Agriculture in the United Kingdom 2004

Produced by:

Department for Environment, Food and Rural Affairs

Scottish Executive Environment and Rural Affairs Department

Department of Agriculture and Rural Development (Northern Ireland)

Welsh Assembly Government, The Department for Environment, Planning and Countryside

LONDON: THE STATIONERY OFFICE

Published by The Stationery Office (TSO) and available from:

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First published 2005

ISBN 0 11 243086 4

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Printed in the United Kingdom for The Stationery Office

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Preface

Legal basis

1 Agriculture in the United Kingdom 2004 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 2004 are provisional because information for 2004 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 (UK), 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 Customs and Excise.

(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. From 1 May 2004, the 25 Member States are: Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

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

Website

6 This publication and other Defra statistics can be found at http://statistics.defra.gov.uk/esg/. Further statistics of the Devolved Administrations can be found at:

- Scottish Executive - www.scotland.gov.uk/Topics/?pageID=62
- Department of Agriculture and Rural Development, Northern Ireland - www.dardni.gov.uk/econs/stats.htm
- Welsh Assembly Government - www.wales.gov.uk/keypubstatisticsforwales/index.htm

Chapter 1 Key events in 2004

Total Income from Farming

1 Total Income from Farming fell by 5.4 per cent at current prices to £3.0 billion, which equates to a fall of 8.1 per cent in real terms. Total Income from Farming per full-time person equivalent fell by 4.7 per cent at current prices, a fall of 7.5 per cent in real terms, to £14,800. Both indicators show a fall for the first time since 2000.

Weather

2 The weather is a key factor in the profitability of farming, particularly for arable farmers and growers. 2004 will be remembered for the very wet autumn when many areas received well over double their average rainfall:

- The wet autumn delayed combining and impacted on the quality of the wheat crop, particularly in the north and east of England, while farmers costs increased as much of the crop needed drying.
- Variable weather led to disease problems for root vegetables while wet weather hindered the planting and drilling of many brassica crops.
- Wet weather at key times increased disease and wastage problems for growers of plants and flowers.
- Planting of potatoes was delayed due to wet weather and rain during the autumn caused some disease, caused fields to become waterlogged and interrupted the maincrop harvest. The crop benefited from welcome rain during the summer.
- Better summer grazing conditions than the previous year helped to increase average carcase weights for sheep but Finishing times for cattle were delayed due to the wet and cold grazing season.
- Cooler weather led to sow conception rates improving after they fell in 2003 due to the hot summer in that year.

CAP Reform

3 The Agricultural Departments for England, Northern Ireland, Scotland and Wales made announcements in February 2004 for the implementation of the Common Agricultural Policy (CAP) reform agreed by the EU Agricultural Council in 2003. In essence, these were:

- In England, a flat rate area based system of payment will be phased in over a transitional period, ending in 2012.
- In Scotland, the single farm payment will be based on subsidy receipts during 2000 to 2002 - the 'historic' basis.
- In Northern Ireland, a static, vertical hybrid model of decoupling will be introduced, comprising a flat rate area based component and a 'historic' component.
- In Wales, the 'historic' basis will be adopted for the single farm payment.
- Further announcements on the detail were made throughout the year. The Single Farm Payment was introduced on 1 January 2005, replacing all major CAP payment schemes with one single payment.

EU enlargement

4 Ten new Member States - Cyprus, Malta, Hungary, Poland, the Slovak Republic, Latvia, Estonia, Lithuania, the Czech Republic and Slovenia – joined the European Union on 1 May 2004, the 5th enlargement of the EU since 1957. At a European Council summit on 16-17 December, the 25 EU leaders formally agreed the accession to the EU of Bulgaria and Romania, which is expected in 2007. It was also agreed to open accession negotiations with Croatia and Turkey in 2005.

New EU Commissioner for agriculture and rural affairs

5 Mrs Mariann Fischer Boel took up the post of Agriculture and Rural Development Commissioner for the European Union in November 2004, following Franz Fischler who had been the Agriculture Commissioner since 1995.

WTO negotiations

6 Following the 5th meeting of the World Trade Organisation (WTO) Ministerial Conference in Cancún, Mexico, in September 2003, which concluded without agreement, negotiations continued and, in August 2004, WTO Member Governments approved a package of framework and other agreements in the Doha Development Agenda. This paved the way for the elimination of all forms of farm export subsidies, for enhanced trading opportunities for all countries and more equitable rules for global trade.

Chapter 2 Farming income; agriculture and food in the economy

Key Findings

In 2004:

- Total Income from Farming fell by 5.4 per cent, or 8.1 per cent in real terms, to £3.0 billion.
- Total Income from Farming per full-time person equivalent fell by 4.7 per cent in current prices, or 7.5 per cent in real terms, to £14,800.
- Gross value added for agriculture decreased by 0.6 per cent.
- Incomes are expected to have fallen for all farm types except dairy and specialist poultry.
- Eurostat Indicator A (net value added at factor cost per full-time person equivalent) was forecast to increase by 3.3 per cent for the European Union as a whole in 2004.
- The United Kingdom ranks third behind the Netherlands and Denmark with an average of 38,400 euros gross value added per full-time person equivalent.
- Agriculture's share of the workforce in the United Kingdom is 1.8 per cent.
- The proportion of part-time workers has risen from about 25 per cent in the 1980s to 50 per cent of the total.
- Consumers' expenditure on food, drink and catering services amounted to £152 billion.
- The agri-food sector provided 3.8 million jobs, just under 15 per cent of the total workforce.
- Food prices have risen by 11 per cent since 1995 while prices of all items have risen by 25 per cent.
- Farmers' share of a basket of food staples is estimated to have fallen by 25 per cent between 1988 and 2004.

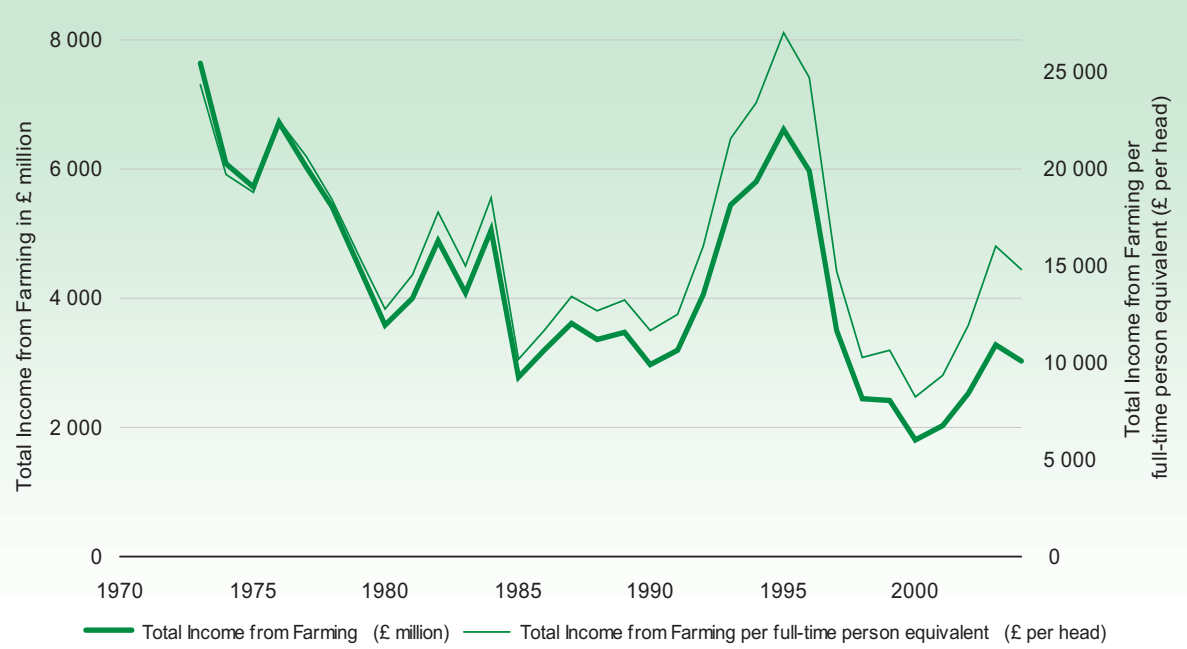
Long-term trends in farming income (Chart 2.1)

