



2008

Agriculture in the United Kingdom



Agriculture in the United Kingdom 2008

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

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Preface

Legal basis

- 1 Agriculture in the United Kingdom 2008 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 2008 are provisional because information for 2008 was still incomplete at the time of publication and therefore an element of forecasting was required.
- 4 The following points apply throughout:
 - (a) All figures relate to the United Kingdom unless otherwise stated.
 - (b) In the tables
 - means 'nil' or 'negligible' (less than half the last digit shown).
 - . . means 'not available' or 'not applicable'.
 - (c) The figures for imports and exports include those from intervention stocks and the figures for exports include re-exports. Imports are based on country of consignment. Exports are based on country of reported final destination. The source of Overseas Trade Statistics is HM Revenue and Customs.
 - (d) Where statistics are shown for the European Union (EU) as a whole they represent the present Member States in all years regardless of when they became a member.
- 5 Where figures are presented in real terms the measure of inflation used is the all-items Retail Price Index.

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 2009

7 The seventh annual 'Agriculture in the United Kingdom' seminar takes place in York on 6 May 2009 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 2009

Name _____ Organisation _____

Email or postal address _____

I would like to attend the 'Agriculture in the United Kingdom' seminar on 6 May 2009. Please send me further details.

Return to:

Amanda Mitchell, Defra, 3rd Floor, Room 309, Foss House, Kings Pool, 1-2 Peasholme Green, York YO1 7PX,

by post or

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

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

Chapter 1 Key Events in 2008

Total Income from Farming

- 1 Total Income from Farming is estimated to have risen by 42 per cent at current prices, or 36 per cent in real terms, to £3.5 billion. Total Income from Farming per full-time person equivalent rose by 42 per cent at current prices, a rise of 36 per cent in real terms, to £18,200.

Economic Downturn

- 2 The United Kingdom, along with other countries of the world, saw an economic downturn begin in 2008. The agriculture sector, fairly resilient to shocks in the wider economy, saw:
 - a weaker pound making exports more competitive;
 - the 2008 single payment higher in sterling terms than in 2007, reflecting the decline in the £/€ exchange rate;
 - a low bank base rate reducing the cost of borrowing, although banks tightened lending conditions and increased margins over base rates;
 - a stability of demand for its outputs compared with other sectors of the economy.

Prices

- 3 World prices of agricultural commodities experienced a boom during the first half of 2008, with a growing demand for commodities (mainly combinable crops and dairy produce), sluggish supply due to the poor weather and low stocks. However prices, in particular for cereals, fell back sharply in the second half of the year as producers responded and increased production.
- 4 The average producer price of agricultural products in the UK was 20 per cent higher in 2008 than in 2007. It is 12 per cent above the peak in 1995 and 56 per cent above the low point in 2000.
- 5 Input prices were high in 2008. High cereal prices led directly to higher animal feed costs and oil prices peaked at over \$140 per barrel in July 2008. The rise in global energy costs was also a contributing factor in the rapid rise of the price of fertilisers.

“Health Check” of the Common Agricultural Policy

- 6 On 20 November 2008, the EU agriculture ministers reached a political agreement on the “Health Check” of the Common Agricultural Policy (CAP). The aim of the “Health Check” was to assess if the CAP was working effectively in the enlarged EU of 27 Member States and to ensure that it was able to better meet new challenges, such as climate change, water management and bioenergies.
- 7 Among a range of measures, the “Health Check” agreement abolishes set-aside, the decoupling of direct aid payments to farmers and increases milk quotas gradually leading up to their abolition in 2015.

- 8 A key measure of the Health Check was an increase in the rates of modulation. This will not affect the majority of UK farmers as the increase in the European compulsory modulation will be offset by equivalent reductions in the existing national voluntary modulation.

Single Payment Scheme

- 9 The SPS 2008 estimated fund value was £1.63 billion with an estimated number of claimants of 106,500. At 31 December 2008, full SPS payments amounting to over £960 million had been made to nearly 70,000 customers. This represented 59 per cent of the estimated fund value paid to 65 per cent of the estimated number of claimants.

Uplands Entry Level Stewardship

- 10 Environment Secretary Hilary Benn announced a new payment scheme for hill farmers on 18 December 2008. The Uplands Entry Level Stewardship (Uplands ELS) will replace the Hill Farm Allowance, and is designed to ensure that farmers are supported and rewarded in their efforts to maintain England's historic upland landscape, such as the Cumbrian Fells, Dartmoor and the Peak District.

Chapter 2 Farming Income

Summary

In 2008:

- Total Income from Farming rose by 42 per cent at current prices, or 36 per cent in real terms, to £3.5 billion;
- Total Income from Farming per full-time person equivalent similarly rose by 42 per cent at current prices, or 36 per cent in real terms, to £18,200;
- agriculture's share of national gross value added is expected to be about 0.5 per cent, similar to that in 2007;
- agriculture's share of national employment was unchanged at 1.7 per cent;
- in real terms, average Farm Business Income for all types of farms in England is expected to be around £44,300 in 2008/09, about 11 per cent lower than in 2007/08;
- in real terms, farm incomes for cropping farm types in England are expected to have fallen while incomes for livestock farms are expected to have increased in 2008/09.

Long-term trends in farming income (chart 2.1)

- 1 In 2008, Total Income from Farming in the United Kingdom is estimated to have risen by 36 per cent in real terms. This is the highest level in real terms since 1997 and is 79 per cent above the low point in 2000 although still 52 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 2008 and indicate a fall in income in 2009 as a fall in the value of output (driven by the fall in cereal prices following the 2008 harvest) is partly offset by a fall in the cost of inputs. However, since these were compiled sterling has weakened further, taking Total Income from Farming per person part way towards the '£ weakens' scenario shown in the chart. Prospects for 2009 and beyond are difficult to predict. Periods of price volatility are likely to occur for the foreseeable future. More widely there is the uncertainty of the scale and length of the global economic downturn and the impact this will have on commodity prices. There is also the impact of future sterling exchange rates; the scenarios on the chart illustrate the significant impact these can have on the fortunes of UK farmers.

Chart 2.1 Long-term trends in farming income in real terms at 2008 prices; United Kingdom

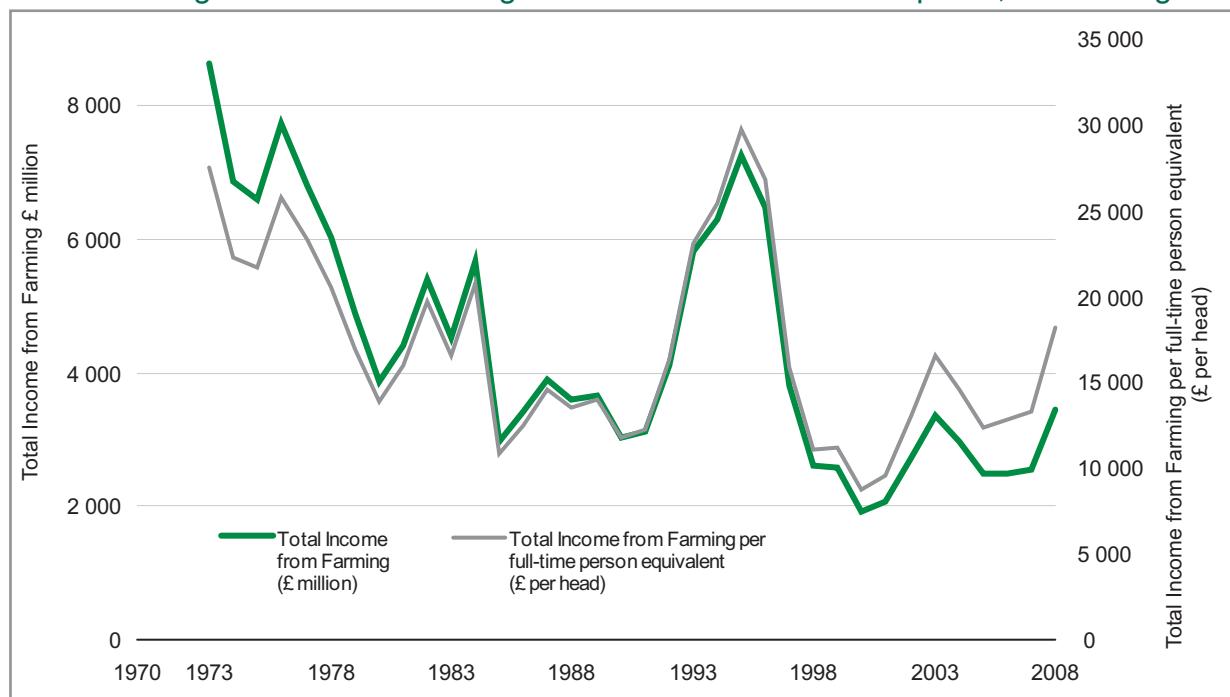
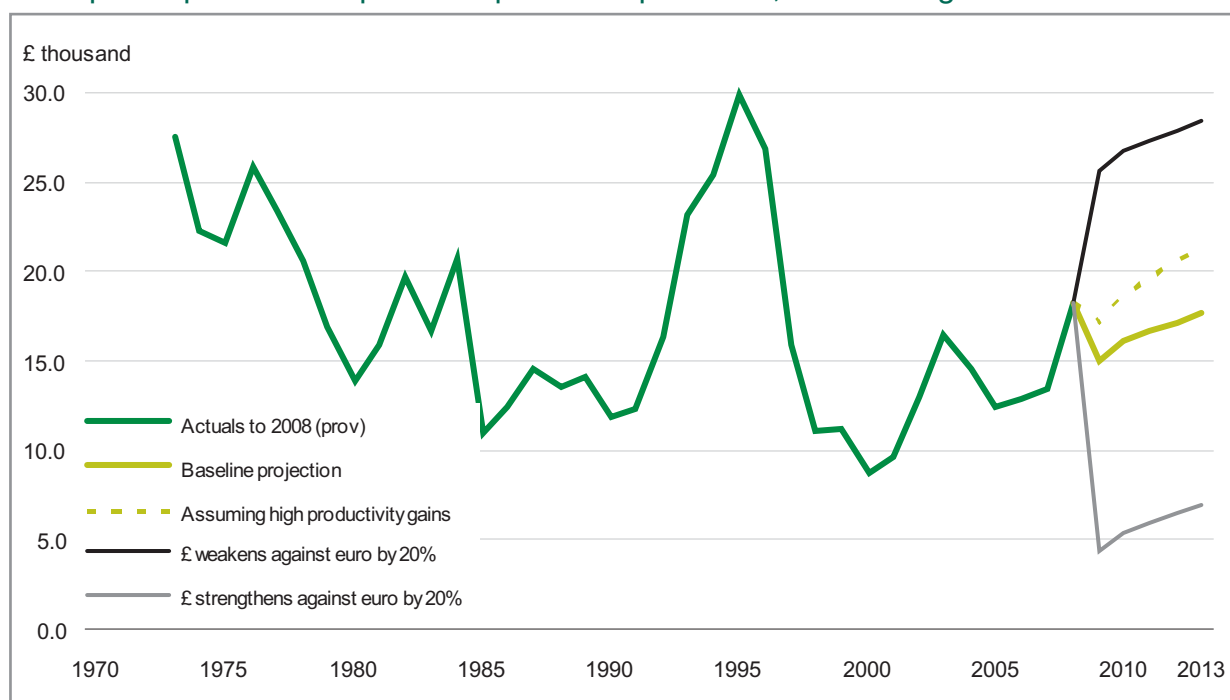


Chart 2.2 Prospects for farming income; Total Income from Farming in real terms at 2008 prices per full-time person equivalent up to 2013; United Kingdom



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

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

2008

- 5 Net value added at factor cost includes all subsidies but makes no allowance for interest, rent or labour costs. In 2008, net value added at factor cost was £6.9 billion, 20 per cent higher than in 2007, or 15 per cent in real terms.
- 6 Total Income from Farming in the United Kingdom in 2008 is estimated to have risen by 42 per cent at current prices, or 36 per cent in real terms, to £3.5 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 6.8 per cent in 2008, or 2.6 per cent in real terms. Income from agriculture of total labour input, which is the sum of 'Total Income from Farming' and 'compensation of employees', rose by 25 per cent, or 20 per cent in real terms. Total Income from Farming per full-time person equivalent (labelled "Total income from farming per AWU of entrepreneurial labour" in table 2.1) is estimated to have risen by 42 per cent in current prices, or 36 per cent in real terms, to £18,200.
- 8 Cash flow from farming fell by 11 per cent in real terms in 2008 to £2.8 billion. Cash flow reflects sales and expenditure on gross fixed capital formation and includes capital transfers paid to the industry in exchange for assets. Variations in cash flow over recent years largely reflect delays in payments made through the Single Payment Scheme.

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

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£ million (unless otherwise specified)

Calendar years

	Net value added at factor cost	Income from farming				Cash flow from farming
		Total Income from Farming	Compensation of employees	Income from agriculture of total labour input	Total income from farming per AWU of entrepreneurial labour (a)	
Current prices		A	B	A + B	(£)	
1999	4 833	1 977	2 028	4 005	8 600	2 887
2000	4 254	1 531	1 900	3 431	6 900	2 644
2001	4 407	1 679	1 950	3 629	7 700	3 736
2002	4 918	2 248	1 965	4 213	10 700	2 613
2003	5 456	2 846	1 915	4 761	13 900	3 325
2004	5 302	2 565	2 004	4 570	12 600	2 581
2005	5 179	2 216	2 218	4 434	11 000	485
2006	5 334	2 304	2 272	4 576	11 800	2 731
2007	5 722	2 437	2 365	4 802	12 800	3 066
2008 (provisional)	6 859	3 457	2 527	5 984	18 200	2 826
In real terms, 2007 prices		A	B	A + B	(£)	
1999	6 284	2 570	2 637	5 207	11 200	3 753
2000	5 373	1 933	2 400	4 333	8 800	3 340
2001	5 467	2 082	2 419	4 501	9 500	4 635
2002	6 003	2 744	2 399	5 142	13 000	3 190
2003	6 472	3 375	2 271	5 646	16 500	3 944
2004	6 107	2 955	2 309	5 264	14 600	2 974
2005	5 802	2 482	2 484	4 967	12 400	544
2006	5 790	2 501	2 466	4 968	12 800	2 964
2007	5 957	2 537	2 462	4 999	13 300	3 192
2008 (provisional)	6 859	3 457	2 527	5 984	18 200	2 826

(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 22 per cent at basic prices compared to 2007.
- 10** The agricultural industry is expected to account for around 0.5 per cent of the national economy in 2008, 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 national workforce remained at 1.7 per cent. It has declined by 27 per cent since 1996.

Summary measures by country (table 2.2)

- 12** Table 2.2 shows the main indicators for the agricultural industries in England, Northern Ireland, Scotland and Wales in 2008. In 2008, England accounted for about 81 per cent of gross value added for the agricultural industry in the United Kingdom, Scotland accounted for about 12 per cent, Northern Ireland for 5.1 per cent and Wales for 2.5 per cent.
- 13** The measures 'Agriculture's share of total regional employment' and 'Agriculture's share of total regional gross value added at basic prices' give an indication of the relative importance of the agricultural industry to each country. In 2008, 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 1.4 per cent, while agriculture's share of gross value added in 2007 was greatest in Northern Ireland where it accounted for 1.2 per cent of the economy, and least in Wales where it accounted for 0.3 per cent of the economy.

Table 2.2 Summary measures by country in 2008

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	Gross output at basic prices	Intermediate consumption	Gross value added at basic prices	Total Income from Farming	Agriculture's share of total regional gross value added at basic prices (a)	Agriculture's share of total regional employment (b) (c)	Agriculture's share of total gross fixed capital formation
	£ million	£ million	£ million	£ million	%	%	%
United Kingdom	19 807	12 991	6 816	3 457	0.46	1.70	1.47
England	14 997	9 488	5 508	2 493	0.41	1.36	..
Wales	1 100	932	168	101	0.32	4.28	..
Scotland	2 308	1 516	792	630	0.83	2.40	..
Northern Ireland	1 403	1 055	348	233	1.23	5.77	..

(a) Data on national and regional GVA for 2008 are not yet available. Data for 2007 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.

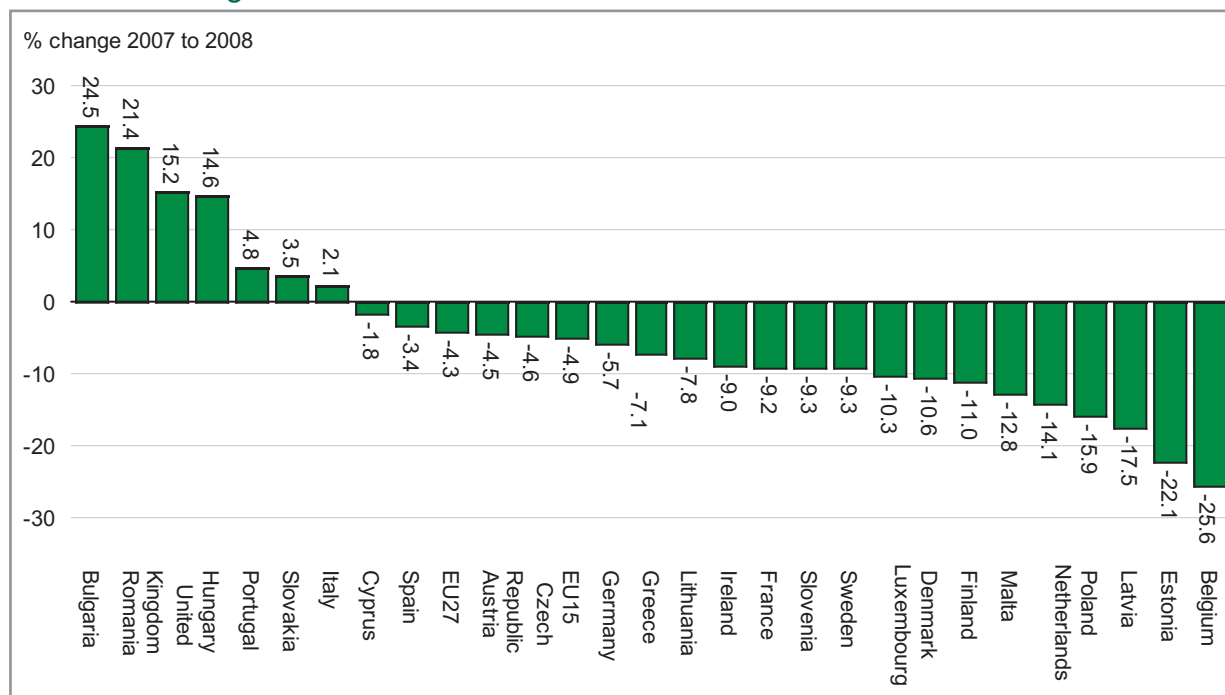
(c) The agriculture industry includes a high proportion of part-time workers. A comparison on the basis of full-time person equivalent would show lower percentages.

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

- 14** Chart 2.3 shows estimated changes from 2007 to 2008 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 December 2008, who are expected to publish updated figures in Spring 2009.

- 15 Indicator A, which is net value added at factor cost per annual work unit (or full-time person equivalent) in real terms, was forecast to fall by 4.3 per cent in the EU27 in 2008 following an increase of 12 per cent in 2007. An increase in agricultural output was expected to be offset by a larger increase in intermediate consumption of goods and services. The strongest growth in incomes were expected in Bulgaria, Romania, United Kingdom and Hungary and the largest falls in Poland, Latvia, Estonia and Belgium. Large fluctuations in prices during 2008 may impact on the precision of the forecast.

Chart 2.3 Changes in income across the EU: Indicator A



Source: Eurostat Statistics in Focus 184/2008

- 16 Table 2.3 compares Indicator A and Indicator C for the United Kingdom, EU15, EU25 and EU27 to 2008. Between 2004 and 2008, Indicator A rose by 11 per cent in the United Kingdom, by 0.5 per cent in the EU15 and by 8.0 per cent in the EU27. Indicator C fell by 5.8 per cent in the United Kingdom, by 20 per cent in the EU15 and by 15 per cent in the EU27. Indicator B is shown for the United Kingdom; it is not available for the EU as a whole but is available for most other Member States.

Table 2.3 Eurostat income indicators

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Index 2000 = 100	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008
Net value added at factor cost of agriculture per total Annual Work Unit (Indicator A)						
United Kingdom	110.4	125.4	122.6	130.3	138.4	148.4
EU15	98.0	101.2	95.2	98.0	105.8	100.6
EU25	..	106.1	99.8	103.3	112.4	105.7
EU27	..	116.4	106.0	109.9	121.3	115.6
Net agricultural entrepreneurial income per unpaid Annual Work Unit (Indicator B) (a)						
United Kingdom	136.2	158.4	143.0	152.2	164.9	184.5
Net entrepreneurial income from agriculture (Indicator C)						
United Kingdom	145.4	145.8	130.3	135.0	142.2	157.6
EU15	106.1	92.8	79.2	79.3	85.3	75.0
EU25	102.8	97.5	83.7	84.4	92.2	81.0
EU27	104.3	99.8	84.0	84.4	90.3	80.2

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 2008. These are estimates published by Eurostat in December 2008, who are expected to published updated figures in Spring 2009.

18 France, Germany, Italy and Spain were expected to account for almost half of the total agricultural output in the European Union in 2008 while Spain, the United Kingdom, Luxembourg, France and Belgium were expected to have the highest entrepreneurial income per full-time person equivalent (AWU).

Table 2.4 Comparison of agriculture in EU Member States for 2008

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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	Entrepreneurial income per AWU €
Member States							
EU27	237 999	180 607	449 321	168 983	81 536	11 448	7 100
EU15	163 651	128 937	313 809	125 426	63 016	5 507	11 400
Austria	3 019	3 166	6 710	2 779	1 940	156	12 500
Belgium	3 277	4 037	7 396	2 006	843	65	13 000
Bulgaria	2 438	1 353	4 468	1 774	1 323	441	3 000
Cyprus	286	306	622	338	33	26	1 300
Czech Republic	2 642	2 090	4 926	1 162	398	135	2 900
Denmark	3 827	5 577	9 966	2 444	- 278	57	-4 900
Estonia	236	345	643	197	117	31	3 800
Finland	1 980	2 328	4 839	1 350	1 090	90	12 100
France	37 818	25 966	69 050	27 414	12 901	884	14 600
Germany	24 534	22 556	48 822	14 414	6 422	545	11 800
Greece	7 291	2 882	11 105	6 040	5 430	582	9 300
Hungary	4 745	2 502	7 850	2 890	1 808	437	4 100
Ireland	1 649	4 206	6 172	1 580	1 713	142	12 100
Italy	28 595	15 322	47 889	26 436	8 168	1 194	6 800
Latvia	501	428	1 057	291	275	100	2 800
Lithuania	1 263	873	2 255	665	342	94	3 600
Luxembourg	95	179	297	112	59	4	15 900
Malta	51	75	134	51	52	4	12 400
Netherlands	11 183	9 722	23 399	8 028	1 536	190	8 100
Poland	11 718	10 152	22 534	8 640	6 784	2 349	2 900
Portugal	3 899	2 767	7 001	2 110	1 235	358	3 400
Romania	11 723	4 582	17 691	7 740	3 487	2 150	1 600
Slovakia	..	..	..	..	..	..	..
Slovenia	589	563	1 173	366	323	83	3 900
Spain	25 721	14 850	42 327	21 737	16 513	896	18 400
Sweden	2 076	2 398	5 169	1 291	685	66	10 400
United Kingdom	8 689	12 980	23 667	7 686	4 762	278	17 100

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)

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

- 20** Estimates of Farm Business Income for 2008/9 (i.e. year ended February 2009) 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 2008 Single Payment Scheme are recorded in the 2008/09 accounting year. Estimates of Farm Business Income are under development in Scotland and will be published once they become available.
- 21** Average Farm Business Incomes are expected to fall on cropping farms in 2008/09. Despite lower prices than the previous year, crop enterprise output is expected to be higher due to a larger cropping area and higher yields. However, this is expected to be more than offset by the impact of increased costs, particularly fuel and fertiliser, resulting in a lower average Farm Business Income for these farms.
- 22** Average Farm Business Income on dairy farms is forecast to increase in England and Wales compared with the previous year, largely driven by a higher milk price. The effect of this on farm profitability is dampened to some extent by higher input costs, particularly fertiliser, fuel and other livestock costs. In Northern Ireland however, as milk prices were similar to the previous year, average Farm Business Income of dairy farms is forecast to fall due to the higher inputs costs.
- 23** On livestock grazing farms in both the Lowland and Less Favoured Areas, incomes are predicted to increase. Tighter supplies have led to higher market prices for finished cattle and lambs with a positive effect on livestock enterprise output. Cull cattle and sheep prices have also been firmer. Although some input costs have increased significantly, costs overall are expected to show a smaller percentage increase than total output.
- 24** Average Farm Business Income is forecast to increase substantially in 2008/09 on specialist pig farms. This reflects in part the low incomes seen in 2007/8 but also higher pigmeat prices throughout the course of 2008 caused by tighter supplies and weaker Sterling against the Euro. Although input costs are also forecast to increase, particularly for fuel and feed, these are expected to be more than offset by the increased output from the pig enterprise.
- 25** Specialist poultry incomes are expected to remain broadly similar in 2008/09 compared to 2007/8. Although prices have increased for both eggs and poultry meat, these rises have been largely offset by increased costs, particularly for feed and energy.
- 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 2007/08. Around a fifth of farms in England, Wales and Northern Ireland had a Farm Business Income of £5,000 or less whilst between a quarter and a third had an income of less than £10,000. Almost a third of farms in England had a Farm Business Income of over £50,000 compared to around 14 per cent in Wales and 19 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 2007/08. 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 12 per cent of farms failing to recover their costs.

Table 2.5 Farm business income by country and type of farm

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Average farm business income per farm (£ farm)		Accounting years ending on average in February				
	2004/05	2005/06	2006/07	2007/08	2008/09 (provisional)	
At current prices						
England						
Cereals	29 200	29 000	45 900	73 400	50 200	
General cropping	42 400	36 900	62 200	81 000	53 600	
Dairy	33 100	33 600	30 800	55 100	72 800	
Grazing livestock (lowland)	9 300	9 400	11 400	12 400	20 000	
Grazing livestock (LFA)	16 200	15 800	10 500	10 400	15 000	
Specialist pigs	25 900	30 300	24 500	6 300	71 300	
Specialist poultry	86 000	93 100	100 600	139 200	142 000	
Mixed	23 900	25 800	27 200	37 300	38 600	
Wales						
Dairy	28 500	30 600	30 500	51 300	62 400	
Grazing livestock (lowland)	11 600	10 000	21 900	19 000	23 900	
Grazing livestock (LFA)	21 000	17 800	17 500	19 800	23 000	
Scotland						
Cereals	..	..	..	..	..
General cropping	..	..	..	..	..
Dairy	..	..	..	..	..
Grazing livestock (LFA)	..	..	..	..	..
Mixed	..	..	..	..	..
Northern Ireland						
Dairy	24 900	28 700	27 300	58 700	51 100	
Grazing livestock (LFA)	10 200	11 900	12 600	13 400	18 800	

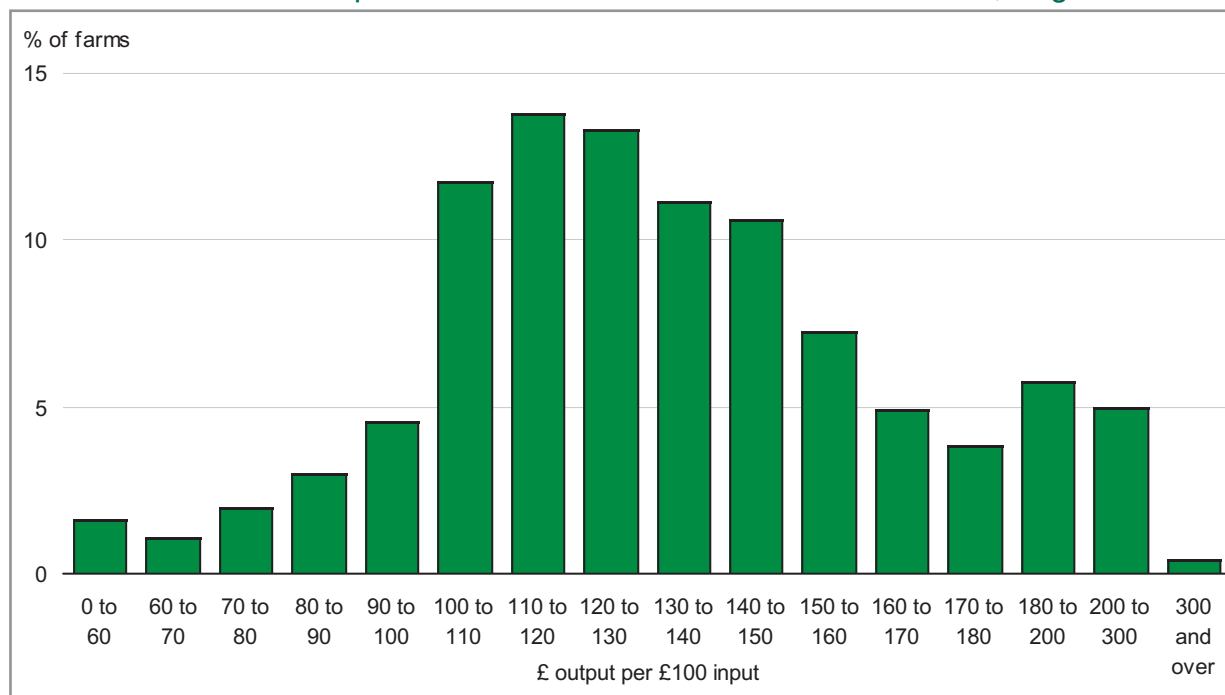
Table 2.6 All farm types: distribution of farm incomes by country 2007/08

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	12.1	12.9	..	9.6
0 to less than £5,000	8.5	8.0	..	9.7
£5,000 to less than £10,000	6.9	11.3	..	11.8
£10,000 to less than £20,000	14.2	22.9	..	22.6
£20,000 to less than £30,000	10.3	15.2	..	12.9
£30,000 to less than £50,000	15.9	15.0	..	14.1
£50,000 and over	32.1	14.7	..	19.3
Average (£ thousand per farm)	48.1	26.5	..	30.1
Net Farm Income				
Less than zero	19.0	22.4	17.5	26.7
0 to less than £5,000	10.4	9.7	7.0	10.7
£5,000 to less than £10,000	8.4	14.7	9.9	12.1
£10,000 to less than £20,000	10.7	16.9	14.6	12.4
£20,000 to less than £30,000	10.9	14.8	13.3	11.9
£30,000 to less than £50,000	14.7	11.2	17.2	10.7
£50,000 and over	25.9	10.3	20.5	15.5
Average (£ thousand per farm)	38.6	18.4	29.8	22.6
Cash Income				
Less than zero	9.3	5.5	7.4	4.8
0 to less than £5,000	6.4	4.4	5.3	3.9
£5,000 to less than £10,000	6.5	8.9	6.7	9.7
£10,000 to less than £20,000	15.0	17.8	14.5	23.6
£20,000 to less than £30,000	10.9	20.4	14.5	10.1
£30,000 to less than £50,000	16.8	24.5	19.7	19.7
£50,000 and over	35.1	18.6	31.9	28.2
Average (£ thousand per farm)	55.3	35.7	44.7	40.6

Chart 2.4 Distribution of performance across farms >0.5 SLR 2007/08; England



2008

Farm income measures

- 29 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

- 30 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.

- 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**

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.
- Stocks are calculated as the end year (February) stock valued at the end year price.

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.
- Stocks are calculated as the end year (February) stock valued at the end year price.

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.
- Stocks are calculated as the difference between opening and closing stocks, valued at the average price across the calendar year.

Diversification

2008

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 in England and Wales is available at:

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

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

Chapter 3 The Structure of the Industry

Summary

In 2008:

- the area of wheat increased by 13.6 per cent compared to 2007 to 2.1 million hectares; the area of barley increased by 14.9 per cent; the area of oats increased by 4.4 per cent; the area of oilseed rape decreased by 11.3 per cent to 0.6 million hectares. The area of potatoes showed an increase of 2.4 per cent;
- there were 10.1 million cattle in the United Kingdom at June 2008, a fall of 1.9 per cent compared to 2007; the number of cows in the dairy herd fell by 2.3 per cent while the number in the beef herd fell by 1.7 per cent; the number of pigs fell by 2.5 per cent to 4.7 million; and the number of sheep and lambs fell by 2.4 per cent to 33.1 million;
- the total farm labour force in the United Kingdom increased by 0.9 per cent compared to 2007 to 531,000; the number of full-time principal farmers fell very slightly, by 0.5 per cent, to 146,300, while the number of part-time principal farmers declined by 0.9 per cent to 196,800; the number of part-time workers declined by 0.4 per cent, while the number of casual workers increased by 4.9 per cent.

Introduction

- 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. Data in this chapter are sourced from the June Surveys/Census of Agriculture carried in the four UK countries each year. Results in tables 3.1 and 3.2 cover all United Kingdom holdings, whereas results pre-2000 in tables 3.3 to 3.5 do not include estimates for Great Britain minor holdings.

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

Chart 3.1 Total area on agricultural holdings June 2008; United Kingdom

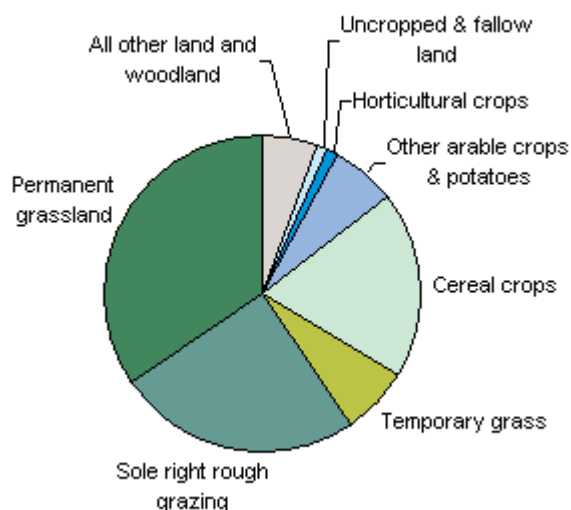
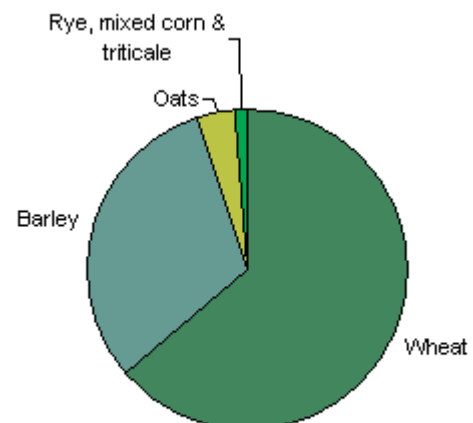


Chart 3.2 Total area of cereal crops grown June 2008; United Kingdom



2 At June 2008, the total agricultural area was 18.7 million hectares, some 77 per cent of the total land area in the United Kingdom (excluding inland water).

3 Permanent grassland and sole right rough grazing accounted for 60 per cent of the area on agricultural holdings in June 2008. Around 35 per cent was considered to be croppable land, i.e. land currently under crops, bare fallow, uncropped land or temporary grass. Around 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 increased in June 2008 compared to June 2007 to 3.3 million hectares. Wheat was the main cereal crop covering over 60 per cent of the area of cereal crop in June 2008. Barley covered around 30 per cent of the area, with oats and other crops making up the remainder. The

area of barley increased by 15 per cent in 2008. The area of oilseed rape decreased by 11 per cent and the area of peas and beans by 8.0 per cent. The area of linseed increased by 30 per cent.

5 In 2007, the source of data for cattle was changed from survey data to administrative data supplied by the Cattle Tracing System (CTS) in England and Wales, the equivalent APHIS system in Northern Ireland. In Scotland, data continued to be sourced from agricultural surveys. The new data is believed to offer greater accuracy as it has greater coverage. However, the results for 2007 onwards 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 1.9 million animals and the beef herd at 1.7 million animals in June 2008. The dairy herd fell by 2.3 per cent, continuing a long term downward trend, while the beef herd fell by 1.7 per cent.

7 The size of the sheep breeding flock continued to decline and fell by 2.8 per cent between June 2007 and June 2008 to 15.6 million animals. The number of lambs fell by 1.7 per cent to 16.6 million.

8 The female pig breeding herd also continued to decline and fell by 7.6 per cent to 421,000 animals in June 2008. The number of pigs other than breeding animals fell by 1.8 per cent to 4.2 million. The poultry breeding flock, comprising layer breeders, broiler breeders, cocks and cockerels, decreased by 21 per cent to 9 million birds. It should be noted that 2007 figures for England were revised due to broilers being mis-classified as broiler breeders on several large poultry units. Approximately 770 thousand poultry were moved into the "Table chickens broilers" category, out of the "Broiler breeders" category.

Chart 3.3 Changes in crop areas; United Kingdom

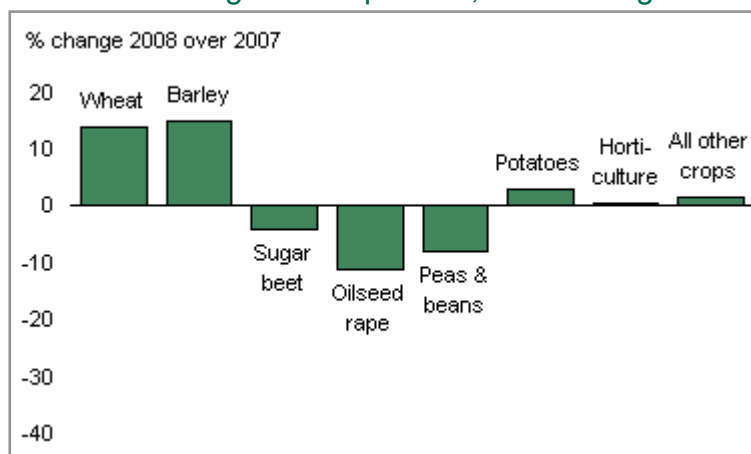


Chart 3.4 Changes in livestock numbers; United Kingdom

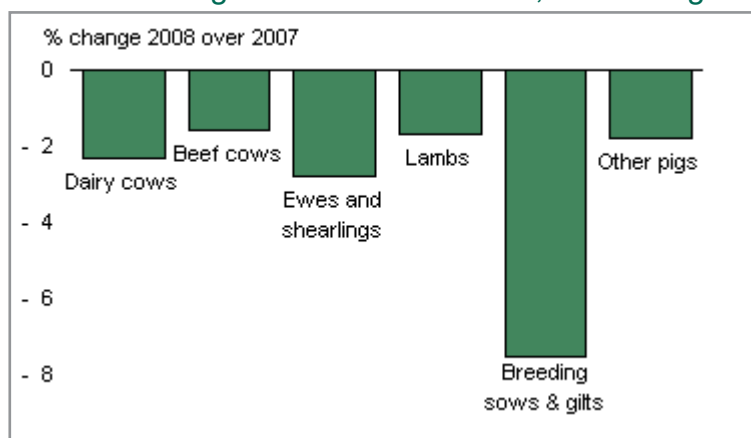


Table 3.1 Agricultural land use United Kingdom

Enquiries: Alison Wray on +44 (0)1904 455313

email: alison.wray@defra.gsi.gov.uk

Thousand hectares	At June of each year					
	Average of 1997-99	2004	2005	2006	2007	2008
Total agricultural area (a)	18 612	18 432	18 502	18 788	18 690	18 702
of which:						
crops	4 890	4 589	4 437	4 415	4 439	4 740
uncropped arable land (b)	32	29	164	197	165	195
Total tillage	4 922	4 619	4 600	4 611	4 603	4 935
All grass under five years old	1 311	1 246	1 193	1 137	1 176	1 141
Total arable land	6 233	5 864	5 794	5 749	5 779	6 076
All grass five years old and over (excluding rough grazing)	5 365	5 620	5 711	5 967	5 965	6 036
Total tillage and grass	11 598	11 485	11 505	11 716	11 744	12 112
Sole right rough grazing	4 618	4 326	4 354	4 491	4 313	4 359
Set-aside	397	559	535	466	440	-
All other land (c) and woodland	775	825	872	874	954	993
Total area on agricultural holdings	17 387	17 195	17 266	17 547	17 452	17 464
Common rough grazing (estimated)	1 225	1 237	1 236	1 241	1 238	1 238

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

(b) Excludes land previously declared as set-aside. Includes all uncropped arable land i.e. bare fallow and arable land not in production managed under GAEC12 conditions (Good Agricultural and Environmental conditions).

(c) 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

Enquiries: Alison Wray on +44 (0)1904 455313

email: alison.wray@defra.gsi.gov.uk

	At June of each year					
	Average of 1997-99	2004	2005	2006	2007	2008
Crop areas (thousand hectares)						
Total	4 890	4 589	4 437	4 415	4 439	4 740
of which:						
Total cereals	3 358	3 130	2 919	2 864	2 885	3 274
of which: wheat (b)	1 976	1 990	1 867	1 836	1 830	2 080
barley	1 264	1 007	938	881	898	1 032
oats	97	108	90	121	129	135
rye, mixed corn and triticale	22	25	24	25	27	27
Other arable crops (excluding potatoes)	1 182	1 136	1 211	1 245	1 170	1 152
of which: oilseed rape (b)	456	498	519	568	674	598
sugar beet not for stockfeeding (c)	189	154	148	130	125	120
hops (c)	3	2	1	1	..	..
peas for harvesting dry and field beans (c)	204	242	239	231	161	148
linseed (b) (c) (d)	127	30	45	36	13	16
other crops (b)	202	203	252	278	272	269
Potatoes	169	148	137	140	140	144
Horticulture	181	175	170	166	169	170
of which: vegetables grown in the open	125	125	121	119	121	122
orchard fruit (e)	29	24	23	23	23	24
soft fruit (f)	10	9	9	10	9	10
plants and flowers (g)	14	15	14	12	13	13
glasshouse crops	2	2	2	2	2	2

continued

Table 3.2 continued

	Average of 1997-99	2004	2005	2006	At June of each year	
					2007	2008
Livestock numbers (thousand head)						
Total cattle and calves (h)	11 526	10 588	10 392	10 270	10 304	10 107
of which: dairy cows	2 453	2 129	2 063	2 066	1 954	1 909
beef cows	1 911	1 736	1 762	1 733	1 698	1 670
heifers in calf	799	690	638	645	..	..
Total sheep and lambs	43 983	35 817	35 416	34 722	33 946	33 131
of which: ewes and shearlings	21 138	17 630	16 935	16 637	16 064	15 616
lambs under one year old	21 754	17 238	17 488	17 058	16 855	16 574
Total pigs	7 834	5 159	4 862	4 933	4 834	4 714
of which: sows in pig and other sows for breeding	654	449	403	401	398	365
gilts in pig	102	66	67	67	57	55
Total poultry (i)	169 901	181 759	173 909	173 081	167 667	166 200
of which: table fowl including broilers	102 268	119 888	111 475	110 672	109 794	109 859
laying fowl (j)	31 009	29 655	29 544	28 632	27 321	25 940
growing pullets	10 317	8 156	10 928	9 625	8 936	9 313
fowls for breeding	9 528	10 125	8 561	9 273	11 461	9 068
turkeys, ducks, geese and all other poultry (k)	16 779	13 935	13 400	14 879	10 154	12 019

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

(c) Figures from 2005 do not include Wales. From 2007 hops area included in "other crops"

(d) England and Wales only prior to 1992. Excludes crops on Set-Aside scheme land

(e) Includes non-commercial orchards.

(f) Includes wine grapes.

(g) Hardy nursery stock, bulbs and flowers.

(h) 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

(i) 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.

(j) Excludes fowls laying eggs for hatching.

(k) 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 by Standard Labour Requirement (SLR) and by land area in 2002 and 2007. The Standard Labour Requirement is representative of labour requirements (hours per-head or hours per hectare) under typical conditions for enterprises of average size and performance. 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 2007. 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.

Table 3.3 Numbers and sizes of holdings; United Kingdom

Enquiries: Alison Wray on +44 (0)1904 455313

email: alison.wray@defra.gsi.gov.uk

		At June of each year			
		2002		2007	
		Number of holdings (thousand)	Total ESU	Number of holdings (thousand)	Total ESU
Size of holding (SLR) (b)	under 1 Standard Labour Requirements (SLR)	225.6	45.4	251.3	47.5
	1 to under 2 SLR	35.3	50.8	32.3	46.0
	2 to under 3 SLR	17.7	43.1	15.7	38.6
	3 to under 5 SLR	14.9	56.8	14.5	55.5
	5 SLRs and over	9.5	92.6	10.0	95.1
	Total	303.0	288.7	323.9	282.6
	Average size (SLRs):				
	All holdings		1.0		0.9
	Holdings 1 SLR and over		3.1		3.2
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings	under 20 hectares	177.3	874	197.2	918
	20 to under 50 hectares	47.8	1 580	49.0	1 614
	50 to under 100 hectares	36.5	2 608	36.1	2 580
	100 hectares and over	41.4	12 093	41.5	12 252
	Total	303.0	17 154	323.9	17 363
	Average area (hectares):				
	All holdings		56.6		53.6
	Holdings 1 SLR and over		172.8		178.8
	% of total area on holdings with 100 hectares and over		70.5		70.6
Tillage and grass area	0.1 to under 20 hectares	119.8	730	115.9	757
	20 to under 50 hectares	41.4	1 383	40.9	1 384
	50 to under 100 hectares	30.8	2 193	29.9	2 181
	100 hectares and over	29.3	5 898	29.5	6 237
	Total	221.4	10 204	216.2	10 559
	Average crops and grass area per holding (hectares) (b)		46.1		48.8
	% of total crops and grass area on holdings with 100 hectares and over		57.8		59.1

(a) 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.

