8 208	4 756	283	29 000

source: Eurostat

(a) 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)

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

21 In October 2006, Defra undertook a formal consultation with outside stakeholders on the subject of farm income measures. Lead government departments in Wales, Scotland and Northern Ireland also held similar consultations at around the same time. The government's response to the consultation was that Farm Business Income should be adopted as the headline measure of farm income. Further details about the England Consultation and a description of the income measures can be found at http://statistics.defra.gov.uk/esg/asd/fbs/Consult.htm

22 Estimates of farm business income for 2007/8 (i.e. year ended February 2008) at current prices are shown in table 2.5 for England, Wales and Northern Ireland alongside outturn data for the previous four years. These estimates include Single Payment Scheme receipts which are recorded as due for the appropriate accounting year, e.g. receipts of the 2007 Single Payment Scheme are recorded in the 2007/08 accounting year. Estimates of farm business income are under development in Scotland and will be published once they become available.

23 Average farm business incomes are expected to increase on cropping and dairy farms in 2007/08. Reflecting higher prices, outputs from most crops are expected to increase markedly, particularly for cereals and oilseed rape. However, this will be offset to some degree by higher input costs, particularly for energy and fertiliser. The increased income on dairy farms is largely driven by a higher milk price although the effect of this on farm profitability is dampened to some extent by higher input costs, particularly feed.

24 On livestock grazing farms in both the lowland and Less Favoured Areas, incomes are predicted to fall. A slightly higher output for cattle enterprises, driven by firmer prices for finished and store cattle, is

Table 2.5 Farm business income by country and type of farm

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

Average farm business income per farm (£ farm)	Accounting years ending on average in February				
	2003/04	2004/05	2005/06	2006/07	2007/08 (provisional)
At current prices					
England					
Cereals	53 100	35 300	33 000	56 100	81 100
General cropping	66 500	46 200	37 300	65 400	83 000
Dairy	32 700	33 300	36 600	33 600	50 700
Grazing livestock (lowland)	12 100	10 800	9 700	13 100	8 700
Grazing livestock (LFA)	17 500	16 200	15 800	10 600	5 900
Specialist pigs	46 900	26 100	30 300	24 400	-4 100
Specialist poultry	48 800	86 000	93 200	101 200	39 500
Mixed	34 200	24 000	33 300	27 100	31 700
Wales					
Dairy	25 700	28 600	30 600	36 800	47 700
Grazing livestock (lowland)	16 800	11 600	11 100	21 900	18 800
Grazing livestock (LFA)	23 300	21 200	18 400	18 000	12 500
Scotland					
Cereals	. .	. .	. .	. .	. .
General cropping	. .	. .	. .	. .	. .
Dairy	. .	. .	. .	. .	. .
Grazing livestock (LFA)	. .	. .	. .	. .	. .
Mixed	. .	. .	. .	. .	. .
Northern Ireland					
Dairy	23 800	24 900	28 700	27 300	39 000
Grazing livestock (LFA)	8 500	10 200	11 900	12 600	12 200

expected to be offset by lower sheep prices resulting in a lower level of livestock output compared to the previous year. Furthermore, costs are expected to increase across a range of inputs, notably feed.

25 Although the average value of eggs, poultry and pigmeat has increased, incomes on specialist pig and specialist poultry farms are expected to fall markedly in 2007/08, largely as a result of higher feed prices.

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 2006/07. Around a quarter of farms in England, Wales and Northern Ireland had a farm business income of £5,000 or less whilst over a third had an income of less than £10,000. Just over 20 per cent of farms in England had a farm business income of over £50,000 compared to 11 per cent in Wales and 8 per cent in Northern Ireland.

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 England for 2006/07. Performance is measured as £ of output per £100 of input, where input includes a charge for farmer and spouse manual labour, imputed or otherwise. The chart illustrates the significant variation in performance across all farms in England with around 16 per cent of farms failing to recover their costs.

Farm income measures

29 **Net Farm Income (NFI)** is no longer considered the best measure of farm income owing to:

- its underlying tenant farm basis despite most farms now being owner occupied (NFI includes imputed rent for owner occupiers);
- its incomplete range of on-farm activities (e.g. semi-integrated non-agricultural activities);
- the restriction in definition to the return to farmers and spouses alone, excluding other partners;
- its consequent misalignment with the main aggregate measure of farm income, Total Income from Farming.

Net farm income *equals*
Receipts from sales of output plus subsidies *plus*
Crop and livestock valuation change *less*
Expenditure (costs, overheads, fuel, repairs, rent, paid labour) *less*
Depreciation of tenant capital *less*
Imputed value of unpaid labour *less*
Imputed rent for owner occupiers.

30 **Farm Business Income (FBI)** is now 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

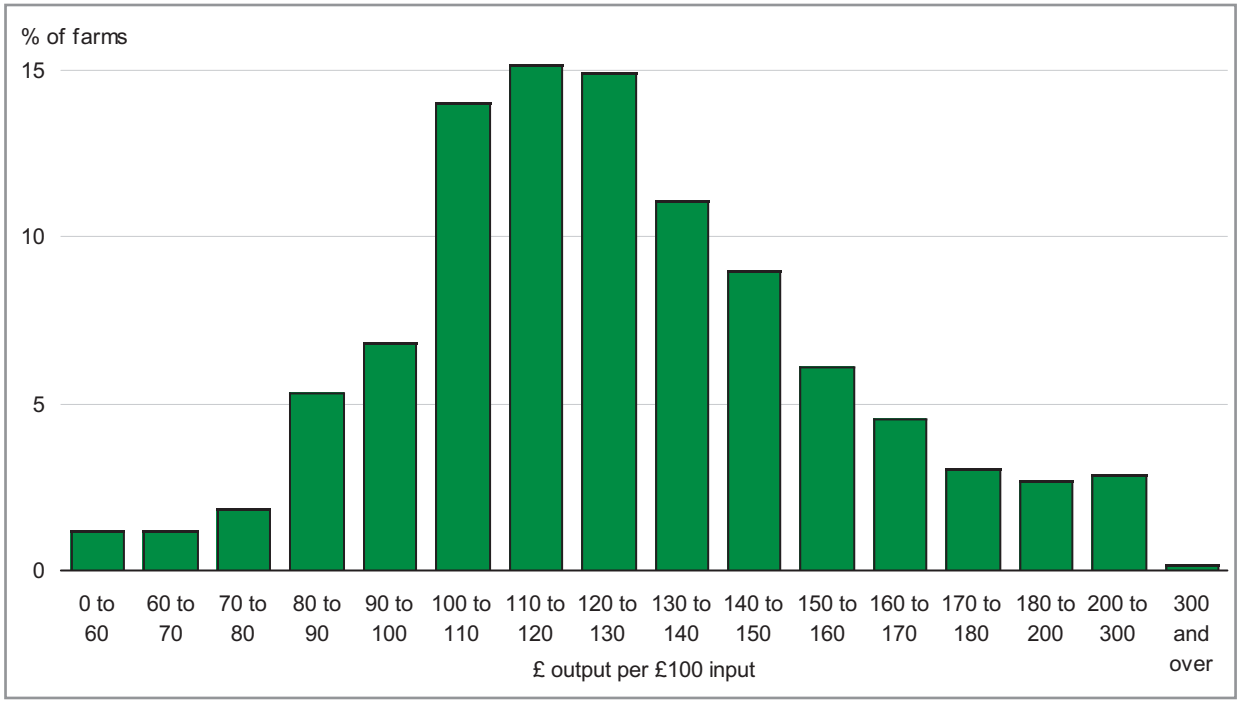
Table 2.6 All farm types: distribution of farm incomes by country 2006/07

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

Percentage of farms

	England	Wales	Scotland	Northern Ireland
Farm Business Income				
Less than zero	15.8	13.1	. .	13.3
0 to less than £5,000	9.9	11.2	. .	13.6
£5,000 to less than £10,000	7.5	13.6	. .	14.4
£10,000 to less than £20,000	17.1	21.3	. .	22.5
£20,000 to less than £30,000	12.2	14.5	. .	15.4
£30,000 to less than £50,000	16.1	15.4	. .	12.6
£50,000 and over	21.4	11.0	. .	8.2
Average (£ thousand per farm)	37.8	23.3	. .	18.1
Net Farm Income				
Less than zero	23.3	28.6	23.3	30.1
0 to less than £5,000	10.4	13.5	8.4	14.2
£5,000 to less than £10,000	10.4	10.6	13.1	12.3
£10,000 to less than £20,000	16.5	18.6	22.7	18.5
£20,000 to less than £30,000	11.4	14.8	10.0	9.2
£30,000 to less than £50,000	12.4	8.5	12.5	8.1
£50,000 and over	15.7	5.5	10.0	7.6
Average (£ thousand per farm)	26.7	12.1	18.9	11.5
Cash Income				
Less than zero	8.7	4.8	7.0	6.0
0 to less than £5,000	7.2	4.6	8.7	3.1
£5,000 to less than £10,000	7.3	9.6	7.7	15.2
£10,000 to less than £20,000	15.8	20.0	15.4	24.2
£20,000 to less than £30,000	13.4	20.5	17.9	15.1
£30,000 to less than £50,000	19.2	21.2	20.0	19.8
£50,000 and over	28.5	19.4	23.3	16.6
Average (£ thousand per farm)	47.9	34.1	34.2	28.5

Chart 2.4 Distribution of performance across farms >0.5 SLR 2006/07; England



31 **Total Income from Farming (TIFF)** represents business profits plus 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.

32 Differences and similarities:

Net Farm Income

- A measure for comparisons of farm type.
- No longer the *preferred* measure for comparisons of farm type
- Covers the 12 month period March to February.
- Includes imputed rent for owner occupiers.
- Incomplete range of on-farm activities.

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.

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.

Diversification

33 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.

34 Further information on diversification is available at:

http://statistics.defra.gov.uk/esg/publications/diversification.asp

http://www.ruralni.gov.uk/index/ruraldev/diversification.htm

http://www.scotland.gov.uk/Publications/2003/04/16927/21191

Chapter 3 The Structure of the Industry

2007

Summary

In 2007:

- the area of wheat fell by 0.9 per cent compared to 2006 to 1.8 million hectares; the area of barley increased by 1.9 per cent; the area of oats increased by 6.5 per cent; the area of oilseed rape increased by 20 per cent to 0.6 million hectares; and the area of potatoes was unchanged;
- there were 10.3 million cattle in the United Kingdom at June 2007, a fall of 2.6 per cent compared to 2006; the number of cows in the dairy herd fell by 1.3 per cent while the number in the beef herd fell by 2.2 per cent; the number of pigs fell by 2.0 per cent to 4.8 million; and the number of sheep and lambs fell by 2.2 per cent to 33.9 million.
- the total farm labour force in the United Kingdom declined by 1.5 per cent compared to 2006 to 526,200; the number of full-time principal farmers fell by 4.3 per cent to 145,600 while the number of part-time principal farmers rose by 0.2 per cent to 198,600; the number of part-time workers rose by 9.3 per cent while the number of casual workers fell by 8.1 per cent.

Introduction

1 The tables and charts in this chapter show the size and structure of the agricultural industry in the United Kingdom. They provide information on land use and livestock numbers, on the distribution of these between holdings, on the labour force, the age and training of holders and on the industry's fixed capital.

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

2 At June 2007, the total area of land on agricultural holdings was 17.4 million hectares, some 77 per cent of the total land area in the United Kingdom (excluding inland water).

Chart 3.1 Total area on agricultural holdings June 2007; United Kingdom

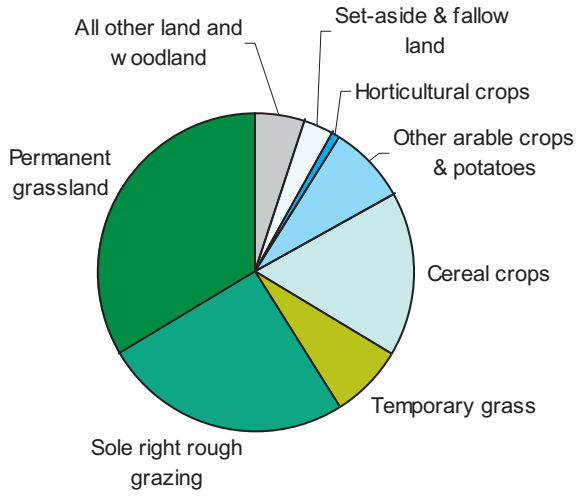
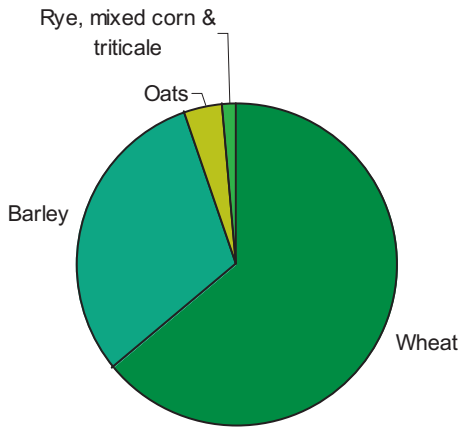


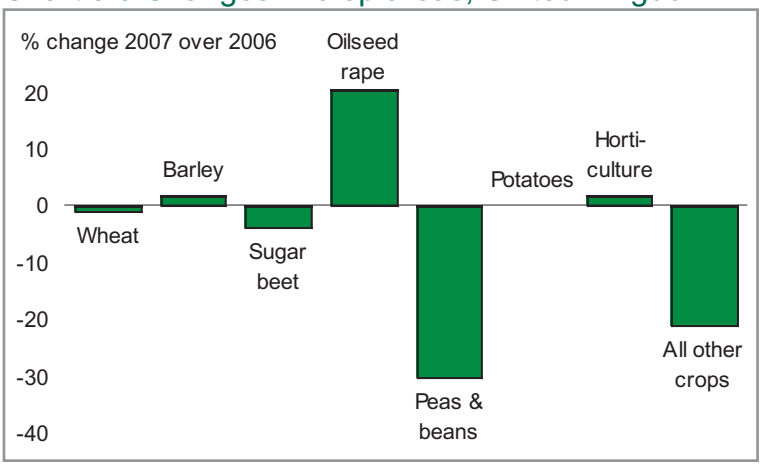
Chart 3.2 Total area of cereal crops grown June 2007; United Kingdom



3 Permanent grassland and sole right rough grazing accounted for 57 per cent of the area on agricultural holdings in June 2007. Around 37 per cent was considered to be croppable land, i.e. land currently under crops, set-aside, bare fallow or temporary grass. Almost half of this croppable area is occupied by cereal crops. Horticultural crops, including vegetables, orchards, soft fruit and crops grown under glass, account for 1.0 per cent of the area on agricultural holdings.

4 The area of cereals was unchanged in June 2007 compared to June 2006 at 4.3 million hectares. Wheat was the main cereal crop covering over 60 per cent of the area of cereal crop in June 2007. Barley covered over 30 per cent of the area with oats and other crops making up the remainder. The area of barley increased by 1.9 per cent in 2007 but the longer term trend has been one of decline. The area of oilseed rape increased by 20 per cent and here there has been an increasing trend. The area of peas and beans fell by 33 per cent and that for linseed fell by 66 per cent.

Chart 3.3 Changes in crop areas; United Kingdom

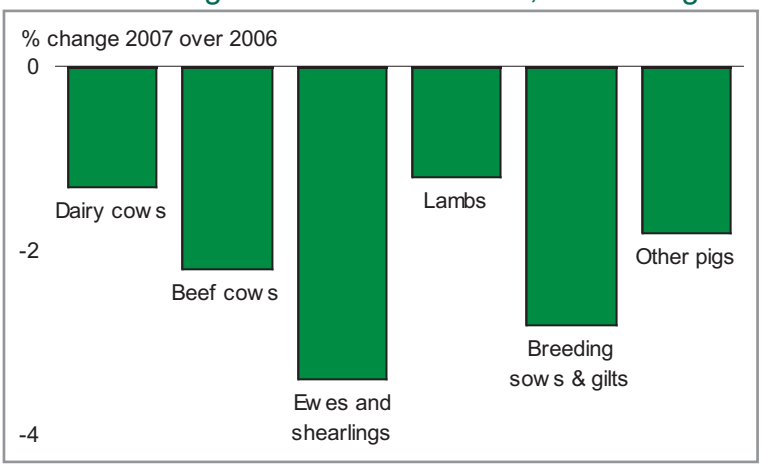


5 In 2007, the source of data for cattle was changed from survey data to adminstrative data supplied by the Cattle Tracing System (CTS) in England and Wales, the equivalent APHIS system in Northern Ireland and survey data in Scotland. The new data is believed to offer greater accuracy as it has greater coverage. However, the results for 2007 are therefore not directly comparable with earlier years; for comparable data for 2005 to 2007, see http://statistics.defra.gov.uk/esg/statnot/june_uk.pdf.

6 The dairy herd was estimated at 2.0 million animals and the beef herd at 1.7 million animals in June 2007. The dairy herd fell by 1.3 per cent continuing a long term declining trend, while the beef herd fell by 2.2 per cent.

7 The size of the sheep breeding flock continued to decline and fell by 3.4 per cent between June 2006 and June 2007 to 16.0 million animals. The number of lambs fell by 1.2 per cent to 16.9 million.

Chart 3.4 Changes in livestock numbers; United Kingdom



8 The female pig breeding herd also continued to decline and fell by 2.8 per cent to 455,000 animals in June 2007. The number of pigs other than breeding animals fell by 1.8 per cent to 4.3 million. The poultry breeding flock, comprising layer breeders, broiler breeders, cocks and cockerels, increased by 32 per cent to 12,255,000 birds.

Table 3.1 Agricultural land use United Kingdom

The data in this table cover all holdings (including minor holdings) in the UK (a)

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

Thousand hectares — At June of each year

	Average of 1996-98	2003	2004	2005	2006	2007
Total agricultural area (b)	18 669	18 464	18 432	18 502	18 713	18 602
of which:						
crops	4 894	4 475	4 589	4 437	4 340	4 350
bare fallow (c)	33	29	29	164	197	165
Total tillage	4 928	4 504	4 619	4 600	4 536	4 515
All grass under five years old	1 367	1 200	1 246	1 193	1 137	1 176
Total arable land	6 295	5 705	5 864	5 794	5 673	5 691
All grass five years old and over (excluding rough grazing)	5 333	5 683	5 620	5 711	5 967	5 965
Total tillage and grass (d)	11 628	11 388	11 485	11 505	11 641	11 656
Sole right rough grazing	4 679	4 329	4 326	4 354	4 491	4 313
Set-aside	376	689	559	535	466	440
All other land (e) and woodland	762	821	825	872	874	954
Total area on agricultural holdings	17 446	17 227	17 195	17 266	17 472	17 363
Common rough grazing (estimated)	1 224	1 236	1 237	1 236	1 241	1 238

(a) Before 2000 Scottish minor holdings were not included data for earlier years are therefore not directly comparable. From 1997 the Northern Ireland census was based on an improved register of holdings and included all active farms having one or more hectares of farmed land plus any below that size which had significant agricultural output. Data prior to 1997 were revised for comparability.

(b) Total area on agricultural holdings plus common rough grazing.

(c) The area of bare fallow has shown an increase in 2005. The rise in the bare fallow area is believed to be due to the way the farmers have described their land following the introduction of the Single Payment Scheme.

(d) Includes bare fallow.

(e) In Great Britain other land comprises farm roads, yards, buildings (excluding glasshouses), ponds and derelict land.

Table 3.2 Crop areas and livestock numbers; United Kingdom

The data in this table cover all holdings (including minor holdings) in the UK (a) (b)

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

At June of each year

		Average of 1996-98	2003	2004	2005	2006	2007
Crop areas (thousand hectares)							
Total		4 894	4 475	4 589	4 437	4 340	4 350
of which:							
Total cereals		3 430	3 057	3 130	2 919	2 861	2 871
of which:	wheat	2 019	1 836	1 990	1 867	1 833	1 816
	barley	1 294	1 076	1 007	938	881	898
	oats	98	121	108	90	121	129
	rye and mixed corn (c)	11	9	9	9	10	8
	triticale (c)	9	15	15	13	13	16
Other arable crops (excluding potatoes)		1 110	1 098	1 136	1 211	1 172	1 170
of which:	oilseed rape	436	460	498	519	500	602
	sugar beet not for stockfeeding (d)	194	162	154	148	130	125
	hops (d)	3	2	2	1	1	. .
	peas for harvesting dry and field beans (d)	196	235	242	239	231	161
	linseed (d) (e)	74	32	30	45	33	11
	other crops	207	201	203	252	278	272
Potatoes		169	145	148	137	140	140
Horticulture		184	176	175	170	166	169
of which:	vegetables grown in the open	128	125	125	121	119	121
	orchard fruit (f)	29	25	24	23	23	23
	soft fruit (g)	11	9	9	9	10	9
	plants and flowers (h)	14	14	15	14	12	13
	glasshouse crops	2	2	2	2	2	2

continued

Table 3.2 continued

At June of each year

	Average of 1996-98	2003	2004	2005	2006	2007 (i)
Livestock numbers (thousand head)						
Total cattle and calves (i)	11 732	10 508	10 588	10 392	10 270	10 304
of which: dairy cows	2 502	2 191	2 129	2 063	2 066	1 954
beef cows	1 891	1 698	1 736	1 762	1 733	1 698
heifers in calf	818	679	690	638	645	. .
Total sheep and lambs	43 127	35 812	35 817	35 416	34 722	33 946
of which: ewes and shearlings (j)	20 835	17 580	17 630	16 935	16 637	16 064
lambs under one year old	21 204	17 322	17 238	17 488	17 058	16 855
Total pigs	7 936	5 046	5 159	4 862	4 933	4 834
of which: sows in pig and other sows for breeding	669	442	449	403	401	398
gilts in pig	109	73	66	67	67	57
Total poultry (k)	164 494	178 800	181 759	173 909	173 081	167 667
of which: table fowl including broilers	95 290	116 738	119 888	111 475	110 672	108 753
laying fowl (l)	31 585	29 274	29 655	29 544	28 632	27 321
growing pullets	10 492	8 286	8 156	10 928	9 625	8 936
fowls for breeding	9 277	10 988	10 125	8 561	9 273	12 502
turkeys, ducks, geese & all other poultry (m)	17 850	13 514	13 935	13 400	14 879	10 154

(a) For various reasons, the crop area figures and livestock numbers shown in this table may differ slightly from those shown in chapter 5.
(b) Before 2000 Scottish minor holdings were not included data for earlier years are therefore not directly comparable.
(c) Figures from 2004 do not include Wales.
(d) Figures from 2005 do not include Wales. From 2007 hops area included in "other crops".
(e) England and Wales only prior to 1992. Excludes crops on Set-Aside scheme land.
(f) Includes non-commercial orchards.
(g) Includes wine grapes.
(h) Hardy nursery stock, bulbs and flowers.
(i) In 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://statistics.defra.gov.uk/esg/statnot/june_uk.pdf
(j) Improvements to the questions on sheep were introduced in 1995 data for earlier years are therefore not directly comparable.
(k) Improvements to the Census methodology were introduced in 1997 onwards to account for poultry production on unregistered units data for earlier years are therefore not directly comparable.
(l) Excludes fowls laying eggs for hatching.
(m) Data before 1996 does not include turkeys.

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

9 Tables 3.3 shows the relative sizes of holdings in European size units (ESU) and by land area in 2000 and 2005. European size units measure the financial potential of the holding in terms of the margins which might be expected from crops and stock. The threshold of 8 ESU is judged to be the minimum for full-time holdings. Table 3.4 shows the relative sizes of holdings by type of enterprise.

10 Table 3.5 shows the relative sizes of holdings in England, Wales, Scotland and Northern Ireland in Standard Labour Requirements (SLRs) in June 2006. Standard Labour Requirements (SLRs) are representative of labour requirements (hours per head or hours per hectare) under typical conditions for enterprises of average size and performance. Table 3.6 shows the relative sizes of agricultural holdings in England, Wales, Scotland and Northern Ireland and of holdings in less favoured areas (LFA) and table 3.7 shows the relative sizes of agricultural holdings in England, Wales, Scotland and Northern Ireland by farm type.

Labour force in agriculture (table 3.8)

11 The total labour force at June 2007 is estimated to have fallen by 1.5 per cent to 526,000 persons compared with June 2006. The number of ‘farmers, business partners, directors and spouses’ fell by 1.8 per cent, the number of ‘salaried managers’ rose by 5.5 per cent and the number of ‘other workers’ fell by 1.6 per cent.

Table 3.3 Numbers and sizes of holdings (a); United Kingdom

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

At June of each year

		2000		2005	
		Number of holdings (thousand)	Total ESU	Number of holdings (thousand)	Total ESU
Size of holding (ESU)	under 8 European Size Units (ESU)	154.6	201.2	197.5	225.5
	8 to under 40 ESU	61.0	1 043.3	55.4	926.1
	40 to under 100 ESU	38.0	2 248.0	33.1	1 928.8
	100 to under 200 ESU	15.9	2 093.1	16.1	2 096.7
	200 ESU and over	6.3	2 371.4	9.0	3 814.9
	Total	275.7	7 957.0	311.1	8 992.0
	Average size (ESUs):				
	All holdings		28.9		28.9
	Holdings 8 ESU and over		64.0		77.2
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings	under 20 hectares	147.2	859	183.3	909
	20 to under 50 hectares	49.8	1 646	49.3	1 625
	50 to under 100 hectares	37.6	2 681	36.8	2 628
	100 hectares and over	41.2	11 860	41.7	12 111
	Total	275.7	17 047	311.1	17 273
	Average area (hectares):				
	All holdings		61.8		55.5
	% of total area on holdings with 100 hectares and over		69.6		70.1
Tillage and grass area	0.1 to under 20 hectares	127.0	797	133.0	836
	20 to under 50 hectares	49.6	1 643	48.6	1 602
	50 to under 100 hectares	36.5	2 603	36.4	2 565
	100 hectares and over	31.7	6 218	33.2	6 484
	Total	244.9	11 262	251.2	11 488
	Average crops and grass area per holding (hectares) (d)		46.0		45.7
	% of total crops and grass area on holdings with 100 hectares and over		55.2		56.4

(a) Land in Great Britain let out under short term lets is attributed to the lessor, but land so let out in Northern Ireland (under the conacre system) is now attributed to the lessee. This difference affects both the number of holdings and their average size.

(b) The numbers of holdings shown in this part of the table are lower than those presented in the "total area" part of the table because holdings without crops and grass are excluded.

(c) The areas shown in this part of the table exclude set-aside land.

(d) Refers to holdings with crops and grass only.

Table 3.4 Numbers and sizes of enterprises; United Kingdom

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

Areas refer to the area of the specified crop and not to the area of the holding At June of each year

		2000		2005	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Cereals (excluding maize)	0.1 to under 15 hectares	23.8	167.5	19.9	150.2
	15 to under 30 hectares	12.5	267.2	10.4	240.6
	30 to under 50 hectares	9.0	351.3	8.4	349.4
	50 to under 100 hectares	11.3	800.6	10.2	753.0
	100 hectares and over	9.4	1 759.6	7.6	1 431.3
	Total	66.0	3 346.2	56.5	2 924.6
	Average area (hectares) (a)		50.7		51.7
	% of total cereals area on holdings with 100 hectares and over		52.6		48.9

continued

Table 3.4 continued

Areas refer to the area of the specified crop and not to the area of the holding — At June of each year

		2000		2005	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Oilseed rape	0.1 to under 10 hectares	3.2	20.5	2.6	17.0
	10 to under 20 hectares	4.1	59.1	3.7	54.9
	20 to under 30 hectares	2.3	55.9	2.6	64.8
	30 to under 50 hectares	2.1	78.7	2.9	113.1
	50 hectares and over	1.4	118.1	3.0	269.3
	Total	13.1	332.3	14.8	519.0
	Average area (hectares) (a)		25.4		35.0
	% of total oilseed rape area on holdings with 50 hectares and over		35.5		51.9
Sugar beet (England and Wales)	0.1 to under 10 hectares	3.4	19.1	2.3	14.9
	10 to under 20 hectares	2.4	34.4	1.9	28.7
	20 hectares and over	2.8	119.3	2.4	104.7
	Total	8.7	172.8	6.5	148.3
	Average area (hectares) (a)		20.0		22.7
	% of total sugar beet area on holdings with 20 hectares and over		69.1		70.6
Potatoes	0.1 to under 2 hectares	5.0	2.8	3.1	2.0
	2 to under 5 hectares	2.4	7.9	1.4	5.4
	5 to under 10 hectares	2.6	18.8	1.9	16.2
	10 to under 20 hectares	2.6	36.7	2.0	32.3
	20 hectares and over	2.3	99.8	1.7	81.5
	Total	14.9	166.0	10.2	137.4
	Average area (hectares) (a)		11.2		13.4
	% of total potato area on holdings with 20 hectares and over		60.2		59.3

		2000		2005	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (thousand)	Number of livestock (thousand)
Dairy cows	1 to 49 dairy cows	13.0	316.3	9.6	263.9
	50 to 99	11.0	792.6	8.0	606.8
	100 and over	8.0	1 226.7	7.1	1 194.5
	Total	32.1	2 335.6	24.6	2 065.2
	Average size of herd (head)		73		84
	% of total dairy cows in herds of 100 and over		52.5		57.8
Beef cows	1 to 4 beef cows	13.5	32.2	11.0	29.1
	5 to 9	10.9	74.7	10.0	71.6
	10 to 19	14.2	197.4	13.3	190.8
	20 to 29	8.7	208.9	8.5	208.5
	30 to 49	9.4	355.9	8.9	341.5
	50 and over	10.5	969.6	9.8	925.5
	Total	67.2	1 838.7	61.5	1 767.0
	Average size of herd (head)		27		29
	% of total beef cows in herds of 50 and over		52.7		52.4
Sheep breeding flock	1 to 19 breeding sheep	13.9	129.5	15.9	157.9
	20 to 49	14.1	462.5	13.7	465.2
	50 to 124	18.6	1 517.4	17.9	1 504.7
	125 to 499	27.0	7 014.0	22.7	5 863.9
	500 and over	11.8	11 386.4	9.6	9 099.9
	Total	85.3	20 509.8	79.9	17 091.6
	Average size of flock (head)		240		214
	% of total breeding sheep in flocks of 500 and over		55.5		53.2

continued

Table 3.4 continued

		2000		2005	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (thousand)	Number of livestock (thousand)
Pig breeding herd	1 to 4 breeding pigs	3.3	6.4	2.3	5.4
	5 to 24	1.7	18.5	1.6	18.1
	25 to 99	1.0	56.9	0.9	45.2
	100 and over	1.5	537.2	1.1	408.3
	Total	7.6	619.0	5.8	477.0
	Average size of herd (head)		82		82
	% of total breeding pigs in herds of 100 and over		86.8		85.6
Fattening pigs (Fattening pigs of over 20kg liveweight excl. barren sows)	1 to 9 fattening pigs	2.7	9.8	3.7	13.4
	10 to 49	1.6	36.2	1.6	32.0
	50 to 299	1.5	216.7	1.2	155.4
	300 to 999	1.6	963.4	1.3	719.1
	1,000 and over	1.2	2 954.2	1.0	2 138.7
	Total	8.7	4 180.3	8.6	3 058.6
	Average size of herd (head)		480		355
	% of total fattening pigs in herds of 1,000 and over		70.7		69.9
Broilers (b) (Includes small numbers of other table fowl in Scotland and Northern Ireland)	1 to 9,999 broilers	1.4	697.3	2.0	668.2
	10,000 to 99,999	0.9	36 769.1	0.7	33 848.1
	100,000 and over	0.3	68 212.5	0.4	76 970.5
	Total	2.6	105 678.9	3.1	111 486.8
	Average size of flock (head)		40 834		36 141
	% of total broilers in flock of 100,000 and over		64.5		69.0
Laying fowls	1 to 999 laying fowls	28.1	822.4	35.8	1 568.5
	1,000 to 4,999	0.5	1 360.6	0.7	1 665.1
	5,000 to 19,999	0.6	6 102.4	0.6	5 763.2
	20,000 and over	0.3	30 021.7	0.4	31 970.0
	Total	29.6	38 306.9	37.4	40 966.8
	Average size of flock (head)		1 295		1 095
	% of total laying fowls in flocks of 20,000 and over		78.4		78.0

(a) Average area refers to the average area of the specified crop on holdings that grow that crop. Holdings that do not grow the crop are excluded from the calculation.

Table 3.5 Size of agricultural holdings 2006

The data in this includes main and minor holdings in Great Britain. In Northern Ireland all active farm businesses are included (a)

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

At June

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Total SLR	Number of holdings (thousand)	Total SLR	Number of holdings (thousand)	Total SLR	Number of holdings (thousand)	Total SLR
Size of holding (SLR) (b)								
under 1 SLR	150.8	29 736.8	26.7	4 878.5	40.8	5 667.2	20.3	6 856.1
1 to under 2 SLR	24.4	34 313.7	4.0	5 758.5	3.7	5 362.5	3.7	5 145.0
2 to under 3 SLR	10.7	26 176.6	2.6	6 373.5	2.3	5 546.0	1.4	3 439.3
3 to under 5 SLR	8.7	33 192.8	2.5	9 707.5	2.6	10 029.7	1.0	3 651.3
5 SLRs and over	5.7	59 851.7	1.7	13 294.7	2.0	16 348.2	0.4	2 991.0
Total	200.4	183 271.6	37.4	40 012.7	51.4	42 953.6	26.7	22 082.6
Average size (SLR):								
All holdings		0.9		1.2		0.8		0.8
Holdings 1 SLR and over		3.1		3.3		3.5		2.4

continued

Table 3.5 continued

	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings								
Under 20 hectares	124.2	529.7	21.4	108.9	29.9	156.3	11.3	115.1
20 to under 50 hectares	27.7	916.2	6.8	226.2	6.3	208.8	9.2	298.4
50 to under 100 hectares	21.8	1 563.0	5.2	370.2	5.5	398.9	4.4	305.3
100 hectares and over	26.7	6 319.8	4.1	794.2	9.2	4 846.7	1.8	309.7
Total	200.4	9 328.6	37.4	1 499.6	51.0	5 610.7	26.7	1 028.5
Average area (hectares):								
All holdings		46.6		40.0		110.0		38.5
Holdings 1 SLR and over		137.3		75.2		439.5		84.3
% of total area on holdings with 100 hectares and over		13.3		53.0		86.4		30.1

(a) This table contains data for all holdings in Great Britain and all active farm businesses in Northern Ireland (see "The Digest of Agricultural Census Statistics, UK, 1997"). Previously in Great Britain only main holdings were included. As a result these figures are not directly comparable with the results for earlier years published in previous editions of FIUK.

(b) Standard Labour Requirements (SLRs) are representative of labour requirements (hours per head or hours per hectare) under typical conditions for enterprises of average size and performance.

Table 3.6 Size of agricultural holdings wholly or mainly in Less Favoured Areas 2006

The data in this includes main and minor holdings in Great Britain. In Northern Ireland all active farm businesses are included. (a)

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

At June

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR
Size of holding (SLRs) (a) (b)								
under 1SLR	24.3	20.9	18.6	13.0	27.7	13.8	15.1	39.3
1 to under 2 SLR	3.8	24.2	3.0	15.7	2.2	11.8	2.4	25.9
2 to under 3 SLR	1.7	18.8	2.0	17.7	1.4	12.5	0.8	14.6
3 to under 5 SLR	1.2	20.7	1.9	25.5	1.7	24.3	0.4	12.3
5 SLRs and over	0.4	15.4	1.0	28.1	1.3	37.6	0.1	7.9
Total	31.5	100.0	26.5	100.0	34.2	100.0	18.8	100.0
Average size (SLR):								
All holdings		0.7		1.0		0.8		0.7
Holdings 1 SLR and over		2.5		3.1		3.6		2.1
% of total SLR on:								
LFA holdings		12.2		69.1		63.7		58.2
non-LFA holdings		87.8		30.9		37.3		41.8

	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings								
Under 20 hectares	19.1	87.1	14.8	75.4	20.5	110.5	7.9	83.7
20 to under 50 hectares	4.8	158.6	4.7	156.7	4.3	141.5	6.7	214.0
50 to under 100 hectares	3.6	255.9	3.8	272.8	3.4	246.2	3.0	205.8
100 hectares and over	3.9	1 046.5	3.2	626.2	6.0	3 982.7	1.2	219.6
Total	31.5	1 548.0	26.5	1 131.2	34.2	4 480.8	18.8	723.1
Average area (hectares):								
All holdings		49.1		42.7		130.9		38.4
Holdings 1 SLR and over		139.1		81.6		576.5		91.7
% of total area on holdings with 100 hectares and over		67.6		55.4		88.9		30.4
% of total area on:								
LFA holdings		16.6		75.4		79.9		70.3
non-LFA holdings		83.4		24.6		20.1		29.7

(a) This table contains data for all holdings in Great Britain and all active farm businesses in Northern Ireland (see "The Digest of Agricultural Census Statistics, UK, 1997"). Previously in Great Britain only main holdings were included. As a result these figures are not directly comparable with the results for earlier years published in previous editions of FIUK.

(b) Standard Labour Requirements (SLRs) are representative of labour requirements (hours per head or hours per hectare) under typical conditions for enterprises of average size and performance.

Table 3.7 Size of agricultural holdings by farm type 2006

The data in this includes main and minor holdings in Great Britain. In Northern Ireland all active farm businesses are included. (a)

Enquiries: Alison Wray on +44 (0)1904 455313 email: alison.wray@defra.gsi.gov.uk

At June of each year

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR
Dairy								
under 1 SLR	1.5	2.5	0.3	2.1	0.1	0.5	0.8	5.9
1 to under 2 SLR	4.6	19.8	0.7	12.4	0.2	4.7	1.3	24.0
2 to under 3 SLR	2.8	21.3	0.7	21.0	0.3	12.7	0.8	23.6
3 to under 5 SLR	2.6	31.1	0.6	29.2	0.5	36.9	0.6	29.3
5 SLRs and over	1.2	25.3	0.4	35.3	0.4	45.2	0.2	17.2
Total	12.6	100.0	2.8	100.0	1.5	100.0	3.8	100.0
Grazing Livestock (LFA)								
under 1 SLR	8.9	24.6	6.3	11.4	9.3	13.2	13.6	61.2
1 to under 2 SLR	2.0	23.9	2.2	16.1	1.7	12.9	1.2	23.6
2 to under 3 SLR	0.9	18.8	1.4	17.2	1.0	12.6	0.3	8.7
3 to under 5 SLR	0.6	19.9	1.4	26.6	1.1	23.3	0.1	4.6
5 SLRs and over	0.2	12.8	0.8	28.7	0.9	38.0	-	1.8
Total	12.7	100.0	12.1	100.0	14.0	100.0	15.2	100.0
Grazing Livestock(lowland)								
under 1 SLR	27.6	40.1	1.8	9.4	1.6	17.1	4.0	53.7
1 to under 2 SLR	3.4	24.3	0.5	11.1	0.2	14.5	0.5	28.1
2 to under 3 SLR	1.0	12.4	0.2	10.0	0.1	14.6	0.1	10.3
3 to under 5 SLR	0.6	12.4	0.3	19.6	0.1	22.1	-	5.3
5 SLRs and over	0.3	10.8	0.3	49.9	0.1	31.7	-	2.6
Total	32.9	100.0	3.6	100.0	2.1	100.0	4.6	100.0
Cereals								
under 1 SLR	13.4	19.1	0.2	18.1	2.6	29.5	0.4	35.2
1 to under 2 SLR	4.9	25.5	-	23.9	0.5	26.4	0.1	23.8
2 to under 3 SLR	2.0	18.2	-	12.7	0.2	16.1	-	14.7
3 to under 5 SLR	1.4	19.6	-	14.5	0.1	15.5	-	16.3
5 SLRs and over	0.6	17.6	-	30.8	-	12.5	-	10.0
Total	22.4	100.0	0.2	100.0	3.6	100.0	0.4	100.0
General Cropping								
under 1 SLR	3.0	5.9	0.1	10.9	1.0	5.4	0.1	15.2
1 to under 2 SLR	2.4	13.4	-	12.8	0.4	12.6	-	16.6
2 to under 3 SLR	1.2	11.3	-	9.8	0.3	15.2	-	14.2
3 to under 5 SLR	1.1	16.6	-	32.5	0.3	21.4	-	24.3
5 SLRs and over	1.2	52.8	-	33.9	0.2	45.3	-	29.7
Total	8.8	100.0	0.1	100.0	2.3	100.0	0.2	100.0
Specialist Pigs								
under 1 SLR	1.4	9.0	-	-	0.1	3.2	0.1	5.9
1 to under 2 SLR	0.3	12.1	-	-	-	3.7	-	11.7
2 to under 3 SLR	0.2	13.2	-	-	-	4.9	-	13.7
3 to under 5 SLR	0.1	13.0	-	-	-	22.6	-	10.8
5 SLRs and over	0.2	52.6	-	-	-	65.6	-	58.0
Total	2.2	100.0	0.1	100.0	0.2	100.0	0.2	100.0
Specialist Poultry								
under 1 SLR	5.0	10.4	0.5	10.9	1.2	7.2	0.2	16.1
1 to under 2 SLR	0.5	14.1	-	17.5	-	8.4	0.1	24.8
2 to under 3 SLR	0.2	11.7	-	15.9	-	13.3	-	16.4
3 to under 5 SLR	0.2	16.4	-	10.5	-	21.8	-	13.9
5 SLRs and over	0.2	47.4	-	45.3	-	49.3	-	28.9
Total	6.2	100.0	0.6	100.0	1.4	100.0	0.4	100.0
Horticulture								
under 1 SLR	5.6	7.6	0.4	15.8	0.9	14.5	0.1	7.2
1 to under 2 SLR	1.5	8.1	-	8.1	-	9.1	0.1	10.4
2 to under 3 SLR	0.6	6.0	-	6.8	-	4.4	-	10.0
3 to under 5 SLR	0.6	9.0	-	5.1	-	9.1	-	21.1
5 SLRs and over	1.0	69.3	-	64.3	-	62.9	-	51.2
Total	9.2	100.0	0.5	100.0	1.0	100.0	0.3	100.0

continued

Table 3.7 continued

	England		Wales		Scotland		Northern ireland	
	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR	Number of holdings (thousand)	Percent of total SLR
Mixed								
under 1 SLR	5.9	11.6	0.5	10.6	1.1	8.2	0.5	19.7
1 to under 2 SLR	2.2	17.2	0.1	10.6	0.5	15.4	0.2	26.2
2 to under 3 SLR	1.0	14.1	0.1	11.2	0.3	14.2	0.1	15.3
3 to under 5 SLR	0.9	19.9	-	12.1	0.3	23.9	0.1	19.3
5 SLRs and over	0.8	37.2	0.1	55.5	0.2	38.4	-	19.6
Total	10.8	100.0	0.9	100.0	2.4	100.0	0.9	100.0
Other								
under 1 SLR	78.7	45.0	16.4	52.1	22.8	53.3	0.5	23.6
1 to under 2 SLR	2.7	24.7	0.4	17.1	0.1	5.7	-	11.2
2 to under 3 SLR	0.7	11.2	0.1	9.5	0.1	5.9	-	17.6
3 to under 5 SLR	0.4	10.9	0.1	9.8	0.1	8.9	-	16.5
5 SLRs and over	0.1	8.2	-	11.5	0.1	26.2	-	31.1
Total	82.6	100.0	17.0	100.0	23.1	100.0	0.5	100.0
Total								
under 1 SLR	150.8	16.2	26.7	12.2	40.8	13.2	20.3	31.0
1 to under 2 SLR	24.4	18.7	4.0	14.4	3.7	12.5	3.7	23.3
2 to under 3 SLR	10.7	14.3	2.6	15.9	2.3	12.9	1.4	15.6
3 to under 5 SLR	8.7	18.1	2.5	23.9	2.6	23.4	1.0	16.5
5 SLRs and over	5.7	32.7	1.7	33.6	2.0	38.1	0.4	13.5
Total	200.3	100.0	37.4	100.0	51.4	100.0	26.8	100.0

(a) This table contains data for all holdings in Great Britain and all active farm businesses in Northern Ireland.

(b) Standard Labour Requirements (SLRs) are representative of labour requirements (hours per head or hours per hectare) under typical conditions for enterprises of average size and performance.

Table 3.8 Labour force in agriculture United Kingdom

The data cover main and minor holdings in the United Kingdom.

Enquiries: Helen Hoult +44 (0)1904 455327 email: helen.hoult@defra.gsi.gov.uk

Thousand persons At June

	Average of 1996-98	2003 (a)	2004	2005	2006	2007
Workers						
Regular whole-time:						
male	88	60	58	57	54	52
female	13	10	10	10	10	10
Regular part-time (b):						
male	31	21	23	24	24	28
female	24	17	17	17	17	17
Seasonal or casual:						
male	55	45	50	46	44	41
female	25	18	19	19	20	18
Salaried managers	9	13	15	16	15	15
Total workers	245	184	192	190	184	182
Farmers, partners, directors and spouses						
whole-time	. .	160	156	154	152	146
part-time	. .	190	198	196	198	199
Total farmers, partners, directors and spouses	367	349	354	351	350	344
Total labour force						
(including farmers and their spouses) (c)	612	533	546	541	534	526

(a) The results for 2002 and those for following years include the effect of the register improvement in England and are not directly comparable with previous years.

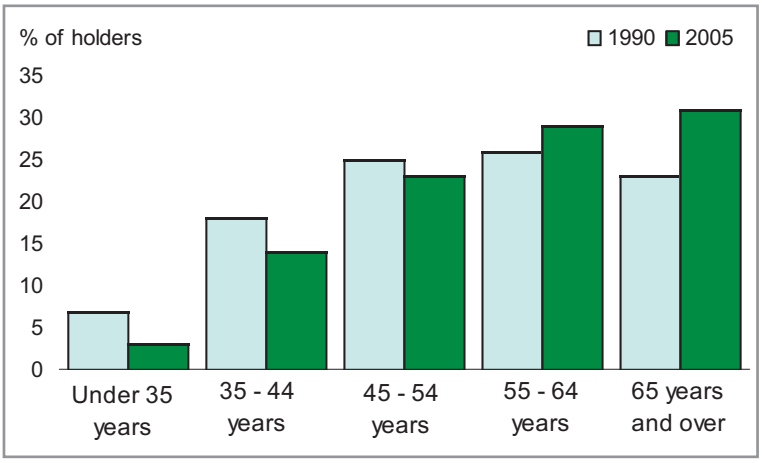
(b) Part-time is defined as less than 39 hours per week in England and Wales, less than 38 hours per week in Scotland and less than 30 hours per week in Northern Ireland.

(c) Figures exclude schoolchildren and most trainees.

Age of holders (chart 3.5, tables 3.9, 3.10)

12 The holder is defined as the (natural or legal) person in whose name the holding is operated. The holder can either own or rent the holding, be a hereditary long-term leaseholder, or a usufructuary or a trustee. The data in chart 3.5, tables 3.9 and 3.10 relate to all holders whether or not the holder is also the manager of the holding. The exact definition of holder varies between countries of the United Kingdom. These data exclude holdings which are deemed not to have a single holder due to their legal status.

Chart 3.5 Age of holders; United Kingdom



13 The average (median) age of holders increased from 55 years in 1990 to 58 years in 2005. The median age is the middle age when the ages of all holders are put in ascending order. The proportions of holders that are aged '55 to 64 years' and '65 years and over' have increased while those aged 'under 35 years', '35 to 44 years' and '45 to 54 years' have fallen. There is little variability across farm type but the concentration of holders aged '65 years and older' increases as holding size decreases.

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

Enquiries: Robin Karfoot +44 (0)1904 456405 email: robin.karfoot@defra.gsi.gov.uk

Thousand persons

	EU FARM TYPE								
	Cereals	General	Horti-culure	Pigs and Poultry	Dairy	Cattle & Sheep (LFA and lowland)	Mixed	Other	All Types
1990									
Holders age									
Under 35 years	1.3	1.6	0.7	0.4	2.7	6.0	1.4	3.3	17.2
as a % of the total	8	7	6	7	8	8	8	6	7
35 - 44 years	3.0	4.5	2.0	1.1	7.0	13.0	3.3	8.7	42.6
as a % of the total	18	20	18	18	21	17	20	17	18
45 - 54 years	4.2	6.0	3.0	1.7	9.6	18.4	4.5	12.2	59.6
as a % of the total	26	26	27	30	28	24	27	24	25
55 - 64 years	4.3	6.3	3.2	1.5	9.5	20.4	4.4	11.7	61.3
as a % of the total	26	28	29	25	28	26	26	23	26
65 years and over	3.7	4.3	2.2	1.2	4.9	20.0	3.2	15.0	54.5
as a % of the total	22	19	20	20	15	26	19	30	23
Total	16.6	22.7	11.0	5.8	33.6	77.9	16.8	50.9	235.3
2005									
Holders age									
Under 35 years	0.6	0.4	0.1	0.3	0.7	3.4	0.5	2.5	8.6
as a % of the total	2.0	3.0	2.0	3.0	4.0	4.0	3.0	3.0	3.0
35 - 44 years	3	2	1	2	4	12	3	11	38
as a % of the total	13.0	15.0	13.0	16.0	19.0	14.0	16.0	12.0	14.0
45 - 54 years	6	3	2	3	6	19	4	21	64
as a % of the total	24.0	24.0	25.0	26.0	28.0	23.0	26.0	22.0	23.0
55 - 64 years	8	4	3	3	6	23	5	28	79
as a % of the total	30.0	29.0	33.0	30.0	30.0	28.0	31.0	29.0	29.0
65 years and over	8	4	2	3	4	25	4	35	84
as a % of the total	30.0	29.0	26.0	26.0	20.0	31.0	24.0	35.0	31.0
Total	25	12	9	11	21	83	16	98	274

(a) The holder is defined as the (natural or legal) person in whose name the holding is operated. The holder can either own or rent the holding, be a hereditary long-term leaseholder, or a usufructuary or a trustee. The data in this table relate to all holders whether or not the holder is also the manager of the holding. The exact definition of holder varies between the countries of the United Kingdom.

(b) The data excludes holdings such as limited companies where there is no single holder.

Table 3.10 Holders age by farm size (a)(b) United Kingdom

Enquiries: Robin Karfoot +44 (0)1904 456405 email: robin.karfoot@defra.gsi.gov.uk

Thousand persons

	<8 ESU	8:<40	40 <100	100 <200	200 and over	Total
1990						
Holders age						
Under 35 years	6.9	5.8	3.4	0.9	0.3	17.2
as a % of the total	6	8	8	8	8	7
35 - 44 years	17.4	12.8	9.0	2.7	0.7	42.6
as a % of the total	16	18	22	23	22	18
45 - 54 years	24.4	18.7	11.8	3.6	1.1	59.6
as a % of the total	23	26	29	31	32	25
55 - 64 years	26.1	20.4	11.1	2.9	0.8	61.3
as a % of the total	24	29	27	25	26	26
65 years and over	33.4	13.6	5.6	1.5	0.4	54.5
as a % of the total	31	19	14	13	12	23
Total	108.3	71.3	40.9	11.5	3.3	235.3
2005						
Holders age						
Under 35 years	4.8	1.9	1.0	0.6	0.3	8.6
as a % of the total	3	3	3	4	4	3
35 - 44 years	19.5	7.7	5.9	3.1	1.6	37.7
as a % of the total	12	14	18	19	20	14
45 - 54 years	35.6	12.6	9.0	4.8	2.3	64.3
as a % of the total	22	23	27	29	30	23
55 - 64 years	46.5	15.8	9.7	4.8	2.3	79.1
as a % of the total	29	29	29	30	30	29
65 years and over	56.6	16.2	7.3	2.9	1.2	84.2
as a % of the total	35	30	22	18	16	31
Total	163.0	54.2	32.8	16.2	7.8	274.0

(a) The holder is defined as the (natural or legal) person in whose name the holding is operated. The holder can either own or rent the holding, be a hereditary long-term leaseholder, or a usufructuary or a trustee. The data in this table relate to all holders whether or not the holder is also the manager of the holding. The exact definition of holder varies between the countries of the UK.