1 In 2004, Total Income from Farming in the United Kingdom is estimated to have fallen by 8.1 per cent in real terms. It is about 70 per cent above the low point in 2000 and 50 per cent below the peak 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 stylised 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.

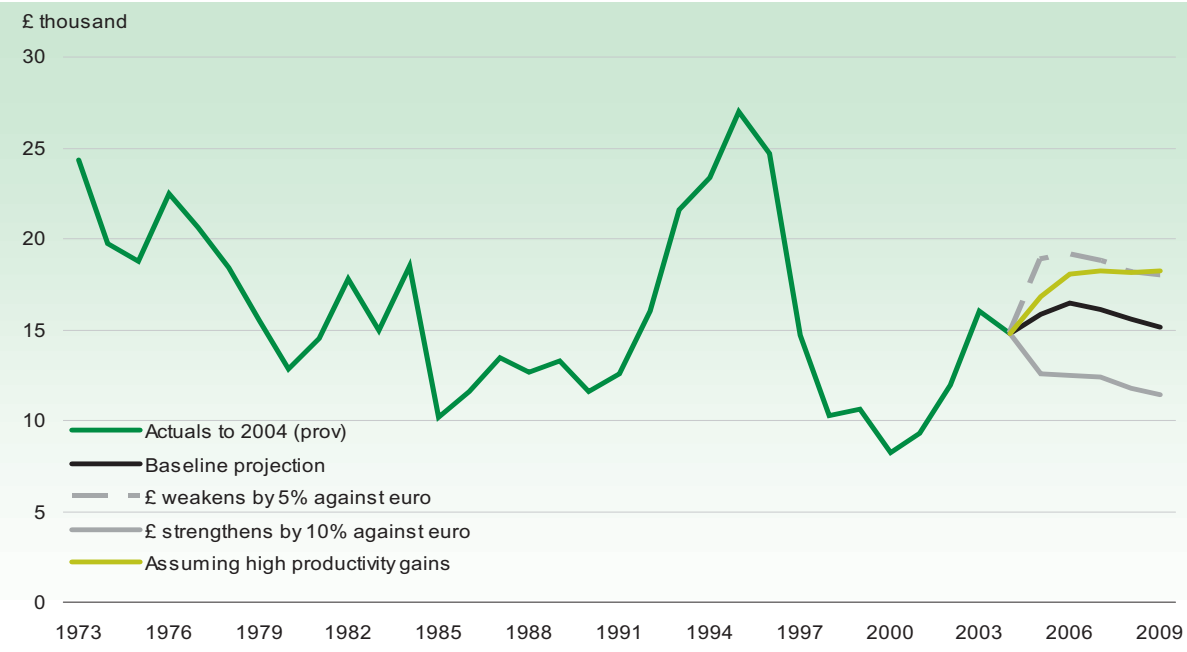
Chart 2.1 UK income trends in real terms at 2004 prices



source: Defra website, http://statistics.defra.gov.uk/esg/

3 The recovery projected for 2005 and 2006 is based on the expectation that energy prices, though still relatively high, will fall below their peak in 2004. The projections also assume a recovery from the poor quality of the harvest in 2004. A slight downward trend in the baseline projection thereafter is influenced by an expectation of lower prices. The projections take account of de-coupling, modulation and Rural Development Programmes, environmental regulations, the single farm payment and cross-compliance. The baseline projection in chart 2.2 assumes an exchange rate of 67 pence per euro. Projections are also provided to illustrate the effects of further

Chart 2.2 UK Total Income from Farming in real terms at 2004 prices per full-time person equivalent up to 2009



source: Defra website, http://statistics.defra.gov.uk/esg/

movements in the exchange rate. The exchange rate scenarios shown illustrate the effects of a 5 per cent weakening of the pound against the euro, which approximates to the favourable 2003 rate, and a 10 per cent strengthening, which approximates to the high exchange rate of 2000.

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 (France, Denmark, the Netherlands and Belgium). This will remain a challenging path for agriculture in the United Kingdom to follow, but if achieved would give a further rise in income per head of around one-fifth relative to the baseline position.

Summary measures including Total Income from Farming (Table 2.1)

5 Net value added at factor cost includes all subsidies, some of which are not included in output, for example arable area payments for land set-aside and payments through agri-environment schemes. It makes no allowance for interest, rent or labour costs. In 2004, net value added at factor cost was £5.8 billion, 0.4 per cent lower than in 2003 (3.3 per cent in real terms).

Table 2.1 Summary measures from the UK aggregate agricultural account

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

£ million (unless otherwise specified) Calendar years

Year	Net value added at factor cost	Income from farming				Cash flow from farming
		Total Income from Farming	Compensation of employees	Income from agriculture of total labour input	Total Income from Farming per AWU of entrepreneurial labour (a)	
		A	B	A + B	(£)	
1995	7 870	5 271	1 836	7 107	21 600	5 094
1996	7 539	4 877	1 881	6 757	20 200	4 891
1997	5 767	2 960	1 930	4 890	12 400	3 200
1998	5 036	2 122	1 975	4 097	9 000	2 832
1999	5 011	2 148	2 029	4 177	9 400	2 995
2000	4 392	1 647	1 893	3 540	7 500	2 701
2001	4 643	1 892	1 943	3 835	8 700	3 926
2002	5 059	2 379	1 958	4 337	11 300	2 557
2003	5 869	3 186	1 916	5 102	15 500	3 573
2004 (provisional)	5 843	3 014	2 004	5 018	14 800	3 100
In real terms, 2004 prices		A	B	A + B	(£)	
1995	9 853	6 599	2 299	8 898	27 000	6 377
1996	9 217	5 962	2 299	8 261	24 700	5 980
1997	6 835	3 508	2 287	5 795	14 700	3 793
1998	5 771	2 432	2 264	4 696	10 300	3 246
1999	5 655	2 424	2 290	4 714	10 600	3 381
2000	4 814	1 805	2 075	3 880	8 200	2 961
2001	4 999	2 037	2 091	4 128	9 300	4 226
2002	5 360	2 521	2 074	4 595	12 000	2 709
2003	6 042	3 281	1 972	5 253	16 000	3 678
2004 (provisional)	5 843	3 014	2 004	5 018	14 800	3 100

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

6 Total Income from Farming in the United Kingdom in 2004 is estimated to have fallen by 5.4 per cent in current prices, or by 8.1 per cent in real terms, to £3.0 billion. It 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 and 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, was 4.6 per cent higher (1.6 per cent in real terms) than in 2003 as a result of slight increases in the number of paid workers and average wages. Income from agriculture of total labour input, which is the sum of Total Income from Farming and compensation of employees, fell by 1.6 per cent or 4.5 per cent in real terms. Total Income from Farming per full-time person equivalent ("Total income from farming per AWU of entrepreneurial labour" in table 2.1) is estimated to have fallen by 4.7 per cent in current prices, or by 7.5 per cent in real terms, to £14,800.