(b) 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

		At June of each year			
		2002		2007	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Cereals (excluding maize)	0.1 to under 15 hectares	21.2	158.1	18.8	144.8
	15 to under 30 hectares	11.3	255.4	10.4	243.9
	30 to under 50 hectares	8.3	335.6	7.9	333.3
	50 to under 100 hectares	10.7	768.0	9.2	695.4
	100 hectares and over	9.2	1 727.9	7.4	1 453.1
	Total	60.6	3 245.0	53.8	2 870.5
	Average area (hectares) (a)		53.6		53.4
	% of total cereals area on holdings with 100 hectares and over		53.2		50.6

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			
		2002		2007	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Oilseed rape	0.1 to under 10 hectares	2.6	17.2	2.9	16.3
	10 to under 20 hectares	3.5	53.8	3.3	50.1
	20 to under 30 hectares	2.2	55.8	2.6	63.3
	30 to under 50 hectares	2.1	85.4	3.1	117.9
	50 hectares and over	1.7	144.7	3.7	354.1
	Total	12.2	356.9	15.6	601.6
	Average area (hectares) (a)		29.4		38.5
	% of total oilseed rape area on holdings with 50 hectares and over		40.5		58.9
Sugar beet (England and Wales only)	0.1 to under 10 hectares	3.0	17.6	2.1	16.4
	10 to under 20 hectares	2.0	29.1	1.3	25.2
	20 hectares and over	2.7	122.4	1.5	83.3
	Total	7.7	169.1	4.9	125.0
	Average area (hectares) (a)		22.0		25.4
Potatoes	% of total sugar beet area on holdings with 20 hectares and over		72.4		66.7
	0.1 to under 2 hectares	4.2	2.5	2.7	2.3
	2 to under 5 hectares	2.0	7.2	1.2	4.9
	5 to under 10 hectares	2.4	18.8	1.7	14.7
	10 to under 20 hectares	2.3	33.9	2.0	31.7
	20 hectares and over	2.1	96.0	1.8	86.6
	Total	13.0	158.5	9.4	140.1
	Average area (hectares) (a)		12.2		14.9
	% of total potato area on holdings with 20 hectares and over		60.5		61.8
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (thousand)	Number of livestock (thousand)
		2002	2007	2002	2007
Dairy cows	1 to 49 dairy cows	11.0	290.4	14.0	162.6
	50 to 99	9.2	698.7	6.3	460.4
	100 and over	7.7	1 238.1	7.8	1 330.7
	Total	27.9	2 227.2	28.1	1 953.7
	Average size of herd (head)		80		69
	% of total dairy cows in herds of 100 and over		55.6		68.1
Beef cows	1 to 4 beef cows	12.7	34.1	17.5	37.4
	5 to 9	10.2	75.7	10.3	70.3
	10 to 19	12.7	187.9	13.0	181.4
	20 to 29	7.5	189.0	7.8	186.2
	30 to 49	8.0	314.4	8.3	314.6
	50 and over	9.0	854.6	9.6	907.7
	Total	60.0	1 655.7	66.4	1 697.7
	Average size of herd (head)		28		26
Sheep breeding flock	% of total beef cows in herds of 50 and over		51.6		53.5
	1 to 19 breeding sheep	16.5	159.6	15.2	159.5
	20 to 49	14.4	488.3	13.1	467.0
	50 to 124	17.6	1 487.6	17.0	1 496.7
	125 to 499	23.7	6 228.7	20.2	5 526.7
	500 and over	9.7	9 367.0	8.7	8 508.7
	Total	81.8	17 731.2	74.3	16 158.6
	Average size of flock (head)		217		218
	% of total breeding sheep in flocks of 500 and over		52.8		52.7

continued

Table 3.4 continued

		2002		2007	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (thousand)	Number of livestock (thousand)
Pig breeding herd	1 to 4 breeding pigs	2.4	6.3	2.3	6.0
	5 to 24	1.2	15.4	1.4	17.2
	25 to 99	0.8	51.1	0.7	40.8
	100 and over	1.3	494.1	1.0	398.6
	Total	5.7	566.9	5.4	462.7
	Average size of herd (head)		100		86
	% of total breeding pigs in herds of 100 and over		87.2		86.1
Fattening pigs (Fattening pigs of over 20kg liveweight excluding barren sows)	1 to 9 fattening pigs	2.4	10.1	3.3	14.6
	10 to 49	1.2	31.8	1.5	36.8
	50 to 299	1.2	184.8	1.1	159.6
	300 to 999	1.3	834.3	1.1	677.1
	1,000 and over	1.1	2 515.3	1.0	2 276.0
	Total	7.2	3 576.3	8.1	3 164.0
	Average size of herd (head)		494		392
Broilers (b) (Includes small numbers of other table fowl in Scotland and Northern Ireland)	1 to 9,999 broilers	1.8	721.1	1.9	539.1
	10,000 to 99,999	0.8	35 231.1	0.7	29 950.8
	100,000 and over	0.3	69 184.4	0.4	78 533.2
	Total	3.0	105 136.6	2.9	109 023.2
	Average size of flock (head)		35 301		37 546
	% of total broilers in flock of 100,000 and over		65.8		72.0
			70.3		71.9
Laying fowls	1 to 999 laying fowls	29.1	828.9	31.2	985.2
	1,000 to 4,999	0.5	1 288.8	0.6	1 429.1
	5,000 to 19,999	0.5	5 275.3	0.4	4 829.8
	20,000 and over	0.3	30 430.5	0.3	27 668.1
	Total	30.4	37 823.5	32.4	34 912.3
	Average size of flock (head)		1 245		1 076
	% of total laying fowls in flocks of 20,000 and over		80.5		79.3

(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 Agricultural holdings by size and country 2007

Enquiries: Alison Wray on +44 (0)1904 455313

email: alison.wray@defra.gsi.gov.uk

									At June
	England			Wales		Scotland		Northern Ireland	
	Number of			Number of		Number of		Number of	
	holdings	Total		holdings	Total	holdings	Total	holdings	Total
	(thousand)	SLR	(thousand)	SLR	(thousand)	SLR	(thousand)	SLR	(thousand)
Size of holding (SLR) (a)									
under 1 SLR	161.7	30 305.8	28.6	5 166.6	41.1	5 386.9	20.0	6 668.6	
1 to under 2 SLR	21.5	30 436.9	3.9	5 634.3	3.6	5 167.0	3.4	4 769.6	
2 to under 3 SLR	9.9	24 149.2	2.3	5 690.0	2.2	5 428.7	1.4	3 299.6	
3 to under 5 SLR	8.8	33 556.5	2.2	8 428.0	2.5	9 647.8	1.0	3 837.0	
5 SLRs and over	6.4	65 583.2	1.2	9 273.5	2.0	16 988.4	0.4	3 218.0	
Total	208.2	184 031.6	38.2	34 192.4	51.4	42 618.8	26.1	21 792.8	
Average size (SLR):									
All holdings		0.9		0.9		0.8		0.8	
Holdings 1 SLR and over		3.3		3.0		3.6		2.5	

continued

Table 3.5 continued

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings								
Under 20 hectares	133.1	538.0	22.6	110.5	30.6	158.1	10.9	111.5
20 to under 50 hectares	27.2	897.6	6.6	220.8	6.2	203.6	9.0	291.7
50 to under 100 hectares	21.3	1 532.6	5.0	355.7	5.4	390.5	4.4	301.0
100 hectares and over	26.6	6 323.1	4.0	772.9	9.2	4 845.2	1.8	310.4
Total	208.2	9 291.3	38.2	1 459.9	51.4	5 597.4	26.1	1 014.5
Average area (hectares):								
All holdings		44.6		38.2		109.0		38.8
Holdings 1 SLR and over		143.0		100.8		446.1		84.9
% of total area on holdings with 100 hectares and over		68.1		52.9		87.0		30.6

(a) 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 Agricultural holdings wholly or mainly in Less Favoured Areas by size and country 2007

Enquiries: Alison Wray on +44 (0)1904 455313

email: alison.wray@defra.gsi.gov.uk

	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)								
under 1SLR	26.0	21.5	20.8	14.7	28.7	13.4	14.8	38.5
1 to under 2 SLR	3.2	20.2	3.0	16.6	2.2	11.5	2.2	24.0
2 to under 3 SLR	1.6	17.8	1.8	17.2	1.4	12.3	0.8	14.4
3 to under 5 SLR	1.3	22.8	1.7	25.2	1.7	23.7	0.5	13.7
5 SLRs and over	0.5	17.7	0.9	26.1	1.4	39.1	0.2	9.4
Total	32.7	100.0	28.2	100.0	35.3	100.0	18.4	100.0
Average size (SLR):								
All holdings		0.7		0.9		0.8		0.8
Holdings 1 SLR and over		2.6		3.0		3.6		2.5
% of total SLR on:								
LFA holdings		12.2		75.6		64.8		58.2
non-LFA holdings		87.8		24.4		35.2		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)
	(thousand)	(thousand)	(thousand)	(thousand)	(thousand)	(thousand)	(thousand)	(thousand)
Total area on holdings								
Under 20 hectares	20.6	89.1	16.4	81.7	21.2	114.1	7.7	81.4
20 to under 50 hectares	4.6	153.0	4.8	160.6	4.4	144.5	6.5	209.0
50 to under 100 hectares	3.5	250.1	3.8	270.3	3.5	251.1	3.0	203.3
100 hectares and over	3.9	1 012.6	3.2	638.3	6.3	4 218.5	1.2	219.0
Total	32.7	1 504.8	28.2	1 150.8	35.3	4 728.2	18.4	712.7
Average area (hectares):								
All holdings		44.6		40.8		133.9		38.8
Holdings 1 SLR and over		143.0		105.8		598.7		84.9
% of total area on holdings with 100 hectares and over		68.1		55.5		89.2		30.6
% of total area on:								
LFA holdings		16.2		78.8		84.5		70.2
non-LFA holdings		83.8		21.2		15.5		29.8

(a) 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 Agricultural holdings by farm type, size and country 2007

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 (a)	1.8	1.8	0.4	1.9	0.1	0.6	0.7	5.4
1 to under 2 SLR	1.9	8.8	0.5	11.9	0.2	4.3	1.2	21.3
2 to under 3 SLR	2.3	17.3	0.5	19.2	0.3	12.3	0.8	22.5
3 to under 5 SLR	2.8	32.7	0.6	32.9	0.5	35.0	0.7	31.0
5 SLRs and over	1.8	39.4	0.3	34.2	0.4	47.9	0.3	19.8
Total	10.6	100.0	2.4	100.0	1.4	100.0	3.6	100.0
Grazing Livestock (LFA)								
under 1 SLR	9.1	23.6	7.1	13.0	9.5	12.9	13.4	61.4
1 to under 2 SLR	2.0	23.1	2.3	17.4	1.7	12.6	1.2	23.0
2 to under 3 SLR	0.9	18.2	1.3	17.3	1.0	12.3	0.2	8.2
3 to under 5 SLR	0.7	21.0	1.3	26.4	1.1	23.1	0.1	5.5
5 SLRs and over	0.2	14.0	0.7	25.9	0.9	39.0	-	1.9
Total	13.0	100.0	12.6	100.0	14.2	100.0	14.9	100.0
Grazing Livestock (lowland)								
under 1 SLR	27.3	38.2	2.2	24.2	1.6	26.3	3.9	52.8
1 to under 2 SLR	3.5	25.0	0.5	21.9	0.1	17.8	0.5	26.8
2 to under 3 SLR	1.1	13.3	0.2	16.6	0.1	14.1	0.1	10.0
3 to under 5 SLR	0.7	12.6	0.1	17.8	0.1	18.9	-	6.4
5 SLRs and over	0.3	10.9	0.1	19.3	-	23.0	-	3.9
Total	32.8	100.0	3.1	100.0	1.9	100.0	4.5	100.0
Cereals								
under 1 SLR	14.5	20.3	0.3	37.4	2.6	29.3	0.4	41.4
1 to under 2 SLR	4.9	25.2	-	27.7	0.5	25.7	-	22.4
2 to under 3 SLR	2.1	17.9	-	12.4	0.2	17.4	-	17.4
3 to under 5 SLR	1.4	19.1	-	{22.6}	0.1	15.3	-	{18.9}
5 SLRs and over	0.7	17.5	-	-	-	12.4	-	-
Total	23.6	100.0	0.4	100.0	3.6	100.0	0.5	100.0
General Cropping								
under 1 SLR	3.2	6.1	0.1	11.3	1.0	4.9	0.1	11.9
1 to under 2 SLR	2.2	12.6	-	13.6	0.4	12.3	0.1	19.0
2 to under 3 SLR	1.0	10.0	-	16.4	0.3	15.2	-	14.4
3 to under 5 SLR	1.0	15.7	-	30.5	0.3	20.5	-	23.2
5 SLRs and over	1.1	55.5	-	28.1	0.3	47.1	-	31.4
Total	8.6	100.0	0.1	100.0	2.3	100.0	0.2	100.0
Specialist Pigs								
under 1 SLR	1.6	9.0	0.1	36.1	0.1	4.1	0.1	5.5
1 to under 2 SLR	0.3	14.1	-	{63.9}	-	3.6	-	14.4
2 to under 3 SLR	0.1	7.8	-	-	-	3.8	-	9.3
3 to under 5 SLR	0.1	14.6	-	-	-	21.3	-	16.0
5 SLRs and over	0.2	54.5	-	-	-	67.2	-	54.7
Total	2.5	100.0	0.1	100.0	0.2	100.0	0.2	100.0
Specialist Poultry								
under 1 SLR	5.2	8.8	0.6	6.1	1.7	15.5	0.2	16.7
1 to under 2 SLR	0.4	12.9	-	8.0	-	5.3	0.1	23.7
2 to under 3 SLR	0.2	11.7	-	7.0	-	11.2	0.1	18.9
3 to under 5 SLR	0.2	17.2	-	11.7	-	21.0	-	17.6
5 SLRs and over	0.2	49.5	-	67.2	-	47.1	-	23.1
Total	6.2	100.0	0.7	100.0	1.8	100.0	0.4	100.0
Horticulture								
under 1 SLR	5.2	6.2	0.4	14.9	0.9	10.8	0.1	6.9
1 to under 2 SLR	1.4	8.1	-	5.7	-	6.4	0.1	10.1
2 to under 3 SLR	0.6	6.2	-	7.5	-	4.4	-	7.6
3 to under 5 SLR	0.6	9.5	-	5.9	-	6.6	-	18.2
5 SLRs and over	1.0	70.1	-	66.1	-	71.7	-	57.2
Total	8.9	100.0	0.5	100.0	1.0	100.0	0.3	100.0

continued

2008

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	4.9	10.6	0.9	20.5	1.1	8.0	0.5	21.3
1 to under 2 SLR	2.0	17.5	0.1	17.3	0.5	14.9	0.2	25.5
2 to under 3 SLR	0.9	13.4	0.1	18.2	0.3	14.2	0.1	18.0
3 to under 5 SLR	0.8	18.5	-	14.7	0.3	22.1	-	17.7
5 SLRs and over	0.7	40.0	-	29.3	0.2	40.7	-	17.5
Total	9.3	100.0	1.1	100.0	2.3	100.0	0.8	100.0
Other								
under 1 SLR	88.9	51.7	16.7	53.5	22.5	46.5	0.7	24.9
1 to under 2 SLR	2.7	22.7	0.4	19.2	0.1	5.8	-	10.7
2 to under 3 SLR	0.6	9.0	0.1	9.2	0.1	6.6	-	17.9
3 to under 5 SLR	0.4	9.5	0.1	9.5	0.1	10.0	-	13.2
5 SLRs and over	0.1	7.1	-	8.5	0.1	31.2	-	33.3
Total	92.7	100.0	17.2	100.0	22.7	100.0	0.8	100.0
Total								
under 1 SLR	161.7	16.5	28.6	15.1	41.1	12.6	20.0	30.6
1 to under 2 SLR	21.5	16.5	3.9	16.5	3.6	12.1	3.4	21.9
2 to under 3 SLR	9.9	13.1	2.3	16.6	2.2	12.7	1.4	15.1
3 to under 5 SLR	8.8	18.2	2.2	24.6	2.5	22.6	1.0	17.6
5 SLRs and over	6.4	35.6	1.2	27.1	2.0	39.9	0.4	14.8
Total	208.2	100.0	38.2	100.0	51.4	100.0	26.1	100.0

(a) 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.

Labour force in agriculture (table 3.8)

- 11** The total labour force at June 2008 is estimated to have increased by 0.9 per cent to 531,000 persons compared with June 2007. The number of 'farmers, business partners, directors and spouses' fell by 0.3 per cent and the number of 'salaried managers' by 1.9 per cent. The number of 'other workers' saw an increase of 3.7 per cent to 173,000 persons.

Table 3.8 Labour force in agriculture United Kingdom

Enquiries: Alison Wray +44 (0)1904 455313

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Thousand persons	Average of 1997-99	2004	2005	2006	2007	At June 2008
Workers						
Regular whole-time:						
male	86	58	57	54	52	55
female	12	10	10	10	10	11
Regular part-time: (e)						
male	29	24	25	24	28	28
female	23	17	17	17	17	17
Seasonal or casual:						
male	53	50	46	44	41	43
female	24	19	19	20	18	19
Salaried managers (f)	11	15	16	15	15	15
Total workers	239	192	190	184	182	188

continued

Table 3.8 continued

	Average of 1997-99	2004	2005	2006	2007	2008
Spouses of farmers, partners and directors (engaged in farm work)	77	..	..	..	..	-
Farmers, partners, directors and spouses						
whole-time	181	156	154	152	146	146
part-time (e)	179	198	196	198	199	197
Total farmers, partners, directors and spouses	363	354	351	350	344	343
Total labour force (including farmers and their spouses) (g) (h)	602	546	541	534	526	531

(a) 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.

(b) From 1998 for England and Wales, estimates for holdings which have not been recording labour have been made, apart from economically insignificant holdings which are very unlikely to be in commercial production. An offsetting adjustment has been made to take out any labour being recorded on these very small holdings. The net effect has been to reduce the level of the labour series between 1998 and 2000 by about 5,000. This has not affected the trends previously recorded.

(c) The results for 2001 exclude the effect of the register improvement in England and are directly comparable with previous years.

(d) 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.

(e) 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.

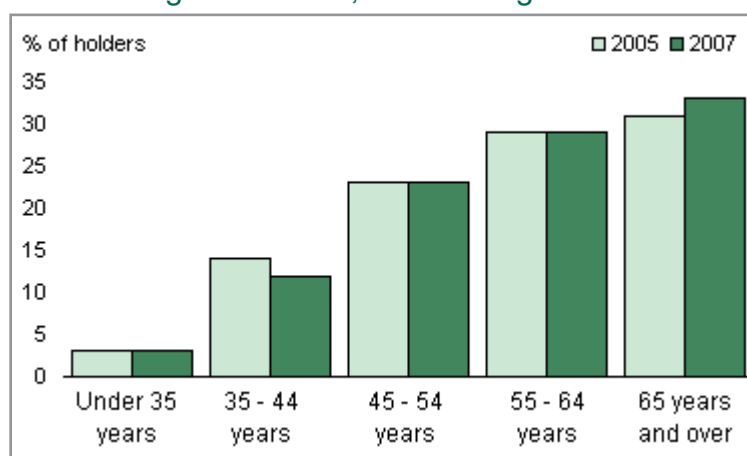
(f) From 1998 in England and Wales, all farmers managing holdings for limited companies or other institutions were asked to classify themselves as salaried managers.

(g) This is the series referred to as 'Workforce in agriculture' in Table 2.2.

(h) Figures exclude schoolchildren and most trainees.

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

Chart 3.5 Age of holders; United Kingdom



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.

13 The average (median) age of holders increased from 58 years in 2005 to 59 years in 2007. 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 '65 years and over' have increased while those aged '35 to 44 years' have fallen. Proportions in other categories have remained virtually unchanged. 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

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Thousand persons

	EC FARM TYPE								All Types
	Cereals	General cropping	Horticulture	Pigs and Poultry	Dairy	Cattle and Sheep (LFA and low-land)	Mixed	Other	
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	3	2	3	4	4	3	3	3
35 - 44 years	3.4	1.9	1.2	1.8	3.9	11.9	2.5	11.3	37.7
as a % of the total	13	15	13	16	19	14	16	12	14
45 - 54 years	6.0	3.0	2.2	2.9	5.9	19.0	4.0	21.3	64.3
as a % of the total	24	24	25	26	28	23	26	22	23
55 - 64 years	7.5	3.6	2.9	3.3	6.2	22.8	4.9	28.0	79.1
as a % of the total	30	29	33	30	30	28	31	29	29
65 years and over	7.5	3.6	2.3	2.9	4.2	25.4	3.7	34.6	84.2
as a % of the total	30	29	26	26	20	31	24	35	31
Total	25.0	12.4	8.8	11.2	20.8	82.5	15.6	97.7	274.0
2007									
Holders age									
Under 35 years	0.5	0.2	0.1	0.2	0.6	3.1	0.3	2.6	7.5
as a % of the total	2.0	2.0	1.0	2.0	3.0	4.0	2.0	2.0	3.0
35 - 44 years	2.8	1.1	0.9	1.5	3.1	11.6	1.8	12.1	34.7
as a % of the total	11.0	13.0	11.0	15.0	17.0	14.0	14.0	10.0	12.0
45 - 54 years	6.4	2.3	2.0	2.3	5.7	18.8	3.6	25.3	66.4
as a % of the total	24.0	26.0	25.0	24.0	31.0	23.0	28.0	22.0	23.0
55 - 64 years	8.1	2.7	2.7	3.0	5.0	23.2	3.8	33.8	82.3
as a % of the total	30.0	31.0	33.0	30.0	28.0	28.0	30.0	29.0	29.0
65 years and over	8.8	2.5	2.4	2.8	3.8	25.7	3.5	43.0	92.5
as a % of the total	33.0	29.0	30.0	29.0	21.0	31.0	27.0	37.0	33.0
Total	26.6	8.8	8.1	9.8	18.1	82.4	13.0	116.7	283.4

(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: Alison Wray +44 (0)1904 455313

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Thousand persons

	<8 ESU	8:<40 ESU	40:<100 ESU	100:<200 ESU	200+ ESU	Total
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

continued

Table 3.10 continued

	<8 ESU	8:<40 ESU	40:<100 ESU	100:<200 ESU	200+ ESU	Total
2007						
Holders age						
Under 35 years	4.7	1.4	0.8	0.4	0.2	7.5
as a % of the total	3	3	3	3	3	3
35 - 44 years	19.7	7.0	4.4	2.4	1.2	34.7
as a % of the total	11	13	15	17	18	12
45 - 54 years	39.2	12.5	8.5	4.2	2.1	66.4
as a % of the total	22	24	29	30	31	23
55 - 64 years	51.8	15.6	8.6	4.3	2.0	82.3
as a % of the total	28	30	30	30	30	29
65 years and over	66.5	15.3	6.6	2.9	1.2	92.5
as a % of the total	37	30	23	20	18	33
Total	181.9	51.7	28.9	14.1	6.7	283.4

(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.

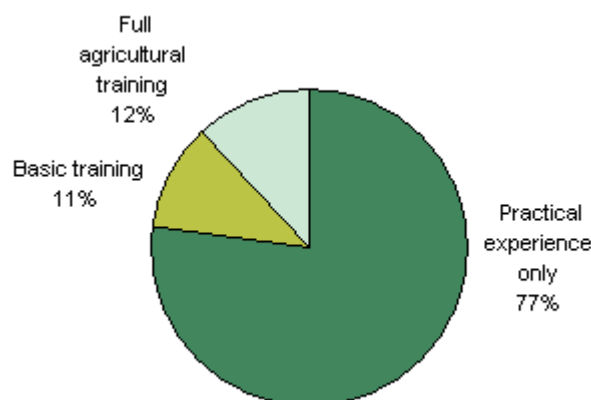
(b) European size units (ESU) measure the financial potential of the holding in terms of the margins which might be expected from crops and stock. The threshold of 8 ESU is judged to be the minimum for full-time holdings.

(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 2005; 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 7.0 per cent on the smallest farms.

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

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Thousand persons

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

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Thousand persons

	<8 ESU	8:<40 ESU	40:<100 ESU	100:<200 ESU	200+ ESU	Total
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 0.3 per cent higher at the end of 2008 compared to the end of 2007, a fall of 12 per cent on the average for 1997 to 1999. In recent years, the capital stock of 'buildings and works', 'plant and machinery' and 'vehicles' have generally all declined. However, this has levelled out over the last three years.
- 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

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Indices 2000 = 100	Average of 1997-99	2004	2005	2006	At year end	
					2007	2008 (provisional)
Gross capital stock (excludes livestock capital assets)						
Buildings and works	104.1	93.1	92.2	91.5	90.7	90.2
Plant and machinery	105.9	94.3	92.5	91.1	91.7	93.0
Vehicles	101.0	101.4	99.5	97.7	97.6	99.1
Total	104.6	94.0	92.7	91.7	91.5	91.8

Chapter 4 Prices

Summary

In 2008 compared with 2007:

- the average producer price of agricultural products rose by 20 per cent;
- the average price of crop products rose by 14 per cent;
- the average price of livestock and livestock products rose by 26 per cent;
- the average price of agricultural inputs rose by 24 per cent;
- the average price of fertiliser more than doubled;
- the average price of energy and lubricants rose by 59 per cent;

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 indices for average farm rents are based on surveys conducted in October. No survey was run in England in 2007 or 2008 and as such no data has been included for these years. A review of sources of farm rents in England is currently underway, the results of which will be available later this year.
- 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 20 per cent higher in 2008 than in 2007. It is 12 per cent above the peak in 1995 and 56 per cent above the low point in 2000. In 2008, the average price for crop products rose by 14 per cent. The average price for cereals rose by 26 per cent, that for fresh vegetables fell by 2.3 per cent and that for potatoes rose by 4.2 per cent. The average price for livestock and livestock products rose by 26 per cent.

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

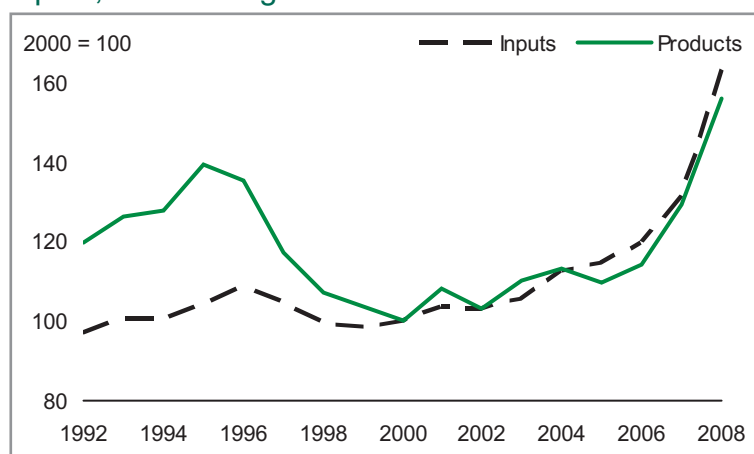


Table 4.1 Price indices for products and inputs; United Kingdom

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Indices (a) 2000 = 100

Calendar years

	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Producer prices for agricultural products (b)	109.2	113.3	109.7	114.2	129.5	155.9
of which:						
Crop products:	109.8	115.1	108.6	118.2	144.0	164.4
Cereals (including seeds)	119.0	114.2	99.1	110.5	163.7	206.3
Industrial crops	116.6	121.6	114.3	118.3	124.6	164.0
Forage crops	82.0	88.1	110.4	104.2	128.1	142.4
Fresh vegetables	100.6	113.7	120.3	129.7	143.5	140.2
Potatoes	115.3	140.3	109.2	142.2	161.1	167.9
Fresh fruit	102.9	112.4	120.1	114.6	126.7	142.2
Seeds	109.0	112.9	114.1	113.1	113.1	113.1
Flowers and plants	103.6	105.3	105.6	108.8	115.3	119.5
Other crop products	105.9	109.7	110.8	110.6	114.0	113.6
Livestock and livestock products:	108.8	112.0	110.4	111.6	119.7	150.2
Livestock (for slaughter and export)	103.5	111.7	110.3	113.8	116.0	146.5
Milk	117.8	109.0	109.0	106.0	122.5	153.1
Eggs	109.5	135.1	121.0	127.6	144.7	177.0
Other livestock products	113.4	110.4	107.5	93.5	115.2	139.5
Prices of agricultural inputs:	100.8	112.5	114.9	119.8	131.3	163.0
of which:						
Currently consumed in agriculture:	101.0	113.7	115.9	121.0	133.6	169.4
Livestock feedingstuffs	110.4	111.6	103.0	108.1	132.7	169.8
Seeds	115.8	110.3	107.9	110.0	153.5	146.8
Fertilisers and soil improvers	98.4	130.5	143.3	151.4	170.5	381.3
Plant protection products	110.2	100.6	101.7	104.0	106.3	108.5
Maintenance and repair of plant and machinery	93.6	122.5	130.3	137.8	143.4	151.6
Energy, lubricants	79.9	108.8	137.4	154.4	162.0	221.3
Maintenance and repair of buildings	98.2	113.4	118.1	125.1	134.2	142.9
Veterinary services	100.8	104.6	103.9	111.1	112.6	108.4
Other goods and services	98.0	114.0	114.5	115.5	120.0	123.8
Contributing to agricultural investment (c):	99.3	104.4	108.7	111.7	115.4	119.9
Machinery and other equipment	97.3	96.1	103.8	108.2	114.2	121.5
Transport equipment	103.8	101.5	103.2	103.4	102.8	103.3
Buildings	95.1	118.1	123.7	130.9	139.7	148.7
Engineering and soil improvement operations	93.4	114.0	118.3	120.8	126.8	131.8

(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.

- 6 The average price of agricultural inputs was 24 per cent higher in 2008 than in 2007 and is 57 per cent higher than in 1995. The average price of inputs that are currently consumed in agriculture rose by 27 per cent and for those inputs which contribute to agricultural investment, the average price rose by 3.9 per cent. The average price of livestock feedingstuffs rose by 28 per cent and the average price for seeds fell by 4.4 per cent in 2008. The average price of fertiliser and soil improvers rose by 124 per cent in 2008.
- 7 Since 2000 the average price of agricultural outputs has changed in line with the average price of agricultural inputs, rising and falling at about the same rate. Prior to that they followed similar patterns between 1988 and 1995 but between 1995 and 2000 the average price of outputs dropped relative to the average price of inputs. This relative change in average price between inputs and outputs was largely due to strengthening of sterling against the euro. The impact of weakening sterling against the euro since August 2008 has not yet emerged on average prices.
- 8 The average price of fertilisers doubled between January and August 2008 and then stabilised. Since 2007 the average price of energy has risen by 59 per cent peaking in July 2008 and then falling back to the prices seen at the end of 2007. Since 2007 the average price of animal feed has risen by 37 per cent peaking in April 2008.
- 9 The average price of cereals was 43 per cent higher in 2008 than in 2007. Prices almost doubled in 2007 peaking in January 2008. Prices then came back down but stabilised at a level above those prices in early 2007. The average prices for livestock, milk and eggs were all almost a third higher in 2008 compared with 2007.

Farm rents (table 4.2)

- 10 UK data is not available for 2007 and 2008 as England results are not available. A review of sources of farm rents data is currently underway, the results of which will be available later in the year.

Table 4.2 Farm rents

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Average per hectare: indices 2000 = 100		Calendar years					
		Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
England	full agricultural tenancies	100.0	94.0	95.3	96.6	..	..
	average (a)	98.1	99.6	98.2	96.9	..	..
Wales (b)	full agricultural tenancies	104.2	100.6	100.8	101.0	101.2	101.3
	average (a)	94.7	109.2	111.0	112.8	114.6	116.8
Scotland (c)(d)		93.9	103.4	..	..	..	..
Great Britain		97.5	100.5	99.0	97.9	98.8	98.5
Northern Ireland (e)		111.9	90.7	86.8	90.7	89.0	89.0

(a) 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.

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

(c) 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.

(d) Scotland - the latest published results relate to 2004. Results from 2005 onwards will be made available after the methodological review of the Tenanted Land Survey (TLS) in Scotland has been completed.

(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)

11 Estimates based on the bi-annual Agricultural Property Market Reports published by the Valuations Office suggest that the average value of agricultural land, based on sales in England rose by 19 per cent in 2008.

12 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

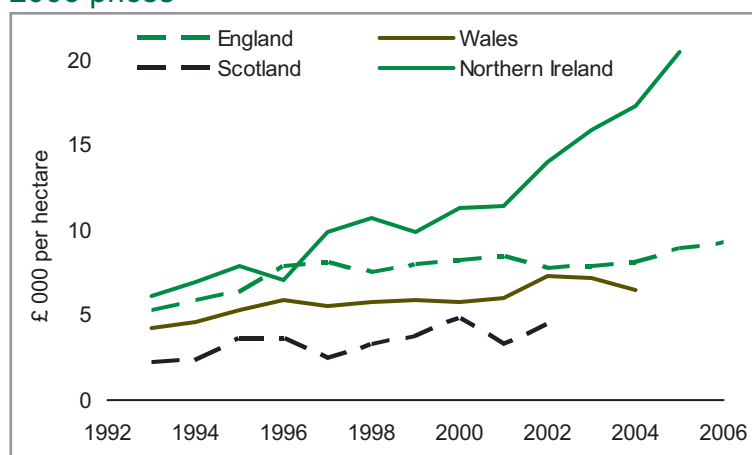


Table 4.3 Agricultural land prices

Enquiries: Organic Statistics Team on +44 (0)1904 466406

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£ per hectare of all sales (a)	Calendar years					
	Average of 1997-99	2003	2004	2005	2006	2007
England (b)	6 418	7 172	7 654	8 651	9 249	10 974
Wales (b)	4 665	6 498	6 107	..	..	..
Scotland	2 579	..	..	..	..	..
Northern Ireland (c)	8 290	14 950	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 2008, the value of production at market prices for:

- wheat rose by 69 per cent to £2.2 billion;
- barley rose by 62 per cent to £882 million;
- oilseed rape rose by 46 per cent to £618 million;
- sugar beet rose by 24 per cent to £200 million;
- fresh vegetables rose by 3.2 per cent to £1.1 billion;
- plants and flowers rose by 2.0 per cent to £797 million;
- potatoes rose by 14 per cent to £755 million;
- fresh fruit rose by 14 per cent to £517 million;
- beef and veal rose by 27 per cent to £2.1 billion;
- pigmeat rose by 17 per cent to £858 million;
- mutton and lamb rose by 29 per cent to £822 million;
- poultrymeat rose by 23 per cent to £1.5 billion;
- milk and milk products rose by 22 per cent to £3.5 billion;
- eggs rose by 28 per cent to £524 million.

General methodology note

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

Methodology note for cereals and potatoes

- 2 A methodological improvement was implemented in 2007 for the calculation of average prices for cereals which in turn are used to estimate the value of production. This was done in order to make better use of all price data collected under the Corn Returns Act in order to take fuller account of forward buying of cereals. This is particularly relevant in 2007 given the very sharp changes in prices that have occurred over the time period from the late summer and autumn 2007 which otherwise would have given rise to artificially high prices and therefore valuation estimates for 2007 in particular. It is also

relevant for 2008 where prices in the first half of the year were high and then declined from around the time of harvest and could otherwise have shown a lower valuation. For this reason the prices shown and quoted will not directly correlate with spot market prices or price series based purely on fixed contract purchases.

- 3 There are revisions to the figures shown in table 5.11 for potatoes from 2000 onwards to correct some data inconsistencies. The Great Britain element for the production figures is now consistent with British Potato Council (BPC) figures across all years, whilst the Northern Ireland figures used have been brought into line with Great Britain 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)

- 4 The area of cereals planted increased by 14 per cent in 2008 and yields also increased, resulting in an increase in overall production of 27 per cent. The increased plantings resulted from the favourable autumn sowing conditions, strong market prices at planting and the reduction in set-aside to zero, which increased the availability of land for plantings. Prices initially increased sharply in August 2007 but this increase continued into 2008, peaking in March/April before beginning to decline. Average prices in 2008 exceeded those for 2007 and in both years substantially exceeded the previous higher levels in late 2003 and early 2004 following the drought affected 2003 harvest in the European Union. The total value of production at market prices was £3.2 billion, 66 per cent higher than in 2007. A significant proportion of this increase was due to increased stock levels. The total value of sales of wheat, barley and oats increased by 22 per cent in 2008 to £2.2 billion.
- 5 Yields of all cereal crops were higher than 2007, when the yields were adversely affected by the hot dry spring followed by persistent wet weather from May to August. For wheat the 2008 yield was the highest level recorded. There was an initial slow start to the 2008 cereal harvest due mainly to delays in crop maturity. This affected all crops, and most were maturing 7-14 days later than normal. The harvest was

Table 5.1 Total cereals; United Kingdom

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Thousand tonnes (unless otherwise specified)					Calendar years	
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares)	3 358	3 130	2 916	2 856	2 884	3 274
Volume of harvested production	22 809	22 005	21 003	20 816	19 130	24 278
Value of production (£ million) (a)	2 578	2 391	1 453	1 512	1 920	3 180
Value of production at market prices (£ million)	1 808	1 707	1 453	1 512	1 920	3 180
Supply and use						
Production	22 809	22 005	21 003	20 816	19 130	24 278
Imports from: the EU	1 900	1 934	2 129	1 838	1 641	1 536
the rest of the world	820	463	702	653	809	748
Exports to: the EU	3 787	2 934	3 097	2 680	2 362	3 002
the rest of the world	1 443	80	208	65	78	465
Total new supply	20 300	21 388	20 529	20 562	19 140	23 095
Change in farm and other stocks	- 65	469	- 358	- 50	- 956	3 337
Total domestic uses	20 364	20 919	20 887	20 612	20 095	19 759
Production as % of total new supply for use in UK	112	103	102	101	100	105

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

further delayed and disrupted due to the persistent wet weather in August and September with difficult combining conditions and subsequent logistical difficulties in drying the grain.

- 6 The quality of barley harvested early was generally of excellent quality providing plentiful supplies of malting quality barley grain. The quality of wheat was more variable. Generally the protein content of the crop was lower, consistent with the higher yields.
- 7 Prices reflected prices on world markets attributable to various factors including increased global demand for food, feed and fuel use, and low world stock levels. In the first half of 2008 prices increased each month, peaking in April before starting to gradually decline. Prices dropped more sharply in August/September in response to higher global production.

Wheat (table 5.2)

- 8 The area of wheat planted increased by 14 per cent and with high yields production increased by 30 per cent. Although production in 2008 was up substantially on 2007, the increased plantings were not all of the higher quality wheat varieties. Grain quality of the 2008 crop was variable and protein levels were generally lower than in 2007. Price increases continued into 2008, peaking in April at £183/tonne for premium milling wheat and £138/tonne for feed wheat. Prices declined more sharply from August/September, ending the year at £142/tonne and £120/tonne respectively.
- 9 The overall annual price in 2008 was £151 per tonne for milling wheat, up £43 per tonne or 40 per cent and for feed wheat this was £124 per tonne, up £27 per tonne or 28 per cent on 2007. The overall value of production of wheat in 2008 increased by 69 per cent to £2.2 billion. The value relating to an increase in stocks contributed a significant £0.4 billion with the value of sales at £1.7 billion, up 25 per cent on 2007.
- 10 Imports in 2008 were higher than in years prior to 2007 as millers sourced a higher proportion of their grain from abroad due to lower quality domestic crop. Exports in 2008 increased by 44 per cent as a result of higher United Kingdom production and availability, especially of feed quality wheat grain. The volume of wheat grain available for domestic use was 2.2 per cent lower than in 2007. A 1.6 per cent increase in use by millers was offset by a 5.6 per cent decrease in use for feed. Overall compound feed production was lower by just 0.2 per cent but high cereal prices pushed the cereal incorporation rate down, and maize substituted for wheat in feed rations in the first half of 2008.

Table 5.2 Wheat; United Kingdom

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Thousand tonnes (unless otherwise specified)

Thousand tonnes (unless otherwise specified)						Calendar years	
	Average of 1997-99	2004	2005	2006	2007	2008	
						(provisional)	
Production							
Area (thousand hectares)	1 976	1 990	1 867	1 833	1 830	2 080	
Yield (tonnes per hectare)	7.7	7.8	8.0	8.0	7.0	8.3	
Volume of harvested production	15 111	15 473	14 863	14 735	13 221	17 227	
Value of production (£ million) (a)	1 676	1 677	1 031	1 070	1 309	2 209	
of which: sales	1 158	1 038	954	1 001	1 336	1 668	
subsidies (b)	460	447	..	..	..	..
on farm use	73	103	83	76	92	127	
change in stocks	- 15	90	- 7	- 8	- 119	413	
Value of production at market prices (£ million) (c)	1 217	1 231	1 031	1 070	1 309	2 209	
Prices (average prices weighted by volumes of sales (£ per tonne))							
Milling wheat	89	87	76	76	108	151	
Feed wheat	79	77	67	72	97	124	

continued

Table 5.2 continued

Thousand tonnes (unless otherwise specified)					Calendar years	
	Average of 1997-99	2004	2005	2006	2007	2008
					(provisional)	
Supply and use						
Production	15 111	15 473	14 863	14 735	13 221	17 227
Imports from: the EU	703	432	688	569	625	670
the rest of the world	500	352	487	459	613	570
Exports to: the EU	2 962	2 250	2 444	2 094	1 903	2 365
the rest of the world	631	43	22	22	9	395
Total new supply	12 721	13 964	13 572	13 647	12 547	15 707
Change in farm and other stocks	- 218	664	- 138	39	- 857	2 600
Total domestic uses	12 939	13 300	13 710	13 608	13 404	13 107
of which: flour milling	5 636	5 600	5 641	5 616	5 622	5 712
animal feed	6 155	6 627	7 002	6 864	6 591	6 223
seed	359	275	254	254	311	321
other uses and waste	788	798	813	874	880	852
Production as % of total new supply for use in UK	119	111	110	108	105	110
% of home grown wheat in milling grist	83	86	82	84	84	84

Wheat (Crop Years: July-June) United Kingdom

Thousand tonnes (unless otherwise specified)					Crop years: July-June	
	2003/04	2004/05	2005/06	2006/07	2007/08	
Production and output						
Volume of harvested production	14 288	15 473	14 863	14 735	13 221	
Value of production (£ million) (a)	1 579	1 572	1 045	1 181	1 642	
of which: sales	1 039	1 031	951	1 113	1 530	
subsidies (b)	440	447	..	..	..
on farm use	106	93	87	83	107	
change in stocks	- 5	2	7	- 16	6	
Value of production at market prices (£ million) (c)	1 139	1 126	1 045	1 181	1 642	

(a) Excludes farm saved seed

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

(c) Excluding subsidies and taxes.

Barley (table 5.3)

- 11 There was a 15 per cent increase in the area of barley grown which together with higher yields, this resulted in a 21 per cent increase in the volume of production. The quality of the 2008 crop was generally very good and malting barley specifications were largely met.
- 12 Prices increases continued into 2008, peaking in April at £182/tonne and £140/tonne for premium malting barley and feed barley respectively. Prices declined more sharply from August/September and after this time fell to £143/tonne and £105/tonne respectively. The average annual price in 2008 for malting barley was £152 per tonne, up £29 per tonne or 24 per cent compared to 2007, and for feed barley the price was £119 per tonne, up £16 per tonne or 15 per cent. The overall value of barley production increased by 62 per cent to £882 million. The increase in stocks contributed £154 million with the value of sales at £462 million, up 18 per cent on 2007.
- 13 The absolute level of barley imports was relatively low in 2008 at 110 thousand tonnes, just 12 thousand tonnes higher than in 2007. Exports increased by 19 per cent consistent with increased availability of the produced crop. The volume available for domestic use increased by 2.6 per cent. There was a 2.9 per cent increase in use by the malting sector and a 2.2 per cent increase 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 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares)	1 264	1 010	938	881	898	1 032
Yield (tonnes per hectare)	5.5	5.8	5.9	5.9	5.7	6.0
Volume of harvested production	7 011	5 816	5 495	5 239	5 079	6 144
Value of production (£ million) (a)	831	664	385	387	545	882
of which: sales	375	281	258	254	393	462
subsidies (b)	284	232	..	..	..	..
on farm use	168	148	140	148	200	266
change in stocks	3	3	- 13	- 15	- 48	154
Value of production at market prices (£ million)	546	432	385	387	545	882
Prices (average prices weighted by volumes of sales (£ per tonne))						
Malting barley	85.5	81	78	81	123	152
Feed barley	73.4	69	66	71	103	119
Supply and use						
Production	7 011	5 816	5 495	5 239	5 079	6 144
Imports from: the EU	126	75	84	94	95	99
the rest of the world	26	4	-	9	3	11
Exports to: the EU	760	584	612	539	408	490
the rest of the world	811	37	186	27	63	70
Total new supply	5 591	5 274	4 781	4 776	4 706	5 694
Change in farm and other stocks	149	- 144	- 181	- 196	- 137	724
Total domestic uses	5 442	5 418	4 962	4 972	4 843	4 970
of which: brewing/distilling	1 904	1 850	1 723	1 683	1 732	1 782
animal feed	3 290	3 395	3 057	3 116	2 919	2 984
seed	202	132	143	135	155	161
other uses and waste	47	41	39	38	37	43
Production as % of total new supply for use in UK	125	110	115	110	108	108

Barley (Crop Years; July-June) United Kingdom

Thousand tonnes (unless otherwise specified)					Crop years : July-June
	2003/04	2004/05	2005/06	2006/07	2007/08
Production and output					
Volume of harvested production	6 370	5 816	5 495	5 239	5 079
Value of production (£ million) (a)	712	641	387	405	427
of which: sales	320	273	241	267	290
subsidies (b)	253	232	..	..	..
on farm use	157	132	145	145	264
change in stocks	- 18	4	-	- 7	-
Value of production at market prices (£ million)	459	410	387	405	554

(a) Excludes farm saved seed

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

Oats (table 5.4)

14 There was a 4.7 per cent increase in the area planted in 2008 compared to 2007. Yields were also up resulting in a 10 per cent increase in the volume of production in 2008. The quality of the crop was variable.

15 Oat prices followed a similar pattern to that seen for wheat and barley, peaking in April 2008 at £125-135/tonne for milling and feed oats and ending the year at £110 -115/tonne. The prices for milling and feed oats are often similar; the average price for 2008 for milling oats and feed oats were £114/tonne and £115/tonne respectively. The value of production of oats increased by 37 per cent to £87 million; the value of sales was £57 million, up 24 per cent on 2007. The volume of oats available for domestic use was in line with 2007. Use of oats by the milling sector was unchanged in 2008 whilst use of oats for animal feed was up 5 thousand tonnes or 2.2 per cent.

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 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares)	97	108	91	121	129	135
Yield (tonnes per hectare)	5.9	5.8	5.8	6.0	5.5	5.8
Volume of harvested production	568	627	532	728	712	784
Value of production (£ million) (a)	63	67	35	54	63	87
of which: sales:	28	32	27	33	46	57
subsidies (b)	22	25	..	..	..	..
on farm use	13	14	12	15	17	23
change in stocks	1	- 4	- 4	6	-	7
Value of production at market prices (£ million) (c)	41	42	35	54	63	87
Prices (average prices weighted by volumes of sales (£ per tonne))						
Milling oats	73	66	67.3	74.0	89.2	113.7
Feed oats	70	69	67.3	75.6	93.0	115.4
Supply and use						
Production	568	627	532	728	712	784
Imports from: the EU	12	17	32	49	53	50
the rest of the world	1	-	-	-	1	-
Exports to: the EU	55	80	27	30	32	125
the rest of the world	-	-	-	8	6	-
Total new supply	526	564	537	747	734	709
Change in farm and other stocks	4	- 50	- 40	108	38	13
Total domestic uses	521	614	577	639	696	696
of which: milling	266	321	343	383	418	419
animal feed	233	273	214	228	249	255
seed	19	17	17	17	18	18
other uses and waste	3	3	3	12	10	4
Production as % of total new supply for use in UK	108	111	99	97	97	111

(a) Excludes farm saved seed

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

(c) Excluding subsidies and taxes.

Oilseed rape (table 5.5)

- 16** In a difficult year, with early damage to crops and a delayed harvest due to exceptionally wet weather, the volume of production of oilseed rape fell by 6.4 per cent to just under 2 million tonnes. While planted area declined by 12 per cent, yields, though highly variable, were better than expected at an average of 3.3 tonnes per hectare. In the first quarter of 2008 market prices continued to rise steeply but by December had fallen back to below the values of December 2007. On average, market prices were 53 per cent higher than in 2007. The value of production rose by 46 per cent to £618 million.
- 17** Imports in 2008 (mainly from Germany and France) nearly doubled, but in absolute terms were relatively low at 123 thousand tonnes. Exports fell by 8.6 per cent with most going to the Netherlands and France.

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 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares)	515	554	594	575	681	598
Yield (tonnes per hectare)	3.1	2.9	3.2	3.3	3.1	3.3
Volume of harvested production	1 610	1 607	1 898	1 870	2 108	1 973
of which:						
Production not on set-aside land:						
Area (thousand hectares)	456	498	519	500	602	598
Yield (tonnes per hectare) (a)	3.1	3.0	3.3	3.4	3.2	3.3
Production (a)	1 431	1 471	1 706	1 674	1 900	1 973
Production on set-aside land:						
Area (thousand hectares)	58	55	75	75	80	-
Yield (tonnes per hectare)	2.9	2.5	2.5	2.6	2.6	-
Production	180	136	192	196	208	-
Value of production (£ million) (b)	398	375	261	307	422	618
of which: sales	229	262	248	309	404	609
subsidies (c)	165	118	..	..	..	..
change in stocks	3	- 5	13	- 2	18	9
Value of production at market prices (£ million) (d)	232	257	261	307	422	618
Supply and use						
Production	1 610	1 607	1 898	1 870	2 108	1 973
Imports from:						
the EU	266	198	47	132	63	123
the rest of the world	42	-	-	-	-	-
Exports to:						
the EU	180	101	168	179	264	241
the rest of the world	66	3	4	15	-	2
Total new supply	1 673	1 701	1 773	1 809	1 907	1 852
Production as % of total new supply for use in UK	96	94	107	103	111	107

(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.

Linseed (table 5.6)

- 18** In 2008 there were increases in the volume and value of production compared with the decline of recent years. Production rose from 20 to 30 thousand tonnes due to a modest increase in area sown and increased yields at 1.8 tonnes per hectare. The value of production doubled, from £4.3 million to £10 million. Compared with 2007, imports from the European Union rose from 6 to 10 thousand tonnes while exports fell from 20 to 12 thousand tonnes.

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 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares)	130	30	45	36	13	16
Yield (tonnes per hectare)	1.4	1.7	1.8	1.4	1.6	1.8
Volume of harvested production	184	51	84	50	20	30
of which:						
Production not on set-aside land:						
Area (thousand hectares)	127	29	42	33	11	16
Yield (tonnes per hectare) (a)	1.4	1.7	1.9	1.4	1.6	1.8
Production (a)	180	50	78	44	17	30
Production on set-aside land:						
Area (thousand hectares)	3	1	3	4	2	-
Yield (tonnes per hectare) (a)	1.6	1.5	1.6	1.5	1.4	-
Production (a)	4	1	5	6	2	-
Value of production (£ million)	84	16	16	8	4	10
of which: sales	21	9	15	8	5	10
subsidies (b)	62	7	..	..	..	..
change in stocks	1	-	1	- 1	- 1	-
Value of production at market prices (£ million) (c)	22	9	16	8	4	10
Supply and use						
Production	184	51	84	50	20	30
Imports from: the EU	1	2	3	4	6	10
the rest of the world	30	3	-	2	1	1
Exports to: the EU	56	36	63	22	20	12
the rest of the world	2	1	-	-	-	-
Total new supply	156	20	24	33	6	30
Production as % of total new supply for use in UK	112	254	346	152	318	100

(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)

19 Production of sugar beet rose to 7.5 million tonnes in 2008, up 11 per cent compared with 2007, due to a combination of high root yields and high sugar levels. This was despite a fall in area of 4.2 per cent. Yields were 16 per cent higher as a result of early drilling combined with favourable conditions for growth and lifting. Average market prices rose by 11 per cent with an overall rise in the value of production of 24 per cent to £200 million. Production as a percentage of total new supply for use in the United Kingdom rose by 11 per cent to 64 per cent.

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

Table 5.7 Sugar beet and sugar; United Kingdom

Enquiries: Anna Moore on +44 (0)1904 456371

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Thousand tonnes (unless otherwise specified)						Calendar years
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Sugar beet						
Area (thousand hectares)	189	154	148	131	125	120
Yield (adjusted tonnes per hectare)	55.8	58.7	58.5	56.6	53.8	62.6
Volume of harvested production	10 557	9 042	8 687	7 400	6 733	7 500
Value of production (£ million)	302	278	279	178	162	200
Sugar content %	17.22	17.20	17.40	16.63	17.96	17.70
Prices (average market price (£ per adjusted tonne) (a))	28.7	30.8	32.1	24.1	24.0	26.7
Sugar (refined basis)						
Production (b)	1 526	1 390	1 341	1 157	1 049	1 160
Imports from: the EU	137	131	221	234	197	205
the rest of the world	1 146	1 140	1 104	1 099	1 109	963
Exports to: the EU	129	159	120	183	414	444
the rest of the world	529	628	668	679	143	85
Total new supply	2 151	1 874	1 879	1 627	1 798	1 799
Production as % of total new supply for use in UK	71	74	71	71	58	64

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

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

Peas and beans for stockfeed (table 5.8)

21 The combined value of production for peas and beans for stockfeed has risen by 7.2 per cent to £84 million in 2008. The fall in the value of production of peas of 15 per cent to £12 million was more than compensated for by the increase in the value of production for beans of 12 per cent to £73 million. The area of dried peas, which are predominantly grown for stockfeed, fell by 19 per cent and the area of dried beans fell by 4.6 per cent. However this was offset by good yields and the volume of production of dried peas and beans increased by 5.8 and 40 per cent respectively. This contrasts with 2007 where the adverse weather and harvesting delays and difficulties severely impacted on production.

Table 5.8 Peas and beans harvested dry; United Kingdom

Enquiries: Anna Moore on +44 (0)1904 456371

email: anna.moore@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified)						Calendar years
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Peas for harvesting dry (a)						
Area (thousand hectares)	76	51	41	37	26	21
Yield (tonnes per hectare)	4	3.5	3.8	3.3	3.1	4.0
Volume of harvested production	272	176	156	122	80	85
Value of production (£ million)	52	28	13	10	14	12
of which: sales	26	15	13	10	14	12
subsidies (b)	26	13	..	..	..	..
Value of production at market prices (£ million) (c)	26	15	13	10	14	12
Field beans						
Area (thousand hectares)	103	178	184	184	123	118
Yield (tonnes per hectare)	3	3.7	3.8	3.4	3.0	4.5
Volume of harvested production (a)	358	661	705	617	375	523
Value of production (£ million)	72	97	58	52	65	73
of which: sales	34	54	58	52	65	73
subsidies (b)	37	43	..	..	..	..
Value of production at market prices (£ million) (c)	34	54	58	52	65	73

(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)

- 22** The area of field vegetables grown in the open fell by 1.2 per cent in 2008 while the value rose by 2.3 per cent to £819 million. Supply and demand have been erratic throughout 2008 due to difficulties in establishing crops in periods of wet weather, slow growth due to poor light levels and low temperatures, poor harvesting conditions and other quality issues. However, demand increased due to poor summer weather. The value of production of cabbages increased by 8.8 per cent to £70 million, carrots rose by 3.5 per cent to £132 million and cauliflowers rose by 12 per cent to £53 million. Quality for carrots was good, with fewer pests and diseases evident. The vining pea crop recovered from the weather losses sustained in 2007.
- 23** The area of protected vegetables remained static while the value of production increased by 5.8 per cent to £282 million. The volume of tomato production showed a slight decrease and there was a switch by some producers from standard round tomatoes to 'on the vine' varieties. More lines were sold through wholesale channels, as supermarkets found volume sales difficult. The value of production of tomatoes rose by 11 per cent to £96 million as prices increased in 2008 on the wholesale markets. The value of production of mushrooms fell by 1.2 per cent to £106 million due in part to a shift in demand to 'value mushroom packs'.

Table 5.9 Fresh vegetables; United Kingdom

Enquiries: Lisa Szydłowska +44 (0)1904 455070

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Thousand tonnes (unless otherwise specified)						Calendar years
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares):	153	117	121	120	118	117
of which: grown in the open (a) (b)	151	117	120	119	118	116
protected (c)	1	1	1	1	1	1
Value of production (£ million):	966	835	912	998	1 067	1 101
of which: grown in the open	649	598	665	738	800	819
protected	317	236	248	260	266	282
of which: subsidies (d)	6	3	..	..	..	..
Selected crops: cabbages	56	53	58	60	64	70
carrots	83	75	94	100	128	132
cauliflowers	41	50	46	41	47	53
lettuces	106	92	84	108	95	112
mushrooms	171	106	104	100	107	106
peas	55	43	41	39	34	45
tomatoes	64	59	69	83	86	96
Value of production at market prices (£ million) (e)	960	831	912	998	1 067	1 101
Prices (farm gate price (£ per tonne))						
Selected crops: cauliflowers	221.5	296.3	344.4	331.1	387.8	446.2
tomatoes	573	752	871	990	1 010	1 078
Supply and use (f)						
Total production	2 917	2 559	2 710	2 597	2 480	2 607
Supplies from the Channel Islands	17	11	8	8	8	8
Imports from: the EU	1 168	1 498	1 736	1 683	1 685	1 696
the rest of the world	167	203	204	210	263	261
Exports to: the EU	126	74	57	71	69	59
the rest of the world	24	18	31	12	19	15
Total new supply	4 120	4 177	4 570	4 415	4 347	4 498
Production as % of total new supply for use in the UK	71	61	59	59	57	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)

- 24** The area used for production of plants and flowers increased by 2.2 per cent in 2008 to 20 thousand hectares. The value of production increased by 2.0 per cent to £797million.
- 25** The value of production of the relatively small flowers and bulbs sector increased by 5.2 per cent to £35 million. The area of narcissus, the UK's major flower and bulb crop has remained relatively stable. Prices for dry bulbs improved in 2008, whilst cut flower prices remained static.
- 26** The value of production of ornamental hardy nursery stock increased by 5.5 per cent to £514 million. Production areas remained largely static with returns showing a modest overall increase. Nursery stock sales for the garden market were affected by poor weather during key sales periods and to some extent by the economic downturn, though sales to the landscape sector held up reasonably well due in part to a decrease in European competition.
- 27** The value of production of protected plants and flowers decreased by 4.9 per cent to £249 million. Poor weather adversely affected the spring bedding plant season with some crops were unsold. Late summer bedding plants were similarly affected although autumn pansies had a better season.