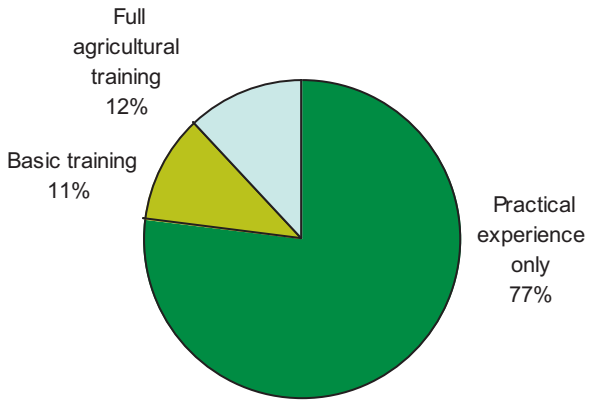
(b) European size units (ESU) measure the financial potential of the holding in terms of the margins which might be expected from crops and stock. The threshold of 8 ESU is judged to be the minimum for full-time holdings.

(c) The data excludes holdings such as limited companies where there is no single holder.

Agricultural training (chart 3.6, tables 3.11, 3.12)

14 The data in chart 3.6, tables 3.11 and 3.12 relate to managers of holdings whether or not the manager is the owner of the holding. 'Basic training' is defined as formal training lasting for less than two years and 'full agricultural training' is defined as formal training lasting for a minimum of two years.

Chart 3.6 Agricultural training; United Kingdom



15 Between 1990 and 2005, there has been almost no change to the overall proportions of managers with 'basic training', 'full training' and 'practical experience only'. Just over three quarters of managers have no formal agricultural training.

16 The proportion of managers who have received 'full agricultural training' is highest among the 'cereals' and 'general cropping' farm types and increased for both of these farm types between 1990 and 2005. The 2005 data show that the proportion of managers with 'full agricultural training' rises with farm size,

with 38 per cent of managers on the largest farms having 'full agricultural training', compared to just 7 per cent on the smallest farms.

Table 3.11 Agricultural training of managers by farm type (a)(b) United Kingdom

Enquiries: Robin Karfoot +44 (0)1904 456405 email: robin.karfoot@defra.gsi.gov.uk

Thousand persons

	EC FARM TYPE								
	Cereals	General	Horti-culture	Pigs and Poultry	Dairy	Cattle & Sheep (LFA and lowland)	Mixed	Other	All Types
1990									
Agricultural training									
Practical experience only	11.1	14.6	7.9	4.2	24.0	64.4	11.7	41.7	179.6
as a % of the total	67	64	72	72	71	83	70	82	76
Basic training	2.7	3.6	1.3	0.7	5.4	6.5	2.6	4.7	27.5
as a % of the total	16	16	12	12	16	8	15	9	12
Full agricultural training	2.8	4.5	1.8	0.9	4.2	6.9	2.5	4.5	28.1
as a % of the total	17	20	17	15	13	9	15	9	12
Total	16.6	22.7	11.0	5.8	33.6	77.9	16.8	50.9	235.3
2005									
Agricultural training									
Practical experience only	16.1	8.4	7.2	9.5	13.4	67.4	11.2	86.9	220.2
as a % of the total	58	61	74	79	63	81	68	85	77
Basic training	5.1	2.2	1.1	1.3	4.0	8.5	2.5	7.0	31.6
as a % of the total	18	16	11	11	19	10	15	7	11
Full agricultural training	6.8	3.2	1.5	1.2	3.8	7.5	2.7	8.3	34.9
as a % of the total	24	23	15	10	18	9	16	8	12
Total	28.0	13.8	9.8	12.0	21.3	83.3	16.4	102.1	286.7

(a) Data in this table relate to the person responsible for the day to day running of the holding - i.e. the manager. This person may or may not be the holder.

(b) 'Basic Training' is defined as formal training lasting less than two years and 'Full Training' is defined as formal training lasting two years or more.

Table 3.12 Agricultural training of managers by farm size (a)(b)(c) United Kingdom

Enquiries: Robin Karfoot +44 (0)1904 456405 email: robin.karfoot@defra.gsi.gov.uk

Thousand persons

	<8 ESU	8:<40 ESU	40: < 100 ESU	100: < 200 ESU	200 and and over	All holdings
1990						
Agricultural training						
Practical experience only	90.4	54.9	26.6	6.3	1.3	179.6
as a % of the total	83	77	65	55	41	76
Basic training	8.6	8.5	7.5	2.3	0.7	27.5
as a % of the total	8	12	18	20	20	12
Full agricultural training	9.3	7.8	6.7	2.9	1.3	28.1
as a % of the total	9	11	16	25	40	12
Total	108.3	71.3	40.9	11.5	3.3	235.3
2005						
Agricultural training						
Practical experience only	144.2	41.7	21.0	9.0	4.3	220.2
as a % of the total	86	75	61	50	41	77
Basic training	11.6	7.3	6.5	4.0	2.1	31.6
as a % of the total	7	13	19	22	21	11
Full agricultural training	12.4	6.8	6.9	4.9	3.9	34.9
as a % of the total	7	12	20	27	38	12
Total	168.3	55.8	34.5	17.9	10.3	286.7

(a) Data in this table relate to the person responsible for the day to day running of the holding - ie the manager. This person may or may not be the holder.

(b) European size units (ESU) measure the financial potential of the holding in terms of the margins which might be expected from crops and stock. The threshold of 8 ESU is judged to be the minimum for full-time holdings.

(c) 'Basic Training' is defined as formal training lasting less than two years and 'Full Training' is defined as formal training lasting two years or more.

Fixed capital stock (table 3.13)

17 Agriculture's total volume of fixed capital stock is estimated to have been 0.7 per cent lower at the end of 2007 compared to the end of 2006, a fall of 14 per cent on the average for 1996 to 1998. In recent years, the capital stock of 'buildings and works', 'plant and machinery' and 'vehicles' have all declined.

18 Table 3.13 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 3.13 Fixed capital stock of agriculture United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455084 email: sarah.harriss@defra.gsi.gov.uk

Indices 2000 = 100 At year end

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Gross capital stock (excludes livestock capital assets)						
Buildings and works	105.5	94.4	93.0	92.2	91.5	90.6
Plant and machinery	108.3	94.8	94.3	92.5	91.1	90.5
Vehicles	101.0	101.4	101.4	99.5	97.6	97.8
Total	106.3	94.9	94.0	92.7	91.7	91.0

Chapter 4 Prices

Summary

In 2007:

- the average producer price of agricultural products rose by 13.2 per cent;
- the average price of crop products rose by 21.8 per cent; the price of wheat was 74 per cent higher in December 2007 than in December 2006.
- the average price of livestock and livestock products rose by 7.1 per cent;
- the average price of agricultural inputs rose by 8.8 per cent;
- provisional results for Great Britain suggest a rise of 0.6 per cent in average farm rents.

Introduction

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

2 The price indices for agricultural products and inputs are constructed using fixed annual weights relating to 2000. They reflect observed market prices and do not take account of subsidy payments coupled to production. The price changes presented in table 9.2 are based on current production and may differ from the price movements presented here.

3 The surveys on which the indices for average farm rents are based are conducted in October. No survey was available for England and Wales in 2006 and estimates for this year are based on trends for previous years. No data has been available for Wales since 2000 and estimates have been made. Due to the duration of periods for rent settings, the values applying to the calendar year are deemed to be mainly (approximately 75 per cent) carried over from those recorded in the preceding October. The derivation of the changes are driven primarily by developments in 2005 and only to a lesser extent (approximately 25 per cent) by conditions in 2004.

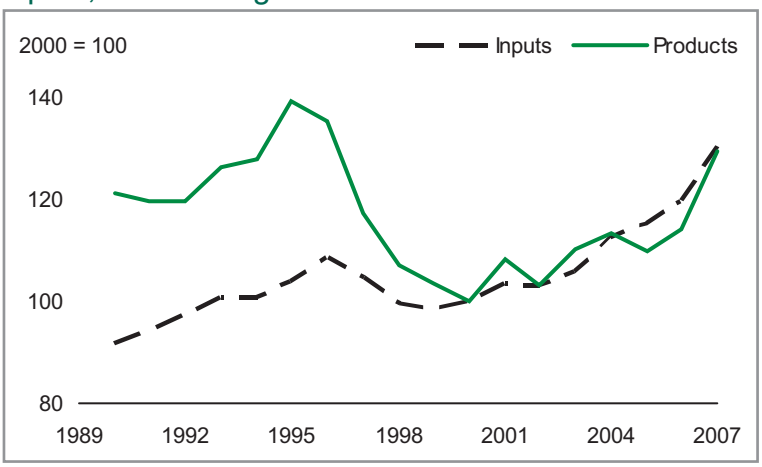
4 The average prices for sales of agricultural land are obtained from data on land transfers collected by the Valuation Office Agency in Great Britain and the Valuation and Lands Agency in Northern Ireland. Only a very small proportion of the total area of farmland in the United Kingdom is sold in any 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. Recent data on land prices in Scotland should be treated with caution given difficulties with collecting accurate statistics and substantial time lags in gathering data; land price data for Scotland are not currently being collected.

Price indices (table 4.1, chart 4.1)

5 The average producer price of agricultural products in the United Kingdom was 13 per cent higher in 2007 than in 2006. It is 7.1 per cent below the peak in 1995 but 29 per cent above the low point in 2000.

In 2007, the average price for crop products rose by 22 per cent. The average price for cereals rose by 48 per cent, that for fresh vegetables rose by 11 per cent and that for potatoes rose by 14 per cent. The average price for livestock and livestock products rose by 7.1 per cent.

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



6 The prices shown in the table are all annual average prices. Comparing December 2006 with December 2007 (not shown) reveals greater price rises over the year culminating with prices in December 2007 being higher than prices in December 2005, the year when prices were

Table 4.1 Price indices for products and inputs; United Kingdom

Enquiries: Clare Burgon on +44 (0)1904 456583 email: clare.f.burgon@defra.gsi.gov.uk

Indices (a) 2000 = 100 Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Producer prices for agricultural products (b)	119.7	109.9	113.3	109.7	114.2	129.3
of which:						
Crop products:	117.0	110.7	115.1	108.6	118.1	143.9
Cereals	137.5	105.2	114.2	99.1	110.5	163.7
Industrial Crops	133.6	120.3	121.6	114.3	118.3	124.0
Forage Crops	77.7	75.9	88.1	110.4	104.2	128.1
Fresh vegetables	102.7	125.5	113.7	120.3	129.7	143.6
Potatoes	106.8	105.6	140.3	109.2	141.7	161.1
Fresh fruit	105.4	124.2	112.4	120.1	114.6	126.7
Seeds	128.1	113.6	112.9	114.1	113.1	113.1
Flowers and plants	101.3	107.9	105.3	105.6	108.8	115.3
Other crop products	120.2	108.6	109.7	110.8	110.6	114.0
Livestock and livestock products:	121.6	109.4	112.0	110.4	111.6	119.5
Livestock (for slaughter and export)	115.8	109.3	111.7	110.3	113.8	115.8
Milk	130.9	106.4	109.0	109.0	106.0	122.4
Eggs	124.2	130.7	135.1	121.0	127.4	143.5
Other livestock products	127.4	107.4	110.4	107.5	93.5	111.1
Prices of agricultural inputs:	104.2	105.9	112.5	115.0	119.6	130.1
of which:						
Currently consumed in agriculture:	105.2	106.5	113.7	116.0	120.7	132.2
Livestock feedingstuffs	124.2	104.9	111.6	103.0	108.1	130.4
Seeds	124.9	116.0	110.3	108.2	104.0	153.6
Fertilisers and soil improvers	103.8	119.0	130.5	143.3	151.4	170.0
Plant protection products	113.5	95.7	100.6	102.9	103.4	104.9
Maintenance and repair of plant and machinery	90.7	116.0	122.5	130.3	137.8	143.4
Energy, lubricants	79.8	100.5	108.8	137.4	154.4	157.9
Maintenance and repair of buildings	97.6	108.3	113.4	118.1	125.1	134.3
Veterinary services	100.0	101.6	104.6	103.9	111.1	111.6
Other Goods and Services	97.4	105.2	114.0	114.5	115.5	119.2
Contributing to agricultural investment (c):	97.7	101.5	104.4	108.7	111.7	115.4
Machinery and other equipment	95.0	95.1	96.1	103.8	108.2	114.0
Transport Equipment	103.2	99.1	101.5	103.2	103.4	102.8
Buildings	93.0	112.1	118.1	123.7	130.9	139.9
Engineering and Soil Improvement operations	90.1	110.7	114.0	118.3	120.8	126.5

(a) Indices covering an aggregation of commodities are weighted annual averages with weights based on the values of output of the respective commodities in 2000.

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

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

peaking. Between December 2006 and December 2007 the price of all agricultural products rose by 20 per cent and the price of wheat rose by 74 per cent.

7 The average price of agricultural inputs was 8.8 per cent higher in 2007 than in 2006 and is 25 per cent higher than in 1995. The average price of inputs that are currently consumed in agriculture rose by 9.5 per cent and for those inputs which contribute to agricultural investment, the average price rose by 3.3 per cent. The average price of livestock feedingstuffs rose by 21 per cent and those for seeds rose by 48 per cent in 2007.

Farm rents (table 4.2)

8 Provisional results for Great Britain suggest a rise of 0.6 per cent in average farm rents in 2007. In England, average rents are estimated to have risen by 0.6 per cent while rents for full agricultural tenancies are estimated to have fallen by 3.7 per cent.

Table 4.2 Farm rents

Enquiries: Dave Rimmer on +44 (0)1904 456406 email: david.j.rimmer@defra.gsi.gov.uk

Average per hectare: indices 2000 = 100 Calendar years

		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
England:	full agricultural tenancies (a)	97.5	93.7	94.0	95.3	96.6	93.1
	average (b)	94.3	100.0	99.6	98.2	96.9	97.5
Wales: (c)	full agricultural tenancies (a)	103.7	100.4	100.6	100.8	101.0	101.2
	average (b)	90.2	107.4	109.2	111.0	112.8	114.6
Scotland (d)		90.5	101.4	103.4	96.0	96.0	96.0
Great Britain		93.7	100.6	100.5	99.0	97.9	98.5
Northern Ireland (e)		115.8	91.2	90.7	86.8	90.7	90.7

(a) Average rent estimates for full agricultural tenancies up to 1995 were sourced from the rent enquiry. For 1995 to 1997, a weighted average of rent enquiry and annual survey of tenanted land data was used. From 1998, estimates were sourced from the Tenanted Land Survey. From 2002, the Tenanted Land Survey has been run every two years with estimates for intervening years being based on the trend.

(b) A new series for England and Wales has been introduced giving a weighted average rent in £ per hectare for all agreements over a year in length.

(c) No data is available for Wales after 2000 estimates for 2001 onwards have been made based on trends.

(d) Scottish estimates prior to 1998 relate to crops and grassland only. From 1998 onwards crops and grass were replaced by a non-less favoured area classification.

(e) 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)

9 Estimates based on the bi-annual Agricultural Property Market Reports published by the Valuations Office suggest that sales in England rose by 2.8 percent in 2007.

10 Over the longer term, all of the four countries of the United Kingdom have shown upward trends since 1993. The average price of agricultural land in Northern Ireland has shown the most significant increase.

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

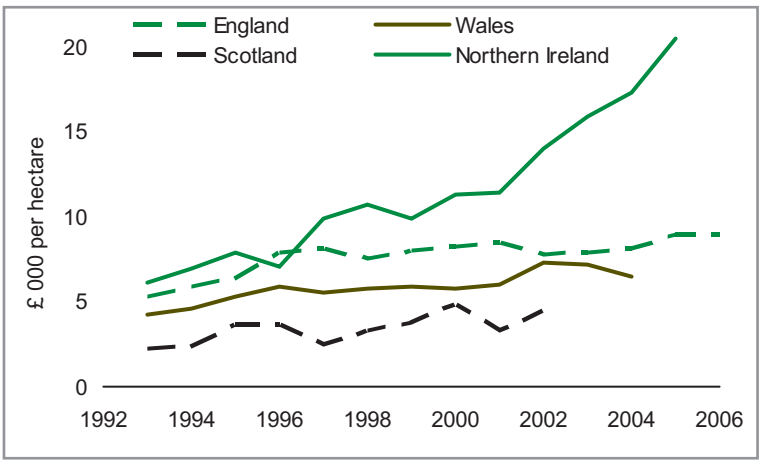


Table 4.3 Agricultural land prices

Enquiries: Joanne Gardiner on +44 (0)1904 455326 email: joanne.gardiner@defra.gsi.gov.uk

£ per hectare of all sales (a) Calendar years

	Average of 1996-98	2002	2003	2004	2005	2006
England (b)	6 213	6 915	7 172	7 654	8 651	8 895
Wales (b)	4 522	6 513	6 498	6 107	. .	. .
Scotland	2 466	3 984	. .	. .	. .	. .
Northern Ireland (c)	7 341	12 456	14 475	16 286	19 837	. .

(a) These series, based on Inland Revenue 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) From 1993, figures for England and Wales are not directly comparable with those estimated in previous years.

(c) 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. From 1990, figures are not directly comparable with those estimated in previous years.

(d) England data for 2005 and 2006 is estimated.

Chapter 5 Commodities

Summary

In 2007, the value of production at market prices for:

- wheat rose by 22 per cent to £1.3 billion;
- barley rose by 40 per cent to £538 million;
- oilseed rape rose by 36 per cent to £422 million;
- sugar beet fell by 3.6 per cent to £172 million;;
- fresh vegetables rose by 5.3 per cent to £1.1 billion;
- plants and flowers rose by 4.0 per cent to £781 million;
- potatoes rose by 6.9 per cent to £664 million;
- fresh fruit rose by 16 per cent to £445 million;
- beef and veal rose by 4.9 per cent to £1.7 billion;
- pigmeat rose by 7.3 per cent to £735 million;
- mutton and lamb fell by 7.8 per cent to £628 million;
- poultrymeat fell by 0.2 per cent to £1.2 billion;
- milk rose by 13 per cent to £2.8 billion;
- eggs rose by 13 per cent to £410 million.

Weather in 2007

1 There were some exceptional weather conditions in 2007. Notably there was flooding in June/July 2007 in Yorkshire and Humberside, East Midlands, West Midlands and in the South East.

2 In cases of severe flooding where water levels were high and/or remained on the land for over a week, crops and by-products such as straw were generally a write-off. Where land was flooded but for a shorter period and not to a great depth, yield and quality were adversely affected, especially where the conditions caused harvesting problems and delays. Whilst the impact on individual farms affected by severe flooding would have been serious, overall it is estimated that less than 1 per cent of the total agricultural area in England was affected by the flooding. A significant proportion of about 37 per cent of the flooded land was grassland with arable and fodder crops making up the remainder. Wheat was the commonly affected arable crop.

3 Separate from the flooding was the general wet weather during the summer where rainfall was over 150 per cent normal levels. This caused more extensive problems including widespread levels of disease especially potato blight and root rot in peas, increased lodging in cereals and beans and delays and/or difficulties harvesting especially vining peas. The general weather conditions rather than the flooding was more significant in terms of adverse affects on crop yield and quality.

General methodology note

4 In 2005, eleven subsidy schemes directly linked to production of commodities were replaced with one single farm payment under 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 value of production at market prices has been incorporated into the statistical tables where appropriate.

Methodology note for cereals and potatoes

5 A methodological improvement has been implemented 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. This was particularly relevant in 2007 given the very sharp increase in spot prices in the late summer and autumn and which otherwise would have given rise to artificially high prices and therefore valuation estimates.

6 There are revisions to the figures shown in table 5.11 for potatoes from 2000 onwards to correct some data inconsistencies. The GB element for the production figures is now consistent with British Potato Council (BPC) figures across all years, whilst Northern Ireland figures used have been brought into line with GB production figures and now include post harvest waste. Due to problems reconciling HMRC trade data with adjusted figures produced by the BPC the EU and third country split has been dropped from the table. Trade figures shown in the table are provided by the BPC. The resultant changes to the value figures are minor and mostly result from revisions to stocks on farm, seed and waste calculations.

Total cereals (table 5.1)

7 The area of cereals planted fell by 0.4% per cent in 2007 but with lower yields overall production fell by 8.5 per cent. Prices were substantially higher in 2007, exceeding the levels in late 2003 and early 2004

Table 5.1 Total cereals United Kingdom

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Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production							
Area (thousand hectares)		3 430	3 056	3 130	2 919	2 860	2 872
Volume of harvested production		23 630	21 494	22 005	21 012	20 826	19 048
Value of production (£ million) (a)		3 001	2 332	2 391	1 384	1 709	1 757
Value of production at market prices (£ million) (b)		2 182	1 486	1 707	1 450	1 513	1 910
Supply and use							
Production		23 630	21 494	22 005	21 012	20 826	19 048
Imports from:	the EU	1 892	1 953	1 934	2 056	1 847	1 854
	the rest of the world	699	645	463	579	558	709
Exports to:	the EU	4 208	4 240	2 934	3 095	2 709	2 408
	the rest of the world	1 466	827	80	208	60	81
Total new supply		20 548	19 026	21 388	20 344	20 462	19 122
Change in farm and other stocks		308	-2 068	469	- 360	- 52	-1 390
Total domestic uses		20 240	21 094	20 919	20 703	20 514	20 512
Production as % of total new supply for use in UK		115	113	103	103	102	100

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

following the drought affected 2003 harvest in the European Union. The total value of production at market prices was £1.9 billion, 26 per cent higher than in 2006.

8 Yields of all cereal crops were adversely affected by the weather conditions in 2007. A hot dry spring followed by lack of sunshine and persistent wet weather from May to August with localised flooding in June/July resulted in poor crop development, increased incidence of disease, delays to combining and in a small number of cases, total loss of crops. Grain quality has been variable and in overall terms lower than in 2006.

9 Cereal prices have been strong throughout 2007 but there was a sharp increase in prices in August with prices peaking in September. The prices have very much reflected prices on world markets and can be attributed to various factors including increased global demand for food, feed and fuel use, low world stock levels, export restrictions introduced by a number of the large grain exporting countries, concerns about adverse weather conditions affecting production in Europe and elsewhere including the drought in Australia as well as lower domestic production and domestic quality concerns.

Wheat (table 5.2)

10 The area of wheat planted fell by 0.9 per cent but production fell by 11 per cent due to the lower yield. Grain quality of the 2007 crop has been variable and in overall terms not as good as in 2006 or 2005. Lower production together with lower availability of higher quality grain for milling resulted in as significant increase in quality premiums. Prices at the start of the year averaged £94 per tonne for milling wheat and £84 per tonne for feed wheat. Prices rose steadily through the year with a sharp increase in August with prices peaking in September at £147 per tonne for milling wheat and £116 per tonne for feed wheat.

11 The overall annual price in 2007 was £108 per tonne for milling wheat, up £32 per tonne or 41 per cent and for feed wheat this was £98 per tonne, up £25 per tonne or 35 per cent on 2006. The overall value of production of wheat in 2006 increased by 22 per cent to £1.3 billion.

12 Imports have increased by 22 per cent as millers have sourced a higher proportion of their grain from abroad due to the lower quality of the 2007 UK wheat crop. Exports have fallen by 8.6 per cent as a result of lower production and availability. The volume of wheat grain available for domestic use was very similar to 2006. The 1.4% increase in use by millers was offset by the 1.8% decrease in use for feed.

Table 5.2 Wheat; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production						
Area (thousand hectares)	2 019	1 837	1 990	1 867	1 833	1 816
Yield (tonnes per hectare)	7.7	7.8	7.8	8.0	8.0	7.2
Volume of harvested production	15 522	14 288	15 473	14 863	14 735	13 137
Value of production (£ million) (a)	1 939	1 434	1 677	1 030	1 072	1 307
of which: sales	1 338	1 048	1 038	956	1 004	1 355
subsidies (b)	489	440	447	. .	. .	. .
on farm use	74	70	103	87	76	94
change in stocks	38	- 124	90	- 13	- 8	- 142
Value of production at market prices (£ million)	1 451	994	1 231	1 030	1 072	1 307
Prices (average prices weighted by volumes of sales (£ per tonne))						
Milling wheat	102.4	76.5	87.4	76.4	76.7	108.3
Feed wheat	91.5	68.4	77.4	67.1	72.3	97.7

continued

Table 5.2 continued

Thousand tonnes (unless otherwise specified) — Calendar years

		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Supply and use							
Production		15 522	14 288	15 473	14 863	14 735	13 137
Imports from:	the EU	654	633	432	688	569	640
	the rest of the world	376	352	352	487	459	617
Exports to:	the EU	3 143	3 121	2 250	2 444	2 123	1 947
	the rest of the world	789	657	43	22	17	10
Total new supply		12 621	11 495	13 964	13 572	13 623	12 437
Change in farm and other stocks		68	-1 924	664	- 139	25	-1 165
Total domestic uses		12 553	13 419	13 300	13 711	13 598	13 602
of which:	flour milling	5 581	5 611	5 600	5 642	5 625	5 702
	animal feed	5 806	6 708	6 627	7 002	6 868	6 742
	seed	356	281	275	254	254	275
	other uses and waste	811	819	798	813	850	882
Production as % of total new supply for use in UK		123	124	111	110	108	106
% of home grown wheat in milling grist		84	85	86	82	82	82

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

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

		2002/03	2003/04	2004/05	2005/06	2006/07
Production and output						
Volume of harvested production		15 973	14 288	15 473	14 863	14 735
Value of production (£ million) (a)		1 455	1 579	1 569	1 045	1 019
of which:	sales	987	1 039	1 028	951	946
	subsidies (b)	446	440	447	-	-
	on farm use	39	106	92	87	86
	change in stocks	- 17	- 5	2	7	- 13
Value of production at market prices (£ million)		1 009	1 139	1 123	1 045	1 019

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

Barley (table 5.3)

13 There was a 1.9 per cent increase in the area of barley grown. The 1 per cent decrease in the area of winter barley was more than offset by a 4 per cent increase in the area of spring barley reflecting the improved prospects for the crop at the time of planting. The increase in area was more than offset by a fall in yields, resulting in a 3.1 per cent reduction in production. Whilst the quality of the 2007 crop was variable and in overall terms not as high as the 2006 crop, malting barley specifications have largely been met with few rejections, aided by the market conditions.

14 Prices for premium malting barley early in the year were at £90 per tonne and £82 per tonne for feed barley and started to rise in May. Prices rose sharply in August and peaked in September at £140/tonne for premium malting barley and £125/tonne for feed barley. Prices for premium malting barley remained at this level for October and November. The average annual price in 2007 for malting barley was £121 per tonne, up £41 per tonne or 50 per cent compared to 2006, and for feed barley the price was £103 per tonne, up £32 per tonne or 46 per cent. The overall value of barley production increased by 40 per cent to £538 million.

15 Imports of barley decreased by 11 per cent, but the absolute level of imports was low. Exports declined by 18 per cent consistent with the reduced availability of a UK produced crop. The volume available for domestic use fell by 1.4 per cent. The 2.5 per cent increase in use by the malting sector was offset by a 3.4 per cent decrease in use of barley for animal feed.

Table 5.3 Barley; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production							
Area (thousand hectares)		1 294	1 078	1 010	938	881	898
Yield (tonnes per hectare)		5.7	5.9	5.8	5.9	5.9	5.7
Volume of harvested production		7 414	6 370	5 816	5 495	5 239	5 079
Value of production (£ million) (a)		980	699	664	383	386	538
of which:	sales	481	312	281	259	252	385
	subsidies (b)	303	253	232	. .	. .	. .
	on farm use	187	149	148	138	147	194
	change in stocks	10	- 15	3	- 14	- 14	- 41
Value of production at market prices (£ million)		678	446	432	383	386	538
Prices (average prices weighted by volumes of sales (£ per tonne))							
Malting barley		103.7	77.1	81.4	77.7	80.8	121.5
Feed barley		83.8	66.7	69.1	66.1	70.6	102.7
Supply and use							
Production		7 414	6 370	5 816	5 495	5 239	5 079
Imports from:	the EU	113	51	75	84	95	90
	the rest of the world	27	7	4	-	9	3
Exports to:	the EU	965	947	584	612	539	402
	the rest of the world	678	170	37	186	27	65
Total new supply		5 911	5 311	5 274	4 781	4 777	4 705
Change in farm and other stocks		240	- 127	- 144	- 181	- 194	- 199
Total domestic uses		5 671	5 438	5 418	4 962	4 971	4 904
of which:	brewing/distilling	1 924	1 949	1 850	1 723	1 683	1 726
	animal feed	3 483	3 294	3 395	3 057	3 115	3 009
	seed	215	151	132	143	135	133
	other uses and waste	49	44	41	39	38	37
Production as % of total new supply for use in UK		125	120	110	115	110	108

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

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

		2002/03	2003/04	2004/05	2005/06	2006/07
Production and output						
Volume of harvested production		6 128	6 370	5 816	5 495	5 239
Value of production (£ million) (a)		650	712	641	387	366
of which:	sales	261	320	273	241	228
	subsidies (b)	242	253	232	-	-
	on farm use	144	157	132	145	144
	change in stocks	3	- 18	4	-	- 7
Value of production at market prices (£ million)		409	459	409	387	366

(a) Excludes farm saved seed.

(b) Includes arable area payments but excludes set-aside payments and is net of taxes.

Oats (table 5.4)

16 Following a substantial increase in crop area of 33 per cent in 2006 there was a further 7.4 per cent increase in crop area for 2007 as a result of sustained continued improvements in the market outlook and prices. However due to reduced yields the production was 2.2 per cent lower. As for wheat and barley the quality of the crop has been variable.

17 The tight supply situation from the low 2005 harvest and increased demand, especially for milling oats resulted in increased prices during 2006 which have continued. The price for milling oats started the year at £80/tonne, gradually rising through the year but with a more substantial rise in September when prices peaked at £97/tonne. The average prices in 2007 were £89 per tonne for milling oats and £90 per tonne for feed oats; these were up £15 and £14 per tonne or 20 and 19 per cent respectively. The value of production of oats increased by 16 per cent to £62 million. The volume of oats available for domestic

use was up 14 per cent mainly as a consequence of increased use by the milling sector but use for animal feed has increased also.

Table 5.4 Oats; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production						
Area (thousand hectares)	98	122	108	91	121	130
Yield (tonnes per hectare)	6.0	6.2	5.8	5.8	6.0	5.5
Volume of harvested production	584	749	627	532	728	712
Value of production (£ million) (a)	72	72	67	35	54	62
of which: sales:	35	32	32	27	33	45
subsidies (b)	23	29	25	. .	. .	. .
on farm use	13	12	14	12	15	17
change in stocks	1	-	- 4	- 4	5	-
Value of production at market prices (£ million)	49	44	42	35	54	62
Prices (average prices weighted by volumes of sales (£ per tonne))						
Milling oats	85.3	60.0	65.5	67.3	74.2	88.8
Feed oats	80.8	59.1	68.9	67.3	75.5	90.0
Supply and use						
Production	584	749	627	532	728	712
Imports from: the EU	10	11	17	32	49	20
the rest of the world	-	-	-	-	-	1
Exports to: the EU	88	157	80	27	30	42
the rest of the world	-	-	-	-	8	6
Total new supply	506	603	564	537	747	691
Change in farm and other stocks	-	- 17	- 50	- 40	117	- 26
Total domestic uses	506	620	614	577	630	717
of which: milling	260	322	321	343	373	420
animal feed	224	279	273	214	228	269
seed	19	15	17	17	17	18
other uses and waste	3	4	3	3	12	10
Production as % of total new supply for use in UK	116	124	111	99	97	103

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

Oilseed rape (table 5.5)

18 The total area planted rose by 19 per cent but the yield was lower. However the volume of harvested production in 2007 increased by 12 per cent from that in 2006, exceeding 2 million tonnes for the first time. High prices, the relative performance of oilseed rape compared to alternative break crops and increased confidence in the market reflecting global demand for both food and non-food uses, including a growing biodiesel industry have all contributed to the increase in planted area. Market prices were on average 24 per cent higher than in 2006, exceeding the previous highs of the mid 1990s. The value of production was up 36 per cent at £422 million.

19 Imports halved in 2007 while exports rose by nearly 45 per cent. Most exports were to the Netherlands, France and Belgium, with Germany the main source of imports.

Linseed (table 5.6)

20 The area of linseed decreased further in 2007, by 66 per cent to 12 thousand hectares. The majority of linseed is grown under contract. The volume of production fell by 61 per cent to 19 thousand tonnes although there was a slight increase in yields. Exports to, and imports from, the European Union were little changed compared with 2006. At £4.6 million the value of sales was 43 per cent down from 2006.

Table 5.5 Oilseed rape; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production						
Area (thousand hectares)	474	542	554	594	575	681
Yield (tonnes per hectare)	3.2	3.3	2.9	3.2	3.3	3.1
Volume of harvested production	1 503	1 771	1 607	1 898	1 890	2 108
of which:						
Production not on set-aside land:						
Area (thousand hectares)	436	460	498	519	500	602
Yield (tonnes per hectare) (a)	3.2	3.4	3.0	3.3	3.4	3.2
Production (a)	1 395	1 548	1 471	1 706	1 674	1 900
Production on set-aside land:						
Area (thousand hectares)	38	82	55	75	76	80
Yield (tonnes per hectare)	2.9	2.7	2.5	2.5	2.9	2.6
Production	108	223	136	192	216	208
Value of production (£ million) (b)	419	417	375	262	310	422
of which: sales	247	283	262	249	312	404
subsidies (c)	161	113	118	. .	. .	. .
change in stocks	11	21	- 5	13	- 2	18
Value of production at market prices (£ million) (d)	258	304	257	262	310	422
Supply and use						
Production	1 503	1 771	1 607	1 898	1 890	2 108
Imports from: the EU	262	136	198	47	132	67
the rest of the world	14	-	-	-	-	-
Exports to: the EU	182	271	101	168	179	280
the rest of the world	31	1	3	4	15	-
Total new supply	1 567	1 634	1 701	1 773	1 829	1 896
Production as % of total new supply for use in UK	96	108	94	107	103	111

(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%

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

(d) Excluding subsidies and taxes.

Table 5.6 Linseed; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production						
Area (thousand hectares)	77	34	31	48	36	12
Yield (tonnes per hectare)	1.5	1.7	1.7	1.9	1.4	1.6
Volume of harvested production	112	59	52	89	49	19
of which:						
Production not on set-aside land:						
Area (thousand hectares)	74	32	30	45	32	11
Yield (tonnes per hectare) (a)	1.5	1.7	1.7	1.9	1.4	1.6
Production (a)	107	56	50	84	44	17
Production not on set-aside land:						
Area (thousand hectares)	3	2	1	3	4	2
Yield (tonnes per hectare) (a)	1.6	1.5	1.5	1.6	1.4	1.4
Production (a)	5	3	1	5	5	2
Value of production (£ million)	53	18	16	17	8	4
of which: sales	16	10	9	16	8	5
subsidies (b)	36	8	7	. .	. .	. .
change in stocks	-	1	-	1	- 1	- 1
Value of production at market prices (£ million) (c)	17	10	9	17	8	4

continued

Table 5.6 continued

Thousand tonnes (unless otherwise specified)							Calendar years
		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Supply and use							
Production		112	59	52	89	49	19
Imports from:	the EU	1	1	2	3	4	5
	the rest of the world	42	10	3	-	2	1
Exports to:	the EU	27	22	36	63	22	19
	the rest of the world	1	-	1	-	-	-
Total new supply		127	48	21	30	32	5
Production as % of total new supply for use in UK		87	122	251	300	153	356

(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 A 4.3 per cent fall in the area of contracted sugar beet and an increase in yields of 6.2 per cent compared to 2006 led to an increase in production of 1.7 per cent to 7.5 million tonnes. Average sugar content for 2007 was higher at 17.20 per cent. Average market prices in 2007 have fallen by 5.2 per cent which has led to a decrease in the overall value of production in 2007 of 3.6 per cent to £172 million. Production as a percentage of total new supply for use in the United Kingdom has fallen to 63 per cent, an 11 per cent decrease on 2006.

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. Sugar prices in the European Union are to be cut by 36 per cent over four years alongside a voluntary restructuring scheme aimed at reducing production by around 6 million tonnes in the same period. 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 has ceased and British Sugar announced the planned cessation of production at their York factory, although this plan is currently under review.

Table 5.7 Sugar beet and sugar; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified)							Calendar years
		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Sugar beet							
Area (thousand hectares)		195	162	154	148	131	125
Yield (adjusted tonnes per hectare)		54.0	56.6	58.7	58.5	56.6	60.2
Volume of harvested production		10 502	9 168	9 042	8 687	7 400	7 525
Value of production (£ million)		329	280	278	269	178	172
Sugar content %		17.52	18.74	17.20	17.40	16.63	17.20
Prices (average market price (£ per adjusted tonne) (a)		31.3	30.5	30.8	30.9	24.1	22.8
Sugar (refined basis)							
Production (b)		1 503	1 368	1 390	1 341	1 157	1 164
Imports from:	the EU	120	122	131	221	234	178
	the rest of the world	1 148	1 008	1 140	1 104	1 099	1 068
Exports to:	the EU	122	132	159	120	183	422
	the rest of the world	445	565	628	668	679	142
Total new supply		2 203	1 800	1 874	1 879	1 627	1 847
Production as % of total new supply for use in UK		68	76	74	71	71	63

(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 combined value of production for peas and beans for stockfeed has risen by 27 per cent to £79 million in 2007. The area of dried peas, which are predominantly grown for stockfeed, fell by 29 per cent. This was accompanied by a 7.6 per cent fall in yields, which led to a 34 per cent fall in total production. The area of field beans, which are predominantly grown for stockfeed, fell by 33 per cent in 2007. Yields also fell by 9.3 per cent, which led to a 39 per cent fall in production. Lower production figures this year for both peas and beans has been due to the dry spring and the later excessive wet weather and flooding in June and July with consequential water logging of soild. This all resulted in higher levels of disease, especially root rots in peas and lodging of beans and harvestings delays and difficulties.

Table 5.8 Peas and beans harvested dry; United Kingdom

Enquiries: Michaela Hall on +44 (0)1904 456371 email: michaela.hall@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Peas for harvesting dry (a)						
Area (thousand hectares)	76	65	51	41	37	26
Yield (tonnes per hectare)	3.6	3.9	3.5	3.8	3.3	3.1
Volume of harvested production	272	254	176	156	122	80
Value of production (£ million)	52	41	30	15	11	15
of which: sales	26	24	15	13	10	14
subsidies (b)	26	17	15	2	1	1
Value of production at market prices (£ million) (c)	26	24	15	13	10	14
Field beans						
Area (thousand hectares)	103	165	178	184	184	123
Yield (tonnes per hectare)	3.5	3.9	3.7	3.8	3.4	3.0
Volume of harvested production (a)	358	639	661	705	617	375
Value of production (£ million)	72	106	104	65	59	71
of which: sales	34	59	54	58	52	65
subsidies (b)	37	48	50	7	6	6
Value of production at market prices (£ million) (c)	34	59	54	58	52	65

(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 The area of field vegetables grown in the open fell by 3.3 per to the season cent in 2007, while the value of production rose by 6.3 per cent to £796 million. A mild start resulted in good supplies of over wintered crops as they matured early. The exceptionally warm spring also brought the season on early. Prolonged and often heavy rain affected drilling and planting from late May onwards and harvesting and other field work was badly affected in late June and July. The value of production of vining peas fell by 14 per cent to £34 million; a high percentage of the pea area was damaged, with crops adversely affected in Lincolnshire and Yorkshire. The value of production of cabbages also fell by 3.2 per cent to £64 million. The value of production of carrots rose by 26 per cent to £126 million. Some winter vegetables achieved higher prices due to an increase in demand caused by the cooler summer. The value of production of mushrooms rose by 6.7 per cent to £106 million; the overall situation stabilised with the home market experiencing slightly reduced price pressure.

25 The area of protected vegetables fell by 4.9 per cent while the value of production rose by 2.0 per cent to £265 million. Crops benefitted from good weather in March and April but yields fell back during the summer. The poor summer affected demand for salads and some crop diseases were more prevalent. The value of cucumbers decreased by 12 per cent to £33 million. The value of tomatoes increased by 3.8 per cent to £86 million.

Table 5.9 Fresh vegetables; United Kingdom

Enquiries: Lisa Szydlowska +44 (0)1904 455070 email: lisa.szydlowska@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production							
Area (thousand hectares):		157	124	117	121	120	116
of which:	grown in the open (a) (b)	156	124	117	120	120	116
	protected (c)	1	1	1	1	1	1
Value of production (£ million):		1 006	905	835	912	1 009	1 062
of which:	grown in the open	672	625	598	665	749	796
	protected	334	280	236	248	260	265
of which:	subsidies (d)	7	4	3	. .	. .	. .
Selected crops:	cabbages	65	56	53	58	66	64
	carrots	84	72	75	94	100	126
	cauliflowers	51	42	50	46	41	45
	lettuces	110	105	92	84	108	95
	mushrooms	171	119	106	104	100	106
	peas	61	53	43	41	39	34
	tomatoes	71	79	59	69	83	86
Value of production at market prices (£ million) (e)		999	901	831	912	1 009	1 062
Prices (farm gate price (£ per tonne))							
Selected crops:	cauliflowers	241.3	331.7	296.3	344.4	331.1	376.6
	tomatoes	628.0	1 042.3	751.6	870.8	989.7	1 009.9
Supply and use (f)							
Total production		2 957	2 543	2 591	2 737	2 650	2 526
Supplies from the Channel Islands		18	12	11	8	8	8
Imports from:	the EU	1 284	1 415	1 498	1 736	1 682	1 673
	the rest of the world	187	197	203	204	210	271
Exports to:	the EU	164	97	74	57	71	70
	the rest of the world	34	6	18	31	12	26
Total new supply		4 248	4 064	4 210	4 598	4 467	4 381
Production as % of total new supply for use in the UK		70	63	62	60	59	58

(a) Includes peas harvested dry for human consumption.
(b) Areas relate to field areas multiplied by the number of crops in the year and hence differ from those shown in table 3.2
(c) Excludes area of mushrooms.
(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 increased by 3.7per cent in 2007 to 19 thousand hectares. The value of production increased by 4.0 per cent to £781million.

27 The value of production of the relatively small flowers and bulbs sector fell by 5.2 per cent to £33 million and this sector is subject to competition from imports. The area has continued to decline, bulb harvesting was difficult in all production areas following the wet summer.

28 The value of production of ornamental hardy nursery stock increased by 5.9 per cent to £487 million. It was a challenging year for nursery stock sales with continued competition from imports. Despite excellent spring weather, sales of nursery stocks fell during the wet summer, although the landscape sector had another strong year. Specimen plant sales in particular increased and overall prices have risen.

29 The value of production of protected plants and flowers increased by 1.9 per cent to £262 million. Bedding plants benefited from a good spring, but the relatively poor summer which followed failed to generate further trade, though the mild autumn increased sales. Volumes marketed through retailers have continued to increase, with more interest in competitively-priced planted containers.

Table 5.10 Plants and flowers; United Kingdom

Enquiries: Lisa Szydlowska +44 (0)1904 455070 email: lisa.szydlowska@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production						
Area (thousand hectares) (a):	19	21	21	20	18	19
Value of production (£ million)	666	772	787	778	751	781
of which: flowers and bulbs in the open (b)	46	33	33	33	35	33
hardy plants and flowers nursery stock	352	456	474	473	460	487
protected crops	267	283	279	272	257	262
Trade (£ million)						
Imports						
Bulbs	37	43	48	53	52	44
Cut flowers	291	552	528	522	552	674
Foliage	17	27	26	25	28	26
Indoor plants	77	100	102	105	104	102
Outdoor plants	21	55	53	69	66	77
Trees	23	52	57	64	71	72
Other	18	33	32	31	36	38
Total Imports (exc. Channel Islands)	484	862	846	869	909	1 032
Exports						
Bulbs	8	8	8	7	8	11
Cut flowers	13	23	19	22	23	28
Foliage	3	1	2	2	2	3
Indoor plants	2	-	1	2	2	2
Outdoor plants	3	4	4	4	4	3
Trees	1	2	2	2	2	3
Other	2	3	5	5	6	7
Total Exports	32	41	40	44	47	57

(a) Areas relate to field areas multiplied by the number of crops in the year and hence differ from those shown in table 3.2.
(b) Including forced flower bulbs.

Potatoes (table 5.11)

30 The area used for maincrop potatoes fell by 3.6 per cent in 2007, however this was offset by an increase in the area for early potatoes of 40 per cent and overall potato areas were unchanged. The yield for early potatoes was 3.2 tonnes per hectare lower in 2007, down 20 per cent on 2006. Maincrop yields increased by 0.5 tonnes or 1.6 per cent. This was despite crop losses due to flooding and the very wet weather. Overall these yields combined with the unchanged area led to a fall in production of 1.6 per cent. Prices started 2007 higher year on year helped by the tight supply situation and whilst they were lower during the summer, towards the end of the year they increased due to the lower production and higher post harvest wastage levels caused by the wet summer and difficult harvesting. Overall prices for 2007 were up £15 per tonne or 11 per cent on 2006. Despite lower production, the higher prices resulted in an increase of 6.9 per cent in the value of production to £664 million in 2007.

Fresh fruit (table 5.12)

31 The area of orchard fruit decreased by 3.7 per cent in 2007 and the value of production increased by 20 per cent to £141 million. The fruit set was disappointing despite blossom coinciding with good weather. The cool wet summer suited most crops and yields were good, though moderate fruit size limited outturns at harvest. The value of pears fell by 28 per cent to £8 million as the quantity available for market was lower than in 2006. The value of culinary apples increased by 22 per cent to £52 million.

32 The area of soft fruit rose slightly, by 1.0 per cent and the value of production increased by 16 per cent to £270 million. The value of production of strawberries increased by 13 per cent to £154 million and raspberries also increased by 24 per cent to £87 million. The soft fruit season was very early,

Table 5.11 Potatoes; United Kingdom

Enquiries: Lindsay Holmes on +44 (0)1904 455563 email: lindsay.holmes@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production						
Area (thousand hectares)	169	145	148	137	140	140
of which: early	16	14	15	12	11	16
maincrop	153	131	134	124	129	124
Yield (tonnes per hectare):						
early	21.5	18.2	16.8	14.3	15.7	12.5
maincrop	43.1	44.2	44.9	46.6	43.0	43.7
overall	40.9	41.7	42.0	43.7	40.8	40.2
Volume of harvested production	6 926	6 058	6 246	5 979	5 727	5 635
of which: early	349	247	248	179	177	198
maincrop	6 577	5 811	5 997	5 800	5 550	5 437
End year stocks	3 613	2 878	2 946	2 858	2 448	2 390
Value of production (£ million)	552	527	674	515	621	664
of which: sales	537	573	656	511	658	664
on farm seed use	19	4	9	13	16	8
change in stocks	- 4	- 50	8	- 9	- 53	- 8
Prices (average price paid to registered producers (£ per tonne)) (a)						
early potatoes	107.7	132.5	178.0	140.8	193.7	153.8
maincrop potatoes	93.2	98.9	118.1	95.9	125.0	140.9
all potatoes	96.0	102.5	123.2	100.6	128.9	143.5
Supply and use						
Total production	6 926	6 058	6 246	5 979	5 727	5 635
Supplies from the Channel Islands	49	31	31	38	31	33
Imports	1 083	1 707	1 774	1 387	1 404	1 851
of which: early	202	143	191	122	92	203
maincrop	143	130	164	166	126	300
processed (raw equivalent)	716	1 401	1 384	1 082	1 177	1 333
seed	22	33	36	17	9	15
Exports	339	440	381	397	629	407
of which: raw	163	178	97	117	172	184
processed (raw equivalent)	100	186	214	190	360	137
seed	77	76	69	90	97	86
Total new supply	7 719	7 355	7 671	7 006	6 532	7 112
Change in stocks	- 23	- 486	68	- 89	- 409	- 58
Total domestic uses	7 742	7 841	7 603	7 095	6 942	7 170
of which: used for human consumption	6 141	6 560	6 449	5 868	5 674	5 816
seed for home crops (including seed imports)	467	369	368	387	386	335
chats, waste and retained stockfeed	1 134	912	786	840	882	1 019
Production as % of total new supply for use in the UK	90	82	81	85	88	79

Potatoes (Crop Years: June-May); United Kingdom

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

	2002/03	2003/04	2004/05	2005/06	2006/07 (provisional)
Production					
Volume of harvested production	6 920	6 921	6 058	6 246	5 979	5 727
Value of production (£ million)	580	435	702	571	570	711
of which:						
sales	551	428	695	546	557	715
on farm seed use	26	5	5	17	15	5
change in stocks	3	3	1	8	- 2	- 9
Prices (average realised return (£ per tonne)) (a)	98.5	74.2	131.4	105.3	108.6	143.3

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

strawberries under tunnels cropped three weeks early. The cool, very wet weather at the end of June and July slowed production down, but subsequent weather was more suited to production right through to the end of November, allowing the multiples to source UK crops for an extended season. The trend to extend the season has also been followed in raspberries with an increase in the planting of autumn-fruiting varieties. There was good demand for home grown strawberries and raspberries.

Table 5.12 Fresh fruit; United Kingdom

Enquiries: Lisa Szydlowska +44 (0)1904 455070 email: lisa.szydlowska@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Production							
Area (thousand hectares):		38	27	27	28	28	27
of which:	orchard fruit (a)	27	19	18	19	19	18
	soft fruit (b)	11	8	8	9	9	9
End year stocks (c)		83	61	81	90	59	69
Value of production (£ million) (d):		250	310	316	388	383	445
of which:							
	orchard fruit	113	102	106	117	117	141
	soft fruit	129	175	171	239	232	270
of which:							
	sales	249	309	306	384	399	439
	change in stocks (c)	-	1	9	4	- 16	6
Selected crops:	dessert apples	51	32	38	49	56	52
	culinary apples	31	35	28	32	42	52
	pears	14	10	8	8	11	8
	raspberries	32	40	41	73	70	87
	strawberries	74	109	100	137	136	154
Prices (farm gate price (£ per tonne)							
Selected crops:	dessert apples	511.3	460.3	412.2	418.6	433.6	491.9
	culinary apples	314.2	471.7	359.1	316.5	378.7	377.1
	pears	430.9	344.0	349.2	350.3	392.1	387.4
Supply and use (e)							
Total production		311	269	294	363	392	398
Imports from:	the EU	1 308	1 244	1 258	1 312	1 361	1 259
	the rest of the world	1 346	1 751	1 935	1 992	2 128	2 302
Exports to:	the EU	70	78	105	119	180	166
	the rest of the world	4	1	1	1	1	2
Total new supply		2 892	3 186	3 380	3 546	3 700	3 791
Change in stocks		-	- 1	20	9	- 31	9
Total domestic uses		2 892	3 187	3 360	3 537	3 730	3 782
Production as % of total new supply for use in the UK		11	8	9	10	11	11

(a) Includes field area of commercial orchards only, and may therefore differ from the area in table 3.2, which also includes non-commercial orchards.