8 Cash flow from farming fell by 13 per cent, or 16 per cent in real terms, to £3.1 billion. Cash flow reflects sales rather than production and expenditure on gross fixed capital formation rather than depreciation of capital assets. It includes capital transfers paid to the industry in exchange for assets.

Summary measures by United Kingdom countries (Table 2.2)

9 Table 2.2 shows the main indicators for the agricultural industries in England, Northern Ireland, Scotland and Wales in 2004. In 2003, England and Wales accounted for roughly 80 per cent of the United Kingdom's Total Income from Farming measure; Scotland accounted for about 15 per cent and Northern Ireland accounted for about 5 per cent.

10 The two measures "Agriculture's share of total regional gross value added" and "Agriculture's share of total regional employment" give an indication of the relative importance of the agricultural industry to each country. Agriculture's share of total gross value added was greatest in Northern Ireland where it contributed 2.3 per cent, and least in England and Wales where it contributed 0.7 per cent. Similarly, agriculture's share of employment was greatest in Northern Ireland where it accounted for 6.8 per cent, and least in England and Wales where it accounted for 1.4 per cent.

Table 2.2 Summary measures by country in 2004

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

	Gross output (a)	Intermediate consumption	Gross value added at basic prices	Total Income from Farming	Agriculture's share of total regional gross value added at basic prices	Agriculture's share of total regional employment (b)
	£ million	£ million	£ million	£ million	%	%
United Kingdom	16 907	9 002	7 905	3 014	0.8	1.8
England & Wales	13 456	7 110	6 346	2 336	0.7	1.4
Scotland	2 164	1 121	1 043	505	1.3	2.7
Northern Ireland	1 287	771	516	173	2.3	6.8

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

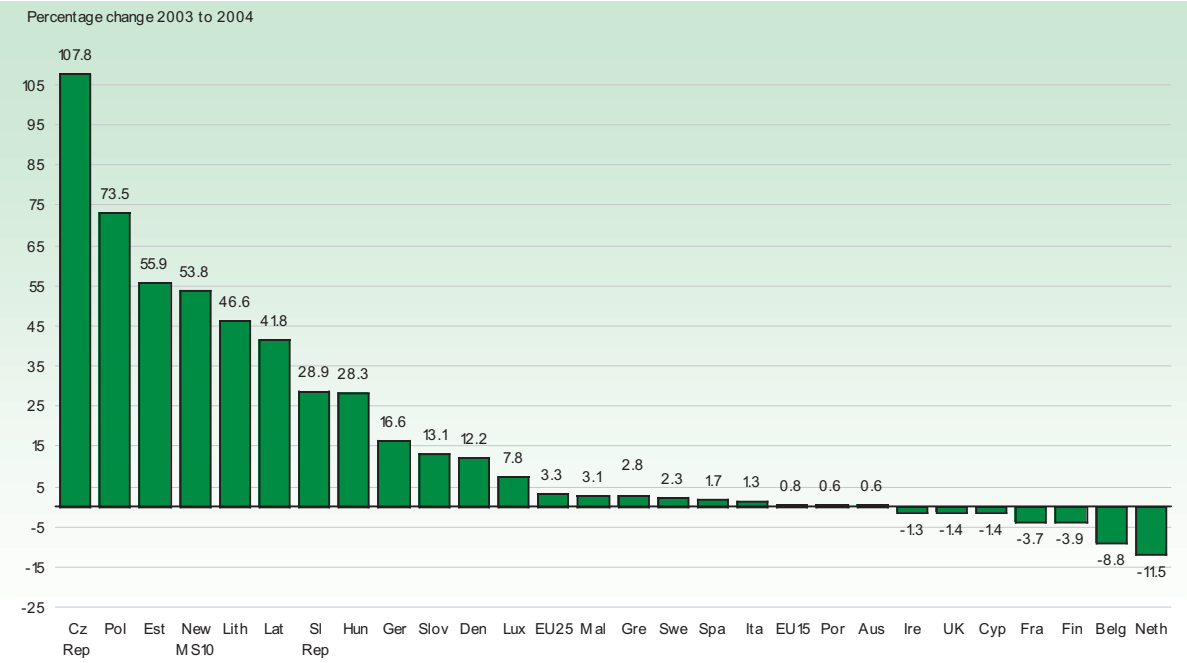
(a) The total workforce in employment consists of employees in employment, the self-employed and people in work-related government training schemes. For Northern Ireland, agriculture's percentage share is higher than that published by the Northern Ireland Department of Enterprise, Trade and Investment, which excludes part-time owners, partners, directors and spouses of farmers.

(b) 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)

11 Chart 2.3 shows estimated changes from 2003 to 2004 in income from agricultural activity across the Member States of the European Union as measured by Eurostat's Indicator A. Paragraphs 13 and 14 comments on Eurostat's Indicator B and Indicator C. The figures quoted are estimates published by Eurostat and are based on forecast economic accounts for agriculture submitted to Eurostat by Member States at the beginning of December, except Indicator A where the latest figure for the United Kingdom has been shown in Chart 2.3.

Chart 2.3 Changes in income across the EU: Indicator A



source: Eurostat: Statistics in focus, December 2004; Defra

12 Net value added at factor cost (deflated by the GDP price index) per annual work unit (or full-time person equivalent), Indicator A, was forecast to increase by 3.3 per cent in the European Union as a whole in 2004. A marked increase of 54 per cent was expected in the ten new Member States along with a smaller increase of 0.8 per cent in the 15 old Member States. Indicator A was expected to increase in nineteen Member States with the strongest rates being in most of the new Member States. In the old Member States, a significant increase was expected in Germany (17 per cent), Denmark (12 per cent) and Luxembourg (7.8 per cent). Income was expected to fall in six Member States with the largest falls expected to be in Belgium (-8.8 per cent) and the Netherlands (-12 per cent).

13 Total enterpreneurial income (deflated by the GDP price index) per annual work unit, Indicator B, was expected to rise by 2.9 per cent in 2004, mostly due to a decline in the non-salaried agricultural labour input. This indicator is not calculated for Germany on methodological grounds and therefore represents EU 25 less Germany.

14 Total entrepreneurial income (deflated by the GDP price index), Indicator C, was expected to rise by 2.7 per cent in the European Union in 2004 as expected increases in net interest paid and compensation of employees were expected to be offset by rental payments.