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 1997-99	2004	2005	2006	2007	2008 (provisional)
Production						
Area (thousand hectares) (a):	20	21	20	18	19	20
Value of production (£ million)	679	787	778	751	781	797
of which: flowers and bulbs in the open (b)	40	33	33	35	33	35
hardy plants and flowers nursery stock	368	474	473	460	487	514
protected crops	271	279	272	257	262	249
Trade (£ million)						
Imports						
Bulbs	36	48	53	52	53	58
Cut flowers	316	528	522	552	559	576
Foliage	17	26	25	28	28	27
Indoor plants	82	102	105	104	104	106
Outdoor plants	24	53	69	66	69	56
Trees	26	57	64	71	72	82
Other	18	32	31	36	35	46
Total Imports (exc. Channel Islands)	521	846	869	909	921	951
Exports						
Bulbs	8	8	7	8	10	12
Cut flowers	13	19	22	23	17	19
Foliage	3	2	2	2	3	2
Indoor plants	2	1	2	2	2	2
Outdoor plants	3	4	4	4	3	4
Trees	1	2	2	2	2	3
Other	2	5	5	6	7	9
Total Exports	31	40	44	47	45	52

(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)

28 There was a 2.4 per cent increase in crop area in 2008 with higher yields than 2007 and the volume of production rose by 7.8 per cent to 6 million tonnes. Prices for all potatoes have risen steadily in recent years, but 2008 saw only a 4.2 per cent rise overall against double-digit percentage rises in 2006 and 2007. The average price for early potatoes was £207/tonne, up £54/tonne or 35 per cent on 2007. This was due to relatively low yields, a late start in the UK and lower production in other exporting countries, including Jersey. Towards the end of 2008, potato crop prices fell due to the market being flooded with poorer quality potatoes, resulting from the wet August which delayed most lifting. Scottish seed potato prices were the highest they've been for many years. This was mainly due to increased demand from international buyers for key export varieties (Hermes and Desiree) of disease free Scottish seed. The overall value of production was £755 million, up 14 per cent on 2007.

Table 5.11 Potatoes; United Kingdom

Enquiries: Richard Thompson on +44 (0)1904 455301

email: richard.thompson@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified)		Calendar years				
		Average of 1997-99	2004	2005	2006	2007 2008 (provisional)
Production						
Area (thousand hectares)		169	148	137	140	140 144
of which: early		16	15	12	11	16 17
maincrop		153	134	124	129	124 127
Yield (tonnes per hectare):						
early		21.4	16.8	14.3	15.7	12.5 13.3
maincrop		42.9	44.9	46.6	43.0	43.1 45.6
overall		40.7	42.0	43.7	40.8	39.7 41.8
Volume of harvested production		6 894	6 246	5 979	5 727	5 564 5 999
of which: early		348	248	179	177	198 224
maincrop		6 546	5 997	5 800	5 550	5 367 5 775
End year stocks		3 583	2 946	2 858	2 448	2 182 2 425
Value of production (£ million)		589	674	515	623	662 755
of which: sales		575	656	511	660	692 706
on farm seed use		17	9	13	16	8 13
change in stocks		- 2	8	- 9	- 53	- 38 36
Prices (average price paid to registered producers (£ per tonne)) (a)						
early potatoes		100.3	178.0	140.8	193.7	153.0 206.8
maincrop potatoes		100.4	118.1	95.9	125.0	141.3 143.9
all potatoes		102.3	123.2	100.6	129.3	143.7 149.8
Supply and use						
Total production		6 894	6 246	5 979	5 727	5 564 5 999
Supplies from the Channel Islands		47	31	38	31	33 26
Imports		1 105	1 774	1 387	1 404	1 544 1 606
of which: early		187	191	122	92	195 162
maincrop		120	164	166	126	148 262
processed (raw equivalent)		780	1 384	1 082	1 177	1 185 1 163
seed		18	36	17	9	16 19
Exports		359	381	397	628	380 431
of which: raw		166	97	117	172	154 145
processed (raw equivalent)		110	214	190	360	131 188
seed		83	69	90	96	95 98
Total new supply		7 687	7 671	7 006	6 533	6 762 7 199
Change in stocks		- 30	68	- 89	- 409	- 266 242
Total domestic uses		7 716	7 603	7 095	6 943	7 028 6 957
of which: used for human consumption		6 162	6 449	5 868	5 674	5 691 5 658
seed for home crops						
(including seed imports)		444	368	387	386	335 338
chats, waste and retained stockfeed		1 111	786	840	883	1 001 961
Production as % of total new supply for use in the UK		90	81	85	88	82 83

continued

Table 5.11 continued

United Kingdom potatoes (Crop Years: June-May)

Thousand tonnes (unless otherwise specified)	Crop years: June-May					
	Average of 1997-99	2003/04	2004/05	2005/06	2006/07	2007/08
Production						
Volume of harvested production	6 926	6 058	6 246	5 979	5 727	5 564
Value of production (£ million)	578	702	571	572	711	677
of which: sales	560	695	546	559	714	685
on farm seed use	15	5	17	15	5	13
change in stocks	2	1	8	- 2	- 9	- 22
Prices (average realised return (£ per tonne)) (a)	102.0	131.4	105.3	109.0	143.2	146.8

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

Fresh fruit (table 5.12)

- 29** The area of orchard fruit increased by 2.7 per cent in 2008 and the value of production increased by 2.9 per cent to £145 million. Wet conditions prior to the apple harvest led to an increased risk of fruit developing storage rot. Shortage of labour and poor weather meant that picking for long term storage suffered some delays. The value of dessert apples increased by 23 per cent to £64 million. The value of culinary apples increased by 10 per cent to £56 million. Prices for culinary apples increased due to a strong demand for processing for cider production. Plums had a very low crop following poor weather at and after flowering and a high proportion of the crop was not picked.
- 30** The area of soft fruit increased by 1.8 per cent and the value of production increased by 20 per cent to £331 million. The value of production of strawberries increased by 22 per cent to £196 million and raspberries increased by 9.0 per cent to £95 million. In response to increased supermarket programmes, the area and production of strawberries and raspberries increased in 2008. Due to periods of reduced demand for strawberries more of the crop was sold through the wholesale market in 2008. Higher prices were achieved in 2008 but costs to the grower also increased.

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 1997-99	2004	2005	2006	2007 (provisional)	2008
Production						
Area (thousand hectares):	36	27	28	28	27	28
of which: orchard fruit (a)	27	18	19	19	18	18
soft fruit (b)	10	8	9	9	10	10
End year stocks (c)	72	81	90	59	69	64
Value of production (£ million) (d):	238	316	388	383	453	517
of which: orchard fruit	104	106	117	117	141	145
soft fruit	125	171	239	232	277	331
of which: sales	243	306	384	399	447	520
change in stocks (c)	- 4	9	4	- 16	6	- 3
Selected crops: dessert apples	52	38	49	56	52	64
culinary apples	29	28	32	42	51	56
pears	12	8	8	11	8	10
raspberries	32	41	73	70	87	95
strawberries	77	100	137	136	161	196
Prices (farm gate price (£ per tonne))						
Selected crops: dessert apples	480.9	412.2	418.6	433.6	488.2	540.2
culinary apples	304.1	359.1	316.5	378.7	373.0	452.1
pears	424.4	348.1	348.9	391.9	386.9	504.0

continued

Table 15.2 continued

Supply and use (e)						
Total production	306	294	363	392	403	403
Imports from: the EU	1 300	1 258	1 312	1 361	1 264	1 145
the rest of the world	1 398	1 935	1 992	2 128	2 268	2 180
Exports to: the EU	68	105	119	177	146	117
the rest of the world	4	1	1	1	2	1
Total new supply	2 932	3 380	3 546	3 704	3 787	3 610
Change in stocks	- 11	20	9	- 31	9	- 5
Total domestic uses	2 943	3 360	3 537	3 735	3 778	3 615
Production as % of total new supply for use in the UK	10	9	10	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)

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

Cattle and calves: beef and veal (table 5.13)

- 32** The value of production at market prices of beef and veal rose by 27 per cent in 2008 to £2.1 billion due to increased finished cattle prices. The finished cattle prices averaged 144.8 pence per kg, a rise of 29 per cent on 2007. Prime cattle marketings fell to 2,021 thousand head, 6.2 per cent lower than in 2007, but marketings of adult cattle rose by 21 per cent to 557 thousand head. Overall home-fed production of beef and veal fell by 2.9 per cent, resulting in the supply of beef and veal falling by 2.7 per cent to 1,061 thousand tonnes. Home-fed production accounted for 81 per cent of new supplies in 2008, a similar figure to 2007.

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 1997-99	2004	2005	2006	2007	2008
	(a)	(a)			(provisional)	
Population						
Total cattle and calves (thousand head at June) (b)	11 526	10 588	10 392	10 270	10 304	10 107
of which: dairy cows	2 453	2 129	2 063	2 066	1 954	1 909
beef cows	1 911	1 736	1 762	1 733	1 698	1 670
heifers in calf	799	690	638	645	..	..
Production (c)						
Total home-fed marketings (thousand head)	2 297	2 361	2 409	2 702	2 724	2 665
of which: steers, heifers and young bulls	2 250	2 250	2 276	2 208	2 155	2 021
calves	42	101	111	125	108	87
cows and adult bulls	4	11	22	370	461	557
Average dressed carcass weight (kg) (d):						
steers, heifers and young bulls	306	319	331	330	342	338
calves	37	26	26	29	32	30
cows and adult bulls	263	264	345	311	317	315
Production (dressed carcass weight):						
home-fed production	691	724	765	852	888	863
gross indigenous production	687	708	755	844	879	860
Value of production (£ million)	1 993	2 331	1 677	1 612	1 673	2 119
of which: value of home-fed production	1 112	1 283	1 381	1 591	1 666	2 099
subsidies (e)	874	1 051	197	68	47	49
change in work-in-progress (f)	11	- 2	101	- 46	- 39	- 27
less imported livestock	4	1	2	2	1	3
plus breeding animals exported	..	..	..	..	-	-
Value of production at market prices (£ million) (g)	1 120	1 279	1 480	1 543	1 626	2 070
Prices						
Store cattle (£ per head) (h):						
Hereford/cross bull calves (i)	114.3	113.7	81.5	73.4	93.0	119.5
Beef/cross yearling steers (j)	392.7	465.3	429.0	444.1	480.9	538.8
Finished cattle (pence per kg liveweight): All prime cattle	91.7	101.2	102.2	110.6	112.3	144.8
Over Thirty Month Scheme and Older Cattle Disposal Scheme (k)						
Over Thirty Month Scheme:						
prime cattle throughput (thousand head)	72	36	27	1	..	..
cull cattle throughput (thousand head)	834	761	683	49	..	..
receipts (£ million)	289	203	178	13	..	..
Older Cattle Disposal Scheme:						
throughput (thousand head)	..	..	..	150	127	126
receipts (£ million)	..	..	..	37	28	29
Supply and use (dressed carcass weight) (l)						
Home-fed production (c)	691	724	765	852	888	863
Imports from: the EU (m) (n)	120	238	205	198	204	214
the rest of the world	64	85	82	72	75	78
Exports to: the EU (n)	11	12	14	52	76	93
the rest of the world	-	-	-	-	1	1
Total new supply	864	1 034	1 037	1 069	1 090	1 061
Home-fed production as % of total new supply for use in the UK	80%	70%	74%	80%	81%	81%

(a) For comparability with other years, the figures for 1987, 1992, 1998 and 2004 have been adjusted from a 53-week to a 52-week basis where appropriate.

(b) 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

(c) 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, the Older Cattle Disposal Scheme and the Calf Processing Aid Scheme are included as subsidies directly linked to the production, i.e. coupled payments. Payments under the Selective Cull Scheme are not included as the payments are for the replacement of capital assets.

continued

Table 5.13 continued

- (d) Average dressed carcase weight of animals fed and slaughtered in the United Kingdom.
- (e) Comprising variable premium, calf subsidy, hill livestock compensatory allowances, suckler cow premium, beef special premium, deseasonalisation premium, extensification payments, slaughter premium and Scottish Beef Calf Scheme. Includes payments made under the Over Thirty Month Scheme, Calf Processing Aid Scheme and the Older Cattle Disposal Scheme..
- (f) A valuation of the change in work-in-progress of animals to be slaughtered.
- (g) Excluding subsidies and taxes.
- (h) Average prices at representative markets in England and Wales.
- (i) 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.
- (j) 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.
- (k) Cattle slaughtered under these schemes are not included within the volume of production. Receipts for the Over Thirty Month Scheme, Calf Processing Aid Scheme and the Older Cattle Disposal Scheme are included as subsidies. Selective Cull Scheme payments are not included in the production and income account.
- (l) Does not include meat offals or trade in preserved or manufactured meat products. Boneless meat has been converted to bone-in weights.
- (m) Includes meat from finished animals imported live from the Irish Republic.
- (n) Adjusted, as necessary, for unrecorded trade in live animals.

Pigs and pigmeat (table 5.14)

- 33** The value of home-fed production of pigmeat rose by 17 per cent to £858 million in 2008. Prices were higher throughout the year, resulting in an average clean pig price of 125.1 pence per kg, 18.0 pence higher than 2007. Marketings of clean pigs fell by 1.0 per cent, with average clean pig carcase weights remaining at 2007 levels at 76 kg.
- 34** Home-fed production of pigmeat fell slightly to 703 thousand tonnes with new supply of pigmeat falling by 5.1 per cent to 1,377 thousand tonnes, mainly due to reduced imports. Home-fed production accounted for 51 per cent of new supplies in 2008, compared with 49 per cent in 2007.

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 1997-99	2004	2005	2006	2007	2008
	(g)	(g)			(provisional)	
Population						
Total pigs (thousand head at June)	7 834	5 159	4 862	4 933	4 834	4 714
of which: sows in pig and other sows for breeding	654	449	403	401	398	365
gilts in pig	102	66	67	67	57	55
Production						
Total home-fed marketings (thousand head)	15 376	8 833	8 709	8 727	9 075	9 006
of which: clean pigs	14 985	8 590	8 494	8 518	8 857	8 761
sows and boars	391	243	215	209	218	245
Average dressed carcass weight (kg) (a):						
clean pigs	69	75	75	75	76	76
sows and boars	143	158	156	153	151	152
Production (dressed carcass weight):						
home-fed production	1 087	679	669	667	707	703
gross indigenous production	1 087	679	670	668	706	703
Value of production (£ million)	956	680	677	685	736	858
of which: value of home-fed production	953	678	671	678	733	858
change in work in progress (b)	- 3	- 1	- 1	-	- 1	- 1
less imported livestock		..	..	..	..	..
plus breeding animals exported	6	3	6	8	4	1
Prices (pence per kg deadweight)						
Clean pigs	90.0	102.9	102.9	104.2	107.1	125.1
Supply and use of pigmeat (dressed carcass weight) (c) (d)						
Home-fed production	1 087	679	669	667	707	703
Imports from: the EU (e)	490	804	836	837	864	808
the rest of the world	3	6	6	7	5	5
Exports to: the EU (f)	239	98	101	110	113	122
the rest of the world	27	12	12	10	12	17
Total new supply	1 314	1 379	1 398	1 391	1 451	1 377
Home-fed production as % of total new supply for use in the UK	83%	49%	48%	48%	49%	51%

(a) Average dressed carcass 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.

(g) For comparability with other years, the figures for 1987, 1992, 1998 and 2004 have been adjusted from a 53-week to a 52-week basis where appropriate.

Sheep and lambs; mutton and lamb (table 5.15)

35 The value of production at market prices of sheepmeat rose by 29 per cent to £822 million. Clean sheep marketings rose by 6.7 per cent in 2008, but the average carcass weight, at 18.8 kg per head, was 3.3 per cent lower than last year. Home-fed production rose slightly to 333 thousand tonnes and exports returned to normal levels as the restrictions affecting exports in 2007 were removed. Overall new supply fell by 3.3 per cent to 376 thousand tonnes. Home-fed production accounted for 88 per cent of new supplies in 2008, compared with 84 per cent in 2007.

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 1997-99 (i)	2004 (j)	2005	2006	2007 (provisional)	2008
Population						
Total sheep and lambs (thousand head at June)	43 983	35 817	35 416	34 722	33 946	33 131
of which: ewes and shearings	21 138	17 630	16 935	16 637	16 064	15 616
lambs under one year old	21 754	17 238	17 488	17 058	16 855	16 574
Production						
Total home-fed marketings (thousand head)	19 364	15 493	16 539	16 590	16 037	17 130
of which: clean sheep and lambs	17 294	13 530	14 300	14 279	13 791	14 713
ewes and rams	2 070	1 963	2 238	2 311	2 245	2 417
Average dressed carcass weight (kg) (a):						
clean sheep and lambs	18	19	19	19	19	19
ewes and rams	29	29	28	28	27	24
Production (dressed carcass weight):						
home-fed production	369	319	336	332	328	333
gross indigenous production	369	319	336	332	328	333
Value of production (£ million)	1 028	988	683	681	637	822
of which: value of home-fed production	666	708	688	709	635	825
subsidies (b)	352	262	..	..	..	..
change in work in progress (c)	14	17	- 5	- 20	6	- 1
less imported livestock	4	-	-	7	4	2
plus breeding animals exported	-	-	-	-	-	-
Value of production at market prices (£ million) (d)	676	726	683	681	637	822
Prices						
Store sheep (£ per head): (e)						
Lambs, hoggets and tegs	37.8	..	30.5	30.7	30.3	33.6
Finished sheep (pence per kg estimated dressed carcass weight) (f):						
Great Britain	203.9	262.6	250.0	258.5	236.8	297.6
Northern Ireland	191.0	227.8	223.8	230.8	226.0	273.4
Supply and use (dressed carcass weight) (g)						
Home-fed production	369	319	336	332	328	333
Imports from: the EU (h)	19	22	20	21	21	21
the rest of the world	125	120	113	119	116	117
Exports to: the EU (i)	135	85	93	94	76	93
the rest of the world	1	1	1	1	1	1
Total new supply	375	375	375	377	389	376
Home-fed production as % of total new supply for use in UK	98%	85%	85%	90%	84%	88%

(a) Average dressed carcass 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.

(j) For comparability with other years, the figures for 1987, 1992, 1998 and 2004 have been adjusted from a 53-week to a 52-week basis where appropriate.

Poultry and poultrymeat (table 5.16)

2008

- 36** The value of production of poultrymeat in 2008 increased by 23 per cent to £1.5 billion, with higher producer prices more than offsetting the 2.1 per cent fall in poultrymeat production. Approximately 80 per cent of the value of poultrymeat comes from the production of chicken, other table fowls and boiling fowls.

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 1997-99	2004	2005	2006	2007	2008 (provisional)
Population							
Number (thousand head at June) (a):		169 901	181 759	173 909	173 081	167 667	166 200
of which:	chickens and other table fowls	102 268	119 888	111 475	110 672	109 794	109 859
	birds in the laying flock (b)	31 009	29 655	29 544	28 632	27 321	25 940
	growing pullets	10 317	8 156	10 928	9 625	8 936	9 313
	fowls for breeding	9 528	10 125	8 561	9 273	11 461	9 068
	turkeys, ducks, geese & all other poultry (c)	16 779	13 935	13 400	14 879	10 154	12 019
Production							
Slaughterings (millions) (d):		857	882	903	880	867	853
of which:	fowls	806	843	864	844	836	823
	turkeys	33	21	19	17	15	15
	ducks & geese	18	18	19	19	16	15
Production (carcase weight) (e):		1 541	1 571	1 583	1 517	1 459	1 429
of which:	chickens and other table fowls	1 159	1 253	1 274	1 236	1 218	1 204
	boiling fowls (culled hens)	55	48	53	53	52	53
	turkeys	285	228	211	184	151	137
	ducks & geese	43	41	45	45	38	35
Value of production (£ million):		1 387	1 331	1 321	1 218	1 207	1 482
of which:	fowls	918	916	931	870	916	1 122
	change in work in progress in fowls (f)	- 8	15	- 7	- 7	- 35	21
	turkeys, ducks, geese	424	324	320	283	262	269
	exports of live poultry	47	74	76	72	65	67
	hatching eggs for export	16	23	20	16	17	24
	less live poultry imported	5	6	6	5	7	9
	less hatching eggs imported	4	14	13	10	10	10
Prices (average producer prices (pence per kg carcase weight)):							
chickens and other table fowls		78.4	72.7	72.6	69.9	74.8	92.8
boiling fowls (culled hens)		19.3	9.7	11.0	10.6	9.7	9.8
turkeys		123.4	109.6	112.1	107.5	123.4	137.4
ducks		164.4	158.6	163.6	170.2	177.7	206.1
geese		250.1	441.8	491.1	468.2	498.9	615.2
Supply and use (carcase weight) (e)							
Production		1 541	1 571	1 583	1 517	1 459	1 429
Imports from:	the EU	289	410	400	411	430	373
	the rest of the world	24	67	85	40	31	35
Exports to:	the EU	125	196	206	163	268	254
	the rest of the world	74	72	55	70	25	22
Total new supply		1 656	1 780	1 806	1 735	1 627	1 560
Production as % of total new supply for use in the UK		93%	88%	88%	87%	90%	92%

(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.

- 37** The average producer price for broilers rose by 24 per cent to 92.8 pence per kg carcase weight in 2008 and the average producer price for turkeys increased by 11 per cent to 137.4 pence per kg. The duck and geese average producer prices also rose, by 16 per cent and 23 per cent respectively. The average producer price for boiling fowl rose slightly compared to 2007 to 9.8 pence per kg carcase weight.
- 38** In 2008, total imports fell by 11 per cent to 408 thousand tonnes and exports fell by 5.8 per cent to 277 thousand tonnes. Total new supply of poultrymeat fell by 4.1 per cent in 2008 to 1.6 million tonnes carcase weight. Production accounted for 92 per cent of new supplies in 2008, compared with 90 per cent in 2007.

Milk (table 5.17)

- 39** Production of milk from the dairy herd decreased by 2.2 per cent to 13.3 billion litres in 2008. The average farmgate milk price rose by 25 per cent to 25.9 pence per litre, and the price of milk products directly from farm to the consumer rose by an average of 16 pence per litre. There was no superlevy charge in 2008 as milk production in the United Kingdom was under the national quota limit in the 2007/08 quota year.
- 40** The total value of milk and milk products produced for human consumption, at market prices, rose by 22 per cent in 2008 to £3.5 billion. The value of raw milk sold from farms to dairy companies for processing into pasteurised drinking milk, cheese, butter and other milk products was £3.4 billion, 98 per cent of the total value of milk and milk products. The value of milk processed on farm for sale direct to the consumer was £0.1 billion.

Table 5.17 Milk; United Kingdom

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

email: Leigh.Riley@defra.gsi.gov.uk

Million litres (unless otherwise specified)	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008 (Provisional)
Population and yield						
Dairy herd (annual average, thousand head) (a)	2 465	2 088	2 010	1 992	1 970	1 935
Average yield per dairy cow (litres per annum)	5 843	6 765	6 990	6 982	6 916	6 885
Production						
Milk from the dairy herd (b)	14 404	14 127	14 052	13 907	13 625	13 325
Milk from the beef herd (b)	7	7	7	7	7	7
less on farm waste and milk fed to stock	283	205	220	202	190	183
Volume for human consumption	14 128	13 930	13 839	13 711	13 442	13 149
Value of production (£ million)	2 840	2 711	2 592	2 497	2 823	3 450
of which: raw milk leaving farm (c)	2 773	2 538	2 523	2 432	2 752	3 367
raw milk processed on farm (d)	85	73	69	65	72	83
subsidies	..	108	..	..	..	..
less levies	18	8	1	..	..	..
Value of production at market prices (£ million) (e)	2 858	2 610	2 592	2 497	2 823	3 450
Prices (average price received by milk producers, net of delivery charges (pence per litre)) (f)						
Farmgate price of milk excluding bonus payments	19.8	18.5	18.5	17.9	20.7	25.9
Farmgate price of milk including bonus payments	19.9	18.5	18.5	18.0	20.7	25.9

continued

Table 5.17 continued

Million litres (unless otherwise specified)					Calendar years	
	Average of 1997-99	2004	2005	2006	2007	2008
					(Provisional)	
Supply and use (g)						
Production	14 411	14 134	14 059	13 914	13 632	13 332
Imports	123	65	49	43	57	26
Exports	376	434	624	610	538	504
Total new supply	14 158	13 765	13 485	13 346	13 151	12 853
of which:						
for liquid consumption	6 813	6 693	6 652	6 736	6 724	6 722
for manufacture	6 941	6 827	6 568	6 343	6 085	5 809
of which: butter (h)	285	249	266	241	248	232
cheese	3 323	3 401	3 705	3 784	3 561	3 581
cream (h)	233	320	302	321	285	252
condensed milk (i)	646	359	351	303	300	324
milk powder	1 951	1 878	1 374	1 258	1 232	958
other	502	620	571	435	459	462
dairy wastage and stock change	68	3	15	38	127	113
other uses (j)	337	241	250	229	216	209

(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, RERAD 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.

Milk products (table 5.18)

- 41** Production of butter fell by 6.6 per cent in 2008. With imports falling by 22 per cent and exports falling by 30 per cent, the overall new supply of butter fell by 12 per cent to 171 thousand tonnes. There were no stocks of butter in intervention at the end of 2008. United Kingdom production accounted for 66 per cent of new supplies of butter in 2008, compared with 62 per cent in 2007.
- 42** Production of cheese in 2008 was unchanged at 378 thousand tonnes. Imports increased by 1.5 per cent and exports fell by 8.4 per cent, resulting in a 1.9 per cent rise in new supply to 697 thousand tonnes. United Kingdom production accounted for 54 per cent of new supplies of cheese in 2008, compared with 55 per cent in 2007.
- 43** Production of milk powders in 2008 fell by 21 per cent to 92 thousand tonnes. Imports rose by 5.7 per cent to 64 thousand tonnes, and exports fell by 8.8 per cent to 96 thousand tonnes. There were no intervention stocks of skimmed milk powder at the end of 2008 and new supply of milk powder fell by 17 per cent to 60 thousand tonnes.

Table 5.18 Milk products; United Kingdom

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

email: Leigh.Riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified)					Calendar years	
	Average of 1997-99	2004	2005	2006	2007	2008
					(provisional)	
Butter (a)(b)						
Production (c)	139	122	130	117	120	113
Imports	110	114	129	147	103	80
Export	65	35	45	36	32	22
Intervention stock change	1	- 8	- 6	2	- 3	-
Total new supply	182	208	219	226	195	171
Production as % of total new supply for use in the UK	76%	58%	59%	52%	62%	66%
Cheese						
Production (c)	372	359	391	400	378	378
Imports	258	335	353	378	403	409
Exports	57	93	96	104	97	89
Total new supply	573	600	648	674	684	697
Production as % of total new supply for use in the UK	65%	60%	60%	59%	55%	54%
Cream - fresh, frozen, sterilized						
Production (b) (c)	237	325	306	327	291	258
Imports	10	15	30	37	43	50
Exports	97	81	93	94	78	59
Total new supply	150	259	244	270	256	248
Production as % of total new supply for use in the UK	158%	126%	125%	121%	113%	104%
Condensed milk (d)						
Production	194	161	143	113	109	110
Imports	13	25	33	45	41	39
Exports	59	18	4	6	6	3
Total new supply	148	169	172	152	144	146
Production as % of total new supply for use in the UK	131%	96%	83%	74%	76%	75%
Milk powders (e)						
Production	204	168	122	114	117	92
Imports	24	68	78	51	61	64
Exports	148	186	102	96	105	96
Intervention stock change	10	- 30	- 11	- 6	-	-
Total new supply	70	79	109	75	72	60
Production as % of total new supply for use in the UK	316%	211%	112%	152%	162%	153%

(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.

(f) Figures are not directly comparable with the figures shown in table 5.17, which are quoted in million litres.

Hen eggs (table 5.19)

- 44** The value of production of eggs produced for human consumption in 2008 rose by 28 per cent to £524 million. The number of eggs produced for human consumption rose by 4.8 per cent to 755 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 average price of eggs graded in the United Kingdom rose by 22 per cent to 69.4 pence per dozen. UK egg production accounted for 80 per cent of new supplies of eggs in 2008, compared with 79 per cent in 2007.

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 1997-99	2004	2005	2006	2007	2008 (provisional)
Population and yield						
Number of fowls laying eggs for eating (millions) (a)	32	31	31	30	29	30
Average yield per layer (number of eggs per bird per year)	288	301	304	300	298	298
Production						
Volume of production of eggs	876	887	884	853	832	868
of which: eggs for human consumption	769	773	772	743	720	755
eggs for hatching (b)	95	99	98	97	99	98
hatching eggs for export (c)	4	7	6	5	5	8
waste	8	8	8	7	7	8
Value of production of eggs for human consumption (£m) (d)	283	378	349	362	410	524
Prices (pence per dozen)						
Weighted average of eggs graded in the UK (e)	36.7	48.9	45.2	48.7	56.9	69.4
Supply and use						
UK production of eggs for human consumption	769	773	772	743	720	755
of which: eggs sold in shell	625	608	583	554	540	566
eggs processed	144	165	190	189	181	189
Imports from (f): the EU	57	148	135	168	203	217
the rest of the world	1	2	2	2	2	1
Exports to (f): the EU	18	13	13	18	17	24
the rest of the world	3	1	-	-	-	-
Total new supply	805	910	896	895	909	948
Production as % of total new supply for use in the UK	95%	85%	86%	83%	79%	80%

(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 organic.

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

Chapter 6 Intermediate Consumption

Summary

- Rising crude oil prices peaked at over \$140 per barrel in July 2008 before falling rapidly to under \$40 per barrel by the end of the year;
- expenditure on fuels has risen by over 900 per cent since 1973 to about £880 million despite usage falling by almost 60 per cent;
- expenditure on electricity has risen by almost 750 per cent since 1973 to about £340 million;
- expenditure on fertiliser rose significantly in 2008 to about £1.5 billion, while the volume has declined by almost 60 per cent since 1997;
- expenditure on pesticides rose by over 25 times between 1973 and 1997 and is now about £650 million;
- veterinary expenses are estimated to be about £280 million and the cost of agriculture services, which rose noticeably in 2008, is estimated to be about £775 million;
- expenditure on animal feed rose sharply in 2008 to about £3.9 billion while the cost of seeds and planting stock is estimated to be about £630 million.

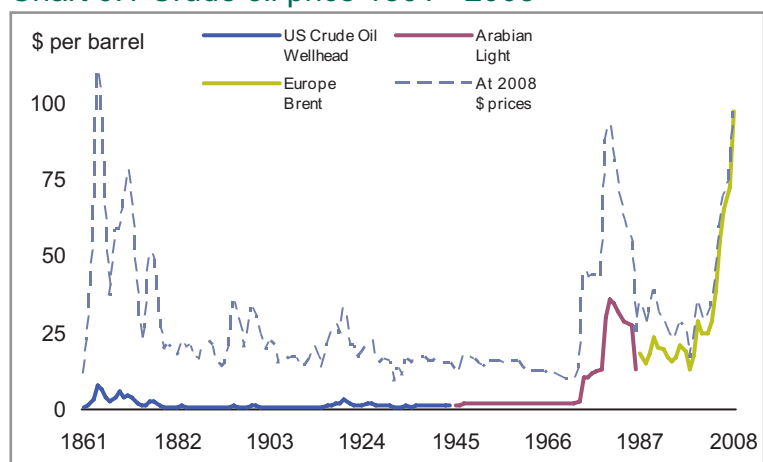
Introduction

- 1 In recent years, increases in crude oil prices have led to increased concerns for the impact of high oil prices on the margins and profitability of agricultural businesses, which are dependent on products derived from petroleum, notably fuels. This chapter presents long-term trends in crude oil prices and intermediate consumption as recorded in the production and income account (see chapter 9). Intermediate consumption represents the consumption of goods and services, e.g. fuels, feed, seeds, fertiliser, plant protection products. Some inputs, such as fuels, electricity and fertilisers, are closely linked to the oil price while others are not and trends for these are shaped by other factors.

Oil prices (chart 6.1)

- 2 Chart 6.1 shows the historic trend in crude oil prices and the equivalent at 2008 prices in dollars. Prices have risen from under \$5 per barrel in the early 1970s to over \$140 per barrel in July 2008 before falling rapidly to below \$40 per barrel at the end of the year. In real terms, the price was higher in July 2008 than that in 1980.

Chart 6.1 Crude oil price 1861 - 2008

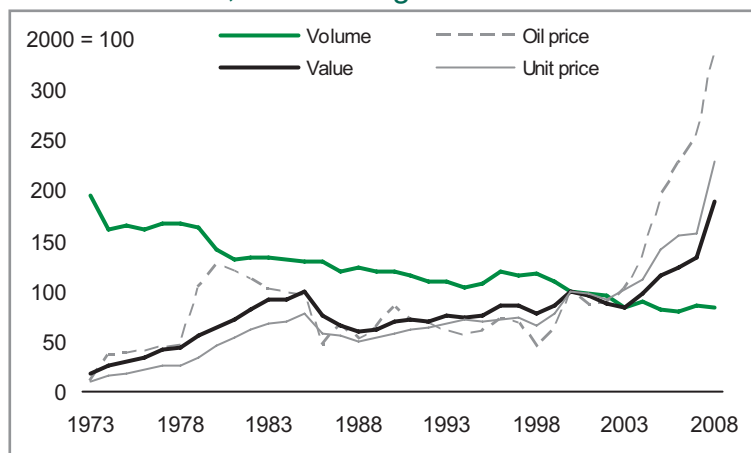


Source: Energy Information Administration, U.S. Department of Energy, BP Statistical Review of World Energy 2008, US Bureau of Labour Statistics

Fuels (chart 6.2, 6.3)

- 3 The average unit price of fuel is influenced by the trend in oil prices, although the oil price is more volatile. Total expenditure on fuels has followed the trend in the unit price and has risen by over 900 per cent since 1973 with noticeable peaks in 1985 and in 2008. Expenditure in 2008 is estimated to be about £880 million, an increase of 42 per cent compared to 2007, driven entirely by an increase in price. There has been a declining trend in the volume of fuels purchased, which has fallen by almost 60 per cent since 1973.

Chart 6.2 Fuels; United Kingdom



- 4 Red diesel prices in 2008 mirrored movement in the oil price, reaching a peak of over 70 pence per litre in July 2008 before falling to about 46 pence per litre at the end of the year, 10 per cent lower than the December 2007 price.

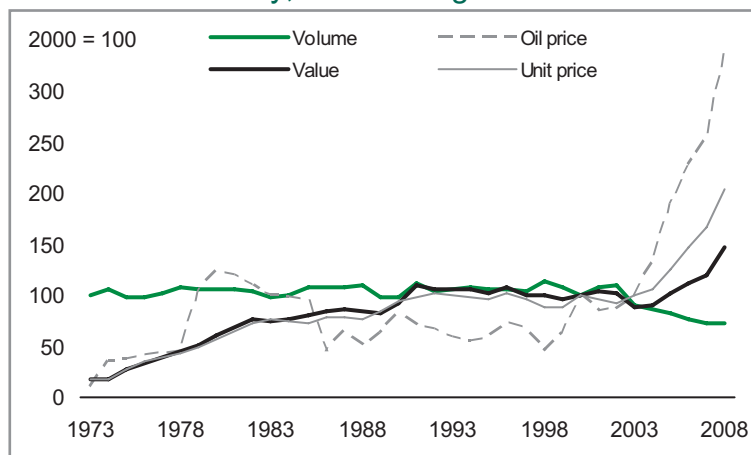
Chart 6.3 Red diesel prices; United Kingdom



Electricity (chart 6.4)

- 5 Electricity is a significant source of energy, used primarily for stationary activities, such as the operation of facilities and dairies. The volume of electricity used remained fairly constant from 1973 until 2002 but then noticeably declined. Total expenditure has closely followed the trend in the unit price and has risen by almost 750 per cent since 1973. Total expenditure in 2008 is estimated to be about £340 million, reflecting a significant increase in price.

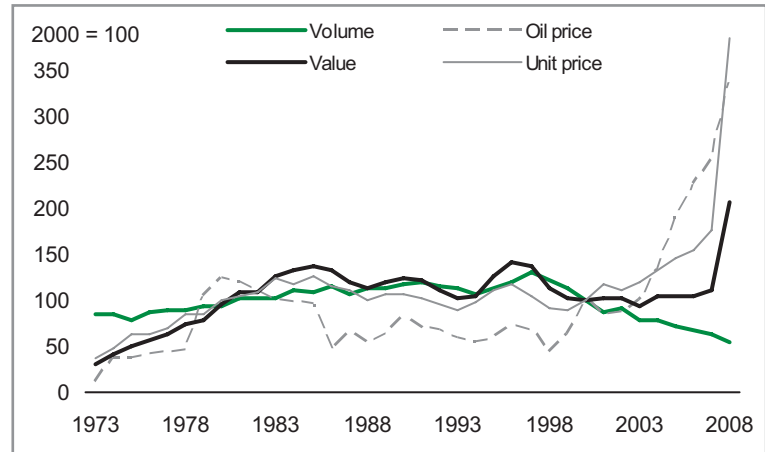
Chart 6.4 Electricity; United Kingdom



Fertiliser (chart 6.5, 6.6)

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

Chart 6.5 Fertiliser; United Kingdom



- 7 The volume of fertiliser rose gradually from 1973 as the area of land under tillage increased. It peaked in 1997 and since has fallen by almost 60 per cent. Total expenditure has largely followed the trend in the unit price, increasing significantly in 2008 to about £1.5 billion.

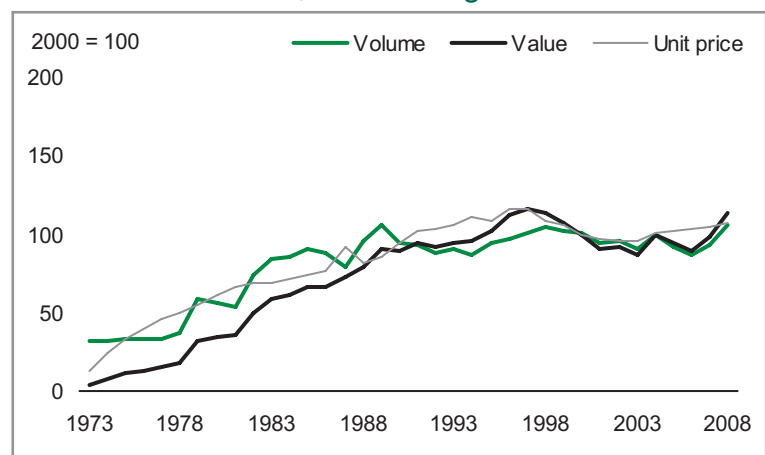
Chart 6.6 Fertiliser prices; United Kingdom



Pesticides (chart 6.7)

- 8 Oil and gas are also used in the production of many herbicides and pesticides as raw materials and energy although use is relatively small compared to that for the manufacture of fertiliser. Prices during the 1990s were in part shaped by exchange rate movements. The volume rose from 1973, peaking in 1989 and then remained fairly level. Total expenditure has largely followed the trend in the volume and is now about £650 million.

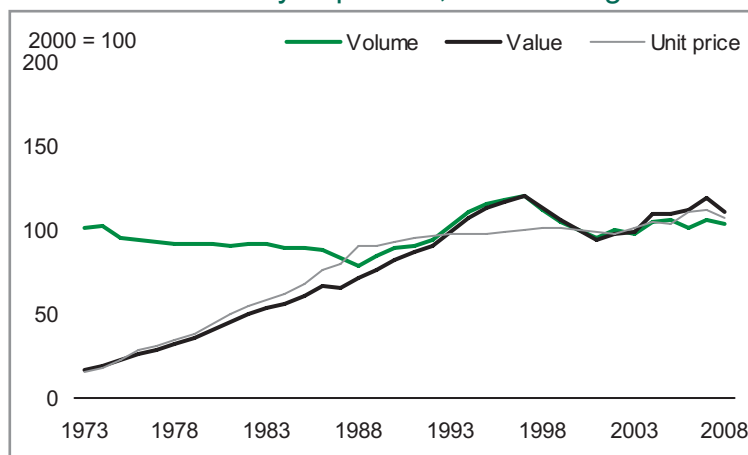
Chart 6.7 Pesticides; United Kingdom



Veterinary expenses (chart 6.8)

- 9** The volume of veterinary expenses declined gradually from 1973 to 1988, rose to a peak in 1997 due in part to trends in profitability in the 1990s, and then declined to 2000 after which it rose again to 2007. Total expenditure rose steadily from 1973 to 1997, then followed a similar trend to that for volume. It is now about £280 million.

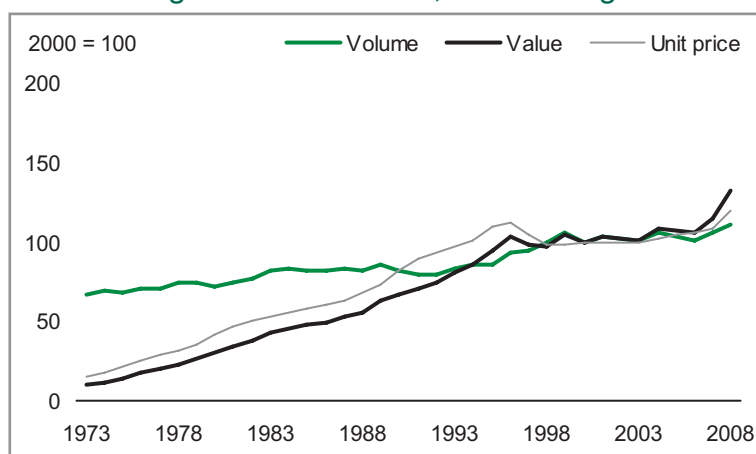
Chart 6.8 Veterinary expenses; United Kingdom



Agricultural services (chart 6.9)

- 10** The volume of agricultural services, such as contract work and machinery rental, shows a constant upward trend reflecting increasing use of contractors on farm for operations such as planting, tilling, chemical applications, discing and harvesting. Total expenditure shows a more significant upward trend, reflecting an increasing unit price trend, and is now about £775 million.

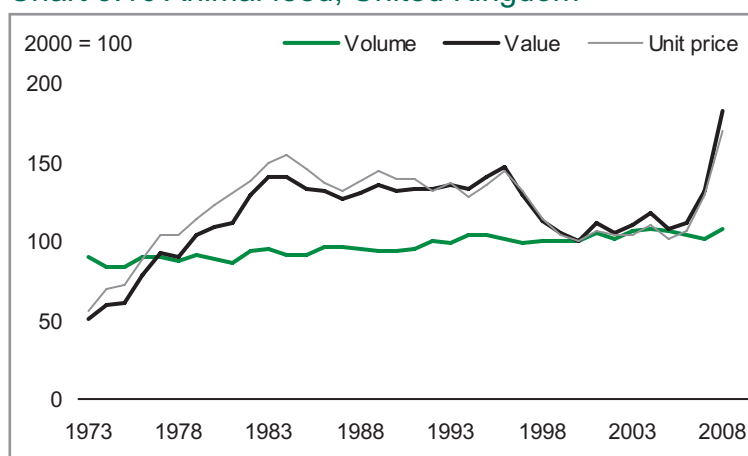
Chart 6.9 Agricultural services; United Kingdom



Animal feed (chart 6.10, table 6.1)

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

Chart 6.10 Animal feed; United Kingdom



- 12** The total cost of all purchased animal feed increased by 39 per cent to £3.9 billion in 2008, reflecting the increase in cereals prices, particularly wheat prices, which had started to increase late in 2007 and carried on into 2008. There were also significant price increases for the straight concentrates sector .
- 13** The total production of all purchased feed increased by 5.9 per cent in 2008 to 21.9 million tonnes. Total compound feed production decreased by 0.2 per cent in 2008 compared to 2007 while cattle feed production increased by 1.2 per cent in 2008 with the majority of the increase coming in the first half of 2008 where more compound feed was fed due to the poor weather and the lack of good quality forage. The 10 per cent decrease in the production of compounds for pig feed is consistent with farmers leaving the industry, partly as a result of the higher feed costs seen in 2007. Poultry feed compounds saw a 1.0 per cent increase in 2008 compared with 2007 and is consistent with the increase seen in the number of birds in the laying flock. Compounds for the production of sheep feed increased by 2.9 per cent for 2008 compared with 2007. This increase in the production of compounds for sheep feed is in line with the increase for home fed marketings, which were disrupted in the second half of 2007 as a result of FMD movement restrictions.
- 14** The use of straight concentrates increased by 15 per cent. There were significant increases in the use of protein crops, in particular maize gluten feed, soya bean meal, sunflower seed meal and both field beans and field peas. The straights concentrate figure includes production of poultry feed by the integrated poultry units where there was a 7.0 per cent reduction in feed wheat used. Inter/intra farm transfer of feed increased by 7.2 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

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Thousand tonnes (unless otherwise specified)	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Compounds:						
cattle	3 906	4 384	4 181	4 520	4 577	4 632
calves	205	200	185	191	206	215
pigs	2 631	1 619	1 586	1 640	1 709	1 533
poultry (a)	3 194	3 373	3 267	3 111	3 191	3 224
other	767	722	704	809	702	723
Total (b)	10 586	10 197	9 800	10 137	10 265	10 242
Straight concentrates (c)	5 828	7 646	7 733	7 243	6 758	7 765
Non-concentrates (d)	529	525	525	525	525	525
Inter/intra farm transfer	3 328	3 537	3 548	3 324	3 139	3 366
Total all purchased animal feed	20 271	21 905	21 606	21 229	20 687	21 897
Value of purchased animal feed (£ million) (e)	2 503	2 558	2 318	2 408	2 855	3 944

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

(b) Includes imports, less exports

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

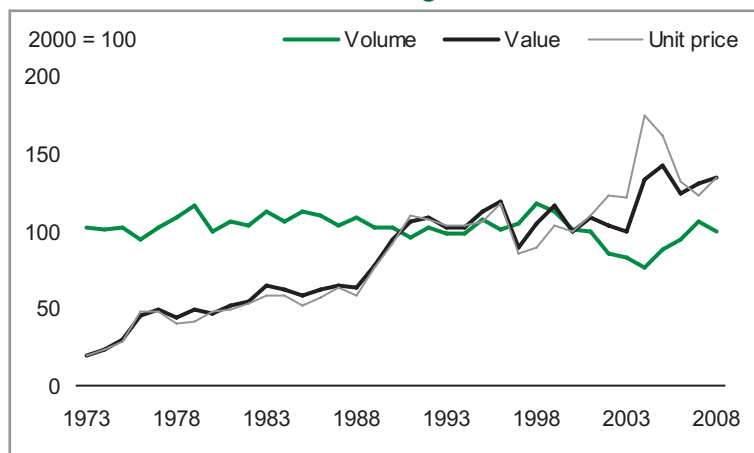
(d) Low-energy bulk feeds expressed as concentrate equivalent. Brewers and distillers grains, hay, milk by-products and other low-energy bulk feeds expressed in terms of equivalent tonnage of high energy feeds.

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

Seeds (chart 6.11)

- 15** The volume of seeds and planting stock purchased was relatively stable between 1973 and 1998, followed by a downturn to 2004 and then an increase. Total expenditure in 2008 is estimated to be about £630 million.

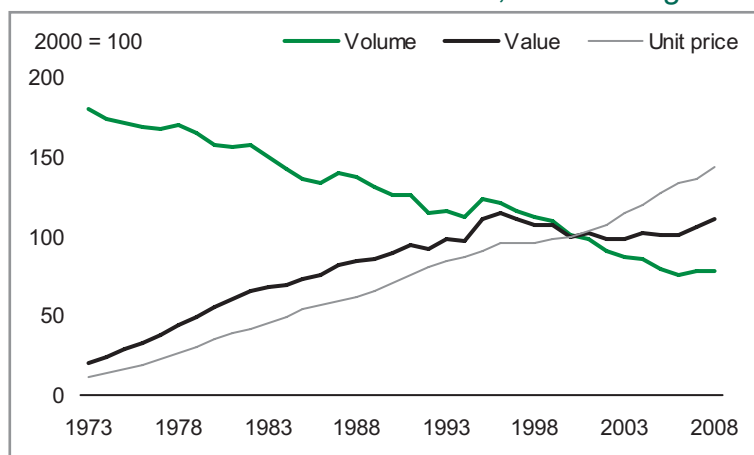
Chart 6.11 Seeds; United Kingdom



Maintenance: materials (chart 6.12)

- 16** The volume of materials purchased for maintenance use shows a long term declining trend from 1973 to 2008. The unit price shows a long term rising trend. Total expenditure followed the trend of the unit price until the mid 1990s and is now about £720 million.

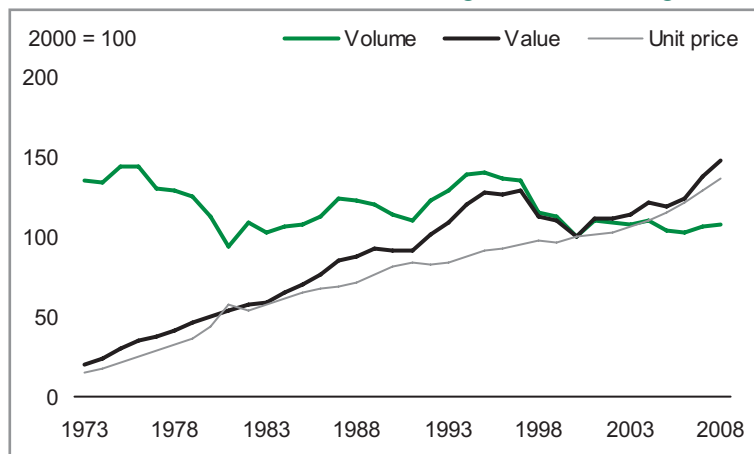
Chart 6.12 Maintenance: materials; United Kingdom



Maintenance: buildings (chart 6.13)

- 17** The volume of maintenance on buildings has fluctuated over time but has been relatively constant since 2001. The unit price shows a long term rising trend. Total 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 £420 million in 2008.

Chart 6.13 Maintenance: buildings; United Kingdom



Chapter 7 The Food Chain

Summary

- food inflation as measured by the RPI was 10 per cent in December 2008. This was a decline from its highest annual rate in 30 years of 13 per cent in August. The peak when measured by the Consumer Price Index (CPI), which excludes non-alcoholic drinks, was 15 per cent;
- in 2007 the agri-food sector accounted for 6.5 per cent of the total economy, with the food wholesale sector decreasing its gross value added by 6.5 per cent;
- an estimated 20 per cent of the total consumers' expenditure in 2008 was on food, drink and catering, with 10 per cent on household food and non-alcoholic beverages;
- consumers' expenditure on food rose by 6.9 per cent to an estimated £182 billion in 2008, with expenditure on household food rising by 13 per cent;
- the food supply chain received £167 billion in 2008 from spending by consumers and the balance of revenue from exports less spending on imports;
- the farmgate share of a basket of food staples was 37 per cent in 2008, little changed since 2007 even though agriculture commodity prices rose by 20 per cent;
- the agri-food sector provided a total of just over 3.6 million jobs in the third quarter of 2008, 14 per cent of all employees in Great Britain;

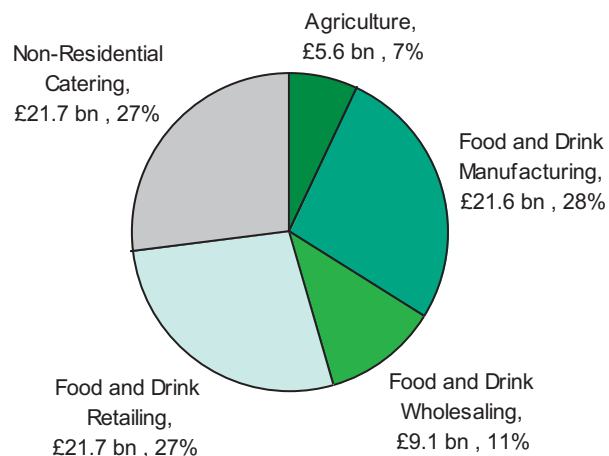
Over the year to December 2008;

- meat prices rose by 15 per cent; milk retail prices increased by 11 per cent; the retail price of bread rose steadily over the year giving an annual rise of 10 per cent; the retail price of potatoes increased by 15 per cent.

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 nearly £80 billion in 2007, a slight increase on 2006. 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 7.0 per cent respectively. Gross value added of food wholesaling is estimated to have fallen by 6.5 per cent in 2007, while that of food retailing rose by 2.1 per cent.