(b) Excludes area of wine grapes and may therefore differ from the area in table 3.2.

(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)

33 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 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 plus live exports (non-breeding) minus live imports (non-breeding).

Cattle and calves: beef and veal (table 5.13)

34 The value of production at market prices of beef and veal rose by 4.9 per cent in 2007 to £1.7 billion due to increased home production and firm finished cattle prices. The finished cattle prices averaged 112.3 pence per kg, a rise of 1.6 per cent on 2006. Despite prime cattle marketings falling by 2.3 per cent, average carcase weight gains and a rise in cull cow marketings resulted in home-fed production of beef and veal rising by 4.2 per cent in 2007, with supply of beef and veal rising by 1.8 per cent to 1088 thousand tonnes.

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 1996-98	2003	2004	2005	2006	2007 (provisional)
Population						(a)
Total cattle and calves (thousand head at June) (a)	11 732	10 508	10 588	10 392	10 270	10 304
of which: dairy cows	2 502	2 191	2 129	2 063	2 066	1 954
beef cows	1 891	1 698	1 736	1 762	1 733	1 698
heifers in calf	818	679	690	638	645	. .
Production (b)						
Total home-fed marketings (thousand head)	2 330	2 286	2 361	2 409	2 702	2 723
of which: steers, heifers and young bulls	2 216	2 194	2 250	2 276	2 208	2 157
calves	46	87	101	111	125	108
cows and adult bulls	69	5	11	22	370	458
Average dressed carcase weight (kg) (c):						
steers, heifers and young bulls	307	319	319	332	331	343
calves	41	26	26	26	29	32
cows and adult bulls	269	237	264	345	311	317
Production (dressed carcase weight):						
home-fed production	701	703	724	765	852	888
gross indigenous production	697	690	708	755	844	879
Value of production (£ million)	2 162	2 188	2 331	1 597	1 647	1 703
of which: value of home-fed production	1 190	1 174	1 283	1 381	1 591	1 669
subsidies (d)	1 013	960	1 051	197	68	46
change in work-in-progress (e)	- 36	55	- 2	21	- 10	- 11
less imported livestock	5	2	1	2	2	1
plus breeding animals exported	. .	. .	. .	. .	. .	-
Value of production at market prices (£ million) (f)	1 149	1 227	1 279	1 400	1 579	1 657
Prices						
Store cattle (£ per head) (g):						
Hereford/cross bull calves (h)	128.9	112.7	113.7	81.5	73.4	93.1
Beef/cross yearling steers (i)	413.7	451.5	465.3	429.0	444.1	481.2
Finished cattle (pence per kg liveweight): All prime cattle	96.2	95.2	101.2	102.2	110.6	112.3
Over Thirty Month Scheme and Older Cattle Disposal Scheme (j)						
Over Thirty Month Scheme:						
prime cattle throughput (thousand head)	171	43	36	27	1	. .
cull cattle throughput (thousand head)	789	679	761	683	49	. .
receipts (£ million)	374.9	198.9	202.7	178.4	12.9	. .
Older Cattle Disposal Scheme:						
throughput (thousand head)	. .	. .	. .	. .	150	127
receipts (£ million)	. .	. .	. .	. .	36.8	27.7
Supply and use (dressed carcase weight) (k)						
Home-fed production (b)	701	703	724	765	852	888
Imports from: the EU (l) (m)	110	223	238	205	198	199
the rest of the world	70	85	85	82	72	73
Exports to: the EU (m)	29	10	12	14	52	70
the rest of the world	6	-	-	-	-	1
Total new supply	846	1 000	1 034	1 037	1 070	1 088
Home-fed production as % of total new supply for use in the UK	83%	70%	70%	74%	80%	82%

(a) In 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://statistics.defra.gov.uk/esg/statnot/june_uk.pdf

continued

Table 5.13 continued

(b) Measures of marketings, production and value exclude all cattle removed from the food chain by the Over Thirty Month Scheme, the Selective Cull Scheme and the Calf Processing Aid Scheme. Payments to producers for the Over Thirty Month 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 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) Category changes: Prior to January 1998, 1st quality Hereford/Friesian bull calves. From January 1998, 1st quality Hereford/cross bull calves. From January 2002, Hereford/cross bull calves.

(i) Category changes: Prior to January 1998, 1st quality yearling steers beef/dairy cross. From January 1998, 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 and the Older Cattle Disposal Scheme are included as subsidies.

(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.

Pigs and pigmeat (table 5.14)

35 The value of production of pigmeat rose by 7.3 per cent to £735 million, the highest value seen since 2001. Prices were generally higher throughout the year, resulting in an average clean pig price of 106.7 pence per kg, 2.4 pence higher than 2006. Marketings of clean pigs rose by 4.0 per cent, with average clean pig carcase weights rising by 2.0 per cent to 76 kg.

36 Home-fed production of pork rose by 7.4 per cent at 617 thousand tonnes. Supplies of pork rose by 6.2 per cent to 896 thousand tonnes. Home-cured bacon production decreased by 12 per cent to 185 thousand tonnes, with total new supply declining by 5.9 per cent to 435 thousand tonnes. Imports accounted for more than half of the domestic supplies of bacon and ham

Sheep and lambs: mutton and lamb (table 5.15)

37 The value of production of sheepmeat fell by 7.8 per cent to £628 million. Clean sheep marketings fell by 3.8 per cent in 2007, but the average carcase weight, at 19.4 kg per head, was 3.0% higher than last year. Overall home-fed production dropped slightly to 328 thousand tonnes whilst total new supply rose by 6.2 per cent to 401 thousand tonnes due to reduced exports.

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 1996-98	2003	2004	2005	2006	2007 (provisional)
Population							
Total pigs (thousand head at June)		7 936	5 046	5 159	4 862	4 933	4 834
of which:	sows in pig and other sows for breeding	669	442	449	403	401	398
	gilts in pig	109	73	66	67	67	57
Production							
Total home-fed marketings (thousand head)		15 241	9 007	8 841	8 709	8 731	9 084
of which:	clean pigs	14 860	8 760	8 597	8 496	8 520	8 862
	sows and boars	381	247	244	213	211	222
Average dressed carcase weight (kg) (a):							
	clean pigs	69	74	75	75	75	76
	sows and boars	141	161	158	156	153	151
Production (dressed carcase weight):							
	home-fed production	1 072	688	679	669	668	708
	gross indigenous production	1 071	689	680	670	668	707
Value of production (£ million)		1 149	671	680	677	685	735
of which:	value of home-fed production	1 139	682	678	671	678	732
	change in work in progress (b)	4	- 14	- 1	-	- 1	- 3
	less imported livestock	. .	. .	. .	. .	. .	. .
	plus breeding animals exported	6	3	3	6	8	6
Prices (pence per kg deadweight)							
Clean pigs		109.8	102.6	102.8	102.9	104.2	106.7
Supply and use of pork (dressed carcase weight) (c) (d)							
Home-fed production		866	569	577	574	575	617
Imports from:	the EU (e)	125	307	297	343	369	385
	the rest of the world	2	3	7	4	9	4
Exports to:	the EU (f)	219	67	82	92	94	101
	the rest of the world	26	7	13	9	14	9
Total new supply		748	805	787	820	843	896
Home-fed production as % of total new supply for use in the UK		116%	71%	73%	70%	68%	69%
Supply and use of bacon and ham (product weight) (c)							
Home-cured production		242	214	211	214	209	185
Imports from:	the EU	244	303	302	283	264	267
	the rest of the world	-	-	-	-	-	-
Exports to:	the EU	7	14	13	10	10	16
	the rest of the world	-	-	1	-	-	-
Total new supply		479	504	500	487	462	435
Home-cured production as % of total new supply for use in UK		51%	43%	42%	44%	45%	42%

(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 products.
(d) Boneless meat has been converted to bone-in weights.
(e) Includes meat from finished animals imported from the Irish Republic.
(f) Adjusted, as necessary, for unrecorded trade in live animals.

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 1996-98	2003	2004	2005	2006	2007 (provisional)
Population							
Total sheep and lambs (thousand head at June)		43 127	35 812	35 817	35 416	34 722	33 946
of which:	ewes and shearlings	20 835	17 580	17 630	16 935	16 637	16 064
	lambs under one year old	21 204	17 322	17 238	17 488	17 058	16 855
Production							
Total home-fed marketings (thousand head)		18 928	15 436	15 493	16 539	16 590	15 979
of which:	clean sheep and lambs	16 797	13 493	13 530	14 300	14 279	13 742
	ewes and rams	2 131	1 943	1 963	2 238	2 311	2 237
Average dressed carcase weight (kg) (a):							
	clean sheep and lambs	18	19	19	19	19	19
	ewes and rams	29	28	29	28	28	27
Production (dressed carcase weight):							
	home-fed production	362	310	319	336	332	328
	gross indigenous production	362	310	319	336	332	328
Value of production (£ million)		1 120	930	987	682	682	628
of which:	value of home-fed production	771	701	708	688	709	635
	subsidies (b)	339	233	262	. .	. .	. .
	change in work in progress (c)	15	- 4	17	- 6	- 20	- 2
	less imported livestock	5	-	-	-	7	4
	plus breeding animals exported	-	-	-	-	-	-
Value of production at market prices (£ million) (d)		781	698	726	682	682	628
Prices							
Store sheep (£ per head): (e)							
Lambs, hoggets and tegs		43.8	37.7	. .	30.5	30.9	26.9
Finished sheep (pence per kg estimated dressed carcase weight) (f):							
Great Britain		238.2	271.1	262.6	250.0	258.5	236.8
Northern Ireland		222.6	239.9	227.8	223.8	230.8	226.0
Supply and use (dressed carcase weight) (g)							
Home-fed production		362	310	319	336	332	328
Imports from:	the EU (h)	21	19	22	20	21	21
	the rest of the world	129	117	120	113	119	118
Exports to:	the EU (i)	138	84	85	93	94	66
	the rest of the world	2	1	1	1	1	1
Total new supply		372	362	375	375	377	401
Home-fed production as % of total new supply for use in the UK		97%	86%	85%	90%	88%	82%

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

(b) Comprising 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: Prior to January 2002, 1st quality lambs, hoggets and tegs. From January 2002, lambs, hoggets and tegs.

(f) Unweighted average of weekly prices at representative markets as reported to the European Commission.

(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)

38 There was little change in the value of production of poultrymeat in 2007, with higher producer prices offsetting the 3.8 per cent fall in the amount of poultrymeat produced. About 75 per cent of the value of poultrymeat comes from the production of chicken, other table fowls and boiling fowls.

39 The average producer price for broilers rose by 6.4 per cent to 74.4 pence per kg carcase weight in 2007 and the average producer price for turkeys increased by 19.4 per cent to 128.3 pence per kg. The duck and geese average producer prices also rose by 4.6 per cent and 6.5 per cent respectively. The exception was the average price boilers, which fell by around 1 pence to 9.7 pence per kg carcase weight.

Table 5.16 Poultry and poultrymeat; 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 1996-98	2003	2004	2005	2006	2007 (provisional)
Population						
Number (thousand head at June) (a):	164 494	178 800	181 759	173 909	173 081	167 667
of which: chickens and other table fowls	95 290	116 738	119 888	111 475	110 672	108 753
birds in the laying flock (b)	31 585	29 274	29 655	29 544	28 632	27 321
growing pullets	10 492	8 286	8 156	10 928	9 625	8 936
fowls for breeding	9 277	10 988	10 125	8 561	9 273	12 502
turkeys, ducks, geese & all other poultry (c)	17 850	13 514	13 935	13 400	14 879	10 154
Production						
Slaughterings (millions) (d):	843	882	882	903	880	871
of which: fowls	790	840	843	864	844	839
turkeys	36	21	21	19	17	15
ducks & geese	17	20	18	19	19	17
Production (carcase weight) (e):	1 519	1 578	1 571	1 585	1 517	1 460
of which: chickens and other table fowls	1 129	1 253	1 253	1 284	1 236	1 219
boiling fowls (culled hens)	56	50	48	51	53	49
turkeys	294	229	228	206	184	154
ducks & geese	41	46	41	45	45	38
Value of production (£ million):	1 473	1 337	1 329	1 302	1 218	1 215
of which: fowls	970	898	916	925	870	912
change in work in progress in fowls (f)	5	- 3	15	- 7	- 7	- 38
turkeys, ducks, geese	446	370	322	307	283	274
exports of live poultry	45	69	74	76	72	66
hatching eggs for export	15	19	23	20	16	16
less live poultry imported	5	5	6	6	5	6
less hatching eggs imported	4	11	14	13	10	9
Prices (average producer prices (pence per kg carcase weight)):						
chickens and other table fowls	84.7	71.3	72.7	71.7	69.9	74.4
boiling fowls (culled hens)	28.6	9.6	9.7	9.8	10.6	9.7
turkeys	129.6	124.1	109.6	108.9	107.5	128.3
ducks	157.5	169.1	158.6	163.6	170.2	178.0
geese	214.2	450.7	441.8	491.1	468.2	498.9
Supply and use (carcase weight) (e)						
Production	1 519	1 578	1 571	1 585	1 517	1 460
Imports from: the EU	271	362	410	400	411	425
the rest of the world	20	50	67	85	40	24
Exports to: the EU	124	172	196	206	163	264
the rest of the world	70	88	72	55	70	27
Total new supply	1 615	1 731	1 780	1 808	1 735	1 618
Production as % of total new supply for use in the UK	94%	91%	88%	88%	87%	90%

(a) Improvements to the Census methodology were introduced in 1997 onwards to account for poultry production on unregistered units. Consequently the figures from 1997 onwards are not directly comparable with those for earlier years.
(b) Hens and pullets kept mainly for producing eggs for eating.
(c) Data prior to 1996 do not include figures for turkeys.
(d) Slaughtering figures include registered and un-registered slaughterhouses.
(e) Excludes offal.
(f) A valuation of the change in work-in-progress of fowls to be slaughtered.

40 In 2007 increased exports to the EU resulted in total exports rising by around a quarter. With a 3.8 per cent fall in home fed production and steady imports, supplies of poultrymeat for domestic use fell by 6.8% to 1.6 million tonnes.

Milk (table 5.17)

41 The total value of milk produced for human consumption, at market prices, rose by 13 per cent in 2007 to £2.8 billion. Raw milk sold from farms to dairy companies for processing into pasteurised drinking milk, cheese, butter and other milk products, accounted for over 97 per cent of the total value in 2007. As the volume of milk sold to dairies fell by 2% to 13.4 billion litres, the rise in the value of milk was entirely due to a 16 per cent rise in the average farmgate price of milk to 20.8 pence per litre.

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 1996-98	2003	2004	2005	2006	2007 (provisional)
Population and yield						
Dairy herd (annual average, thousand head) (a)	2 507	2 202	2 090	2 013	1 994	1 976
Average yield per dairy cow (litres per annum)	5 702	6 623	6 762	6 983	6 983	6 908
Production						
Milk from the dairy herd (b)	14 291	14 580	14 132	14 055	13 926	13 653
Milk from the beef herd (b)	7	7	7	7	7	7
less on farm waste and milk fed to stock	282	223	209	223	219	217
Volume for human consumption	14 016	14 364	13 930	13 839	13 714	13 443
Value of production (£ million)	3 119	2 628	2 711	2 592	2 498	2 830
of which: raw milk leaving farm (c)	3 054	2 556	2 538	2 523	2 432	2 759
raw milk processed on farm (d)	97	73	73	69	65	71
subsidies	. .	. .	108	. .	. .	. .
less levies	32	. .	8	1	. .	. .
Value of production at market prices (£ million) (e)	3 151	2 628	2 611	2 593	2 498	2 830
Prices (average price received by milk producers, net of delivery charges (pence per litre)) (f)						
Farmgate price of milk excluding bonus payments	22.0	18.0	18.5	18.5	17.9	20.8
Farmgate price of milk including bonus payments	22.2	18.0	18.5	18.5	18.0	20.8
Supply and use (g)						
Production	14 298	14 587	14 139	14 062	13 933	13 660
Imports	123	105	65	49	43	63
Exports	279	399	434	624	610	521
Total new supply	14 142	14 294	13 769	13 488	13 366	13 202
of which:						
for liquid consumption	6 804	6 752	6 693	6 652	6 736	6 698
for manufacture	6 917	7 271	6 827	6 568	6 343	6 131
of which: butter (h)	277	268	249	266	241	249
cheese	3 338	3 315	3 401	3 705	3 784	3 604
cream (h)	232	316	320	302	321	285
condensed milk (i)	685	375	359	351	303	298
milk powder	1 919	2 399	1 878	1 374	1 258	1 223
other	467	598	620	571	435	471
dairy wastage and stock change	85	5	3	15	38	127
other uses (j)	336	266	245	253	249	247

(a) Dairy herd is 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. In the current year, estimated bonuses for April to December have been included.
(g) Aggregated data from surveys run by Defra, SEERAD and DARD, NI, on the utilisation of milk by dairies.
(h) Includes the utilisation of the residual fat of low fat liquid milk production.
(i) Includes condensed milk used in the production of chocolate crumb and in the production of machine skimmed milk.
(j) Includes farmhouse consumption, milk fed to stock and on farm waste. Excludes suckled milk.

42 The value of milk processed on farm for sale direct to consumers rose by 8.4 per cent and accounted for less than 3 per cent of the total value of milk produced for human consumption in 2007. There was no superlevy charge in 2007 as milk production in the United Kingdom was under the national quota limit in the 2006/07 quota year.

Milk products (table 5.18)

43 Production of butter rose by 3.2 per cent in 2007. With imports falling by 27 per cent and marginally fewer exports, overall new supply of butter declined by 13 per cent to 197 thousand tonnes. There were no stocks of butter in intervention at the end of 2007.

44 Production of cheese fell by 4.2 per cent to 381 thousand tonnes in 2007. This was offset by a 7.1 per cent increase in imports, resulting in a 2.5 per cent rise in new supply to 688 thousand tonnes.

Table 5.18 Milk products; United Kingdom

These tables show production and supplies of milk products manufactured by both dairy companies and on farm. The figures are quoted in thousand tonnes and are not directly comparable with the figures shown in table 5.17, which are quoted in million litres.

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

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Butter (a)(b)						
Production (c)	135	131	122	130	117	121
Imports	110	118	114	129	147	108
Export	64	44	35	45	36	34
Intervention stock change	-	- 2	- 8	- 6	2	- 3
Total new supply	181	207	208	219	226	197
Production as % of total new supply for use in the UK	75%	63%	58%	59%	52%	61%
Cheese						
Production (c)	375	351	359	391	397	381
Imports	245	316	335	353	378	405
Exports	56	90	93	96	104	97
Total new supply	564	577	600	648	671	688
Production as % of total new supply for use in the UK	66%	61%	60%	60%	59%	55%
Cream - fresh, frozen, sterilized						
Production (b) (c)	235	321	325	306	327	291
Imports	9	15	15	30	37	44
Exports	97	114	81	93	94	78
Total new supply	147	222	259	244	270	256
Production as % of total new supply for use in the UK	160%	144%	126%	125%	121%	114%
Condensed milk (d)						
Production	204	158	161	143	113	110
Imports	12	20	25	33	45	41
Exports	62	20	18	4	6	6
Total new supply	154	157	169	172	152	145
Production as % of total new supply for use in the UK	132%	101%	96%	83%	74%	76%
Milk powders (e)						
Production	200	216	168	122	114	114
Imports	22	45	68	78	51	60
Exports	129	173	186	102	96	106
Intervention stock change	26	24	- 30	- 11	- 6	-
Total new supply	67	65	79	109	75	68
Production as % of total new supply for use in the UK	318%	332%	211%	112%	152%	167%

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

(b) Includes production from the residual fat of low fat milk products.

(c) Includes farmhouse manufacture.

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

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

45 Production of milk powders in 2007 remained at 114 thousand tonnes. Imports rose by 17 per cent to 60 thousand tonnes, and exports rose by 9.8 per cent to 106 thousand tonnes. There were no intervention stocks of skimmed milk powder at the end of 2007 and the total new supply of milk powder fell by 9.1 per cent.

Hen eggs (table 5.19)

46 The value of production of eggs produced for human consumption in 2007 rose by 13 per cent to £410 million while the quantity of eggs produced for human consumption fell by 3.8 per cent to 714 million dozen. Production of eggs for processing accounted for 25 per cent of the total number of eggs produced for human consumption, with eggs sold in shell accounting for the other 75 per cent. The weighted average price of eggs graded in the United Kingdom rose by 18 per cent to 57.4 pence per dozen.

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 1996-98	2003	2004	2005	2006	2007 (provisional)
Population and yield							
Number of fowls laying eggs for eating (millions) (a)		33	30	31	31	30	29
Average yield per layer (number of eggs per bird per year)		285	298	301	304	300	295
Production							
Volume of production of eggs		888	843	892	884	853	825
of which:	eggs for human consumption	781	733	778	772	743	714
	eggs for hatching (b)	94	98	99	98	97	98
	hatching eggs for export (c)	4	5	7	6	5	5
	waste	8	7	8	8	7	7
Value of production of eggs for human consumption (£m) (d)		316	338	381	349	361	410
Prices (pence per dozen)							
Weighted average of eggs graded in the UK (e)		40.5	46.1	48.9	45.2	48.6	57.4
Supply and use							
Production of eggs for human consumption		781	733	778	772	743	714
of which:	eggs sold in shell	650	580	613	582	554	533
	eggs processed	131	154	165	190	189	181
Imports from (f):	the EU	63	156	148	135	168	185
	the rest of the world	2	2	2	2	2	2
Exports to (f):	the EU	19	15	13	13	18	15
	the rest of the world	3	1	1	-	-	-
Total new supply		823	875	915	895	895	887
Production as % of total new supply for use in the UK		95%	84%	85%	86%	83%	81%

(a) Population is implied from gross production and average yield and hence differs from the census figures in table 3.2.
(b) Eggs for hatching are not valued as they are included in the final value for poultry (table 5.16).
(c) Hatching eggs for exports are valued in table 5.16.
(d) Excludes the value of eggs for hatching.
(e) 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 barn.
(f) Includes shell egg equivalent of whole (dried, frozen and liquid) egg, egg yolk and albumen.

Chapter 6 Intermediate Consumption

Summary

- Crude oil prices reached a high point of $95 per barrel during 2007;
- expenditure on fuels has risen by over 600 per cent since 1973 to almost £600 million despite usage falling by almost 60 per cent;
- the cost of electricity has also risen by over 580 per cent to about £275 million;
- expenditure on fertiliser, having levelled out in recent years at about £750 million, increased to £850 million in 2007, while the volume has declined since 1997 to the lowest levels in 35 years;
- expenditure on pesticides rose by over 20 times between 1973 and 1997 to about £550 million;
- veterinary expenses are estimated to be about £285 million and the cost of agriculture services is estimated to be about £625 million;
- expenditure on animal feed has risen to about £2.8 billion while the cost of seeds and planting stock is estimated to be about £605 million.

Introduction

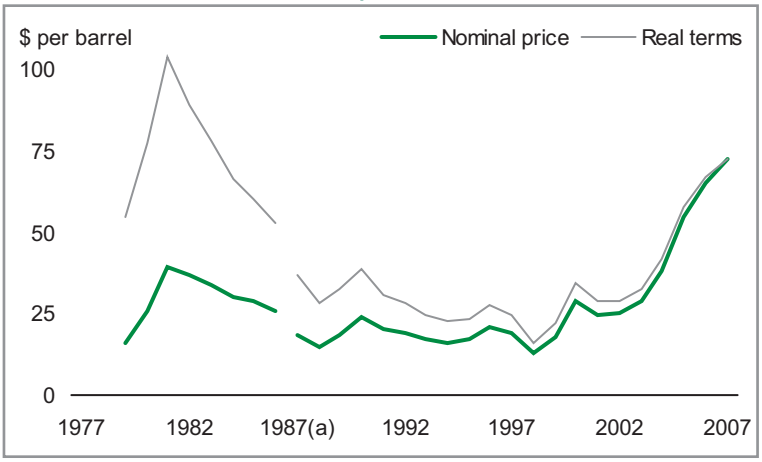
1 In recent years, increases in crude oil prices have led to increased concerns for the impact of high oil prices on the margins and profitability of agricultural businesses, which are dependent on products derived from petroleum, notably fuels. This chapter presents long-term trends in crude oil prices 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 trend in prices for Brent crude oil, which is widely used to determine crude oil prices in Europe. The prices for 1979 to 1986 are as at the Friday that is closest to 1 January and those from 1987 are the average of daily spot prices.

3 Prices have risen from under $5 per barrel in the early 1970s to over $90 per barrel in December 2007. In real terms however, the price remains below that in the early 1980s.

Chart 6.1 Brent crude oil price



Source: Energy Information Administration, U.S. Department of Energy

(a) The annual average for 1987 is the average of daily spot prices from 20 May 1987 to 1 Jan 1988

Fuels (chart 6.2, 6.3)

4 The average unit price of fuel is influenced by the trend in oil prices, although the oil price is more volatile.

5 Expenditure on fuels has followed the trend in the unit price and has risen by over 600 per cent since 1973 with a notable peak in 1985. Expenditure in 2007 is estimated to be almost £600 million.

6 There has been a declining trend in the volume of fuels purchased, which has fallen by almost 60 per cent since 1973. The fall in usage has only partially offset the increase in the unit price.

7 Red diesel prices rose throughout 2007 and peaked at 50.8 pence per litre in December 2007, 31% higher than the December 2006 price.

Chart 6.2 Fuels; United Kingdom

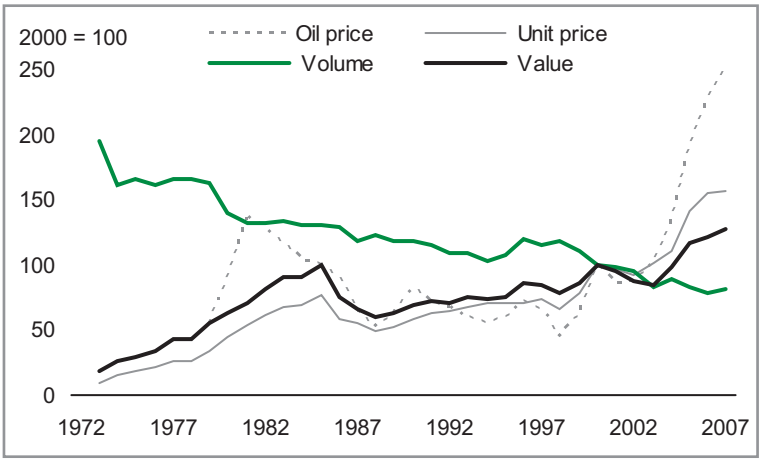
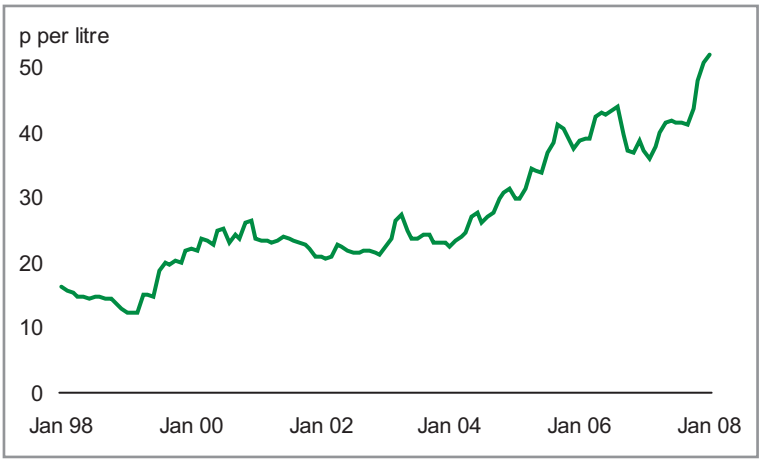


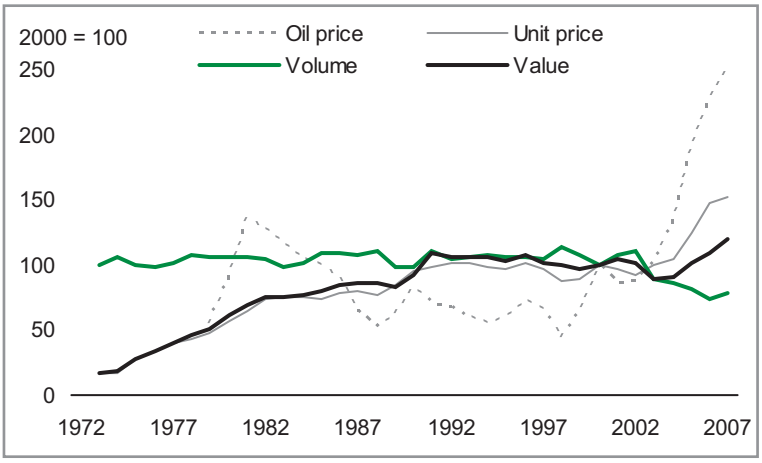
Chart 6.3 Red diesel prices; United Kingdom



Electricity (chart 6.4)

8 Electricity is also a significant source of energy, used primarily for stationary activities, such as the operation of facilities and dairies. The volume of electricity used has remained fairly constant since 1973, only declining after 2002. Expenditure has closely followed the trend in the unit price and has risen over 580 per cent since 1973. Expenditure in 2007 is estimated to be about £277 million.

Chart 6.4 Electricity; United Kingdom



Fertiliser (chart 6.5, 6.6)

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

10 The volume rose gradually from 1973 and peaked in 1997 as the area of land under tillage increased. Since 1997, the volume has fallen by almost 50 per cent.

11 Expenditure has largely followed the trend in the unit price only diverging from it after 2000 since when it has remained fairly constant at around £750-850 million.

12 Gas prices were a significant driver underlying the increase in fertiliser prices between September 2004 and April 2006, when the price of nitrogen based fertiliser rose by 25 per cent. The price of nitrogen based fertiliser fell in the second half of the year as gas prices fell, and stabilised until September 2007 when prices rose sharply, driven by increases in energy costs and demand, with emerging markets in Latin America, Asia and Africa.

Chart 6.5 Fertiliser; United Kingdom

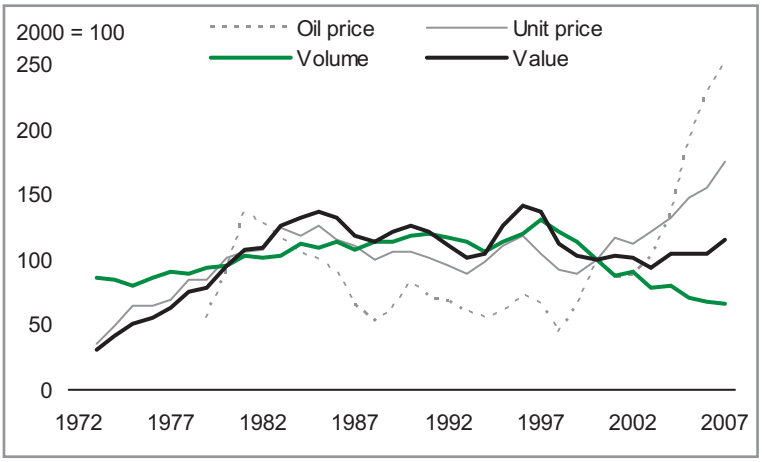
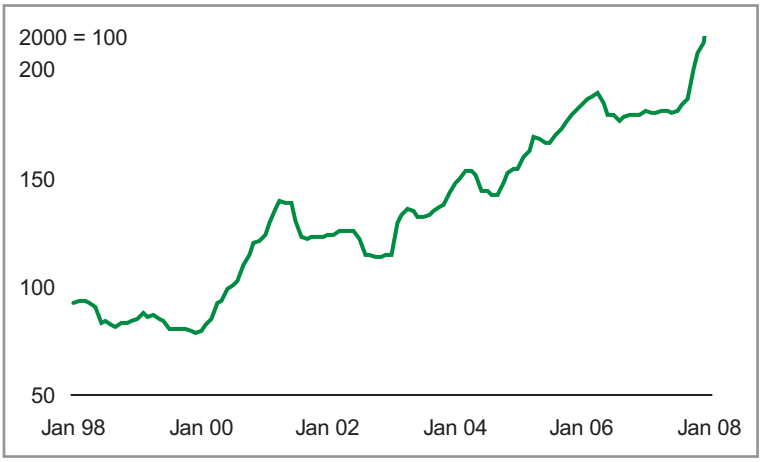


Chart 6.6 Fertiliser prices; United Kingdom

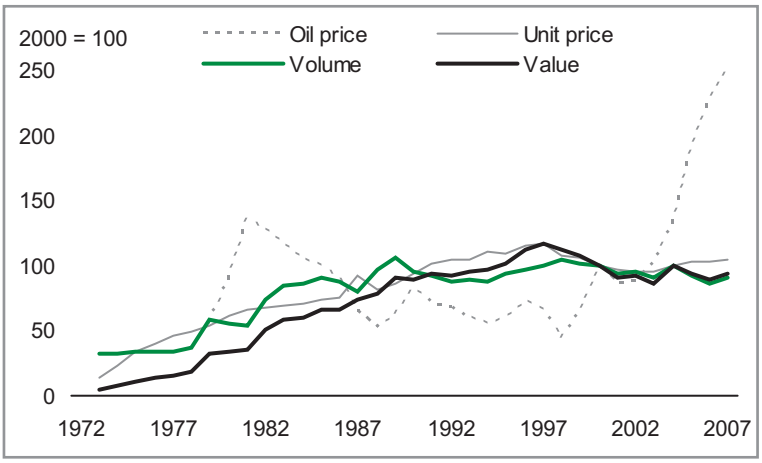


Pesticides (chart 6.7)

13 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.

14 The volume rose from 1973 to a peak in 1989 and then stabilised from 1990 onwards. Expenditure has largely followed the trend in the volume and is now about £550 million.

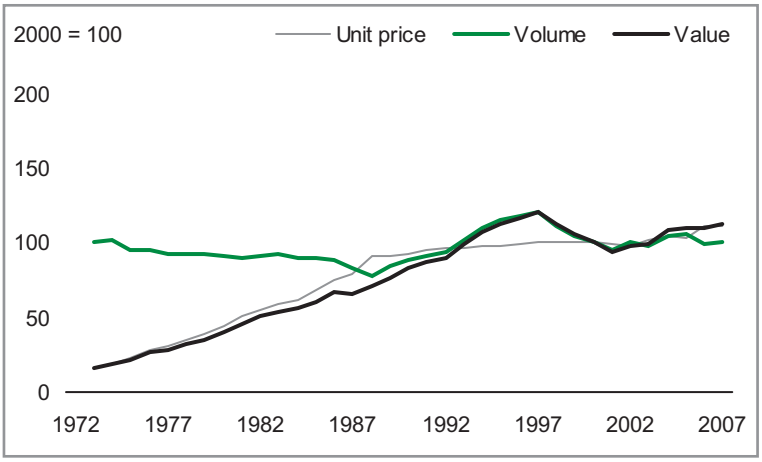
Chart 6.7 Pesticides; United Kingdom



Veterinary expenses (chart 6.8)

15 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 after when it fluctuated at around the 2000 level. Expenditure rose steadily from 1973 to 1997, then followed the trend for volume before diverging in 2004. It is now about £285 million.

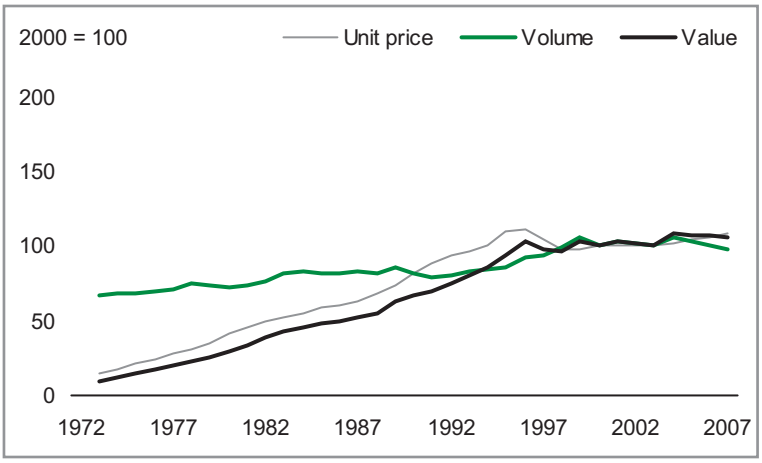
Chart 6.8 Veterinary expenses; United Kingdom



Agricultural services (chart 6.9)

16 The volume of agricultural services, such as contract work and machinery rental, has risen on a gentle upward trend reflecting increasing use of contractors on farm for operations such as planting, tilling, chemical applications, discing and harvesting. Expenditure, which has followed a long term upward trend, is currently about £625 million.

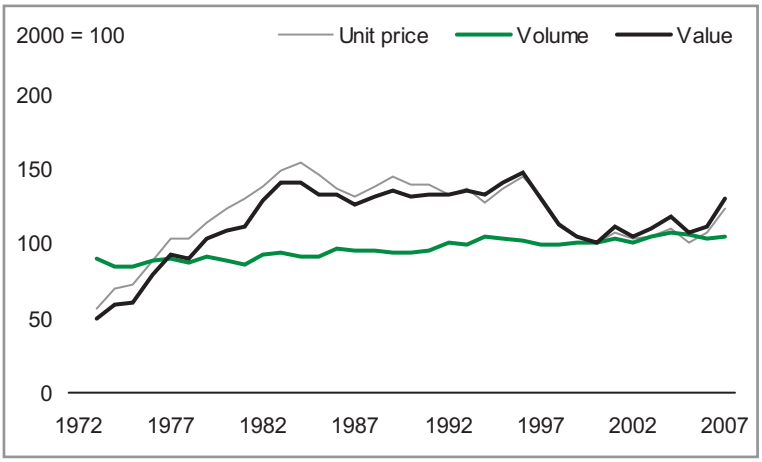
Chart 6.9 Agricultural services; United Kingdom



Animal feed (chart 6.10, table 6.1)

17 The cost of animal feed is the largest item of expenditure recorded in the production and income account. 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 which mirrored the decline in the pig herd, before levelling out from 2000 to 2006 at around £2.4 billion. Expenditure on feed rose by 17 per cent in 2007 to £2.8 billion due to an increase in the unit price. The volume of feed shows a gently increasing trend from 1973 to 2007.

Chart 6.10 Animal feed; United Kingdom



18 The total production of all purchased feed has increased by 1.6 per cent in 2007 to 21.4 million tonnes. Total compound feed production increased by 2.7 per cent in 2007 compared to 2006. Cattle feed production increased by 3.6 per cent in 2007 and follows a 8.1 per cent increase in 2006. Cattle feed production first started to increase in March 2006 as a result of forage shortage due to the weather and has continued into 2007 with increases in most months compared with the previous year. Pig and poultry compound feed production increased by 6.1 and 2.1 per cent respectively. The figures for poultry indicate some recovery of the compound feed market in 2007 following a 4.8 per cent reduction in 2006. The increase in compound feed production for pigs is consistent with the increase in home fed marketings and higher finished weights.

19 The production of compounds for sheep fell by 11 per cent but production in 2006 was particularly high due to wet weather in the spring and hot weather in the summer which reduced the availability of fodder and silage. There was also a reduction in the home fed marketings for sheep in 2007. The movement restrictions implemented due to the outbreaks of foot and mouth and blue tongue disease in 2007 may have had some impact on feed where there was some disruption to the normal marketing pattern.

20 The use of straight concentrates fell by 8.7 per cent. Within this sector there were significant reductions in the use of feed wheat, wheat feed, field beans and maize gluten feed but there was an increase in the use of soya bean meal. More wheat feed was used in compound feed production compared to 2006. The straights concentrate figure includes production of poultry feed by the integrated poultry units where there was a 3.7 per cent reduction in feed wheat used. Inter/intra farm transfer of feed increased by 21 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 1996-98	2003	2004	2005	2006	2007 (provisional)
Compounds:						
cattle	3 952	4 406	4 384	4 181	4 520	4 684
calves	234	193	200	185	191	210
pigs	2 648	1 560	1 619	1 586	1 640	1 740
poultry (a)	3 209	3 337	3 373	3 267	3 111	3 175
other	741	692	722	704	809	722
Total (b)	10 690	10 083	10 197	9 800	10 137	10 406
Straight concentrates (c)	5 956	7 426	7 526	7 663	7 129	6 510
Non-concentrates (d)	532	525	525	525	525	525
Inter/intra farm transfer	3 172	3 407	3 537	3 551	3 269	3 958
Total all purchased animal feed	20 350	21 441	21 785	21 539	21 060	21 398
Value of purchased animal feed (£ million)	2 811	2 382	2 547	2 312	2 399	2 807

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

(b) Including imports, less exports.

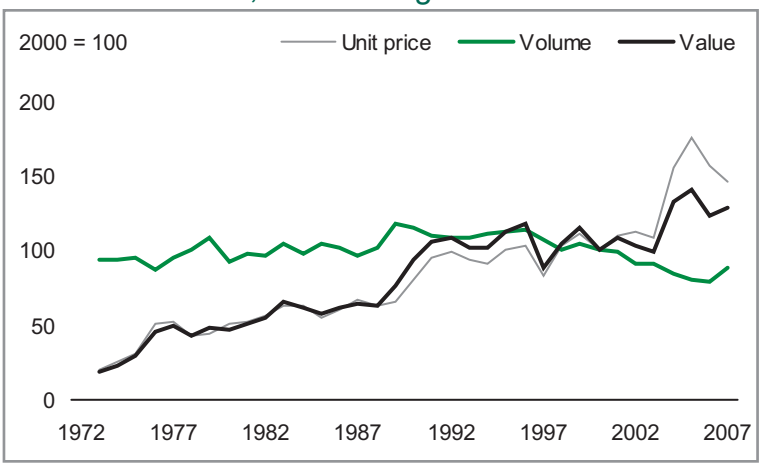
(c) These are cereals, cereal offals, proteins and other high energy feeds.

(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.

Seeds (chart 6.11)

21 Methological note: The approach used to estimate the cost of seeds and planting stock purchased has been revised. Data are now based on estimates from the Farm Business Survey and the data series have been backdated to 1989 to include the cost of young plants and not just seed costs. This has resulted in some significant changes. Expenditure has almost doubled and is currently estimated at £600 million.

Chart 6.11 Seeds; United Kingdom

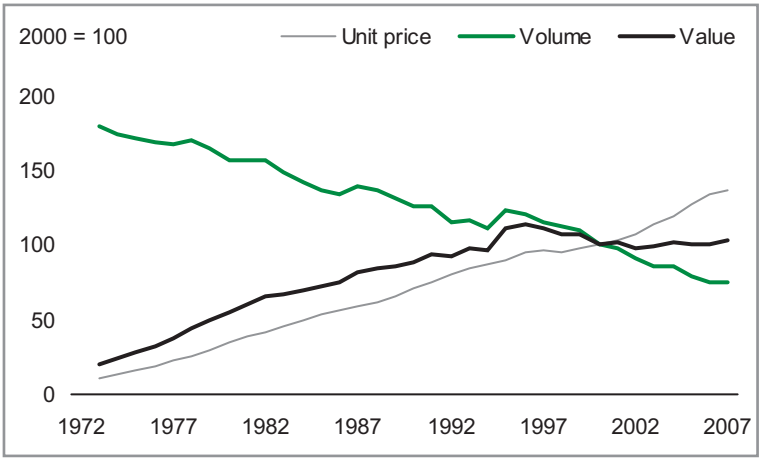


22 The volume of seeds and planting stock purchased has remained relatively stable between 1973 and the mid 1990s after which there has been a general downward trend although an increase in 2007 over 2006 has been estimated.

Maintenance: materials (chart 6.12)

23 The volume of materials purchased for maintenance use shows a long term declining trend from 1973 to 2007. The unit price on the other hand shows a long term rising trend. Expenditure followed the trend of the unit price until 2000 when it levelled out at around £650 million.

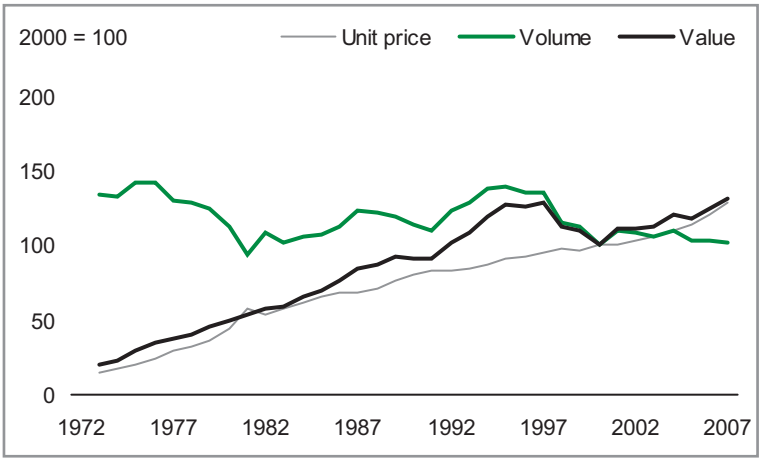
Chart 6.12 Maintenance: materials; United Kingdom



Maintenance: buildings (chart 6.13)

24 The volume of maintenance on buildings fluctuated between 1973 and 2006. It fell to a low point in 1981 before rising to a high point in the mid-1990s and then declined to about 25 per cent lower than in 1973. The unit price shows a long term rising trend. Expenditure followed a similar rising trend to a high point in 1997 then fell until 2000 before resuming an upward trend to a value of about £375 million in 2007.

Chart 6.13 Maintenance: buildings; United Kingdom



Chapter 7 The Food Chain

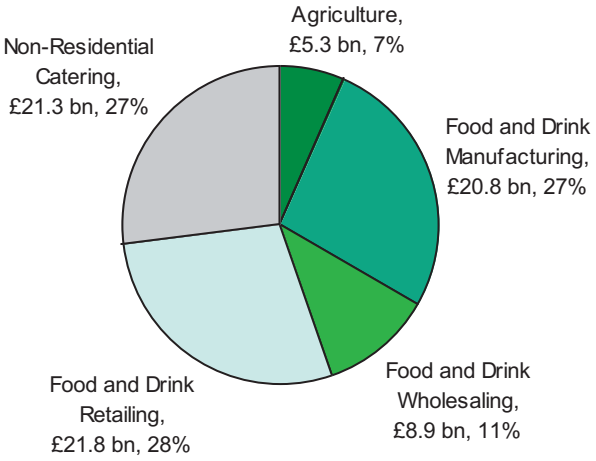
Summary

- food inflation reached 6 per cent in December 2007, the highest rate since 1991 when general inflation went into double figures;
- the price of butter and eggs rose by 30 per cent during 2007 and the price of bread and milk rose by about 15 per cent;
- in 2006 the agri-food sector accounted for 6.9 per cent of the total economy, with the food retail sector increasing its gross value added by 8.9 per cent;
- an estimated 20 per cent of the total consumers' expenditure in 2007 was on food, drink and catering, with 7.6 per cent on household food and non-alcoholic beverages;
- consumers' expenditure on food rose by 5.7 per cent to £171 billion in 2007, with expenditure on household food rising by 8.6 per cent;
- the food supply chain received £148 billion in 2007 from spending by consumers and the balance of revenue from exports less spending on imports;
- farmgate share of a basket of food staples was 36 per cent in 2007, hardly changed since 2006 even though agriculture commodity prices rose by 13 per cent;
- the agri-food sector provided a total of just over 3.6 million jobs in the third quarter of 2007, 14 per cent of all employees in Great Britain;.

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

1 The agri-food sector in the United Kingdom accounted for a total estimated gross value added of £78 billion in 2006, a 5.0 per cent increase on 2005. 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 6.8 per cent respectively. Gross value added of food wholesaling is estimated to have risen by 18 per cent in 2006, while that of food retailing rose by 8.9 per cent. The only sub-sector not to grow in 2006 was food manufacturing, where gross value added was unchanged.

Chart 7.1 Gross value added by the agri-food sector 2006; United Kingdom



Source: Annual Business Inquiry (ONS) and Defra

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 1996-98	2003	2004	2005	2006	2007 (provisional)
Agri-food sector's contribution to total economy gross value added							
at current prices	Agriculture	8 248	7 421	7 165	5 109	5 280	5 753
	Food Manufacturing (a)	. .	20 679	21 307	20 788	20 778	. .
	Food Wholesaling (a)	. .	6 633	7 880	7 548	8 908	. .
	Food Retailing (a)	. .	17 947	19 221	19 995	21 778	. .
	Food Non-Residential Catering (a)	. .	18 359	21 126	20 879	21 268	. .
% of national gross value added (current prices)		. .	7.4	7.5	6.9	6.9	. .
Workforce in the food sector (thousand persons)							
	Agriculture (b) (c)	612	478	493	490	484	477
	Food Manufacturing (c)	. .	436	421	412	404	394
	Food Wholesaling (c)	. .	216	213	211	212	213
	Food Retailing (c)	. .	1 175	1 164	1 193	1 169	1 152
	Food Non-Residential Catering (c)	. .	1 373	1 407	1 417	1 402	1 413
% of total workforce in employment		. .	14.5	14.4	14.3	13.9	13.8
Imports and exports							
Imports of food, feed and drink (d) (e)		21 546	22 883	23 283	24 174	24 835	. .
% of total UK imports		9.3	8.9	8.7	8.6	7.7	. .
Exports of food, feed and drink (d) (e)		12 091	10 797	10 295	10 258	10 505	. .
% of total UK exports		5.8	5.2	5.1	4.7	4.3	. .
Self-sufficiency							
% of all food		68.6	63.5	62.3	59.8	59.5	60.5
% of indigenous type food		82.2	76.6	75.0	72.8	72.5	73.9
Household final consumption expenditure on food and alcoholic drinks							
at current prices		111 803	144 040	150 571	156 929	162 201	171 410
of which:	household food	53 991	63 174	65 521	67 539	70 927	77 033
	food eaten out	27 008	42 010	44 721	48 410	49 968	52 422
	alcoholic drinks	30 804	38 856	40 329	40 980	41 306	41 999
at constant 2003 prices (£ million)		127 015	144 040	148 794	151 633	152 390	155 420
of which:	household food	57 204	63 174	65 181	66 231	67 969	70 709
	food eaten out	33 776	42 010	43 507	45 687	45 877	46 545
	alcoholic drinks	36 035	38 856	40 106	39 715	38 544	38 217
% of total household final consumption expenditure		22.3	20.7	20.6	20.6	20.4	20.4
of which:	household food	10.8	9.1	8.9	8.9	8.9	9.2
	food eaten out	5.4	6.0	6.1	6.4	6.3	6.3
	alcoholic drinks	6.1	5.6	5.5	5.4	5.2	5.0
Producer prices for agricultural products (2003 = 100)		108.9	100.0	103.0	99.8	103.9	117.6
Retail price index (2003 = 100):							
	food	94.1	100.0	100.6	101.8	104.0	108.8
	alcoholic drinks	87.2	100.0	101.9	103.9	106.4	109.6
	all items	87.0	100.0	103.0	105.9	109.3	113.9

(a) Results from the Annual Business Inquiry (ONS). 2005 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.