Table 2.3 Eurostat income indicators

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

Index 1995 = 100

	Average of 1993-95	1999	2000	2001	2002	2003
Net value added at factor cost of agriculture per total Annual Work Unit (Indicator A)						
UK	92.2	61.4	58.3	62.4	66.8	79.1
EU15	93.1	100.4	104.8	111.7	104.1	107.2
Net agricultural entrepreneurial income per unpaid Annual Work Unit (Indicator B)						
UK	90.3	40.7	34.6	40.6	47.4	62.7
EU15 less Germany	88.1	103.5	108.7	119.6	106.8	111.5
Net entrepreneurial income from agriculture (Indicator C)						
UK	91.7	38.2	31.4	36.5	41.2	52.9
EU15	92.7	89.0	90.1	96.5	83.2	84.1

Source: Eurostat

15 Table 2.3 compares Indicator A, Indicator B and Indicator C for the EU 15 as a whole up to 2003. Between 1999 and 2003, Indicator A rose by 26 per cent in the United Kingdom and by 6.5 per cent in the EU 15, Indicator B rose by 46 per cent in the United Kingdom and by 7.5 per cent in the EU 15 less Germany, and Indicator C rose by 36 per cent in the United Kingdom but fell by 5.9 per cent in the EU 15.

Comparison of agriculture in EU Member States (Table 2.4)

16 Table 2.4 shows the relative importance of agriculture in the 25 Member States in 2004. Again, these are estimates based on forecast economic accounts for agriculture submitted to Eurostat by Member States at the beginning of December.

17 France, Italy, Spain, Germany and the Netherlands were forecast to account for just over 70 per cent of the total value of crop output in the European Union in 2004; the ten new Member States were expected to account for about 7.5 per cent of the total value, of which Poland was expected to contribute almost half. France was also the main producer in the livestock sector and, together with Germany, Italy, the United Kingdom and Spain, was expected to account for over 60 per cent of the total value of livestock output in the European Union; the ten new Member States were expected to account for almost 10 per cent with Poland again contributing almost half.

18 In terms of gross value added per annual work unit, the United Kingdom ranks third behind the Netherlands and Denmark, with an average of 39,800 euros per full-time person equivalent. The ten new Member States occupy most of the bottom places.

Table 2.4 Comparison of agriculture in EU Member States for 2004

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

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

	Total crop output	Total animal output	Gross output	Gross value added	Entrepre-neurial income	Agriculture as a % of: National GVA at market prices (a) (b)	National employment (b)	Total labour input AWU (c)	Gross value added per AWU
						%	%	thousand AWU	€ '000
Member States (d)									
EU25	176 242	131 864	326 164	163 948	82 308	. .	. .	9 610	17.1
EU15	161 382	119 248	297 129	153 031	75 781	. .	4.0	5 774	26.5
Austria	2 629	2 598	5 760	2 668	1 788	2.1	3.2	161	16.6
Belgium	2 887	3 665	6 631	2 498	1 028	1.0	5.9	72	34.8
Cyprus	321	292	650	356	70	. .	. .	37	9.6
Czech Republic	2 074	1 460	3 661	1 261	578	1.0	1.9	141	8.9
Denmark	3 245	4 839	8 469	3 284	163	. .	. .	68	48.1
Estonia	172	252	478	204	137	1.7	3.5	37	5.5
Finland	1 608	2 124	4 064	1 360	1 113	3.2	6.2	103	13.2
France	37 189	23 806	65 589	31 201	12 674	1.8	3.9	953	32.7
Germany	22 044	19 645	43 207	17 078	4 246	. .	. .	592	28.8
Greece	8 769	2 925	12 106	8 627	6 554	. .	. .	519	16.6
Hungary	3 340	2 264	6 109	1 786	979	. .	. .	549	3.3
Ireland	1 394	4 422	6 071	2 642	1 777	0.7	2.5	158	16.7
Italy	29 282	14 217	45 715	30 141	14 516	4.7	16.5	1 128	26.7
Latvia	286	262	632	244	189	2.2	7.6	139	1.8
Lithuania	806	519	1 355	550	272	2.2	4.8	187	2.9
Luxembourg	95	165	277	136	74	. .	. .	4	35.1
Malta	48	79	137	73	64	0.5	2.4	5	16.2
Netherlands	9 912	7 672	19 549	8 585	1 990	. .	. .	200	42.9
Poland	6 357	6 253	13 136	5 393	3 971	. .	. .	2 524	2.1
Portugal	4 042	2 269	6 318	3 315	2 081	2.0	11.9	508	6.5
Slovak Republic	1 010	726	1 901	642	75	. .	. .	128	5.0
Slovenia	447	511	975	409	193	. .	. .	90	4.5
Spain	26 590	14 980	43 346	28 132	21 359	0.5	5.0	938	30.0
Sweden	2 114	2 351	4 824	1 611	690	0.5	2.4	73	21.9
United Kingdom	9 581	13 570	25 204	11 752	5 730	-	1.4	296	39.8

Source: Eurostat

(a) Differs from agriculture's contribution to total economy gross value added (GVA) in current prices (tables 2.2 and 2.3) because it excludes directly paid subsidies.

(b) Data for 2001.

(c) Differs from workforce in agriculture in tables 2.2 and 3.8 which is shown in thousand persons. In this table the basis is annual work units (AWU) (full-time equivalents) as opposed to persons employed.

(d) Cyprus, the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovenia and the Slovak Republic joined the European Union on 1 May 2004.

Net farm incomes by farm type (Tables 2.5, 2.6, chart 2.4)

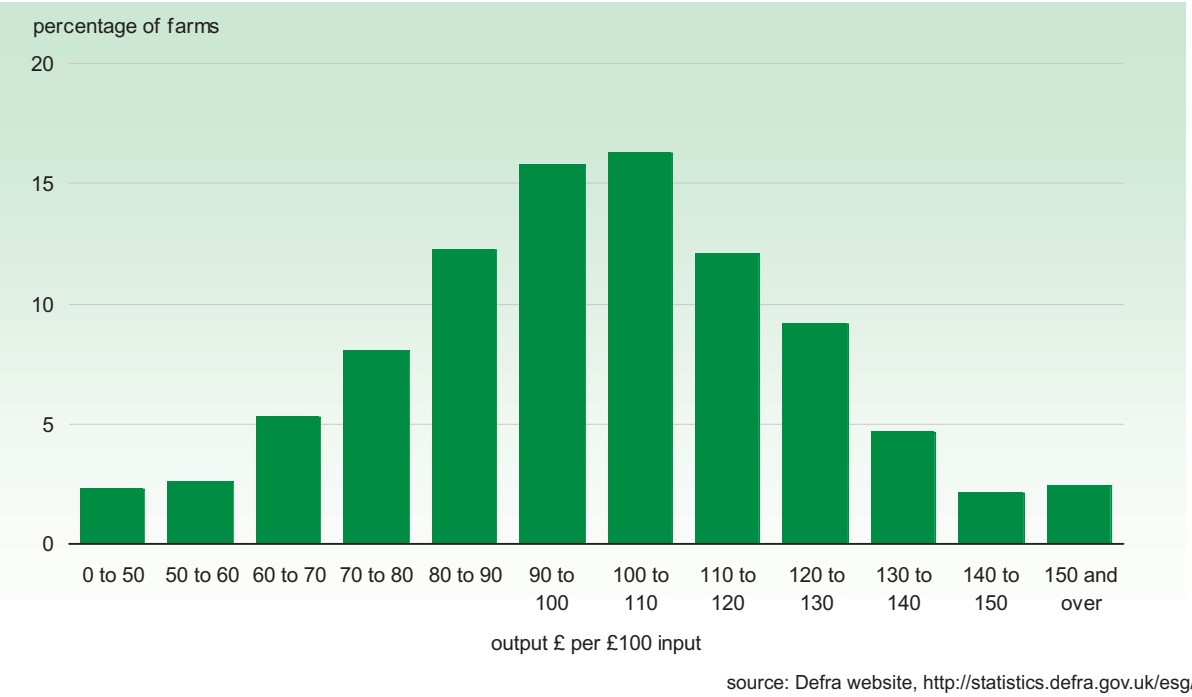
19 Average net farm income for all types of farms in the United Kingdom is forecast to fall by about 30 per cent in real terms to around £17,000 in 2004/05. Incomes are expected to have fallen for all farm types except dairy and specialist poultry. Incomes for dairy farms will be bolstered by payment of a dairy premium in 2004 although this will be partially offset by higher costs. Incomes for cereal and general cropping farms are expected to fall due to lower prices particularly for cereals and potatoes from the 2004 harvest, reduced subsidy payments and increases in key inputs such as fuel, fertiliser and agrochemicals. Incomes for cattle and sheep farms in less favoured areas are also expected to fall due to lower prices for cattle and sheep and increases in costs. Incomes on pig farms are forecast to decline reflecting a lower average pigmeat price and increased costs, while specialist poultry farms are expected to show a rise in incomes due an increase in the value of eggs.