Chart 7.1 Gross value added by the agri-food sector 2007; United Kingdom



Source: Annual Business Inquiry (ONS) and Defra

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

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email: jim.holding@defra.gsi.gov.uk

£ million (unless otherwise specified)		Calendar years				
		Average of 1997-99	2004	2005	2006	2007 2008 (provisional)
Agri-food sector's contribution to total economy gross value added						
at current prices	Agriculture	7 355	7 154	5 138	5 183	5 592 6 816
	Food Manufacturing (a)	..	21 307	21 096	21 213	21 560 ..
	Food Wholesaling (a)	..	7 880	7 430	9 731	9 097 ..
	Food Retailing (a)	..	19 221	19 782	21 294	21 744 ..
	Food Non-Residential Catering (a)	..	21 126	20 864	21 284	21 683 ..
% of national gross value added (current prices)		..	7.3	6.8	6.9	6.5 ..
Workforce in the food sector (thousand persons)						
	Agriculture (b) (c)	602	493	490	485	477 482
	Food Manufacturing (c)	..	421	411	400	399 392
	Food Wholesaling (c)	..	213	211	211	212 213
	Food Retailing (c)	..	1 164	1 196	1 152	1 147 1 151
	Food Non-Residential Catering (c)	..	1 407	1 417	1 397	1 399 1 388
% of total workforce in employment		..	14.4	14.3	13.9	13.8 13.7
Imports and exports						
Imports of food, feed and drink (d) (e)		21 843	24 280	25 210	25 901	26 569 ..
% of total UK imports		9.1	8.7	8.4	7.8	8.6 ..
Exports of food, feed and drink (d) (e)		11 882	10 736	10 698	10 955	11 379 ..
% of total UK exports		5.6	5.1	4.7	4.3	5.2 ..
Self-sufficiency						
% of all food		67.7	62.5	60.1	59.0	59.4 60.3
% of indigenous type food		81.6	75.1	73.1	72.0	72.4 72.9
Household final consumption expenditure on food and alcoholic drinks						
at current prices		116 740	150 264	154 546	158 835	170 293 182 063
of which:	household food	55 330	64 830	67 187	69 410	77 161 86 808
	food eaten out	29 102	43 884	45 828	47 111	50 086 52 451
	alcoholic drinks	32 308	41 550	41 531	42 314	43 046 42 825
at constant 2003 prices (£ million)		129 992	148 443	149 434	149 400	154 676 156 240
of which:	household food	58 408	64 473	65 855	66 499	70 635 73 313
	food eaten out	35 020	42 697	43 274	43 254	44 438 44 664
	alcoholic drinks	36 564	41 273	40 305	39 647	39 603 38 273
% of total household final consumption expenditure		21.3	20.1	19.8	19.5	19.8 20.3
of which:	household food	10.1	8.7	8.6	8.5	9.0 9.7
	food eaten out	5.3	5.9	5.9	5.8	5.8 5.8
	alcoholic drinks	5.9	5.6	5.3	5.2	5.0 4.8
Producer prices for agricultural products (2003 = 100)		99.4	103.0	99.8	103.9	117.7 141.8
Retail price index (2003 = 100):						
	food	94.6	100.6	101.8	104.0	108.8 118.8
	alcoholic drinks	89.8	101.9	103.9	106.4	109.6 113.9
	all items	89.3	103.0	105.9	109.3	113.9 118.5

(a) Results from the Annual Business Inquiry (ONS). 2007 data is provisional.

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

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

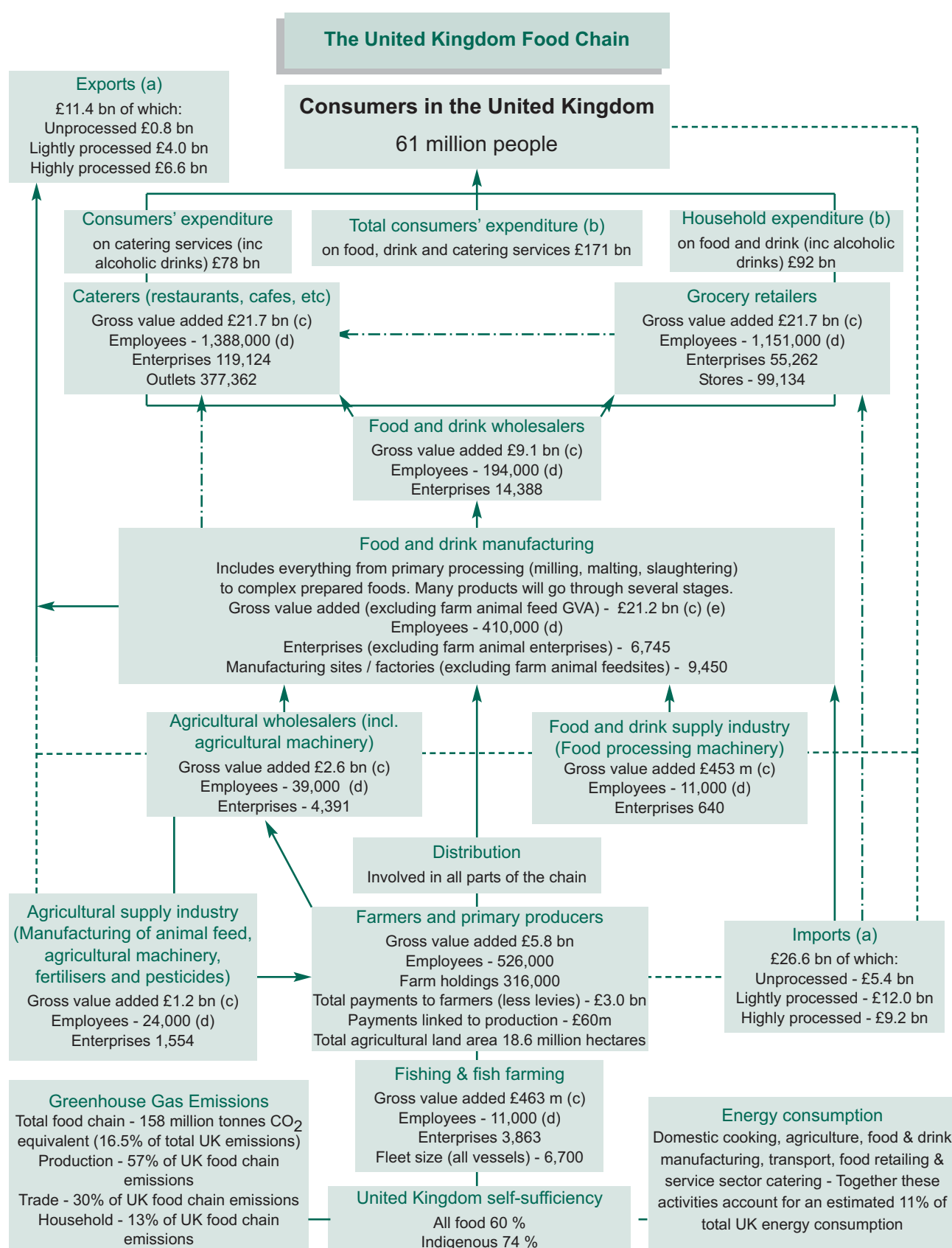
(d) This aggregate covers Standard International Trade Classification divisions 01-09, 11, 22 and Section 4.

(e) The figures for 1993 onwards are Overseas Trade Statistics (OTS), based on data collected by HM Revenue and Customs. Data shown has been adjusted to 2007 prices using the all items RPI index.

The food chain (chart 7.2)

- 2** In 2008, the food supply chain in the United Kingdom as a whole received £167 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.

Chart 7.2 The food chain; United Kingdom



(a) Overseas trade data is final for the full year 2007 from HM Revenue and Customs. (Data may not equal total due to rounding). Dashed lines indicate main trade flows.

(b) Consumers' expenditure, properly known as household final consumption expenditure, is final from the Office of National Statistics for full year 2007 and is calculated at current prices. (Data may not equal total due to rounding).

(c) Gross value added (GVA) is the difference between the value of goods and services provided and the cost of raw materials and other inputs used up in production. GVA figures are from the Office of National Statistics and is provisional data for full year 2007, which is calculated at basic prices (market prices less taxes plus subsidies)

Continued

Chart 7.2 Continued

(d) Employee data for food and drink wholesalers, grocery retailers, and caterers, is for Great Britain only and is for Q3 2008 from the Office of National Statistics. Employee data is rounded.

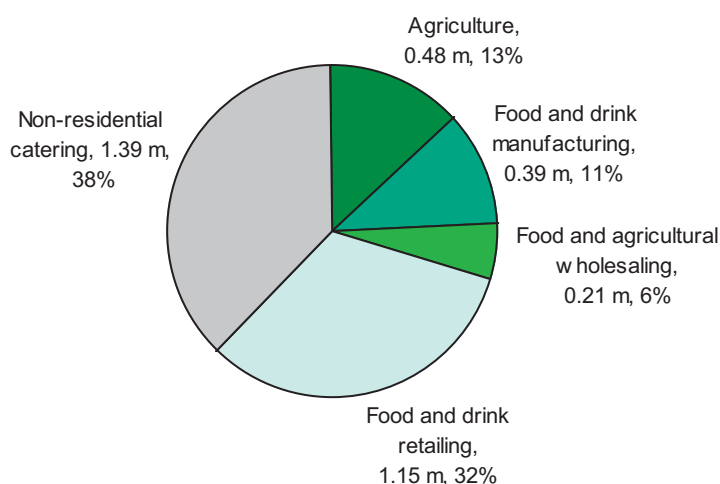
(e) GVA for food manufacturing does not include farm animal feed, which is included in the agricultural supply industry. This figure therefore does not match that shown in table 7.1.

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 2008, 14 per cent of all employees in Great Britain. Of these, a little less than half a million were employed in agriculture. Chart 7.3 shows how the different parts of the sector make up this total.

4 Employment in the agri-food sector as a whole fell by 0.2 per cent over 'the year to the third quarter of 2008' while employment for the whole economy fell by 0.03 per cent over the same period. Employment in agriculture rose by around 1.0 per cent while food manufacturing saw employment fall by 1.8 per cent. The reduction of employment in food manufacturing is in line with long term trends.

Chart 7.3 Employees in the agri-food sector Q3 2008; Great Britain



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

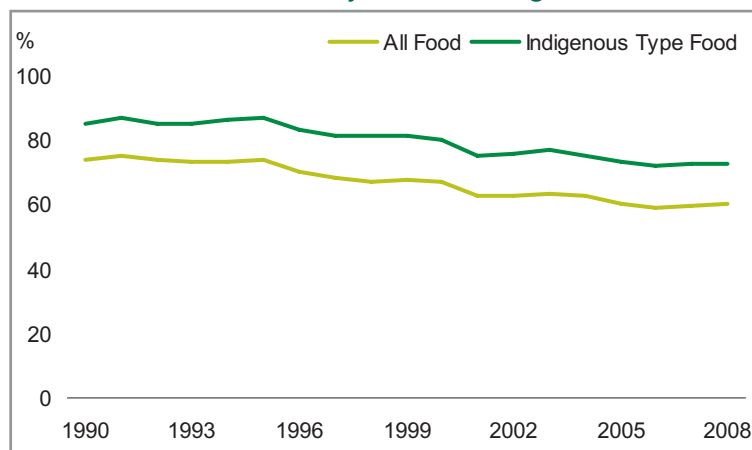
Trade in food, feed and drink (table 7.1)

5 The value of imports of food, feed and drink was over £26.6 billion in 2007, an increase of 2.6 per cent from 2006. The value of exports of food, feed and drink rose by 3.9 per cent over the same period to £11.4 billion. The trade gap in food, feed and drink widened by 1.6 per cent to £15.2 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 60 per cent for all food in 2008 and 73 per cent for indigenous food. This compares with 59 per cent and 72 per cent respectively in 2007. This slight increase on 2007 is a result of the

Chart 7.4 Self sufficiency; United Kingdom



increased value of domestically produced milk, meat, oilseed and cereals, which has outweighed a widening of the trade gap in food.

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

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

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

Distinction between competitiveness and food security

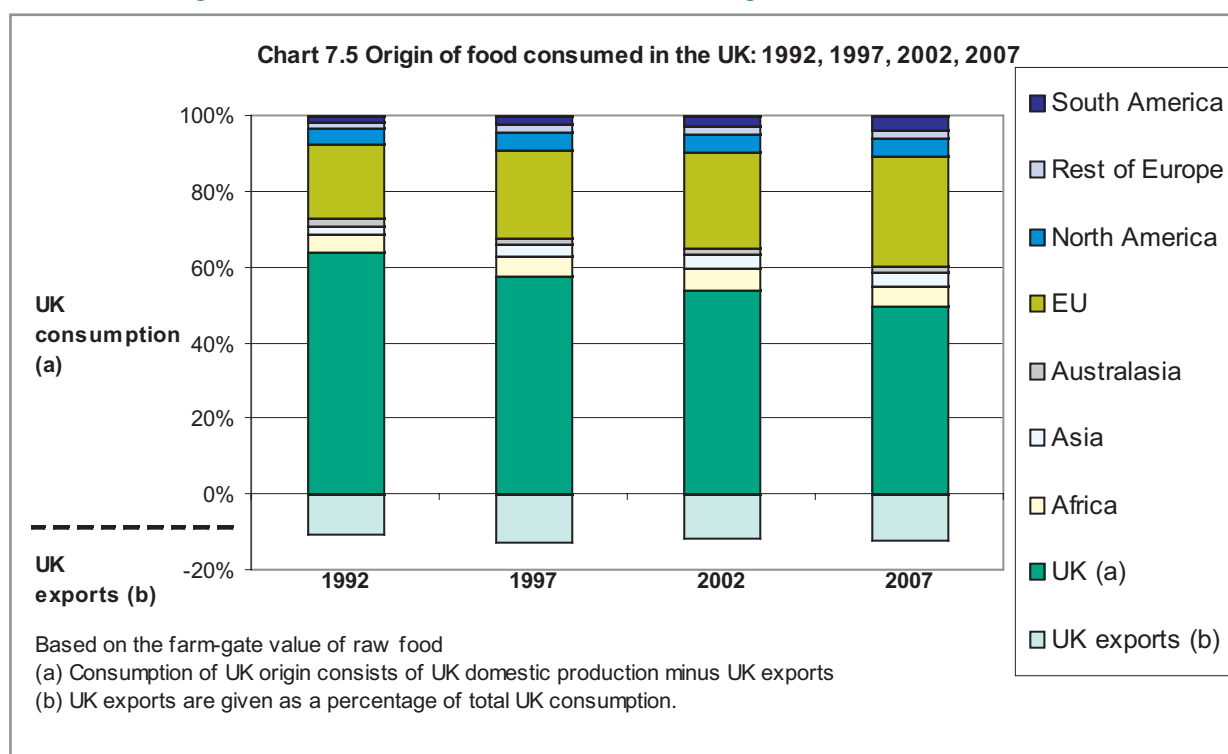
9 The self-sufficiency ratio provides a very broad indicator of the ability of UK agriculture to meet consumer demand, which can also be described as competitiveness. The ratio is not an appropriate measure of “food security” since it fails to account for many dimensions of this complex issue. A detailed 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 and chapter 8 for further details;
- self-sufficiency fails to insulate a country against many possible disruptions to its supply chain.
- production potential is more relevant at the EU level, and the EU as a whole is over 90 per cent self-sufficient; further trade liberalisation is unlikely to greatly 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.

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

10 Chart 7.5 includes the proportion of United Kingdom food consumption that is produced in the United Kingdom. This should not be confused with the measure of United Kingdom Self-Sufficiency in Food given in chart 7.4. Chart 7.5 looks purely at the breakdown of food that the United Kingdom actually consumes. Self-Sufficiency (Chart 7.4) considers all United Kingdom food production, including food that the United Kingdom exports instead of consuming. A further, much smaller difference is that the United Kingdom food production used in the Self-Sufficiency calculations has been adjusted to take account of the balance of trade in important inputs into agriculture.

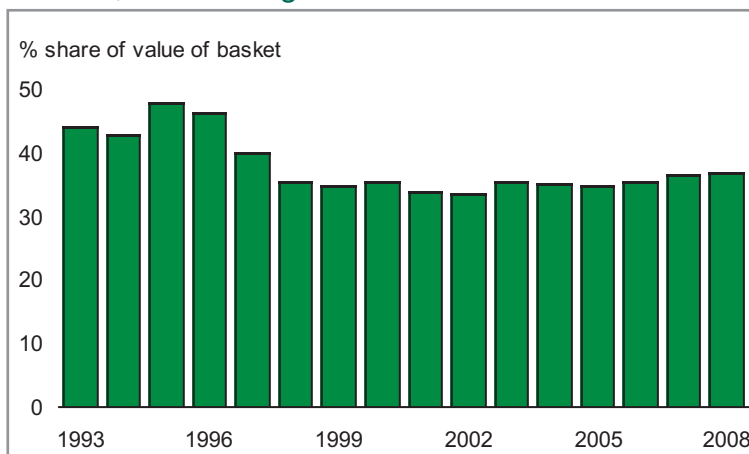
Chart 7.5 Origin of food consumed in the United Kingdom



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

- 11** In 2008 the farmgate share of the price of a basket of items covering staples of agricultural production was 37 per cent. This is 22 per cent less (or 10 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 7.6 Farmgate share of retail prices for a basket of items; United Kingdom



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

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

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		Farmgate share in 1988 %	Farmgate share in 2008 %	Change in share %	Weight in basket 2008
Farmers' share of basket		47	37	- 22	
Farm gate product	Retail product				
apples	dessert apples per kg	55	43	- 22	6
beef	untrimmed beef (b) per kg	67	50	- 26	176
carrots	carrots per kg	30	47	54	13
cabbages	cabbage, hearts, per kg	38	46	22	7
chicken	oven ready roasting chicken, fresh or chilled per kg	47	38	- 19	112
eggs	size 2 eggs per dozen	28	24	- 13	53
lamb	untrimmed lamb (b) per kg	65	47	- 27	75
onions	onions per kg	25	20	- 22	5
pork	untrimmed pork (b) per kg	57	37	- 34	83
potatoes	old loose white potatoes per kg	24	22	- 5	71
tomatoes	tomatoes per kg	48	51	6	9
wheat	white loaf sliced, 800g	16	9	- 46	52
milk	whole milk (c)	38	35	- 7	338

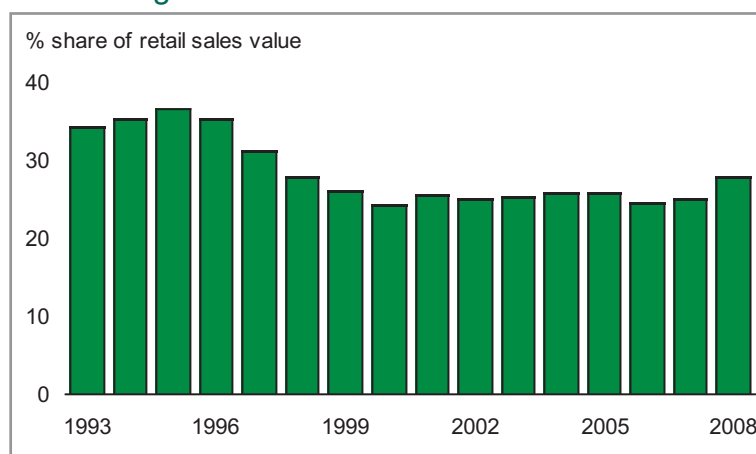
(a) Farm gate prices from Defra, retail prices from the Office for National Statistics and the Meat and Livestock Commission (MLC).

(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).

2008

- 13** The farmers' share was 37 per cent at the end of 2008, only slightly higher than in 2007 despite fluctuations during the year. Commodity prices rose causing an increase in retail food prices after a lag of a month or two. For cereals, commodity prices fell back but the retail price of bread remained high. In October and November 2008 the farmgate share of a loaf of bread was down to its lowest level in recent times at 6 per cent. Over the year as a whole the farmgate share of a loaf of bread was 9 per cent. For meat, the commodity

Chart 7.7 Farmgate share of total household sales; United Kingdom

prices rose and stayed high to the end of 2008; the farmers' share of the retail price of meat rose from 45 per cent to 50 per cent for beef. In 2008 the price of farmgate products were on average 20 per cent higher than in 2007 and the price of retail food was up 9.2 per cent.

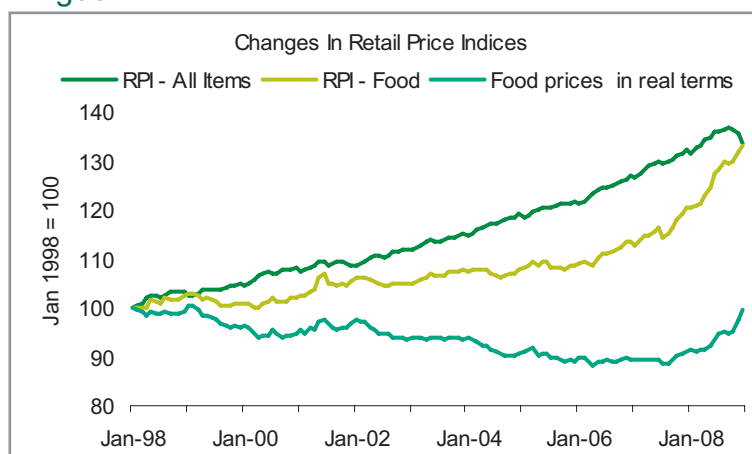
- 14** Changes in exchange rates have a significant impact on farmgate prices. Farmgate prices increased up to 1995 but then reduced when sterling strengthened against the euro. It is too early to see the effects of the weakening of sterling against the euro towards the end of 2008. Retail food prices were less affected by these factors as the food chain contains a large cost component that reflects overall conditions in the economy.
- 15** Chart 7.7 shows a related analysis; the farmgate share of total household food sales. This analysis compares the estimates of the value of farmgate output with estimates of consumers' expenditure on all household food, including highly processed foods. This approach differs because it encompasses

all purchased food and therefore incorporates changes due to consumers changing their types of purchase. In particular, it will over time include a higher share of food items incorporating greater processing or value added beyond the farmgate. This explains why farmers receive a lower share of the total household food sales than of the basket of household food items. In the second half of the nineties farm incomes tumbled and the farmers' share dropped from 36 to 24 per cent. Since 2000 farmers have seen a gradual increase in their percentage share of the retail sales value. In 2008 the farmgate share of total household food sales jumped up 2.6 percentage points; it is now at 28 per cent, equivalent to the level of 1998.

Changes in retail price indices (chart 7.8)

Chart 7.8 Changes in retail price indices; United Kingdom

- 16** Food inflation as measured by the RPI was 10 per cent in December 2008, i.e. retail food prices were 10 per cent higher in December 2008 than in December 2007. This was a decline from its highest annual rate in 30 years of 13 per cent in August 2007. The peak when measured by the Consumer Price Index (CPI) which excludes non-alcoholic drinks was 15 per cent.



Source: Retail Price Index (ONS)

- 17** Livestock prices rose in the first half of 2008 and remained high. Meat retail prices followed a similar pattern with a lag of about a month. Meat prices rose by 15 per cent over the year to December 2008.
- 18** Milk retail prices increased by 11 per cent over the year to December 2008, with distinct step rises of 2 pence per pint in June and 3 pence per pint in October. The farmgate price of milk dropped in the first half of 2008 and then returned gradually by the end of the year to the level of late 2007.
- 19** The farmgate price of bread making wheat remained fairly constant in the first five months of 2008 but then dropped from June onwards with the availability of new global supplies. The retail price of bread rose steadily over the year an annual rise of 10 per cent to December 2008.
- 20** The farmgate price of potatoes peaked in June 2008 and then dropped sharply until October. The retail price of potatoes, which includes imports, rose in June and then remained steady for the rest of the year. Over the year to December the retail price of potatoes increased by 15 per cent.
- 21** Food prices rose in response to rises in commodity prices, the rise in fuel prices and the weakening of sterling. Whilst fuel and cereal prices have fallen back from their peaks in spring 2008, the continued weakening of sterling through 2008 dampened their impact on retail prices.
- 22** Food prices rose faster than general inflation in 2008. General inflation as measured by the all items retail price index was 0.9 per cent in December 2008 but when measured by the consumer price index, which excludes mortgage interest payments, was 3.1 per cent. However since 1998 food prices have risen by only 20 per cent while prices of all items have risen by 32 per cent. Since January 1998 food prices have risen by 33 per cent while prices of all items have risen by 33 per cent. In real terms food prices are on average almost the same as they were at the start of 1998.

Chapter 8 Overseas Trade

Summary

In 2007:

- the value of food, feed and drink exports was £11.4 billion, a rise of 3.9 per cent over 2006 in real terms;
- the value of food, feed and drink imports increased by 2.6 per cent to £26.6 billion in real terms;
- the trade gap in food, feed and drink widened by 1.6 per cent to £15.2 billion in real terms;
- principal destinations for exports were the Irish Republic (20 per cent), France (12 per cent), the USA (7.9 per cent), Spain (7.7 per cent) and Germany (6.9 per cent);
- the most important trade partners for imports were the Netherlands (13 per cent), France (12 per cent), the Irish Republic (8.8 per cent), Germany (8.0 per cent) and Spain (5.9 per cent).

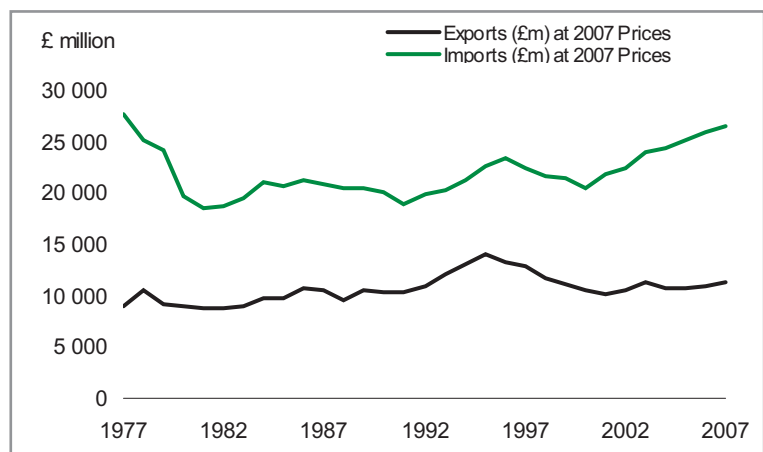
Introduction

- 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: trade between the United Kingdom and countries outside the European Union (extra-EU trade) and trade 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 due to differing definitions. In chapter 5, trade in meat is on a carcase weight equivalent basis, and trade in milk and processed milk products are from different data sources to those used in this chapter.

Trade in food, feed and drink (chart 8.1, table 8.1)

- 3 The value of exports of food, feed and drink was 2.4 per cent lower in real terms in 2007 than in 1998. 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 23 per cent higher in real terms in 2007 than in 1998. As a consequence, the trade gap in food, feed and drink widened by 52 per cent in real terms between 1998 and 2007 to £15.2 billion.

Chart 8.1 Trade in food, feed and drink at 2007 prices; United Kingdom



- 4 Table 8.1 shows the value of trade at 2007 prices. The value of food, feed and drink exports was £11.4 billion in 2007, 3.9 per cent up in real terms on 2006 when it stood at £11.0 billion, while the value of food, feed and drink imports was £26.6 billion in 2007, 2.6 per cent higher in real terms than in 2006 when it stood at £25.9 billion. As a result, the trade gap in food, feed and drink widened by 1.6 per cent in real terms between 2006 and 2007. Most categories have seen a rise in exports with the largest

Table 8.1 Trade in food, feed and drink by SITC division (at 2007 prices); United Kingdom

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£ million		Calendar years					
SITC division Code	Title	Average of 1996-98	2003	2004	2005	2006	2007
Exports							
01	Meat	1 163.9	688.2	738.1	782.9	791.4	834.4
02	Dairy	965.4	866.7	865.6	775.1	757.7	807.6
03	Fish	929.6	1 015.8	980.2	1 010.9	984.6	982.2
04	Cereals	1 880.1	1 532.0	1 372.9	1 334.5	1 290.2	1 357.5
05	Fruit and Veg	569.0	538.5	562.1	554.2	607.8	599.5
06	Sugar	575.1	390.2	414.9	366.9	390.5	390.5
07	Coffee, tea, etc.	884.1	715.7	670.2	674.1	700.5	732.4
08	Animal feed	506.2	376.6	348.8	339.1	379.3	426.6
09	Misc.	670.5	778.7	790.5	788.3	809.7	779.4
11	Drink	4 087.1	3 991.2	3 733.5	3 774.2	3 909.2	4 097.3
22 + S4	Oils	378.7	366.7	259.1	297.6	334.6	371.9
	Total	12 609.6	11 260.4	10 736.0	10 697.7	10 955.5	11 379.3
Imports							
01	Meat	2 995.9	3 835.3	3 917.5	4 004.8	4 092.4	4 083.7
02	Dairy	1 497.8	1 753.0	1 828.8	1 879.6	1 942.1	1 872.5
03	Fish	1 609.3	1 639.8	1 631.3	1 825.4	2 004.5	1 994.5
04	Cereals	1 526.9	1 585.1	1 615.0	1 626.0	1 624.5	1 920.4
05	Fruit and Veg	5 408.2	5 619.0	5 643.5	6 072.9	6 231.7	6 370.3
06	Sugar	1 077.1	978.2	993.4	1 031.8	1 010.8	972.0
07	Coffee, tea, etc.	1 672.7	1 361.1	1 367.9	1 487.4	1 539.8	1 607.0
08	Animal feed	1 035.9	1 028.7	1 026.6	999.0	1 058.5	1 072.6
09	Misc.	1 156.3	1 210.3	1 280.2	1 275.0	1 317.5	1 535.8
11	Drink	3 161.5	3 787.3	3 955.5	4 005.5	3 971.9	4 014.7
22+S4	Oils	1 327.8	1 068.6	1 020.4	1 002.9	1 106.7	1 125.8
	Total	22 469.3	23 866.5	24 280.2	25 210.2	25 900.5	26 569.2

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

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

Division 00, which covers all live animals, is excluded from the aggregate 'Food, Feed and Drink' because it includes non-food animals, particularly race horses.

S4 stands for Section 4 in the SITC and covers animal and vegetable oils, fats and waxes.

absolute increase being seen in Drink and the largest percentage increase being seen in animal feed. The Cereal and Miscellaneous (mostly ingredients for the food processing industry) categories drove the increase in imports, rising by 18 per cent and 17 per cent. The increased value of animal feed exports and imports of cereals was caused by the high prices seen in reaction to a poor world and UK cereal harvest in 2007.

Trading partners (charts 8.2, 8.3)

- 5 Principal destinations of food, feed and drink exports to the European Union in 2007 were the Irish Republic (£2.2 billion), France (£1.4 billion), Spain (£882 million) and Germany (£780 million). The principal European Union countries from which food, feed and drink were imported into the United Kingdom in 2007 were the Netherlands (£3.5 billion), France (£3.2 billion) the Irish Republic (£2.3 billion) and Germany (£2.1 billion).

- 6 Principal non-EU destinations of food, feed and drink exports in 2007 were the USA (£895 million), Singapore (£192 million) and Canada (£179 million) while the main non-EU countries from which food, feed and drink were imported into the United Kingdom were the USA (£777 million), Brazil (£688 million) and Australia (£587 million).

Exports and imports (charts 8.4, 8.5)

- 7 Between 1998 and 2007, in real terms at 2007 prices:

- the value of exports of highly processed foods and drink, such as confectionery, canned meats, jams, alcoholic drinks and ice cream, increased by 5.3 per cent;
- the value of exports of lightly processed foods and drinks, i.e. goods that retain their raw recognisable form, such as meat, cheese and butter, powdered milk, flour and sugar, fell by 8.0 per cent;
- the value of exports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, fell by 26 per cent.

Chart 8.2 Exports in food, feed and drink by country of destination 2007; United Kingdom

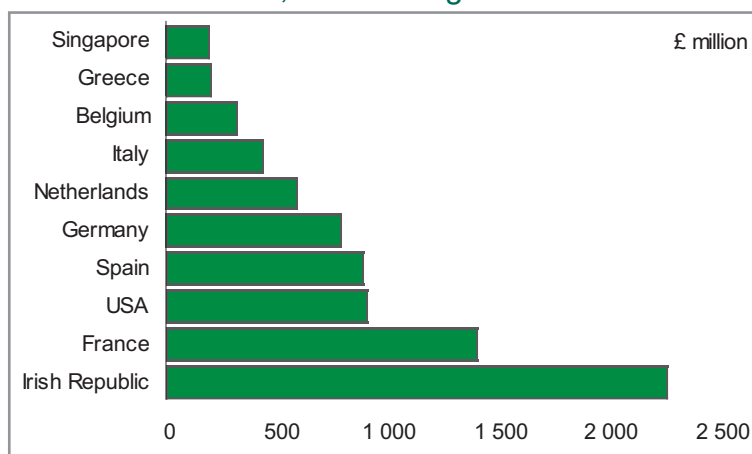


Chart 8.3 Imports in food, feed and drink by country of despatch 2007; United Kingdom

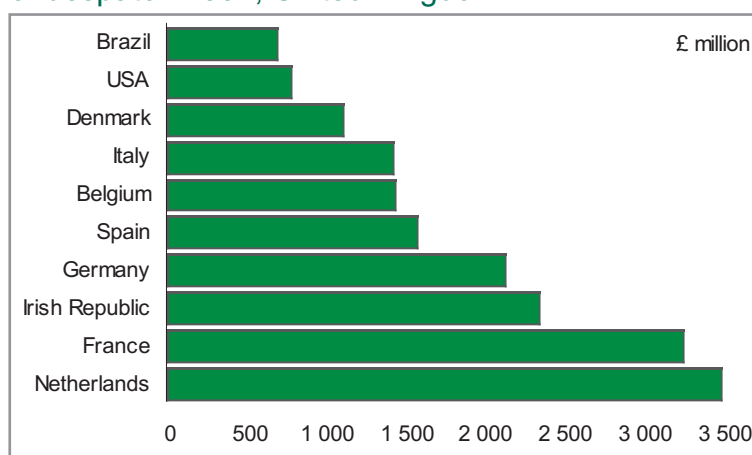
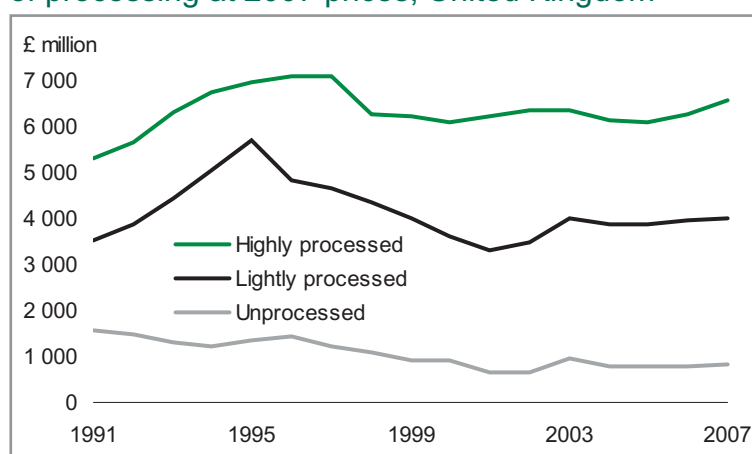


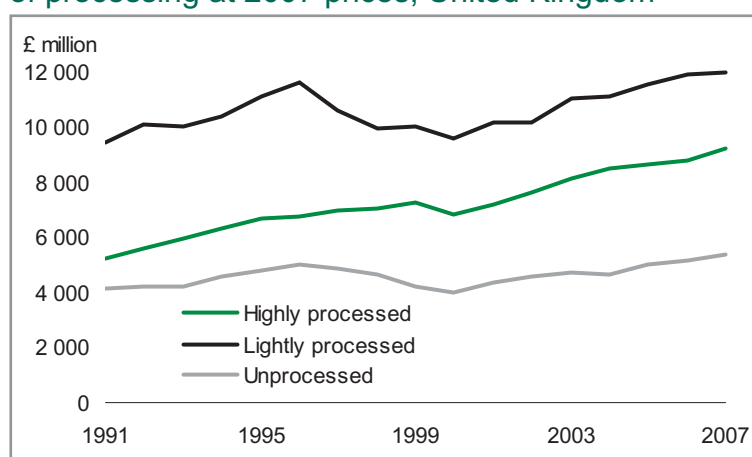
Chart 8.4 Exports of food, feed and drink by degree of processing at 2007 prices; United Kingdom



8 Between 1998 and 2007, at 2007 prices:

- the value of imports of highly processed foods and drink increased by 31 per cent;
- the value of imports of lightly processed foods and drinks increased by 21 per cent;
- the value of imports of unprocessed commodities increased by 16 per cent.

Chart 8.5 Imports of food, feed and drink by degree of processing at 2007 prices; United Kingdom



Trade in key commodities (table 8.2, 8.3)

9 Between 1998 and 2007, at 2007 prices:

- the value of exports of whisky increased by 10 per cent to £2.9 billion; the value of wine imports increased by 15 per cent to £2.6 billion;
- the value of exports of lamb and mutton fell by 33 per cent (exports were banned during the outbreak of foot and mouth disease in 2001 but have partially recovered since);
- the value of beef and veal exports increased eightfold and the value of imports increased by 82 per cent (the pattern of beef exports reflects the export ban on beef between March 1996 and November 2005);
- the value of pork imports tripled while exports declined by 67 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 17 per cent while the value of exports fell by 9.2 per cent;
- the value of breakfast cereal imports more than doubled, while the value of exports fell by 12 per cent;
- the value of cheese exports increased by 51 per cent while imports increased by 20 per cent.

Table 8.2 Trade in key commodities in real terms at 2007 prices; United Kingdom

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£ million		Calendar years					
		Average of 1996-98	2003	2004	2005	2006	2007
Whisky	Imports	64.0	96.7	100.9	107.6	119.1	98.4
	Exports	2 975.4	2 749.2	2 546.5	2 600.9	2 635.0	2 876.8
Wine	Imports	2 117.8	2 498.1	2 595.8	2 534.8	2 435.8	2 567.5
	Exports	146.3	161.8	131.0	138.4	178.7	208.7
Cheese	Imports	797.0	847.7	897.0	918.7	924.0	930.3
	Exports	176.0	204.5	223.0	236.2	240.5	241.3
Poultrymeat	Imports	617.5	754.8	818.0	818.8	735.6	775.9
	Exports	242.8	194.9	214.7	224.3	167.4	200.3
Beef and veal	Imports	398.3	629.9	676.1	627.6	651.4	613.2
	Exports	74.9	22.6	22.2	27.4	96.1	125.6
Wheat, unmilled	Imports	166.3	134.4	103.3	145.3	138.7	208.2
	Exports	509.5	332.7	230.0	213.9	199.0	231.2

continued

Table 8.2 continued

£ million		Calendar years					
		Average of 1996-98	2003	2004	2005	2006	2007
Lamb and mutton	Imports	319.9	287.3	313.3	314.2	294.1	279.3
	Exports	340.1	217.6	209.1	230.0	242.7	182.7
Pork	Imports	295.3	528.7	550.0	634.9	711.7	670.4
	Exports	319.9	74.0	102.1	112.2	103.9	88.2
Breakfast cereals	Imports	54.7	86.4	101.4	106.1	99.2	115.1
	Exports	321.5	314.8	308.3	320.1	320.5	313.6
Milk and cream	Imports	74.6	34.0	37.4	38.9	47.9	52.6
	Exports	178.4	191.1	155.1	185.9	185.9	183.0
Bacon and ham	Imports	690.2	709.5	606.3	568.2	573.9	563.4
	Exports	24.2	44.0	38.1	29.8	26.9	30.2
Butter	Imports	288.1	320.3	308.6	333.0	349.1	228.6
	Exports	174.4	85.4	65.5	78.8	62.5	66.2
Eggs and egg products	Imports	45.6	95.8	94.7	83.0	95.2	106.4
	Exports	32.3	33.2	36.3	29.6	25.4	25.2
Fresh Vegetables	Imports	1 231.6	1 537.9	1 524.3	1 716.3	1 686.9	1 747.3
	Exports	90.5	120.6	113.0	106.1	95.0	93.0
Fresh Fruit	Imports	1 172.5	1 255.3	1 310.7	1 424.5	1 511.7	1 490.6
	Exports	46.3	46.6	61.9	80.7	90.0	54.6

Table 8.3 Trade in key commodities by volume; United Kingdom

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Thousand tonnes (unless otherwise specified)		Calendar years					
		Average of 1996-98	2003	2004	2005	2006	2007
Whisky (million litres)	Imports	7.9	16.3	14.6	13.5	16.9	14.4
	Exports	267.5	277.9	273.4	284.1	302.0	326.3
Wine (million litres)	Imports	880.6	1 220.0	1 333.7	1 315.1	1 260.1	1 308.9
	Exports	38.5	24.5	21.8	21.4	32.3	47.7
Cheese	Imports	256.0	315.6	334.7	352.9	378.1	402.9
	Exports	55.1	89.8	93.3	96.3	104.2	97.2
Poultrymeat	Imports	246.7	346.6	396.4	406.4	381.7	383.4
	Exports	205.6	268.3	265.5	304.6	258.7	291.8
Beef and veal	Imports	131.1	269.4	280.6	239.9	235.7	240.1
	Exports	24.7	5.7	6.5	8.9	41.2	59.4
Wheat, unmilled	Imports	1 030.4	984.7	776.4	1 200.7	1 028.1	1 238.4
	Exports	3 931.4	3 661.5	2 528.2	2 494.8	2 116.5	1 911.1
Lamb and mutton	Imports	124.9	111.5	116.2	110.1	113.8	114.1
	Exports	112.7	75.8	76.7	85.2	87.1	68.8
Pork	Imports	153.5	380.5	383.5	432.0	458.8	462.9
	Exports	205.5	69.4	84.3	91.5	94.7	98.6
Breakfast cereals	Imports	28.5	61.0	66.9	78.8	86.7	91.8
	Exports	153.8	159.1	152.8	168.0	169.3	165.3
Milk and cream	Imports	163.8	52.5	70.8	79.0	123.8	133.5
	Exports	195.2	312.0	339.4	592.2	621.3	513.2
Bacon and ham	Imports	243.9	303.2	301.7	283.4	264.0	277.5
	Exports	6.6	13.9	13.2	10.6	10.2	11.9
Butter	Imports	109.2	118.4	113.7	128.6	147.1	103.2
	Exports	63.6	44.4	34.8	45.1	35.7	31.7
Eggs and egg products	Imports	25.2	70.4	67.1	78.7	78.4	93.1
	Exports	18.8	17.6	15.1	13.7	13.1	11.9
Fresh Vegetables	Imports	1 379.0	1 797.0	1 870.9	2 134.7	2 103.4	2 184.3
	Exports	268.6	602.1	514.9	463.5	384.6	304.2
Fresh Fruit	Imports	1 423.7	1 604.1	1 790.3	1 870.7	1 971.8	1 953.5
	Exports	47.9	60.8	83.9	88.4	107.7	63.0

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

Commodity specific trade with EU 26 countries (charts 8.6 to 8.11)

- 10** This section describes the volume of trade in 3 key commodities between the United Kingdom and the other 26 Member States of the European Union (the EU 26 countries). These commodities have been analysed in this way because the vast majority of UK trade is with countries within the EU.

Bacon and ham

- 11** Imports of bacon and ham from the EU 26 countries have been far in excess of exports for many years. Total imports have fluctuated a little but have risen in the 2000's to reach 278 thousand tonnes in 2007. In 2007, the Netherlands and Denmark provided 81 per cent of all imported bacon and ham.

Chart 8.6 Trade with EU 26 countries: bacon and ham

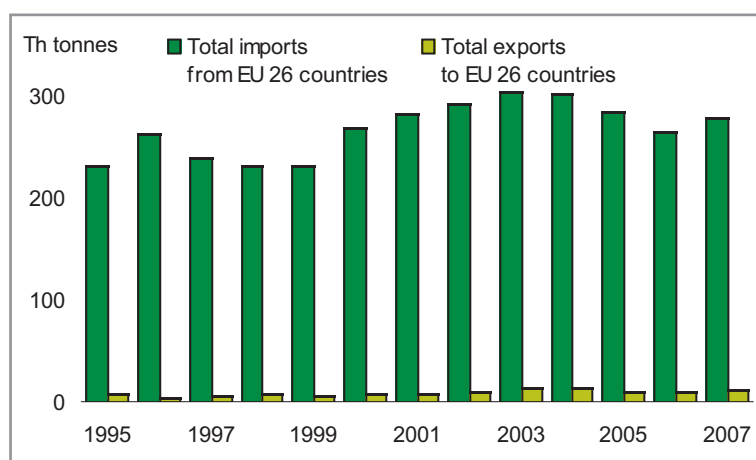
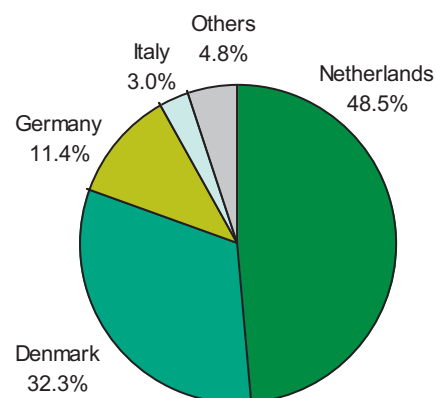


Chart 8.7 Trade with EU 26 countries: imports of bacon and ham 2007



Pork

- 12** Since the ban on exports during the outbreak of foot and mouth disease in 2001, exports have been much lower and imports much higher than their pre-2001 levels. The volume of both imports and exports increased slightly in 2007, imports reaching 458 thousand tonnes and exports 88 thousand tonnes. Denmark accounted for 42 per cent of the imports of pork in 2007, with a further 35 per cent contributed by Germany, the Netherlands, Belgium and Luxembourg together.

Chart 8.8 Trade with EU 26 countries: pork

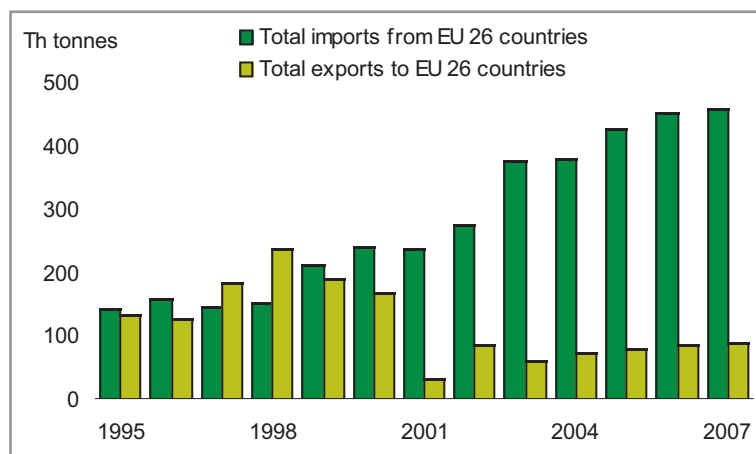
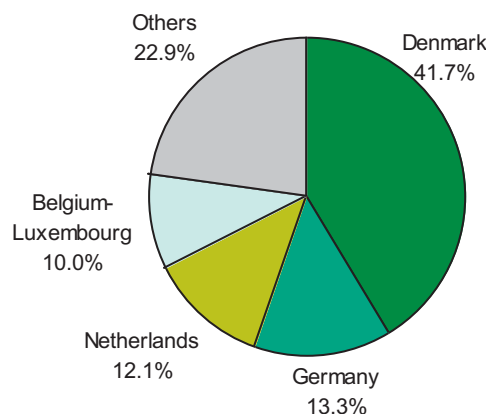


Chart 8.9 Trade with EU 26 countries: imports of pork 2007



Milk and cream

- 13** Imports have increased every year since 2003 and the 2007 figure of 134 thousand tonnes is more than double the 2003 total. Exports have risen sharply since 2002, reaching a peak of 620 thousand tonnes in 2006. Despite falling back to 512 thousand tonnes in 2007, exports still outweigh imports by almost four to one. In 2007, 86 per cent of milk and cream exports went to the Irish Republic, with a further 12 per cent exported to Belgium, Luxembourg and Germany.

Chart 8.10 Trade with EU 26 countries: milk and cream

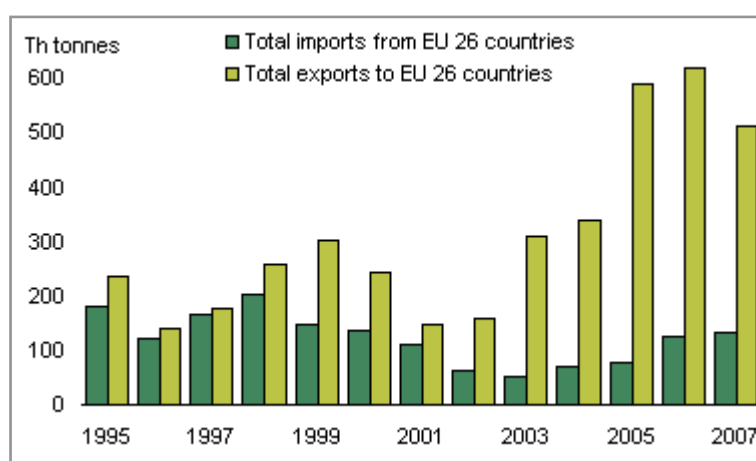
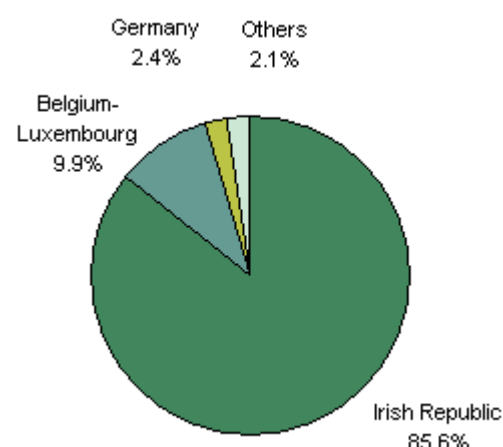


Chart 8.11 Trade with EU 26 countries: exports of milk and cream 2007



Commodity specific worldwide trade (charts 8.12 to 8.13)

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

Lamb and mutton

- 15** The ban on exports during the outbreak of foot and mouth disease explains the dip in exports in 2001, followed by a recovery to 87.1 thousand tonnes in 2006. In 2007, exports fell back to 68.8 thousand tonnes. Imports have remained steady at around 110 thousand tonnes for the last decade. Seventy-three per cent of all lamb and mutton exported in 2007 went to France, with a further 18 per cent going to Belgium, Luxembourg, the Irish Republic or Italy.

Chart 8.12 World trade: lamb and mutton

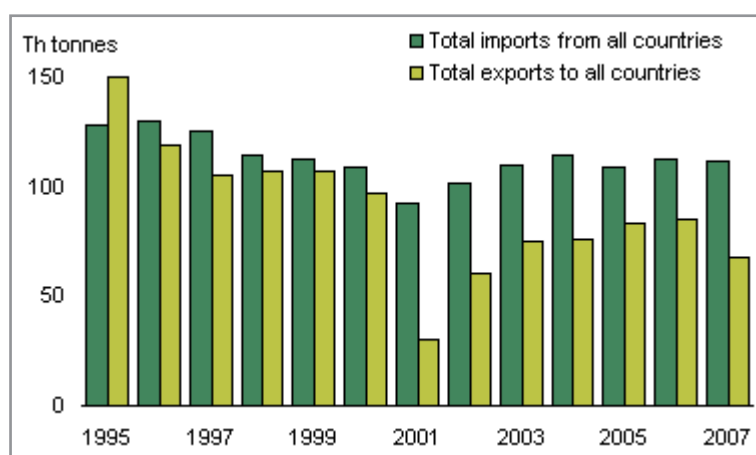
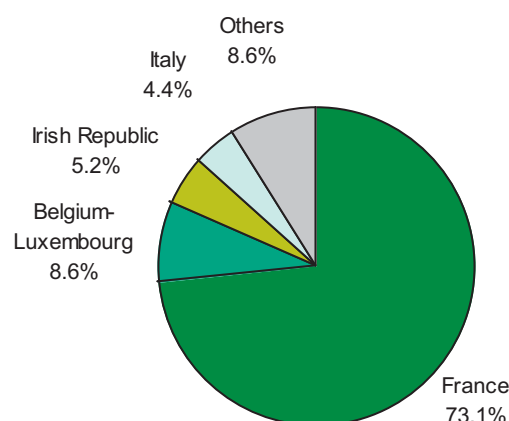


Chart 8.13 Trade all countries: exports of lamb and mutton 2007



Beef and veal

- 16** Following the Government's announcement of a link between BSE and new variant CJD, exports of beef originating in the United Kingdom were banned between March 1996 and November 2005. The small amounts of exports seen over that period are of beef and veal of non-UK origin which have been imported into the United Kingdom and then exported. Following the end of the ban, exports are showing some signs of recovery but at 59.4 thousand tonnes, are still nowhere close to the 1995 level of 274 thousand tonnes. Imports rose during the export ban and are currently about twice the level of imports before the ban. The Irish Republic accounted for 61 per cent of the imports in 2007, with Brazil, the Netherlands and Germany together accounting for a further 23 per cent.