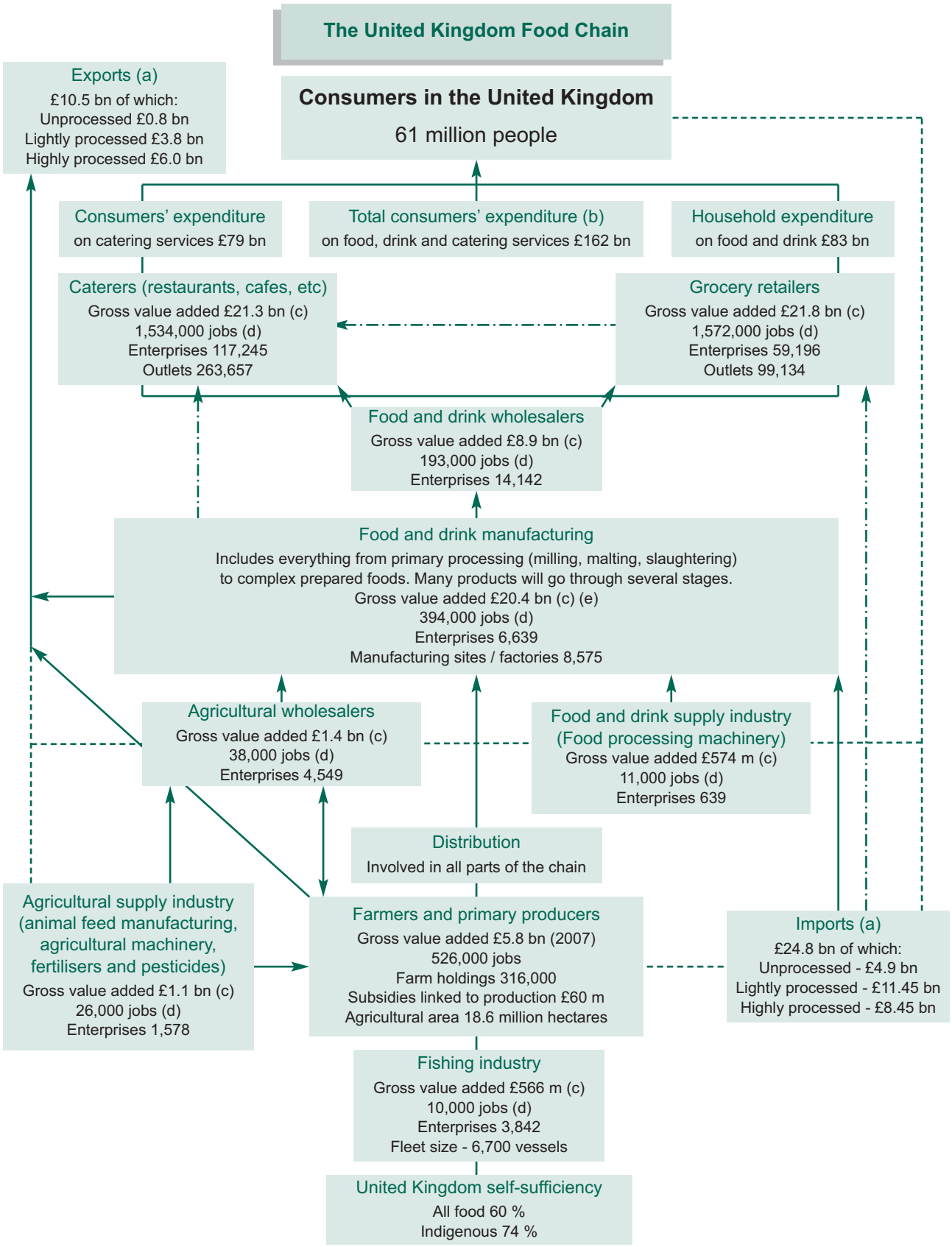
(e) The figures for 1993 onwards are Overseas Trade Statistics (OTS), based on data collected by HM Revenue and Customs. Data shown are quoted in real terms at 2006 prices.

The food chain (chart 7.2)

2 In 2007, the food supply chain in the United Kingdom as a whole received £148 billion 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.

2007

Chart 7.2 The food chain; United Kingdom

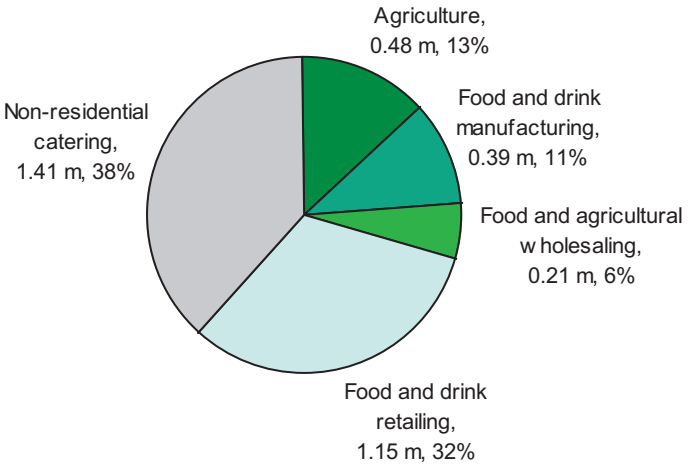


(a) Overseas Trade data are provisional for the full year 2007 from HM Revenue and Customs.
(b) Consumers' expenditure, properly known as household final consumption expenditure, is a provisional estimate by Defra for 2007 calculated at current prices.
(c) Gross value added figures are provisional data from the Office for National Statistics for 2006 calculated at basic prices (market prices less taxes plus subsidies).
(d) Employee data are for Q3 2007 from the Office for National Statistics.
(e) GVA for food manufacturing does not include farm animal feed, which is included in agricultural supply industry. This figure therefore does not match that shown in table 7.1.

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 2007, 14 per cent of all employees in Great Britain. Of these a little under 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 2006; Great Britain



Source: Labour Force Survey (ONS); June Survey (Defra)

4 Employment in the agri-food sector as a whole fell by 0.6 per cent over the year to the third quarter of 2007 while employment for the whole economy fell by 0.7 per cent over the same period. Employment in agriculture fell by around 1.5 per cent while food manufacturing saw employment fall by 2.4 per cent. The reduction of employment in food manufacturing is in line with long term trends.

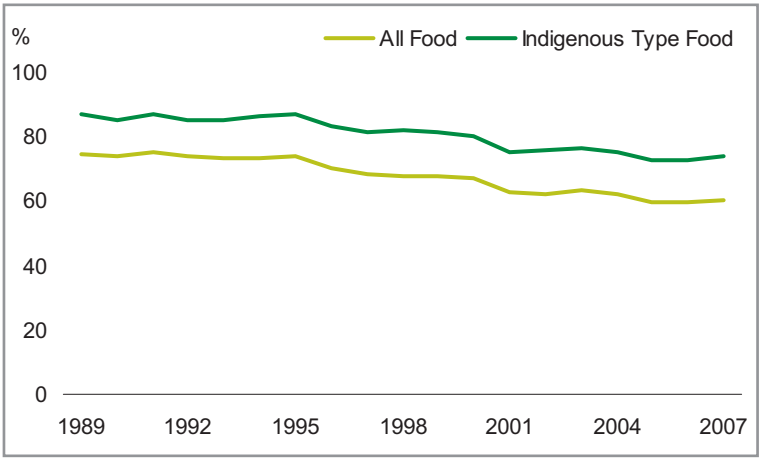
Trade in food, feed and drink (table 7.1)

5 The value of imports of food, feed and drink was almost £25 billion in 2006, an increase of 2.7 per cent from 2005. The value of exports of food, feed and drink rose by 2.4 per cent over the same period to £10.5 billion. The trade gap in food, feed and drink widened by 3.0 per cent to £14 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 estimated to be 61 per cent for all food in 2007 and 74 per cent for indigenous type food. This compares with 59 per cent and 72 per cent respectively in 2006. This slight increase on 2006 is a result of the increased value of domestically produced milk, oilseed and cereals.

Chart 7.4 Self sufficiency; United Kingdom



7 Since 1995 self-sufficiency has followed a downward trend following a peak in the 1980s. In the longer term it should be noted that over the last 50 years self-sufficiency has been significantly and consistently below 100% and the growth towards a peak in the 1980s reflected the influence of the Common Agricultural Policy (CAP) on agriculture in the United Kingdom.

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 a combination of the BSE export ban and Over Thirty Month Scheme which reduced domestic production.
- The fall in pork self-sufficiency was due to 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, Irish Republic, Denmark and Netherlands), where the impact of currency movements on relative UK competitiveness would have been a factor.

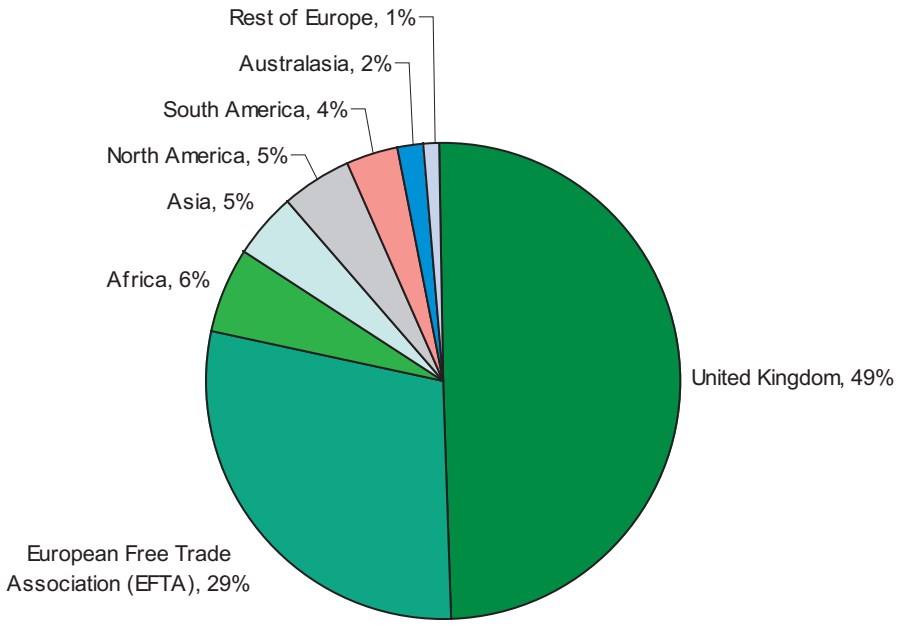
Distinction between competitiveness and food security (Chart 7.5)

9 The self-sufficiency ratio provides a very broad indicator of agriculture's ability to meet consumer demands, i.e. competitiveness. The ratio is not an appropriate measure of "food security" since it fails to account for many dimensions of this complex issue. A detailed discussion and analysis is given in the defra publication 'Food Security and the UK: An Evidence and Analysis Paper' available at http://statistics.defra.gov.uk/esg/reports/foodsecurity/default.asp. The key points on self-sufficiency and food security from this paper are:

- Diversity enhances security. The United Kingdom sources foods from diverse stable countries, mainly European countries, and imports can make up for domestic supply shortages; see Chart 7.5 Origins of food consumed in the United Kingdom.
- Self-sufficiency fails to insulate a country against many possible disruptions to its supply chain.
- Production potential is more relevant at EU level, and the EU as a whole is over 90% self-sufficient. Further trade liberalisation is unlikely to materially affect food security within the EU.

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.

Chart 7.5 Origins of food consumed in the United Kingdom

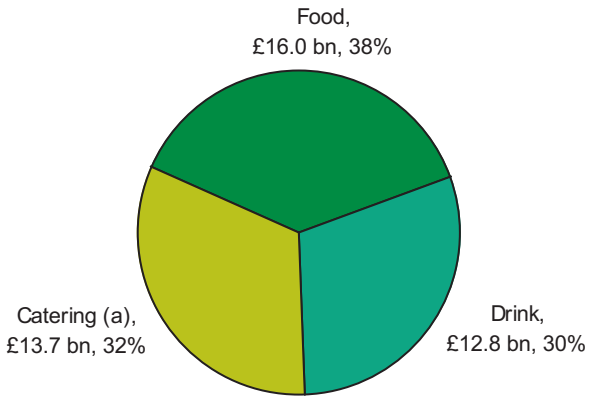


Consumers' expenditure on food, drink and catering (chart 7.6)

10 Splitting the total consumers' expenditure in the third quarter of 2007 on food and drink into expenditure on food, expenditure on catering and expenditure on drink shows that 38 per cent is spent on food, 32 per cent on catering and 30 per cent on drink (including non-alcoholic drink).

11 An estimated 20 per cent of the total consumers' expenditure in 2007 was on food, drink and catering, with 7.6 per cent on household food and non-alcoholic beverages, 6.5 per cent on food eaten out and 6.0 per cent on alcoholic drinks.

Chart 7.6 Consumers' expenditure Q3 2007; United Kingdom



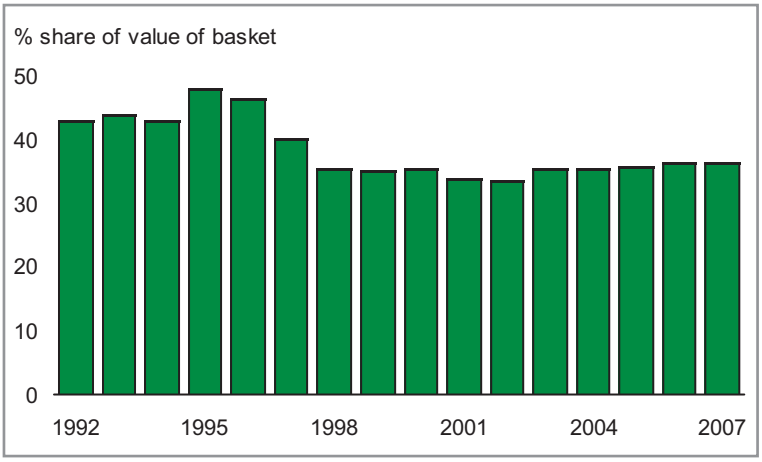
Source: Consumer Trends (ONS)

(a) Catering excludes on-trade alcohol sales

Farmers' share of consumers' expenditure (table 7.2, charts 7.7, 7.8)

12 In 2007 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.

Chart 7.7 Farmgate share of retail prices for a basket of items; United Kingdom



13 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. Most weight is given to milk and then other livestock products. The fruit and vegetables selected have a small impact on the overall value of the basket.

14 The farmers' reducing share of the basket of food items corroborates evidence that farmgate prices are not keeping up with retail food prices. This can be explained partly by retail price rises accounted for by greater processing and packaging beyond the farmgate though the items in the basket have not changed substantially over this period. Another reason for retail food prices to rise ahead of farmgate prices is additional regulation beyond the farmgate to ensure food safety, notably in meat processing.

15 Changes in exchange rates have a significant impact on farmgate prices. Farm gate prices increased up to 1995 but then reduced when sterling strengthened against the euro. CAP reform over the last 15 years, which cut commodity support prices and compensated with direct payments to farmers, has also played a role. Retail food prices were less affected by these factors as the food chain contains a large cost component that reflects overall conditions in the economy.

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

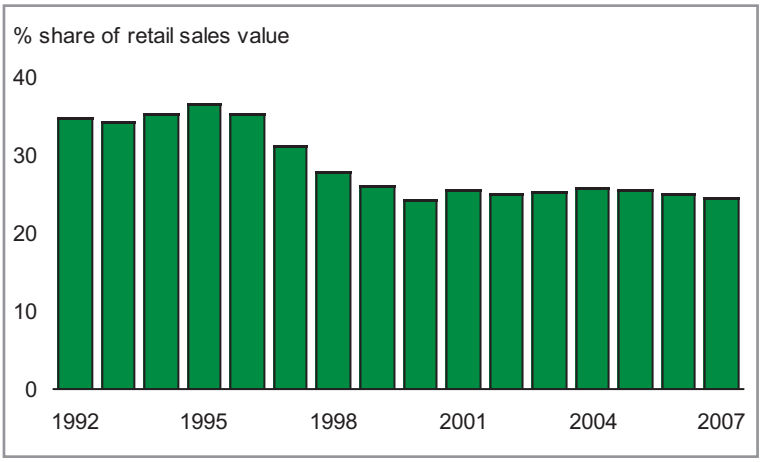
Enquiries: Jim Holding on +44 (0)1904 455069 e-mail: jim.holding@defra.gsi.gov.uk

		Farmgate share in 1988 %	Farmgate share in 2007 %	Change in share %	Weight in basket 2007
Farmers' share of basket		47	36	- 22	
Farm gate product	**Retail product**				
apples	dessert apples per kg	55	44	- 19	6
beef	untrimmed beef (b) per kg	67	45	- 32	175
carrots	carrots per kg	30	48	59	15
cabbages	cabbage, hearts, per kg	38	51	33	8
chicken	oven ready roasting chicken, fresh or chilled per kg	47	44	- 8	109
eggs	size 2 eggs per dozen	28	29	4	49
lamb	untrimmed lamb (b) per kg	65	41	- 36	68
onions	onions per kg	25	38	49	8
pork	untrimmed pork (b) per kg	57	36	- 37	86
potatoes	old loose white potatoes per kg	24	26	10	80
tomatoes	tomatoes per kg	48	51	8	10
wheat	white loaf sliced, 800g	23	10	- 37	54
milk	whole milk (c)	38	35	- 7	331

(a) Farm gate prices from Defra, retail prices from the Office for National Statistics and the Meat and Livestock Commission (MLC).
(b) Retail prices for beef, lamb and pork are untrimmed MLC 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).

16 Chart 7.8 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 37 to 24 per cent. Since 2000 farmers have seen little change in their percentage share of the retail sales value - it is now at 25 per cent.

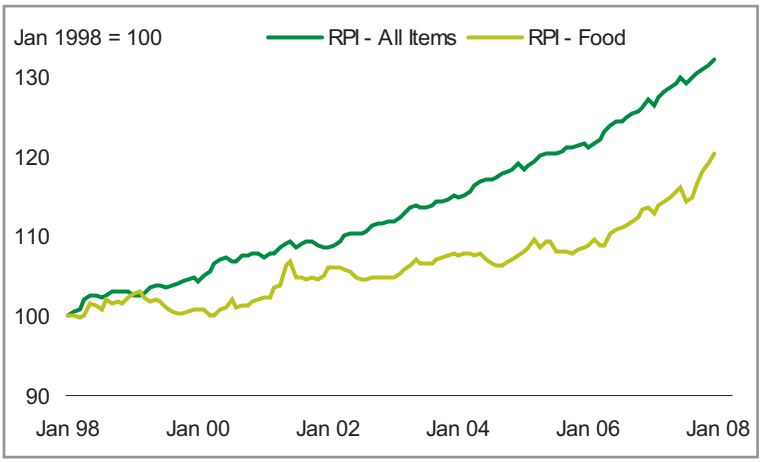
Chart 7.8 Farmgate share of total household sales; United Kingdom



Changes in retail price indices (chart 7.8)

17 Food inflation reached 6.0 per cent in December 2007, the highest rate since 1991 when general inflation went into double figures. In other words retail food prices were 6.0 per cent higher in December 2007 than in December 2006. The prices of both butter and eggs rose by 30 per cent during 2007 and the prices of both bread and milk rose by about 15 per cent. Food retail price rises were driven by the rise in the agricultural commodity price of cereals.

Chart 7.8 Changes in retail price indices; United Kingdom



Source: Retail Price Index (ONS)

18 Food prices rose faster than general inflation in 2007. General inflation as measured by the all items retail price index was 4.0 per cent in December 2007. However since 1998 food prices have risen by only 20 per cent while prices of all items have risen by 32 per cent.

Chapter 8 Overseas Trade

Summary

In 2006:

- the value of food, feed and drink exports was £10.5 billion, a rise of 5.7 per cent over 2005;
- the value of food, feed and drink imports increased by 6.0 per cent to £24.8 billion;
- the trade gap in food, feed and drink widened by 6.3 per cent to £14.3 billion;
- principal destinations for exports were the Irish Republic (19 per cent), France (13 per cent), USA (8.6 per cent), Spain (7.0 per cent) and Germany (5.9 per cent);
- the most important trade partners for imports were France (13 per cent), the Netherlands (12 per cent), Irish Republic (9.0 per cent), Germany (7.5 per cent) and Spain (6.1 per cent).

Introduction

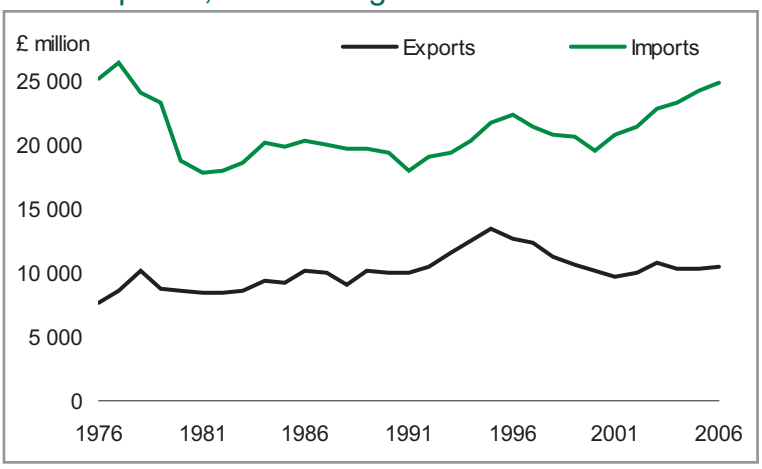
1 The Overseas Trade Statistics presented in this chapter are based on data collected by HM Revenue and Customs and are compiled from returns made by importers and exporters. Before the completion of the Single Market in the European Union at the end of 1992 all overseas trade data for the United Kingdom were 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 15 per cent lower in real terms in 2006 than in 1997. This is a consequence of the combination of the strength of sterling, disease related issues, and lower world commodity prices. The value of imports was 16 per cent higher in real terms in 2006 than in 1997. As a consequence, the trade gap in food, feed and drink has widened by 57 per cent in real terms between 1997 and 2006 to £14.3 billion.

Chart 8.1 Trade in food, feed and drink in real terms at 2006 prices; United Kingdom



4 Table 8.1 shows the value of trade at current prices. The value of food, feed and drink exports was £10.5 billions in 2006, 5.7 per cent up on 2005 when it stood at £9.9 billion, while the value of food, feed and drink imports was £24.8 billion in 2006, 6.0 per cent higher than in 2005 when it stood at £23 billion.

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

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£ million Calendar years

SITC division Code	Title	Average of 1995-97	2002	2003	2004	2005	2006
Exports							
01	Meat	1 130.5	513.8	603.9	667.0	727.6	758.9
02	Dairy	763.2	619.3	760.5	782.2	720.4	726.5
03	Fish	705.7	762.3	891.4	885.8	939.5	944.1
04	Cereals	1 435.8	1 135.5	1 344.4	1 240.7	1 240.2	1 237.1
05	Fruit and vegetables	460.3	432.2	472.6	508.0	515.0	582.8
06	Sugar	421.7	325.7	342.4	375.0	340.9	374.4
07	Coffee, tea, etc.	682.0	615.6	628.1	605.7	626.4	671.7
08	Animal feed	389.9	311.1	330.5	315.2	315.1	363.7
09	Misc.	484.3	621.1	683.3	714.4	732.6	776.4
11	Drink	3 158.0	3 329.0	3 502.5	3 373.9	3 507.5	3 748.4
22 + S4	Oils	271.5	249.7	321.8	234.1	276.5	320.9
	Total	9 902.9	8 915.2	9 881.4	9 701.9	9 941.8	10 504.7
Imports							
01	Meat	2 366.5	2 891.8	3 365.7	3 540.2	3 721.8	3 924.0
02	Dairy	1 131.5	1 324.6	1 538.4	1 652.7	1 746.8	1 862.2
03	Fish	1 177.3	1 438.8	1 439.0	1 474.2	1 696.4	1 922.1
04	Cereals	1 130.8	1 310.2	1 391.0	1 459.5	1 511.1	1 557.7
05	Fruit and vegetables	4 068.2	4 528.0	4 930.9	5 099.9	5 643.7	5 975.4
06	Sugar	847.4	792.3	858.4	897.7	958.9	969.2
07	Coffee, tea, etc.	1 268.7	1 169.3	1 194.4	1 236.1	1 382.3	1 476.5
08	Animal feed	826.5	757.4	902.7	927.7	928.4	1 015.0
09	Misc.	859.5	888.0	1 062.1	1 156.9	1 184.9	1 263.3
11	Drink	2 216.9	3 118.1	3 323.5	3 574.5	3 722.4	3 808.5
22+S4	Oils	1 011.1	872.1	937.7	922.1	932.0	1 061.1
	Total	16 904.3	19 090.6	20 943.8	21 941.5	23 428.7	24 834.9

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, oilcake 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.

Trading partners (charts 8.2, 8.3)

5 Principal destinations of food, feed and drink exports to the European Union in 2006 were the Irish Republic (£2 billion), France (£1.4 billion), Spain (£731 million) and Germany (£623 million). The principal European Union Members States from which food, feed and drink were imported into the United Kingdom in 2006 were France (£3.1 billion), the Netherlands (£3.0 billion), the Irish Republic (£2.2 billion) and Germany (£1.9 billion).

6 Principal non-EU destinations of food, feed and drink exports in 2006 were the USA (£901 million), Canada (£167 million) and South Korea (£158 million) while the main non-EU countries from which food, feed and drink were imported into the United Kingdom were the USA (£765 million), Brazil (£589 million) and Australia (£551 million).

Exports and imports (charts 8.4, 8.5)

7 Between 1997 and 2006, in real terms at 2006 prices:

- Exports of highly processed foods and drink, such as confectionery, canned meats, jams, alcoholic drinks and ice cream, fell by 12.1 per cent.
- Exports of lightly processed foods and drinks, i.e. goods that retain their raw recognisable form, such as meat, cheese and butter, powdered milk, flour and sugar, fell by 15 per cent.
- Exports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, fell by 34 per cent.

Chart 8.2 Trade in food, feed and drink by country of destination 2006; United Kingdom

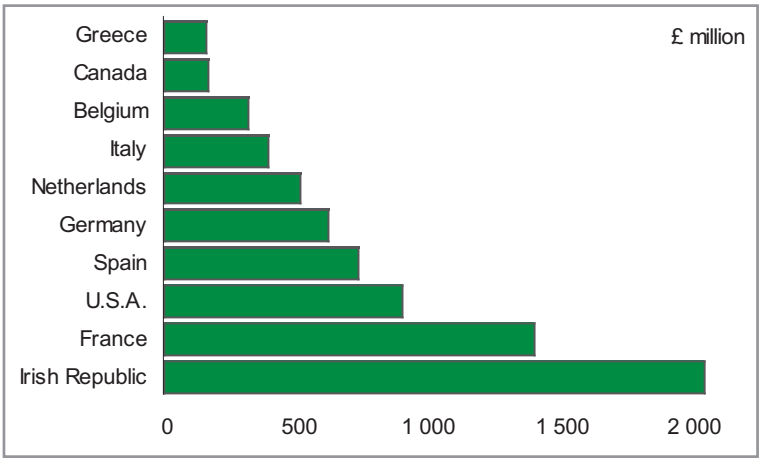


Chart 8.3 Trade in food, feed and drink by country of despatch 2006; United Kingdom

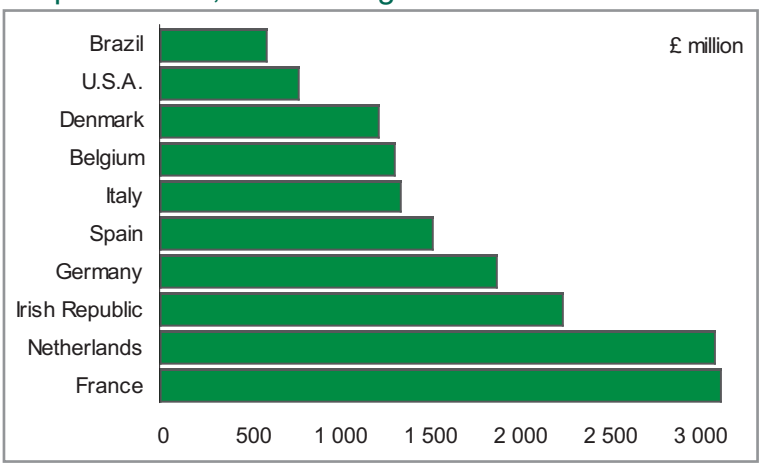
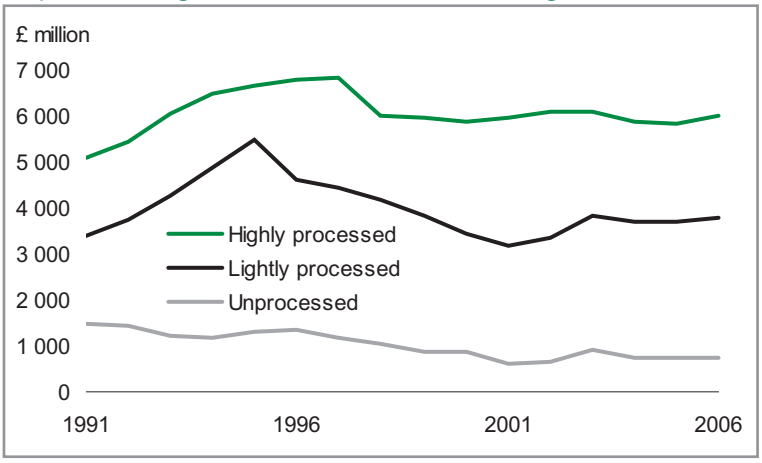


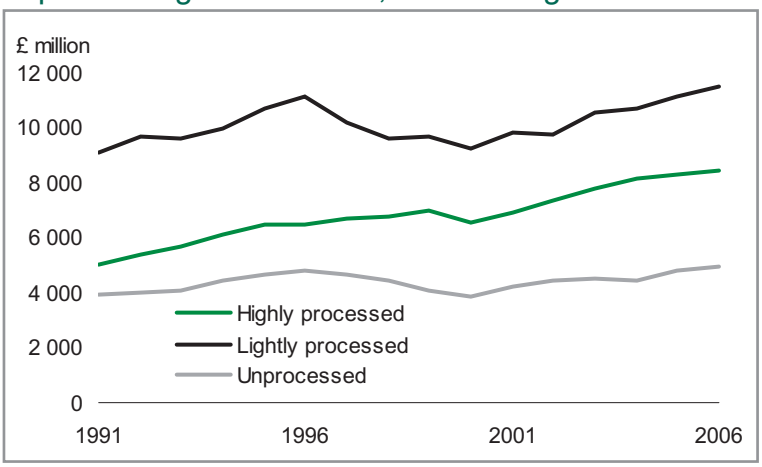
Chart 8.4 Exports of food, feed and drink by degree of processing in real terms; United Kingdom



8 Between 1997 and 2006, in real terms at 2006 prices:

- Imports of highly processed foods and drink increased by 26.3 per cent.
- Imports of lightly processed foods and drinks increased by 12.9 per cent.
- Imports of unprocessed commodities increased by 6.1 per cent.

Chart 8.5 Imports of food, feed and drink by degree of processing in real terms; United Kingdom



Trade in key commodities (table 8.2, 8.3)

9 Between 1997 and 2006, in real terms at 2006 prices:

- the value of exports of whisky fell by 17 per cent to £2.5 billion; the value of wine imports increased by 13 per cent to £2.3 billion;
- the value of exports of lamb and mutton fell by 27 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 exports more than quadrupled and the value of imports increased by 45 per cent (the pattern of beef exports reflects the export ban on beef between March 1996 and November 2005);
- the value of pork imports more than doubled while exports declined by 71 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 25 per cent while the value of exports fell by 37 per cent;
- all trade in breakfast cereal increased with the value of imports increasing by 74 per cent and exports increasing by 2.2 per cent;
- the value of cheese exports increased by 50 per cent while imports increased by 19 per cent.

Table 8.2 Trade in key commodities in real terms at 2006 prices; United Kingdom

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

£ million Calendar years

		Average of 1995-97	2002	2003	2004	2005	2006
Whisky	Imports	62.0	77.9	92.7	96.8	103.2	114.2
	Exports	3 043.7	2 603.5	2 635.9	2 442.0	2 494.3	2 526.6
Wine	Imports	1 888.8	2 278.9	2 395.2	2 489.3	2 431.0	2 335.6
	Exports	123.2	154.7	155.2	125.6	132.7	171.3
Cheese	Imports	760.9	727.5	812.8	860.2	881.1	885.9
	Exports	181.3	172.8	196.0	213.9	226.5	230.6
Poultrymeat	Imports	550.3	634.9	723.7	784.4	785.3	705.3
	Exports	240.4	160.9	186.9	205.9	215.2	160.5
Beef and veal	Imports	426.7	514.2	604.0	648.4	601.9	624.6
	Exports	332.7	20.3	21.7	21.3	26.3	92.1
Wheat, unmilled	Imports	161.3	165.7	128.9	99.1	139.4	133.0
	Exports	503.2	133.5	319.0	220.5	205.2	190.8

continued

Table 8.2 continued

£ million — Calendar years

		Average of 1995-97	2002	2003	2004	2005	2006
Lamb and mutton	Imports	318.5	256.4	275.4	300.4	301.3	282.0
	Exports	377.5	160.4	208.6	200.5	220.6	232.7
Pork	Imports	309.4	372.2	506.9	527.4	608.9	682.4
	Exports	322.3	83.5	71.0	97.9	107.6	99.6
Breakfast cereals	Imports	49.2	85.1	82.8	97.2	101.8	95.1
	Exports	273.6	286.6	301.8	295.6	307.0	307.3
Milk and cream	Imports	76.8	35.3	32.6	35.9	37.4	46.0
	Exports	182.1	123.8	183.2	148.8	178.3	178.3
Bacon and ham	Imports	750.2	639.2	680.3	581.4	544.9	550.2
	Exports	22.7	34.4	42.2	36.5	28.6	25.8
Butter	Imports	298.2	286.1	307.1	295.9	319.4	334.7
	Exports	179.4	79.7	81.9	62.9	75.6	59.9
Eggs and egg products	Imports	46.5	73.7	91.9	90.8	79.6	91.3
	Exports	30.1	35.5	31.8	34.8	28.3	24.4

Table 8.3 Trade in key commodities by volume; United Kingdom

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Thousand tonnes (unless otherwise specified) — Calendar years

		Average of 1995-97	2002	2003	2004	2005	2006
Whisky (million litres)	Imports	8.2	13.8	16.3	14.6	13.5	16.9
	Exports	271.0	267.9	277.9	273.4	284.1	302.0
Wine (million litres)	Imports	846.0	1 128.2	1 220.0	1 333.7	1 315.1	1 260.1
	Exports	32.9	28.5	24.5	21.8	21.4	32.3
Cheese	Imports	241.3	285.2	315.6	334.7	352.9	378.1
	Exports	55.3	82.3	89.8	93.3	96.3	104.2
Poultrymeat	Imports	232.6	317.1	346.6	396.4	406.4	381.7
	Exports	187.0	243.8	268.3	265.5	304.6	258.7
Beef and veal	Imports	134.2	226.1	269.4	280.6	239.9	235.7
	Exports	114.3	5.3	5.7	6.5	8.9	41.2
Wheat, unmilled	Imports	920.3	1 367.6	984.7	776.4	1 200.7	1 028.1
	Exports	3 543.8	1 624.0	3 661.5	2 528.2	2 494.8	2 116.5
Lamb and mutton	Imports	129.0	101.8	111.5	116.2	110.1	113.8
	Exports	127.7	61.1	75.8	76.7	85.2	87.1
Pork	Imports	149.6	275.9	380.5	383.5	432.0	458.8
	Exports	169.5	89.5	69.4	84.3	91.5	94.7
Breakfast cereals	Imports	24.7	55.7	61.0	66.9	78.8	86.7
	Exports	126.5	159.9	159.1	152.8	168.0	169.3
Milk and cream	Imports	156.5	63.9	52.5	70.8	79.0	123.8
	Exports	187.8	159.4	312.0	339.4	592.2	621.3
Bacon and ham	Imports	243.8	291.6	303.2	301.7	283.4	264.0
	Exports	6.6	10.7	13.9	13.2	10.6	10.2
Butter	Imports	112.3	116.0	118.4	113.7	128.6	147.1
	Exports	59.6	38.8	44.4	34.8	45.1	35.7
Eggs and egg products	Imports	27.5	69.0	70.4	67.1	78.7	78.4
	Exports	14.7	18.8	17.6	15.1	13.7	13.1

Notes to Table 8.2 and Table 8.3

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

Trade with EU 26 countries (charts 8.6 to 8.17)

10 This section describes the trade in several key commodities between the United Kingdom and the other 26 Member States of the European Union (the EU 26 countries).

Bacon and ham

11 Imports of bacon and ham from the EU 26 countries have been far in excess of exports for many years. Total imports have fluctuated but have fallen in recent years to 264 thousand tonnes in 2006. In 2006, the Netherlands and Denmark accounted for 79 per cent of all imported bacon and ham.

Chart 8.6 Trade with EU 26 countries:bacon and ham

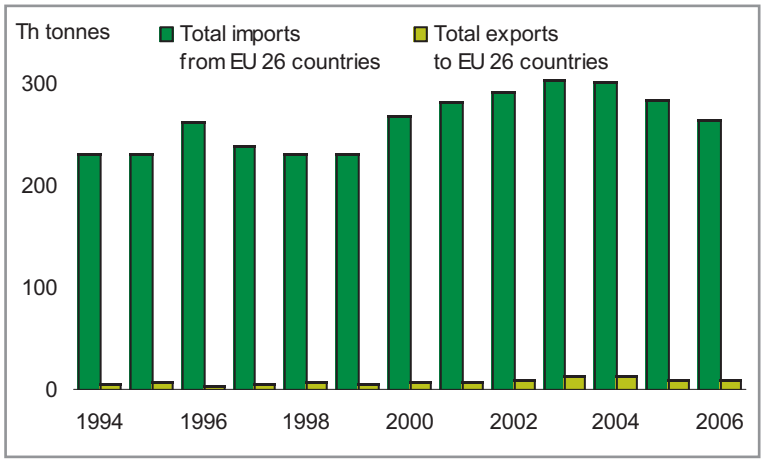
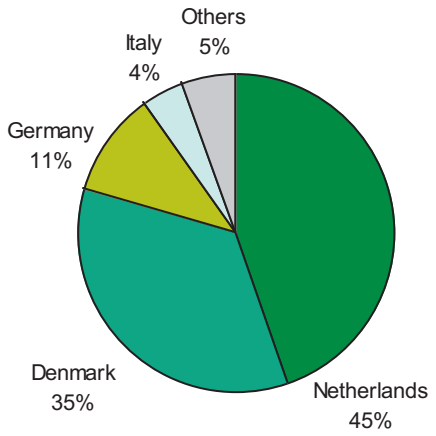


Chart 8.7 Trade with EU 26 countries: imports of bacon and ham 2006



Pork

12 Exports of pork to the EU 26 countries grew strongly in 1997 and 1998. Since 1998 exports have declined rapidly. The dip in 2001 is the result of a ban on exports during the outbreak of foot and mouth disease that year. Imports have outperformed exports except in the two strong years for exports in 1997 and 1998. Imports rose to 453 thousand tonnes in 2006 while exports increased slightly to 85 thousand tonnes. Denmark and the Netherlands accounted for over half of the imports of pork in 2006 with a further 20 per cent contributed by Germany, Belgium and Luxembourg.

Chart 8.8 Trade with EU 26 countries: pork

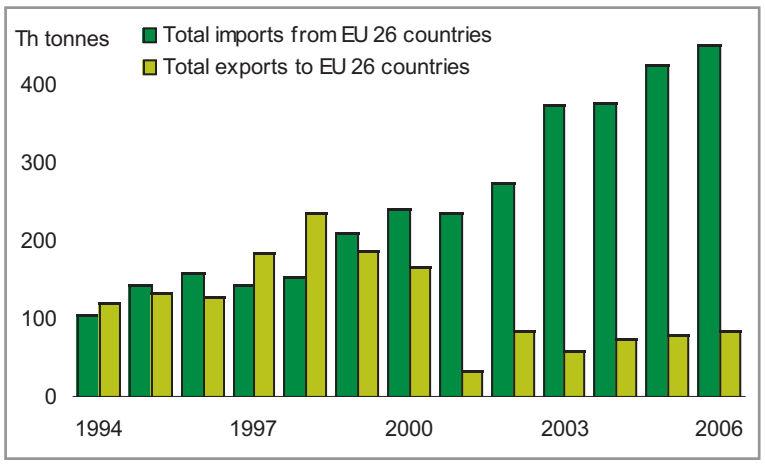
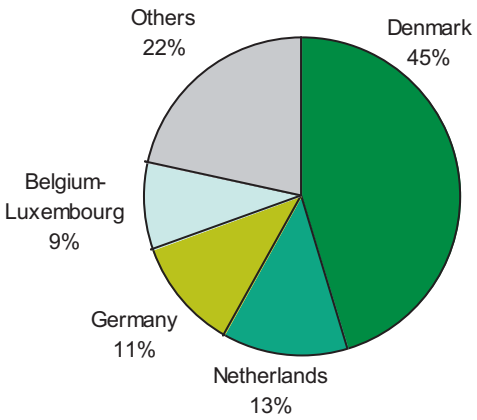


Chart 8.9 Trade with EU 26 countries: imports of pork 2006



Lamb and mutton

13 The United Kingdom has exported much more lamb and mutton to the EU 26 countries than it has imported from these countries for many years. Exports peaked in 1995 but have since declined. The ban on exports during the outbreak of foot and mouth disease shows in the dip in 2001 followed by a recovery to 86.3 thousand tonnes for 2006. 71 per cent of all lamb and mutton exported to the EU 26 countries in 2006 went to France with a further 20 per cent going to Belgium, Luxembourg, Germany and Italy.

Chart 8.10 Trade with EU 26 countries: lamb and mutton

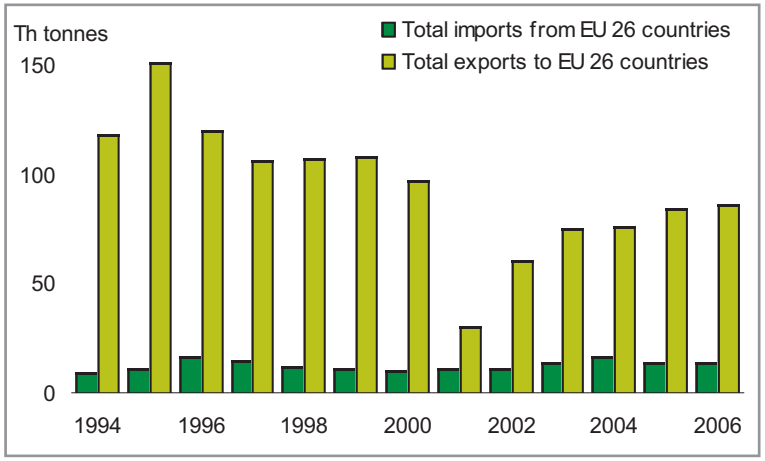
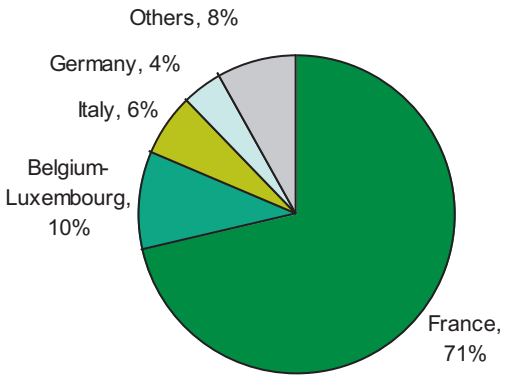


Chart 8.11 Trade with EU 26 countries: exports of lamb and mutton 2006



Beef and veal

14 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 from 1997 are of beef and veal of non-UK origin which have been imported into the United Kingdom and then exported. Since the ban began, imports from the EU 26 countries have risen strongly reaching 180 thousand tonnes in 2006. The Irish Republic accounted for 80 per cent of the imports in 2006 with the Netherlands, Germany and France accounting for a further 15 per cent.

Chart 8.12 Trade with EU 26 countries: beef and veal

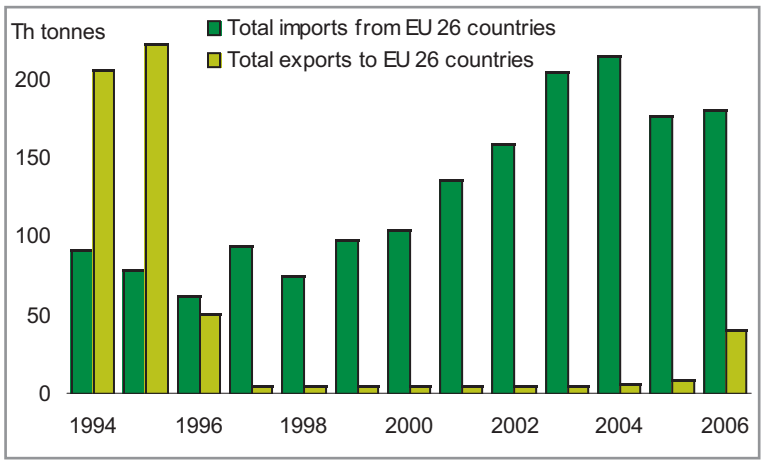
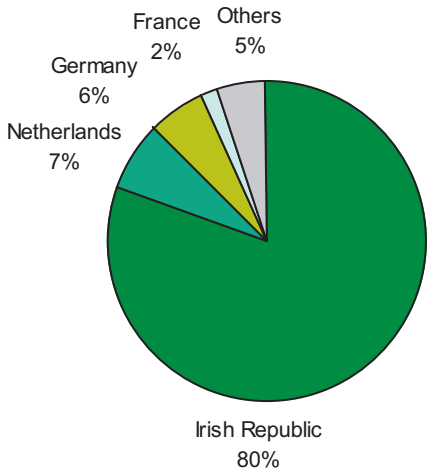


Chart 8.13 Trade with EU 26 countries: imports of beef and veal 2006



Milk and cream

15 Since 1998 imports have been in decline but increased to 124 thousand tonnes in 2006, more than double the 2003 total. Exports have risen sharply since 2002 reaching 620 thousand tonnes in 2006. In 2006, 86 per cent of milk and cream exports went to the Irish Republic with a further 14 per cent exported to Belgium, Luxembourg, and Germany.

Chart 8.14 Trade with EU 26 countries: milk and cream

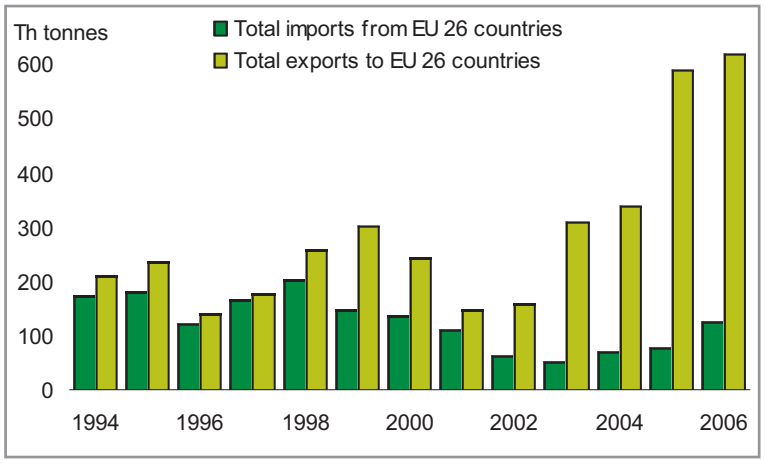
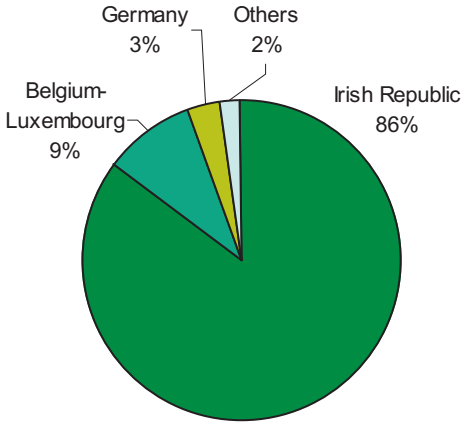


Chart 8.15 Trade with EU 26 countries: exports of milk & cream 2006



Unmilled wheat

16 Exports of unmilled wheat to the EU 26 countries have exceeded imports from these countries. The drop in exports in 2001 and 2002 was due to poor harvests resulting from bad weather. In 2006, exports stood at 2,094 thousand tonnes, of which over half went to Spain. A further 38 per cent went to Portugal, the Netherlands and the Irish Republic.

Chart 8.16 Trade with EU 26 countries: unmilled wheat

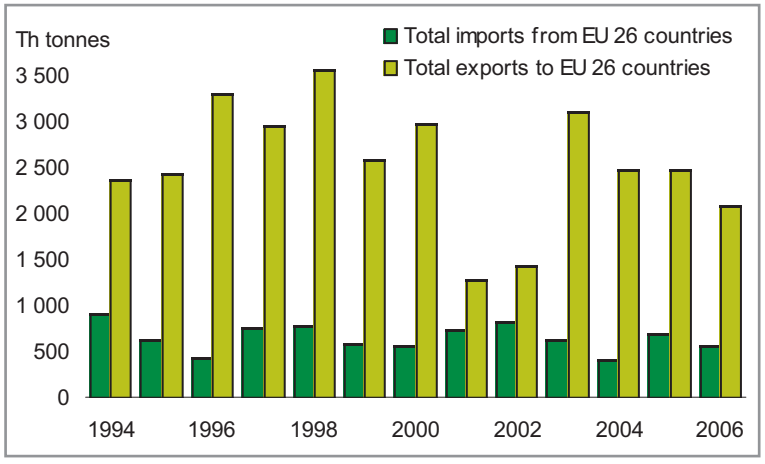
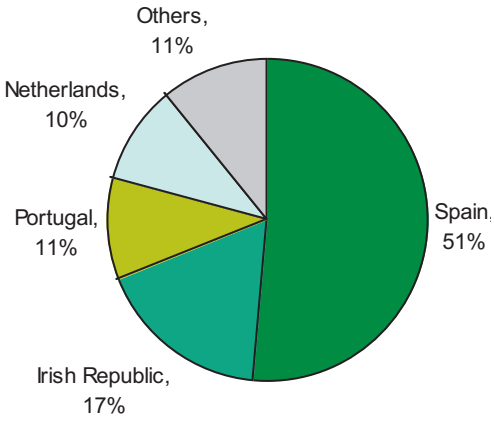


Chart 8.17 Trade with EU 26 countries: exports of unmilled wheat 2005



Chapter 9 Accounts

Summary

In 2007:

- Total Income from Farming is estimated to have risen by 10 per cent in current prices, or by 5.7 per cent in real terms, to £2.5 billion. Increases in the value of output largely due to higher cereal prices were partly offset by increased input costs;
- the value of total output at market prices rose by 8.4 per cent to £15.7 billion;
- the value of intermediate consumption rose by 7.8 per cent mainly due to significant increases in the value of animal feed which rose by 17 per cent;
- gross value added at market prices rose by 9.5 per cent;
- net value added at factor cost rose by 7.6 per cent to £5.8 billion;
- labour costs rose by 3.7 per cent and rents fell by 5.3 per cent.