20 Table 2.6 shows there were wide variations in the level of income across farms in 2003/04. In the United Kingdom, 30 per cent of farms had net incomes of less than £5,000. The proportion was around 47 per cent in Northern Ireland, 28 per cent in Scotland, and 26 and 32 per cent in England and Wales respectively. A third of farms in England had incomes of £30,000 or more but only 13 per cent of farms in Northern Ireland had incomes of this level. In the United Kingdom as a whole, about one-fifth of farms had a net farm income of less than zero with a higher proportion of about a third in Northern Ireland.

21 The table compares three measures of farm income: net farm income; occupier's net income; and cash income. Net farm income treats all farms, whether tenanted or owner-occupied, on the same basis so the profitability of farms with different tenure types can be compared. Occupier's net income differs because imputed rent is not deducted as a cost and land-type costs are included in inputs. This measure is therefore closer to the income position from the occupier's point of view. Cash income is defined as the cash return to the group (with an entrepreneurial interest in the business) for their labour and on all investment and is calculated as output less input.

22 Chart 2.4 shows the differences in performance of farms in the United Kingdom for 2003/04. 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.

Chart 2.4 UK distribution of performance across farms



source: Defra website, http://statistics.defra.gov.uk/esg/

Table 2.5 Net farm income by country and type of farm

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

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

	1999/00	2000/01	2001/02 (a)	2002/03	2003/04	2004/05 (provisional)
At current prices						
England						
Dairy	9 200	14 000	30 900	16 400	25 100	28 500
Grazing livestock (LFA)	5 600	5 900	7 400	17 700	14 900	10 500
Grazing livestock (lowland)	500	- 400	- 100	6 400	7 200	5 000
Cereals	15 300	7 500	5 900	13 200	38 700	17 500
General cropping	7 400	18 600	17 500	15 600	59 900	29 500
Specialist pigs	-10 900	42 100	21 600	25 300	34 100	29 000
Specialist poultry	5 000	30 300	26 700	97 100	55 700	86 500
Mixed	7 200	7 600	4 500	11 400	25 100	18 500
Wales						
Dairy	14 000	12 300	29 600	18 200	18 100	20 500
Grazing livestock (LFA)	3 300	3 900	1 600	13 300	15 900	17 000
Grazing livestock (lowland)	300	800	2 200	9 400	8 900	8 500
Scotland						
Dairy	3 700	19 500	37 400	8 800	23 500	25 000
Grazing livestock (LFA)	2 900	3 200	11 700	15 700	18 000	14 000
Cereals	6 300	4 500	1 100	500	17 300	-4 000
General cropping	2 200	5 400	2 600	-1 400	27 600	- 500
Mixed	4 400	8 800	10 300	9 100	20 300	9 500
Northern Ireland						
Dairy	7 000	14 600	17 500	6 500	15 500	17 500
Grazing livestock (LFA)	-1 600	700	4 000	4 600	4 900	4 000
United Kingdom						
Dairy	9 000	14 300	28 200	14 200	22 100	25 000
Grazing livestock (LFA)	2 400	3 200	5 800	13 000	14 200	12 000
Grazing livestock (lowland)	600	- 100	1 300	6 700	7 100	5 500
Cereals	13 600	6 900	5 000	11 400	35 500	14 500
General cropping	5 900	15 600	14 200	12 300	53 500	24 000
Specialist pigs	-10 900	37 600	20 000	23 500	31 700	27 000
Specialist poultry	5 000	26 300	22 100	83 500	52 000	80 500
Mixed	5 900	7 700	5 300	10 400	22 700	16 000
ALL TYPES (Including Horticulture)	6 600	8 700	13 000	13 900	24 300	17 500
In real terms (at 2003/04 prices)						
United Kingdom						
Dairy	9 900	15 200	29 600	14 600	22 100	24 000
Grazing livestock (LFA)	2 600	3 500	6 100	13 400	14 200	12 000
Grazing livestock (lowland)	700	- 200	1 300	6 900	7 100	5 000
Cereals	14 900	7 400	5 200	11 700	35 500	14 000
General cropping	6 500	16 600	14 900	12 600	53 500	23 000
Specialist pigs	-11 900	40 000	20 900	24 100	31 700	26 000
Specialist poultry	5 500	28 000	23 200	85 900	52 000	78 000
Mixed	6 400	8 200	5 500	10 700	22 700	15 500
ALL TYPES (Including Horticulture)	7 300	9 200	13 600	14 300	24 300	17 000

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Excluding farms subjected to compulsory foot and mouth disease cull.