Chart 8.14 World trade: beef and veal

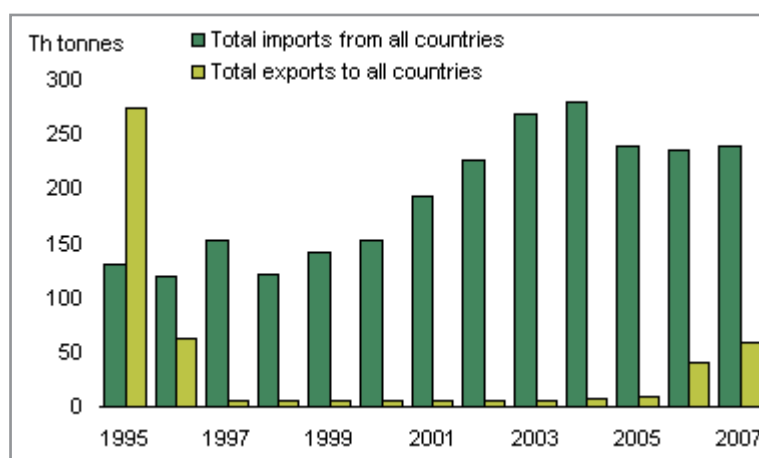
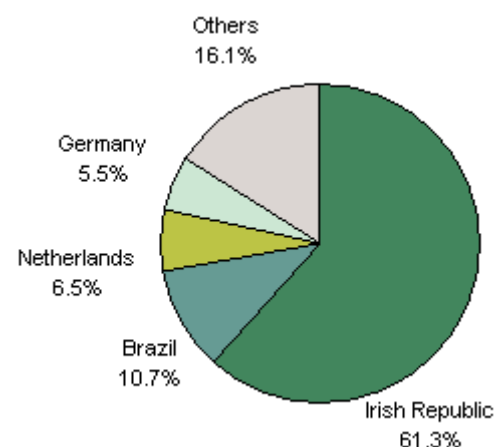


Chart 8.15 Trade all countries: imports of beef and veal 2007



Poultrymeat

- 17** The United Kingdom has a long term trade deficit in poultrymeat. Imports have increased steadily from 1993, reaching 383 thousand tonnes in 2007. The Netherlands accounted for 45 per cent of imports in 2007 with France, Germany and Poland accounting for a further 26 per cent.

Chart 8.16 World trade: poultrymeat

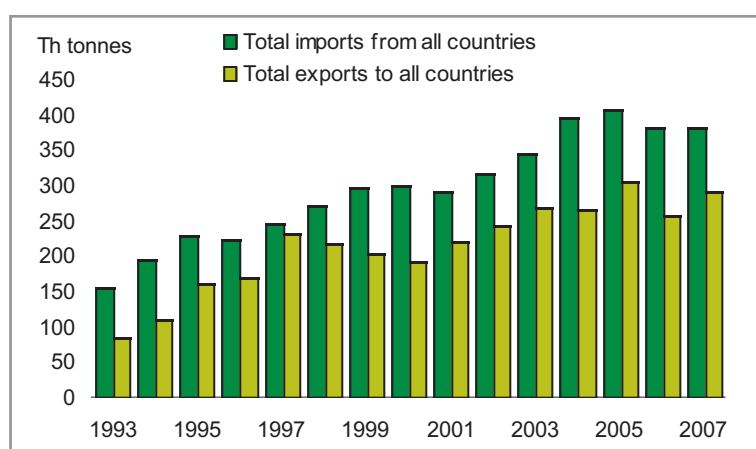
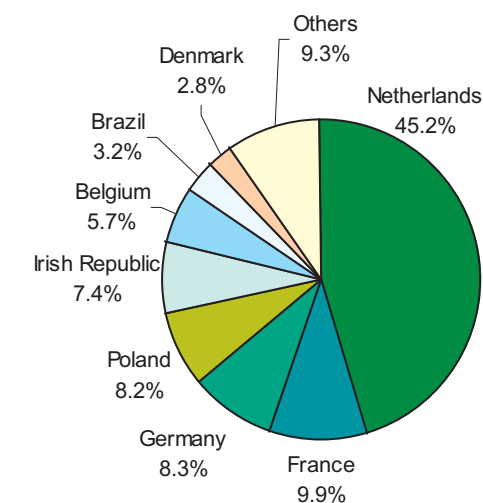


Chart 8.17 Trade all countries: imports of poultrymeat 2007



Unmilled wheat

- 18** Exports of unmilled wheat have comfortably exceeded imports every year from 1993 apart from 2001 and 2002. Exports fell to the same level as imports in these two years due to a poor 2001 harvest, caused by severe flooding in the previous winter. In 2007, exports stood at 1.9 million tonnes, of which half went to Spain. A further 38 per cent went to Portugal, the Irish Republic or the Netherlands.

Chart 8.18 World trade: unmilled wheat

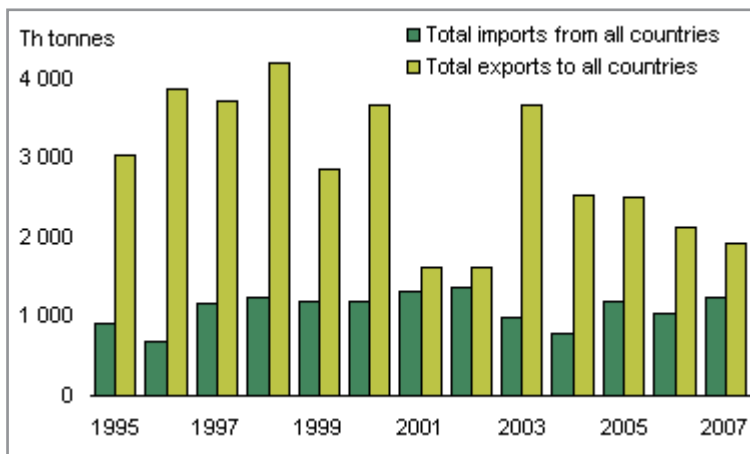
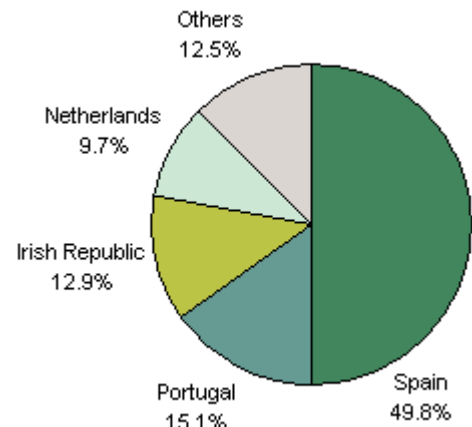


Chart 8.19 Trade all countries: exports of unmilled wheat 2007



Fresh vegetables

- 19** The United Kingdom has a large and steadily increasing trade deficit in fresh vegetables. Imports have risen each year since 2000, reaching 2.2 million tonnes in 2007; almost double the 1994 total. Exports have declined to 304 thousand tonnes since a peak of 602 thousand tonnes in 2003. In 2007, 60 per cent of all fresh vegetable imports came from Spain or the Netherlands. The next largest share (5.6 per cent) came from France.

Chart 8.20 World trade: fresh vegetables

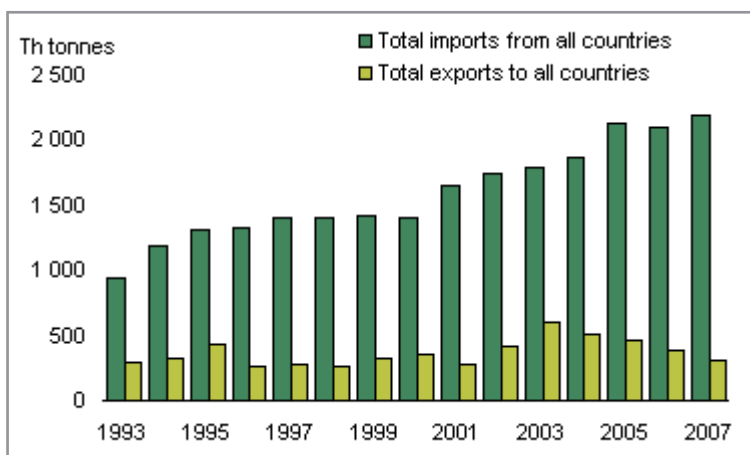
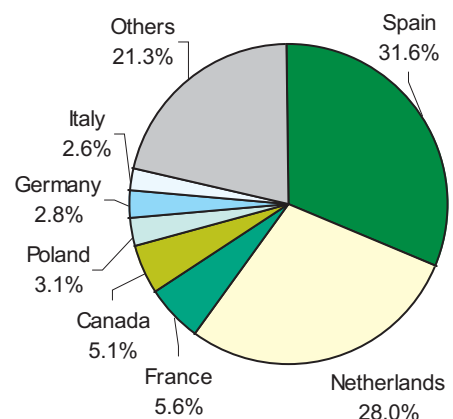


Chart 8.21 Trade all countries: imports of fresh vegetables 2007



Fresh fruit

- 20** Imports of fresh fruit have historically been far in excess of exports, rising to 3.7 million tonnes in 2007. Exports have seen higher levels in recent years but equal just 4.2 per cent of the level of imports. Spain was the largest single source of imports, accounting for 13 per cent in 2007. The top three sources of imports (Spain, South Africa and Costa Rica) provided only 33 per cent of imports between them, which demonstrates the diversity of supply of fresh fruit.

Chart 8.22 World trade: fresh fruit

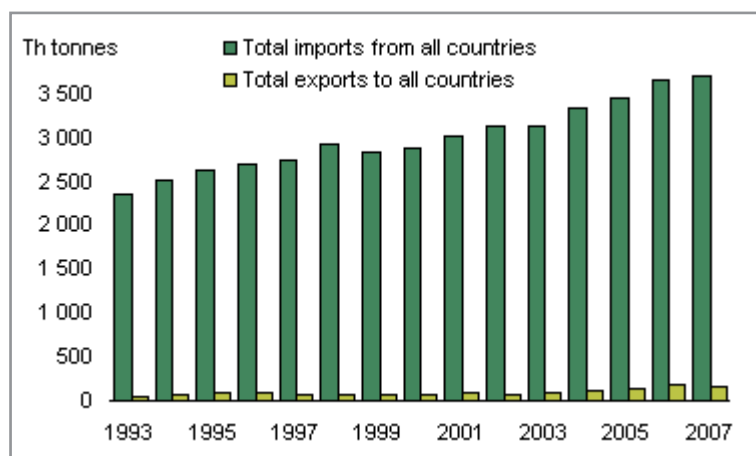
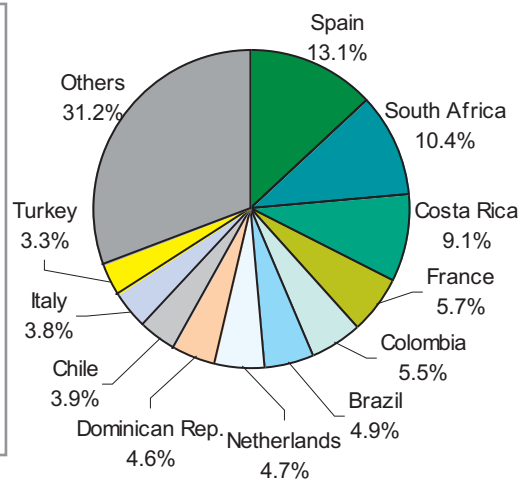


Chart 8.23 Trade all countries: imports of fresh fruit 2007



Chapter 9 Accounts

Summary

In 2008:

- Total Income from Farming is estimated to have risen by 42 per cent in current prices, or by 36 per cent in real terms, to £3.5 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 26 per cent to £19.8 billion;
- the value of intermediate consumption rose by 27 per cent mainly due to significant increases in the value of animal feed which rose by 38 per cent and fertilisers which rose by more than 80 per cent;
- gross value added at market prices rose by 22 per cent;
- net value added at factor cost rose by 20 per cent to £6.9 billion;
- labour costs rose by 6.8 per cent while rents fell by 13 per cent.

At market prices, the value of output of:

- cereals was £3.2 billion, 66 per cent higher than in 2007 as a result of continued high prices, an increase to the area planted and higher yields;
- oilseed rape rose by 46 per cent to £618 million as a result of high prices;
- sugar beet rose by 24 per cent to £200 million;
- fresh vegetables rose by 3.1 per cent to £1.1 billion;
- plants and flowers rose by 2.0 per cent to £797 million;
- potatoes was £755 million, 14 per cent higher than in 2007;
- fresh fruit rose by 14 per cent to £517 million;
- livestock production rose, by 25 per cent to £6.5 billion, the value of production of cattle increased by 27 per cent to £2.1 billion due to increased finished cattle prices;
- milk production rose by 22 per cent to £3.5 billion due to higher prices;
- egg production rose by 28 per cent to £524 million again due to higher prices.

In 2007:

- net worth rose by 18 per cent or 13 per cent in real terms, to £179 billion;
- total assets increased by 16 per cent while liabilities fell by 0.8 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 2008 by 42 per cent in current prices, or by 36 per cent in real terms, to £3.5 billion. In real terms, TIFF remains below the high levels of the mid nineties but is now nearly 80 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 2008 the total value of output at market prices increased by 26 per cent to £19.8 billion. The value of intermediate consumption increased by 27 per cent and gross value added at market prices increased by 22 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 2008 was largely a result of higher prices than those seen in 2007. Input costs rose by 27 per cent, mainly due to the significant increase in the cost of animal feed which rose by 38 per cent following the continued high cereal prices. Energy costs and fertiliser costs also showed considerable increases of 37 per cent and 85 per cent respectively.
- 7 Gross value added for the industry, which represents its contribution to national GDP, increased by 22 per cent at market prices. Interest payments fell by 1.3 per cent. Compensation of employees increased by 6.8 per cent.
- 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 2008, net value added at factor cost was £6.9 billion, a 20 per cent rise compared to 2007.

- 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 6.8 per cent while rent costs and interest payments fell by 13 per cent and 1.3 per cent respectively.

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 2008 (£ billion); United Kingdom

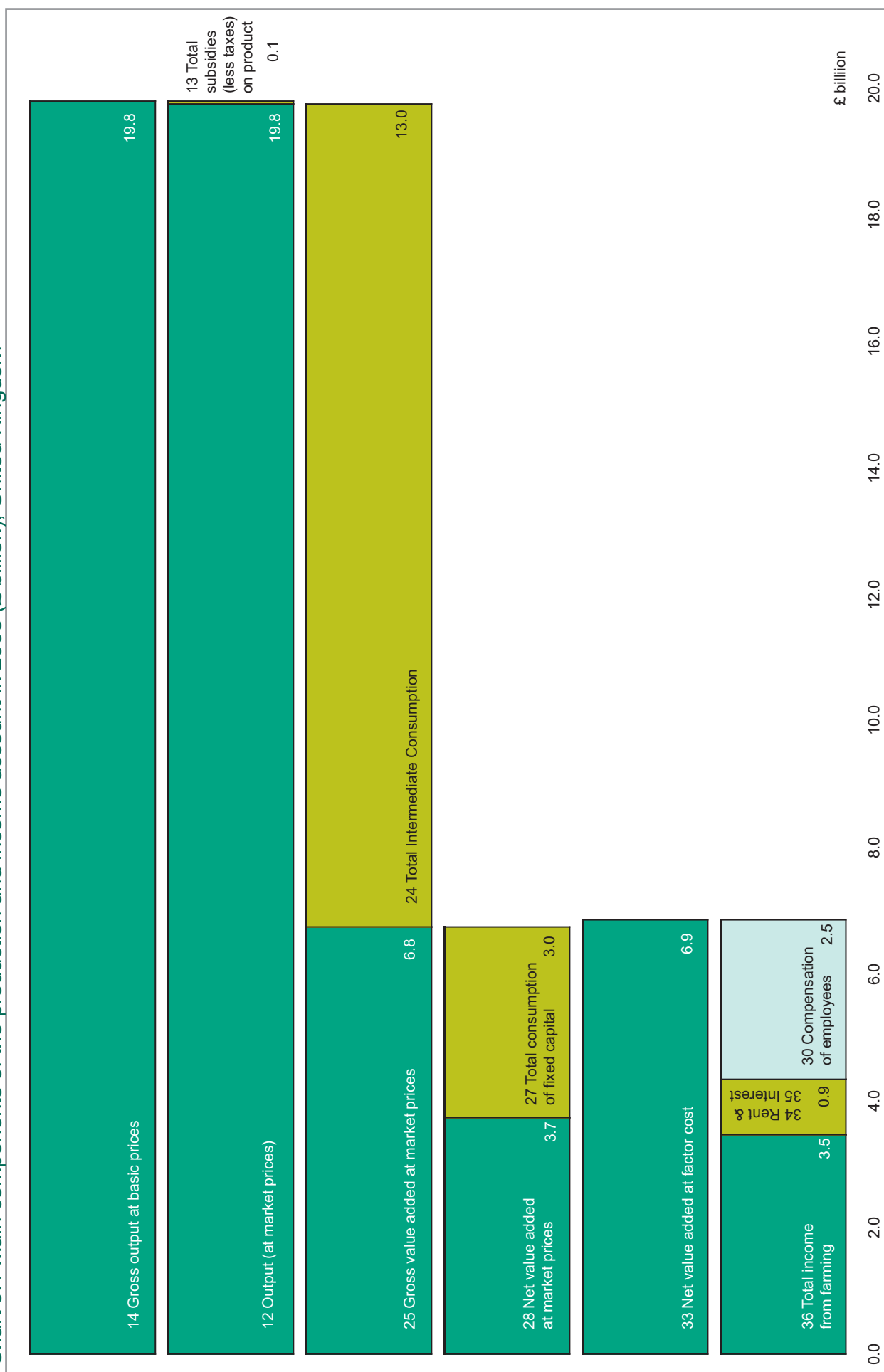


Chart 9.2 Changes in value of output and inputs between 2007 and 2008 (£ million)

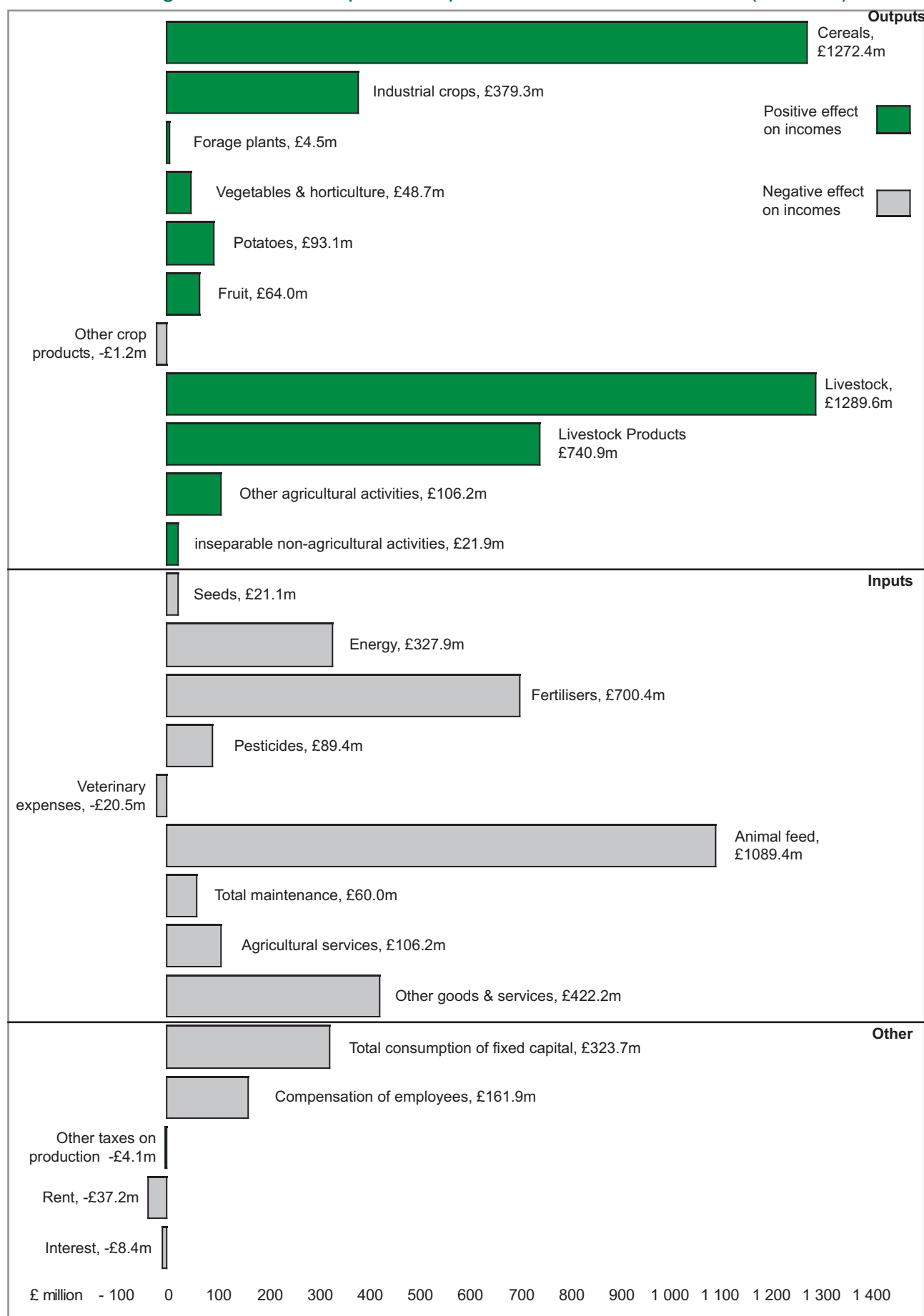


Table 9.1 Production and income account at current prices; United Kingdom

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£ million	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Output at market prices (a)						
1 Output of cereals	1 808	1 707	1 445	1 509	1 933	3 206
wheat	1 217	1 231	1 024	1 069	1 317	2 234
rye	3	2	1	1	1	1
barley	546	432	384	384	550	882
oats and summer cereal mixtures	41	42	35	54	63	87
other cereals	1	1	1	1	1	1
2 Output of industrial crops	808	798	806	734	771	1 151
oil seeds	254	266	277	315	427	628
oilseed rape	232	257	261	307	422	618
other oil seeds	22	9	16	8	4	10
sugar beet	302	278	269	178	162	200
other industrial crops	251	254	260	241	183	322
fibre plants	3	1	1	1	-	1
hops	15	6	5	4	4	4
other industrial crops (b)	234	247	254	235	178	317
3 Output of forage plants	80	93	95	86	106	111
4 Output of vegetables and horticultural products	1 639	1 621	1 690	1 749	1 848	1 897
fresh vegetables	960	835	912	998	1 067	1 100
plants and flowers	679	787	778	751	781	797
5 Output of potatoes (including seeds)	589	674	515	623	662	755
6 Output of fruit	238	316	388	383	453	517
7 Output of other crop products including seeds	41	31	52	48	44	43
Total crop output (sum 1 - 7)	5 203	5 241	4 992	5 132	5 818	7 679
8 Output of livestock	4 859	4 839	4 935	5 060	5 220	6 510
primarily for meat	4 288	4 182	4 332	4 304	4 391	5 422
cattle	1 120	1 279	1 480	1 543	1 626	2 070
pigs	956	680	677	685	736	858
sheep	676	726	683	681	637	822
poultry	1 387	1 331	1 321	1 218	1 207	1 482
other animals	149	166	171	176	183	190
gross fixed capital formation	571	657	603	756	830	1 088
cattle	294	337	355	484	523	735
pigs	9	8	6	8	5	8
sheep	136	176	111	133	153	181
poultry	132	136	131	131	149	163
9 Output of livestock products	3 191	3 038	3 009	2 918	3 286	4 027
milk	2 858	2 610	2 592	2 497	2 823	3 450
eggs	283	378	349	362	410	524
raw wool	27	20	20	11	12	12
other animal products	24	29	48	48	41	41
Total livestock output (8 + 9)	8 050	7 877	7 944	7 978	8 507	10 537
10 Other agricultural activities	713	718	640	624	670	776
agricultural services	585	636	631	623	669	775
leasing out quota	128	82	10	1	-	-
11 Inseparable non-agricultural activities	408	637	678	726	737	759
12 Output (at market prices) (sum 1 to 11)	14 373	14 474	14 255	14 460	15 732	19 751
of which:						
transactions within the agricultural industry						
feed wheat	73	103	83	76	92	127
feed barley	168	148	140	148	200	266
feed oats	13	14	12	15	17	23
seed potatoes	17	9	13	16	8	13
straw	205	209	210	191	137	259
contract work	585	636	631	623	669	775
leasing of quota	128	82	10	1	-	-
total capital formation in livestock	571	657	603	756	830	1 088
13 Total subsidies (less taxes) on product (c)	2 292	2 168	208	80	56	56
14 Gross output at basic prices (12 + 13)	16 665	16 641	14 463	14 539	15 788	19 807

continued

Table 9.1 continued

	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Intermediate consumption						
15 Seeds	483	620	662	580	608	630
16 Energy	617	669	779	833	898	1 226
electricity	228	210	235	259	276	341
fuels	388	459	544	574	622	884
17 Fertilisers	865	775	774	775	827	1 527
18 Pesticides	650	576	547	518	567	656
19 Veterinary expenses	289	279	280	286	304	284
20 Animal feed (d)	2 503	2 558	2 318	2 408	2 855	3 944
compounds	1 566	1 450	1 318	1 402	1 646	2 163
straights	683	844	764	768	899	1 365
feed purchased from other farms	254	265	236	239	310	416
21 Total maintenance (e)	1 042	1 012	994	1 014	1 086	1 146
materials	706	663	653	656	689	722
buildings	336	349	341	358	397	424
22 Agricultural services	585	636	631	623	669	775
23 Other goods and services (e)(f)	2 277	2 362	2 341	2 321	2 382	2 804
24 Total intermediate consumption (sum 15 to 23)	9 310	9 488	9 325	9 356	10 195	12 991
25 Gross value added at market prices (12 - 24)	5 063	4 986	4 929	5 103	5 536	6 760
26 Gross value added at basic prices (14 - 24)	7 355	7 154	5 138	5 183	5 592	6 816
27 Total consumption of Fixed Capital	2 570	2 534	2 661	2 682	2 709	3 033
equipment	1 323	1 192	1 204	1 195	1 207	1 256
buildings (e)(g)	684	674	676	685	696	707
livestock	562	667	781	802	806	1 070
cattle	305	364	490	501	502	720
pigs	10	9	7	7	6	9
sheep	115	167	151	162	157	191
poultry	133	128	133	131	141	150
28 Net value added at market prices (25 - 27)	2 493	2 453	2 268	2 421	2 827	3 727
29 Net value added at basic prices (26 - 27)	4 785	4 620	2 477	2 501	2 883	3 783
30 Compensation of employees (h)	1 978	2 004	2 218	2 272	2 365	2 527
31 Other taxes on production	- 89	- 96	- 102	- 99	- 103	- 107
32 Other subsidies on production (c)	407	778	2 805	2 932	2 942	3 182
33 Net value added at factor cost (29 + 31 + 32)	5 103	5 302	5 179	5 334	5 722	6 859
34 Rent	248	241	216	234	287	249
rent paid (i)	329	346	303	318	381	337
rent received (j)	- 81	- 105	- 87	- 83	- 95	- 87
35 Interest (k)	627	491	530	523	634	625
36 Total income from farming (33 - 30 - 34 - 35)	2 251	2 565	2 216	2 304	2 437	3 457

(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

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£ million	Calendar years				
	Current price value		Changes %		
	2007	2008	value	volume	price
Output at market prices (a)					
1 Output of cereals	1 933	3 206	66	- 7	78
wheat	1 317	2 234	70	- 9	87
rye	1	1	- 8	-	- 8
barley	550	882	60	- 1	61
oats and summer cereal mixtures	63	87	37	- 2	41
other cereals	1	1	38	- 16	65
2 Output of industrial crops	771	1 151	49	- 10	65
oil seeds	427	628	47	11	33
oilseed rape	422	618	46	13	30
other oil seeds	4	10	141	- 60	509
sugar beet	162	200	24	- 9	36
other industrial crops	183	322	76	- 37	177
fibre plants	-	1	114	- 50	331
hops	4	4	-	-	-
other industrial crops (b)	178	317	78	- 37	183
3 Output of forage plants	106	111	4	- 29	46
4 Output of vegetables and horticultural products	1 848	1 897	3	-	3
fresh vegetables	1 067	1 100	3	- 4	7
plants and flowers	781	797	2	4	- 2
5 Output of potatoes (including seeds)	662	755	14	- 5	20
6 Output of fruit	453	517	14	15	- 1
7 Output of other crop products including seeds	44	43	- 3	- 7	4
Total crop output (sum 1 - 7)	5 818	7 679	32	- 4	37
8 Output of livestock	5 220	6 510	25	2	23
primarily for meat	4 391	5 422	23	1	22
cattle	1 626	2 070	27	4	22
pigs	736	858	17	5	11
sheep	637	822	29	4	25
poultry	1 207	1 482	23	- 6	30
other animals	183	190	4	-	3
gross fixed capital formation	830	1 088	31	5	25
cattle	523	735	41	-	40
pigs	5	8	54	- 9	68
sheep	153	181	19	21	- 2
poultry	149	163	10	7	3
9 Output of livestock products	3 286	4 027	23	- 2	25
milk	2 823	3 450	22	- 2	25
eggs	410	524	28	- 2	31
raw wool	12	12	3	- 7	11
other animal products	41	41	1	- 21	28
Total livestock output (8 + 9)	8 507	10 537	24	-	24
10 Other agricultural activities	670	776	16	5	10
agricultural services	669	775	16	5	10
leasing out quota	-	-	- 1	- 58	136
11 Inseparable non-agricultural activities	737	759	3	- 4	7
12 Output (at market prices) (sum 1 to 11)	15 732	19 751	26	- 1	27
of which:					
transactions within the agricultural industry					
feed wheat	92	127	38	- 10	54
feed barley	200	266	33	- 1	34
feed oats	17	23	34	- 1	35
seed potatoes	8	13	58	- 62	315
straw	137	259	89	- 42	224
contract work	669	775	16	5	10
leasing of quota	-	-	- 1	- 58	136
total capital formation in livestock	830	1 088	31	5	25
13 Total subsidies (less taxes) on product (c)	56	56	-	- 4	..
14 Gross output at basic prices (12 + 13)	15 788	19 807	25	- 1	27

continued

Table 9.2 continued

	Current price value		Changes %		price
	2007	2008	value	volume	
Intermediate consumption					
15 Seeds	608	630	3	13	- 9
16 Energy	898	1 226	37	3	..
electricity	276	341	24	- 5	31
fuels	622	884	42	7	33
17 Fertilisers	827	1 527	85	- 6	96
18 Pesticides	567	656	16	8	8
19 Veterinary expenses	304	284	- 7	5	- 11
20 Animal feed (d)	2 855	3 944	38	- 1	40
compounds	1 646	2 163	31	1	30
straights	899	1 365	52	- 6	61
feed purchased from other farms	310	416	34	- 4	40
21 Total maintenance (e)	1 086	1 146	6	4	2
materials	689	722	5	3	1
buildings	397	424	7	4	3
22 Agricultural services	669	775	16	5	10
23 Other goods and services (e)(f)	2 382	2 804	18	- 2	21
24 Total intermediate consumption (sum 15 to 23)	10 195	12 991	27	1	26
25 Gross value added at market prices (12 - 24)	5 536	6 760	22	- 5	29
26 Gross value added at basic prices (14 - 24)	5 592	6 816	22	- 5	28
27 Total consumption of Fixed Capital	2 709	3 033	12	- 2	14
equipment	1 207	1 256	4	- 1	5
buildings (e)(g)	696	707	2	- 3	5
livestock	806	1 070	33	- 4	38
cattle	502	720	43	- 5	51
pigs	6	9	45	4	39
sheep	157	191	21	- 2	24
poultry	141	150	7	1	6
28 Net value added at market prices (25 - 27)	2 827	3 727	32	- 8	43
29 Net value added at basic prices (26 - 27)	2 883	3 783	31	- 8	42
30 Compensation of employees (h)	2 365	2 527	7	-	7
31 Other taxes on production	- 103	- 107	4	..	..
32 Other subsidies on production (c)	2 942	3 182	8	..	..
33 Net value added at factor cost (29 + 31 + 32)	5 722	6 859	20	- 11	35
34 Rent	287	249	- 13	..	..
rent paid (i)	381	337	- 12	..	..
rent received (j)	- 95	- 87	- 8	..	..
35 Interest (k)	634	625	- 1	..	..
36 Total income from farming (33 - 30 - 34 - 35)	2 437	3 457	42	..	..

(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 18 per cent (13 per cent in real terms) to £179 billion. The total value of assets rose by 16 per cent (12 per cent in real terms) to £190 billion. The total value of liabilities fell slightly by 0.8 per cent (4.6 per cent in real terms) to £11.1 billion.

11 At current prices, net of depreciation and excluding the value of quota, the value of fixed assets rose by 17 per cent to £180 billion. Within this, the value of land and buildings, which forms the greater part of the total, rose by 17 per cent to £167 billion, led by the continued rise in land prices. The value of current assets rose by 2.8 per cent to £9.6 billion. Long and medium-term liabilities fell by 1.4 per cent to £5.5 billion while short-term liabilities fell slightly by 0.1 per cent to £5.6 billion.

Table 9.3 Aggregate balance sheets for agriculture; United Kingdom

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£ million	As at December each year					
	Average of 1996-98	2003	2004	2005	2006	2007 (provisional)
At current prices						
Assets						
Fixed: (a)						
Land and buildings	82 698	101 533	110 910	120 851	142 648	167 097
Plant, machinery and vehicles	8 336	6 950	7 007	7 114	7 215	7 605
Breeding livestock	4 733	3 849	4 014	4 020	4 183	5 726
Total fixed	95 767	112 331	121 930	131 985	154 046	180 427
Current:						
Trading livestock	2 688	2 840	2 644	2 360	2 485	2 424
Crops and stores	2 703	2 191	2 251	2 139	2 191	2 625
Debtors, cash deposits	3 885	4 721	4 662	4 871	4 662	4 553
Total current	9 275	9 752	9 557	9 370	9 337	9 602
Total assets	105 042	122 083	131 487	141 355	163 383	190 029
Liabilities						
Long and medium-term:						
AMC and SASC (b)	1 275	1 313	1 317	1 363	1 482	1 588
Building societies and institutions	322	444	473	474	488	473
Bank loans	2 007	2 350	2 373	2 356	2 534	2 726
Family loans	360	510	531	555	530	456
Other	186	254	260	382	536	247
Total long and medium-term	4 150	4 872	4 954	5 130	5 570	5 490
Short-term:						
Leasing	186	130	139	121	93	98
Hire purchase	652	699	695	628	708	802
Trade credit	1 257	1 373	1 323	1 382	1 479	1 526
Bank overdrafts	2 598	2 847	2 868	3 532	3 249	3 056
Other	160	116	134	125	96	137
Total short-term	4 854	5 165	5 159	5 789	5 625	5 619
Total liabilities	9 004	10 036	10 113	10 919	11 195	11 109
Net worth	99 080	112 047	121 374	130 435	152 188	178 920
In real terms (as deflated by the retail price index):						
Indices 2000 = 100						
Total assets	99	101	105	110	122	136
Total liabilities	99	97	94	99	97	93
Net worth	99	101	106	111	124	141

(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 2008 is £2.4 billion, a rise of 9.4 per cent compared to 2007. Consumption of fixed non-livestock assets rose, by 3.2 per cent to £2.0 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 2008, the value of capital formation in livestock rose by 31 per cent to £1.1 billion. Consumption of fixed capital in livestock, which is approximated by assuming that all depreciation takes place at the time animals leave the breeding herds, rose by 33 per cent to £1.1 billion, led by an increase of 43 per cent in capital consumption in cattle.
- 14** Changes in inventories contribute to income. Stocks of crops rose by £799 million in 2008. The value of work-in-progress livestock rose by £63 million.

Table 9.4 Accumulation accounts; United Kingdom

Enquiries: Graham Brown on +44 (0)1904 455084

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£ million	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008
						(provisional)
Capital account						
Gross fixed capital formation	2 050	2 491	2 385	2 674	3 033	3 499
Acquisitions less disposals of non-livestock assets:	1 479	1 834	1 782	1 918	2 203	2 411
buildings and works	486	594	687	748	736	853
plant and machinery	806	999	876	963	1 247	1 319
vehicles	187	242	219	207	221	240
Capital formation in livestock (a):	571	657	603	756	830	1 088
cattle	294	337	355	484	523	735
sheep	136	176	111	133	153	181
pigs	9	8	6	8	5	8
poultry	132	136	131	131	149	163
Consumption of fixed capital	2 570	2 534	2 661	2 682	2 709	3 033
Non-livestock assets:	2 007	1 866	1 880	1 880	1 903	1 963
buildings and works	684	674	676	685	696	707
plant and machinery	1 104	984	994	985	999	1 040
vehicles	219	209	210	209	208	216
Livestock (b):	562	667	781	802	806	1 070
cattle	305	364	490	501	502	720
sheep	115	167	151	162	157	191
pigs	10	9	7	7	6	9
poultry	133	128	133	131	141	150
Changes in inventories	- 15	97	2	- 190	- 272	590
stocks of crops	- 14	102	- 15	- 89	- 182	617
work-in-progress livestock	- 1	- 5	16	- 102	- 90	- 27
Total Income from Farming	2 251	2 565	2 216	2 304	2 437	3 457
Other capital grants and payments not included in the pro- duction and income account	68	64	85	79	87	159

(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 £696 million in 2008. The value of work-in-progress for non-breeding livestock production rose mainly due to cattle. The same was true for replacement animals for breeding herds. The value of work-in-progress for crop production decreased in 2008 by £135 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

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£ million	Calendar years				
	2004	2005	2006	2007	2008 (provisional)
Livestock production work-in-progress (non-breeders)					
cattle	- 177	- 223	155	- 34	443
sheep	- 25	- 33	- 9	- 18	38
pigs	- 85	48	75	- 90	21
poultry (a)	- 13	11	- 12	18	27
Total	- 300	- 198	208	- 123	529
Replacement animals for breeding herds					
cattle	13	- 82	315	12	286
sheep	- 13	- 14	- 4	- 7	16
pigs	- 1	1	1	- 2	-
Total	- 1	- 94	313	3	302
Crop production work-in-progress					
wheat	15	- 104	61	391	- 49
barley	- 7	- 11	14	78	16
potatoes	- 154	35	111	50	- 87
other crops (b)	- 30	4	31	73	- 15
Total	- 177	- 76	217	593	- 135
Total holding gains	- 479	- 368	738	473	696

(a) Broilers, ducks, geese and turkeys.

(b) Oats, oilseeds, apples and pears.

Interest (table 9.6)

- 16** Total interest charges payable on farmers' borrowings for agricultural purposes including land purchases, less interest received on short-term deposits is estimated to be £625 in 2008, a fall of 1.3 per cent compared to 2007. An increase in borrowing was offset by a fall in interest rates.

Table 9.6 Interest; United Kingdom

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£ million (unless otherwise specified)	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Interest rates						
average bank base lending rate in the UK	6.4%	4.4%	4.6%	4.6%	5.5%	4.7%
average rate of interest on bank advances to agriculture	8.8%	6.5%	6.7%	6.6%	7.6%	..
Interest charges (all lending to the farm business) on:						
bank advances	437	343	377	384	452	..
AMC and SASC loans (a)	115	77	77	72	86	..
instalment credit	65	54	55	51	71	..
leased assets	14	7	5	5	7	..
other credit (b)	46	48	57	54	74	..
less interest earned on money held on short-term deposit	51	38	42	43	57	..
Total	627	491	530	523	634	625

(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)

2008

- 17** The volume of gross fixed capital formation rose by 5.9 per cent with both livestock and non-livestock assets showing increases in volumes; of 4.0 per cent and 6.7 per cent respectively. The volume of consumption of fixed capital also rose in 2008 by 4.7 per cent breaking the trend of falling volumes which has occurred since 1996. Consumption of fixed capital in livestock rose by 6.0 per cent in 2008 while consumption of fixed capital in non-livestock assets rose by 4.1 per cent.

Table 9.7 Changes in volume of capital assets; United Kingdom

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Indices 2000 = 100

Indices 2000 = 100						Calendar years	
	Average of 1997-99	2004	2005	2006	2007	2008	
						(provisional)	
Total volume of gross fixed capital formation							
Gross fixed capital formation:	120.6	133.5	125.4	133.1	147.2	155.8	
non livestock:	122.5	147.1	139.9	147.9	166.9	178.0	
buildings and works	138.4	152.7	174.2	185.4	177.9	201.7	
plant and machinery	118.3	144.6	123.3	133.4	169.7	174.7	
vehicles	106.3	143.5	128.6	120.1	128.9	135.7	
livestock	118.2	107.1	96.9	104.0	109.1	113.5	
Total volume of capital consumption							
Consumption of fixed capital	102.5	92.5	93.4	90.3	88.3	92.5	
non livestock:	105.1	95.4	93.3	92.5	91.1	94.8	
buildings and works	106.3	98.3	94.9	96.7	93.5	102.3	
plant and machinery	105.1	92.6	90.9	88.8	88.4	89.5	
vehicles	100.8	101.2	100.3	98.5	97.5	98.2	
livestock	92.8	83.6	92.2	83.5	80.6	85.4	

Chapter 10 Productivity

Summary

In 2008, compared to 2007:

- total factor productivity rose by 2.7 per cent;
- the volume of final output at market prices rose by 4.6 per cent;
- the volume of all inputs rose by 1.8 per cent;
- the volume of total labour in annual work units (or full-time person equivalent) rose by 1.1 per cent;
- labour productivity as measured by net value added at market prices per annual work unit rose by 13 per cent.

Over the longer term:

- since 1973, productivity has grown by 55 per cent, the volume of final output at market prices has increased by 25 per cent and the volume of all inputs has fallen by 20 per cent.

Introduction

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

Productivity (chart 10.1, table 10.1)

- 5 Total factor productivity increased by 2.7 per cent in 2008 as the volume of final output (gross output at market prices less transactions in the industry) rose by 4.6 per cent, more than offsetting an increase of 1.8 per cent in the volume of all inputs (including fixed capital, paid and entrepreneurial labour).

- 6 Over the longer term, since 1973, the productivity of the agriculture industry in the United Kingdom has increased by 55 per cent. The volume of final output has increased by 25 per cent while the volume of all inputs has fallen by 20 per cent. Labour productivity in 2008, as measured by net value added per annual work unit, was over five times its 1973 value.

Chart 10.1 Productivity; United Kingdom

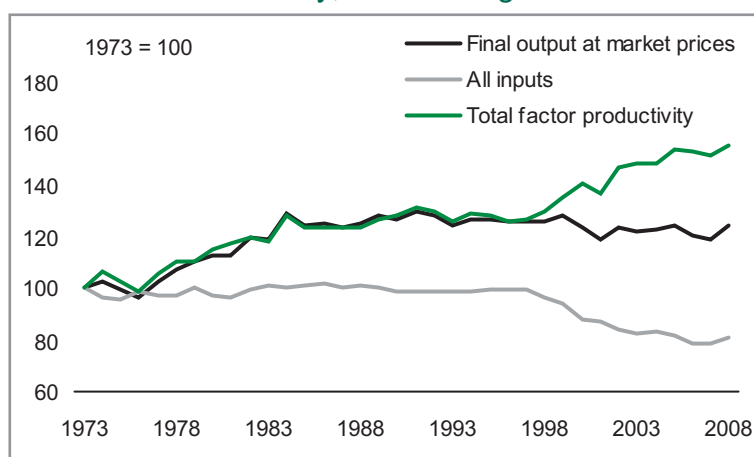


Table 10.1 Productivity United Kingdom

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Volume indices 2000 = 100

Calendar years

	Average of 1997-99	2004	2005	2006	2007 (provisional)	2008
Final output at market prices (gross output less transactions within the industry)	102.3	99.4	100.8	97.6	96.4	100.9
All inputs (including fixed capital, paid and entrepreneurial labour)	110.1	94.3	92.3	89.9	89.8	91.4
Net value added at market prices per AWU of all labour (a)	72.3	131.7	153.2	154.4	145.1	163.3
Total factor productivity (b)	93.0	105.5	109.2	108.5	107.4	110.4

(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)

- 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>).

International comparison of productivity

- 8 An international comparison of total factor productivity using total factor productivity relative to the USA is given in a Defra research project at:
(<http://statistics.defra.gov.uk/esg/reports/productivity%20research/default.asp>).

Volume indices (table 10.2)

- 9 In 2008, the volume of output of:
- cereals rose by 28 per cent with the largest increases being in output of wheat and barley;
 - industrial crops rose by 15 per cent mainly due to increases in sugar beet and straw;
 - forage plants rose by 23 per cent;
 - vegetables and horticultural products rose by 4.9 per cent with an increase of 7.3 per cent in output of fresh vegetables and a 1.5 per cent increase in output of plants and flowers;
 - potatoes rose by 9.5 per cent;

- fruit rose by 2.7 per cent;
- livestock production fell slightly by 0.2 per cent;
- livestock products fell by 1.3 per cent; eggs rose by 6.6 per cent while milk fell by 2.1 per cent;
- other agricultural activities, almost entirely agricultural services, rose by 5.3 per cent;
- inseparable non-agricultural activities fell by 2.6 per cent.

10 The volume of consumption of:

- seeds fell by 5.9 per cent;
- electricity rose by 1.0 per cent and fuels fell by 2.5 per cent;
- fertilisers fell by 16 per cent;
- pesticides rose by 13 per cent;
- veterinary expenses fell by 2.4 per cent;
- animal feeds rose by 5.6 per cent, mainly due to an increase of 18 per cent in animal straights;
- maintenance rose slightly, by 0.2 per cent;
- agricultural services rose by 5.3 per cent;
- other goods and services rose by 13 per cent.

Table 10.2 Output and input volume indices; United Kingdom

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Indices 2000 = 100

	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Outputs at market prices						
1 Output of cereals	95.0	92.9	88.8	88.0	82.0	104.7
wheat	90.3	93.2	89.4	88.7	80.4	104.0
rye	113.6	86.4	86.4	86.4	86.4	86.4
barley	107.7	90.4	86.4	82.3	81.8	103.1
oats and summer cereal mixtures	89.0	97.7	82.9	113.7	111.0	119.0
other cereals	66.6	103.1	104.4	104.2	87.4	99.7
2 Output of industrial crops	114.3	105.7	103.6	96.5	87.4	100.8
oil seeds	150.6	139.8	167.2	161.5	178.9	176.5
oilseed rape	140.9	140.4	165.5	163.1	183.8	180.4
other oil seeds	430.9	120.2	195.9	116.5	46.0	69.4
sugar beet	116.3	99.6	95.7	81.5	74.2	82.6
other industrial crops	96.3	93.1	75.8	73.1	46.3	76.5
fibre plants	149.1	45.5	31.7	32.5	16.1	26.8
hops	145.6	72.4	61.9	51.1	51.1	51.1
others (a)	94.0	94.0	76.4	74.0	46.5	77.5
3 Output of forage plants	95.9	111.4	113.4	100.8	71.8	88.2
4 Output of vegetables and horticultural products	101.9	95.3	95.4	89.7	89.4	93.8
fresh vegetables	106.4	88.3	91.9	89.8	86.6	92.9
plants and flowers	96.2	104.8	100.4	90.0	93.8	95.3
5 Output of potatoes (including seeds)	113.1	106.2	99.3	93.7	89.4	97.9
6 Output of fruit	97.8	130.0	148.5	149.7	172.3	177.0
7 Output of other crop products including seeds	97.2	84.6	123.6	112.3	104.9	104.7
Total crop output	102.0	99.5	98.3	94.1	90.6	104.2
8 Output of livestock	106.7	97.2	99.3	96.6	98.2	98.0
primarily for meat	105.5	96.5	100.3	96.1	97.1	96.2
cattle	100.9	104.5	120.3	112.6	117.0	113.8
pigs	123.9	77.5	77.0	76.9	80.7	80.0
sheep	102.2	88.6	89.5	85.7	88.8	89.9

continued

Table 10.2 continued

Indices 2000 = 100

	Average of 1997-99	2004	2005	2006	2007	2008
poultry	101.1	103.5	101.3	97.0	91.3	91.5
other animals	100.4	99.1	99.6	99.0	99.3	98.8
gross fixed capital formation	118.2	107.1	96.9	104.0	109.1	113.5
cattle	113.2	101.8	95.6	104.6	105.1	110.4
pigs	151.7	93.5	79.4	96.9	88.6	98.0
sheep	177.3	148.2	116.3	126.9	153.3	155.2
poultry	102.5	98.0	93.9	92.7	99.1	101.9
9 Output of livestock products	101.8	101.6	101.8	100.6	98.3	97.0
milk	101.8	100.3	99.6	98.7	96.8	94.7
eggs	101.6	113.3	115.2	111.3	108.6	115.7
raw wool	107.6	85.7	87.9	79.5	74.3	74.3
other animal products	110.4	105.3	173.7	173.9	137.8	112.9
Total livestock output	104.7	98.9	100.4	98.2	98.3	97.7
10 Other agricultural activities	112.6	109.8	95.9	91.7	96.5	101.6
agricultural services	99.7	106.3	103.3	100.1	105.3	110.9
leasing out quota	263.0	146.3	16.9	1.6	0.7	0.6
11 Inseparable non-agricultural activities	87.8	113.7	116.1	118.7	114.3	111.4
12 Output (at market prices)	103.4	100.2	100.0	97.2	96.0	100.9
of which:						
transactions within the agricultural industry						
feed wheat	155.6	220.7	206.9	176.3	157.9	170.3
feed barley	107.8	97.4	102.3	101.9	100.8	104.7
feed oats	91.9	109.5	95.9	106.2	105.3	106.3
seed potatoes	141.8	65.6	131.5	138.7	52.9	81.5
straw	93.8	90.9	71.2	67.9	39.6	69.9
contract work	99.7	106.3	103.3	100.1	105.3	110.9
leasing of quota	263.0	146.3	16.9	1.6	0.7	0.6
total capital formation in livestock	118.2	107.1	96.9	104.1	109.2	113.6
13 Total subsidies (less taxes) on product	..	..	..	..	..	..
14 Gross output at basic prices	103.9	100.1	100.6	97.7	96.5	101.5
Intermediate consumption						
15 Seeds	111.3	75.9	87.3	93.7	106.3	100.0
16 Energy						
electricity	108.6	86.6	81.7	76.1	72.0	72.8
fuels	114.8	88.9	82.0	79.3	84.8	82.6
17 Fertilisers	122.2	79.2	71.4	67.6	63.7	53.8
18 Pesticides	101.9	99.3	92.3	86.5	93.1	105.6
19 Veterinary expenses	112.0	104.4	105.6	100.8	106.1	103.5
20 Animal feed	102.4	107.7	105.6	104.6	103.0	108.8
compounds	107.8	103.3	99.5	102.6	104.0	103.3
straights	88.2	111.2	111.5	104.2	98.3	115.6
feed purchased from other farms	117.0	125.8	125.4	119.2	114.4	120.1
21 Total maintenance (b)	115.1	92.9	86.0	83.4	86.3	86.5
materials	112.4	85.4	78.7	75.2	77.7	77.5
buildings	121.2	110.2	103.3	102.8	106.7	107.7
22 Agricultural services	99.7	106.3	103.3	100.1	105.3	110.9
23 Other goods and services (b) (c)	117.8	105.4	98.6	94.8	92.6	104.4
24 Total intermediate consumption	110.4	98.5	94.6	92.1	92.9	95.7
25 Gross value added at market prices	91.4	103.4	111.0	107.6	102.2	111.8
26 Gross value added at basic prices	96.1	102.2	110.3	106.7	101.3	110.8
27 Total consumption of Fixed Capital	102.5	92.5	93.4	90.3	88.3	92.5
equipment	104.4	94.0	92.4	90.3	89.8	90.9
buildings (b)	106.3	98.3	94.9	96.7	93.5	102.3
livestock	92.8	83.6	92.2	83.5	80.6	85.4
cattle	87.2	81.5	92.2	79.2	75.1	80.8
pigs	122.8	78.2	68.3	66.5	69.3	76.2
sheep	87.7	78.7	86.2	86.7	85.2	90.1
poultry	106.0	94.7	98.2	95.5	96.2	95.9
28 Net value added at market prices	80.3	118.5	136.5	132.7	122.2	139.0
29 Net value added at basic prices	92.7	109.0	124.6	120.7	111.2	126.2

(a) Includes straw and minor crops.