At market prices, the value of output of:

- cereals was £1.9 billion, 26 per cent higher than in 2006 as a result of high prices, which increased sharply from July to peak in September following two successive smaller world harvests and increasing demand for cereals for food, feed and fuel purposes;
- oilseed rape rose by 36 per cent to £421 million with both prices and production increased due to global demand for both food and non-food uses;
- sugar beet fell by 3.6 per cent to £172 million;
- fresh vegetables rose by 5.3 per cent to £1.1 billion due to increased prices;
- plants and flowers rose by 4.0 per cent to £782 million;
- potatoes was £664 million, 6.9 per cent higher than in 2006;
- fresh fruit rose by 16 per cent to £445 million partly due to an extended season for strawberries;
- livestock production also rose, by 2.8 per cent to £5.2 billion, the value of production of cattle increased by 4.9 per cent to £1.7 billion due to a rise in prices and a greater proportion of older cattle entering the food chain;
- milk production rose by 13 per cent to £2.8 billion due to higher prices;
- egg production rose by 13 per cent to £410 million again due to higher prices.

In 2006:

- net worth rose by 16 per cent or 11 per cent in real terms, to £152 billion;
- total assets increased by 16 per cent while liabilities rose by 4.6 per cent.

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 changes 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 risen in 2007 by 10.2 per cent in current prices, or by 5.7 per cent in real terms, to £2.5 billion. In real terms, TIFF remains below the high levels of the mid nineties but is now 40 per cent above 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 plus 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.

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

5 In 2007 the total value of output at market prices increased by 8.4 per cent to £15.7 billion. The value of intermediate consumption increased by 7.8 per cent and gross value added at market prices increased by 9.5 per cent. 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.

6 The increased value of production for many outputs in 2007 was largely a result of higher prices than those seen in 2006. Input costs rose by 7.8 per cent, mainly due to the significant increase in the cost of animal feed which rose by 17 per cent following the high cereal prices. Energy costs and fertiliser costs also increased, by 6.6 per cent and 11 per cent respectively.

7 Gross value added for the industry, which represents its contribution to national GDP, increased by 9.5 per cent at market prices. Interest payments increased by 18 per cent. Compensation of employees increased by 3.7 per cent despite a falling labour force.

8 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 2007, net value added at factor cost was £5.8 billion, a 7.6 per cent rise compared to 2006.

9 Total Income from Farming is derived by deducting interest, rent and paid labour costs from net value added at factor cost. Labour costs rose by 3.7 per cent, rent cost fell by 5.3 per cent but interest payments rose by 18 per cent.

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	28	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	32	Subsidies and taxes not linked to production of a specific product, e.g. Single Payment Scheme, agri-environment payments, animal disease compensation.
Net value added at factor cost	33	Net value added at basic prices plus other subsidies (less taxes) on production
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 2007 (£ billion); United Kingdom

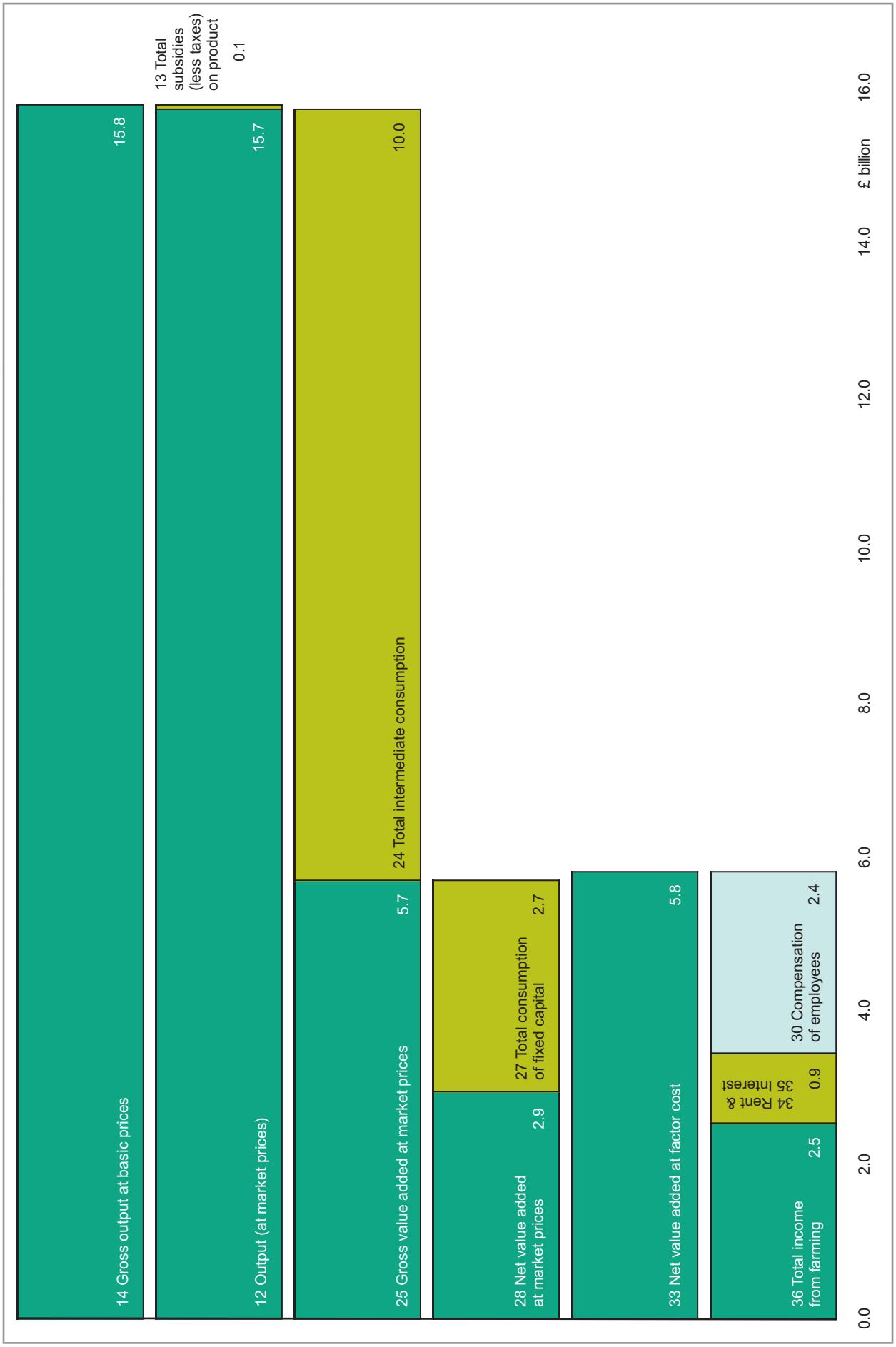


Chart 9.2 Changes in value of output and inputs between 2006 and 2007 (£ million)

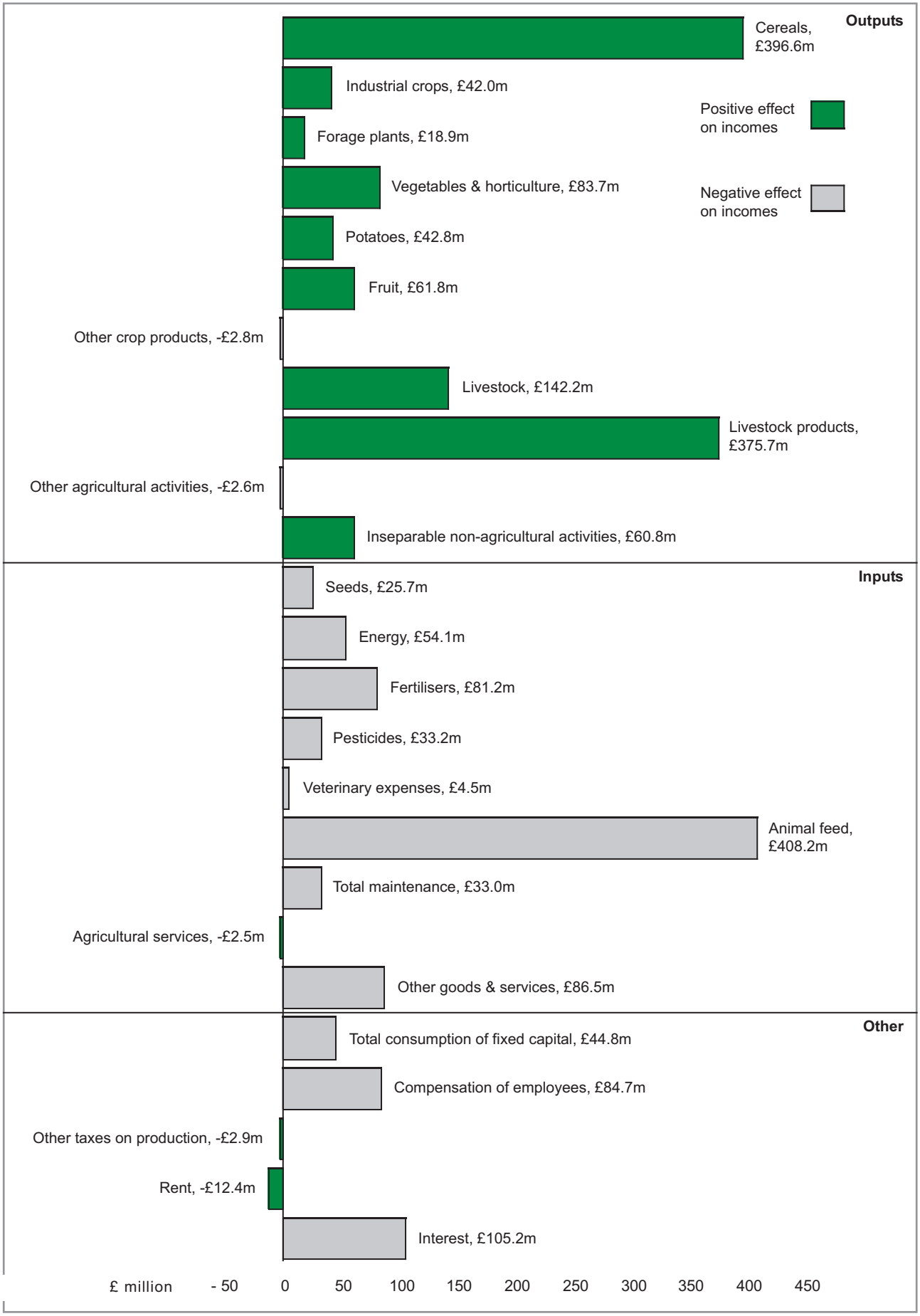


Table 9.1 Production and income account at current prices; United Kingdom

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

£ million — Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Output at market prices (a)						
1 Output of cereals	2 182	1 486	1 707	1 450	1 513	1 910
wheat	1 451	994	1 231	1 030	1 072	1 307
rye	3	1	2	1	1	1
barley	678	446	432	383	386	538
oats and summer cereal mixtures	49	44	42	35	54	62
other cereals	1	1	1	1	1	1
2 Output of industrial crops	849	813	799	808	737	779
oil seeds	275	314	266	279	318	426
oilseed rape	258	304	257	262	310	422
other oil seeds	17	10	9	17	8	4
sugar beet	329	280	278	269	178	172
other industrial crops	245	219	254	260	241	181
fibre plants	3	2	1	1	1	1
hops	17	6	6	5	4	4
other industrial crops (b)	225	211	247	254	235	176
3 Output of forage plants	87	104	93	95	85	104
4 Output of vegetables and horticultural products	1 665	1 673	1 621	1 690	1 760	1 844
fresh vegetables	999	901	835	912	1 009	1 062
plants and flowers	666	772	787	778	751	781
5 Output of potatoes (including seeds)	552	526	674	515	621	664
6 Output of fruit	250	310	316	388	383	445
7 Output of other crop products including seeds	40	32	31	52	48	45
Total crop output (sum 1 - 7)	5 625	4 943	5 242	4 998	5 147	5 791
8 Output of livestock	5 333	4 826	4 837	4 892	5 100	5 242
primarily for meat	4 699	4 094	4 180	4 232	4 339	4 419
cattle	1 149	1 227	1 279	1 400	1 579	1 657
pigs	1 149	671	680	677	685	735
sheep	781	698	726	682	682	628
poultry	1 473	1 337	1 329	1 302	1 218	1 215
other animals	147	161	166	171	176	183
gross fixed capital formation	634	731	657	659	760	823
cattle	321	448	337	411	491	520
pigs	13	7	8	6	8	7
sheep	167	146	176	111	130	153
poultry	132	130	136	131	131	143
9 Output of livestock products	3 523	3 032	3 040	3 010	2 918	3 293
milk	3 151	2 628	2 611	2 593	2 498	2 830
eggs	316	338	381	349	361	410
raw wool	33	21	20	20	12	13
other animal products	23	45	29	48	48	40
Total livestock output (8 + 9)	8 856	7 858	7 877	7 901	8 017	8 535
10 Other agricultural activities	734	632	718	642	627	625
agricultural services	584	592	636	633	626	624
leasing out quota	150	40	82	10	1	1
11 Inseparable non-agricultural activities	385	592	637	674	710	771
12 Output (at market prices) (sum 1 to 11)	15 600	14 025	14 474	14 215	14 502	15 722
of which:						
transactions within the agricultural industry						
feed wheat	74	70	103	87	76	94
feed barley	187	149	148	138	147	194
feed oats	13	12	14	12	15	17
seed potatoes	19	4	9	13	16	8
straw	198	177	209	211	191	137
contract work	584	592	636	633	626	624
leasing of quota	150	40	82	10	1	1
total capital formation in livestock	634	731	657	659	760	823
13 Total subsidies (less taxes) on product (c)	2 428	1 976	2 168	208	82	60
14 Gross output at basic prices (12 + 13)	18 028	16 002	16 642	14 423	14 584	15 782

continued

Table 9.1 continued

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Intermediate consumption						
15 Seeds	486	467	620	662	580	605
16 Energy	625	600	669	781	820	874
electricity	237	205	210	235	253	276
fuels	388	395	459	546	568	598
17 Fertilisers	961	696	775	774	770	851
18 Pesticides	658	501	576	547	514	547
19 Veterinary expenses	298	253	279	280	283	287
20 Animal feed (d)	2 811	2 382	2 547	2 312	2 399	2 807
compounds	1 752	1 348	1 450	1 318	1 402	1 635
straights	785	804	833	757	760	868
feed purchased from other farms	275	230	265	237	238	304
21 Total maintenance (e)	1 074	967	1 012	994	1 016	1 049
materials	722	642	663	654	654	671
buildings	353	325	349	340	362	378
22 Agricultural services	584	592	636	633	626	624
23 Other goods and services (e)(f)	2 281	2 123	2 362	2 332	2 298	2 384
24 Total intermediate consumption (sum 15 to 23)	9 780	8 581	9 477	9 315	9 305	10 028
25 Gross value added at market prices (12 - 24)	5 820	5 445	4 997	4 900	5 198	5 693
26 Gross value added at basic prices (14 - 24)	8 248	7 421	7 165	5 109	5 280	5 753
27 Total consumption of Fixed Capital	2 631	2 648	2 533	2 659	2 705	2 750
equipment	1 316	1 206	1 192	1 205	1 193	1 199
buildings (e)(g)	677	692	673	674	683	694
livestock	638	750	667	781	829	856
cattle	340	441	364	490	529	553
pigs	13	8	9	7	7	7
sheep	155	173	167	151	162	157
poultry	131	128	128	133	131	139
28 Net value added at market prices (25 - 27)	3 189	2 797	2 464	2 241	2 493	2 943
29 Net value added at basic prices (26 - 27)	5 617	4 773	4 632	2 450	2 574	3 003
30 Compensation of employees (h)	1 928	1 915	2 004	2 201	2 271	2 356
31 Other taxes on production	- 85	- 83	- 96	- 102	- 98	- 101
32 Other subsidies on production (c)	384	783	778	2 788	2 914	2 900
33 Net value added at factor cost (29 + 31 + 32)	5 916	5 473	5 313	5 135	5 390	5 802
34 Rent	245	268	241	215	234	222
rent paid (i)	323	364	346	302	318	317
rent received (j)	- 78	- 96	- 105	- 86	- 84	- 95
35 Interest (k)	622	450	511	548	581	686
36 Total income from farming (33 - 30 - 34 - 35)	3 121	2 839	2 558	2 171	2 303	2 538

(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 %		
	2006	2007	value	volume	price
Output at market prices (a)					
1 Output of cereals	1 513	1 910	26	- 8	37
wheat	1 072	1 307	22	- 10	36
rye	1	1	6	-	6
barley	386	538	40	- 2	43
oats and summer cereal mixtures	54	62	16	- 2	19
other cereals	1	1	10	- 20	37
2 Output of industrial crops	737	779	6	- 7	14
oil seeds	318	426	34	9	22
oilseed rape	310	422	36	11	22
other oil seeds	8	4	- 46	- 61	38
sugar beet	178	172	- 4	2	- 5
other industrial crops	241	181	- 25	- 36	18
fibre plants	1	1	3	-	3
hops	4	4	-	-	-
other industrial crops (b)	235	176	- 25	- 37	19
3 Output of forage plants	85	104	22	- 30	75
4 Output of vegetables and horticultural products	1 760	1 844	5	- 1	6
fresh vegetables	1 009	1 062	5	- 5	11
plants and flowers	751	781	4	4	-
5 Output of potatoes (including seeds)	621	664	7	- 4	12
6 Output of fruit	383	445	16	13	3
7 Output of other crop products including seeds	48	45	- 6	- 7	1
Total crop output (sum 1 - 7)	5 147	5 791	12	- 4	17
8 Output of livestock	5 100	5 242	3	1	2
primarily for meat	4 339	4 419	2	1	1
cattle	1 579	1 657	5	3	2
pigs	685	735	7	5	2
sheep	682	628	- 8	1	- 9
poultry	1 218	1 215	-	- 6	6
other animals	176	183	4	-	4
gross fixed capital formation	760	823	8	2	6
cattle	491	520	6	- 3	9
pigs	8	7	- 9	- 5	- 5
sheep	130	153	18	21	- 3
poultry	131	143	9	4	5
9 Output of livestock products	2 918	3 293	13	- 2	15
milk	2 498	2 830	13	- 2	16
eggs	361	410	13	- 3	17
raw wool	12	13	17	- 8	28
other animal products	48	40	- 15	2	- 17
Total livestock output (8 + 9)	8 017	8 535	6	-	7
10 Other agricultural activities	627	625	-	- 2	2
agricultural services	626	624	-	- 2	2
leasing out quota	1	1	- 13	- 16	4
11 Inseparable non-agricultural activities	710	771	9	3	5
12 Output (at market prices) (sum 1 to 11)	14 502	15 722	8	- 2	10
of which:					
transactions within the agricultural industry					
feed wheat	76	94	24	- 11	39
feed barley	147	194	32	- 3	36
feed oats	15	17	14	- 1	15
seed potatoes	16	8	- 51	- 65	40
straw	191	137	- 29	- 41	21
contract work	626	624	-	- 2	2
leasing of quota	1	1	- 13	- 16	4
total capital formation in livestock	760	823	8	2	6
13 Total subsidies (less taxes) on product (c)	82	60	- 26	- 5	. .
14 Gross output at basic prices (12 + 13)	14 584	15 782	8	- 2	10

continued

Table 9.2 continued

	Current price value		Changes %		
	2006	2007	value	volume	price
Intermediate consumption					
15 Seeds	580	605	4	11	- 6
16 Energy	820	874	7	5	. .
electricity	253	276	9	6	3
fuels	568	598	5	4	1
17 Fertilisers	770	851	11	- 2	13
18 Pesticides	514	547	6	5	1
19 Veterinary expenses	283	287	2	1	1
20 Animal feed (d)	2 399	2 807	17	- 1	19
compounds	1 402	1 635	17	3	14
straights	760	868	14	- 8	24
feed purchased from other farms	238	304	28	- 6	35
21 Total maintenance (e)	1 016	1 049	3	-	4
materials	654	671	3	1	2
buildings	362	378	4	- 2	7
22 Agricultural services	626	624	-	- 2	2
23 Other goods and services (e)(f)	2 298	2 384	4	-	4
24 Total intermediate consumption (sum 15 to 23)	9 305	10 028	8	1	7
25 Gross value added at market prices (12 - 24)	5 198	5 693	10	- 6	16
26 Gross value added at basic prices (14 - 24)	5 280	5 753	9	- 6	15
27 Total consumption of Fixed Capital	2 705	2 750	2	- 1	3
equipment	1 193	1 199	1	- 1	1
buildings (e)(g)	683	694	2	- 1	3
livestock	829	856	3	- 2	6
cattle	529	553	5	- 3	8
pigs	7	7	3	3	- 1
sheep	162	157	- 3	- 2	- 1
poultry	131	139	6	-	5
28 Net value added at market prices (25 - 27)	2 493	2 943	18	- 10	31
29 Net value added at basic prices (26 - 27)	2 574	3 003	17	- 9	29
30 Compensation of employees (h)	2 271	2 356	4	-	4
31 Other taxes on production	- 98	- 101	3	. .	. .
32 Other subsidies on production (c)	2 914	2 900	-	. .	. .
33 Net value added at factor cost (29 + 31 + 32)	5 390	5 802	8	- 14	25
34 Rent	234	222	- 5	. .	. .
rent paid (i)	318	317	-	. .	. .
rent received (j)	- 84	- 95	13	. .	. .
35 Interest (k)	581	686	18	. .	. .
36 Total income from farming (33 - 30 - 34 - 35)	2 303	2 538	10	. .	. .

(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)

10 The value of net worth rose by 11 per cent in real terms to £152 billion. The total value of assets rose by 11 per cent in real terms to £164 billion. The total value of liabilities increased by 0.1 per cent in real terms to £11.4 billion.

11 At current prices, net of depreciation and excluding the value of quota, the value of fixed assets rose by 16 per cent to £154 billion. Within this, the value of land and buildings, which forms the greater part of the total, rose by 17 per cent to £143 billion, led by the continued rise in land prices. The value of current assets rose by 5.6 per cent to £9.7 billion. Long and medium-term liabilities rose by 10 per cent to £5.7 billion while short-term liabilities fell very slightly by 0.5 per cent to £5.7 billion.

Table 9.3 Aggregate balance sheets for agriculture; United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455084 sarah.harriss@defra.gsi.gov.uk

£ million — As at December each year

	Average of 1996-98	2002	2003	2004	2005	2006 (provisional)
At current prices						
Assets						
Fixed: (a)						
Land and buildings	82 849	96 903	102 157	111 532	121 595	142 693
Plant, machinery and vehicles	8 336	7 110	6 950	7 007	7 108	7 202
Breeding livestock	4 733	3 783	3 799	4 072	3 978	4 222
Total fixed	95 917	107 796	112 906	122 611	132 681	154 117
Current:						
Trading livestock	2 688	2 605	2 853	2 605	2 320	2 537
Crops and stores	2 699	2 031	2 412	2 115	2 042	2 362
Debtors, cash deposits	3 885	4 259	4 891	4 662	4 847	4 828
Total current	9 272	8 895	10 157	9 382	9 208	9 727
Total assets	105 189	116 691	123 063	131 993	141 889	163 844
Liabilities						
Long and medium-term:						
AMC and SASC (b)	1 275	1 334	1 313	1 317	1 363	1 482
Building societies and institutions	322	389	460	473	473	519
Bank loans	2 007	2 284	2 435	2 373	2 358	2 467
Family loans	360	450	529	531	554	574
Other	186	271	263	260	383	619
Total long and medium-term	4 150	4 728	5 000	4 954	5 131	5 660
Short-term:						
Leasing	186	113	130	139	121	93
Hire purchase	652	593	724	695	627	695
Trade credit	1 257	1 238	1 423	1 323	1 377	1 522
Bank overdrafts	2 598	2 991	2 949	2 868	3 531	3 337
Other	160	128	120	134	126	104
Total short-term	4 854	5 063	5 347	5 159	5 782	5 751
Total liabilities	9 004	9 790	10 347	10 113	10 913	11 411
Net worth	96 185	106 901	112 717	121 880	130 977	152 433
In real terms (as deflated by the retail price index):						
Indices 2000 = 100						
Total assets	99	99	101	105	110	122
Total liabilities	99	97	100	94	99	99
Net worth	99	99	101	106	111	124

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

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

Capital account (table 9.4)

12 The capital account in table 9.4 shows estimates of changes in the assets held by the agricultural sector in the United Kingdom. The provisional estimate of gross fixed capital formation in buildings, works, plant, machinery and vehicles in 2007 is £2.0 billion, a rise of 6.5 per cent compared to 2006. Consumption of fixed non-livestock assets also rose slightly, by 0.9 per cent to £1.9 billion.

13 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 2007, the value of capital formation in livestock rose by 8.3 per cent to £823 million. 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 3.3 per cent to £856 million, led by an increase of 5.5 per cent in capital consumption in poultry.

14 Changes in inventories contribute to income. Stocks of crops fell by £80 million in 2007 with large falls for wheat and barley following decreased production and increased prices. The value of work-in-progress livestock fell by £2.7 million as increased prices were generally offset by decreased numbers.

Table 9.4 Accumulation accounts; United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455084 sarah.harriss@defra.gsi.gov.uk

£ million — Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Capital account						
Gross fixed capital formation	2 363	2 377	2 488	2 444	2 669	2 857
Acquisitions less disposals of non-livestock assets:	1 729	1 646	1 831	1 785	1 909	2 033
buildings and works	547	508	591	696	747	736
plant and machinery	969	914	999	876	963	1 077
vehicles	213	224	242	213	199	220
Capital formation in livestock (a):	634	731	657	659	760	823
cattle	321	448	337	411	491	520
sheep	167	146	176	111	130	153
pigs	13	7	8	6	8	7
poultry	132	130	136	131	131	143
Consumption of fixed capital	2 631	2 648	2 533	2 659	2 705	2 750
Non-livestock assets:	1 993	1 897	1 866	1 878	1 876	1 894
buildings and works	677	692	673	674	683	694
plant and machinery	1 101	1 002	984	995	984	993
vehicles	215	204	209	210	208	206
Livestock (b):	638	750	667	781	829	856
cattle	340	441	364	490	529	553
sheep	155	173	167	151	162	157
pigs	13	8	9	7	7	7
poultry	131	128	128	133	131	139
Changes in inventories	35	- 132	97	- 30	- 158	- 241
stocks of crops	57	- 167	101	- 23	- 88	- 168
work-in-progress livestock	- 22	35	- 5	- 8	- 70	- 73
Total Income from Farming	3 121	2 839	2 558	2 171	2 303	2 538
Other capital grants and payments not included in the production and income account	76	62	64	85	81	84

(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)

15 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 rose by £523 million in 2007. The value of work-in progress of non-breeding livestock production fell with the exception of poultry while replacement animals for breeding herds rose due to cattle. The value of work-in-progress of crop production increased in 2007 by £582 million. Revaluation is not included in the production and income account and therefore does not contribute to income.

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

	2003	2004	2005	2006	2007 (provisional)
Livestock production work-in-progress (non-breeders)					
cattle	113	- 177	- 215	144	- 22
sheep	16	- 25	- 33	- 9	- 19
pigs	41	- 85	48	75	- 93
poultry (a)	18	- 13	6	- 8	17
Total	188	- 301	- 194	201	- 118
Replacement animals for breeding herds					
cattle	- 93	13	- 77	368	69
sheep	8	- 13	- 14	- 4	- 8
pigs	1	- 1	1	1	- 2
Total	- 84	- 1	- 90	365	59
Crop production work-in-progress					
wheat	148	- 24	- 87	81	385
barley	35	- 14	- 9	15	70
potatoes	233	- 155	35	111	57
other crops (b)	4	- 31	4	31	70
Total	420	- 223	- 57	239	582
Total holding gains	525	- 525	- 341	805	523

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

Interest (table 9.6)

16 Revised figures for 2006 show that interest charges payable on farmers' borrowings for agricultural purposes, including land purchases, net of interest on short-term deposits, rose by 6.1 per cent in 2006 to £581 million. In 2007, interest charges are estimated to have risen by 18 per cent to £686 million due to both an increase in the level of farmers' borrowings, and to a rise in interest rates.

Table 9.6 Interest; United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455084 email: sarah.harriss@defra.gsi.gov.uk

£ million (unless otherwise specified) — Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Interest rates						
average bank base lending rate in the UK	6.6%	3.7%	4.4%	4.6%	4.5%	5.5%
average rate of interest on bank advances to agriculture	9.1%	5.7%	6.5%	6.7%	6.6%	7.6%
Interest charges (all lending to the farm business) on:						
bank advances	422	305	342	377	393	. .
AMC and SASC loans (a)	112	84	96	96	105	. .
instalment credit	70	44	53	51	51	. .
leased assets	17	5	7	5	6	. .
other credit (b)	44	34	42	47	53	. .
less interest earned on money held on short-term deposit	42	22	30	29	27	. .
Total	622	450	511	548	581	686

(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)

17 The volume of gross fixed capital formation rose by 3.8 per cent with both livestock and non-livestock assets showing increases in volumes of 2.0 per cent and 4.6 per cent respectively. The volume of consumption of fixed capital has continued to fall since 1996 and a 1.4 per cent fall in 2007 continued the trend. Consumption of fixed capital in livestock fell by 2.3 per cent in 2007 while consumption of fixed capital in non-livestock assets fell by 0.9 per cent.

Table 9.7 Changes in volume of capital assets; United Kingdom

Enquiries: Sarah Harriss on +44 (0)1904 455084 email: sarah.harriss@defra.gsi.gov.uk

Indices 2000 = 100 Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Total volume of gross fixed capital formation						
Gross fixed capital formation:	137.4	123.0	133.7	127.4	132.4	137.5
non livestock:	146.7	131.9	147.5	140.8	147.9	154.8
buildings and works	160.9	131.3	154.2	179.3	188.1	180.9
plant and machinery	145.4	131.2	144.6	123.3	133.4	146.6
vehicles	122.3	135.7	143.5	124.8	115.6	128.4
livestock	118.5	105.4	107.0	101.5	102.3	104.3
Total volume of capital consumption						
Consumption of fixed capital	104.1	93.3	92.4	93.4	90.7	89.5
non livestock:	106.2	96.7	95.4	93.2	92.5	91.6
buildings and works	106.9	100.5	98.1	94.8	96.7	95.7
plant and machinery	106.9	93.5	92.6	91.0	88.7	87.9
vehicles	100.3	101.1	101.2	100.3	98.4	97.6
livestock	95.3	83.4	83.6	92.1	85.1	83.2

Chapter 10 Productivity

Summary

In 2007, percentage changes from 2006 to 2007 :

- total factor productivity fell by 1.2 per cent;
- the volume of final output at market prices fell by 1.1 per cent;
- the volume of all inputs rose by 0.1 per cent;
- the volume of total labour in annual work units (or full-time person equivalent) fell by 2.1 per cent as the shift to part-time working continued and the head count of total labour fell;
- labour productivity as measured by net value added at market prices per annual work unit fell by 7.7 per cent.

Over the longer term:

- since 1973, productivity has grown by 52 per cent, the volume of final output at market prices has increased by 20 per cent and the volume of all inputs has fallen by 22 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 both because of 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, which are not easily susceptible to change.

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 the value of production at market prices, i.e. excluding subsidies.

Productivity (chart 10.1, table 10.1)

5 Total factor productivity decreased by 1.2 per cent in 2007 as the volume of final output (gross output at market prices less transactions in the industry) fell by 1.1 per cent and the volume of all inputs (including fixed capital, paid and entrepreneurial labour) rose by 0.1 per cent.

6 Over the longer term, since 1973, the productivity of the agriculture industry in the United Kingdom has increased by 52 per cent. The volume of final output has increased by 20 per cent while the volume of all inputs has fallen by 22 per cent. Labour productivity in 2007, as measured by net value added per annual work unit, was five times its 1973 value.

Chart 10.1 Productivity; United Kingdom

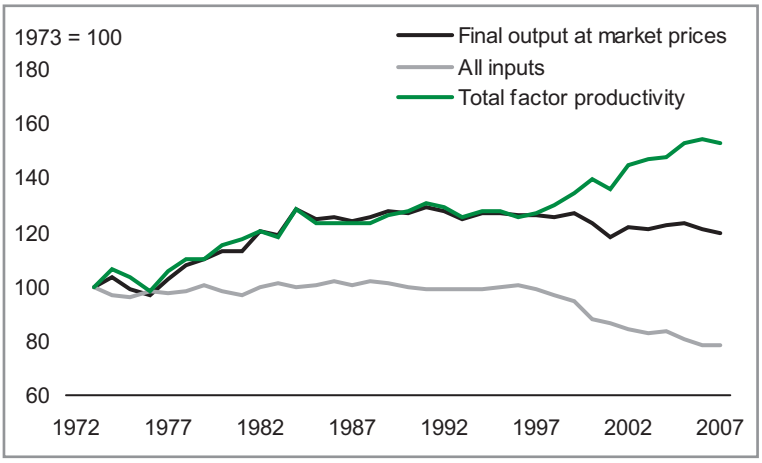


Table 10.1 Productivity; United Kingdom

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

Volume indices 2000 = 100 Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Final output at market prices (gross output less transactions within the industry)	102.4	98.5	99.8	100.3	98.4	97.3
All inputs (including fixed capital, paid and entrepreneurial labour)	112.0	93.6	94.5	91.9	88.9	89.0
Net value added at market prices per AWU of all labour (a)	66.6	130.1	130.9	155.6	170.8	157.7
Total factor productivity (b)	91.4	105.2	105.6	109.2	110.6	109.3

(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).

Productivity at the farm level (England and Wales) (table 10.2)

7 Analysis of Farm Business Survey data for England and Wales from 1982 to 2002 shows that most farm types exhibit a relatively high degree of efficiency with the majority of farms close to the efficient frontier (Defra research project http://statistics.defra.gov.uk/esg/reports/agri.asp). Frontier farms of all types are becoming more efficient through time due to technical change, which ranges from 5.8 per cent per year for cereal farms to 1.6 per cent a year for poultry farms (table 10.2). However, while the frontier of productive efficiency is being pushed out by technical change, evidence suggests that the average farm is falling behind that advancing frontier. Change in mean annual efficiency from 1982 to 2002 (shown as average per annum percentages) shows that farms of all types (except cereal and poultry farms) have on average become relatively less efficient compared to the frontier. The issue of scale of operation dominates the difference between the farms that are most efficient, and that define the frontier, and those that are least efficient. However this does not exclusively mean that large farms (in terms of area or herd size) are more efficient than small farms, but that on average larger farms are more efficient.

Table 10.2 Productivity at the farm level; England and Wales

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	Cereals	Dairy	Sheep	Beef	Poultry	Pigs	General Cropping	Mixed
Number of farms in sample	702	1 431	592	402	85	199	1 094	1 093
Technical change (average per annum)	5.8%	2.0%	2.0%	3.3%	1.6%	3.5%	4.2%	5.2%
Approximate Efficiency Change (average per annum)	0.00%	- 0.43%	- 0.76%	- 0.24%	0.00%	- 0.48%	- 0.95%	- 0.95%

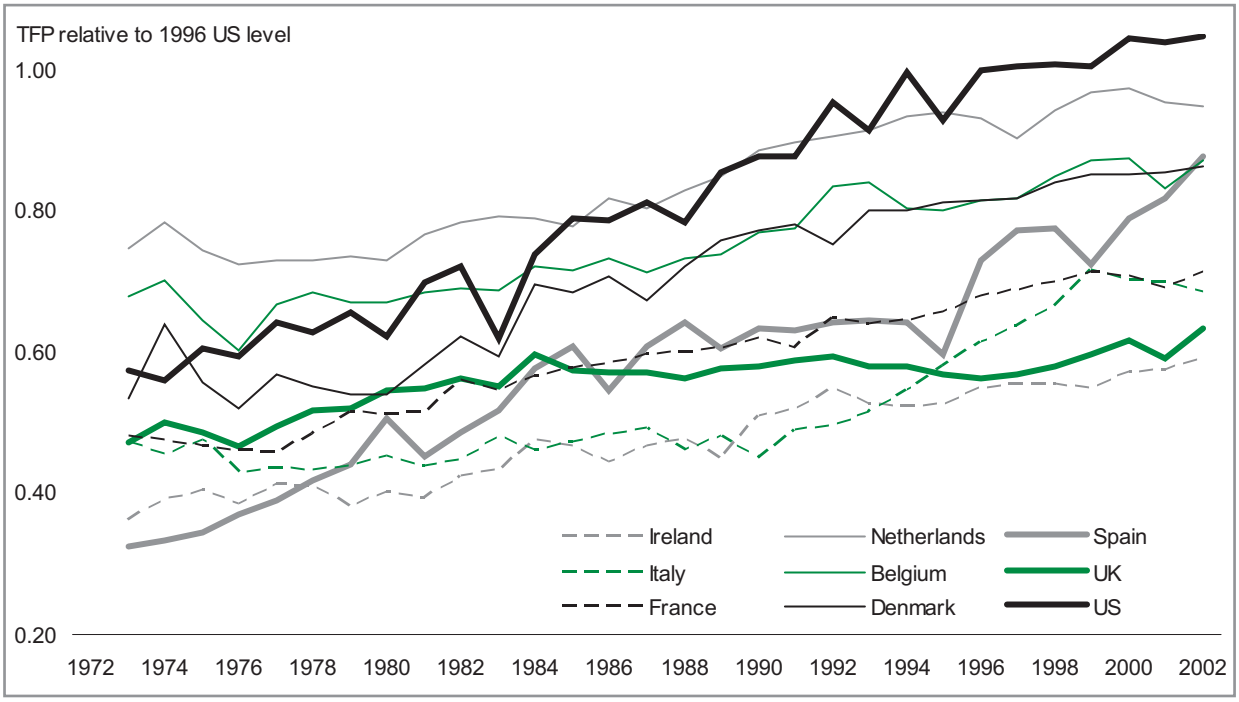
Source: Defra Research project

International comparison of productivity (chart 10.2)

8 An international comparison of total factor productivity is made in chart 10.2 using total factor productivity relative to the USA (Defra research project http://statistics.defra.gov.uk/esg/reports/agri.asp). Over the period 1973 to 2002 the United Kingdom shows only modest productivity growth compared to other countries shown in the chart; increasing at a rate of 34 per cent to achieve a 2002 level higher only than Ireland and Sweden (not shown).

9 The United Kingdom began the period with a high growth rate but switched to a low rate in 1984. The highest growth rate is that of Spain, which began the period in second from last place, but grew by 170 per cent to achieve a 2002 level of total factor productivity behind only the Netherlands and the USA.

Chart 10.2 Total factor productivity - International comparison 1973 to 2002



Source: Defra research project

Volume indices (table 10.3)

10 In 2007, the volume of output of:

- cereals fell by 8.1 per cent with the largest fall in output of wheat;
- industrial crops fell by 7.5 per cent with a large fall in output of other oil seeds;
- forage plants fell by 30 per cent;
- vegetables and horticultural products fell by 1.0 per cent with a fall of 4.8 per cent in output of fresh vegetables offsetting a 4.3 per cent increase in output of plants and flowers;
- potatoes fell by 4.2 per cent;
- fruit rose by 13 per cent;
- livestock production rose by 0.7 per cent;
- livestock products fell by 2.1 per cent as output of milk and eggs both fell;

- other agricultural activities fell by 2.4 per cent as the leasing out of quota fell by 16 per cent;
- inseparable non-agricultural activities rose by 3.0 per cent.

11 The volume of consumption of:

- seeds rose by 11 per cent;
- electricity rose by 6.1 per cent and fuels by 3.8 per cent;
- fertilisers fell by 1.8 per cent;
- pesticides rose by 5.1 per cent;
- veterinary expenses rose by 0.7 per cent;
- animal feeds fell by 1.5 per cent particularly due to a fall of 7.8 per cent in straights feed;
- maintenance fell by 0.3 per cent;
- agricultural services fell 2.3 per cent;
- other goods and services fell by 0.2 per cent.

Table 10.3 Output and input volume indices; United Kingdom

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Indices 2000 = 100 Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Outputs at market prices						
1 Output of cereals	98.4	91.1	92.9	89.0	88.0	80.9
wheat	92.8	86.5	93.2	89.8	88.7	79.4
rye	122.7	86.4	86.4	86.4	86.4	86.4
barley	113.8	99.8	90.4	86.1	82.2	80.2
oats and summer cereal mixtures	91.9	116.8	97.6	82.8	113.7	111.0
other cereals	62.1	107.2	103.1	105.0	104.2	83.7
2 Output of industrial crops	111.6	109.3	105.7	103.9	96.9	89.7
oil seeds	137.4	153.3	139.9	168.0	163.1	178.4
oilseed rape	132.8	153.8	140.6	165.8	164.8	183.4
other oil seeds	262.3	138.1	121.3	208.6	114.5	45.1
sugar beet	115.7	101.0	99.6	95.7	81.5	82.9
other industrial crops	98.3	91.9	93.1	75.9	73.2	46.6
fibre plants	158.6	67.3	47.7	35.1	43.6	43.6
hops	175.8	72.4	72.4	61.9	51.1	51.1
others (a)	94.8	92.5	94.0	76.5	74.0	46.5
3 Output of forage plants	92.5	115.6	111.4	113.4	100.2	69.9
4 Output of vegetables and horticultural products	102.5	93.5	95.3	95.4	90.2	89.3
fresh vegetables	108.5	87.8	88.3	91.9	90.6	86.3
plants and flowers	95.0	101.3	104.8	100.4	90.0	93.8
5 Output of potatoes (including seeds)	113.3	100.2	106.2	99.3	93.8	89.8
6 Output of fruit	102.5	109.7	130.0	148.5	149.7	168.9
7 Output of other crop products including seeds	93.2	83.0	84.6	123.6	116.3	108.5
Total crop output	103.1	97.2	99.5	98.4	94.4	90.4
8 Output of livestock	106.4	95.6	98.0	98.7	98.3	99.0
primarily for meat	105.1	94.8	97.4	99.0	98.4	98.9
cattle	98.1	105.9	104.5	111.7	116.2	119.8
pigs	123.1	76.8	77.6	77.1	76.8	80.7
sheep	98.7	83.5	88.5	89.4	85.8	87.0
poultry	105.0	100.8	106.9	105.2	100.7	95.0
other animals	100.4	99.3	99.1	99.6	99.0	99.3
gross fixed capital formation	118.5	105.4	107.0	101.5	102.3	104.3
cattle	114.4	109.2	101.8	103.6	103.1	99.9
pigs	157.7	101.6	92.8	80.6	97.0	92.4
sheep	176.5	119.9	148.2	115.8	124.0	149.9
poultry	104.0	95.0	98.0	93.9	92.7	96.1

continued

Table 10.3 continued

Indices 2000 = 100 — Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Total livestock output	104.2	98.9	99.5	100.0	99.3	99.0
10 Other agricultural activities	112.5	98.7	109.8	96.2	92.2	90.0
agricultural services	95.3	100.9	106.3	103.6	100.5	98.2
leasing out quota	318.0	73.8	146.3	16.9	1.8	1.5
11 Inseparable non-agricultural activities	84.9	110.6	113.7	115.3	116.1	119.6
12 Output (at market prices)	103.4	98.7	100.5	99.8	97.8	96.2
of which:						
transactions within the agricultural industry						
feed wheat	140.8	162.8	220.7	216.4	176.8	157.5
feed barley	105.3	107.9	97.4	100.5	100.9	97.8
feed oats	83.0	109.7	109.5	96.1	106.4	105.1
seed potatoes	162.9	43.3	65.6	131.5	138.7	48.6
straw	94.9	89.9	90.9	71.3	67.9	40.0
contract work	95.3	100.9	106.3	103.6	100.5	98.2
leasing of quota	318.0	73.8	146.3	16.9	1.8	1.5
total capital formation in livestock	118.5	105.5	107.1	101.6	102.3	104.4
13 Total subsidies (less taxes) on product	. .	. .	. .	. .	. .	. .
14 Gross output at basic prices	103.5	98.8	100.3	100.1	98.0	96.4
Intermediate consumption						
15 Seeds	107.6	91.3	84.9	80.5	79.1	88.1
16 Energy						
electricity	108.0	89.6	86.6	81.7	74.2	78.7
fuels	118.0	83.5	88.9	82.4	78.5	81.5
17 Fertilisers	124.0	78.2	79.2	71.4	67.2	66.0
18 Pesticides	100.3	90.5	99.3	92.2	85.8	90.1
19 Veterinary expenses	116.6	97.6	104.5	105.5	99.6	100.4
20 Animal feed	103.0	105.2	107.0	105.5	104.1	102.5
compounds	109.2	102.2	103.3	99.5	102.6	105.5
straights	89.3	106.8	109.0	111.0	102.7	94.8
feed purchased from other farms	111.5	120.5	125.8	126.2	118.7	112.2
21 Total maintenance (b)	119.8	92.4	92.8	86.0	83.5	83.3
materials	115.9	86.4	85.5	78.8	75.0	75.5
buildings	128.6	106.1	109.9	103.0	103.7	101.5
22 Agricultural services	95.3	100.9	106.3	103.6	100.5	98.2
23 Other goods and services (b) (c)	122.3	99.2	105.4	98.3	93.9	93.8
24 Total intermediate consumption	111.8	96.0	98.9	93.8	90.4	90.9
25 Gross value added at market prices	89.3	103.6	103.3	112.1	113.4	107.1
26 Gross value added at basic prices	93.8	102.3	102.2	110.3	111.4	105.2
27 Total consumption of Fixed Capital	104.1	93.3	92.4	93.4	90.7	89.5
equipment	105.8	94.7	94.0	92.5	90.2	89.4
buildings (b)	106.9	100.5	98.1	94.8	96.7	95.7
livestock	95.3	83.4	83.6	92.1	85.1	83.2
cattle	90.6	81.0	81.5	92.2	81.8	79.3
pigs	120.8	79.0	78.7	67.7	67.1	69.4
sheep	89.1	78.0	78.7	86.2	86.7	84.8
poultry	105.2	96.2	94.7	98.2	95.5	95.9
28 Net value added at market prices	75.6	117.3	117.8	138.6	146.8	132.8
29 Net value added at basic prices	88.7	108.6	108.8	124.8	131.5	119.0

(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.

Labour (table 10.4)

12 The total cost of paid labour rose by 3.7 per cent to £2.4 billion in 2007 as the average wage increased while paid labour input fell by 0.5 per cent. The volume of the total labour force fell by 2.1 per cent and has fallen by 51 per cent since 1973 reflecting the outflow of labour from the industry. The volume of paid labour has fallen by 65 per cent since 1973, while the volume of entrepreneurial labour has fallen by 39 per cent in that time.

Table 10.4 Costs and volumes of labour engaged in agricultural work (a); United Kingdom

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Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Paid labour costs (£ million) (b)	1 929	1 915	2 004	2 201	2 271	2 356
Annual work unit (thousand) (c)						
Entrepreneurial labour	239	204	203	201	196	190
Paid labour	140	97	98	97	91	91
Labour force	379	301	300	297	287	281

(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 Direct payments and trader based schemes

Summary

In 2007:

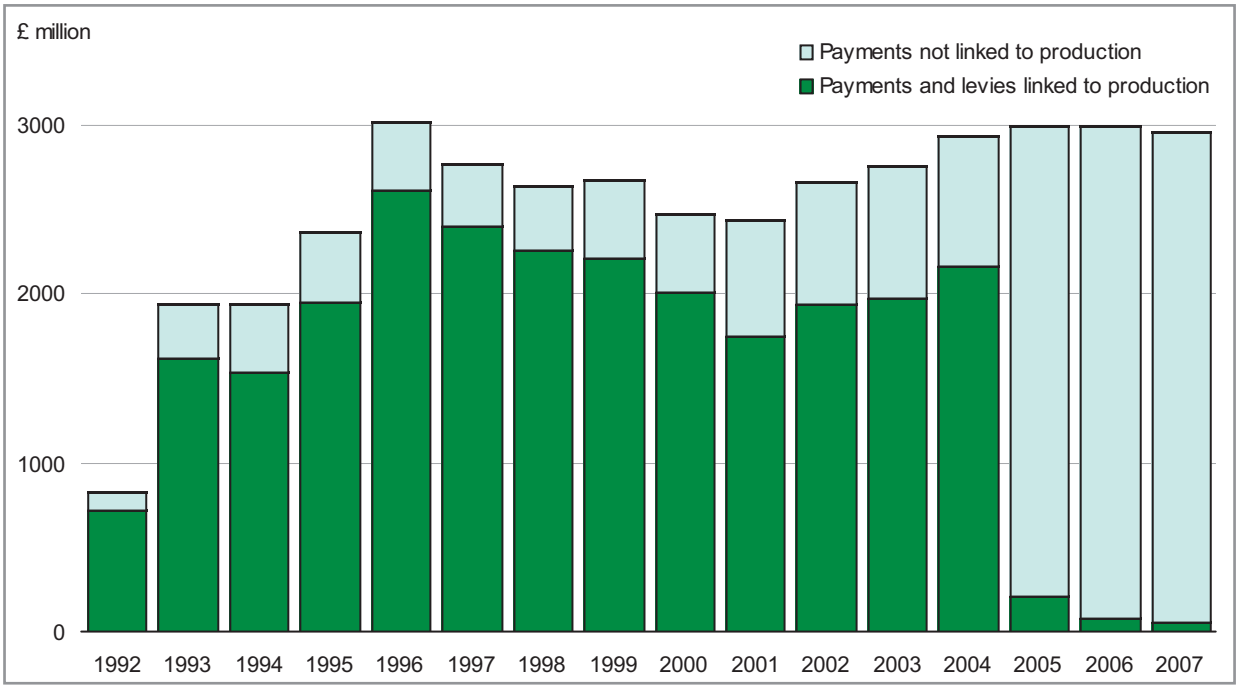
- direct payments made to farmers less levies totalled £2.96 billion, broadly similar to the preceding three years;
- payments linked to production fell from £82 million to £60 million;
- payments not linked to production, including the Single Payment Scheme, are expected to fall by 0.5 per cent to £2.98 billion.

Introduction

1 This chapter gives details of direct payments received by farmers that are included in the production and account shown in chapter 9. It also includes expenditure on trader based market support measures.

2 Following agreement by the EU Agricultural Accounts and Prices Working Group on the classification of subsidies in the economic account for agriculture, payments relating to extensification, rural world premium (the less favoured area supplement paid with Sheep Annual Premium) and deseasonalisation have been moved from 'payments and levies linked to the production of agricultural products' to 'payments not linked to production'. Also, following agreement by the Working Group on how losses in agriculture ought be recorded in the economic account for agriculture, compensation for cattle compulsorily slaughtered under bovine tuberculosis control measures have been apportioned between income and capital.