Table 2.6 All farm types: distribution of farm incomes by country 2003/04

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

Percentage of farms

	England	Wales	Scotland	Northern Ireland	United Kingdom
Net Farm Income					
Less than zero	18.3	20.4	15.7	32.3	19.8
0 to less than £5,000	8.1	11.7	12.6	14.5	10.0
£5,000 to less than £10,000	10.5	14.3	12.7	12.4	11.5
£10,000 to less than £20,000	19.1	18.2	18.1	19.5	18.9
£20,000 to less than £30,000	11.3	15.9	14.7	8.3	12.0
£30,000 to less than £50,000	13.6	12.7	15.0	11.0	13.4
£50,000 and over	19.1	6.8	11.3	2.0	14.4
Average (£ thousand per farm)	30.2	15.8	19.8	8.7	24.3
Occupier's Net Income					
Less than zero	16.6	17.6	14.8	33.1	18.4
0 to less than £5,000	8.2	9.6	8.0	15.5	9.2
£5,000 to less than £10,000	11.0	14.9	11.4	12.2	11.7
£10,000 to less than £20,000	18.7	18.8	23.0	18.9	19.4
£20,000 to less than £30,000	11.0	15.9	14.3	10.6	12.0
£30,000 to less than £50,000	14.5	14.2	15.7	8.0	13.9
£50,000 and over	20.0	9.2	12.8	1.7	15.4
Average (£ thousand per farm)	32.1	18.6	22.2	7.8	26.1
Cash Income					
Less than zero	9.2	5.5	3.5	5.7	7.5
0 to less than £5,000	6.4	6.5	4.5	11.7	6.8
£5,000 to less than £10,000	6.6	9.3	6.8	12.2	7.6
£10,000 to less than £20,000	13.6	20.5	18.3	24.3	16.4
£20,000 to less than £30,000	13.8	17.0	17.1	17.2	15.1
£30,000 to less than £50,000	18.6	21.0	23.6	16.7	19.4
£50,000 and over	31.8	20.2	26.1	12.2	27.2
Average (£ thousand per farm)	49.3	32.5	31.3	23.5	42.5

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

Diversification

23 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, processing, etc., 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.

24 Further information on diversification in the countries of the United Kingdom, is available at:

- http://statistics.defra.gov.uk/esg/index/list.asp?i_id=014
- http://www.countryside.wales.gov.uk/fe/master.asp?n1=4&n2=107
- http://www.ruralni.gov.uk/ruraldev/diversification/index.asp
- http://www.scotland.gov.uk/about/FCSD/MCG-NW/00018956/page486428816.aspx

Agriculture in the national economy (Table 2.7)

25 Gross value added for the industry, which represents its contribution to national gross domestic product (GDP) decreased marginally, by 0.6 per cent, compared to 2003 since the increase in output was more than offset by the increase in intermediate consumption.

Table 2.7 UK agriculture and food in the national economy

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

£ million (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Agriculture's contribution to total economy gross value added						
at current prices	9 551	6 669	6 745	7 143	7 951	7 905
volume index (2000 = 100)	95.2	100.0	90.0	102.0	100.4	102.0
% of national gross value added (current prices)	1.6	0.8	0.8	0.8	0.8	0.8
Workforce in agriculture (thousand persons) (a)	627	557	568	550	533	546
% of total workforce in employment	2.4	1.9	2.0	1.9	1.8	1.8
Gross fixed capital formation in agriculture						
total gross fixed capital formation at current prices	2 651	1 610	2 011	2 153	2 445	2 483
% of national gross fixed capital formation (current prices)	2.4	1.0	1.2	1.3	1.4	1.3
volume index (2000 = 100):						
buildings & works, plant & machinery, vehicles	171.8	100.0	113.9	115.6	136.2	145.2
livestock	118.6	100.0	115.9	115.8	107.7	109.4
Imports of food, feed and drink (b) (c)	14 984	16 828	18 267	19 091	20 944	. .
% of total UK imports	10.0	7.6	8.0	8.4	8.9	. .
Exports of food, feed and drink (b) (c)	9 100	8 702	8 506	8 915	9 881	. .
% of total UK exports	6.7	4.7	4.5	4.8	5.2	. .
Household final consumption expenditure on						
food and alcoholic drinks at current prices	96 329	127 844	132 996	139 524	146 242	152 229
of which: household food	48 272	58 563	59 974	61 170	63 493	65 377
food eaten out	22 177	34 642	37 019	40 050	43 611	45 793
alcoholic drinks	25 880	34 639	36 003	38 304	39 138	41 059
at constant 2001 prices	114 115	132 189	132 996	136 375	140 228	144 053
of which: household food	53 233	60 620	59 974	60 724	62 178	63 541
food eaten out	29 060	36 106	37 019	38 528	40 654	41 495
alcoholic drinks	31 821	35 463	36 003	37 123	37 396	39 016
% of total household final consumption expenditure	23	21	21	21	21	21
of which: household food	11	10	9	9	9	9
food eaten out	5	6	6	6	6	6
alcoholic drinks	6	6	6	6	6	6
Retail price index (2000 = 100):						
food	92.9	100.0	103.3	104.0	105.4	106.0
alcoholic drinks	85.0	100.0	102.1	104.2	106.6	108.7
all items	84.9	100.0	101.8	103.5	106.5	109.6

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) From 2001, figures include the effect of the register improvement in England and are NOT directly comparable with earlier years. See also table 3.8.

(b) This aggregate covers Standard International Trade Classification divisions 01-09, 11, 22 and section 4. A breakdown of the data can be found in table 4.1.

(c) Overseas Trade Statistics (OTS), based on data collected by HM Customs and Excise.

26 Since 2000 the agricultural industry has accounted for around 0.8 per cent of the total economy, measured in terms of gross value added. Since 1973, when the share was almost 3 per cent, the overall trend has been downwards, although there have been brief recoveries when prices for agricultural commodities improved.

27 The industry's share of the workforce is now at 1.8 per cent. Since the early 1980s there has been a shift in the composition of the labour force with an increase in the proportion of part-time workers, rising from 25 per cent to about 50 per cent of the total.

The food chain (Chart 2.5)

28 The food supply chain in the United Kingdom as a whole received £141 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). The agri-food sector provided a total of 3.8 million jobs in the third quarter of 2004, equivalent to just under 15% of employees in the United Kingdom. Of these a little over half a million were employed in agriculture. Chart 2.6 shows the largest elements of the food chain from agriculture as a primary producer through food manufacturing and retail trade to consumers' expenditure.

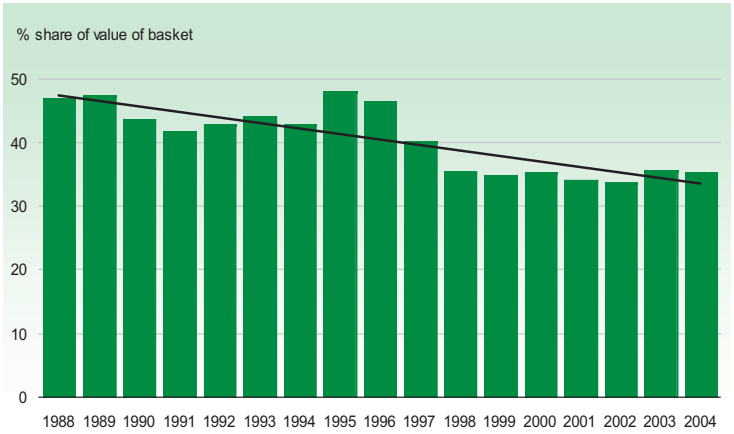
Consumers' expenditure on food and drink

29 In 2004 consumers' expenditure on food and drink, including catering services, is provisionally estimated at £152 billion, 4.1 per cent higher than in 2003. This represents 21 per cent of consumers' expenditure on all items and in volume terms, it is an increase of 2.7 per cent. Consumers spent £41 billion on alcoholic beverages in 2004, a rise of 4.9 per cent compared to expenditure in 2003; in volume terms, this is an increase of 4.3 per cent. In real terms food has become cheaper. Since 1995, food prices have risen by only 11 per cent while prices of all items have risen by 25 per cent.