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

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

Labour (table 10.3)

- 11** The total cost of paid labour rose by 6.8 per cent to £2.5 billion in 2008 as the average wage and the volume of paid labour both increased. The volume of the total labour force rose slightly, by 1.1 per cent. It has fallen by 51 per cent since 1973 reflecting the outflow of labour from the industry. Since 1973 the volume of paid labour has fallen by 64 per cent and the volume of entrepreneurial labour has fallen by 39 per cent.

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

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	Average of 1997-99	2004	2005	2006	Calendar years	
					2007	2008 (provisional)
Paid labour costs (£ million) (b)	1 978	2 004	2 218	2 272	2 365	2 527
Annual work unit (thousand) (c)						
Entrepreneurial labour	235	203	201	196	190	190
Paid labour	137	98	97	91	91	94
Labour force	372	300	297	287	281	284

(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

2008

Summary

In 2008:

- direct payments made to farmers totalled £3.27 billion, an 8.9 per cent increase on 2007 ;
- payments not linked to production, including the Single Payment Scheme, are expected to increase by 9.0 per cent to £3.21 billion.
- payments linked to production totalled £56 million, which was similar to 2007 and a 30 per cent decrease from 2006;

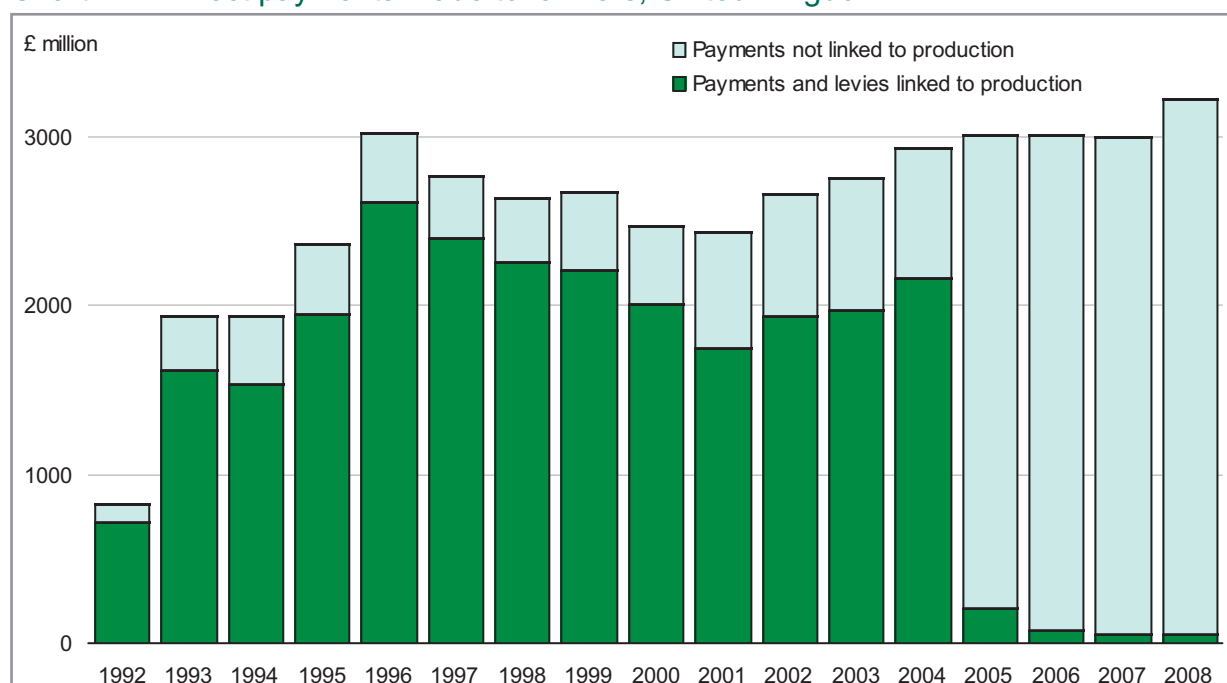
Introduction

- 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. Data shown in this chapter will not necessarily match that shown in Chapter 9, due to the availability of more recent data.

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

- 2 Direct payments made to farmers less levies as recorded in the production and income account (see table 9.1) totalled £3.27 billion in 2008. This is made up of £56 million of payments that are linked to production and £3.21 billion of payments that are not linked to production but which farmers may receive

Chart 11.1 Direct payments made to farmers; United Kingdom



by virtue of engaging in agriculture, such as the single payment scheme, less favoured area support schemes and animal disease compensation.

- 3 Payments that are still linked to production stayed at a similar level to those in 2007 at £56 million. Schemes linked to production include the Older Cattle Disposal Scheme (which ended on 31 December 2008), the Scottish Beef Calf Scheme, Area Payments for Nuts, Aid for Energy Crops and the Protein Crop Premium.
- 4 Decoupled payments, including the Single Payment Scheme and other payments made to farmers by virtue of being engaged in agricultural activities, increased from £2.99 billion in 2007 to £3.27 billion in 2008.

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

Shows payments after deduction for modulation where appropriate

Enquiries: Alan Horsfall on +44 (0)1904 455083

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£ million	Calendar years					
	Average of 1997-99	2004	2005	2006	2007	2008 (provisional)
Payments and levies linked to the production of agricultural products						
Crop subsidies						
Arable area payments	1 073	900	..	..	..	..
Other crop subsidies (a)	16	13	12	12	9	7
Livestock subsidies						
Beef special premium	195	267	..	..	..	..
Suckler cow premium	191	229	..	..	..	..
Slaughter premium	..	157	..	..	..	..
Over Thirty Month Scheme/Older Cattle Disposal Scheme	289	203	178	50	28	29
Beef national envelope	..	37	..	..	..	..
Scottish beef calf scheme	..	..	19	18	19	21
Sheep annual premium	259	244	..	..	..	..
Sheep national envelope	..	18	..	..	..	..
Other livestock subsidies	287	..	..	..	..	..
Dairy subsidies (b)	..	108	..	..	..	..
less Levies:						
Milk superlevy	- 18	- 8	- 1	..	..	..
Total coupled payments	2 292	2 168	208	80	56	56
Payments not linked to production						
Single Payments Scheme	..	..	2 352	2 356	2 299	2 567
Agri-environment schemes	106	257	288	376	460	476
Less Favoured Areas support schemes (c)	..	153	146	183	132	137
Animal disease compensation (d)	11	19	19	17	22	28
Extensification schemes	107	159	..	..	..	..
Rural World Premium	62	60	..	..	..	..
Arable area payments setaside	116	129	..	..	..	..
Other (e)	5	..	..	..	31	-
Total decoupled and other payments	407	778	2 805	2 932	2 943	3 209
Total payments less levies	2 699	2 945	3 013	3 012	2 999	3 265
Capital transfers and other payments not included in the production and income account	68	64	85	79	87	159

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

(b) Dairy premium and additional dairy premium.

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

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

(e) Deseasonalisation premium (1997-99); additional support for hillfarmers in England, Welsh light lambs scheme, Scottish ewe scheme, Scottish sheep welfare scheme (2007).

- 5 Payments made through the Single Payment Scheme are estimated to total £2.57 billion in 2008 after deductions for modulation. 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 than in the year when payments are made.
- 6 Payments to farmers taking part in agri-environment schemes are expected to increase to £476 million, an increase of 3.6 per cent on 2007.
- 7 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) increased by 4.3 per cent from 2007 to £137 million. This was largely due to a 25 per cent increase in the value of Tir Mynydd to £29.7 million.
- 8 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 31 per cent to £28 million in 2008. With the exception of the FMD years of 2001-2002, confirmed incidence of bTB has been steadily increasing over the past 20 years.

Table 11.2 Payments to farmers by country in 2007

Shows payments after deduction for modulation where appropriate

Enquiries: Alan Horsfall on +44 (0)1904 455083

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£ million	Calendar years				
	England	Wales	Scotland	Northern Ireland	United Kingdom
Payments and levies linked to the production of agricultural products					
Crop subsidies					
Protein crop premium, area aid for nuts, energy crops aid.	8	-	1	-	9
Livestock subsidies					
Older Cattle Disposal Scheme	14	3	7	4	28
Scottish Beef Calf Scheme	..	..	19	..	19
Total coupled payments	22	4	26	4	56
Payments not linked to production					
Single Payment Scheme	1 450	227	394	229	2 299
Less Favoured Areas support schemes (a)	27	24	60	21	132
Agri-environment schemes					
Environmental Stewardship / Countryside Stewardship Schemes	265	..	..	..	265
Countryside Premium / Rural Stewardship / Land Management Contracts Schemes	..	..	49	..	49
Tir Cymen / Tir Gofal / Tir Cynnal	..	31	..	..	31
Countryside Management Scheme	..	..	..	17	17
Organic Aid & Organic Farming Schemes	2	3	5	1	10
Environmentally Sensitive Areas Schemes	56	4	5	7	73
Sites and Areas of Special Scientific Interest	10	1	3	-	14
Animal disease compensation	6	5	-	10	22
Other (b)	9	2	21	..	31
Total decoupled and other payments	1 826	297	536	285	2 943
Total subsidies less levies and taxes	1 848	300	563	289	2 999

(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.

(b) Sheep Welfare Scheme (Scotland), Scottish Ewe Scheme, Exceptional payments to hill farmers (England), Welsh light lambs scheme

- 9 Table 11.2 shows a breakdown of direct payments made to farmers by country in 2007 as recorded in the production and income account for the United Kingdom.

Expenditure through trader based schemes (table 11.3)

- 10 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 2007 and 31 March 2008.
- 11 Expenditure on internal trader based schemes was £87 million in 2007-08, up from £43 million in 2006-07. This was due mainly to an increase in support for sugar and isoglucose which rose to £63.9 million from its 2006-07 level of £13.1 million. Support for milk and milk products fell by £7.5 million.

Table 11.3 Expenditure through trader based schemes United Kingdom

Enquiries: Alan Horsfall on +44 (0)1904 455083

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£ million	Financial years	
	2006/07	2007/08 (provisional)
Trader based - Internal market		
Horticulture	16.1	17.5
Milk & Milk products	9.6	2.1
Protein & textile plants	0.9	1.1
School milk	0.4	0.5
Seeds	0.0	0.0
Sugar and Isoglucose	13.1	63.9
Other	2.9	1.8
Total	43.0	87.0
Trader based - External market		
Milk & Milk products	23.8	1.3
Processed Goods	12.8	6.3
Sugar and Isoglucose	139.2	-39.0
Other	1.6	0.5
Total	177.4	-30.9

Source: RPA annual report and accounts 2007 - 2008, pp 58-59

Chapter 12 Rural Development Programme

2008

Summary

- There are four rural development programmes in the United Kingdom, covering: England, Wales, Scotland and Northern Ireland; and the period 2007 - 2013.
- 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 €647 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.

To help ensure a balanced approach to policy, Member States and regions are obliged to spread their rural development funding between all three of these thematic axes.

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.

A further requirement is that some of the funding must support projects based on experience with the Leader Community Initiatives. The “Leader approach” to rural development involves highly individual projects designed and executed by local partnerships to address specific local problems.

Rural Development Programmes 2007-2013 (tables 12.1 to 12.3)

- 5** The overall objectives for each of the rural development programmes for England, Wales, Scotland and Northern Ireland 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	€ 647 million	€ 328 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	€ 44 m
Axis 2: Improving the environment and the countryside	€ 4 183 m	€ 722 m	€ 1 469 m	€ 205 m
Axis 3: The quality of life in rural areas and diversification of the rural economy	€ 334 m	€ 94 m	€ 248 m	€ 79 m (a)
Axis 4: Leader	€ 220 m	€ 47 m	€ 108 m	€ 79 m (a)

Source: European Commission

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

- 6 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/ruraldevelopmentplan20072013/?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>

<http://www.rdpni.info/>

And at:

European Commission > Rural Development policy 2007-2013 > Country files > United Kingdom:

http://ec.europa.eu/agriculture/rurdev/countries/uk/index_en.htm

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

- 7 Table 12.4 shows payments made through two key measures of the rural development programme; Less Favoured Areas and Agri-environment, adopted by each of the countries of the United Kingdom through which most funding and support have been provided, as recorded in the production and income account shown in chapter 9.
- 8 Total payments made through these measures of the rural development programmes in 2007 rose by 6.1 per cent compared to 2006, to £572 million. This included £132 million in payments on Less Favoured Areas schemes, and £440 million on agri-environment schemes.

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 programmes for 2007-2013 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

Enquiries: Alan Horsfall on +44 (0)1904 455083

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£ Million		Calendar years				
		2003	2004	2005	2006	2007
Less Favoured Areas						
England:	Hill Farm Allowance	39.5	34.9	27.3	27.2	27.2
Wales:	Tir Mynydd	34.0	35.7	35.8	34.8	23.7
Scotland:	Less Favoured Areas Support Scheme	62.7	60.7	61.0	100.3	59.9
Northern Ireland:	Less Favoured Areas Compensatory Allowance	23.7	22.1	21.8	21.0	21.0
Agri-Environment						
England:	Organic Farming Scheme	10.4	6.5	4.6	2.6	2.3
	Countryside Stewardship Scheme	70.2	103.3	117.4	106.5	94.2
	Environmentally Sensitive Areas Scheme	59.6	64.5	69.8	63.8	56.4
	Environmental Stewardship Scheme	..	..	..	84.3	170.3
Wales:	Organic Farming Scheme	2.7	1.9	2.3	2.0	2.5
	Tir Gofal	13.4	16.9	19.1	18.3	25.2
	Environmentally Sensitive Areas Scheme	8.5	7.0	5.3	5.4	3.7
	Tir Cynnal	..	..	..	6.2	5.7
Scotland:	Organic Aid Scheme	7.2	3.5	2.5	2.5	5.1
	Rural Stewardship Scheme	7.2	11.3	12.3	20.8	24.9
	Environmentally Sensitive Areas Scheme	11.1	9.7	8.2	6.3	5.1
	Land Management Contract Scheme	..	..	14.5	22.0	20.0
Northern Ireland:	Organic Farming Scheme	0.2	0.1	0.3	0.4	0.6
	Countryside Management Scheme	3.1	5.6	5.8	10.2	16.9
	New Environmentally Sensitive Areas Scheme (a)	5.2	5.7	4.9	4.8	7.4

(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

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Thousand Hectares	31 December					
	2003	2004	2005	2006	2007	2008
England						
Organic Farming Scheme	200	143	141	68	25	13
Countryside Stewardship Scheme	521	570	531	514	474	442
Environmentally Sensitive Areas Scheme	635	653	616	582	546	503
Environmental Stewardship Scheme						
Entry Level Scheme (a)	31	31	1 375	3 921	4 725	5 024
Higher Level Scheme	..	..	..	83	175	291
Wales						
Organic Farming / Maintenance Schemes	55	55	68	81	76	121
Tir Cymen/Tir Gofal	120	115	332	354	364	329
Environmentally Sensitive Areas Scheme	161	171	127	77	78	65
Tir Cynnal	..	..	223	223	273	293
Scotland						
Organic Aid Scheme	339	269	167	127	124	117
Countryside Premium Scheme/Rural Stewardship Scheme	190	250	363	461	477	314
Environmentally Sensitive Areas Scheme	855	815	688	530	351	268
Land Management Contracts / Land Managers Options	..	..	391	439	437	488
Northern Ireland						
Organic Farming Scheme	5	5	6	10	6	6
Countryside Management Scheme	90	116	118	318	317	315
New Environmentally Sensitive Areas Scheme (b)	146	126	131	141	131	122

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

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

Table 12.6 Agri-environment schemes ; number of agreement holders

Enquiries: Alan Horsfall on +44 (0)1904 455083

email: alan.horsfall@defra.gsi.gov.uk

Rounded to nearest hundred

31 December

	2003	2004	2005	2006	2007	2008
England						
Organic Farming Scheme	2 600	1 800	1 700	800	300	100
Countryside Stewardship Scheme	16 900	17 800	16 700	15 600	13 400	12 000
Environmentally Sensitive Areas Scheme	12 500	13 000	11 500	9 600	8 600	7 800
Environmental Stewardship Scheme:						
Entry Level Scheme (a)	300	300	12 500	28 500	34 300	37 300
Higher Level Scheme	..	..	..	1 200	2 000	2 900
Wales						
Organic Farming Scheme	500	600	700	800	800	900
Tir Cymen/Tir Gofal	2 400	3 000	3 200	3 300	3 200	2 900
Environmentally Sensitive Areas Scheme	2 600	2 300	1 700	1 000	1 000	800
Tir Cynnal	..	..	3 400	3 400	4 200	4 400
Scotland						
Organic Aid Scheme	700	600	500	400	400	400
Countryside Premium Scheme/Rural Stewardship Scheme	1 900	2 900	4 600	6 200	6 400	5 400
Environmentally Sensitive Areas Scheme	2 900	2 800	2 400	2 000	1 600	1 200
Land Management Contracts / Land Managers Options	..	..	4 800	5 800	5 800	6 700
Northern Ireland						
Organic Farming Scheme	100	100	100	100	100	100
Countryside Management Scheme	2 400	2 900	5 200	8 900	8 800	8 700
New Environmentally Sensitive Areas Scheme (b)	4 400	4 400	3 500	4 300	3 900	3 400

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

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

Chapter 13 Organic Farming

2008

Summary

In January 2008:

- the total area of land that was organically managed (either fully organic or in-conversion) increased by 10 per cent to 682 thousand hectares compared to 620 thousand hectares in January 2007;
- permanent and temporary pasture accounted for 85 per cent of organically managed land in the United Kingdom, unchanged from January 2007;
- half of the organically managed land in the United Kingdom was in England, covering 348 thousand hectares;
- sixty-eight per cent of producers and growers and 84 per cent of processors and importers were located in England;
- twenty-eight per cent of organic livestock producers in the United Kingdom were located in the southwest region of England;
- there were 250 thousand cattle, 863 thousand sheep, 50 thousand pigs, 4,441 thousand poultry and 4 thousand other livestock being reared organically in the United Kingdom.

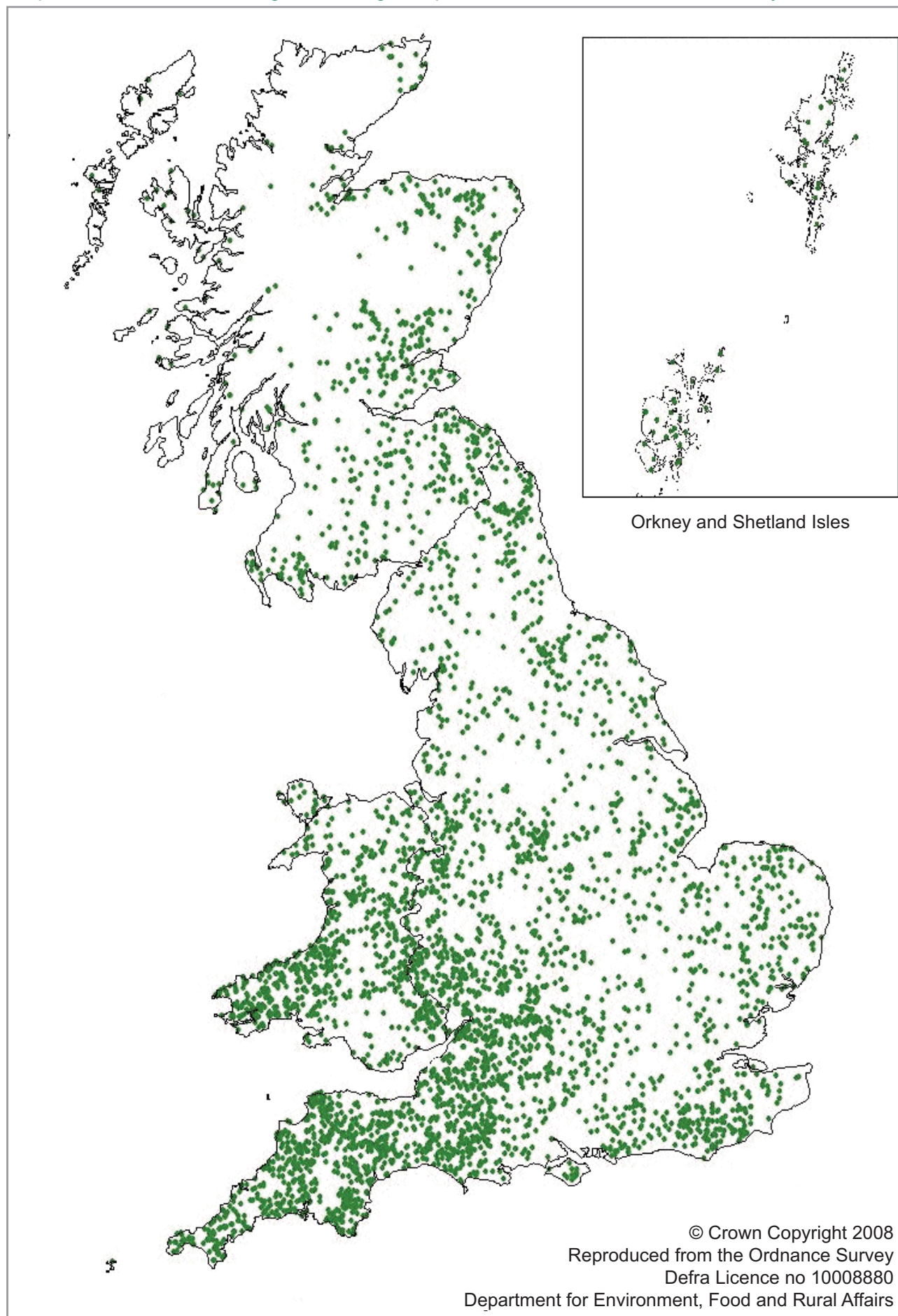
Introduction

- 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 2008. 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 After a decline from a peak in 2003, the total area of land that was organically managed, either fully organic or in-conversion, increased by 10 per cent to 682 thousand hectares in January 2008 compared to 620 thousand hectares in January 2007.
- 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.

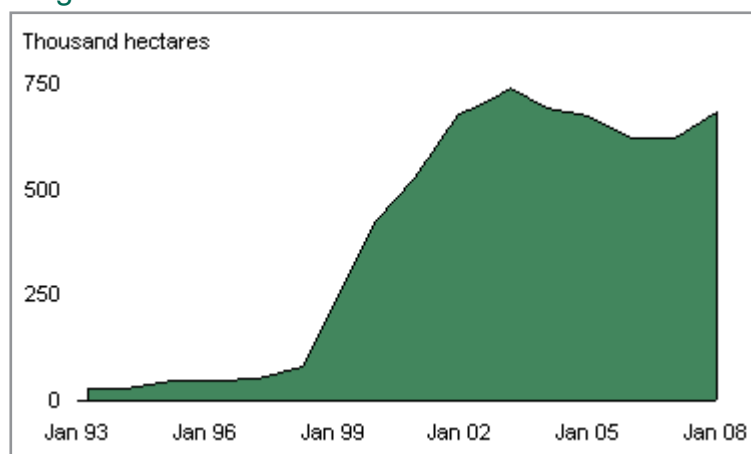
Map 13.1 Distribution of registered organic producers in Great Britain: January 2007



5 The area of in-conversion land rose by 30 per cent between January 2007 and January 2008 to 158 thousand hectares while the area of fully organic land rose by 5.1 per cent to 524 thousand hectares. Of the total organically managed land in the United Kingdom, 77 per cent was fully organic in January 2008.

6 In January 2008 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, woodland and other uses.

Chart 13.1 Organically managed land; United Kingdom



Regional analysis (tables 13.1 to 13.3)

7 Fifty-one per cent of the United Kingdom's organically managed land is in England covering 348 thousand hectares, 33 per cent is in Scotland, 14 per cent in Wales and 1.5 per cent in Northern Ireland. Sixty one per cent of organically managed land in England is situated in the south west and south east of the country. As a percentage of the total area in the United Kingdom, the land area in Scotland has fallen from 54 per cent in January 2004 to 33 per cent in January 2008 due to a number of extensive hill farms pulling out of the sector.

8 Sixty-eight per cent of organic producers and growers are located in England, 16 per cent in Wales, 12 per cent in Scotland and 4.6 per cent in Northern Ireland. Over half of producers and growers in England are located in the southwest and southeast of the country. Eighty-four per cent of processors and importers of organic food in the United Kingdom are located in England with 8.6 per cent in Scotland, 5.6 per cent in Wales and 2.1 per cent in Northern Ireland.

Table 13.1 Organic and in-conversion land

Enquiries: Organic Statistics Team on +44 (0)1904 466406

email: organic-stats@defra.gsi.gov.uk

Thousand hectares

	January 2004	January 2005	January 2006	January 2007	January 2008
Land, in-conversion					
North East	6.8	4.6	6.6	6.9	4.8
North West	2.6	2.5	3.2	1.8	3.3
Yorkshire & Humberside	1.7	1.3	2.3	3.4	4.1
East Midlands	1.6	1.2	2.4	2.1	3.1
West Midlands	3.7	2.4	3.2	4.0	5.7
Eastern	3.0	2.4	2.6	3.6	5.3
South West	10.8	9.1	22.0	31.6	48.2
South East (inc. London)	6.5	5.4	10.7	13.2	14.6
England	36.8	28.8	53.2	66.5	89.0
Wales	8.0	8.6	12.8	15.4	30.9
Scotland	20.4	13.7	16.7	35.2	34.8
Northern Ireland	0.8	1.6	3.2	4.0	3.2
United Kingdom	66.0	52.7	86.0	121.1	157.9

continued

Table 13.1 Continued

Thousand hectares

	January 2004	January 2005	January 2006	January 2007	January 2008
Land, fully organic					
North East	20.5	25.3	29.3	22.6	25.8
North West	19.9	19.8	18.9	19.4	20.4
Yorkshire & Humberside	8.1	8.6	9.0	9.0	9.6
East Midlands	16.1	13.4	13.2	12.5	13.2
West Midlands	25.5	26.8	27.0	26.3	28.2
Eastern	9.7	10.3	11.8	10.8	12.7
South West	86.2	90.5	94.0	93.4	106.3
South East (inc. London)	34.3	34.9	35.2	35.8	42.5
England	220.2	229.6	238.4	229.9	258.7
Wales	50.2	55.6	58.0	63.5	65.1
Scotland	351.9	331.6	231.2	200.1	193.1
Northern Ireland	6.6	5.0	6.3	5.1	7.3
United Kingdom	629.0	621.8	533.9	498.6	524.3

Source: OASIS

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

Enquiries: Organic Statistics Team on +44 (0)1904 466406

email: organic-stats@defra.gsi.gov.uk

Thousand hectares

	January 2004	January 2005	January 2006	January 2007	January 2008
Land, in-conversion					
Cereals	7.0	4.1	10.3	11.9	13.2
Other crops	1.9	2.7	3.5	3.4	3.5
Fruit & nuts	-	-	-	-	-
Vegetables (including potatoes)	1.9	1.3	1.3	2.1	2.6
Herbs & ornamentals	-	-	-	-	-
Temporary pasture	12.7	10.4	15.9	22.9	34.2
Set aside	2.3	1.3	1.4	1.1	..
Permanent pasture (a)	38.1	27.2	47.5	72.1	93.6
Woodland	0.7	0.6	3.5	4.2	5.6
Non cropping	-	2.9	1.1	2.3	3.3
Other	-	1.7	1.1	-	-
Unknown	-	-	-	0.8	1.1
Total	66.0	52.7	86.0	121.1	157.9
Land, fully organic					
Cereals	35.4	35.1	37.4	35.5	38.4
Other crops	7.5	10.2	7.3	6.8	7.8
Fruit & nuts	1.4	1.5	1.5	1.6	1.6
Vegetables (including potatoes)	11.7	12.7	12.4	13.5	14.3
Herbs & ornamentals	-	-	0.6	0.6	-
Temporary pasture	77.3	80.3	82.0	79.8	90.9
Set aside	4.6	4.6	2.3	1.3	..
Permanent pasture (a)	481.3	467.8	380.9	350.5	358.4
Woodland	4.8	5.2	3.3	4.0	5.9
Non cropping	0.9	1.3	2.4	4.0	4.7
Other	3.0	2.4	3.2	-	-
Unknown	0.8	-	-	0.6	1.4
Total	629.0	621.8	533.9	498.6	524.3

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 466406

email: organic-stats@defra.gsi.gov.uk

Number of businesses

	January 2004	January 2005	January 2006	January 2007	January 2008
Producers and growers					
North East	74	83	101	116	137
North West	169	176	168	173	211
Yorkshire & Humberside	134	149	138	155	190
East Midlands	218	237	221	236	276
West Midlands	325	337	335	351	408
Eastern	258	259	253	267	315
South West	1 020	1 123	1 152	1 282	1 631
South East (inc. London)	409	463	417	423	556
England	2 607	2 827	2 785	3 003	3 724
Wales	623	667	688	710	857
Scotland	689	653	595	686	671
Northern Ireland	153	174	217	240	254
United Kingdom	4 072	4 321	4 285	4 639	5 506
Processors and/or importers (a)					
North East	31	19	28	45	53
North West	130	107	143	159	180
Yorkshire & Humberside	126	121	141	164	191
East Midlands	191	154	195	210	241
West Midlands	139	114	143	169	188
Eastern	249	209	255	289	298
South West	353	242	380	450	509
South East (inc. London)	450	387	484	516	579
England	1 669	1 353	1 769	2 002	2 239
Wales	112	85	112	125	149
Scotland	174	152	197	225	231
Northern Ireland	35	36	50	52	56
United Kingdom	1 990	1 626	2 128	2 404	2 675

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-eight per cent of organic livestock producers in the United Kingdom are located in the south west region of England and 59 per cent of organic livestock producers in the United Kingdom are found in England. There were 250 thousand cattle, 863 thousand sheep, 50 thousand pigs, 4,441 thousand poultry and 4 thousand other livestock being reared organically in the United Kingdom in January 2008. 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 466406

email: organic-stats@defra.gsi.gov.uk

Number of producers

	January 2004	January 2005	January 2006	January 2007	January 2008
North East	49	44	54	46	58
North West	122	87	102	104	95
Yorkshire & Humberside	82	54	82	82	85
East Midlands	135	110	125	121	127
West Midlands	196	162	196	174	190
Eastern	99	69	86	91	76
South West	761	553	724	706	705
South East (inc. London)	220	162	201	179	188
England	1 664	1 241	1 570	1 503	1 524
Wales	469	402	502	493	580
Scotland	385	293	296	285	282
Northern Ireland	119	110	140	167	176
United Kingdom	2 637	2 046	2 508	2 448	2 562

Source: OASIS

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

Enquiries: Organic Statistics Team on +44 (0)1904 466406

email: organic-stats@defra.gsi.gov.uk

Thousand head

	January 2004	January 2005	January 2006	January 2007	January 2008
Cattle	126.8	174.8	214.3	244.8	250.4
Sheep	440.7	571.6	691.0	747.3	863.1
Pigs	48.8	43.7	30.0	32.9	50.4
Poultry	2 166.2	2 431.6	3 439.5	4 421.3	4 440.7
Goats	0.7	0.5	0.5	0.6	0.5
Other livestock	1.0	1.2	1.5	4.3	3.4

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

2008

Summary

- The rate of confirmed incidence of Bovine Tuberculosis (bTB) in 2007 was higher than in 2006 at 3.9 per cent compared to 3.6 per cent. This is lower than the 2005 level of 4.5 per cent.
- At the end of 2007, 91 per cent of the cattle herds in Great Britain were considered officially bTB free compared to 92 per cent at the end of 2006.
- The first case of Bluetongue Virus (BTV) was recorded in the United Kingdom in September 2007. As at the end of December 2008, there had been 149 confirmed premises affected by Bluetongue (BTV8) in England and Wales. All cases in 2008 have been identified as a result of post import tests on animals in Europe.

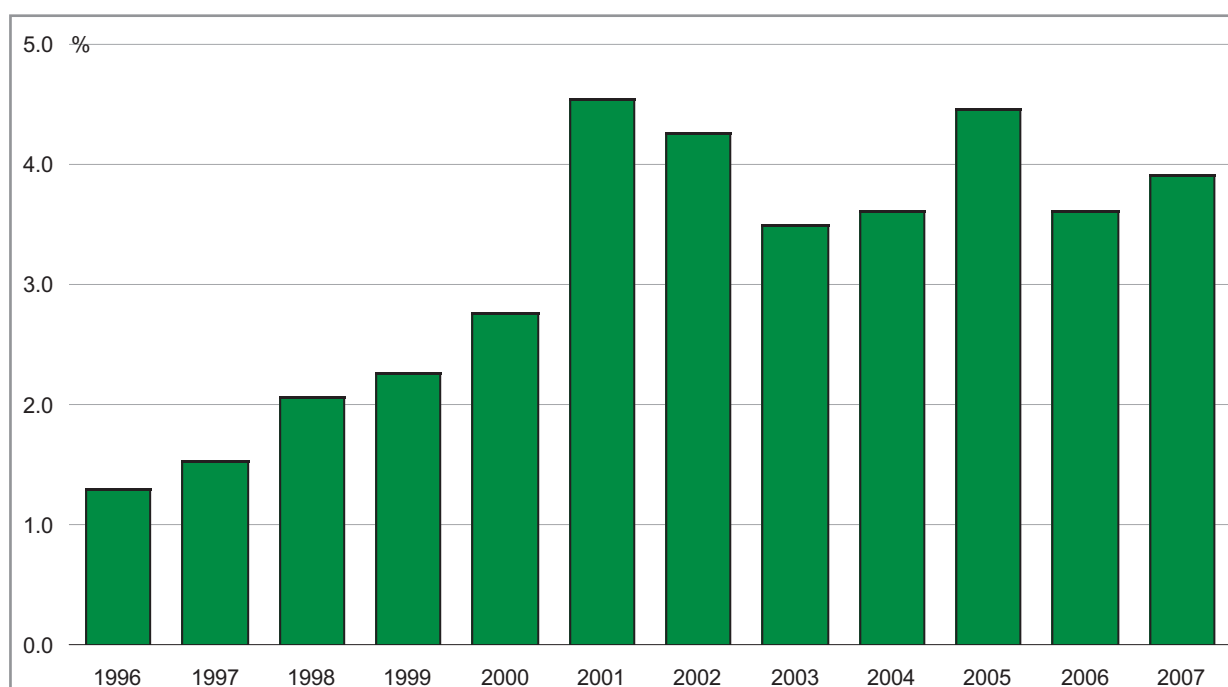
Introduction

- 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 and 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, was published in November 2006, and subsequent updates were made in September 2008. 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>.
- 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.
- 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 2008 are not yet available. Table 14.1 shows results for 2007, broken down by region and country, plus total results for 2006.
- 10** During 2007, the number of tests carried out on unrestricted herds in Great Britain was slightly lower than in 2006 (56,605 against 56,722) decreasing by 0.2 per cent. However, the number of new herd incidents in Great Britain increased from 3,531 in 2006 to 4,172 in 2007 (up 18 per cent). Infection was confirmed in 2,215 of these new incidents (up 8.3 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 2007, this gives a confirmed new incidence rate of 3.9 per cent, which can be interpreted as "for every 100 tests in unrestricted cattle herds, an average of 3.9 new confirmed incidents were detected". This is an increase from 2006 when 3.6 per cent of tests resulted in a new confirmed incident.
- 12** Chart 14.1 shows the confirmed new incidence rate of bTB in Great Britain, however, it should be recognised that bTB is a regional disease which mainly affects the South West of England, South and mid-Wales, and the West Midlands. The confirmed new incidence rate in England is 4.3%, in Wales is 4.0%, and is just 0.4% in Scotland.

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 2007

Enquiries : Michael Chatten on +44 (0)1904 455098

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 2007	Great Britain total 2006	Northern Ireland total 2007	Northern Ireland total 2006
Cattle herds										
1. Total number of cattle herds registered on Vetnet	22 209	24 005	12 065	58 279	13 946	14 056	86 281	89 804	25 187	27 710
2. ...of which were under TB2 restrictions because of a TB incident at some time during the reporting period	4 166	571	233	4 970	1 515	83	6 568	5 864	..	..
TB tests carried out (in year to date)										
3. Total number of unrestricted herd tests	22 454	12 203	5 777	40 434	10 896	5 275	56 605	56 722	27 250	29 218
4. Total number of cattle tested	3 061 389	961 537	318 254	4 341 180	1 246 334	291 982	5 879 496	5 470 484	1 640 552	1 711 678
TB incidents (started in year to date)										
5. Total new herd TB incidents	2 643	381	159	3 183	930	59	4 172	3 531	1 264	1 513
6. ...of which are considered confirmed new TB incidents (i.e. CNIs)	1 510	201	46	1 757	437	21	2 215	2 045	881	955
7. ...of which are considered unconfirmed TB incidents	1 078	176	102	1 356	472	36	1 864	1 472	383	558
8. ...of which are still unclassified TB incidents (pending culture results)	55	4	11	70	21	2	93	14	..	..
Animals slaughtered (in year to date, excluding any reactors awaiting slaughter on the date of the data download)										
9. As Reactors (inc. IRx3)	15 551	2 079	913	18 543	7 171	357	26 071	19 995	7 299	9 383
10. As Inconclusive Reactors (IRs)	349	32	63	444	111	20	575	473	..	..
11. As Direct Contacts (DCs)	592	169	46	807	631	116	1 554	1 814	589	689
12. Slaughterhouse cases reported to the SVS (of which confirmed)	607 (378)	111 (58)	41 (18)	759 (454)	64 (27)	19 (7)	842 (488)	726 (415)	1133 (699)	979 (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	3 820	1 033	667	5 520	2 081	279	7 880	6 859	..	..

(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.

- 13 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 (4.5 per cent) was the highest incidence rate over the last twenty years (excluding 2001, when testing was focused on the most “at risk” herds). Despite a reversal to the trend in 2006, the confirmed incidence rate in 2007 increased, albeit to lower levels than those seen in 2005.
- 14 A total of 6,568 cattle herds were under restrictions due to a bTB incident at some time during 2007 in Great Britain, compared with 5,864 herds in 2006. This figure includes new herd incidents plus any incidents disclosed in previous years and still unresolved in 2007. At the end of 2007, a total of 7,880 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 2007, 91 per cent of the cattle herds in Great Britain were considered officially bTB free compared to 92 per cent at the end of 2006.
- 15 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.
- 16 Following cases of highly pathogenic avian influenza (AI) H5N1 strain in wild mute swans at the Fleet Reserve in Dorset, the Secretary of State declared on 10 January 2008 a Wild Bird Control Area and a Wild Bird Monitoring Area around the place where disease was confirmed. The Wild Bird Control Area was revoked on 19 February, but following confirmation of H5N1 in a Canada goose, was reinstated on 29 February. On 5 March, this Control Area was lifted and the Monitoring Area was reduced in size. On 27 March, the Wild Bird Monitoring Area and associated disease control restrictions put in place following cases of H5N1 in wild birds in Dorset were lifted. On 4 June 2008, Defra confirmed that the AI present in laying hens on a premises near Banbury in Oxfordshire was the highly pathogenic H7N7 strain. Active surveillance in the area showed no evidence of disease spread and infection was confined to the one infected premises. The Surveillance Zone and remaining disease control area restrictions put in place following the outbreak of H7N7 in Oxfordshire were lifted on 8 July 2008. The Protection Zone was lifted on 29 June 2008. The latest news and information on AI can be found at: <http://defraweb/animalh/diseases/notifiable/ai/index.htm>.
- 17 The first case of Bluetongue Virus (BTV) recorded in the UK was detected in September 2007. Defra confirmed that BTV was circulating between the local animal and midge population in East Anglia. Control and Protection Zones were set up and movement restrictions out of these zones were put into place. 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, was under movement restrictions. In May 2008, Defra published an epidemiology report on the distribution of BTV in Great Britain as of 15 March 2008 (the end of the winter 2007/08 vector free period). By that time, BTV had been confirmed on 125 holdings in 13 counties in the East and South East of England, as well as two individual cases in Leicestershire and Staffordshire in animals originating from East Anglia. Further cases in 2008 were detected as a result of post-import testing on animals arriving from continental Europe. As at the end of December 2008, there had been 149 confirmed premises affected by Bluetongue (BTV8) in England and Wales. In May 2008, voluntary vaccination of animals commenced in restricted areas before being rolled out to other regions. Vaccine sales figures suggest that enough had been purchased to vaccinate around 60 per cent of the susceptible population. EU commission rules state that when vaccination takes place in an area previously free from BTV, that area must then be declared a Protection Zone. Consequently, by 3 November 2008 the whole of Great Britain had been declared a Protection Zone. Bluetongue is a disease of ruminants, including sheep, cattle, deer, camelids, (Alpacas, Guanacos, Llamas) and goats. It does not affect humans. The latest news and information on BTV can be found at:- <http://defraweb/animalh/diseases/notifiable/bluetongue/index.htm>

Animal Welfare

- 18** Defra, the Scottish Government, Welsh Assembly 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 Animal Health (AH) agency visits and scanning visits by AH, Meat Hygiene Service (MHS) and Veterinary Laboratory Agency (VLA). In Northern Ireland many of these checks fall to the Veterinary Service (VS).

On Farm Welfare

- 19** Farm visits are made by Animal Health (AH) as part of programmed compliance checks or where the livestock keeper has requested an inspection ("compliance" or "elective" respectively). Where an allegation of poor welfare has been made, a visit is undertaken as a matter of urgency and these are referred to as "complaint" visits. Targeted visits are undertaken where there is possible cause for concern for the welfare for livestock. Targeted and complaint inspection results are reported jointly in the statistics that are produced.
- 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** Animal Health carried out 10,883 welfare inspections at 4,363 visits during 2008 (an average of 2.5 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.

Chart 14.2 Results of AH assessments of complaint, targeted & cross compliance on farm welfare assessments in Great Britain between 1st January and 31st December 2008

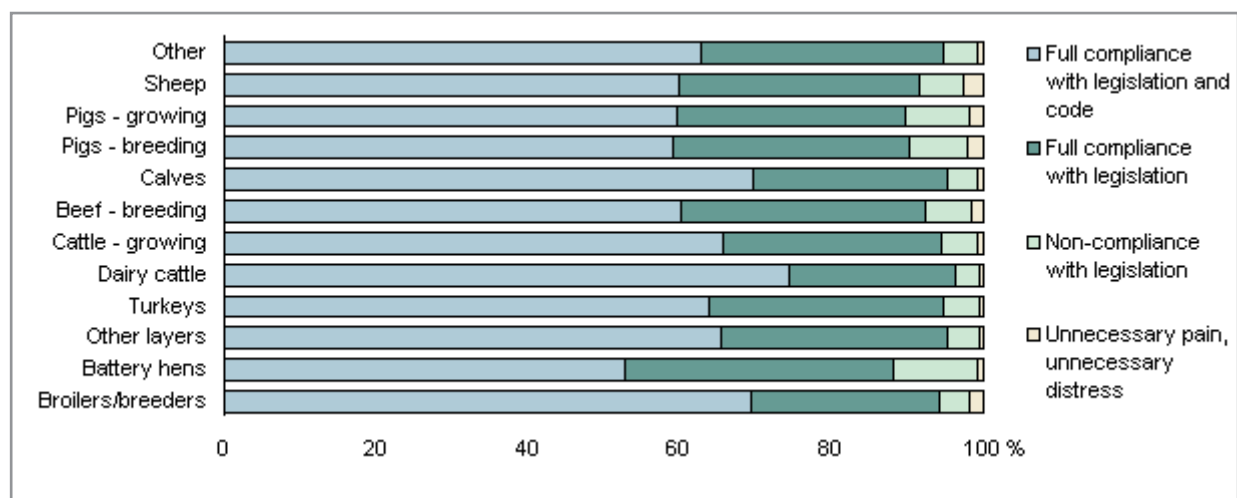
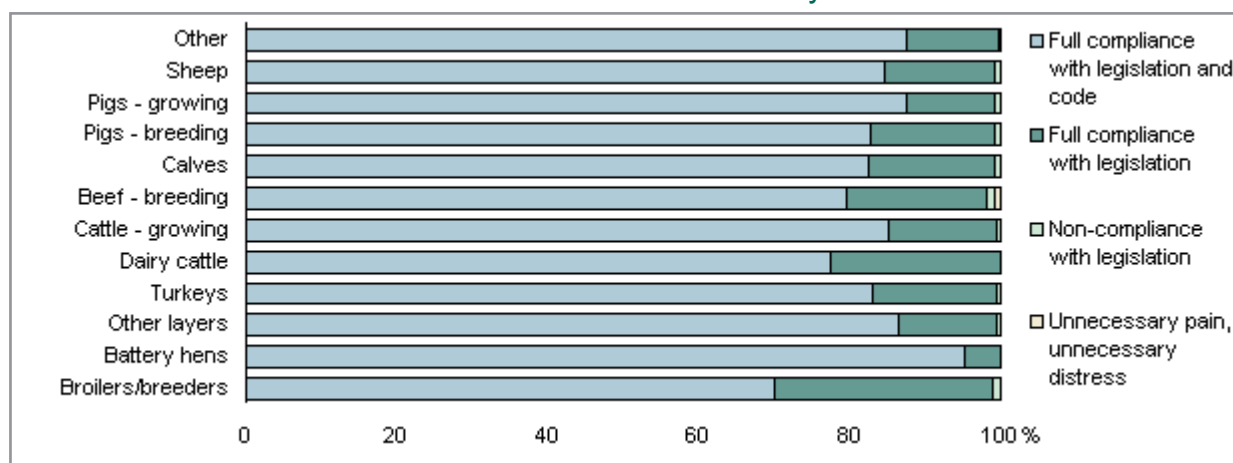


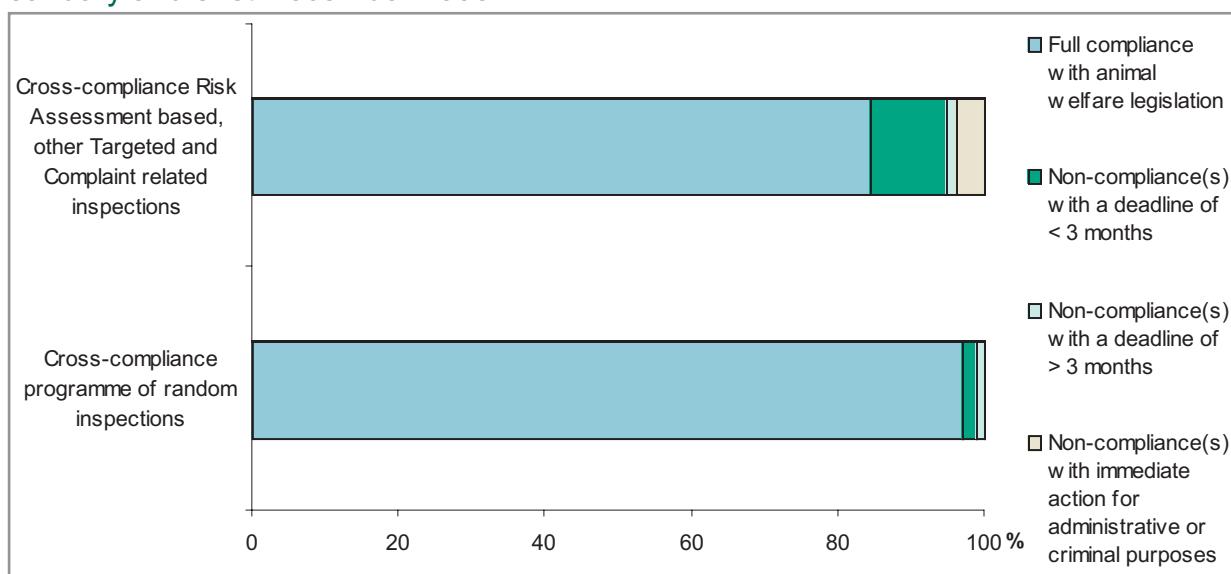
Chart 14.3 Results of AH assessments of elective, programmed and special on farm welfare assessments in Great Britain between 1st January and 31st December 2008



22 Results from on farm welfare assessments show that there was a high level of compliance on farms, with 94 per cent of assessments at visits achieving either full compliance with legislation and code or full compliance with legislation. Overall 1.3 per cent of assessments revealed a level of non-compliance which was deemed to cause 'unnecessary pain, unnecessary distress' (UPUD).

23 Where visits are based on complaints, cross compliance checks, or are targeted, 6.8 per cent of the visits showed non-compliance with legislation or UPUD. This is a reduction from the 8.0 per cent seen in 2007 and a continuation of the downward trend from the 13 per cent seen in 2005 and 2006. The percentage of elective and programmed visits showing non-compliance or UPUD remained the same as in 2007, at 0.6 per cent.

Chart 14.4 Results of VS assessments of the welfare of animals on farm in Northern Ireland during complaint, targeted and cross compliance (risk) visits between 1st January and 31st December 2008



- 24** During 2008 the Veterinary Service in Northern Ireland carried out 638 welfare inspections on farms. Of this total 85 per cent were complaint, targeted, or cross compliance inspections (where herds are identified as being “at risk”) with the remaining 15 per cent random cross compliance checks.
- 25** Of the random cross compliance inspections, 97 per cent achieved an overall assessment of compliance with legislation. Non-compliance needing corrective action relating to housing, animal treatment (with action required within 3 months) or that associated with staff training, record keeping, or frequency of inspection (with time given for improvements), was found on 3.0 per cent of visits. No assessments identified a serious welfare problem requiring immediate action, with respect to application of administrative or criminal penalties.
- 26** Of the complaint and targeted visits and risk cross compliance; 84 per cent achieved compliance with legislation; 12 per cent showed levels of non-compliance needing corrective action; whilst 4.0 per cent of visits were assessed as showing a serious welfare problem requiring immediate action with respect to application of administrative or criminal penalties. Due to changes in the way NI data is reported it is not possible this year to chart results by species.

Chapter 15 Environment

2008

Summary

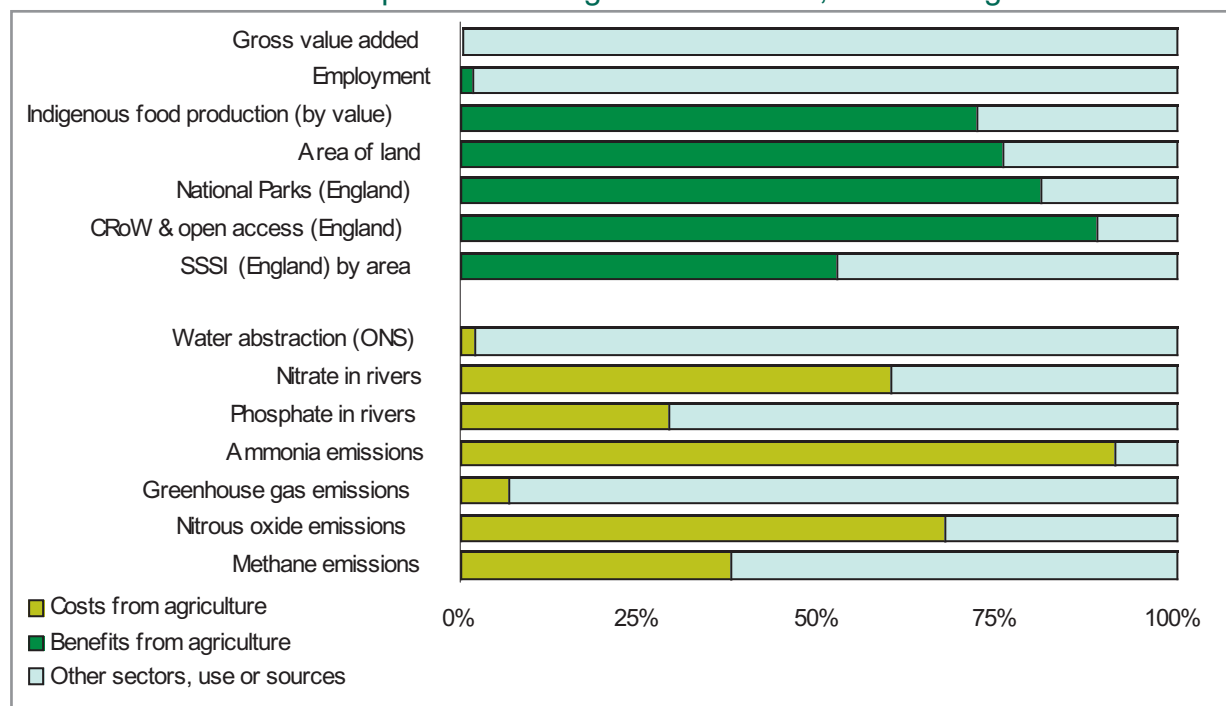
- Agricultural activities cover about three quarters of the land area in the United Kingdom.
- In 2006, around one fifth of United Kingdom habitat A/SSSIs on agriculturally managed land were in a favourable condition and one fifth were recovering.
- Around 8 million hectares of farmland in the United 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 12 per cent over the 10 years up to 2006.
- Agricultural emissions of nitrous oxide have fallen by 18 per cent over the 10 years up to 2006.
- Ammonia emissions from agriculture have reduced by 13 per cent over the 10 years to 2006.
- Nitrate levels in rivers in England fell between 2000 and 2003 but have since remained relatively level. In Scotland, Wales and Northern Ireland they remain low.
- Phosphate levels in rivers in all countries have fallen slightly between 2000 and 2007.
- Total energy use by agriculture has fallen by 22 per cent over 10 years.
- Over the last 10 years, the use of nitrate and phosphate fertilisers has shown an overall decline, nitrate by 28 per cent and phosphate by 45 per cent.