Chart 11.1 Direct payments made to farmers; United Kingdom



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

3 Direct payments made to farmers less levies as recorded in the production and income account (see table 9.1) totalled £2.98 billon in 2007, broadly in line with total payments in each of the preceding three years. This is made up of £60 million of payments that are linked to production and £2.92 billion of payments that are 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 and animal disease compensation.

4 Payments that are still linked to production fell from £82 million to £60 million in 2007. This is primarily a result of the Over Thirty Month Scheme being replaced by the Older Cattle Disposal Scheme in January 2006 and a fall in throughput of cattle through the Older Cattle Disposal Scheme in 2007 compared to

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: Joanne Kinder on +44 (0)1904 455407 email: joanne.kinder@defra.gsi.gov.uk

£ million — Calendar years

	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
Payments and levies linked to the production of agricultural products						
Crop subsidies						
Arable area payments	1 093	925	900	. .	. .	. .
Other crop subsidies (a)	18	3	13	12	13	14
Livestock subsidies						
Beef special premium	200	238	267	. .	. .	. .
Suckler cow premium	200	208	229	. .	. .	. .
Slaughter premium	. .	136	157	. .	. .	. .
Over Thirty Month Scheme/Older Cattle Disposal Scheme	375	199	203	178	50	28
Beef national envelope	. .	34	37	. .	. .	. .
Scottish beef calf scheme	. .	. .	. .	19	18	19
Sheep annual premium	260	223	244	. .	. .	. .
Sheep national envelope	. .	10	18	. .	. .	. .
Other livestock subsidies	313	. .	. .	. .	. .	. .
Dairy subsidies (b)	. .	. .	108	. .	. .	. .
less Levies:						
Milk superlevy	- 32	. .	- 8	- 1	. .	. .
Total coupled payments	**2 428**	**1 976**	**2 168**	**208**	**82**	**60**
Payments not linked to production						
Single Payments Scheme	. .	. .	. .	2 349	2 354	2 292
Agri-environment schemes (c)	90	223	257	288	381	443
Less Favoured Areas support schemes (d)	. .	160	153	146	183	133
Animal disease compensation (e)	8	25	19	19	16	20
Extensification schemes	104	145	159	. .	. .	. .
Rural World Premium	67	53	60	. .	. .	. .
Arable area payments setaside	112	177	129	. .	. .	. .
Other (f)	4	. .	. .	. .	. .	31
Total decoupled and other payments	**384**	**783**	**778**	**2 802**	**2 935**	**2 919**
Total payments less levies	**2 812**	**2 759**	**2 945**	**3 010**	**3 017**	**2 980**
Capital transfers and other payments not included in the production and income account	76	62	64	85	81	84

(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) Data for the Land Management Contract Menu Scheme in Scotland has been revised after publication of the agricultural account. The totals shown may therefore not match the corresponding lines in Table 9.1.

(d) 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.

(e) 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.

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

2006. Other schemes linked to production are the Scottish Beef Calf Scheme, Area Payment for Nuts, Aid for Energy Crops and Protein Crop Premium, which totalled £32 million in 2007, a similar amount to that in 2006.

5 Decoupled payments, including the Single Payment Scheme and other payments made to farmers by virtue of being engaged in agricultural activities, fell marginally from £3.02 billion in 2006 to £2.98 billion in 2007.

6 Payments made through the Single Payment Scheme are estimated to total £2.29 billion in 2007 after deductions for modulation. An uplift in value due to a favourable exchange rate was offset by increases in rates of modulation, particularly in England. 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 is made rather the year when payments are made.

7 Payments to farmers taking part in agri-environment schemes are expected to rise by 17 per cent to £445 million, mainly due to increasing uptake of the Environmental Stewardship Scheme in England more than offsetting declines in the classic schemes of Countryside Stewardship Scheme, Environmentally Sensitive Areas Scheme and Organic Farming Scheme that closed to new entrants in 2004.

8 Payments to farmers under the less favoured areas support schemes (Hill Farm Allowance in England, Tir Mynydd in Wales, Less Favoured Area Support Scheme in Scotland and Less Favoured Area Compensatory Allowance in Northern Ireland) fell by 28 per cent to £133 million. The fall reflected an additional, one-off payment of £40 million, which was paid to farmers in Scotland who received payments through the Less Favoured Area Support Scheme in 2006 and a fall in the value of Tir Mynydd in Wales in 2007 compared to 2006.

9 Payments of animal disease compensation recorded as income, principally for work-in-progress cattle slaughtered as a result of bovine tuberculosis (bTB) control measures, are expected to have increased by 22 per cent to £20 million in 2007, a level similar to that in 2005, due mostly to an increase in cattle compulsorily slaughtered under bTB control measures in England in 2007 compared to 2006.

10 Table 11.2 shows a breakdown of direct payments made to farmers by country in 2006 as recorded in the production and income account for the United Kingdom.

Expenditure through trader based schemes (table 11.3)

11 Table 11.3 shows expenditure on trader based schemes, both internal market and external trade. The figures represent actual expenditure as recorded in the Rural Payments Agency (RPA) resource account for the years ended 31 March 2006 and 31 March 2007.

12 Expenditure on internal trader based schemes was £43.0 million in 2006-07, down from £88.0 million in 2005-06. This was due mainly to a fall in support for sugar and isoglucose, which fell by £25 million; support for horticulture and for milk and milk products also fell by £19 million.

13 Expenditure for external trader based schemes, that is, export refunds in respect of trade with non-member countries, fell by 15 per cent from £210 million in 2005/06 to £177 million in 2006/07. This was due mainly to falls of £14 million in support for milk and milk products and £14 million in support for sugar and isoglucose.

Table 11.2 Direct payments to farmers by country in 2006

Shows payments after deduction for modulation where appropriate

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£ 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.	13	-	1	-	13
Livestock subsidies					
Over Thirty Month Scheme / Older Cattle Disposal Scheme	25	6	11	8	50
Scottish Beef Calf Scheme	. .	. .	18	. .	18
Total coupled payments	**38**	**6**	**30**	**8**	**82**
Payments not linked to production					
Single Payment Scheme	1 520	220	388	226	2 354
Less Favoured Areas support schemes (a)	27	35	100	21	183
Agri-environment schemes					
Environmental Stewardship / Countryside Stewardship Schemes	192	. .	. .	. .	192
Countryside Premium / Rural Stewardship / Land Management Contracts Schemes	. .	. .	47	. .	47
Tir Cymen / Tir Gofal / Tir Cynnal	. .	31	. .	. .	31
Countryside Management Scheme	. .	. .	. .	10	10
Organic Aid & Organic Farming Schemes	3	3	3	-	9
Environmentally Sensitive Areas Schemes	64	4	6	5	79
Sites and Areas of Special Scientific Interest	10	1	3	-	14
Animal disease compensation	6	4	-	7	16
Total decoupled and other payments	**1 821**	**299**	**547**	**269**	**2 935**
Total subsidies less levies and taxes	**1 859**	**305**	**577**	**277**	**3 017**

(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.

Table 11.3 Expenditure through trader based schemes United Kingdom

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£ million Financial years

	2005/06	2006/07 (provisional)
Trader based - Internal market		
Horticulture	25.4	16.1
Milk & milk products	19.4	9.6
Protein & textile plants	1.2	0.9
School milk	0.4	0.4
Seeds	0.9	0.0
Sugar and isoglucose	37.9	13.1
Other	2.8	2.9
Total	**88.0**	**43.0**
Trader based - External market	**0.0**	**0.0**
Milk & milk products	37.6	23.8
Processed Goods	16.7	12.8
Sugar and isoglucose	153.1	139.2
Other	2.4	1.6
Total	**209.8**	**177.4**

Source: RPA annual report and accounts 2006 - 2007, pp 45-46

Chapter 12 Rural Development Programme

Summary

- The 2007-2013 rural development programmes for England, Wales, Scotland, and Northern Ireland have been agreed.
- The overall budgets for each are €5,187 million for the rural development programme for England; €991 million for the rural development programme for Wales; €2,133 million for the rural development programme for Scotland; and €323 million for the rural development programme for Northern Ireland.
- In all four programmes, most spending provides support for Axis 2 - Improving the environment and the countryside, which includes support for farmers in less favoured area and funding for agri-environment schemes.

Introduction

1 The Agenda 2000 reforms of the Common Agricultural Policy (CAP) introduced a comprehensive rural development regulation (RDR), described as a new 'second pillar' to the CAP, in addition to existing schemes. This aimed to complement reforms in the agricultural market sectors in promoting a competitive, multi-functional sector and sought to encourage alternative sources of income in rural areas while supporting agri-environment measures (Council Regulation 1257/1999).

2 Under the rural development regulation, each Member State was required to draw up territorially-based rural development programmes at the most appropriate geographical level for 2000-2006. There were four such rural development programmes in the United Kingdom, which covered England, Scotland, Wales and Northern Ireland. These ended on 31 December 2006.

3 Further reform of the CAP was agreed in June 2003, which aimed to further strengthen rural development by transferring further funds from the 'first pillar' to the 'second pillar'. At the same time, the scope of the rural development instruments was expanded (Council Regulation 1783/2003) and compulsory modulation was introduced; optional modulation was used in the United Kingdom in addition to compulsory modulation. In September 2005, the Agricultural Council adopted a fundamental reform of rural development policy for the period of 2007-2013.[1]

4 Three major objectives (or 'Axes') were set for 2007-2013. These are:

Axis 1 - Improving the competitiveness of the agricultural and forestry sector
Axis 2 - Improving the environment and the countryside
Axis 3 - Improving the quality of life in rural areas and diversification of the rural economy

There is also a fourth Axis that uses the LEADER approach to deliver a locally-driven approach to innovation and development administered by local partnerships.

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[1] Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development. OJ L-277, 21/10/2005.

5 Member States prepared national strategic plans on rural development on the basis of the strategic guidelines adopted by Council. Member States then submitted rural development programmes at a national or regional level, having chosen measures that best met the needs of their rural areas from a range of measures within each Axis.

Rural Development Programmes 2007-2013 for England, Wales, Scotland and Northern Ireland (tables 12.1 to 12.3)

6 The United Kingdom submitted a single National Strategy Plan to the Commission, which comprised dedicated annexes for England, Wales, Scotland and Northern Ireland with an over-arching introduction. Each of the rural development programmes for England, Wales, Scotland and Northern Ireland have been submitted and approval received. The overall objectives for each programme are shown in Table 12.1; the overall budget allocated to each programme and the element that is funded by the European Agricultural Fund for Rural Development (EAFRD) is shown in Table 12.2; and the allocation of budget by Axis is shown in Table 12.3.

Table 12.1 Chosen strategy for each Rural Development Programme

	Strategy
England	To build profitable, innovative and competitive farming, food and forestry sectors, that meet the needs of consumers and make a net positive contribution to the environment. To improve the environment and countryside. To enhance opportunity in rural areas, in a way that harnesses and builds on environmental quality.
Wales	Stimulating a dynamic and innovative agriculture sector. Encouraging sustainable production methods with a view to improving the environment. Improving the quality of life in rural areas and encouraging diversification of the rural economy. Building capacity and innovation in rural areas.
Scotland	Support business viability, add value to the rural economy and facilitate increased market orientation. Support a coherent and integrated approach to meet environmental objectives. Encourage private enterprise and entrepreneurship, improve services and infrastructure at local level and support Scotland's cultural opportunities. Support capacity building and innovation.
Northern Ireland	Focus on vocational training, farm modernisation and supply chain improvements; support for less favoured areas and agri-environment and forest environment measures; diversification of rural economy, cultural heritage and promotion of tourism, to be supported by the local communities through a bottom up approach.

Source: European Commission

Table 12.2 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	€ 323 million	€ 171 million

Source: European Commission

Table 12.3 Budget allocation by axis

		England	Wales	Scotland	Northern Ireland
Axis 1:	Improving the competitiveness of the agricultural and forestry	€ 448 m	€ 122 m	€ 306 m	€ 35 m
Axis 2:	Improving the environment and the countryside	€ 4 183 m	€ 722 m	€ 1 469 m	€ 188 m
Axis 3:	The quality of life in rural areas and diversification of the rural economy	€ 334 m	€ 94 m	€ 248 m	€ 100 m (a)
Axis 4:	Leader	€ 220 m	€ 47 m	€ 108 m	€ 100 m (a)

Source: European Commission

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

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

Rural Development Programme for England 2007-2013:
http://www.defra.gov.uk/rural/rdpe/index.htm

Rural Development Programme for Wales 2007-2013:
http://new.wales.gov.uk/topics/environmentcountryside/farmingandcountryside/ruraldevelopment/20072013ruraldevelopmentplan/?lang=en

Rural Development Programme for Scotland 2007-2013:
http://www.scotland.gov.uk/Topics/Rural/SRDP

Rural Development Programme for Northern Ireland 2007-2013:
http://www.dardni.gov.uk/index/rural-development/nirdp2007-2013.htm

And at:

European Commission > Rural Development policy 2007-2013 > United Kingdom:
http://ec.europa.eu/agriculture/rurdev/countries/uk/index_en.htm

European Commission: England's Rural Development Plan. Memo/07/604 (20 December 2007):
http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/604&format=HTML&aged=0&language=EN&guiLanguage=en

European Commission: Rural Development Plan for Wales. Memo/08/104 (20 February 2008):
http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/104&format=HTML&aged=0&language=EN&guiLanguage=en

European Commission: Rural Development Plan for Scotland. Memo/08/37 (24 January 2008):
http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/37&format=HTML&aged=0&language=EN&guiLanguage=en

European Commission: Rural Development Plan for Northern Ireland. Memo/08/104 (25 July 2008):
http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/309&format=HTML&aged=1&language=EN&guiLanguage=en

Payments made through key measures of the Rural Development Programmes 2000-2006 (table 12.4)

8 Table 12.4 shows payments made through two key measures of the rural development programme 2000-2006: Less Favoured Areas and Areas with Environmental Restrictions; and Agri-environment and Animal Welfare, adopted by each of the countries of the United Kingdom through which most funding and support have been provided, as recorded in the production and income account shown in chapter 9.

Take-up of agri-environment schemes (tables 12.5,12.6)

9 Agri-environmental schemes require farmers to demonstrate good environmental practice. Tables 12.5 and 12.6 show the take-up of agri-environment schemes by area of land under management agreements and by the number of agreement holders, including those that were introduced prior to the rural development programme 2000-2006 but where agreements continue to be honoured. Due to the differing requirements of schemes, care should be taken when making comparisons.

Table 12.4 Payments made through key measures of the rural development programmes for 2000-2006

Enquiries: Joanne Kinder on +44 (0)1904 455407 email: joanne.kinder@defra.gsi.gov.uk

£ million Calendar years

		2002	2003	2004	2005	2006
Less Favoured Areas and Areas with Environmental Restrictions measure						
England:	Hill Farm Allowance	39.0	39.5	34.9	27.3	27.2
Wales:	Tir Mynydd	40.2	34.0	35.7	35.8	34.8
Scotland:	Less Favoured Areas Support Scheme	63.5	62.7	60.7	61.0	100.3
Northern Ireland:	Less Favoured Areas Compensatory Allowance	23.5	23.7	22.1	21.8	21.0
Agri-Environment and Animal Welfare measure						
England:	Organic Farming Scheme	18.9	10.4	6.5	4.6	2.6
	Countryside Stewardship Scheme	54.0	70.2	103.3	117.4	106.5
	Environmentally Sensitive Areas Scheme	50.9	59.6	64.5	69.8	63.8
	Environmental Stewardship Scheme	. .	. .	. .	. .	84.3
Wales:	Organic Farming Scheme	2.5	2.7	1.9	2.3	3.1
	Tir Gofal	11.1	13.4	16.9	19.1	24.2
	Environmentally Sensitive Areas Scheme	6.0	8.5	7.0	5.3	4.2
	Tir Cynnal	. .	. .	. .	. .	5.9
Scotland:	Organic Aid Scheme	4.7	7.2	3.5	2.5	2.5
	Rural Stewardship Scheme	3.2	7.2	11.3	12.3	20.8
	Environmentally Sensitive Areas Scheme	10.0	11.1	9.7	8.2	6.3
	Land Management Contract Scheme	. .	. .	. .	14.5	21.8
Northern Ireland:	Organic Farming Scheme	0.4	0.2	0.1	0.3	0.4
	Countryside Management Scheme	2.9	3.1	5.6	5.8	10.2
	New Environmentally Sensitive Areas Scheme (a)	5.0	5.2	5.7	4.9	4.8

(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.

Table 12.5 Agri-environment schemes - area under agreements

Enquiries: Joanne Kinder on +44 (0)1904 455407 email: joanne.kinder@defra.gsi.gov.uk

Thousand Hectares 31 December

	2002	2003	2004	2005	2006	2007
England						
Organic Farming Scheme	157	200	143	141	68	25
Countryside Stewardship Scheme	420	521	570	531	514	474
Environmentally Sensitive Areas Scheme	590	635	653	616	582	546
Environmental Stewardship Scheme						
Entry Level Scheme (a)	. .	31	31	1 354	3 741	4 416
Organic Entry Level Scheme	. .	. .	. .	21	180	309
Higher Level Scheme	. .	. .	. .	. .	83	175
Wales						
Organic Farming / Maintenance Schemes	48	55	55	68	81	76
Tir Cymen/Tir Gofal	116	120	115	332	354	364
Environmentally Sensitive Areas Scheme	173	161	171	127	77	78
Tir Cynnal	. .	. .	. .	223	223	273
Scotland						
Organic Aid Scheme	. .	. .	. .	. .	. .	. .
Countryside Premium Scheme/Rural Stewardship Scheme	. .	. .	. .	. .	. .	. .
Environmentally Sensitive Areas Scheme	. .	. .	. .	. .	. .	. .
Land Management Contracts	. .	. .	. .	. .	. .	. .
Northern Ireland						
Organic Farming Scheme	5	5	5	6	10	6
Countryside Management Scheme	57	90	116	118	318	317
New Environmentally Sensitive Areas Scheme (b)	144	146	126	131	141	131

(a) Includes Entry Level Pilot 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 12.6 Agri-environment schemes - number of agreement holders

Enquiries: Joanne Kinder on +44 (0)1904 455407 email: joanne.kinder@defra.gsi.gov.uk

Rounded to nearest hundred 31 December

	2002	2003	2004	2005	2006	2007
England						
Organic Farming Scheme	2 000	2 600	1 800	1 700	800	300
Countryside Stewardship Scheme	15 400	16 900	17 800	16 700	15 600	13 400
Environmentally Sensitive Areas Scheme	12 000	12 500	13 000	11 500	9 600	8 600
Environmental Stewardship Scheme:						
Entry Level Scheme (a)	. .	300	300	12 100	27 200	32 200
Organic Entry Level Scheme	. .	. .	. .	300	1 400	2 100
Higher Level Scheme	. .	. .	. .	. .	1 200	2 000
Wales						
Organic Farming Scheme	500	500	600	700	800	800
Tir Cymen/Tir Gofal	1 800	2 400	3 000	3 200	3 300	3 200
Environmentally Sensitive Areas Scheme	2 400	2 600	2 300	1 700	1 000	1 000
Tir Cynnal	. .	. .	. .	3 400	3 400	4 200
Scotland						
Organic Aid Scheme	. .	. .	. .	. .	. .	. .
Countryside Premium Scheme/Rural Stewardship Scheme	. .	. .	. .	. .	. .	. .
Environmentally Sensitive Areas Scheme	. .	. .	. .	. .	. .	. .
Land Management Contracts	. .	. .	. .	. .	. .	. .
Northern Ireland						
Organic Farming Scheme	100	100	100	100	100	100
Countryside Management Scheme	1 300	2 400	2 900	5 200	8 900	8 800
New Environmentally Sensitive Areas Scheme (b)	4 400	4 400	4 400	3 500	4 300	3 900

(a) Includes Entry Level Pilot 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 13 Organic Farming

Summary

In January 2007:

- the total area of land that was organically managed (either fully organic or in-conversion) remained unchanged from January 2006 at 619 thousand hectares;
- permanent and temporary pasture accounted for 85 per cent of organically managed land in the United Kingdom;
- thirty-eight per cent of organically managed land in the United Kingdom was in Scotland, covering 235 thousand hectares;
- sixty-five per cent of producers and growers and 83 per cent of processors and importers were located in England;
- twenty-nine per cent of organic livestock producers in the United Kingdom were located in the southwest region of England;
- there were 245 thousand cattle, 747 thousand sheep, 33 thousand pigs, 4,421 thousand poultry and 4.9 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.

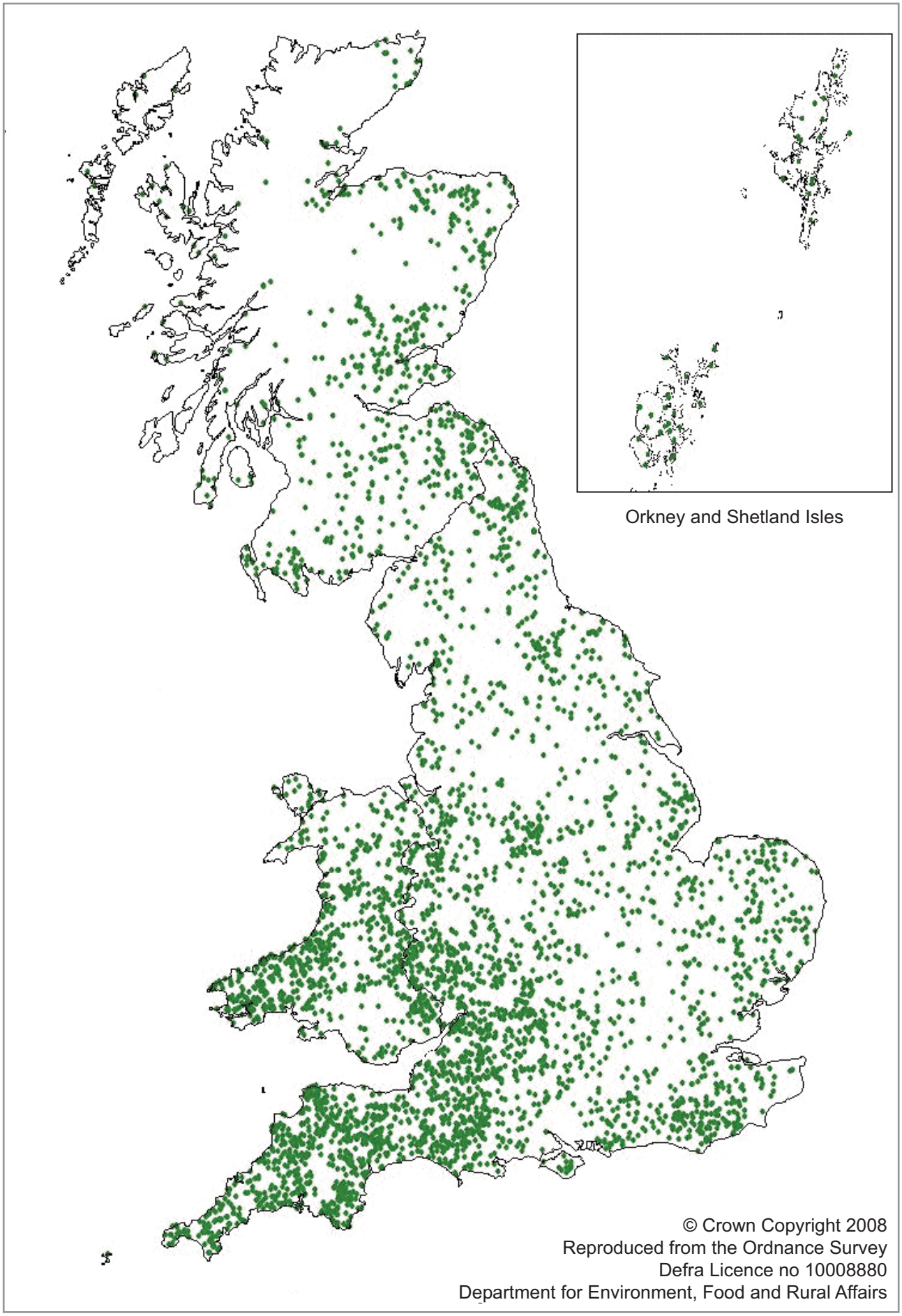
2 In partnership with the various organic sector bodies in the United Kingdom, Defra collected and published data on the organic sector during 2007. Work continues with the organic sector bodies to further develop the data collected and published. If you have any comments on the statistics shown here or on future requirements, contact the Organic Statistics team at: organic-stats@defra.gsi.gov.uk.

Organic and in-conversion land (map 13.1, table 13.1, chart 13.1)

3 The total area of land that was organically managed, either fully organic or in-conversion, was unchanged at 619 thousand hectares in January 2007 compared to January 2006, following three years of decline.

4 The late 1990s and early 2000s saw increases in the area of organically managed land, peaking in March 2003, for a variety of reasons. Significant factors operating during this period were: farmers seeking alternatives to conventional farming in response to falling farm incomes, the scope of organic farming being extended by the European Union to include livestock production in July 1999 and payment rates under organic farming support schemes being substantially increased.

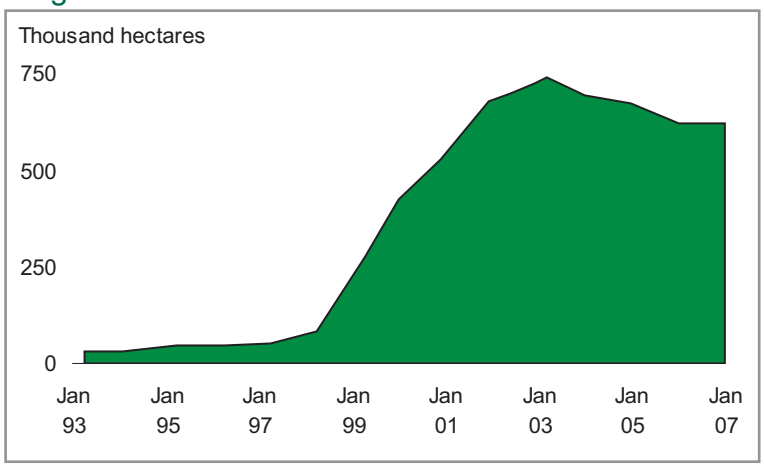
Map 13.1 Distribution of registered organic producers in Great Britain: January 2007



5 The area of in-conversion land rose by 41 per cent between January 2006 and January 2007 to 121 thousand hectares while the area of fully organic land fell by 35 thousand hectares. Of the total organically managed land in the United Kingdom, 80 per cent was fully organic in January 2007.

6 Permanent and temporary pasture accounted for 85 per cent of organically managed land in the United Kingdom. The remainder was made up of cereals and other crops, vegetables including potatoes, set-aside, woodland and other uses.

Chart 13.1 Organically managed land; United Kingdom



Regional analysis (tables 13.1 to 13.3)

7 Forty-eight per cent of the United Kingdom's organically managed land is in England covering 296 thousand hectares, 38 per cent is in Scotland, 13 per cent in Wales and 1.5 per cent in Northern Ireland. Fifty-nine per cent of organically managed land in England is situated in the southwest and southeast of the country. As a percentage of the total area in the United Kingdom, the land area in Scotland has fallen from 58 per cent in March 2003 to 38 per cent in January 2007 due to a number of extensive hill farms pulling out of the sector.

8 Despite 38 per cent of the organically managed land being in Scotland, only 15 per cent of organic producers and growers are found there. Sixty-five per cent are located in England, 15 per cent in Wales and 5.2 per cent in Northern Ireland. Over half of producers and growers in England are located in the southwest and southeast of the country. Eighty-three per cent of processors and importers of organic food in the United Kingdom are located in England with 9.4 per cent in Scotland, 5.2 per cent in Wales and 2.2 per cent in Northern Ireland.

Table 13.1 Organic and in-conversion land

Enquiries: Organic Statistics Team on +44 (0)1904 455557 email: organic-stats@defra.gsi.gov.uk

Thousand hectares

	March 2003	January 2004	January 2005	January 2006	January 2007
Land, in-conversion					
North East	15.3	6.8	4.6	6.6	6.9
North West	7.7	2.6	2.5	3.2	1.8
Yorkshire & Humberside	2.3	1.7	1.3	2.3	3.4
East Midlands	2.9	1.6	1.2	2.4	2.1
West Midlands	6.0	3.7	2.4	3.2	4.0
Eastern	4.1	3.0	2.4	2.6	3.6
South West	18.0	10.8	9.1	22.0	31.6
South East (inc. London)	11.5	6.5	5.4	10.7	13.2
England	67.8	36.8	28.8	53.2	66.5
Wales	13.7	8.0	8.6	12.8	15.4
Scotland	121.3	20.4	13.7	16.7	35.2
Northern Ireland	1.5	0.8	1.6	3.2	4.0
United Kingdom	204.3	66.0	52.7	86.0	121.1

continued

Table 13.1 continued

Thousand hectares

	March 2003	January 2004	January 2005	January 2006	January 2007
Land, fully organic					
North East	12.4	20.5	25.3	29.3	22.6
North West	15.1	19.9	19.8	18.9	19.4
Yorkshire & Humberside	7.0	8.1	8.6	9.0	9.0
East Midlands	12.0	16.1	13.4	13.2	12.5
West Midlands	23.4	25.5	26.8	27.0	26.3
Eastern	7.8	9.7	10.3	11.8	10.8
South West	78.1	86.2	90.5	94.0	93.4
South East (inc. London)	28.3	34.3	34.9	35.2	35.8
England	184.0	220.2	229.6	238.4	229.9
Wales	41.4	50.2	55.6	58.0	63.5
Scotland	307.3	351.9	331.6	231.2	200.1
Northern Ireland	4.1	6.6	5.0	6.3	5.1
United Kingdom	536.9	629.0	621.8	533.9	498.6

Source: OASIS

Table 13.2 Organic and in-conversion land use; United Kingdom

Enquiries: Organic Statistics Team on +44 (0)1904 455557 email: organic-stats@defra.gsi.gov.uk

Thousand hectares

	March 2003	January 2004	January 2005	January 2006	January 2007
Land, in-conversion					
Cereals	11.2	7.0	4.1	10.3	11.9
Other crops	6.5	1.9	2.7	3.5	3.4
Fruit & nuts (nuts not included in Mar 03)	-	-	-	-	-
Vegetables (including potatoes)	3.0	1.9	1.3	1.3	2.1
Herbs & ornamentals (included nuts in Mar 03)	-	-	-	-	-
Temporary pasture	18.1	12.7	10.4	15.9	22.9
Set aside	3.5	2.3	1.3	1.4	1.1
Permanent pasture (a)	159.1	38.1	27.2	47.5	72.1
Woodland	1.1	0.7	0.6	3.5	4.2
Non cropping	-	-	2.9	1.1	2.3
Other	-	-	1.7	1.1	-
Unknown	0.8	-	-	-	0.8
Total	204.3	66.0	52.7	86.0	121.1
Land, fully organic					
Cereals	25.7	35.4	35.1	37.4	35.5
Other crops	14.1	7.5	10.2	7.3	6.8
Fruit & nuts (nuts not included in Mar 03)	1.5	1.4	1.5	1.5	1.6
Vegetables (including potatoes)	9.7	11.7	12.7	12.4	13.5
Herbs & ornamentals (included nuts in Mar 03)	-	-	-	0.6	0.6
Temporary pasture	58.9	77.3	80.3	82.0	79.8
Set aside	3.4	4.6	4.6	2.3	1.3
Permanent pasture (a)	413.9	481.3	467.8	380.9	350.5
Woodland	5.6	4.8	5.2	3.3	4.0
Non cropping	1.4	0.9	1.3	2.4	4.0
Other	-	3.0	2.4	3.2	-
Unknown	2.4	0.8	-	-	0.6
Total	536.9	629.0	621.8	533.9	498.6

Source: OASIS

(a) Includes rough grazing.

Table 13.3 Organic producers, growers, processors and importers - regional breakdown

Enquiries: Organic Statistics Team on +44 (0)1904 455557 email: organic-stats@defra.gsi.gov.uk

Number of businesses

	March 2003	January 2004	January 2005	January 2006	January 2007
Producers and growers					
North East	73	74	83	101	116
North West	171	169	176	168	173
Yorkshire & Humberside	136	134	149	138	155
East Midlands	220	218	237	221	236
West Midlands	330	325	337	335	351
Eastern	248	258	259	253	267
South West	1 026	1 020	1 123	1 152	1 282
South East (inc. London)	418	409	463	417	423
England	2 622	2 607	2 827	2 785	3 003
Wales	618	623	667	688	710
Scotland	725	689	653	595	686
Northern Ireland	139	153	174	217	240
United Kingdom	4 104	4 072	4 321	4 285	4 639
Processors and/or importers (a)					
North East	34	31	19	28	45
North West	122	130	107	143	159
Yorkshire & Humberside	118	126	121	141	164
East Midlands	175	191	154	195	210
West Midlands	138	139	114	143	169
Eastern	224	249	209	255	289
South West	333	353	242	380	450
South East (inc. London)	393	450	387	484	516
England	1 537	1 669	1 353	1 769	2 002
Wales	103	112	85	112	125
Scotland	152	174	152	197	225
Northern Ireland	33	35	36	50	52
United Kingdom	1 825	1 990	1 626	2 128	2 404

Source: OASIS

(a) Processers and importers include abattoirs, bakers, storers and wholesalers. The recorded location depends on the address registered with the Sector Bodies and so larger businesses may be recorded at their headquarters.

Livestock statistics (tables 13.4, 13.5)

9 Twenty-nine per cent of organic livestock producers in the United Kingdom are located in the southwest region of England and 61 per cent of organic livestock producers in the United Kingdom found in England. There were 245 thousand cattle, 747 thousand sheep, 33 thousand pigs, 4,421 thousand poultry and 4.9 thousand other livestock being reared organically in the United Kingdom. The figures are based on annual inspections of organic holdings conducted by certification bodies.

Table 13.4 Producers of organic and in-conversion livestock

Enquiries: Organic Statistics Team on +44 (0)1904 455557 email: organic-stats@defra.gsi.gov.uk

Number of producers

	January 2004	January 2005	January 2006	January 2007
North East	49	44	54	46
North West	122	87	102	104
Yorkshire & Humberside	82	54	82	82
East Midlands	135	110	125	121
West Midlands	196	162	196	174
Eastern	99	69	86	91
South West	761	553	724	706
South East (inc. London)	220	162	201	179
England	1 664	1 241	1 570	1 503
Wales	469	402	502	493
Scotland	385	293	296	285
Northern Ireland	119	110	140	167
United Kingdom	2 637	2 046	2 508	2 448

Source: OASIS

Table 13.5 Estimates of organic and in-conversion livestock numbers (a); United Kingdom

Enquiries: Organic Statistics Team on +44 (0)1904 455557 email: organic-stats@defra.gsi.gov.uk

Thousand head

	January 2004	January 2005	January 2006	January 2007
Cattle	126.8	174.8	214.3	244.8
Sheep	440.7	571.6	691.0	747.3
Pigs	48.8	43.7	30.0	32.9
Poultry	2 166.2	2 431.6	3 439.5	4 421.3
Goats	0.7	0.5	0.5	0.6
Other livestock	1.0	1.2	1.5	4.3

Source: OASIS

(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 14 Animal Health and Welfare

Summary

- Indicators, which measure progress within livestock sectors in England towards the aims of the Animal Health and Welfare Strategy for Great Britain, were published in November 2006, and updated in June 2007.
- During 2006, the Department of Agriculture and Rural Development in Northern Ireland published its Animal Health and Welfare Strategy, which reflects Northern Ireland's geographical position within the island of Ireland.
- The rate of confirmed incidence of bovine tuberculosis (bTB) in 2006 was lower than in 2005, at 3.6 per cent compared to 4.5 per cent.
- At the end of 2006, 92 per cent of the cattle herds in Great Britain were considered officially bTB free, compared to 94 per cent at the end of 2005.

Introduction

1 The aim of this section is to provide a focus on key high profile issues and to signpost readers to more detailed information and statistics on a wide range of animal health and welfare issues across the United Kingdom.

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/animalh/ahws/default.htm). The Great Britain strategy is being implemented at a national, devolved 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 Within England, the strategy is overseen by an independent advisory group, the England Implementation Group (EIG). Defra has worked with the EIG to develop indicators which report progress towards the stated aims of the strategy within England.

4 The first suite of indicators, looking at progress within Livestock sectors, were published in November 2006, and subsequent updates were made in June 2007. Many of these indicators are still in development, however, there is work in place for further development and regular updates of the indicators.The indicators can be found at http://www.defra.gov.uk/animalh/ahws/eig/indicators/index.htm with updates published at regular intervals. The next update is due to take place in Spring 2008.

5 Indicators are being developed, in conjunction with the EIG, to develop measures which monitor progress towards the strategy outcomes for companion animals, including pets, animals for sport and aquaculture. These will be developed during 2008 along with further development of the livestock indicators. Work is ongoing to develop measures for Scotland and Wales.

6 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

7 Animal Health and Welfare within Great Britain is comprehensively reported through the Chief Veterinary Officer's (CVO) report published annually at http://www.defra.gov.uk/animalh/cvo/report/index.htm.

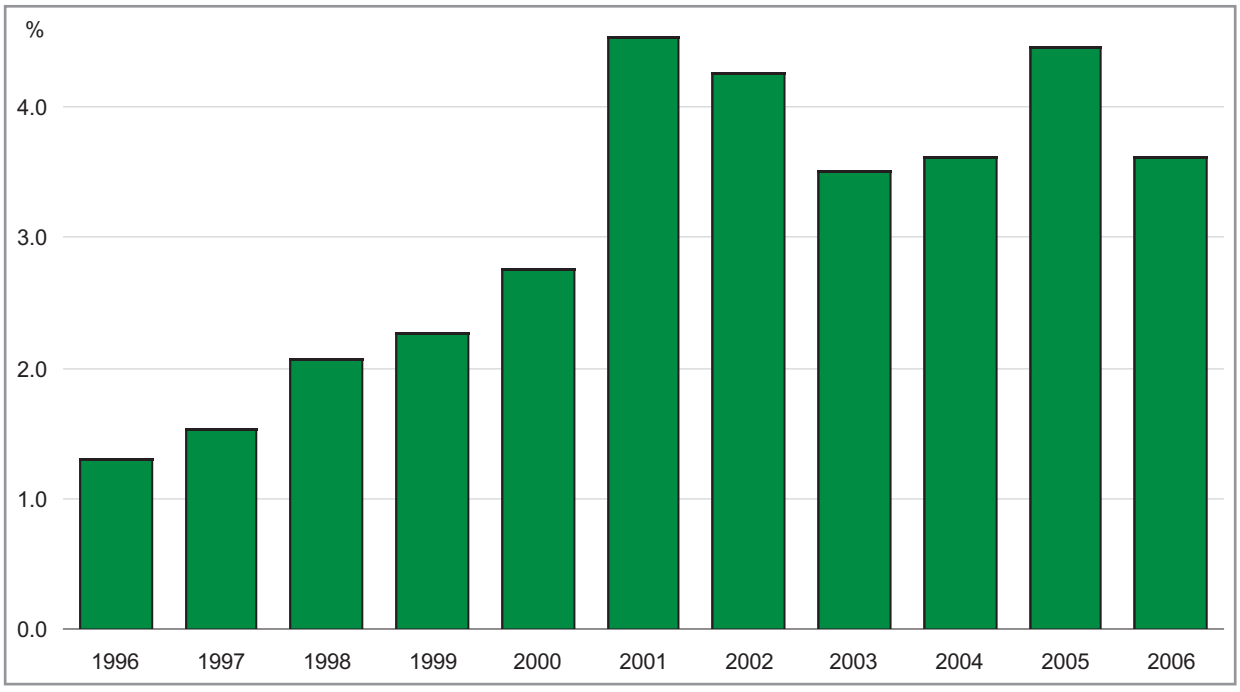
8 DARD in Northern Ireland publishes animal health bulletins on a regular basis via the internet at http://www.dardni.gov.uk/index/dard-statistics.

9 Bovine Tuberculosis (bTB) continues to be a disease affecting a small percentage of the national cattle herd but providing an ongoing challenge to both industry and government. Due to laboratory procedures there is a time-lag in confirmed incidents so the final results for 2007 are not yet available. Table 14.1 shows results for 2006, broken down by region and country, plus total results for 2005.

10 During 2006, 21 per cent more tests were carried out on unrestricted herds in Great Britain than in 2005 (56,208 against 46,629). However, the number of new herd incidents in Great Britain decreased from 3,673 in 2005 to 3,528 in 2006 (down 3.9 per cent). Infection was confirmed in 2,040 of these new incidents (down 2.2 per cent on the previous year).

11 The number of confirmed incidents recorded is standardised using the number of tests carried out to give a confirmed new bTB incidence rate (calculated as "number of confirmed incidents" divided by "number of unrestricted tests"). In 2006, this gives a confirmed new incidence rate of 3.6 per cent, which can be interpreted as "for every 100 tests in unrestricted cattle herds, an average of 3.6 new confirmed incidents were detected". This is a decrease from 2005 when 4.5 per cent of tests resulted in a new confirmed incident.

Chart 14.1 Confirmed new incident 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 14.1 Bovine tuberculosis:summary statistics for the testing of animals and herds 2006

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 2006	Great Britain total 2005	Northern Ireland total 2006	Northern Ireland total 2005
Cattle herds										
1. Total number of cattle herds registered on Vetnet	22 976	24 579	12 737	60 292	14 691	14 430	89 413	91 103	27 710	28 263
2. ...of which were under TB2 restrictions because of a TB incident at some time during the reporting period	3 740	611	179	4 530	1 274	58	5 862	5 682	. .	. .
TB tests carried out (in year to date)										
3. Total number of unrestricted herd tests	22 539	12 718	5 003	40 277	11 632	4 299	56 208	46 629	29 218	30 263
4. Total number of cattle tested	2 864 566	1 013 605	253 587	4 131 758	1 097 520	240 661	5 469 939	4 849 206	1 711 678	1 776 099
TB incidents (started in year to date)										
5. Total new herd TB incidents	2 170	414	134	2 718	766	44	3 528	3 673	1 513	1 792
6. ...of which are considered confirmed new TB incidents (i.e. CNIs)	1 332	199	59	1 590	432	18	2 040	2 086	955	1 012
7. ...of which are considered unconfirmed TB incidents	827	213	75	1 115	328	26	1 469	1 578	558	780
8. ...of which are still unclassified TB incidents (pending culture results)	11	2	-	13	6	-	19	9	. .	. .
Animals slaughtered (In year to date, excluding any reactors awaiting slaughter on the date of the data download)										
9. As Reactors (inc. IRx3)	12 527	1 654	400	14 581	5 241	169	19 991	25 769	9 383	10 479
10. As Inconclusive Reactors (IRs)	294	21	46	361	103	9	473	568	. .	. .
11. As Direct Contacts (DCs)	786	229	46	1 061	721	32	1 814	3 744	689	1 208
12. Slaughterhouse cases reported to the SVS (of which confirmed)	425 (260)	145 (84)	47 (27)	617 (371)	82 (35)	29 (10)	728 (416)	591 (390)	979 (n/a)	609 (n/a)
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 2006	3 070	937	522	4 529	2 050	277	6 856	5 748	. .	. .

(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.

12 With the exception of the FMD years of 2001-2002, confirmed incidence of bTB in Great Britain has been steadily increasing over the past twenty years. The incidence rate in 2005 was the highest incidence rate over the last twenty years (excluding 2001, when testing was focussed on the most "at risk" herds). However, 2006 data shows a reversal in this trend, with a drop in the confirmed incidence rate. It remains to be seen whether this is a true reversal in trend, or a temporary phenomenon.

13 A total of 5,862 cattle herds were under restrictions due to a bTB incident at some time during 2006 in Great Britain, compared with 5,682 herds in 2005. This figure includes new herd incidents plus any incidents disclosed in previous years and still unresolved in 2006. At the end of 2006, a total of 6,856 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 2006, 92 per cent of the cattle herds in Great Britain were considered officially bTB free compared to 94 per cent at the end of 2005.

14 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.

15 In February 2007, the highly pathogenic strain of Avian Influenza, H5N1, was found in a turkey finishing site in Suffolk. Restrictions were put in place and the entire depopulation of birds on the site took place. Following epidemiological investigation into the source and spread of the disease, it was determined that the outbreak had been confined to the single farm. No further cases of H5N1 were found and restrictions were lifted on 12 March 2007. A second outbreak of H5N1 was found in Diss, Norfolk in November 2007. Once again zones were set up and movement restrictions were put in place. Any birds at risk of infection in the zones were subsequently slaughtered. Further cases in surrounding farms were confirmed. On 19 December 2007, the Surveillance and Restricted Zones were lifted and with the exception of some limited restrictions on the export of certain poultry meat, all movement restrictions were lifted.

16 On 3 August 2007, Foot and Mouth Disease (FMD) was confirmed on a premise in Surrey. Since that date, there have been a further seven confirmed infected premises of FMD in Surrey, Windsor and Maidenhead. The last infected premises in the outbreak was confirmed on 30 September. There have been no further confirmed cases of foot and mouth disease since this date. From 3 August to 17 October there was a complete movement ban on animals across the country. On 17 October, the movement restrictions were lifted for animals outside the FMD risk area. On 6 November, animals outside of the FMD risk area were eligible for export to the EU. On 31 December 2007, 3 months after the last infected premise was confirmed, all restrictions on movement and exports of animals were lifted in the FMD risk areas.

17 The first case of Bluetongue Virus recorded in the United Kingdom was detected on 22 September 2007. On 28 September, Defra confirmed that Bluetongue disease was circulating between the local animal and midge population in East Anglia after an increase in cases, leading to movement restrictions being put into place in the surrounding areas (relating to movements into and out of the Control and Protection Zones). The announcement followed epidemiological investigation of several cases of the disease and took account of surveillance results. Subsequent cases led to the extension of the Control and Protection Zones and at the end of 2007 most of Central and Southern England, excluding the South-West, were under movement restrictions due to the spread of the disease. Bluetongue is a disease of ruminants, including sheep, cattle, deer, camelids and goats. It does not affect humans.

Animal Welfare

18 Defra, the Scottish Government, Welsh Assemby Government and Department of Agriculture and Rural Development, Northern Ireland 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 State Veterinary Service (SVS) visits and scanning visits by the SVS, Meat Hygiene Service (MHS) and Veterinary Laboratory Agency (VLA). In Northern Ireland many of these checks fall to the Veterinary Service (VS).

19 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 "compliant" visits. Targeted visits are undertaken where there is possible cause for concern for the welfare for livestock. Targeted and compliant inspection results are reported jointly in the statistics that are produced.

20 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.

21 The following graphs show a summary of results from welfare inspections on farm.

On farm welfare

22 Animal Health carried out 8,456 welfare inspections at 4,202 visits during 2007 (2.0 inspections per visit) on farms in Great Britain to check that legislation and the welfare codes are being followed. 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.

23 Results from on farm welfare assessments show that there was a high level of compliance on farms, with 93 per cent of assessments at visits achieving either full compliance with legislation and code (grade A) or full compliance with legislation (grade B). Overall 1.5 per cent of assessments revealed a level of non compliance which was deemed to cause 'unnecessary pain, unnecessary suffering'.

24 Where visits are based on complaints, cross compliance checks, or are targeted, 8.0 per cent of the visits showed non-compliance with legislation (grade C) or unnecessary pain, unnecessary distress (grade D), compared to 1.1 per cent of visits carried out as special, elective or programmed visits. This represents a fall from 2005 when 13 per cent of complaint and targeted visits showed some level of non-compliance; the percentage of elective and programmed visits showing some non-compliance remained the same.