Farmers' share of consumers' expenditure (Table 2.8, charts 2.6, 2.7)

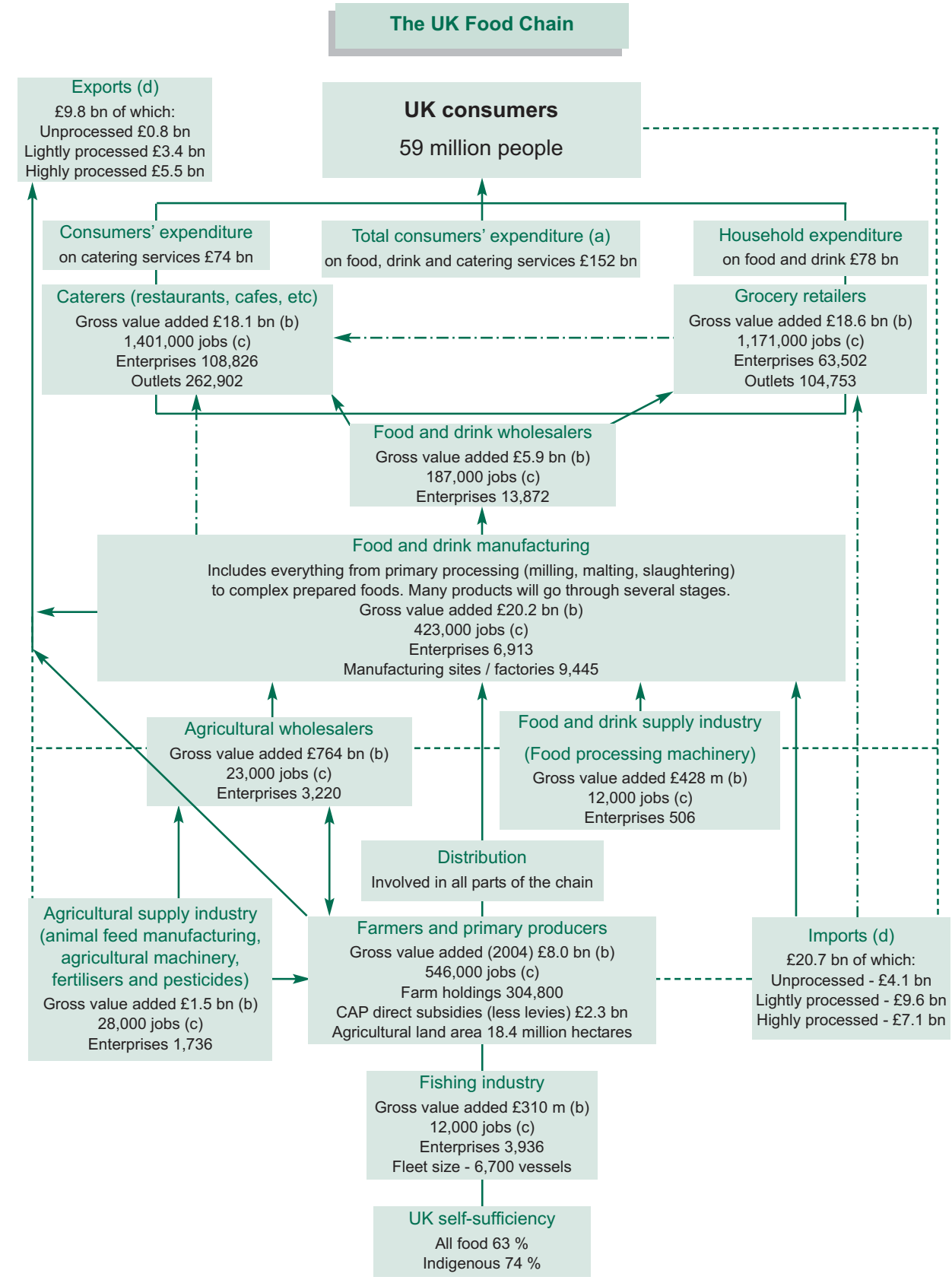
30 Compared with 1998, farmers are estimated to have received 25 per cent, or 12 percentage points, less in 2004 for their contribution to a basket of food items covering staples of agricultural production in the United Kingdom than they received in 1988. The absolute level of the farmers' share is sensitive 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 2.6 UK farmgate share of retail prices for a basket of food items



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 2.5 The UK food chain



(a) Consumers' expenditure is a provisional estimate by Defra for 2004 calculated at current prices.

(b) Gross value added figures are provisional data from the Office for National Statistics for 2003 calculated at basic prices (market prices less taxes plus subsidies).

(c) Employee data are for Q3 2004 from the Office for National Statistics.

(d) Overseas Trade data are provisional for the full year 2004 from HM Customs and Excise.

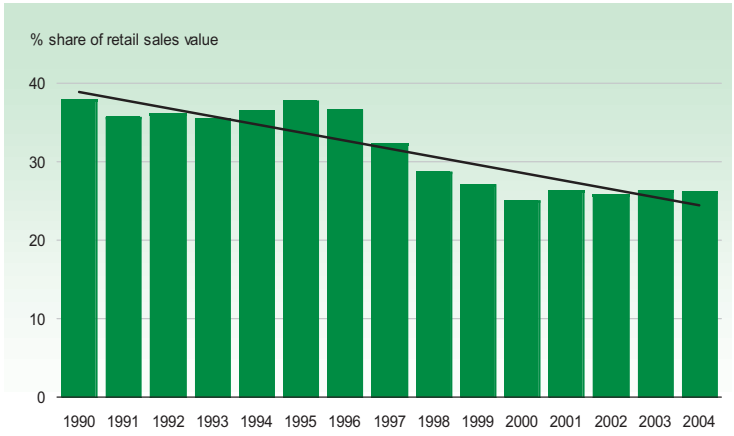
31 Table 2.8 shows the items in the basket and how the farmers' share has changed for each. They are weighted according to their value to farmers in the United Kingdom. Most weight is given to milk and then other livestock products. The fruit and vegetables selected have a small impact on the overall value of the basket.

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

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

34 Chart 2.7 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.

Chart 2.7 UK farmgate share of total household food sales



source: Defra website, http://statistics.defra.gov.uk/esg/

35 This explains why farmers receive a lower share of the total household food sales than of the basket of household food items. The reduction in the farmers' share of total household food sales between 1990 and 2004 is slightly larger than the corresponding reduction in the farmers' share of the basket of goods.

Table 2.8 UK farmgate share of retail prices for a basket of food items (a)

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

		Farm gate share in 1988 %	Farm gate share in 2004 %	Change in share %	Weight in basket 2004
Farmers' share of basket		47	35	- 28	
Farmgate product	**Retail product**				
apples	dessert apples per kg	55	40	- 27	5
beef	untrimmed beef (b) per kg	67	45	- 33	166
carrots	carrots per kg	30	39	30	19
cabbages	cabbage, hearts, per kg	38	42	10	7
chicken	oven ready roasting chicken, fresh or chilled per kg	47	40	- 16	117
eggs	size 2 eggs per dozen	28	35	23	57
lamb	untrimmed lamb (b) per kg	65	48	- 25	82
onions	onions per kg	25	24	- 7	7
pork	untrimmed pork (b) per kg	57	36	- 36	85
potatoes	old loose white potatoes per kg	24	21	- 11	87
tomatoes	tomatoes per kg	48	72	50	6
wheat	white loaf sliced, 800g	23	15	- 35	25
milk	whole milk (c)	38	30	- 20	337

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Farmgate 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 (shop milk based on a two pint purchase).