Introduction (chart 15.1)

- 1 This chapter 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.
- 2 In the United Kingdom, agricultural activities cover around three quarters of the land area and produce around two-thirds of 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.
- 3 Chart 15.1 summarises the environmental impacts of United Kingdom agriculture or England where stated in the context of the overall situation. It includes the agricultural contribution to: the United Kingdom economy; land protection and conservation; resources; pollution and emissions. It is intended to indicate the relative contribution of farming in different areas but as different baselines are used for

comparison, the figures should not be directly compared. The latest available data are used, the sources and units of which can be found in the specific tables and charts elsewhere in this publication.

Chart 15.1 Environmental profile of the agricultural sector; United Kingdom



Source: Collated by Defra

Environmental impacts

Land use (table 15.1)

- 4** In 2007 arable land accounted for around 30 per cent of agricultural land. About 4.0 per cent of the land (i.e. around 11 per cent of arable land) was bare fallow or set aside, where up to 20 per cent of the set aside was used for industrial crops. In 2008 there was no compulsory set-aside, although some former set-aside land remained uncropped on a voluntary basis, and is recorded as 'bare fallow' in June Survey statistics. Chart 3.1 shows the breakdown of land use in 2008. Uncropped land can provide a variety of environmental benefits, particularly in terms of providing habitats and food for a range of wildlife. The nature and extent of these benefits is determined by the way it is managed. More information can be found at <https://statistics.defra.gov.uk/esg/ace/setasidepublished.htm>. Farm woodlands provide permanent habitats for a variety of wildlife, can prevent soil erosion on slopes and accumulate carbon.

Table 15.1 Area of uncropped land; United Kingdom

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Thousand hectares	2000	2001	2002	2003	2004	2005	2006	2007	2008
uncropped set aside	495	752	536	605	503	457	387	358	-
bare fallow	37	43	33	29	29	164	197	165	195
total uncropped land	532	795	569	634	533	620	583	523	195
farm woodland	500	514	524	544	563	583	606	663	705

source: Defra June Survey

- 5 Table 15.1 shows the area of farm woodland and uncropped agricultural land: bare fallow (land left uncropped on a voluntary basis) and set-aside, net of industrial crops, in the United Kingdom. The total area of uncropped land fell sharply in 2008 as a result of the zero rate of set-aside.

Land management

- 6 Appropriate land management is required to maintain the landscape and conserve the natural functions of the land. Although grasslands need to be kept in condition by grazing, over or under grazing can lead to soil erosion, loss of species, carbon loss, etc. Changing the type and mix of livestock, between cattle and sheep can also have an effect on the number of plant species in the area. The poorer grasslands in Less Favoured Areas often give poor agricultural returns, but are valued for the resulting landscape and associated biodiversity and also for recreational opportunities. Intensive farmland accounts for over 40 per cent of United Kingdom land area, though less than 5 per cent (by area) of Areas/Sites of Special Scientific Interest are on arable or improved grassland.
- 7 The management of 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).
- 8 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.
- 9 The Farm Practices Survey (FPS) 2008 estimates that nearly 20 per cent of farmers practice IFM. The full FPS reports can be found on the Defra Website at:
<https://statistics.defra.gov.uk/esg/publications/fps/default.asp>
 LEAF (Linking Environment and Farming) actively promotes IFM to their members and wider industry through technical know how, demonstration and communication. Further information can be found at:
<http://www.leafuk.org>
- 10 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 accumulation 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.

11 Agriculture plays a role in providing many of these functions. Further information on ecosystems can be found at: <http://www.defra.gov.uk/wildlife-countryside/natural-environ/eco-approach.htm>

12 Changes were made in 2005 (CAP reform) to the way subsidies are paid to farmers. To receive their single farm payment, farmers are required to keep land in good agricultural and environmental condition by meeting specified cross compliance criteria. Further support for environmental issues comes from various agri-environment schemes.

13 The preparation of environmental impact assessments and soil management and protection plans are a requirement of cross compliance. Land, including uncropped land, has to be kept in good agricultural and environmental condition. In 2007 the average compliance rate was over 99 per cent; in general breaches were found in less than 1.5 per cent of random inspections. The breaches were mainly due to the lack of maintenance of the 2 metre protection zones along water courses or of hedgerows.

14 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 (Areas/Sites of Special Scientific Interest) and SACs (Special Areas of Conservation). From table 12.5 the total area farmed under any agri-environment scheme in the United Kingdom is over 8 million hectares. Details of these schemes can be found at:
<http://www.naturalengland.org.uk/ourwork/farming/funding/es/default.aspx>;
<http://www.countryside.wales.gov.uk/>; <http://www.dardni.gov.uk/>;
<http://www.scottishexecutive.gov.uk/Topics/Agriculture/Environment/Agrienvironment>

Landscape (map 15.1, tables 15.2, 15.3)

15 The countryside has been managed and shaped by agriculture over the course of 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. There are 97 (terrestrial) National Character Areas identified in England, 21 Landscape Character Zones in Scotland, 130 Landscape Character Areas in Northern Ireland and 49 Landscape Character Areas in Wales. 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.

Map 15.1 Designated areas in Great Britain

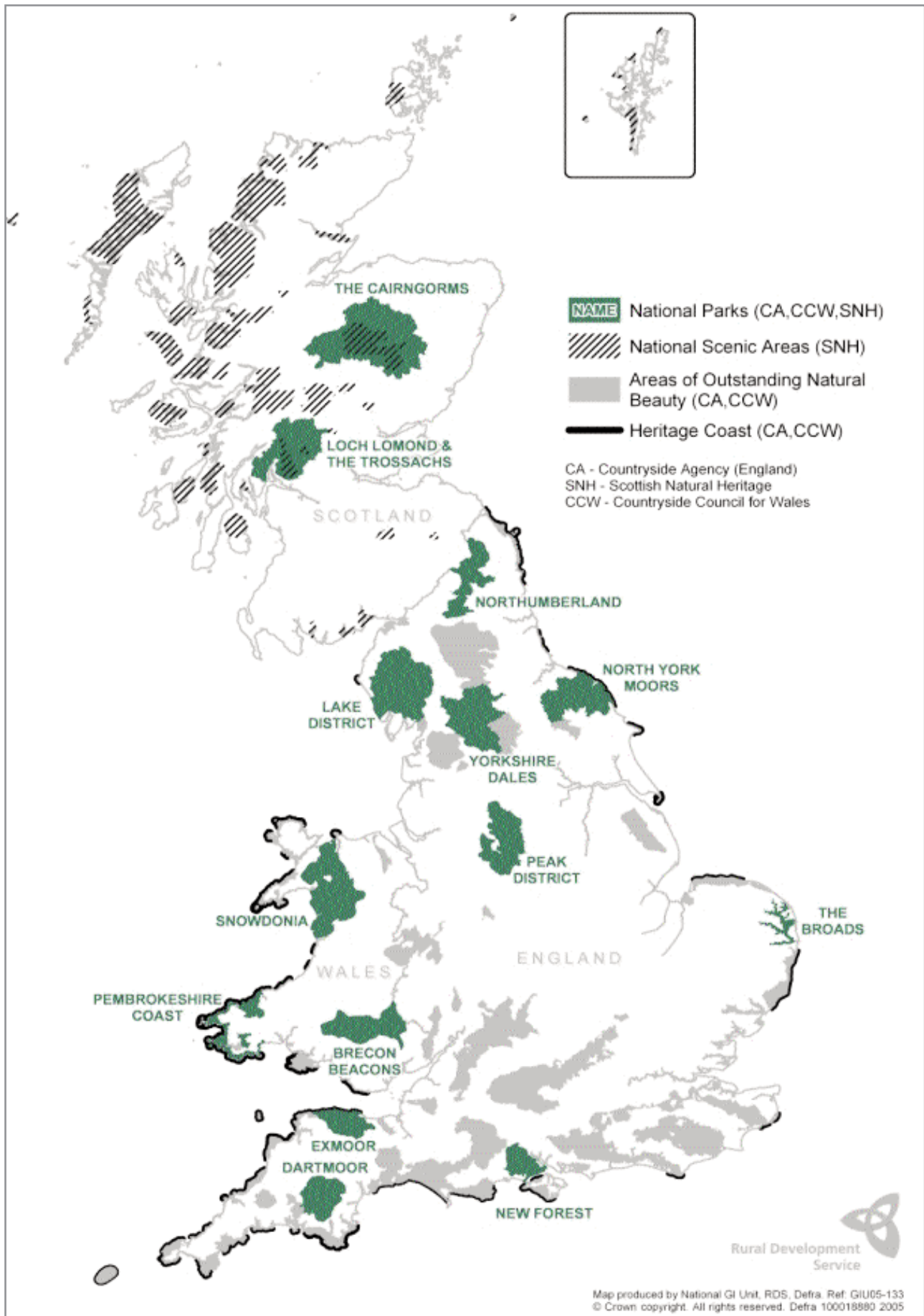


Table 15.2 Designated National Parks and Areas of Outstanding Natural Beauty and Natural Scenic Areas 2008 (a) (b) (c)

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	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	7	..	..	..
AONB / NSA	2 053	36	16	84	5	4	1 021	40	13	317	9	22

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

(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.

16 Table 15.2 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.

Table 15.3 Stock of linear landscape features in GB 2007 and changes 1998 - 2007For definitions of linear features used in CS2007 see the reports <http://www.countrysidesurvey.org.uk/index.html>

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	England			Wales			Scotland		
	2007 Length	Change in length 1998-2007		2007 Length	Change in length 1998-2007		2007 Length	Change in length 1998-2007	
	thousand km		%	thousand km		%	thousand km		%
Hedge	408.0	- 20.0	- 4.7	54.0	- 3.0	- 5.3	21.0	- 2.0	- 8.7
Wall	82.0	-	-	14.0	-	-	79.0	- 1.0	- 1.3
Line of trees/shrubs/relict hedge and fence	72.0	12.0	20.0	30.0	3.0	11.1	12.0	-	-
Line of trees/shrubs/relict hedge	82.0	6.0	7.9	19.0	-	-	14.0	0.7	5.3
Bank/grass strip	42.0	2.0	5.0	16.0	-	-	6.0	-	-
Fence	363.0	16.0	4.6	74.0	-	-	74.0	-	-
Total	1 049.0	16.0	32.8	207.0	-	5.8	206.0	- 2.3	- 1.1

Source: Countryside Survey 2008. NERC, Centre for Ecology and Hydrology

17 Agriculture can help conserve historic landscape by retaining features such as historic field patterns while local materials and building techniques contribute to the visual impact of the countryside. Traditional buildings and field boundaries are important characteristic features of the landscape. Table 15.3 shows the stock and changes in stock of some landscape boundary features from the Countryside Surveys of 1998 and 2007. Further information can be found at: <http://www.naturalengland.org.uk/>; <http://www.snh.org.uk>; <http://www.doeni.gov.uk>; <http://ccw.gov.uk>; <http://www.countrysidesurvey.org.uk/index.html>

Recreation (charts 15.2, 15.3)

- 18** The countryside 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 of people visit the open countryside sometime during the year, over two thirds of these visiting at least once a month. Chart 15.2 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 15.2 The three most important aspects of visits to the countryside

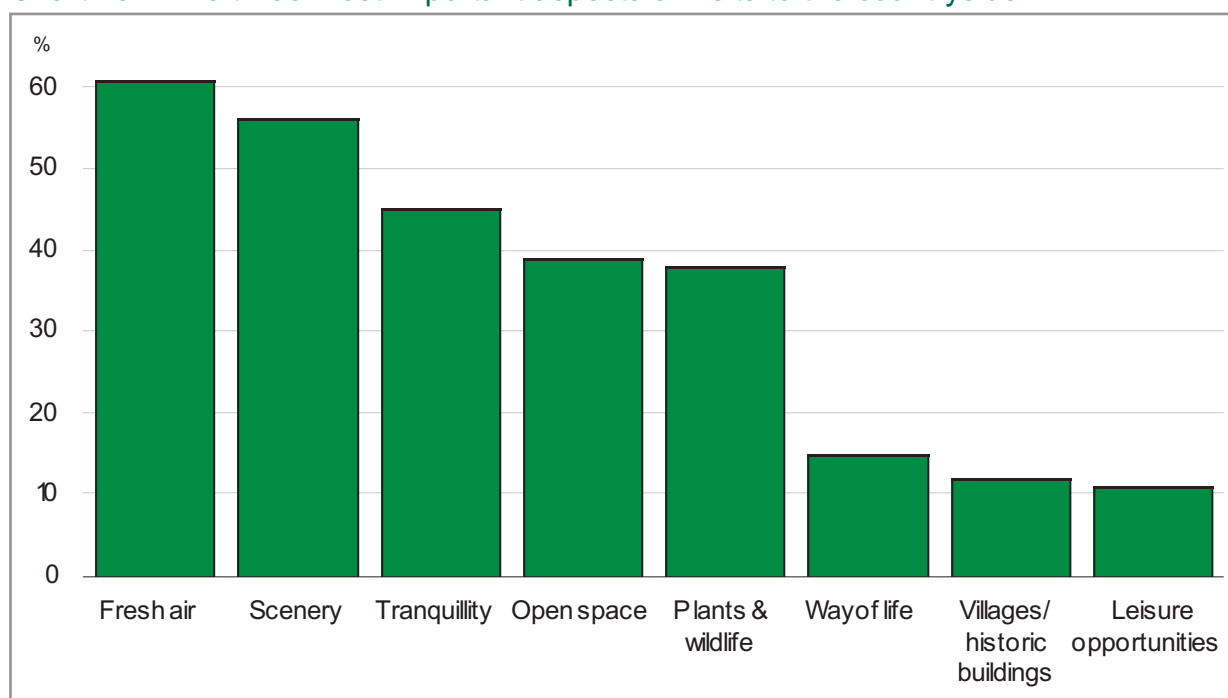
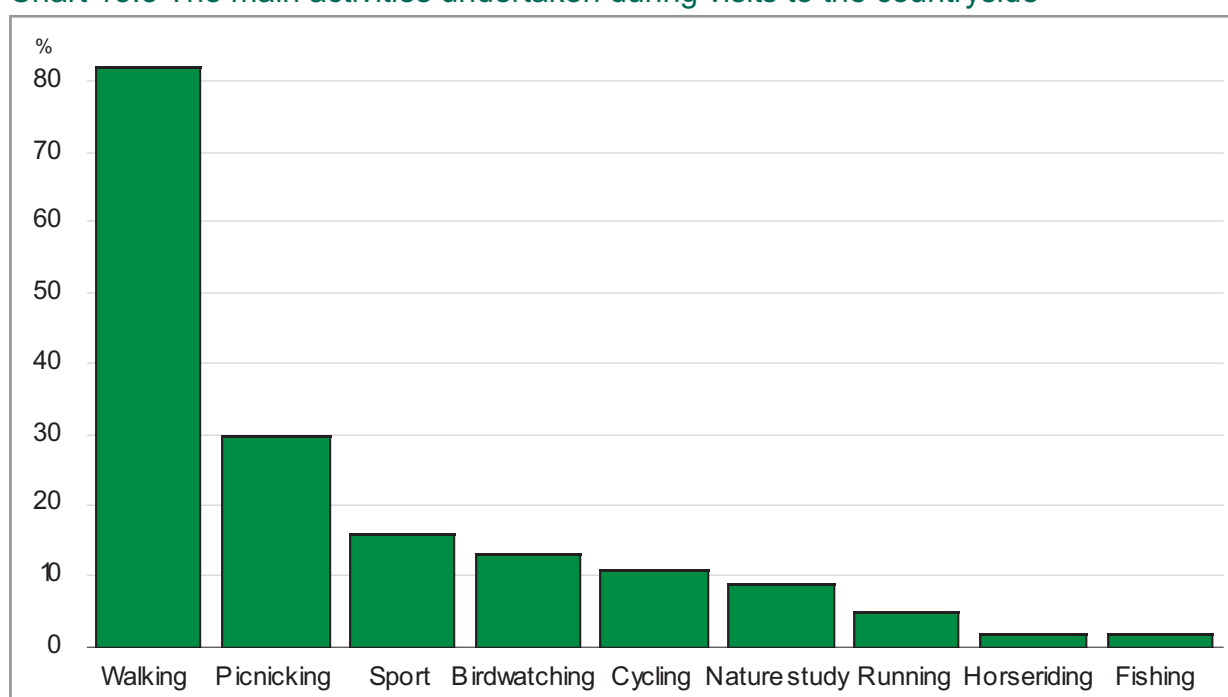


Chart 15.3 The main activities undertaken during visits to the countryside



19 Chart 15.3 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 can be found at : <http://www.defra.gov.uk/environment/statistics/pubatt/index.htm>.

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/access/index.htm> or <http://www.outdooraccess-scotland.com/default.asp> Over 100 million visits are made to National Parks annually.

Biodiversity

Habitats (tables 15.4, 15.5; charts 15.4, 15.5, 15.6, 15.7)

21 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.

Table 15.4 Stock of broad habitat areas in the United Kingdom 2007

For definitions of broad habitats used in CS2007 see the reports <http://www.countrysidesurvey.org.uk/index.html>

Enquiries: Barbara Norton on +44 (0)1904 455577

Broad Habitat	England		Wales		Scotland		Northern Ireland		United Kingdom	
	000 ha	%	000 ha	%	000 ha	%	000 ha	%	000 ha	%
Woodland habitats										
Broadleaved, Mixed and Yew Woodland	981	8.3	174	8.8	251	3.2	82	5.9	1 488	6.4
Coniferous Woodland	257	2.2	106	5.4	956	12.2	61	4.4	1 380	6.0
Intensive agriculture										
Improved Grassland	2 856	24.0	731	36.9	907	11.5	573	41.3	5 067	21.9
Arable and Horticultural	4 002	33.7	73	3.7	534	6.8	49	3.5	4 657	20.2
Semi-natural habitats										
Neutral Grassland	1 453	12.2	263	13.3	461	5.9	231	16.6	2 407	10.4
Bog	140	1.2	48	2.4	2 044	26.0	161	11.6	2 393	10.4
Dwarf Shrub Heath	331	2.8	117	5.9	894	11.4	17	1.2	1 360	5.9
Acid Grassland	396	3.3	210	10.6	982	12.5	10	0.7	1 599	6.9
Fen, Marsh and Swamp	118	1.0	36	1.8	239	3.0	47	3.4	439	1.9
Bracken	91	0.8	38	1.9	132	1.7	3	0.2	263	1.1
Calcareous Grassland	30	0.3	1	0.1	26	0.3	2	0.1	59	0.3
Sediment and rock (a)	62	0.5	24	1.2	170	2.2	9	0.6	265	1.1
Water										
Standing Open Water and Canals	97	0.8	18	0.9	88	1.1	64	4.6	265	1.1
Rivers and Streams	29	0.2	8	0.4	21	0.3	6	0.4	64	0.3
Developed habitats										
Built up and Gardens	1 038	8.7	132	6.7	153	1.9	74	5.3	1 397	6.0
Total	11 881	100.0	1 979	100.0	7 858	100.0	1 389	100.0	23 103	100.0

Source: Countryside Survey 2007, Northern Ireland Countryside Survey 2007, NERC, Centre for Ecology and Hydrology

(a) In Northern Ireland 1998 data

22 Table 15.4 shows the stock of broad habitats in the United Kingdom in 2007 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.

Table 15.5 Designated areas for habitats and species 2008 (a)

Enquiries: Barbara Norton on +44 (0)1904 455577

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	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	1 351	-	5	62	-	10	52	-	1	8	-
NNR	92	222	1	24	68	1	140	66	2	2	9	-
A/SSSIs	1 077	4 115	8	252	1 018	12	1 036	1 455	13	94	255	7
Natura 2000 (b)												
SAC	978	241	7	147	90	7	963	239	12	66	52	5
SPA	714	81	5	101	19	5	657	146	8	109	15	8
Ramsar	360	70	3	24	10	1	313	51	4	78	20	6

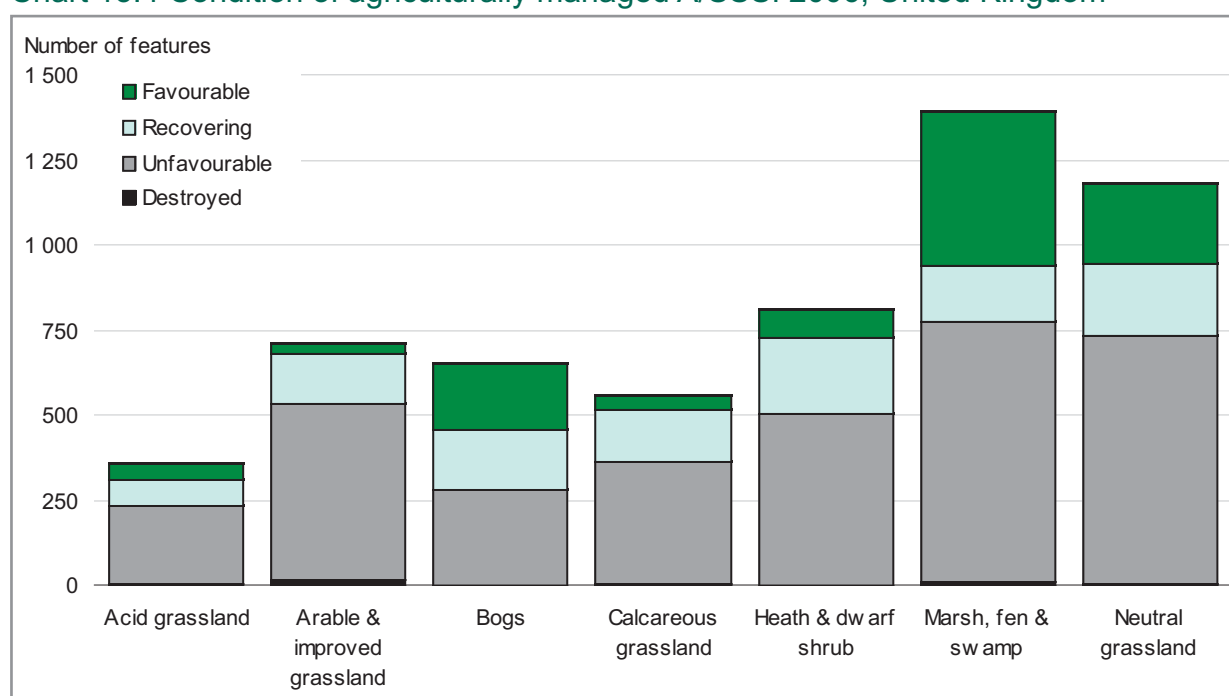
Source: Defra, English Nature, Department of Environment (Northern Ireland), Countryside Council for Wales, Welsh Assembly Government, Scottish Executive and Scottish Natural Heritage

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 mainly A/SSSIs

2008

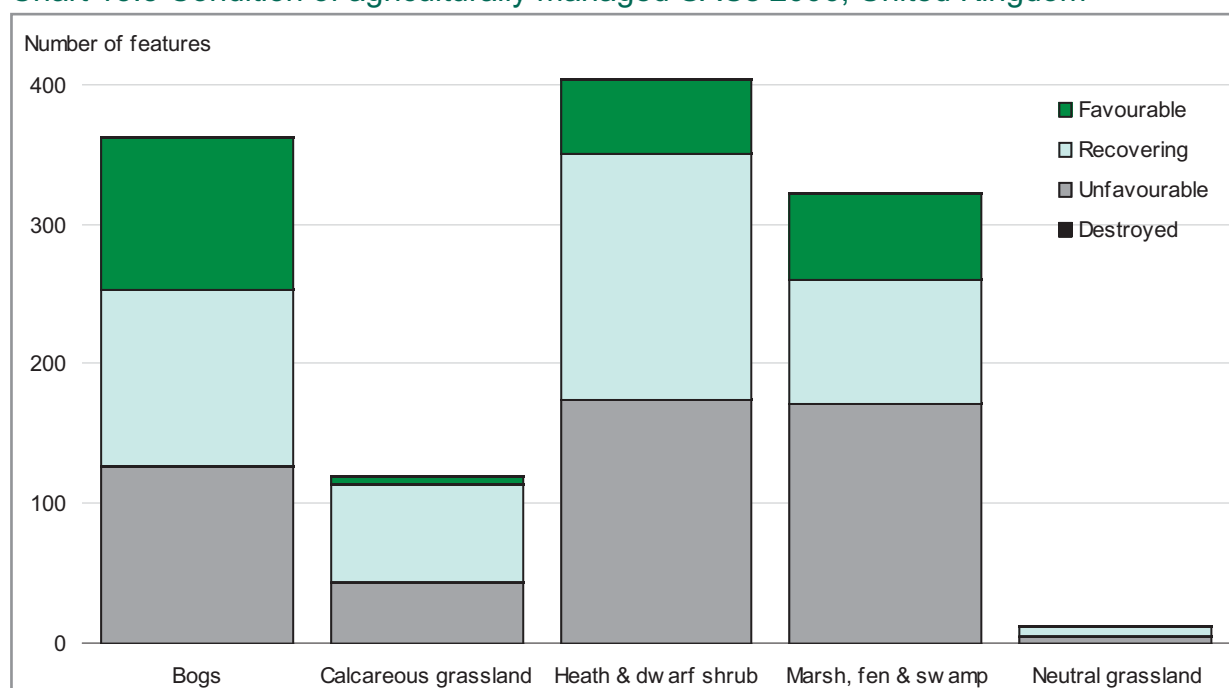
- 23** National Nature Reserves (NNRs) are of national importance. Sites of Special Scientific Interest (SSSIs) and Areas of Special Scientific Interest (ASSIs) in Northern Ireland protect and conserve the most important wildlife and geological sites in the United Kingdom. The Natura 2000 sites: Special 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 15.5 shows the areas of these designated habitats in the countries of the United Kingdom.

Chart 15.4 Condition of agriculturally managed A/SSSI 2006; United Kingdom

- 24** Chart 15.4 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.

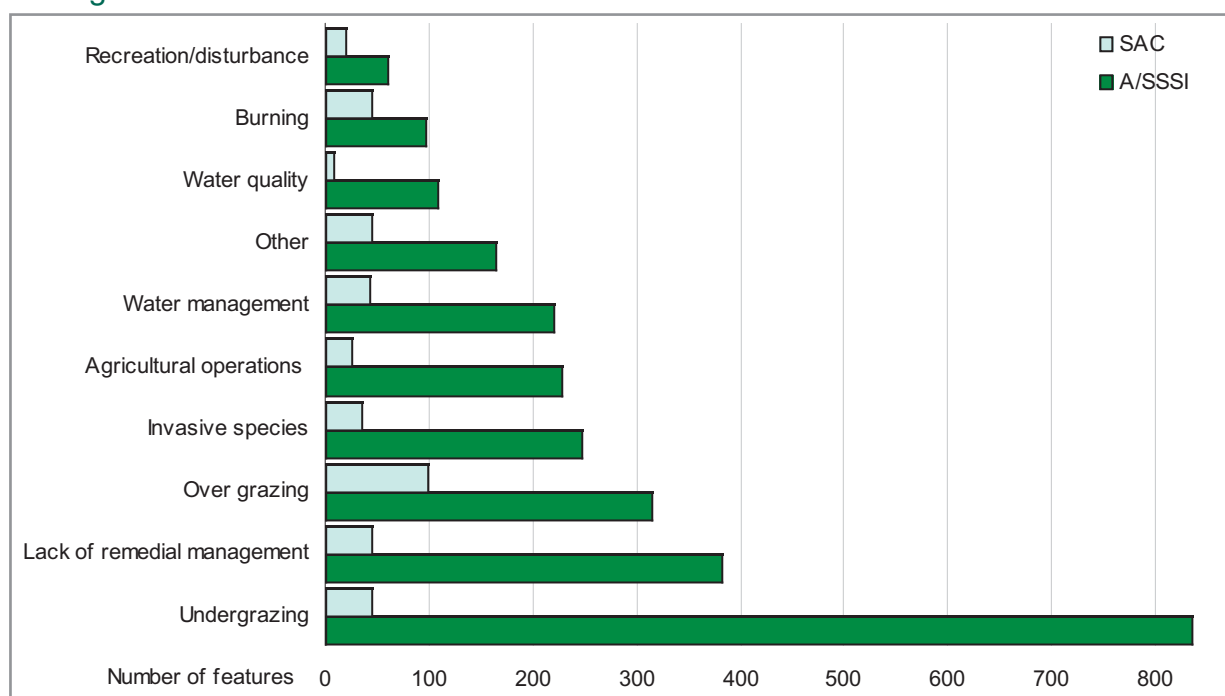
- 25 Chart 15.5 shows, by number of features, the condition of Special Areas of Conservation (SACs) features, for the United Kingdom, 2006, for habitats on predominately agriculturally managed land.

Chart 15.5 Condition of agriculturally managed SACs 2006; United Kingdom



- 26 Chart 15.6 shows the main reasons for adverse conditions, on unfavourable and recovering, predominantly agriculturally managed A/SSSIs and SACs. Agricultural activities account for about half of the damage to these A/SSSIs and for about 40 per cent 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 per cent 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>

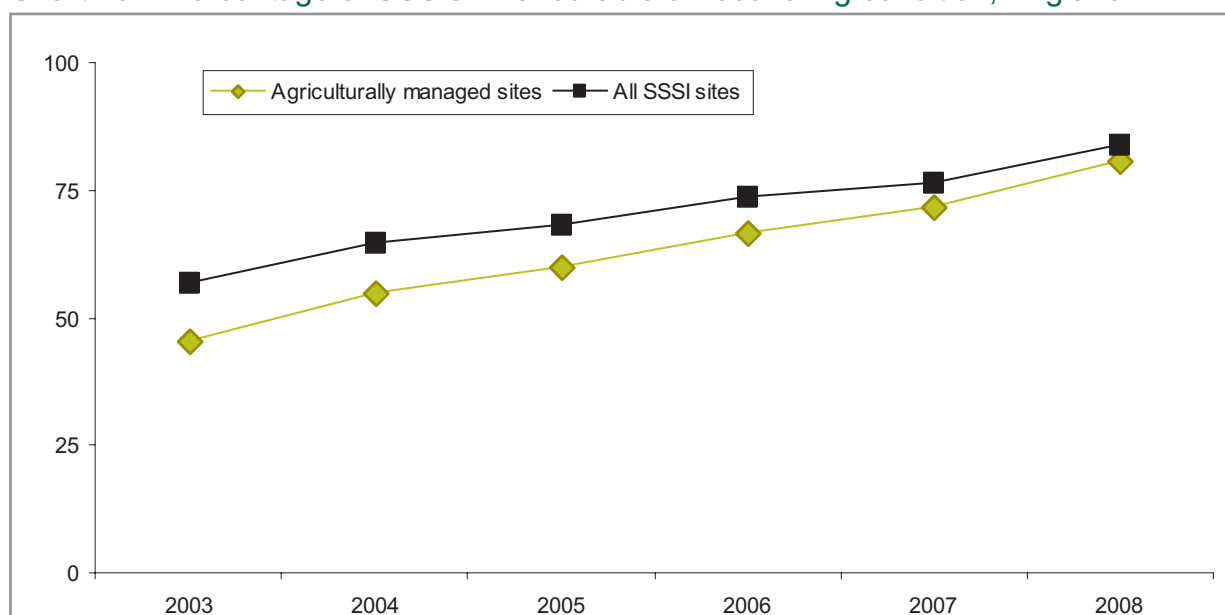
Chart 15.6 Main reasons for adverse conditions on predominantly agriculturally managed sites



2008

- 27 There was no Common Standards Monitoring report to Europe in 2008, so there is no compatible data across the United Kingdom for 2007. Chart 15.7 shows the percentage (by area) of all SSSIs in England that were in a favourable or recovering condition and those SSSIs on agriculturally managed sites from 2003 to 2008.

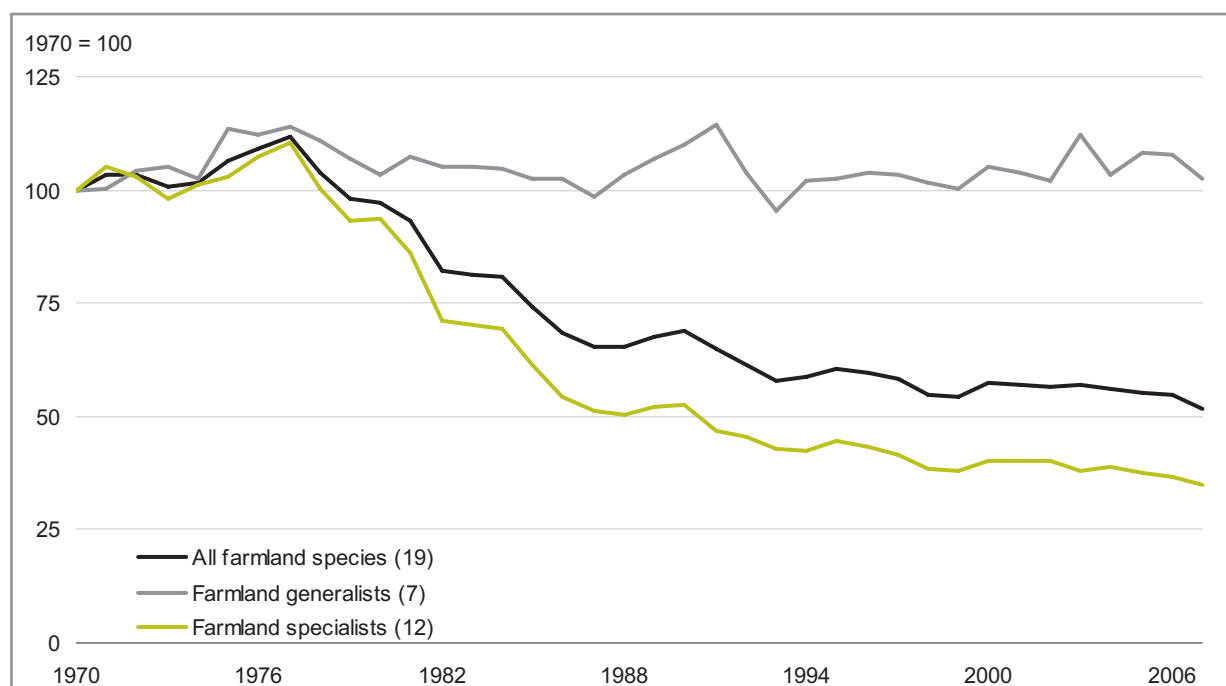
Chart 15.7 Percentage of SSSIs in favourable or recovering condition; England



Species (chart 15.8)

- 28** 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.
- 29** Chart 15.8 shows the trends in farmland bird populations since 1970. Bird populations are considered good indicators of the state of wildlife more generally since they have a wide habitat distribution and are near the top of the food chain. 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 percentage points by the late 1990s and have continued to decline, though at a slower rate since 2000 and are now at their lowest level. Further information can be found at: <http://www.bto.org/> ; <http://www.rspb.org.uk/>.

Chart 15.8 Farmland bird index 1970 - 2007



Resources

Soil

- 30** 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. Soil degradation is both the physical loss (erosion) and the reduction in quality of soil associated with compaction, nutrient decline and contamination.

- 31** Good soil management and soil quality can financially benefit farmers. While these benefits are fairly modest in absolute terms they are often significantly higher than the costs involved in improving the management of soil organic matter. Further information can be found in the Defra report at: <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=10433&FromSearch=Y&Publisher=1&SearchText=sp0310&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>.
- 32** According to the 2007 farm practices survey for England, 50 per cent of farmers had experienced some symptom 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>).
- 33** 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; 60 per cent of the phosphorus lost from agriculture is associated with soil erosion (Defra 2003). Soil erosion rates are typically up to 20 tonnes/ha/yr, but erosion rates as high as 100t/ha have been reported (Environment Agency (EA) 2006). Such significant losses of soil can impact on crop production as well as water quality. The costs of soil erosion caused by agriculture are in the region of £45 million per annum (EA and other reports).
- 34** There is also evidence to suggest that poor soil management has an impact on flooding, especially at a local rather than a catchment level. The EA has estimated the overall flooding related costs from structural damage to soils to be £29-£128 million per annum.
- 35** 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.

Nutrient Balances

- 36** Eurostat use soil nutrient balances as one of their agri-environmental indicators. The methodology has been developed by OECD (Organisation for Economic Co-operation and Development) to calculate the loading of nitrate and phosphate on the land including that from livestock manure etc. The nutrient balance in the soil is relevant to air quality, nutrient management, water quality and climate change. The model being developed by Defra will show changes over time for the United Kingdom and the English regions, as well as relevant geographical units such as river catchments, nitrate vulnerable zones (NVZs) etc.

Fertiliser use (charts 15.9, 15.10)

- 37** Charts 15.9: nitrogen fertiliser use and 15.10: phosphate fertiliser use, show similar fluctuating patterns and a gradual decline in fertiliser use in Great Britain, nitrogen by 36 per cent and phosphate by 49 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 15.9 Nitrogen fertiliser use GB;1984 - 2007

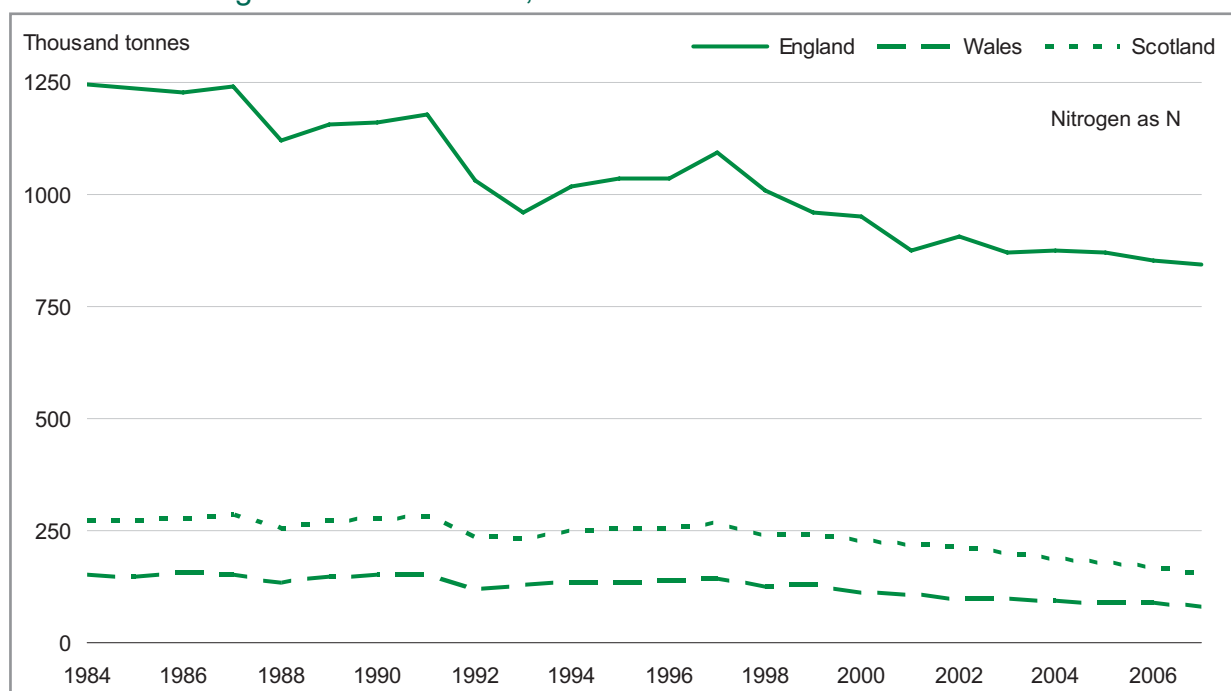
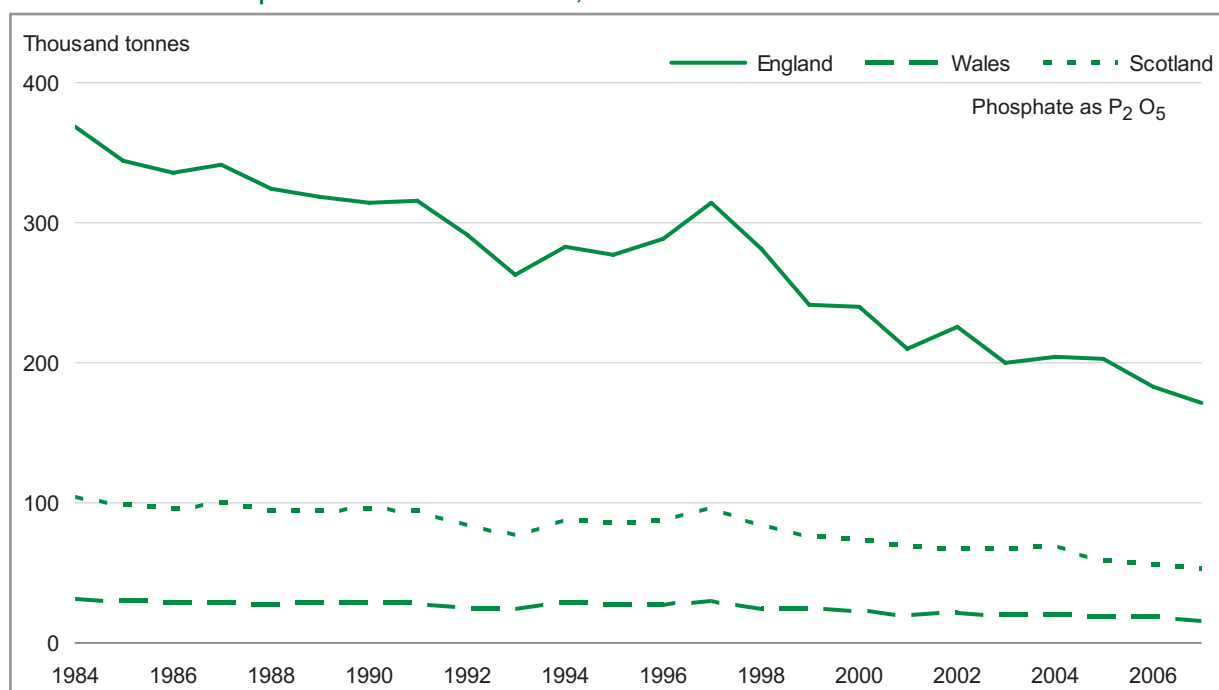


Chart 15.10 Phosphate fertiliser use GB;1984 - 2007



Energy use (tables 15.6, 15.7)

- 38** The power used both directly and indirectly by agriculture comes from mainly finite resources. Table 15.6 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 22 per cent over 10 years but has risen 4.7 per cent in 2007. This table also shows electricity production from biomass and farm waste and the heat generation from waste digestion and biomass, which has doubled over 5 years.

Table 15.6 Direct and indirect energy consumption and electricity generation from renewables; United Kingdom

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Units: Thousand tonnes of oil equivalent (1000 ToE)

	Average 1996-98	2003	2004	2005	2006	2007
Total energy consumption	3 804	3 182	3 200	3 117	2 948	3 088
Direct energy	1 352	944	891	985	877	839
of which: Natural gas & coal	116	208	213	195	178	176
Oil products (inc petroleum)	833	318	246	363	272	262
Electricity	330	346	361	356	355	329
Biomass	72	72	72	72	72	72
Indirect inputs	2 452	2 239	2 309	2 131	2 071	2 249
of which: Fertiliser	1 465	1 185	1 183	1 111	1 050	1 053
Pesticide	234	248	296	243	212	321
Tractor purchases	221	320	340	299	305	372
Animal feeds	531	485	490	478	504	503
Electricity generation(a)	70	304	301	287	268	357
Heat production (b)	72	72	74	100	112	145

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, co-firing of short rotation coppice with coal (641,400 ToE in 2007 from all biomass sources) is not included.

(b) Includes heat from farm waste digestion, straw and short rotation coppice

- 39** Energy used directly (for heating, lighting and power) by the agricultural industry is around 0.5 per cent of overall United Kingdom energy consumption. Direct energy use has fallen by 4.4 per cent in 2007, and by 38 per cent over 10 years.
- 40** Energy used indirectly in the production of agricultural inputs (for the manufacture of fertilisers, pesticides and machinery) is around 1.4 per cent of overall United Kingdom energy demand. The manufacture of fertilisers at 47 per cent is the most dominant indirect input of energy. Reductions in the use of fertilisers together with efficiency savings during manufacturing have led to a 31 per cent reduction in energy use for fertiliser over 10 years. Energy used in the manufacturing of pesticides, 14 per cent of the indirect energy use, increased 52 per cent in 2007 and 31 per cent over 10 years. The higher usage is due to weather conditions and increased pressure from diseases, and from an increase in cropping area.

Table 15.7 CO₂ emissions from direct and indirect energy consumption; United Kingdom

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units: Kt CO₂ e

	1997	2003	2004	2005	2006	2007
Total energy consumption	11 865	9 964	10 037	9 836	9 443	9 791
Direct energy	4 601	3 411	3 281	3 570	3 250	3 080
of which:						
Natural gas & coal	304	490	500	458	417	411
Oil products (inc petroleum)	2 392	931	718	1 067	797	768
Electricity	1 646	1 732	1 804	1 786	1 777	1 642
Biomass	259	258	259	259	259	259
Indirect inputs	7 265	6 553	6 756	6 267	6 193	6 710
of which:						
Fertiliser	3 396	2 745	2 742	2 578	2 436	2 442
Pesticide	720	703	838	689	620	941
Tractor purchases	872	938	997	876	895	1 091
Animal feeds	2 277	2 167	2 178	2 124	2 242	2 236

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 15.7 shows the estimated emissions of carbon dioxide (CO₂) equivalent associated with the energy consumption in table 15.6. The total emissions have fallen by 17 per cent over 10 years. Electricity accounts for over half of the direct energy emissions, whilst fertilisers and animal feeds account for 30 per cent and 23 per cent respectively of the indirect emissions.

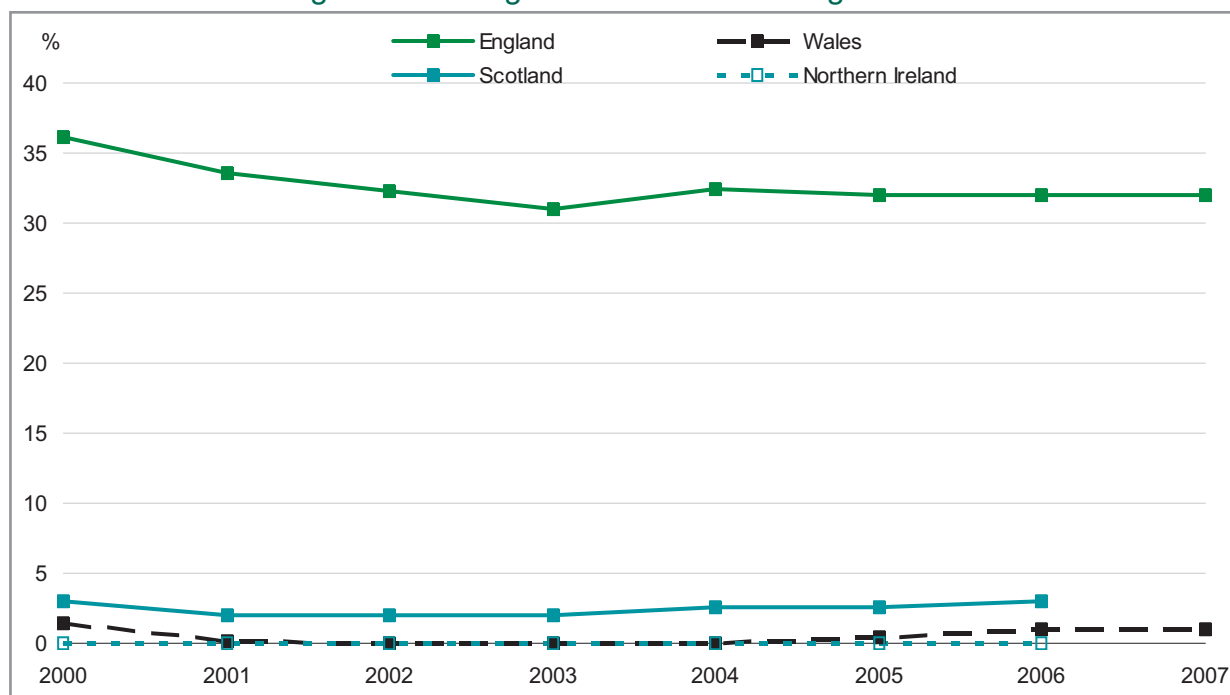
Water use

- 42** River and groundwater are important resources for agriculture. Water used for agriculture represents about 2.0 per cent of the total water abstracted. Agricultural use of water can have both positive and negative contributions to flooding, soil erosion and the recharge of aquifers. According to an Environment Agency report (2008) most of south east and eastern England is seriously water stressed. Although agriculture accounts for a relatively small proportion of the total water abstracted, much of the water used in agriculture is in the south and east of England.

Pollution

Water quality (charts 15.11, 15.12)

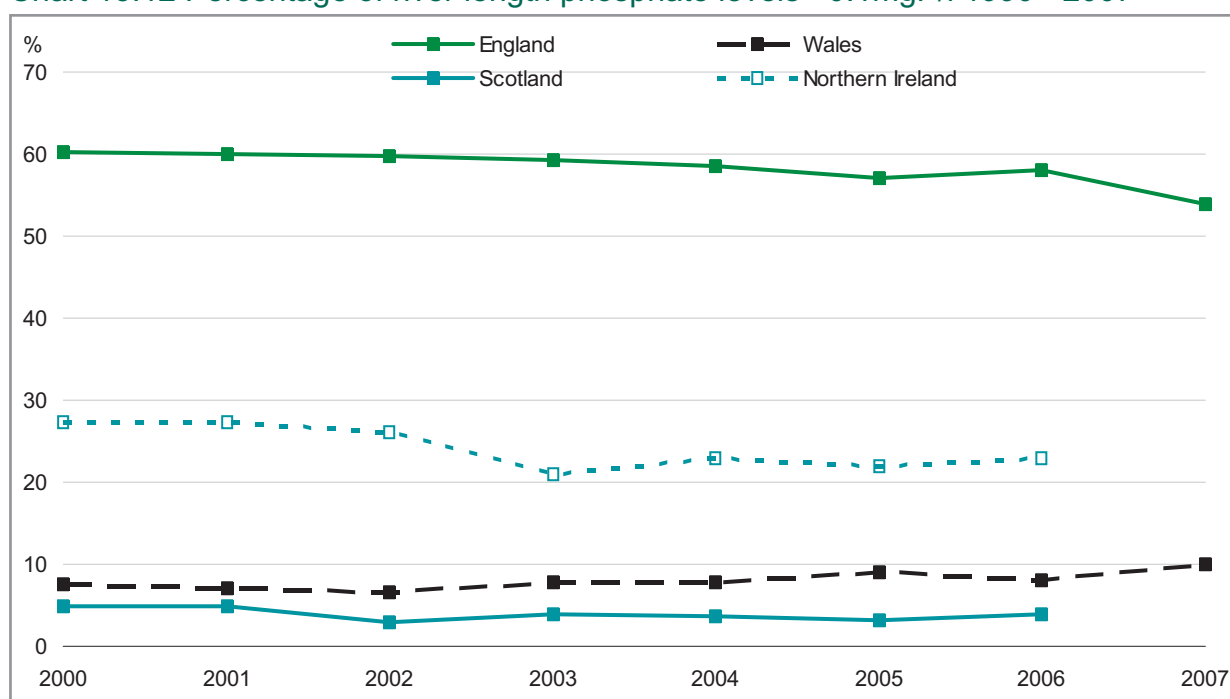
- 43** Farming is a significant source of water pollution, both diffuse, such as from fertiliser and pesticides spread on the land, and to a lesser extent from point sources such as runoff from livestock buildings. The key areas of concern are:
- nitrate pollution in surface and groundwater;
 - phosphorus 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 15.11 Percentage of river length nitrate levels >30mg NO₃/l 1990 - 2007

2008

- 44 Chart 15.11 shows the proportion of river lengths where nitrate levels exceed 30 mg NO₃ per litre. In Northern Ireland, Wales and Scotland these remain low. In England levels have fallen overall since 2000 (although 2004 shows an increase) reflecting the decrease in fertiliser use (chart 15.9 and paragraph 37). Agriculture accounts for around 60 per cent (ADAS report 2004) of the nitrate in rivers.