Chart 14.2 Results of SVS assessments of the welfare of animals on farm in Great Britain between 1 January and 31 December 2007 during complaint and target visits

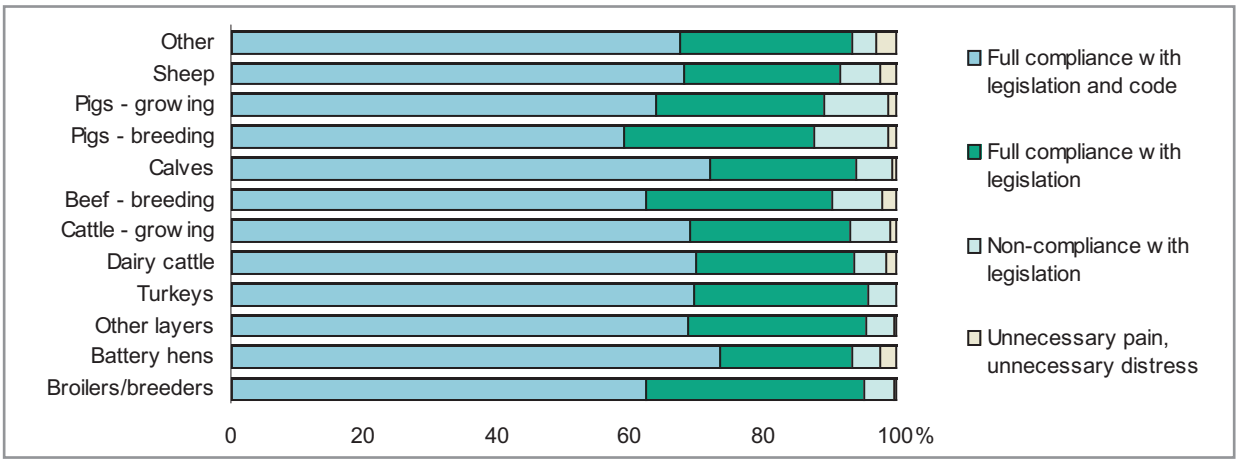


Chart 14.3 Results of SVS assessments of the welfare of animals on farm in Great Britain between 1 January and 31 December 2007 during programme and elective visits

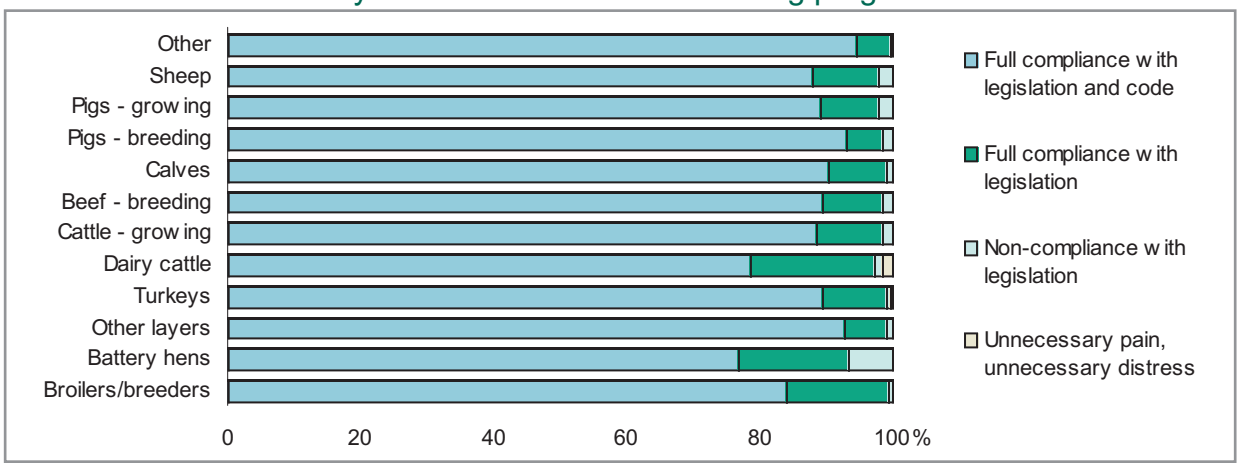


Chart 14.4 Results of VS assessments of the welfare of animals on farm in Northern Ireland between 1 January and 31 December 2007 during complaint and target visits

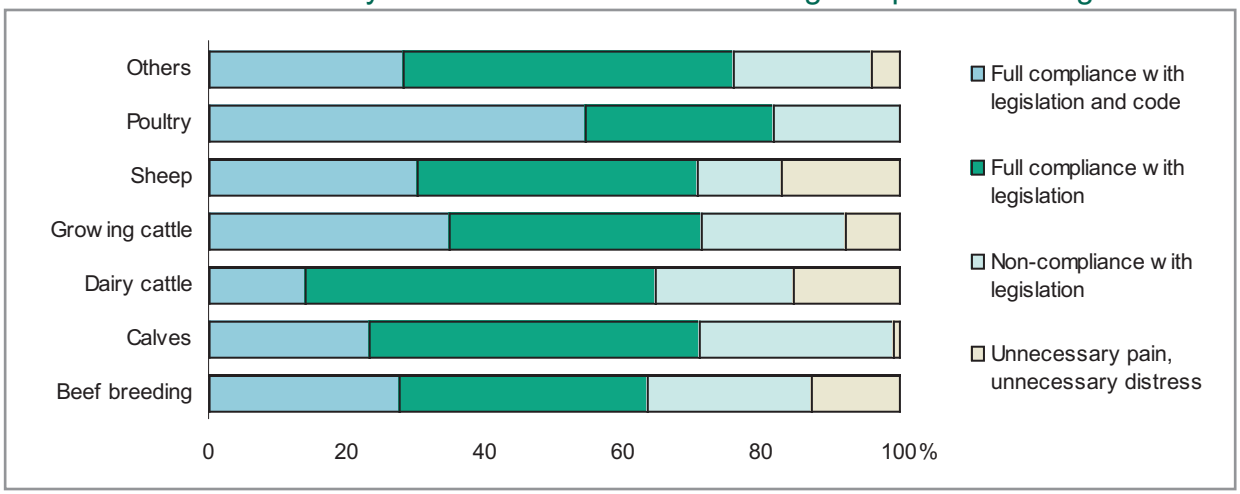
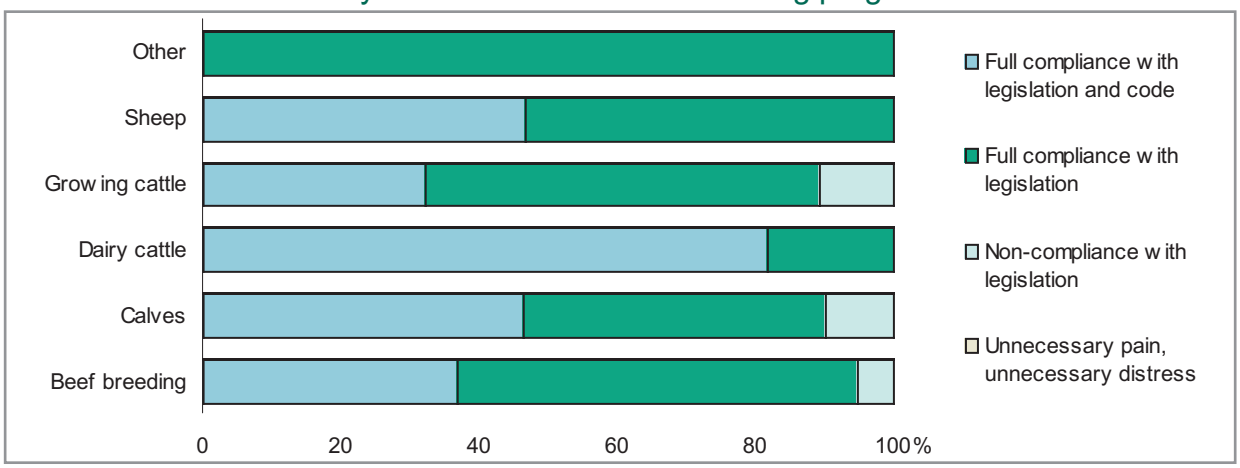


Chart 14.5 Results of VS assessments of the welfare of animals on farm in Northern Ireland between 1 January and 31 December 2007 during programme and elective visits



25 During 2007 the Veterinary Service in Northern Ireland carried out 727 welfare inspections on farms. Of this total 79 per cent were complaint, targeted, or cross compliance inspections (where herds are identified as being “at risk”) with the remaining 21 per cent programmed, elective or random cross compliance checks.

26 Of the programmed and elective visits 95 per cent achieved an overall visit assessment of compliance with legislation, of which 43 per cent complied with both legislation and code. Non compliance was found on 5 per cent of visits. No visits were assessed as showing unnecessary pain and unnecessary distress to the animals.

27 Of the complaint and targeted visits 69 per cent of visits achieved compliance with legislation and 27 per cent of visits showed evidence of compliance with both legislation and code. However, in this group of visits 10 per cent were assessed to be at a level where unnecessary pain and distress is caused.

Chapter 15 Environment

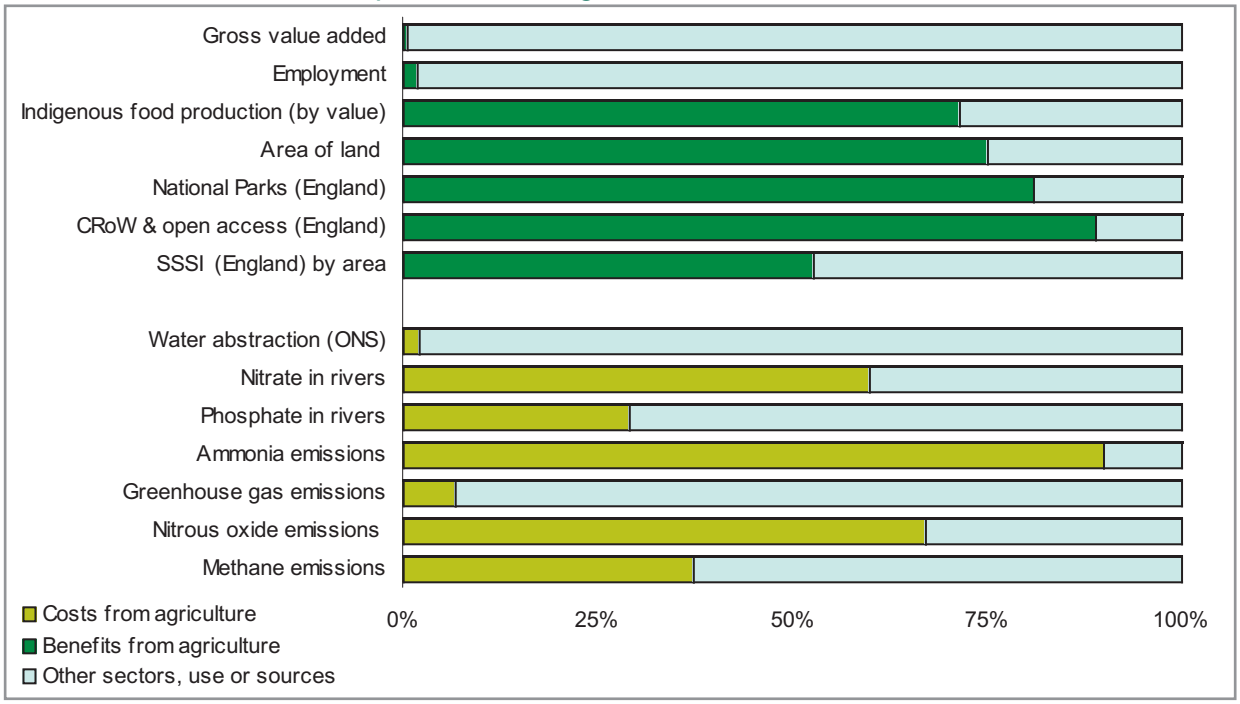
2007

Summary

- Agricultural activities cover about three quarters of the land area in the United Kingdom.
- In 2006, around one fifth of United Kingdom habitat ASSIs/SSSIs on agriculturally managed land were in a favourable condition and one fifth were recovering.
- Around 7 million hectares of farmland in the United Kingdom are managed under agri-environment schemes.
- The index of farmland bird populations declined by about half between 1978 and 1993, and has since remained relatively stable.
- Agricultural emissions of methane have fallen by 13 per cent over the 10 years up to 2005.
- Agricultural emissions of nitrous oxide have fallen by 13 per cent over the 10 years up to 2005.
- Ammonia emissions from agriculture have reduced by 14 per cent over the 10 years to 2005.
- Nitrate levels in rivers in England fell between 2000 and 2003 but have since remained steady. In Scotland, Wales and Northern Ireland they remain low.
- Phosphate levels in rivers in all countries have fallen slightly between 2000 and 2006.
- Total energy use by agriculture has fallen by 23 per cent over 10 years.
- Over the last 10 years, the use of nitrate and phosphate fertilisers has shown an overall decline.

Introduction

Chart 15.1 Environmental profile of the agricultural sector



Source: Collated by Defra

1 In the United Kingdom, agricultural activities cover around three-quarters of the land area and produce two-thirds of United Kingdom food. The agricultural sector is made up of around 310 thousand holdings varying widely in size and type. A range of different farming practices are employed involving: 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 extent to which farming activities impact on the environment. The effects on the environment are significant and complex; farming activities can give rise to both positive and negative impacts on the environment operating at local, regional, national and global levels.

2 Chart 15.1 puts United Kingdom agriculture into context by bringing together data to summarise agriculture in comparison with other sectors in the United Kingdom. It shows the agricultural sector as a proportion of the United Kingdom (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 and 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.

3 Changes were made in 2005 (CAP reform) to the way subsidies are paid to farmers. Farmers are now required to farm in an environmentally responsible way to meet the cross compliance criteria to receive their single farm payment. This means keeping land in good agricultural and environmental condition. Further support for environmental issues comes from various agri-environment schemes. Tables of payments, areas of land and number of agri-environment agreements are in chapter 12.

Environmental impacts

4 This section brings together physical data to show the state and trend of the impacts of agriculture on the environment. This includes farm woodland, but not forests or other woodland. The data have been selected to put these impacts into context and show the agricultural contribution to environmental issues. They cover the major environmental issues where reliable sources exist.

Landscape (map 15.1, tables 15.1, 15.2)

5 The countryside has been shaped and managed by agriculture for several thousand years. Traditional farming methods together with climatic conditions and the underlying geology have produced distinctive and unique regional landscapes. Local landscapes are shaped by natural landforms, local building materials, species and habitat types and land management practices. These have combined to create distinctive and unique character areas in the United Kingdom. Our ideas of landscape are rooted in history and local, regional and national cultures. National Parks and Areas of Outstanding Natural Beauty (AONB), National Scenic Areas in Scotland, are designated for various reasons including their landscape value.

6 Table 15.1 shows the area of designated land in National Parks and Areas of Outstanding Natural Beauty (AONB), Natural Scenic Areas (NSA) in Scotland. Map 15.1 shows their distribution in Great Britain.

7 Agriculture can help conserve historic landscape by protecting features such as historic field patterns which are all part of our heritage. Local materials and vernacular building techniques make unique contributions to the visual impact of the countryside. Traditional buildings and field boundaries are important characteristic features of the landscape. Table 15.2 shows the stock and changes in stock of some landscape boundary features from the Countryside Surveys of 1990 and 1998. Further information can be found at: http://www naturalengland.org.uk/; http://www.snh.org.uk/; http://www.doeni.gov.uk/, http://www.ccw.gov.uk/; http://www.cs2000.org.uk/index.htm.

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Map 15.1 Designated areas in Great Britain

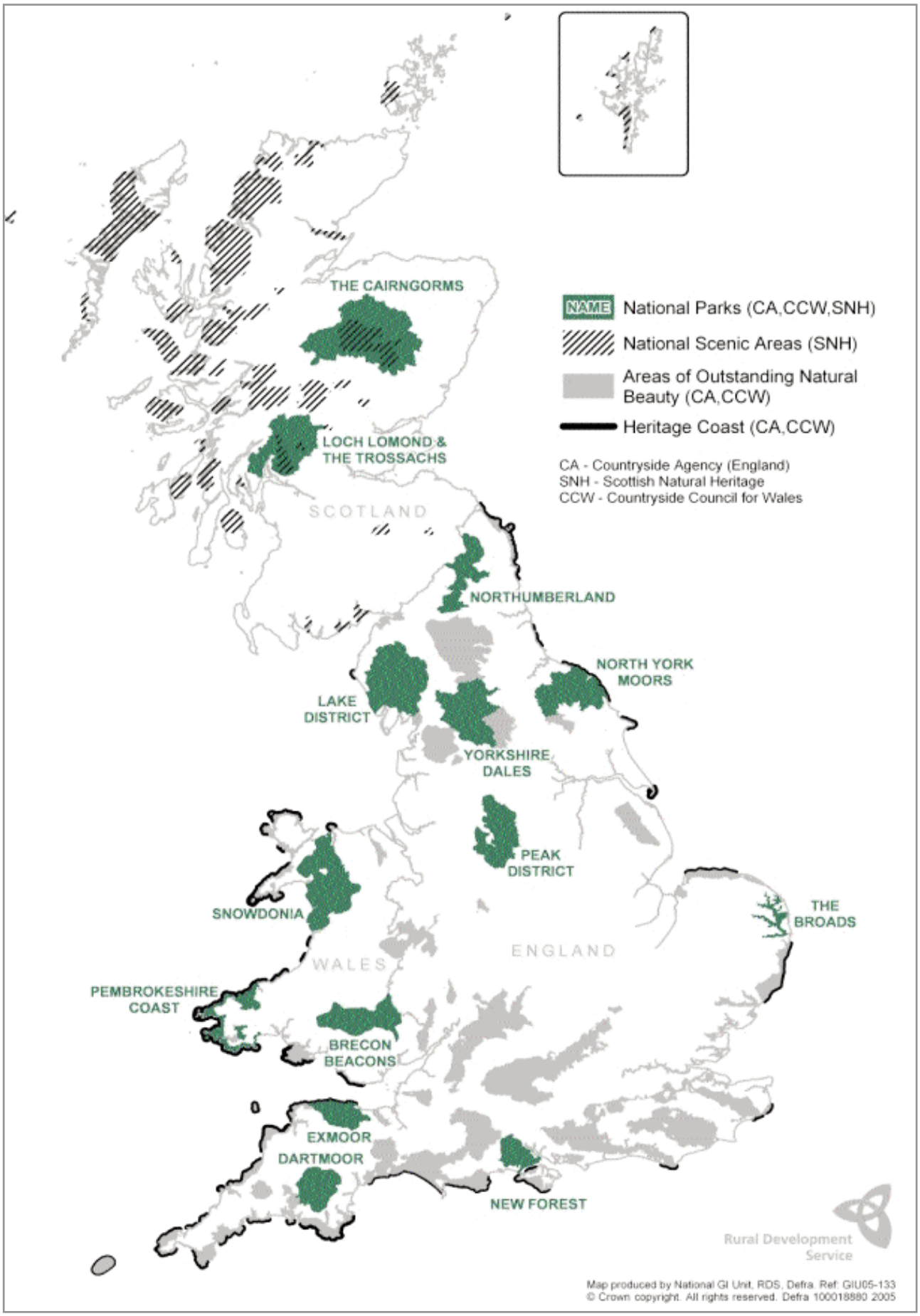

Table 15.1 Designated National Parks and Areas, Outstanding Natural Beauty and Natural Scenic Areas 2006 (a) (b) (c)

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

	England			Wales			Scotland			Northern Ireland		
	000 ha	Number	% of total land	000 ha	Number	% of total land	000 ha	Number	% of total land	000 ha	Number	% of total land
National parks	1 051	9	8	410	3	20	568	2	9	. .	. .	. .
AONB / NSA	2 064	36	16	105	5	4	1 002	40	17	286	9	20

Source, Defra, English Nature, Department of Environment (Northern Ireland), Countryside Council for Wales, Welsh Assembly Government, Scottish Government, Scottish Natural Heritage, National Trust and Scottish National Trust

(a) Generally AONBs and National Parks are mutually exclusive, however, some AONBs exist within the Broads and Natural Scenic Areas remain within the Scottish National Parks.

(b) The total number of AONBs in England and Wales is 40, as the Wye Valley AONB spans both countries, the respective areas are included in each country in this table.

(c) The percentage is included for comparison purposes. Areas of land are not always consistent in their inclusion of lakes, estuaries and other bodies of water.

Table 15.2 Stock of linear landscape features in Great Britain, 1998 and changes 1990 to 1998

For definitions of linear landscape features used in Countryside Survey 2000 see Accounting for Nature: assessing habitats in the UK countryside.

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

	England and Wales			Scotland		
	1998 Length	Change in length 1990-1998		1998 Length	Change in length 1990-1998	
	thousand km		%	thousand km		%
Hedge	449.3	- 0.4	-	19.0	0.8	4.6
Remnant Hedge	52.3	- 13.5	- 20.9	5.3	- 0.9	- 20.0
Wall	105.8	- 2.7	- 2.5	87.1	- 1.5	- 1.7
Line of trees/shrubs/relict hedge and fence	70.0	15.5	30.8	11.1	1.4	14.0
Line of trees/shrubs/relict hedge	83.4	19.6	31.4	13.3	2.4	22.2
Bank/grass strip	70.0	- 1.9	- 2.5	12.4	0.8	6.3
Fence	423.2	25.6	6.6	233.7	8.6	3.9
Total	1 253.9	42.3	3.5	382.0	11.7	3.2

Source: CS2000, Defra e-Digest of Environmental Statistics

Habitats and species (tables 15.3, 15.4; charts 15.2 to 15.5)

8 By interacting with environmental factors such as soil type, climatic conditions and existing populations of flora and fauna, agriculture creates, maintains and supports semi-natural habitats, but can also damage them. Agricultural land use and other factors, such as recreational use, impact on habitats and species in a complex and diverse manner.

9 Table 15.3 shows the stock of broad habitats in the United Kingdom and the relative dominance in terms of area of habitat of land under intensive agriculture. The flora and fauna will not only vary between the different habitats, but also within the individual habitats depending on local features.

10 National Nature Reserves (NNR) are of national importance. Sites of Special Scientific Interest (SSSIs) and Areas of Special Scientific Interest (ASSIs) in Northern Ireland protect and conserve the most important wildlife and geological sites in the United Kingdom. The Natura 2000 sites: Special Protection Areas (birds); Special Areas of Conservation (habitats) and Ramsar (wetlands) sites are internationally important sites for species and habitats usually designated within the SSSIs and ASSIs. Table 15.4 shows the areas of these designated habitats in the countries of the United Kingdom.

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Table 15.3 Stock of broad habitat areas in the United Kingdom 1998

For definitions of broad habitats used in Countryside Survey 2000 see the definitions page in the Land section of the e-Digest

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

Broad Habitat	England and Wales		Scotland		Northern Ireland		United Kingdom	
	000 ha	%	000 ha	%	000 ha	%	000 ha	%
Woodland habitats								
Broadleaved, Mixed and Yew Woodland	1 171	7.7	300	3.7	51	3.7	1 522	6.2
Coniferous Woodland	380	2.5	993	12.4	61	4.4	1 435	5.9
Intensive agriculture								
Improved Grassland	4 431	29.1	1 051	13.1	568	41.0	6 050	24.7
Arable and Horticultural	4 609	30.3	639	8.0	59	4.3	5 307	21.7
Semi-natural habitats								
Neutral Grassland	444	2.9	168	2.1	254	18.3	867	3.5
Bog	180	1.2	2 038	25.4	148	10.7	2 367	9.7
Dwarf Shrub Heath	485	3.2	1 002	12.5	13	0.9	1 500	6.1
Acid Grassland	547	3.6	748	9.3	28	2.0	1 324	5.4
Fen, Marsh and Swamp	210	1.4	337	4.2	53	3.8	600	2.5
Bracken	273	1.8	166	2.1	4	0.3	443	1.8
Calcareous Grassland	38	0.2	27	0.3	1	0.1	66	0.3
Sediment and rock	204	1.3	168	2.1	9	0.6	189	0.8
Water								
Standing Open Water and Canals	106	0.7	85	1.1	. .	. .	. .	. .
Rivers and Streams	43	0.3	21	0.3	. .	. .	. .	. .
Developed habitats								
Built up and Gardens	1 180	7.7	151	1.9	. .	. .	. .	. .
Boundary and Linear Features	411	2.7	87	1.1	. .	. .	. .	. .
Unsurveyed urban land	426	2.8	37	0.1	. .	. .	. .	. .
Unclassified	93	0.6	2	-	143	10.3	. .	. .
Total	15 230	100.0	8 020	100.0	1 385	100.0	24 495	100.0

Source: Countryside Survey 2000, Northern Ireland Countryside Survey 2000, e-Digest of Environmental Statistics

Table 15.4 Designated areas for habitats and species 2006 (a)

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

		England			Wales			Scotland			Northern Ireland		
		000 ha	Number	% of total land	000 ha	Number	% of total land	000 ha	Number	% of total land	000 ha	Number	% of total land
	LNR	35	1 308	-	5	63	-	10	50	-	3	39	-
	NNR	92	221	1	24	67	1	140	66	2	2	9	-
	SSSI / ASSI	1 077	4 113	8	218	1 016	10	1 037	1 456	13	94	241	7
Natura 2000 (b)	SAC	977	240	7	129	97	6	963	238	12	66	52	5
	SPA	713	81	5	82	21	4	630	142	8	109	15	8
	Ramsar	360	70	3	8	13	-	313	51	4	78	21	6

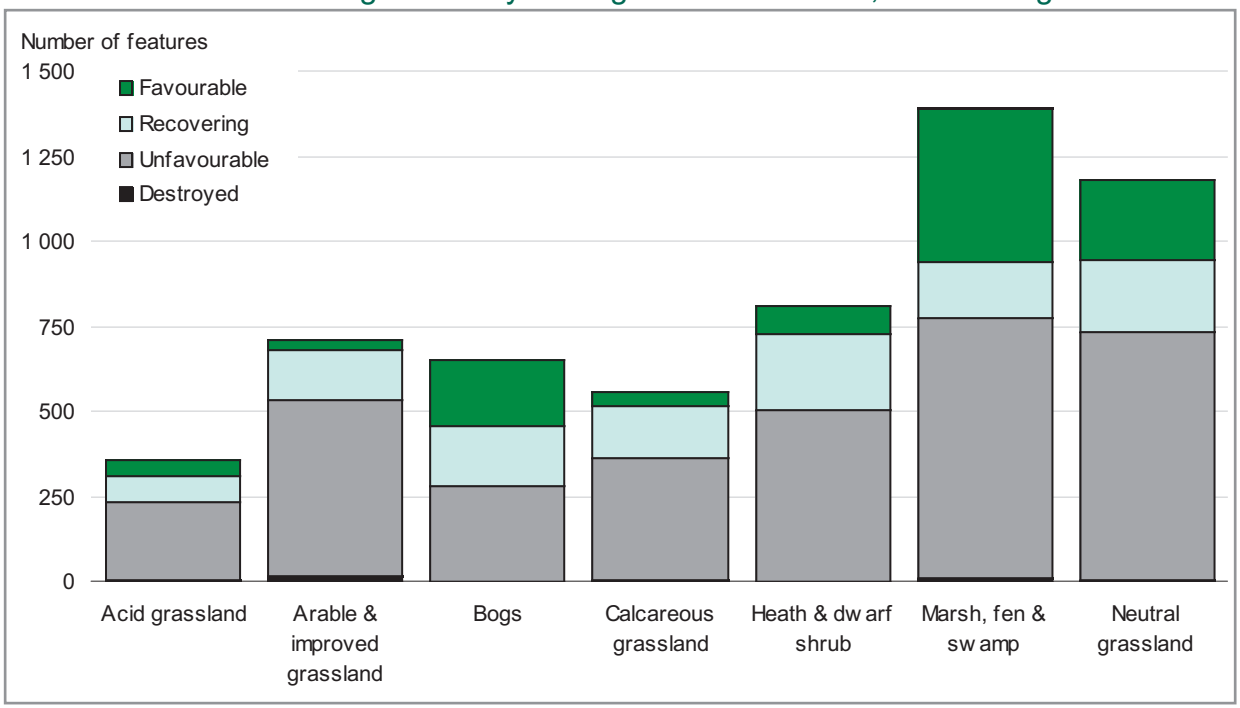
Source: Defra, English Nature, Department of Environment (Northern Ireland), Countryside Council for Wales, Welsh Assembly Government, Scottish Government and Scottish Natural Heritage

a) The percentage is included for comparison purposes. Areas of land are not always consistent in their inclusion of lakes, estuaries and other bodies of water.

b) Natura 2000 sites can be in more than one designation, and are on SSSIs &/or NNR

11 Chart 15.2 shows the condition of those Sites of Special Scientific Interest (Areas of Special Scientific Interest in Northern Ireland), A/SSSIs, for the United Kingdom (2006) that are habitats under predominately agricultural management. These are shown by the number of features, more than one feature can be present within one area of A/SSSI. The assessments are made on a six year rolling programme.

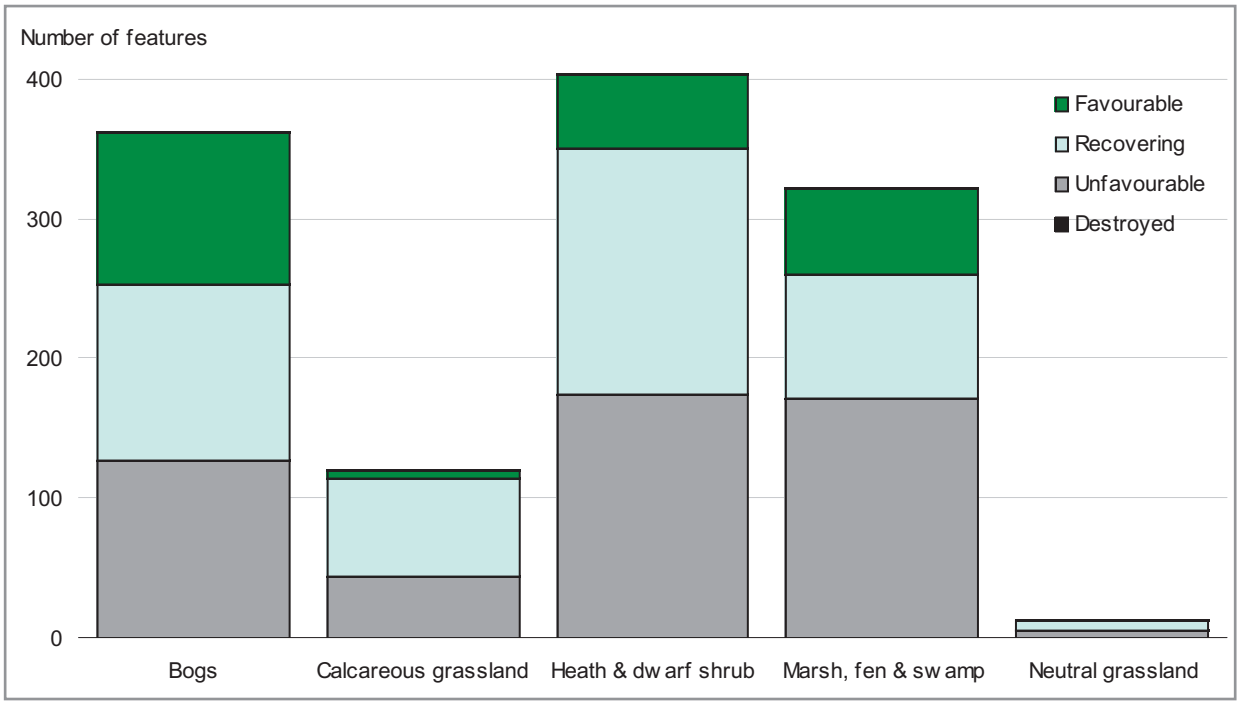
Chart 15.2 Condition of agriculturally managed A/SSSIs 2006; United Kingdom



Sources: Natural England, Scottish Natural Heritage, Countryside Council for Wales and Department of Environment (Northern Ireland)

12 Chart 15.3 shows, by number of features, the condition of Special Areas of Conservation (SACs) features, for the United Kingdom, 2006, for habitats on predominately agriculturally managed land.

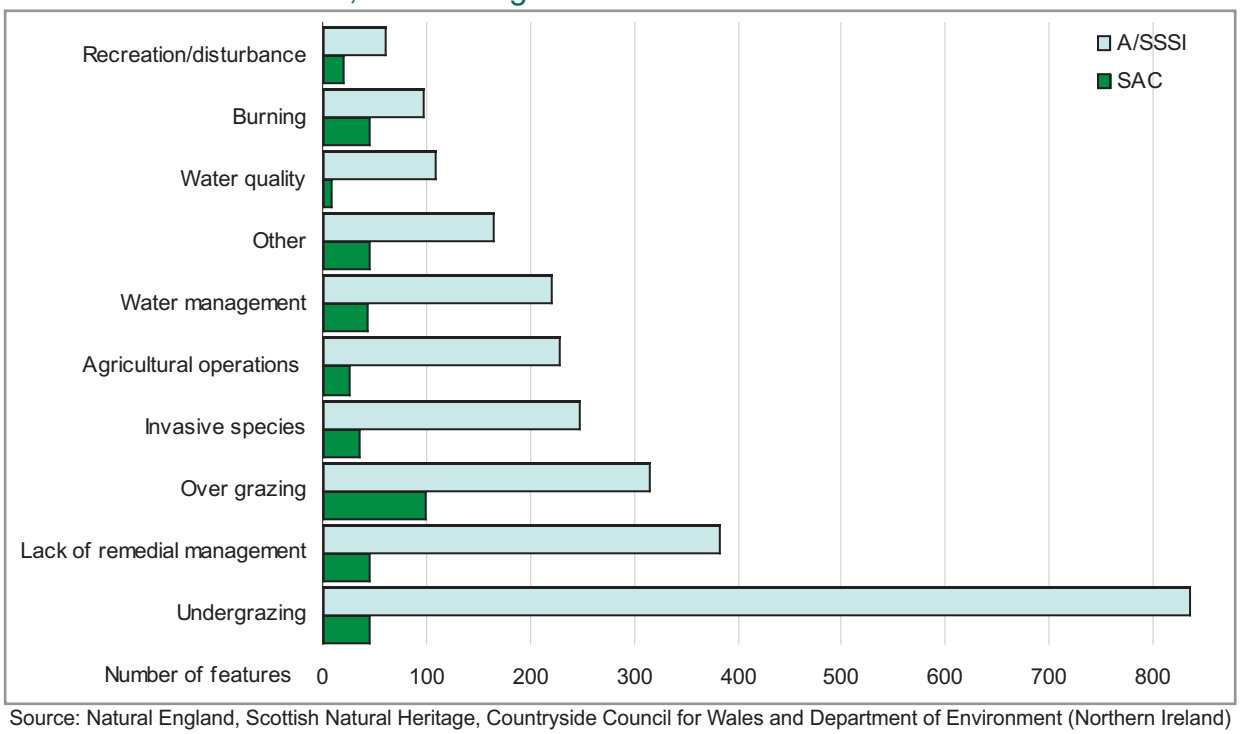
Chart 15.3 Condition of agriculturally managed SACs 2006; United Kingdom



Source: Natural England, Scottish Natural Heritage, Countryside Council for Wales and Department of Environment (Northern Ireland)

13 Chart 15.4 shows the main reasons for adverse conditions, unfavourable and recovering, on predominately agriculturally managed A/SSSIs and SACs. Agricultural activities account for about half of damage to these A/SSSIs and to about 40 percent of these SACs. Indirect damage can be caused on areas outside agriculture, such as sensitive habitats or bodies of water by air or water pollution. Around 30 percent of damage to all A/SSSIs and SACs is from agricultural activities. All data in this section (A/SSSIs & SACs) are extracted from those used in the JNCC Common Standards Monitoring 2007, except the Welsh SSSI data which does not comply with these common standards, but are included for completeness. The categories for the Welsh unfavourable and recovering SSSIs have been apportioned using the 76/24 percentage split suggested in the SSSI review made in 2003. Further details can be found in the 2006 report including the non agricultural features, background and definitions at: http://www.jncc.gov.uk/page-2217.

Chart 15.4 Main reasons for adverse conditions on predominately agriculturally managed A/SSSIs and SACs 2006; United Kingdom

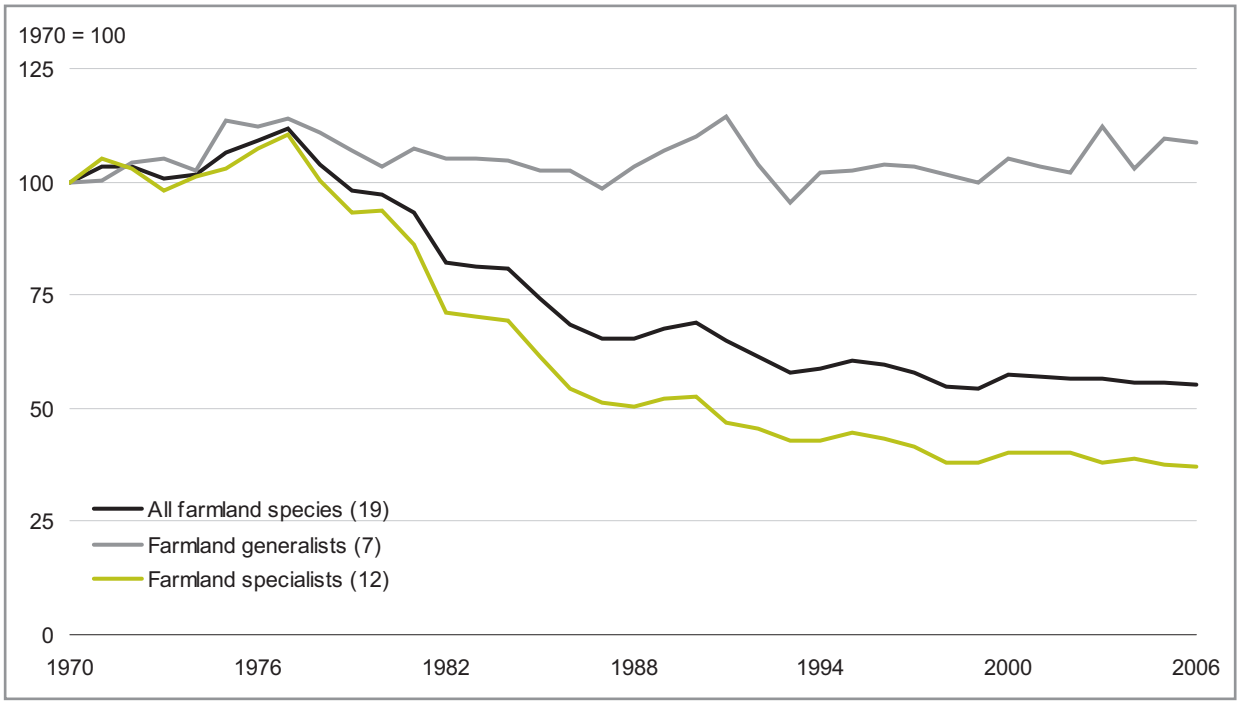


Source: Natural England, Scottish Natural Heritage, Countryside Council for Wales and Department of Environment (Northern Ireland)

14 Farming activities carried out in an environmentally responsible manner will help support, maintain and enhance the diversity of the landscapes, habitats and food sources for farmland wildlife. Much of our flora and fauna have adapted to agricultural systems, the common names of wild species indicate their historic relationship with farming, such as corncrake, barn owl, hedge sparrow, field poppy, corn cockle and corn flower.

15 Chart 15.5 shows the trends in farmland bird populations since 1970. Bird populations are considered good indicators of the state of wildlife since they have a wide habitat distribution and are near the top of the food chain. Therefore, changes in the bird population reflect changes in habitat diversity and within the food chain. The chart shows that, although 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 per cent by the late 1990s and have since remained relatively stable. Further information can be found at: http://www.bto.org/; http://www.rspb.org.uk/.

Chart 15.5 Farmland bird index; United Kingdom



Source: Defra/RSPB/BTO

16 Land under agricultural management can still provide many of the necessary functions that the natural land or wilderness delivers. The natural environment consists of ecosystems: functioning units of interacting plants, animals and micro-organisms with other non living elements. These provide beneficial goods and services for both ecological and economic functions including:

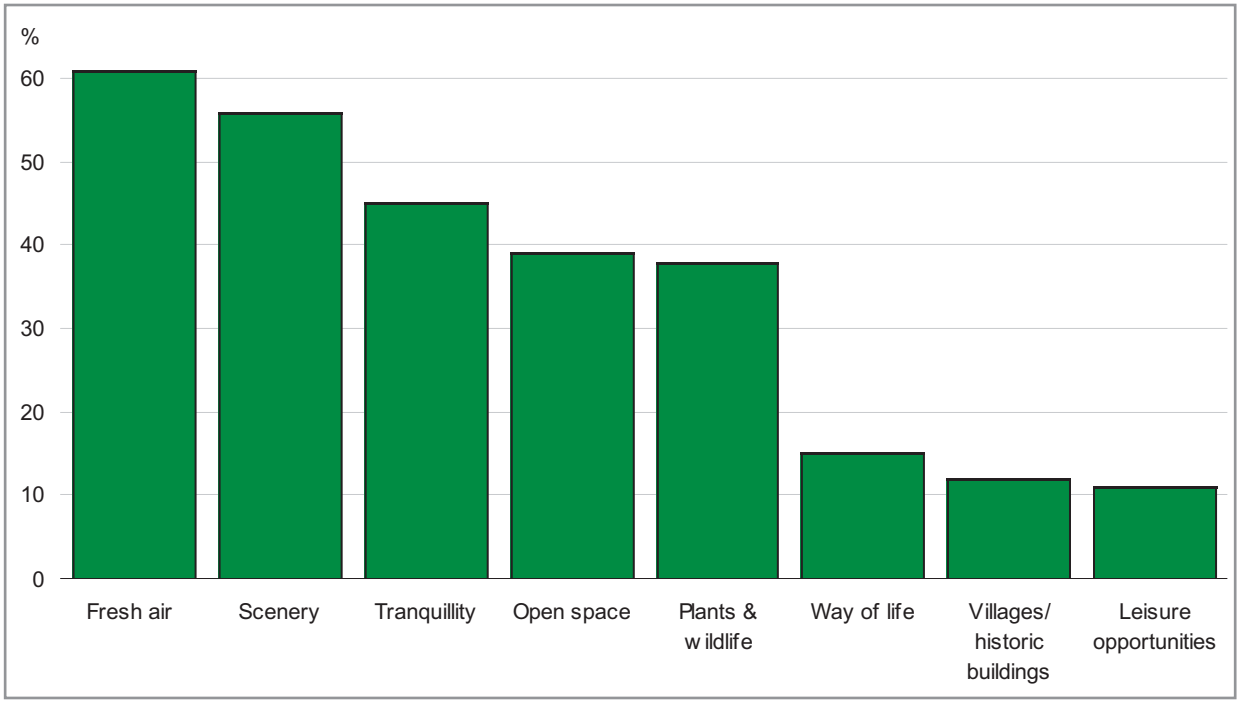
- filtering and purifying air, water and soils, recharging aquifers;
- nutrient cycling, nitrogen fixation, carbon sequestration and soil formation;
- pest and disease control, climate regulation, mitigation of storms and floods, erosion control, regulation of rainfall and water supply;
- habitat provision and storehouse of genetic material;
- production of biomass, raw materials and food, pollination and seed dispersal;
- aesthetic, recreational and cultural opportunities.

17 Agriculture plays a role in providing many of the functions. Further information on ecosystems can be found at: http://www.defra.gov.uk/wildlife-countryside/natres/eco-actionp.htm

Recreation (charts 15.6, 15.7)

18 The countryside has been shaped and managed by agriculture for several thousand years. It is valued for: landscapes; tranquillity; open spaces; fresh air and recreational opportunities. The landscape is made more accessible for recreational activities, such as walking, cycling and horse riding, by the network of paths, bridleways and green lanes which cross farmland. From the 2007 Survey of Public Attitudes & Behaviour Towards the Environment (England), over 90 per cent visit the open countryside sometime during the year, over two thirds of these visiting at least once a month. Chart 15.6 shows the most important aspects for which people visit the countryside, up to 3 aspects are included per person. Over 60 per cent say that fresh air is an important aspect of their visit, 56 per cent the scenery and 45 per cent tranquillity.

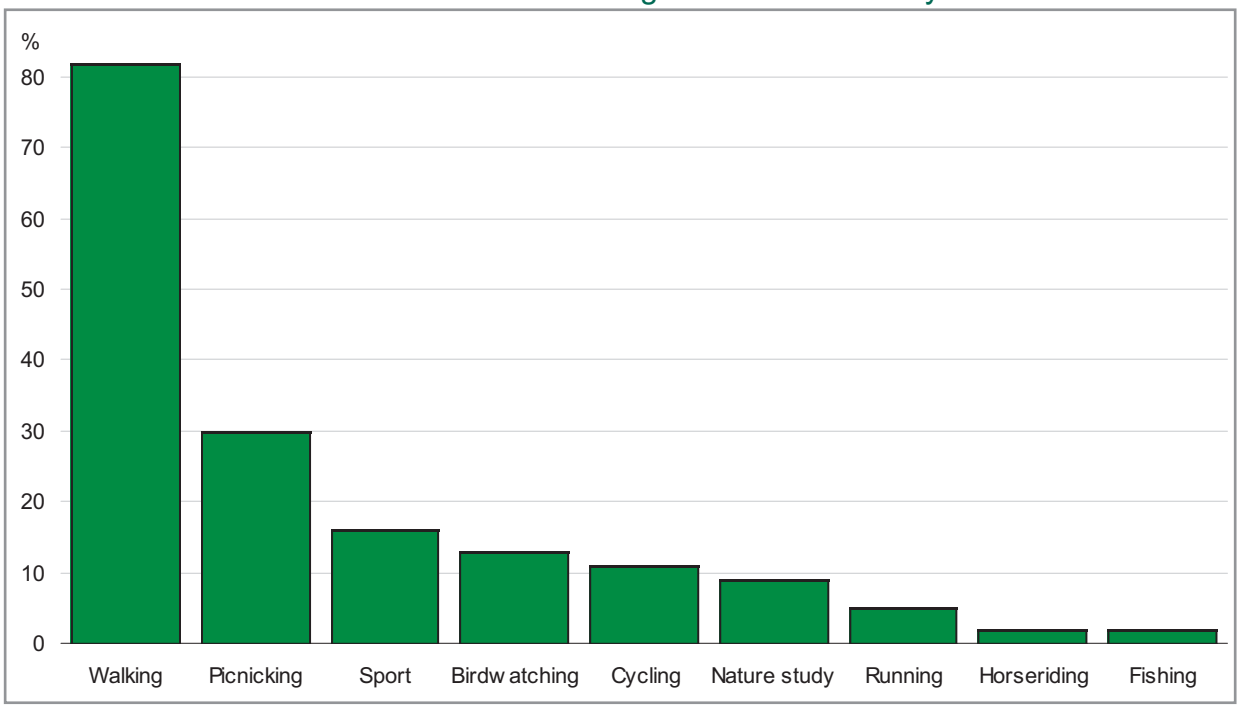
Chart 15.6 Three most important aspects of visits to the countryside



Source: Survey of Public Attitudes & Behaviour Towards the Environment 2007

19 Chart 15.7 shows the activities undertaken by those visiting the countryside, some include more than one activity. Over 80 percent go walking, 30 per have a picnic and 13 per cent go birdwatching. Further information on the survey can be found at: http://www.defra.gov.uk/environment/statistics/pubatt/index.htm

Chart 15.7 Recreational activities taken during visits to the countryside



Source: Survey of Public Attitudes & Behaviour Towards the Environment 2007

20 The area of open access has increased in England and Wales by an additional million hectares under the Countryside and Rights of Way Act 2000. In Scotland the Land Reform (Scotland) Act 2003 gives a right of responsible access to all land and inland water for recreational and educational purposes. Part 1 of the Act

came into force in 2005. Further information can be found at: http://www.defra.gov.uk/wildlife-countryside/cl/accessopen/index.htm or http://www.outdooraccess-scotland.com/default.asp. Over 100 million visits are made to National Parks annually.

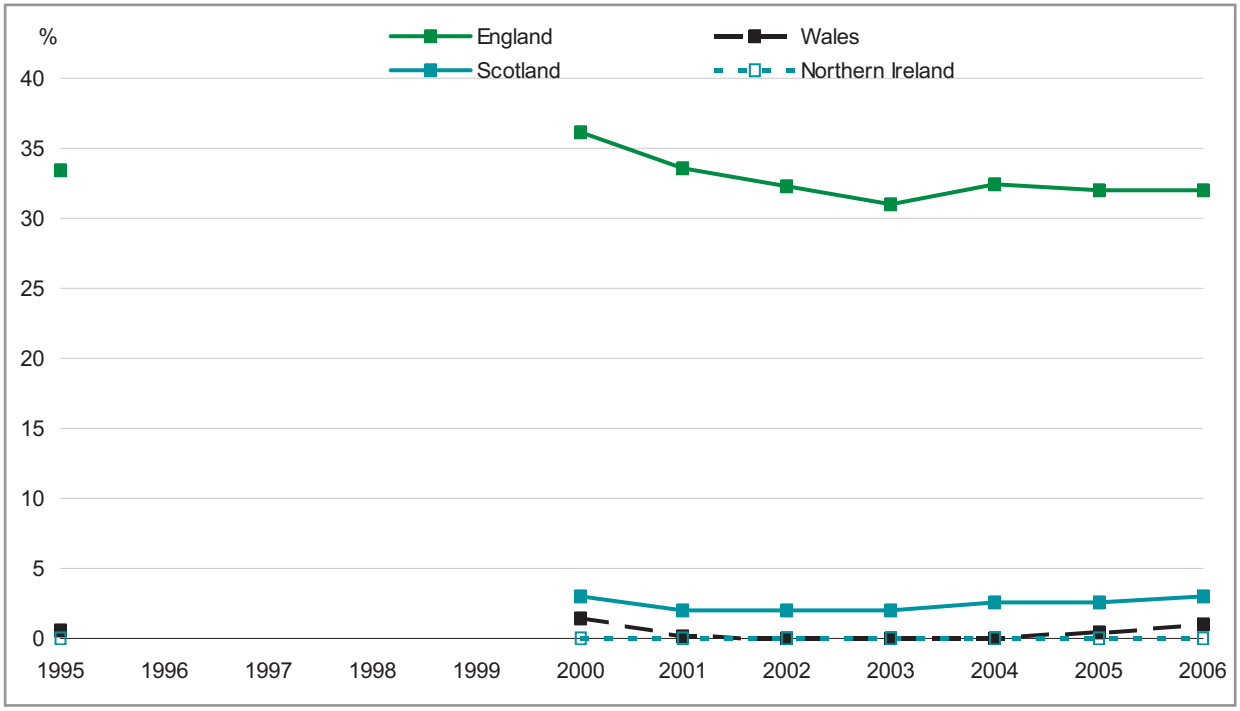
Water (charts 15.8, 15.9)

21 River and groundwater are important resources for agriculture. Water used for agriculture represents about 2 per cent of water abstracted. Agricultural use of water can have both positive and negative contributions to flooding, soil erosion and the recharge of aquifers.

22 Farming is a major source of water pollution, both diffuse, such as from fertiliser and pesticides spread on the land, and to a lesser extent from point sources such as runoff from livestock buildings. The key areas of concern are:

- nitrate pollution in surface and groundwater;
- phosphorus levels in surface water;
- contamination by pesticides;
- and other environmental problems including the harmful effects of soil erosion sediments and mineral salts resulting in impaired drinking water.

Chart 15.8 Per cent of river length with nitrate levels greater than 30mg NO_3 per litre

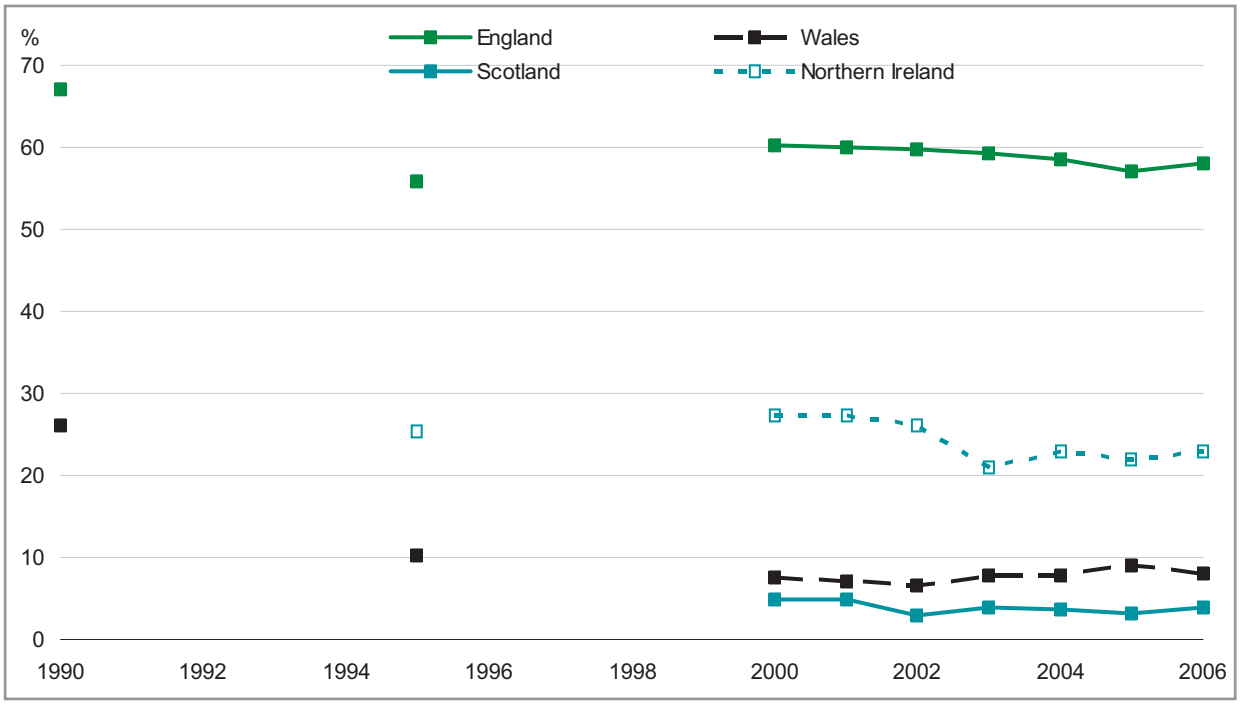


Source: Environment Agency, Scottish Environment Protection Agency, Environment & Heritage Service, Defra e-Digest of Environmental Statistics

23 Chart 15.8 shows the lengths of rivers with nitrates levels over 30 mg NO_3 per litre. In Northern Ireland, Wales and Scotland these remain low. In England levels have fallen overall since 2000 (though 2004 shows an increase) reflecting the decrease in fertiliser use (chart 15.13 and paragraph 42). Agriculture accounts for around 60 per cent (ADAS report 2004) of the nitrate in rivers.

24 Chart 15.9 shows phosphate levels in rivers by country. High levels 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 (White and Hammond 2006) of phosphates in river water. Further information can be found at: http://www.environment-agency.gov.uk/?lang=_e, http://www.sepa.org.uk/, http://www.doeni.gov.uk/.

Chart 15.9 Per cent of river length with phosphate levels greater than 0.1mg P per litre

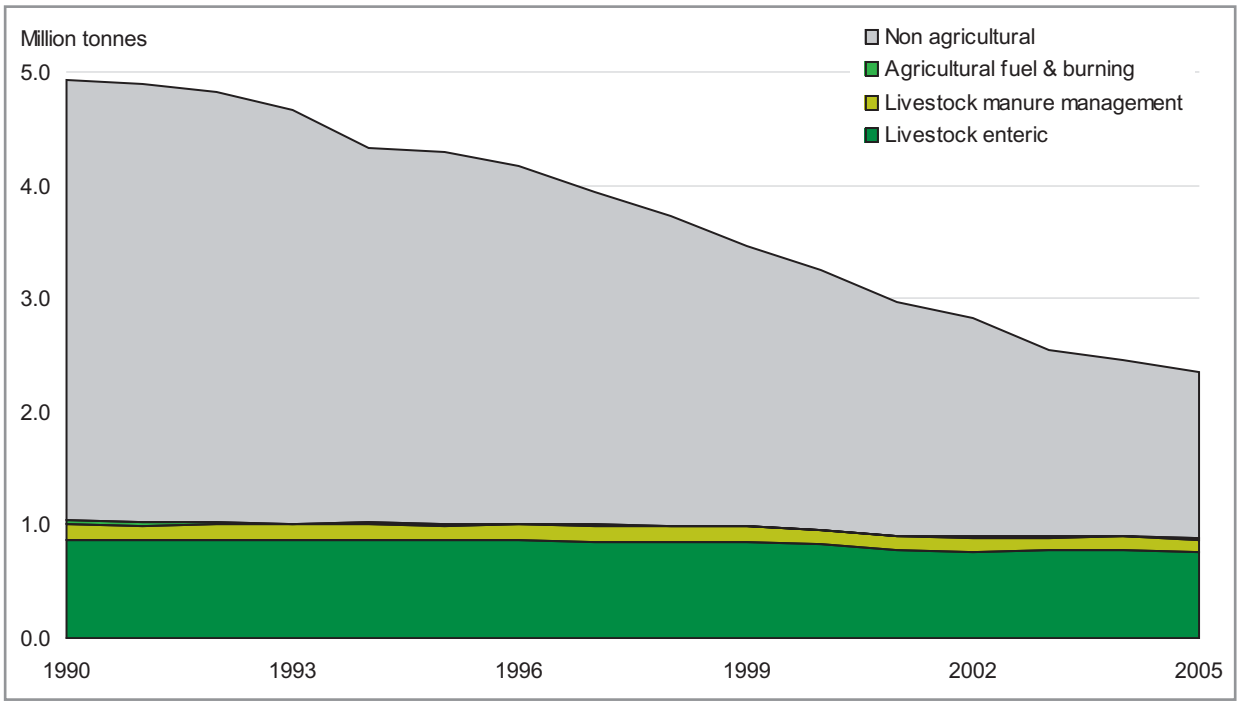


Source: Environment Agency, Scottish Environment Protection Agency, Environment & Heritage Service, Defra e-Digest of Environmental Statistics

Air (charts 15.10 to 15.12)

25 Emissions of carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) are of concern as they are greenhouse gasses and contribute to climate change. Methane and nitrous oxide have global warming potentials greater than carbon dioxide of 21 and 310 times respectively. Greenhouse gas emissions from agriculture account for around 7 per cent of total United Kingdom emissions.

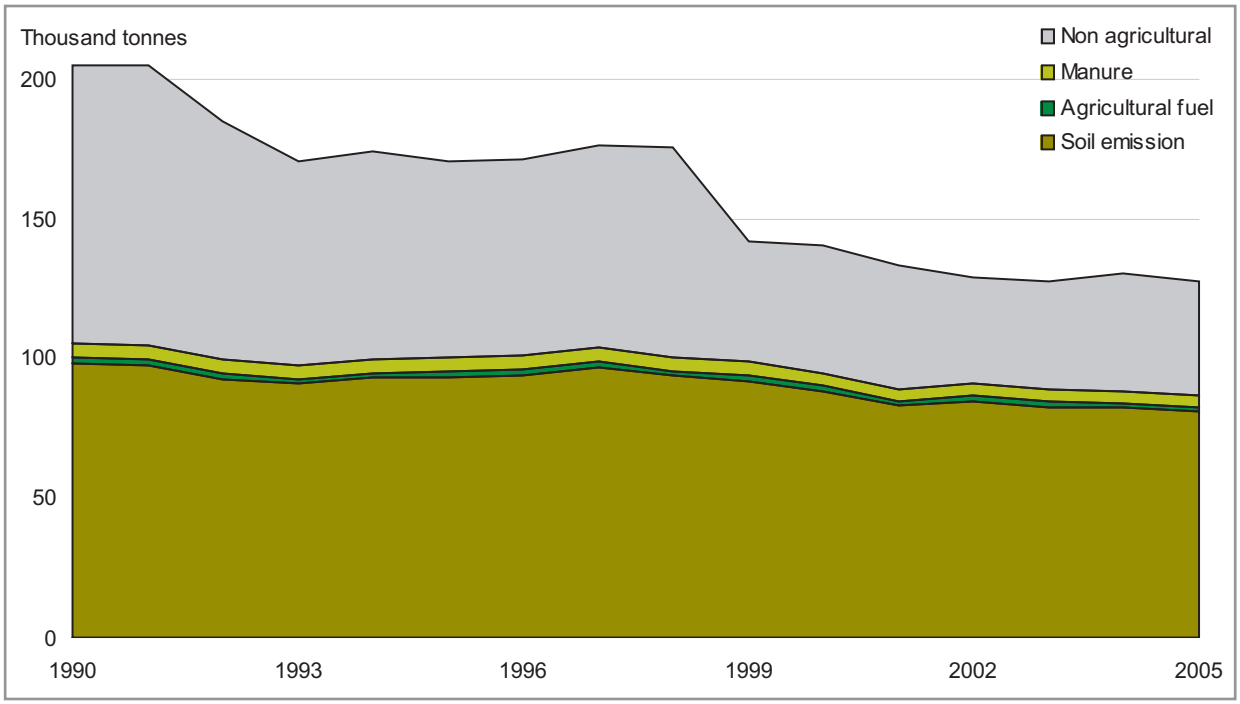
Chart 15.10 Methane emissions by source 1990 to 2005; United Kingdom



Source: AEA Energy & Environment, eDigest of Environmental Statistics

26 Chart 15.10 shows the United Kingdom methane (CH_4) emissions from all sources and that from agriculture. Agriculture accounts for 37 per cent of these emissions. Methane emissions from agriculture are mainly generated as a result of enteric fermentation in ruminating animals. There has been a 13 per cent fall over the last 10 years, reflecting a general reduction in livestock numbers over this period.

Chart 15.11 Nitrous oxide emissions by source 1990 to 2005; United Kingdom



Source: AEA Energy & Environment, eDigest of Environmental Statistics

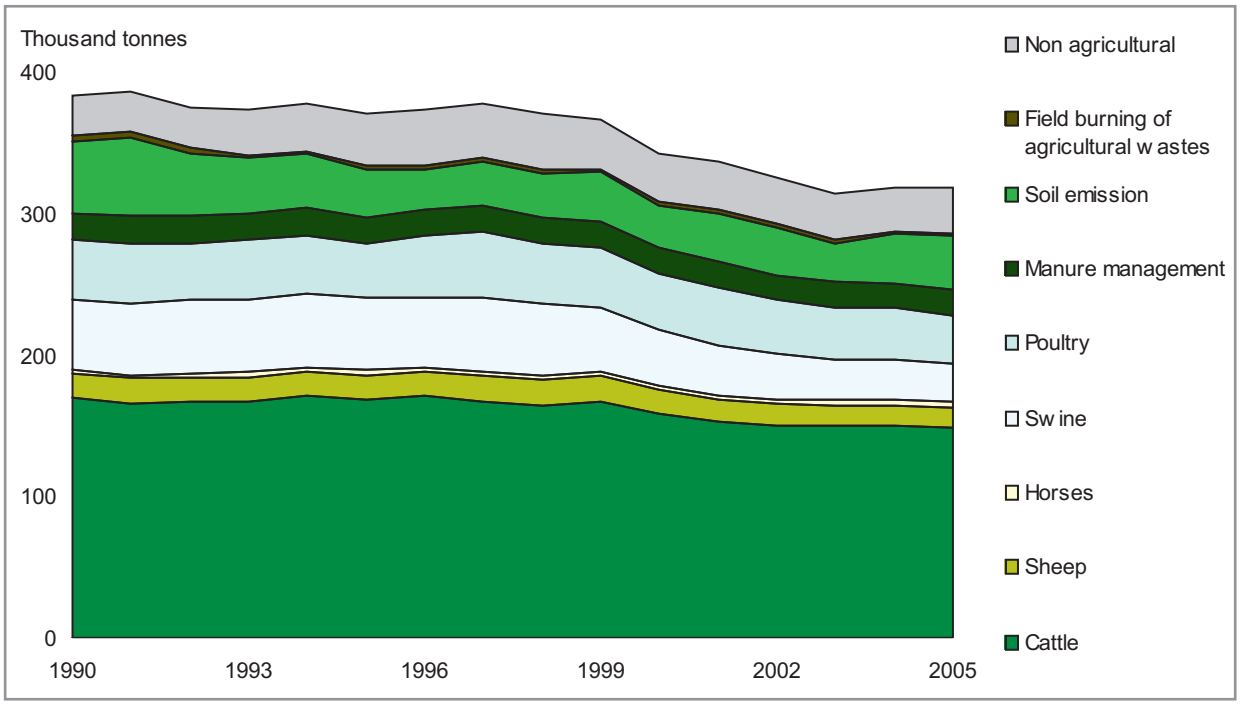
27 Chart 15.11 shows the United Kingdom emissions of nitrous oxide (N_2O) from all sources and that from agriculture. Agricultural emissions of nitrous oxides are produced mainly from the oxidation of the nitrogen in fertilisers and account for 63 per cent of all United Kingdom nitrous oxide emissions. The fall since the late nineties in these emissions reflects a reduction in fertiliser use (see chart 15.13 and 15.14 on fertiliser use).

28 Carbon dioxide (CO_2) is emitted during cultivation of arable land or semi-natural vegetation, when the soil is rotated to the surface and exposed to the air, when peat or fenland is drained and during the combustion of fossil fuels, eg to power tractors and machinery. Agriculture accounts for less than 1 per cent of carbon dioxide emissions in the United Kingdom.

29 Chart 15.12 shows ammonia (NH_3) emissions. Emissions from agriculture have reduced by 14 per cent during the last 10 years and now account for 90 per cent of United Kingdom emissions. Emissions arise predominately from livestock housing and from the spreading of animal manure (each accounting for around 25 per cent of the total emission from agriculture), with the majority of emissions (52%) associated with cattle. Inorganic nitrogen fertilisers are also a source of ammonia emissions, accounting for around 12% of the total emission 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' shown in chart 15.12. The trend for falling emissions over the last 10 years is largely due to declining livestock numbers and fertiliser use.

30 Many (semi-)natural habitats are naturally nitrogen limited and can be damaged by ammonia (NH_3) emissions, by either, poor air quality locally, or deposited further afield by wind or rain. The nitrogen in

Chart 15.12 Ammonia emissions by source 1990 to 2005; United Kingdom



Source: AEA Energy & Environment, eDigest of Environmental Statistics

the gas can damage sensitive terrestrial and aquatic habitats by enriching the soil or water (with nitrates) and leading to loss of biodiversity. Ammonia also causes acidification which can also affect the aquatic and plant biodiversity. High concentrations of ammonia in the air can damage plants such as lichens, mosses and heathers.

31 Species of plants in naturally nitrogen limited habitats such as moorland, heather, bog and infertile grassland, and upland freshwater lakes and rivers are adapted to low nitrate conditions. Ammonia deposition benefits other species that need more nitrogen, which can then invade the sensitive areas and outnumber the adapted species. Most recent estimates show that there are a significant number of sensitive habitats at risk of damage from air pollution.

32 Areas shown in black on map 15.2 identify areas of sensitive habitats at risk from ammonia emissions. Further information can be found at: http://www.defra.gov.uk/environment/statistics/index.htm, http://www.naei.org.uk/emissions/emissions_2000.php, http://www.sepa.org.uk/, http://www.doeni.gov.uk.

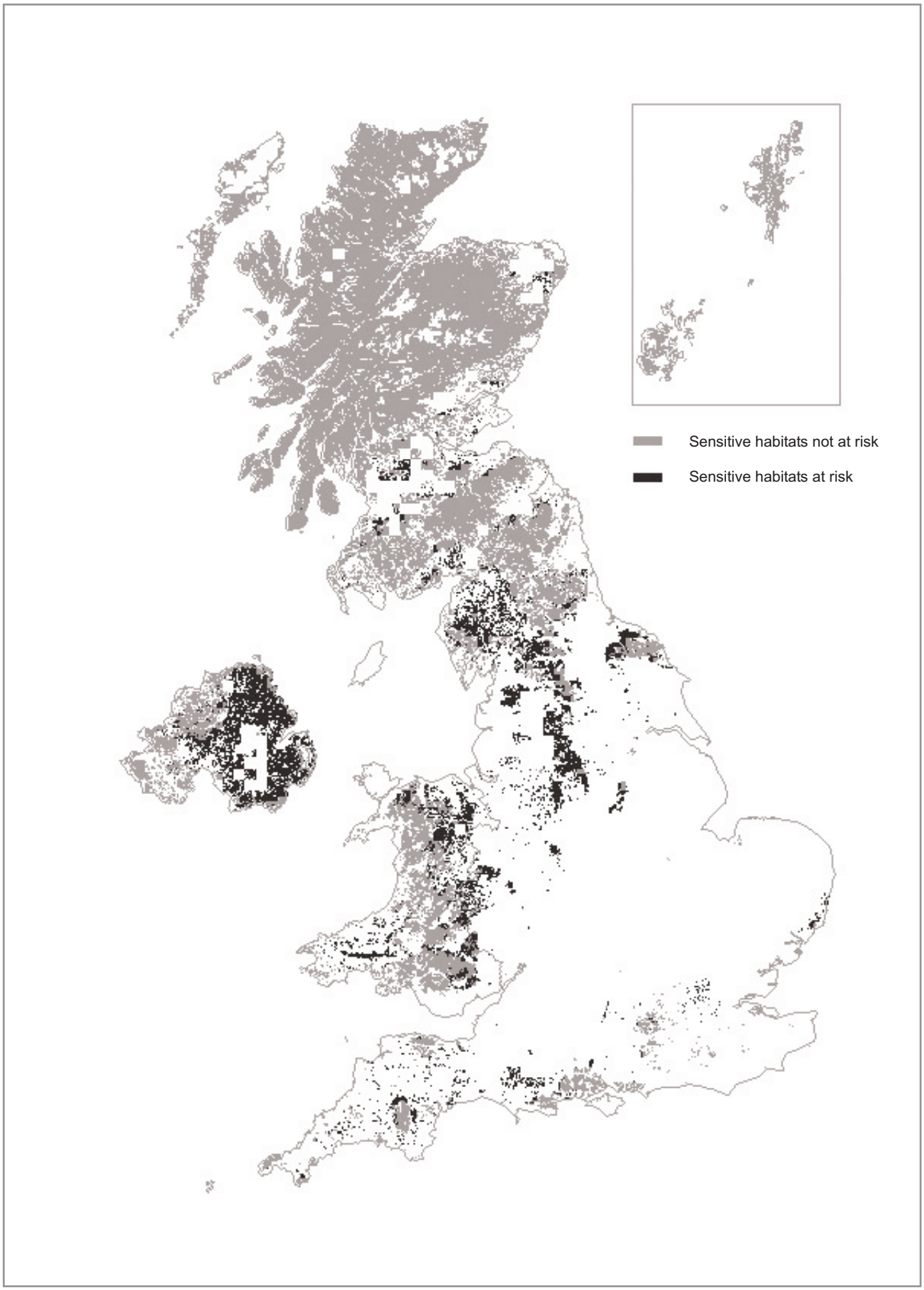
33 Non-agricultural emissions dominate in areas of large populations.

Soil

34 Soil is one of the fundamental assets of most farms and is essential for food and fibre production, providing support, nutrients and water. However, mismanagement can result in its loss and degradation, which in turn will reduce the ability of soils to perform this service. Soil degradation is both the physical loss (erosion) and the reduction in quality of soil associated with compaction, nutrient decline and contamination.

35 Good soil management and soil quality can increase profitability of farmers. For example, evidence suggests that by improving management of soil organic matter farmers can be better off to the tune of £31 to £66 per hectare (Defra report). While the financial benefits are fairly modest in absolute terms they are often significantly higher than the costs involved in improving the management of soil organic matter.

Map 15.2 Sensitive habitats at risk from ammonia emissions



Source: Centre for Ecology & Hydrology

36 According to the 2007 farm practices survey for England, 50 per cent of farmers had experienced some indicator of soil erosion on their land (down 3 per cent from 2006). Indicators included discoloured runoff entering ditches and water courses, sediment deposited in ditches and water courses, sediment deposited on roads and the formation of gullies and rills (Defra Farm Practice Survey 2007: http://statistics.defra.gov.uk/esg/publications/fps/default.asp).

37 Studies have shown that agriculture is the main source of silt in rivers through soil erosion and channel bank erosion. Eroded soil particles carry bound pollutants such as phosphorus, pesticides, heavy metals and micro-organisms; 60per cent of the phosphorus lost from agriculture is associated with soil erosion (Defra 2003). Typical soil erosion rates are in the order of <1-20 tonnes/ha/yr, but erosion rates as high as 100t/ha have been reported (Environment Agency 2006). Such significant losses of soil can impact on crop production as well as water quality.

38 Although much of the evidence collected suggests that agriculture can have a negative impact on soil, a focus on basic good management of soil to minimise erosion and structural damage and to build up organic matter levels can mitigate many of these negatives over time. Greater emphasis is being given to protecting soil as part of CAP cross compliance, an increase in the incentives to protect soil from erosion (such as under Environmental Stewardship), plus the exploration of a range of soil conservation measures as part of the implementation of the Water Framework Directive. Further information can be found at: http://www.defra.gov.uk/environment/water/wfd/index.htm.

Other resources (tables15.5, 15.6; chart 15.13, 15.4)

39 The power used both directly and indirectly by agriculture comes from mainly finite resources. Table 15.5 shows estimated direct and indirect use expressed as tonnes of oil equivalent (ToE) for purposes of comparison. This is the energy consumed in agricultural production, but not in the processing and distribution of food. It shows that the total energy used in agriculture has fallen by 23 per cent over 10 years and by over 5 per cent in 2006.

Table 15.5 Direct and indirect energy consumption and electricity generation; United Kingdom

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

Units: 1000 tonnes of oil equivalent (1000 ToE)

		Average 1995-97	2002	2003	2004	2005	2006
Total energy consumption		3 966	3 390	3 182	3 200	3 117	2 948
Direct energy		1 418	1 144	944	891	985	877
of which:	Natural gas & coal	126	208	208	213	195	178
	Oil products (inc petroleum)	889	509	318	246	363	272
	Electricity	331	356	346	361	356	355
	Biomass	72	72	72	72	72	72
Indirect Inputs		2 548	2 246	2 239	2 309	2 131	2 071
of which:	Fertiliser	1 457	1 242	1 185	1 183	1 111	1 050
	Pesticide	240	222	248	296	243	212
	Tractor purchases	295	294	320	340	299	305
	Animal Feeds	556	487	485	490	478	504
Electricity generation (a)		17	72	81	80	73	69

Source: ADAS, Reports prepared for Defra using : Digest of UK Energy Statistics, Agriculture in the UK, Agricultural Industries Confederation, Agricultural Engineers Association, Crop Protection Association and Department of Trade and Industry.

a) Includes electricity from farm waste digestion, poultry litter combustion, meat and bone combustion, straw and short rotation coppice.

40 Energy used directly (for heating, lighting and power) by the agricultural industry is around 0.5 per cent of overall United Kingdom energy use. Direct energy use has fallen by 11 per cent in 2006, and by 35 per cent over 10 years. Energy used indirectly in the production of agricultural inputs (for the manufacture of fertilisers, pesticides and machinery) is around 1.3 per cent of overall United Kingdom

energy demand. The most dominant indirect input of energy, over 50 per cent, arises from the manufacture of fertilisers. Reductions in the use of fertilisers together with efficiency savings during manufacturing have led to a 25 per cent reduction in energy use for fertiliser over 10 years. This table also shows electricity production from biomass and farm waste. This is in addition to the energy used on farm that is derived from biomass, which is mainly as heat.

Table 15.6 CO_2 emissions from United Kingdom direct and indirect energy consumption

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

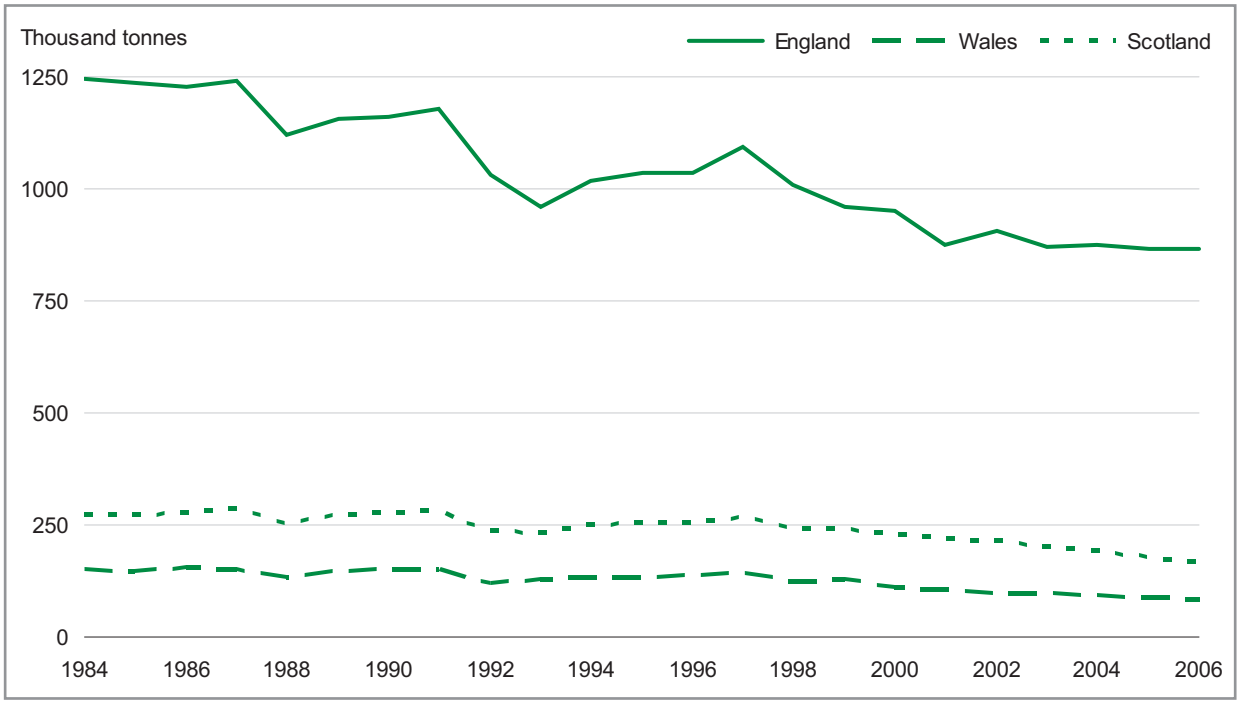
units: Kt CO_2

		1996	2002	2003	2004	2005	2006
Total energy consumption		11 915	10 419	9 964	10 037	9 836	9 443
Direct energy		4 843	3 866	3 411	3 281	3 570	3 250
of which:	Natural gas & coal	314	329	490	500	458	417
	Oil products (inc petroleum)	2 623	1 489	931	718	1 067	797
	Electricity	1 646	1 789	1 732	1 804	1 786	1 777
	Biomass	259	259	258	259	259	259
Indirect Inputs		7 072	6 554	6 553	6 756	6 267	6 193
of which:	Fertiliser	3 286	2 900	2 745	2 742	2 578	2 436
	Pesticide	701	625	703	838	689	620
	Tractor purchases	708	863	938	997	876	895
	Animal Feeds	2 377	2 166	2 167	2 178	2 124	2 242

Source: ADAS, Reports prepared for Defra using : Digest of UK Energy Statistics, Agriculture in the UK, Agricultural Industries Confederation, Agricultural Engineers Association, Crop Protection Association and Department of Trade and Industry.

41 Table 15.6 shows the estimated emissions of carbon dioxide (CO_2) equivalent associated with the energy consumption in table 15.5. The total emissions have fallen by 21 per cent over 10 years, electricity accounts for over half the direct energy emissions, whilst fertilisers and animal feeds account for 40 and 36 per cent respectively of the indirect emissions.

Chart 15.13 Nitrogen (N) fertiliser use in Great Britain 1984 to 2006

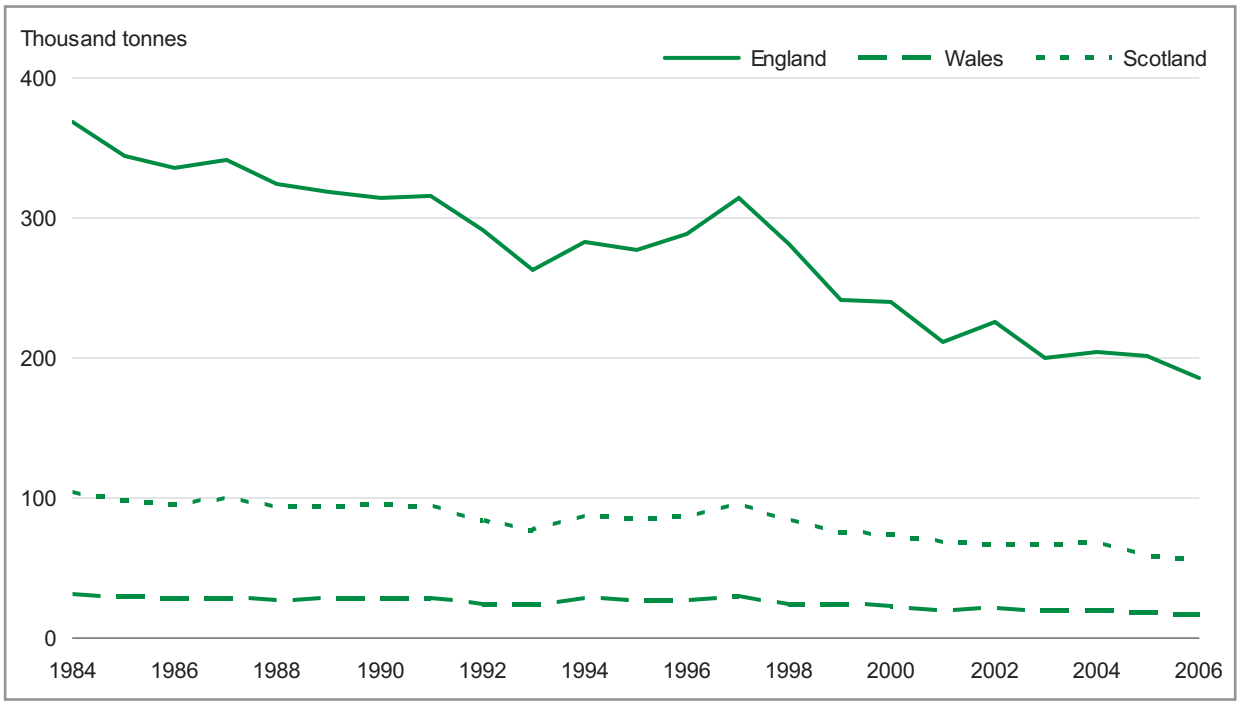


Source: GB Fertiliser practice survey, Defra June Survey

42 Charts 15.13 nitrogen fertiliser use and 15.14 phosphate fertiliser use (NB different scales), show similar fluctuating pattern and a gradual decline in fertiliser use in Great Britain, nitrogen by 32 per cent and phosphate by 44 per cent over 20 years. Fertiliser is 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.

Chart 15.14 Phosphate (P_2O_5) fertiliser use in Great Britain 1984 to 2006



Source: GB Fertiliser practice survey, Defra June Survey

Land and resources management (table 5.7)

43 The management of the land involves planning the use of resources (inputs) in relation to the outputs from that land. Organic practices require farmers to limit inputs. Emphasis is placed on natural methods of production and pest control for both land and livestock management (see chapter 13 on organic farming).

44 Integrated Farm Management (IFM) is a sustainable system of farming which integrates traditional processes with modern farming practices. Using technology, training and information helps farmers to establish the basis for efficient and profitable production which is economically viable and environmentally responsible. The principles of IFM include:

organisation and planning;

- soil management, crop nutrition and crop protection;

- pollution control and waste management;

- energy efficiency;

- animal husbandry;

- landscape features, habitat and wildlife;

- community relations.

45 LEAF (Linking Environment And Farming) actively promotes IFM to their members and wider industry through technical know how, demonstration and communication. Table 15.7 shows the number of members and the area they farm, the number of LEAF self assessment audit returns (about 30 per cent

of members) and the number and area of those whose produce is sold under the LEAF Marque. The number of members has increased by around 36 per cent since 2003. The increase in members and audits in 2006 were for a potential Scottish environment scheme which was dropped. Further information can be found at: http://www.leafuk.org.

Table 15.7 LEAF Membership, audit returns & Leaf Marque

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

	2003	2004	2005	2006 (a)	2007
					numbers
Number of farmer members	1 527	1 691	1 801	2 554	2 084
Number of audit returns		538	707	975	585
Number in Leaf Marque					307
					thousand hectares
Area farmed by members (b)	622	689	733	1 040	849
Area of returned audits		253	292	538	263
Area in Leaf Marque					119

Source: LEAF

(a) Estimated.
(b) Includes Scottish farmers registering to participate in an environment scheme which was withdrawn.

46 The preparation of environmental impact assessments and soil management and protection plans are a requirement of cross compliance. Land has to be kept in good agricultural and environmental condition, including the prevention of pollution and damage to water courses etc in order to claim under the Single Payment Scheme. The countries of the United Kingdom offer a range of agri-environment schemes, at different levels, aimed at delivering effective environmental management to maintain and enhance habitats and landscape features. These schemes have played a major part in improving the condition of important habitats such as A/SSSIs and SACs. Details of these schemes can be found at:
http://defraweb/erdp/schemes/es/default.htm;
http://www.countryside.wales.gov.uk/;
http://www.dardni.gov.uk/;
http://www.scottishexecutive.gov.uk/Topics/Agriculture/Environment/Agrienvironment.

Waste

47 An estimated half a million tonnes of waste is produced by agriculture each year, this excludes organic material such as slurry/manure, crop residues, etc when beneficially re-used on farm. The largest components are animal health products, agrochemicals and plastics.

48 The 2004 report of Defra's Farm Practices Survey (England) shows a general reduction in recycling plastic since the previous survey in 2001. The number of farmers using landfill sites has also fallen and is around 1 to 5 per cent of farmers. Burning continues to be the main way to dispose of waste, especially for plastics and packaging. In many cases nearly 50 per cent of farmers burn these (except plastic crop cover) in the open or use drum incinerators. The full reports can be found on the Defra website at: http://statistics.defra.gov.uk/esg/publications/fps/fpsreport.pdf.

49 In 2005 the Government brought into force Regulations in Scotland to bring agricultural waste within the controls of the EU Waste Framework and Landfill Directives. Similar regulations were made in the rest of the United Kingdom in 2006. The new Regulations make it illegal for the disposal of waste by open burning (unless it is plant tissue) or in farm dumps, i.e. uncontrolled landfills. Further regulations are being consulted on at the end of 2006 to provide three new waste management licensing exemptions for agricultural waste.

50 As well as slurry and manure being used to fertilise the land, other organic material, such as straw and poultry manure, is now being used as a source of energy, both for heat and power on farm and increasingly for electricity generation (see paragraph 40).

Other statistics and data sources

Agricultural Change and Environment Observatory

51 The Agricultural Change and Environment Observatory Programme was initiated in response to the most recent major reform of the Common Agricultural Policy (CAP) in 2003, and represents the main vehicle for identifying environmental risks from a changing agriculture sector. The Observatory draws on evidence from a wide range of sources, making the greatest possible use of data from existing surveys and other established sources. Evidence sources include commissioned external work, analysis undertaken by the Observatory team, economics and statistics analysis undertaken more widely across Defra plus external sources. Research undertaken to date by the Observatory has highlighted the complexities involved in identifying and understanding the impacts on the environment, not only of the 2003 CAP reforms, but also of the other major drivers of agricultural change.

52 Reflecting the key role of the Observatory in monitoring agricultural and environmental change, a systematic framework has been developed covering the mechanisms by which drivers of change affect agriculture, the processes through which these changes occur and the resulting environmental impacts. A major component of this has been the development of a suite of indicators (published on the Observatory's website) covering key elements at each stage of the framework. Major areas of research during 2007 have included projects on set-aside, farmers' intentions, baseline projections for agriculture, assessing the implications of farm level changes on environmental outcomes, developing June agricultural census historical data, further analysis of changes in livestock numbers, and developing a framework for monitoring both the impact of cross compliance measures and the environmental impact of the zero per cent rate of set-aside for 2008 harvest.

53 The Observatory will continue to build on earlier work, taking account of developments in the major drivers affecting agricultural practices and their likely environmental impacts. These are likely to include future CAP policy reforms, in particular those arising in the wake of the 2008 CAP Health Check, such as the possible abolition of set-aside and milk quotas, increased modulation and any changes to cross compliance or the Agri-Environment regimes. The Observatory will also need to improve understanding of how farmers are likely to respond to changes in policy, institutional and market factors and other behavioural drivers and the factors that influence their responses. Further details on research projects, future work and background information about the Observatory can be found at: http://statistics.defra.gov.uk/esg/ace/index.htm

Strategies for sustainable agriculture

54 Monitoring of environmental impacts is a vital part of delivering strategies for sustainable agriculture. Scotland's A Forward Strategy for Agriculture was published in 2006: http://www.scottishexecutive.gov.uk/Topics/Agriculture/Agricultural-Policy/17289/7902. In Wales a Sustainable Farming and Environment: Action towards 2020 was published in July 2007: http://new.wales.gov.uk/topics/environmentcountryside/countryside_policy/farming/sustainablefarming2020/?lang=en. In England, Defra's Sustainable Farming and Food Strategy (SFFS) was launched in 2002 and the report Forward Look Evidence Paper was published in 2006. A set of indicators, bringing together the economic, environmental and social pillars of sustainable agriculture, monitors this strategy and can be found at: http://statistics.defra.gov.uk/esg/indicators/default.htm.

Environmental Statistics and Sustainable Development

55 Much of the environmental data used in this chapter is taken from the Defra eDigest of Environmental Statistics which can be found at: http://www.defra.gov.uk/environment/statistics/index.htm. This provides summary statistics on the environment in the United Kingdom.

56 There are 68 national indicators to support the Government's Sustainable Development Strategy http://www.sustainable-development.gov.uk/progress/index.htm. A number of these indicators measure the environmental impacts of agriculture and feature in three of the four priority areas on; Sustainable consumption and production; Climate change and energy; Natural resource protection and enhancing the environment.

Valuing environmental impacts of agriculture

57 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 assigning values to these physical impacts they can be compared with each other and aggregated together to give a measure of the overall impact. Bringing together monetised valuations into a coherent framework provides a set of environmental accounts for agriculture.

58 In 2003 Defra and the devolved administrations commissioned Eftec to develop a Framework for Environmental Accounts for Agriculture. The report was published in July 2004. This was followed up in 2007 with further research to develop this framework and fill in some of the identified gaps in data. Jacobs are due to publish their report in March 2008. Many of the changes emerging from the latest study are improvements to the methodologies and valuations, and do not necessarily reflect any changes in farming practices. These will be shown as we develop a time series.

59 Defra will continue to take this work forward, identifying key gaps and further develop both data and methodologies, to give a transparent and understandable account to show the state and changes to the environment by agriculture. As more reliable estimates are developed the environmental accounts will have a valuable role in setting priorities for agricultural policy and as an evidence base for measuring the sustainability of agriculture. As the work continues to develop, the latest estimates, together with earlier studies (Eftec, Jacobs etc.) and other related reports will be available on: http://statistics.defra.gov.uk /esg/reports/envacc/default.asp.

60 For any enquiries on this chapter, please contact Barbara Norton, Barbara.Norton@defra.gsi.gov.uk, 01904 455577.

Chapter 16 Key Statistics for EU Member States

2007

Summary

In 2007:

- income from agricultural activity in the United Kingdom as measured by Indicator A was 34 per cent higher than in 2000, while for the EU15 it was 3.9 per cent higher;

In 2007, 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 2006, of the EU27 Member States:

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

Between 2000 and 2007:

- producer prices for crop products rose by 40 per cent in the United Kingdom and by 26 per cent in the EU25;
- producer prices for animals and animal products rose by 18 per cent in the United Kingdom and by 7.2 per cent in the EU15;
- purchase prices for the means of agricultural production rose by 28 per cent in the United Kingdom and by 24 per cent in the EU15.

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.

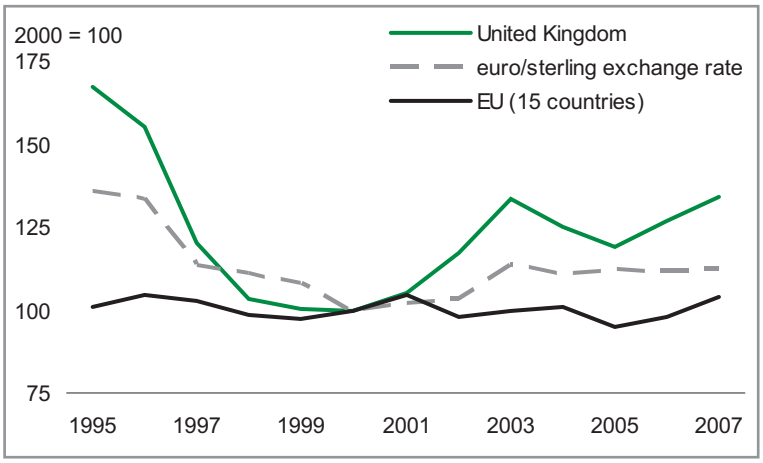
2 Eurostat is the Statistical Office of the European Communities situated in Luxembourg. Its task is to provide the European Union with statistics at European level that enable comparisons between countries and regions. Eurostat itself does not collect data; this is done in Member States by their statistical 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 16.1 shows Indicator A, a measure of the average income obtained from agriculture, for the United Kingdom and the EU15. An index showing the trend in the euro/sterling exchange rate is also shown.

Chart 16.1 Indicator A of the income from agricultural activity



4 Incomes from agricultural activity in the United Kingdom as measured by Indicator A have risen by 34 per cent since 2000 after falling in 2004 and 2005 while those in the EU15 are 3.9 per cent higher than in 2000. Incomes in the United Kingdom are influenced by the euro/sterling exchange rate.

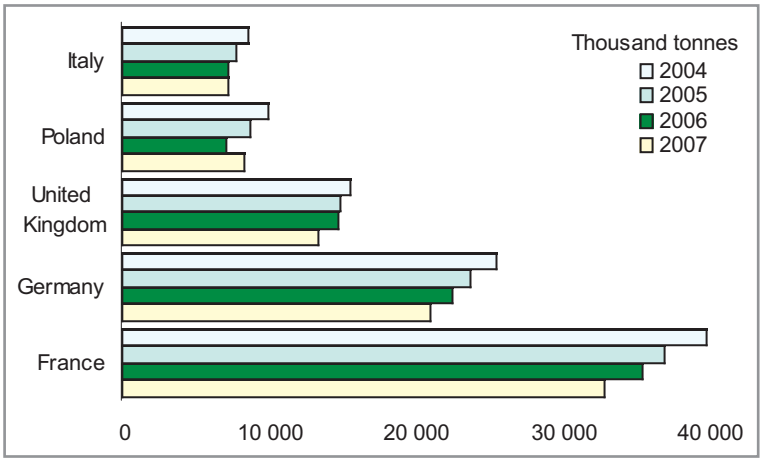
Agricultural products

Wheat

5 Chart 16.2 shows the quantities of wheat produced by the top five producing Member States in 2004 to 2007. This is the production of common wheat and durum wheat.

6 In 2007, the United Kingdom ranked third in the quantity of wheat produced behind France and Germany having produced about 11 per cent of the total for the EU27.

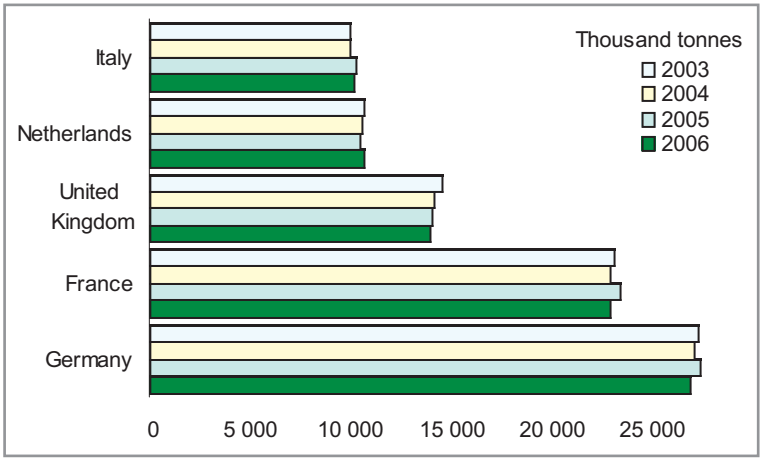
Chart 16.2 Production of wheat



Cows' milk

7 Chart 16.3 shows the proportions of cows' milk collected by the top five producing Member States in 2003 to 2006. 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.

Chart 16.3 Production of cows' milk



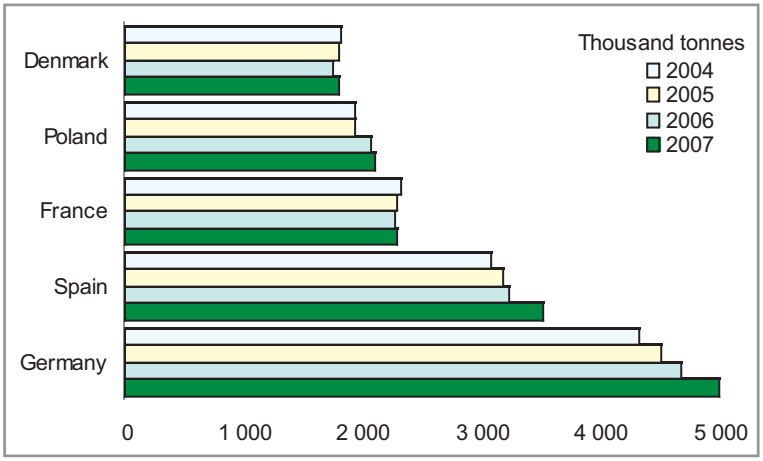
8 In 2006, the United Kingdom ranked third in the quantity of cows' milk collected behind Germany and France having produced about 10 per cent of the total for the EU27.

Pigmeat

9 Chart 16.4 shows the proportions of pigmeat produced by the top five producing Member States in 2004 to 2007. This is the total carcase weight of pigs slaughtered in slaughter-houses and on the farm whose meat is declared fit for human consumption.

10 In 2007, the United Kingdom ranked ninth in the quantity of pigmeat produced with about 3.3 per cent of the total for the EU27.

Chart 16.4 Production of pigmeat

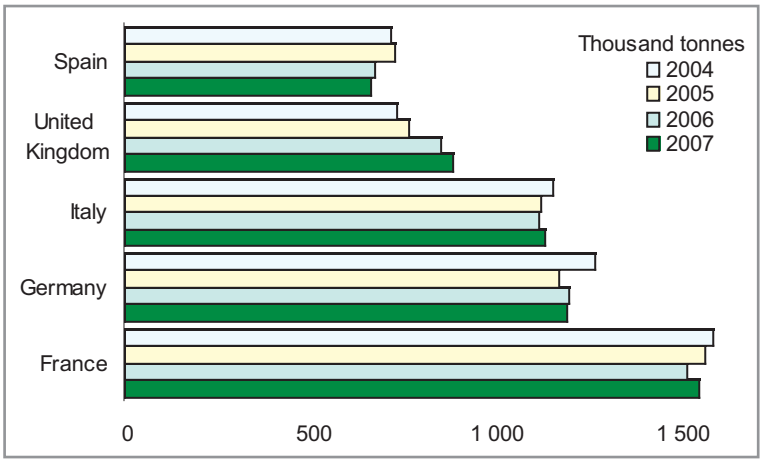


Beef and veal

11 Chart 16.5 shows the proportions of beef and veal produced by the top five producing Member States in 2004 to 2007. This is the carcase weight of bovine animals (calves, bullocks, bulls, heifers and cows) slaughtered in slaughter-houses and on the farm whose meat is declared fit for human consumption.

12 In 2007, 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 16.5 Production of beef and veal

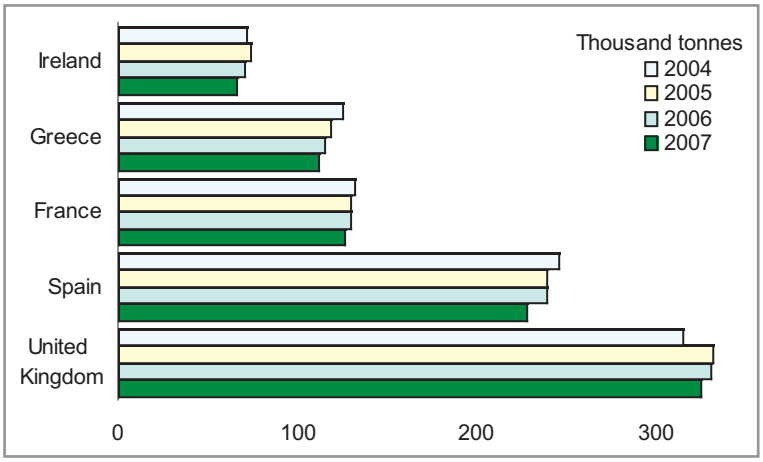


Sheep and goat meat

13 Chart 16.6 shows the proportions of sheep and goat meat produced by the top five producing Member States in 2004 to 2007. 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 2007, the United Kingdom was the largest producer of sheep and goat meat in the European Union having produced about 32 per cent of the total for the EU27.

Chart 16.6 Production of sheep and goat meat



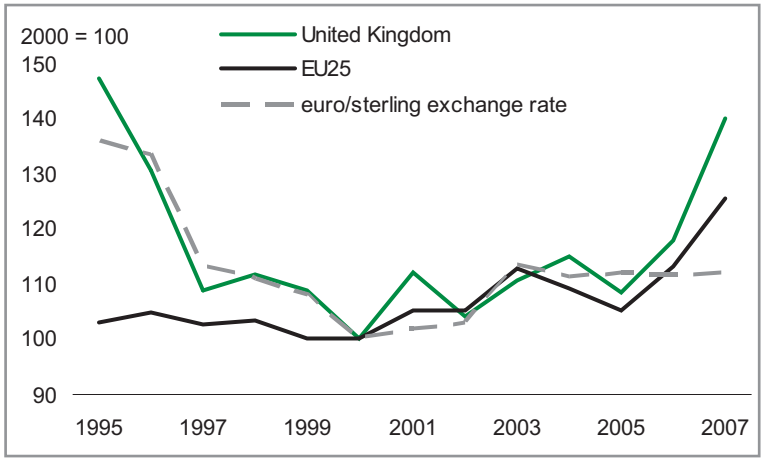
Price indices

Crop products

15 The indices in Chart 16.7 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 40 per cent between 2000 and 2007 while those in the EU25 rose by 26 per cent. Producer prices in the United Kingdom are heavily influenced by the euro/sterling exchange rate.

Chart 16.7 Producer Price Indices: Crop products

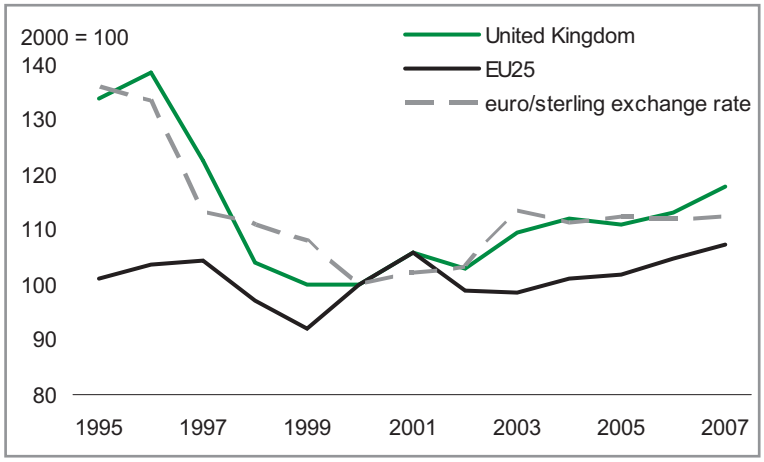


Animals and animal products

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 18 per cent between 2000 and 2007 while those in the EU25 have risen by 7.2 per cent. Producer prices in the United Kingdom are heavily influenced by the euro/sterling exchange rate.

Chart 16.8 Producer Price Indices: Animals and animal products

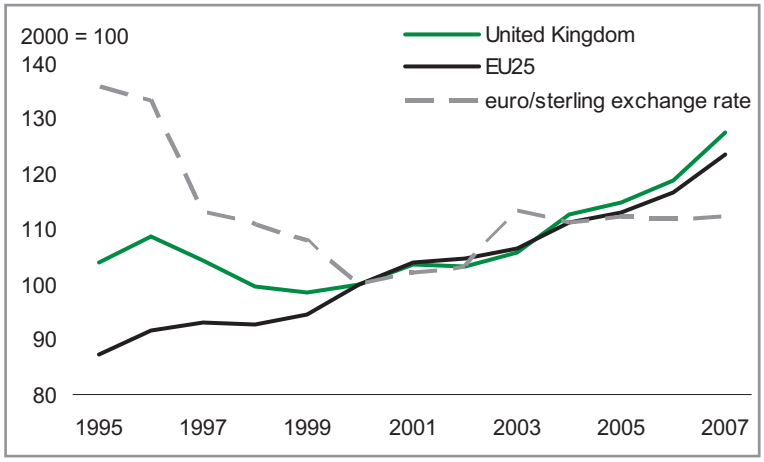


Total means of agricultural production

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 28 per cent between 2000 and 2007 while those in the EU15 have risen by 24 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 16.9 Purchase Price Indices: Total means of agricultural production



AGRICULTURE IN THE UNITED KINGDOM 2007

Agriculture in the United Kingdom 2007 is the twentieth 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.