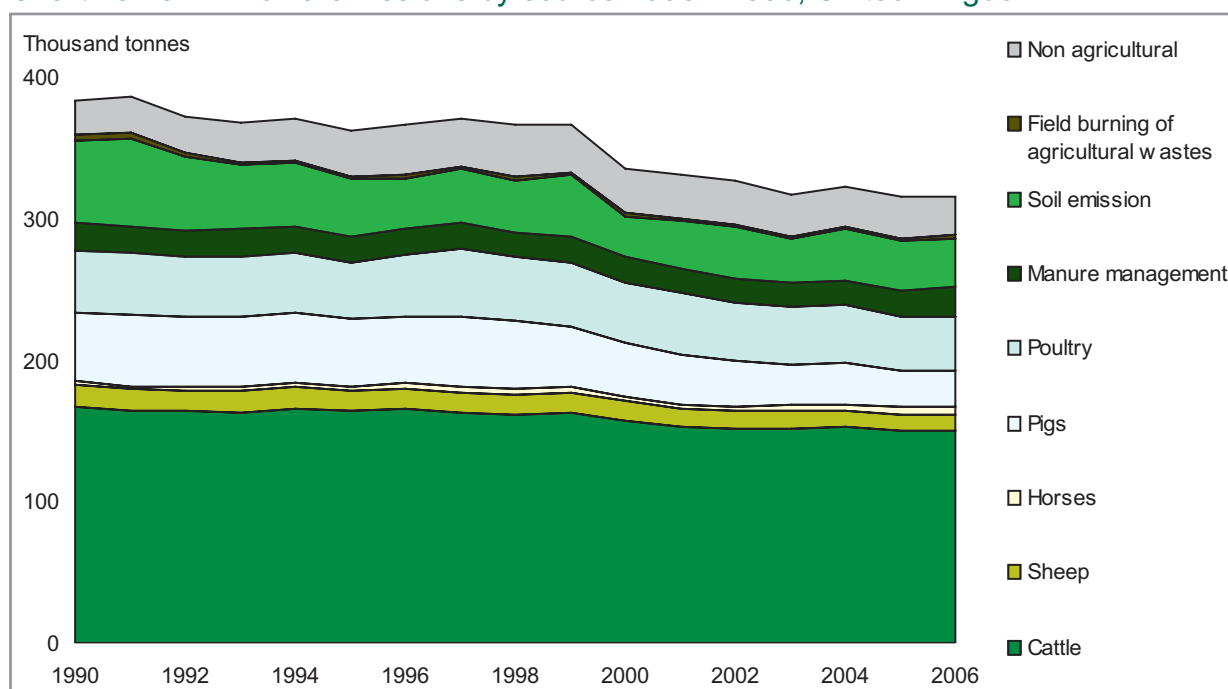
Chart 15.12 Percentage of river length phosphate levels >0.1mgP/l 1990 - 2007



- 45 Chart 15.12 shows the proportion of river lengths where phosphate levels exceed 0.1 mg per litre. 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/>.
- 46 The water quality monitoring used in these charts is being changed for the Water Framework Directive (WFD) and from 2007 there is no updated compatible data across the United Kingdom for nitrates and phosphates in water.

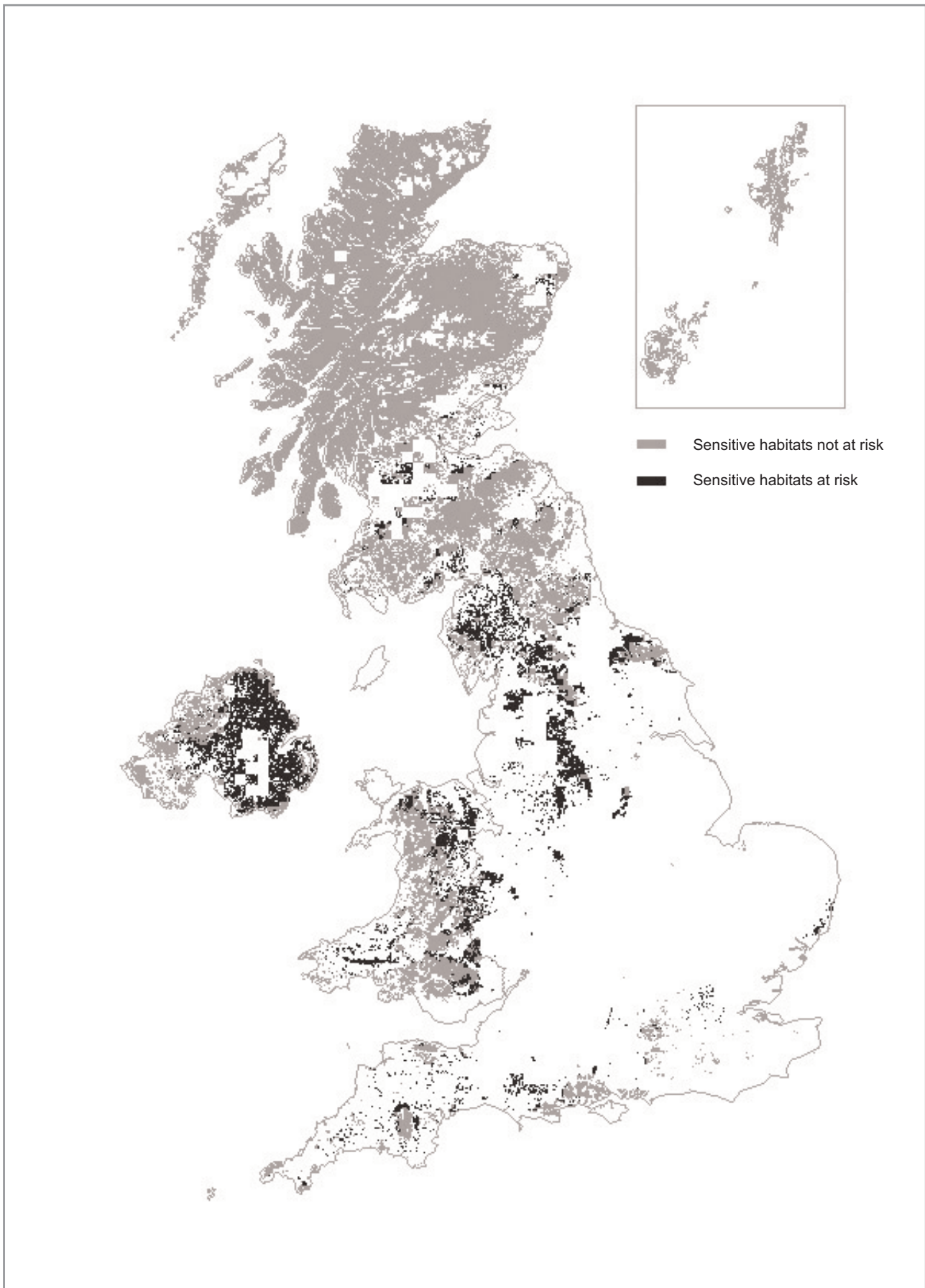
Air Quality (chart 15.13, map 15.2)

Chart 15.13 Ammonia emissions by source 1990 - 2006; United Kingdom



- 47 Chart 15.13 shows ammonia (NH_3) emissions by source. Emissions from agriculture have reduced by 13 per cent during the last 10 years and now account for 91 per cent of United Kingdom emissions. Emissions arise predominately from livestock housing and from the spreading of animal manure (each accounting for around a quarter of the total emission from agriculture), with the majority of emissions (52 per cent) associated with cattle. Inorganic nitrogen fertilisers are also a source of ammonia emissions, accounting for around 12 per cent 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 15.13. The trend for falling emissions over the last 10 years is largely due to declining livestock numbers and fertiliser use.
- 48 Many (semi-)natural habitats are naturally nitrogen limited and can be damaged by ammonia emissions by either, poor air quality locally, or deposited further afield by wind or rain. The nitrogen in the gas can damage sensitive terrestrial and aquatic habitats by enriching the soil or water (with nitrates) leading to loss of biodiversity. Ammonia also causes acidification which can affect aquatic and plant biodiversity. High concentrations of ammonia in the air can damage plants such as lichens, mosses and heathers.

Map 15.2 Sensitive habitats at risk from ammonia emissions



Source: Centre for Ecology & Hydrology

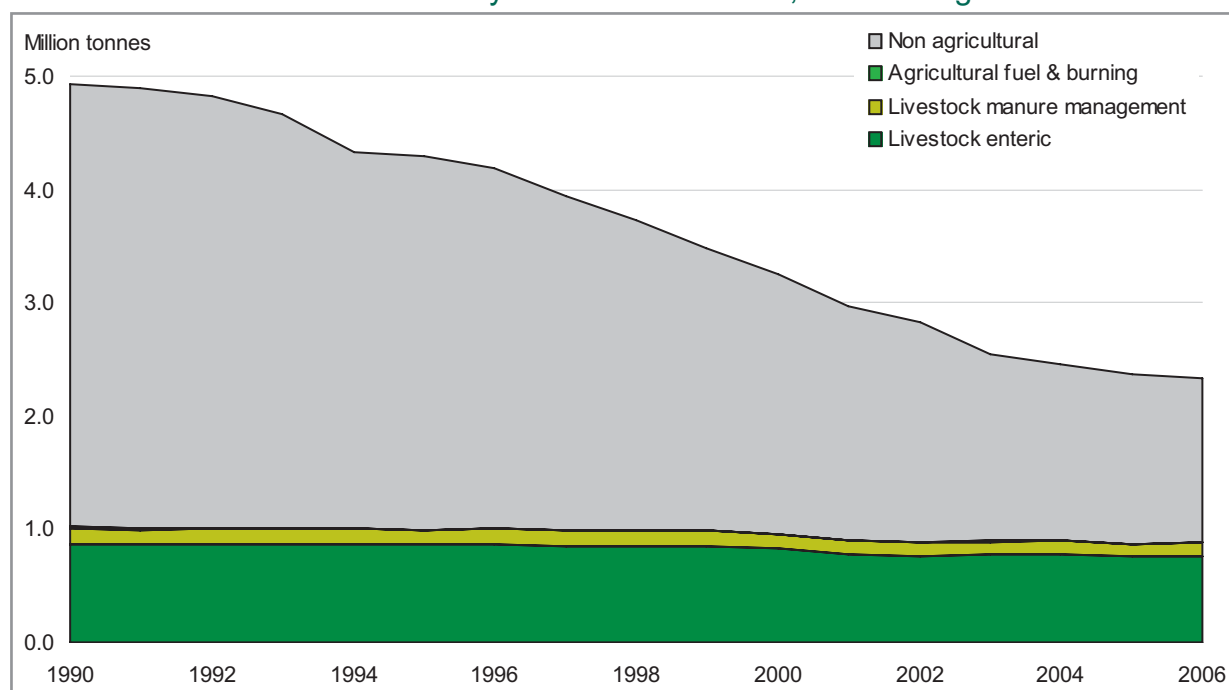
- 49 Species of plants in naturally nitrogen limited habitats such as moorland, heather, bog and infertile grassland, and upland freshwater lakes and rivers have adapted to low nitrate conditions. Ammonia deposition benefits other species that need more nitrogen, which can then invade the sensitive areas 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.
- 50 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>, <http://www.sepa.org.uk> and <http://www.doeni.gov.uk>.
- 51 Non-agricultural emissions dominate in areas of large populations.

Greenhouse gas emissions and climate change

Emissions (charts 15.14, 15.15)

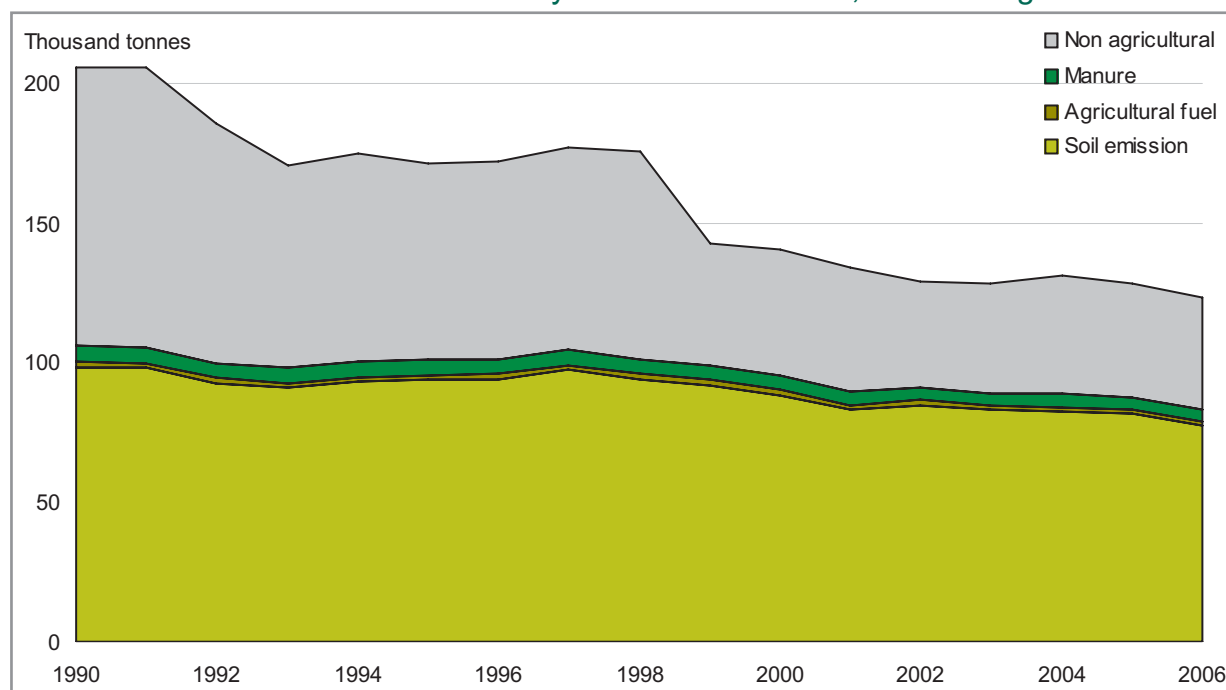
- 52 Emissions of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) are of concern as they are greenhouse gasses and contribute to climate change. Methane and nitrous oxide have relatively greater impacts on climate change with global warming potentials 21 and 310 times greater than carbon dioxide. Greenhouse gas emissions from agriculture account for around 7.0 per cent of total United Kingdom emissions. Carbon dioxide from agriculture accounts for less than 1.0 per cent of the total.

Chart 15.14 Methane emissions by source 1990 - 2006; United Kingdom



- 53 Chart 15.14 shows the United Kingdom methane (CH₄) emissions from agriculture and that from all other sources. Agriculture accounted for 38 per cent of these emissions in 2006. The main agricultural source of methane emissions is enteric fermentation in ruminating animals. There has been a 12 per cent fall over the last 10 years, reflecting a general reduction in livestock numbers over this period.

Chart 15.15 Nitrous oxide emissions by source 1990 - 2006; United Kingdom



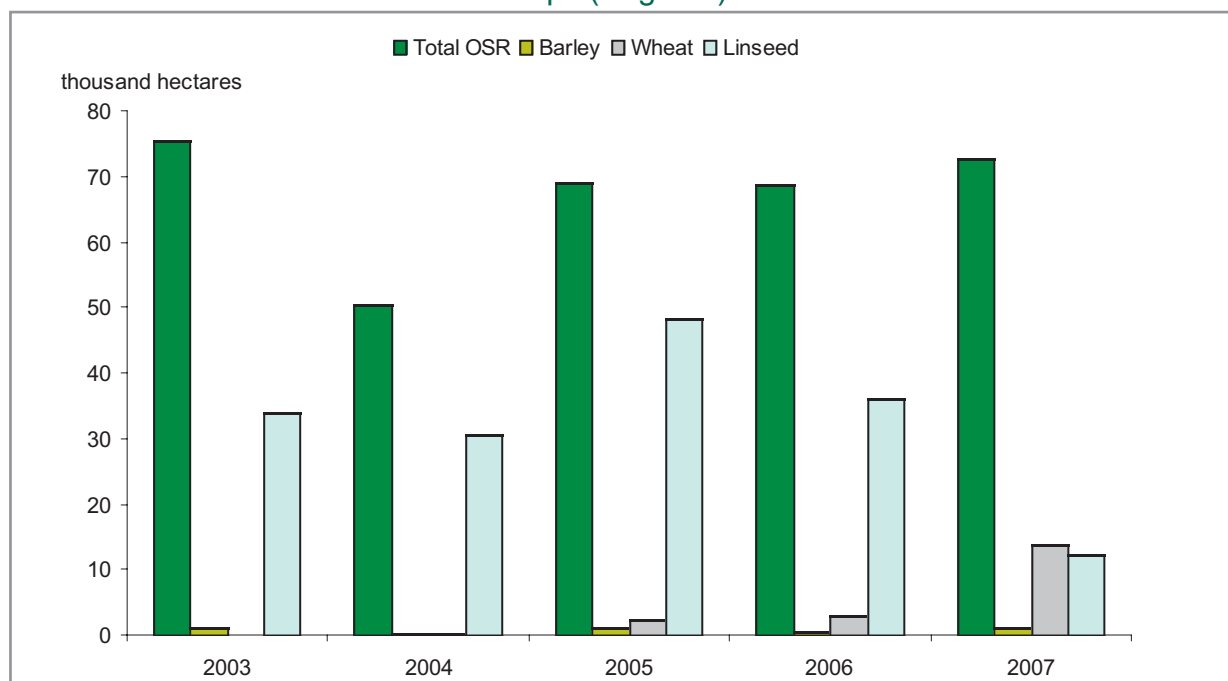
2008

- 54 Chart 15.15 shows the United Kingdom emissions of nitrous oxide (N_2O) from agriculture and that from all other sources. The main agricultural source of emissions of nitrous oxides is from the oxidation of the nitrogen in fertilisers, accounting for 68 per cent of all nitrous oxide emissions. The fall since the late nineties in these emissions reflects a reduction in fertiliser use (see charts 15.9 and 15.10 on fertiliser use).

Climate change - mitigation (charts 15.16, 15.17)

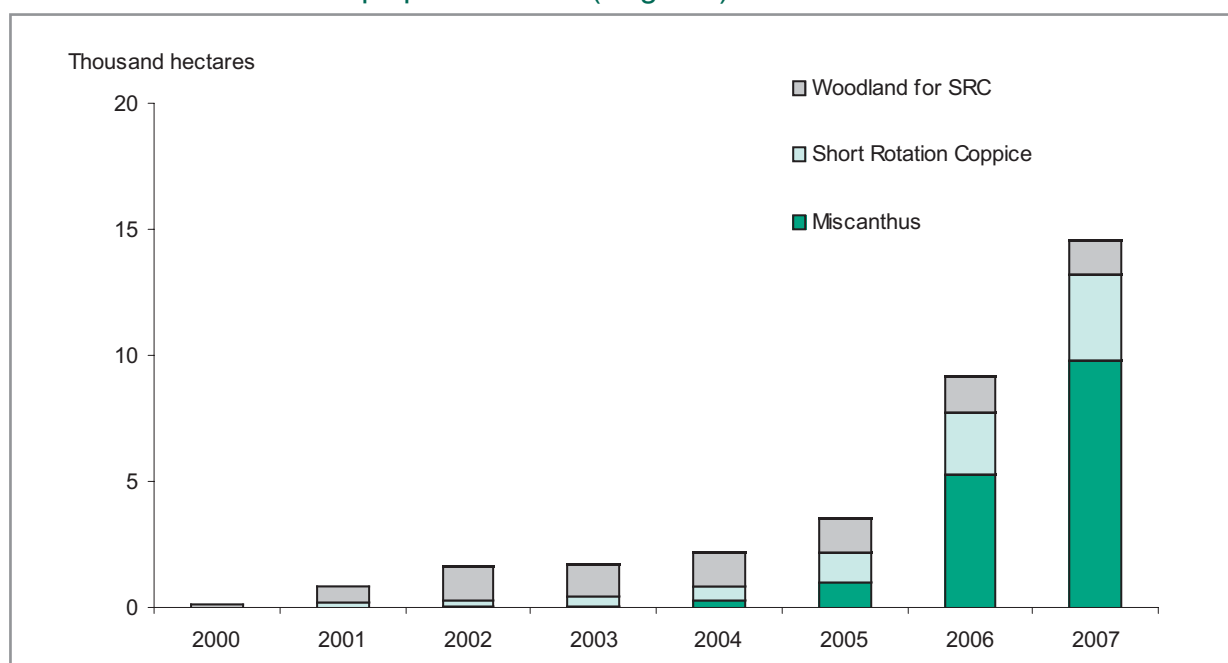
- 55 As noted above, agriculture accounts for around 7.0 per cent of the United Kingdom greenhouse gas emissions. Agriculture can contribute to reducing emissions, both by reducing those directly and indirectly produced by farming, but also by reducing emissions from other sectors. Some non food crops can be used to replace fossil fuels and the methane from waste can be used for heating or power instead of it increasing emissions from landfill. These different crops can have a visual impact on the landscape as well as an effect on the wild flora and fauna.
- 56 Renewable energy crops can be considered carbon neutral and when used as a substitute for fossil fuels, reduce greenhouse gas emissions. These include crops of miscanthus and short rotation coppice (SRC) of willow or poplar (usually for energy production) as well as oilseed rape (OSR), sugar beet and wheat (mainly oils or biofuels). Chart 15.16 shows the areas of crops grown mainly for biofuels and oil (England). In 2007 the industrial wheat was less than 1.0 per cent of the wheat crop in England, and industrial barley was 0.2 per cent of the total barley crop.

Chart 15.16 Area of biofuel and oil crops (England)



57 Chart 15.17 shows the cumulative area of biomass, short rotation coppice (SRC) and miscanthus, planted for energy production. The first cropping from SRC is in the 4th year and then every 3 years. Annual harvesting of miscanthus starts in the second year. The biomass and perennial crops will provide more permanent habitats for flora and fauna than annual crops.

Chart 15.17 Biomass crops planted area (England)



58 Crops grown as renewable resources for pharmaceuticals, fibres and oils, can substitute for minerals, reducing the dependence on finite resources. Small areas of speciality crops are often grown to contract. Annual crops include poppy, borage and sun flowers grown for pharmaceuticals or oils, flax and hemp are grown for fibre, paper, insulation or biocomposites (mainly used in the automotive sector). Perennial crops include chamomile, lavender and rosemary for pharmaceuticals or oils.

- 59** Anaerobic digestion breaks down digested matter to produce biogas which can be used as a renewable energy source, and a nutrient rich digestate which can be used as a fertiliser. As well as farm waste, anaerobic digesters can use supermarket and other food waste. These digesters can be small scale and suitable for use on farms.

Climate change - adaptation (charts 15.18, 15.19)

- 60** From the Farm Practices Survey 2008, 22 per cent of farmers regard climate change as a threat, 13 per cent as an opportunity and 42 per cent as both. Charts 15.18 and 15.19 show how farmers are responding to both the benefits or threats and what changes they are considering making. The full FPS reports can be found at: <https://statistics.defra.gov.uk/esg/publications/fps/default.asp>.

Chart 15.18 Benefits of climate change

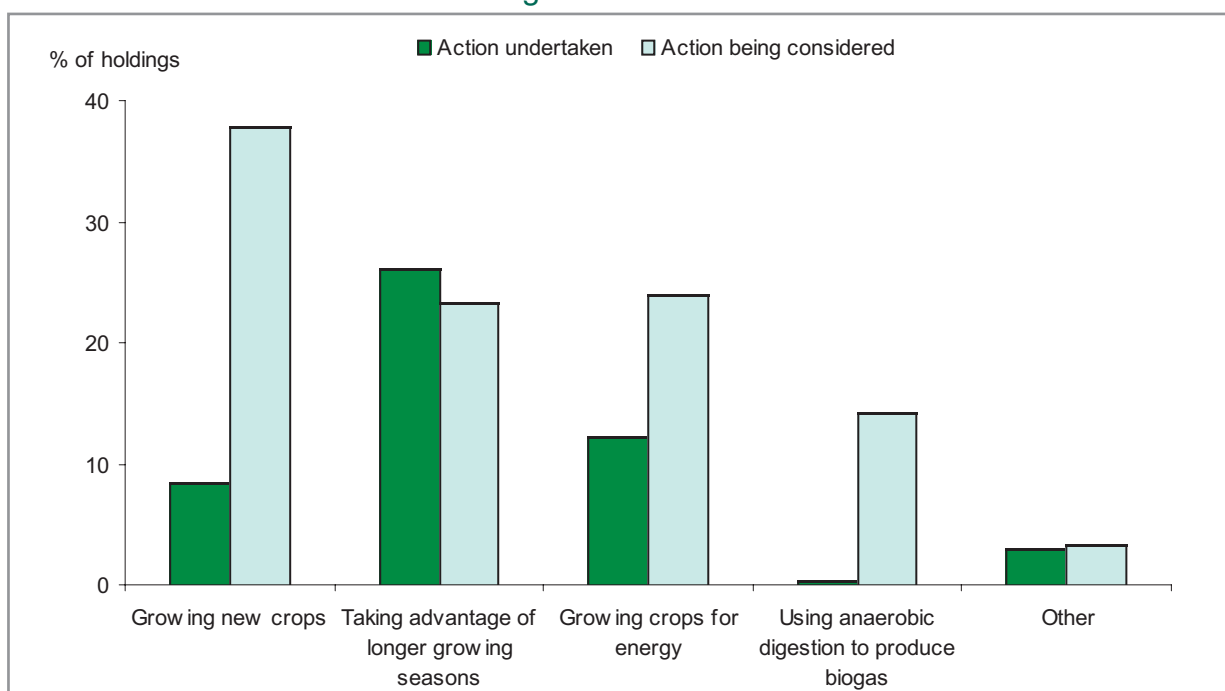
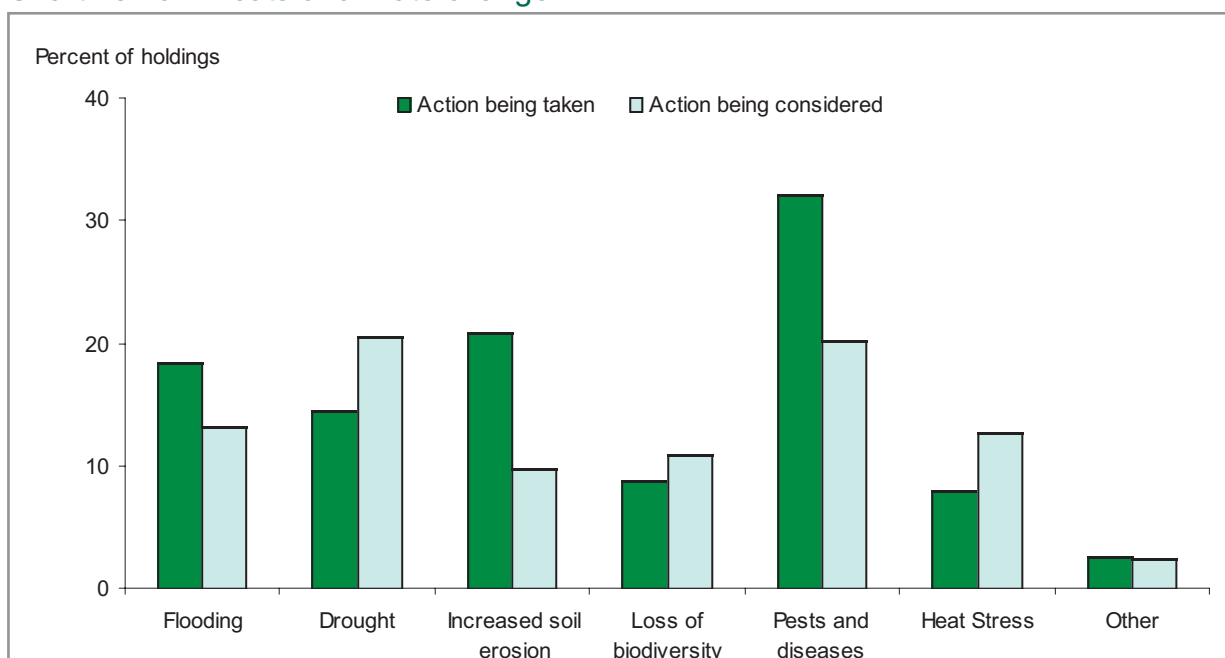


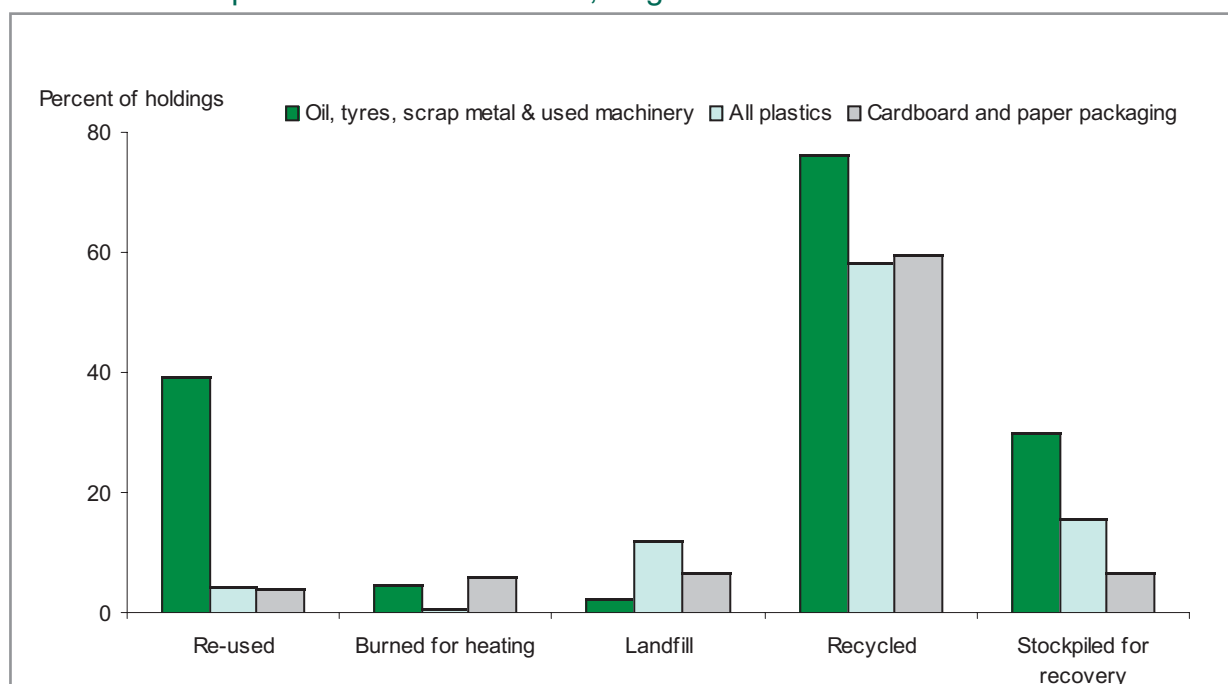
Chart 15.19 Threats of climate change



Waste (chart 15.20)

- 61** 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. An Environment Agency report (2006) estimates that annually there are 205 thousand tonnes of chemical and medical waste, over 220 thousand tonnes of material and equipment waste, 138 thousand tonnes of plastic waste and 9 thousand tonnes of paper and card waste.
- 62** From 2005 farming was no longer exempt from the United Kingdom's implementation of the EU's Waste Framework Directive. 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. The 2008 Farm Practices Survey (England) included questions on how farmers disposed of their farm waste. The number of farmers re-using or recycling any farm waste has remained relatively level and was 96 per cent in 2008. The numbers of farmers taking any waste to landfill sites has remained relatively level and was 15 per cent in 2008. Chart 15.20 shows how farmers (in England) disposed of their farm waste in 2008. The majority of farmers recycle or re-use waste or stockpile it for recovery. The full FPS reports can be found on the Defra website at: <https://statistics.defra.gov.uk/esg/publications/fps/default.asp>

Chart 15.20 Disposal of farm waste 2008; England



- 63** 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 39 and table 15.6).

Other statistics and data sources

Agricultural Change and Environment Observatory

- 64** The Agricultural Change and Environment Observatory was initiated in response to the 2003 reforms of the Common Agricultural Policy (CAP) and is a major 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 as well as economic, statistics and social research 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.
- 65** 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. The Observatory maintains a suite of indicators (published on the Observatory's website) covering key elements at each stage of the framework. Major areas of research during 2008 have included projects on agricultural specialisation, monitoring the impact of zero per cent set-aside, understanding behaviours in a farming context and investigating opportunities to link the Countryside Survey 2007 to key agricultural drivers of change.
- 66** 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 will include evaluating the impact of cross compliance as well as changes arising in the wake of the recent CAP Health Check (such as the abolition of set-aside) and changes to Agri-Environment regimes. The Observatory will also continue 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: <https://statistics.defra.gov.uk/esg/ace/index.htm>

Strategies for sustainable agriculture

- 67** 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.scotland.gov.uk/Publications/2006/03/01142456/0> In Wales "a Sustainable Farming and Environment: Action towards 2020" was published in July 2007: <http://wales.gov.uk/topics/environmentcountryside/farmingandcountryside/farming/sustainablefarming2020/?land=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

- 68** 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.
- 69** There are 68 national indicators to support the Government's Sustainable Development Strategy <http://www.defra.gov.uk/sustainable/government/>. 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
- 70** The United Kingdom biodiversity indicators show changes in aspects of biodiversity such as the population size of important species or the area of land managed for wildlife. They can be found at: <http://www.jncc.gov.uk/page-4229>.

Valuing environmental impacts of agriculture (table 15.8)

- 71** 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.
- 72** 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 by Jacobs to develop this framework, examine some of the conceptual issues and fill in some of the identified gaps in data. This report was published April 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. Table 15.8 shows the account for the United Kingdom from 2000. The majority of the valuations use annual flows, whereas the greenhouse gas emissions and air quality valuations are based on present values and so are listed separately in the table. This table has been developed since the report with improved data sources, estimates for the UK where appropriate and a time series from 2000 to 2007. Further information about the changes can be found on the website.
- 73** 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) will be available at:
<http://statistics.defra.gov.uk/esg/reports/envacc/default.asp>
- 74** For any further enquiries on this chapter, please contact Barbara Norton, 01904 455577, Barbara.Norton@defra.gsi.gov.uk

Table 15.8 Environmental Accounts for Agriculture 2000 - 2007; United Kingdom

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£ million			2000	2001	2002	2003	2004	2005	2006	2007
Benefits										
Landscape	<i>semi-natural habitats</i>		463.1	472.8	486.5	489.8	506.8	526.7	562.5	577.5
	<i>linear features</i>		25.3	25.6	26.0	26.7	27.4	28.1	28.9	30.1
	Total Landscape		488.3	498.5	512.5	516.5	534.2	554.8	591.4	607.5
Biodiversity	<i>Habitats (A/SSSIs)</i>		247.4	275.3	303.5	336.4	385.4	417.8	461.0	504.6
	<i>Species</i>		535.4	542.3	548.3	565.0	572.2	583.5	595.2	586.3
	Total Biodiversity		782.7	817.6	851.8	901.4	957.7	1 001.3	1 056.2	1 090.8
Other benefits	<i>Waste sink</i>		16.3	22.2	23.0	25.6	28.1	34.1	35.1	36.7
Total benefits			1 287.4	1 338.3	1 387.3	1 443.5	1 520.0	1 590.1	1 682.8	1 735.0
Damages/costs										
Annual flows										
Water quality	<i>Estuarine</i>		3.6	3.4	3.4	3.3	3.2	3.2	3.3	3.5
	<i>Lake</i>		22.8	23.2	23.6	24.3	25.0	25.7	26.6	27.7
	<i>Marine</i>		2.4	2.5	2.1	0.9	1.3	1.0	0.4	2.3
	<i>River</i>		66.3	63.4	67.0	70.2	71.3	68.3	66.4	69.3
Water pollution	<i>pollution incidents</i>		1.1	0.8	0.6	0.8	0.7	0.4	0.4	0.4
Water abstraction	<i>Abstraction</i>		52.9	44.5	45.3	56.8	45.3	38.4	39.6	41.3
Drinking water	<i>clean up costs</i>		79.4	102.9	145.9	151.7	130.7	118.9	116.8	131.8
Flooding	<i>flooding from agriculture</i>		201.0	204.6	207.9	214.0	220.3	226.6	233.8	243.8
Total water			429.5	445.3	495.9	522.0	497.8	482.6	487.3	520.1
Other damages	<i>Waste</i>		7.0	7.2	7.3	7.5	7.7	7.9	8.2	8.5
	<i>Soil erosion</i>		9.1	9.3	9.4	9.7	10.0	10.2	10.6	11.0
Damages (annual flows)			445.7	461.8	512.6	539.2	515.5	500.8	506.1	539.6
Present values										
GHG	<i>Carbon dioxide</i>		71.8	77.1	80.9	87.2	91.9	95.9	98.8	103.1
	<i>Methane</i>		307.2	305.9	320.6	349.0	376.9	397.4	433.8	452.4
	<i>Nitrous oxide</i>		459.3	454.0	487.7	518.0	556.3	596.6	608.4	634.4
	<i>Land use change</i>		0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	Total GHG		838.4	837.1	889.4	954.4	1 025.2	1 090.0	1 141.1	1 190.1
Air quality	<i>Ammonia</i>		432.8	435.1	436.1	435.2	459.4	459.2	477.1	497.5
	<i>other air emissions</i>		162.9	156.7	157.7	154.7	149.1	142.0	130.8	136.4
Total air quality			595.6	591.9	593.8	589.9	608.5	601.2	607.8	633.9
Damages - present values			1 434.1	1 429.0	1 483.2	1 544.2	1 633.7	1 691.2	1 749.0	1 824.0

(a) For further details of methodologies and data sources see: <http://statistics.defra.gov.uk/esg/reports/envacc/default.asp>

Chapter 16 Key Statistics for EU Member States

2008

Summary

In 2008:

- income from agricultural activity in the United Kingdom as measured by Indicator A was 48 per cent higher than in 2000, while for the EU15 it was 0.6 per cent higher;

In 2008, 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 2007, of the EU27 Member States:

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

Between 2000 and 2008:

- producer prices for crop products rose by 67 per cent in the United Kingdom and by 31 per cent in the EU25;
- producer prices for animals and animal products rose by 52 per cent in the United Kingdom and by 20 per cent in the EU25;
- purchase prices for the means of agricultural production rose by 64 per cent in the United Kingdom and by 45 per cent in the EU25.

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.

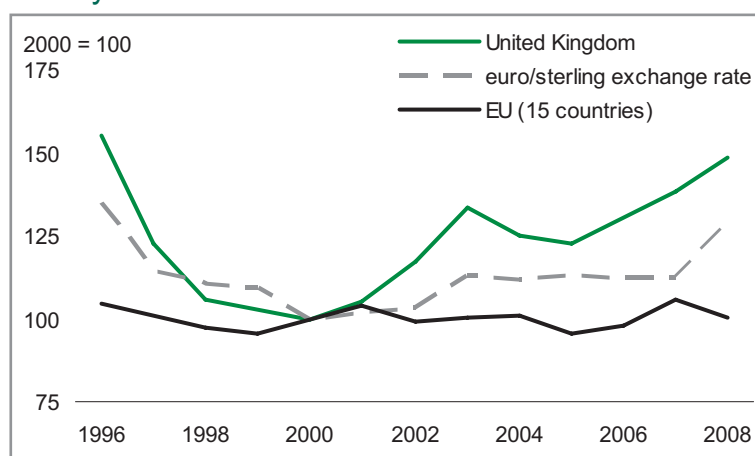
Incomes

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.

4 Incomes from agricultural activity in the United Kingdom as measured by Indicator A have risen by 48 per cent since 2000 after falling in 2004 and 2005 while those in the EU15 are 0.6 per cent higher than in 2000. Incomes in the United Kingdom are influenced by the euro/sterling exchange rate.

Chart 16.1 Indicator A of the income from agricultural activity



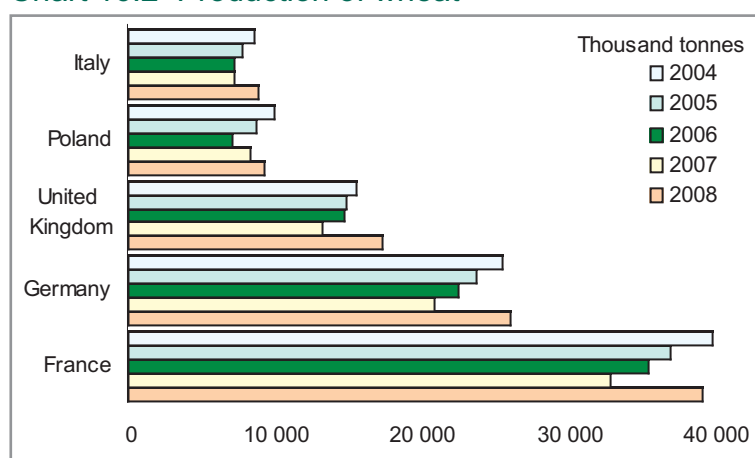
Agricultural products

Wheat

5 Chart 16.2 shows the quantities of wheat produced by the top five producing Member States in 2004 to 2008. This is the production of common wheat and durum wheat.

6 In 2008, the United Kingdom ranked third in the quantity of wheat produced behind France and Germany having produced about 12 per cent of the total for the EU27.

Chart 16.2 Production of wheat

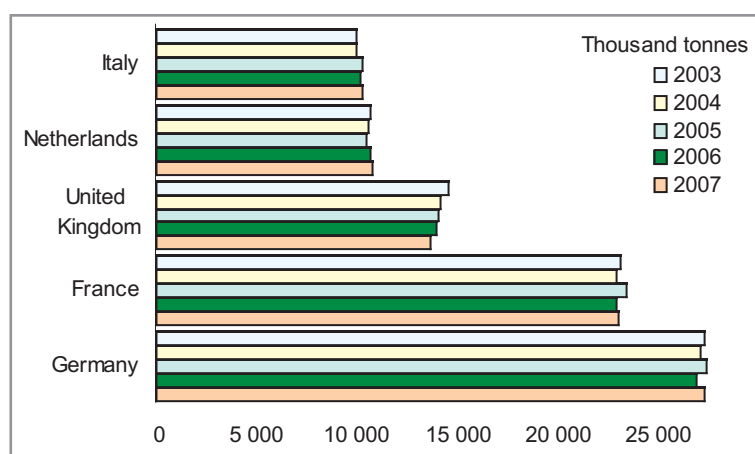


Cows' milk

7 Chart 16.3 shows the proportions of cows' milk collected by the top five producing Member States in 2003 to 2007. This is cows' milk collected from farms by approved dairies and excludes milk consumed on farm, sold direct to consumers and used for cattle feed.

8 In 2007, the United Kingdom ranked third in the quantity of cows' milk collected behind Germany and France having produced about 10 per cent of the total for the EU27.

Chart 16.3 Production of cows' milk



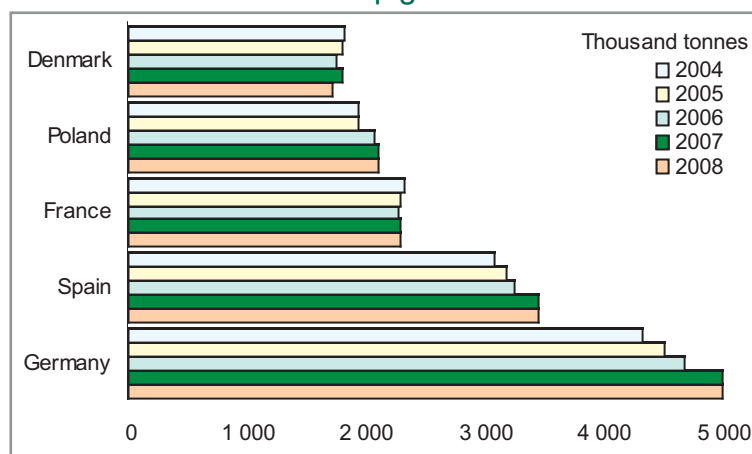
Pigmeat

2008

9 Chart 16.4 shows the quantities of pigmeat produced by the top five producing Member States in 2004 to 2008. This is the total carcass weight of pigs slaughtered in slaughterhouses and on the farm whose meat is declared fit for human consumption.

10 In 2008, 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

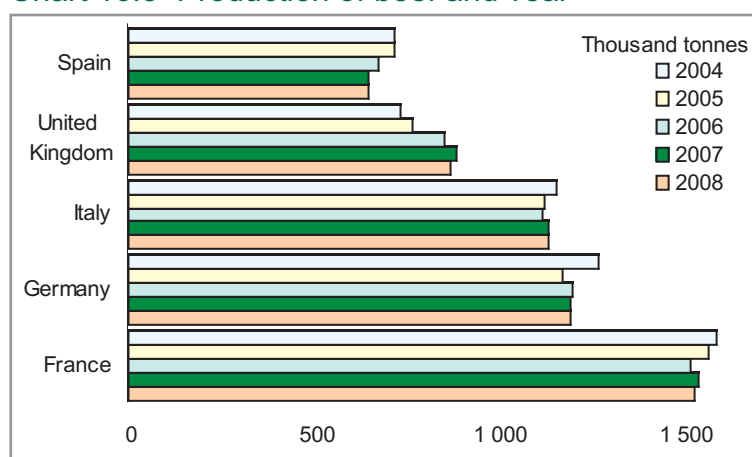


Beef and veal

11 Chart 16.5 shows the proportions of beef and veal produced by the top five producing Member States in 2004 to 2008. This is the carcass weight of bovine animals (calves, bullocks, bulls, heifers and cows) slaughtered in slaughterhouses and on the farm whose meat is declared fit for human consumption.

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

Chart 16.5 Production of beef and veal

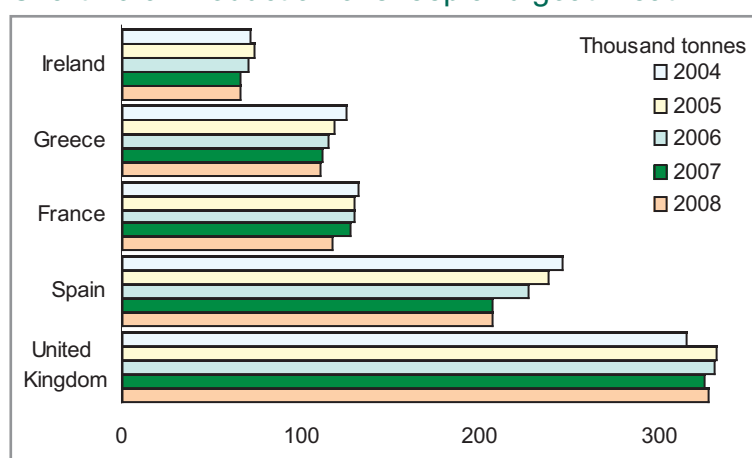


Sheep and goat meat

13 Chart 16.6 shows the proportions of sheep and goat meat produced by the top five producing Member States in 2004 to 2008. This is the carcass weight of sheep, including lambs, and goats slaughtered in slaughterhouses or elsewhere whose meat is declared fit for human consumption.

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

Chart 16.6 Production of sheep and goat meat



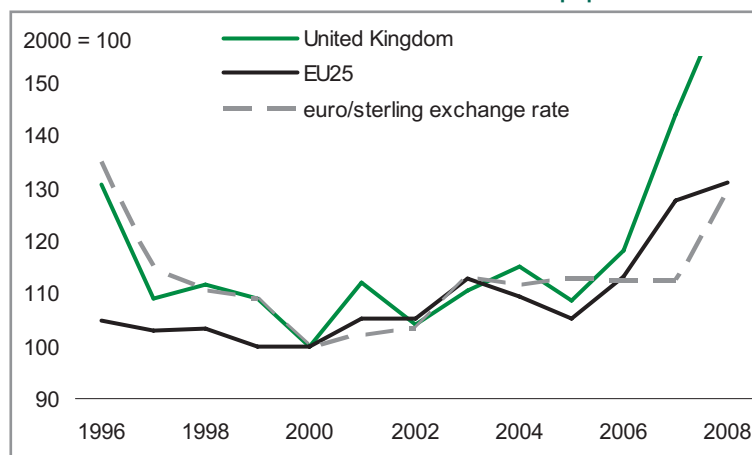
Price indices

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

Chart 16.7 Producer Price Indices: Crop products

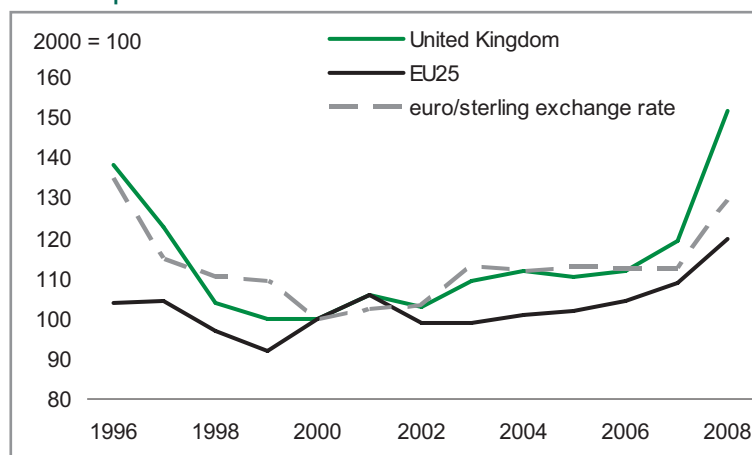


Animals and animal products

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

Chart 16.8 Producer Price Indices: Animals and animal products

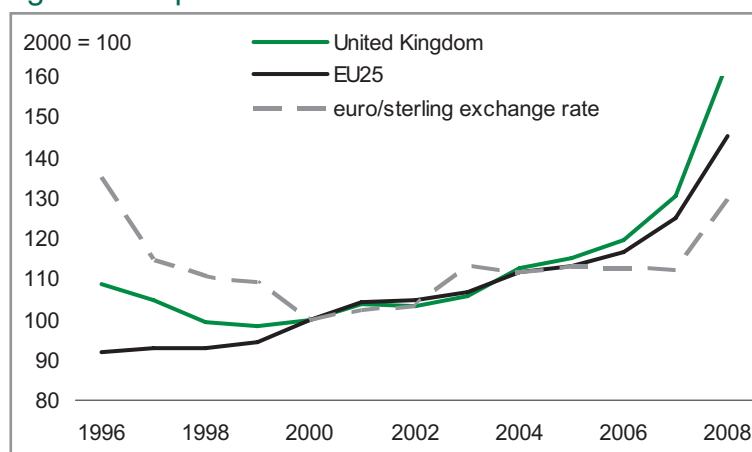


Total means of agricultural production

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

Chart 16.9 Purchase Price Indices: Total means of agricultural production



AGRICULTURE IN THE UNITED KINGDOM 2008

Agriculture in the United Kingdom 2008 is the twenty-first 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.