Chapter 3 The structure of the industry

2004

Key Findings

In 2004:

- The total area of agricultural land in the United Kingdom was 18.4 million hectares, about 77 per cent of the total land area.
- The area of all crops rose by 2.6 per cent to 4.6 million hectares; the area for cereals increased by 2.4 per cent and other arable crops increased by 3.3 per cent.
- The dairy herd continued its long-term declining trend and fell by 2.8 per cent while the beef breeding herd increased by 2.3 per cent.
- The size of the sheep flock was virtually unchanged.
- The size of the pig breeding herd rose by 1.5 per cent, the first increase since 1998.

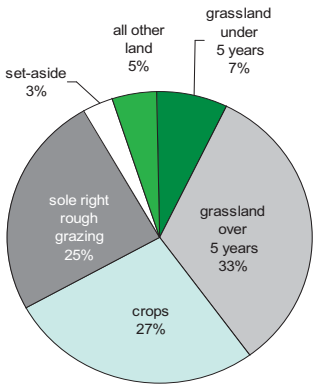
Introduction

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

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

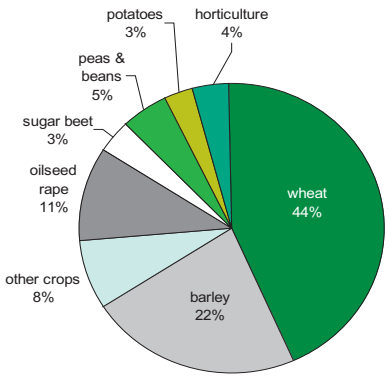
2 At June 2004, the total area of agricultural land was 18.4 million hectares, some 77 per cent of the total land area in the United Kingdom.

Chart 3.1 Total area on agricultural holdings in the UK



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 3.2 Total area of crops grown in the UK



source: Defra website, http://statistics.defra.gov.uk/esg/

Table 3.1 UK agricultural land use

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

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Thousand hectares — At June of each year

	Average of 1993-95	2000	2001	2002	2003	2004
Total agricultural area (b)	18 829	18 311	18 556	18 506	18 467	18 437
of which:						
Crops	4 511	4 665	4 455	4 573	4 478	4 593
Bare fallow	46	37	43	33	29	29
Total tillage	4 557	4 702	4 498	4 605	4 507	4 623
All grass under five years old	1 482	1 226	1 205	1 243	1 201	1 246
Total arable land	6 039	5 928	5 703	5 848	5 708	5 869
All grass five years old and over (excluding rough grazing)	5 346	5 363	5 584	5 519	5 683	5 620
Total tillage and grass (c)	11 385	11 291	11 287	11 366	11 391	11 489
Sole right rough grazing	4 830	4 445	4 435	4 488	4 329	4 326
Set-aside	679	567	800	612	689	560
All other land and woodland (d)	709	780	801	806	821	825
Total area on agricultural holdings	17 602	17 083	17 323	17 271	17 230	17 200
Common rough grazing (estimated)	1 227	1 228	1 232	1 234	1 236	1 237

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Before 2000 Scottish minor holdings were not included; data for earlier years are therefore not directly comparable.

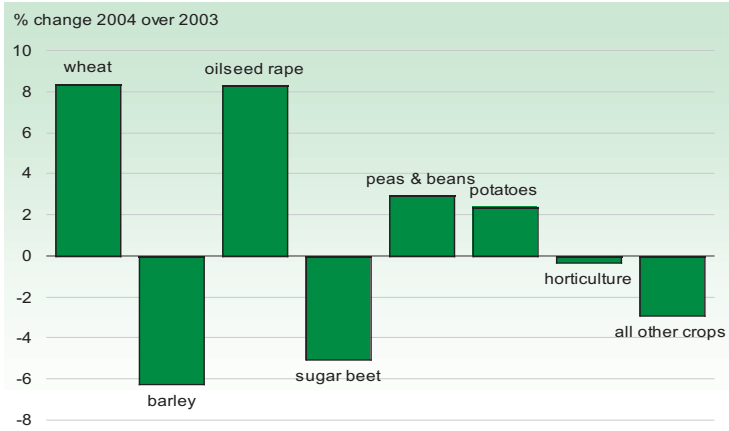
(b) Total area on agricultural holdings plus common rough grazing.

(c) Includes bare fallow.

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

3 The June 2004 Census showed an increase of 2.6 per cent in the area of crops in the United Kingdom. The total area of cereals increased by 2.4 per cent overall, compared with a 5.7 per cent fall in the previous year, with the area of wheat increasing by 8.4 per cent. The area devoted to other arable crops increased by 3.3 per cent following a 10 per cent increase in the previous year. The area used for horticulture was virtually unchanged.

Chart 3.3 Changes in UK crop areas

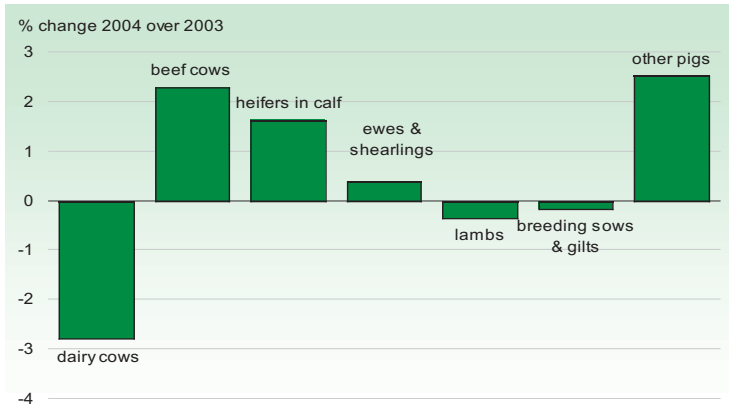


source: Defra website, http://statistics.defra.gov.uk/esg/

4 The cattle population showed an increase of 0.8 per cent compared to June 2003. While the dairy herd continued its long-term trend of declining numbers falling by 2.8 per cent, the beef breeding herd showed an increase of 2.3 per cent.

5 The sheep and lambs population has remained virtually unchanged since June 2002. The total pig population increased by 2.3 per cent in June 2004 although the numbers of breeding sows and gilts in pig fell slightly.

Chart 3.4 Changes in UK livestock numbers



source: Defra website, http://statistics.defra.gov.uk/esg/

Table 3.2 UK crop areas and livestock numbers

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

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

At June of each year

		Average of 1993-95	2000	2001	2002	2003	2004
Crop areas (thousand hectares)							
Total		4 511	4 665	4 455	4 573	4 478	4 593
of which:							
Total cereals		3 086	3 348	3 014	3 245	3 059	3 133
of which:	wheat	1 810	2 086	1 635	1 996	1 837	1 990
	barley	1 156	1 128	1 245	1 101	1 078	1 010
	oats	104	109	112	126	122	108
	rye and mixed corn	10	10	7	9	9	9
	triticale	6	16	14	14	15	15
Other arable crops (excluding potatoes)		1 068	979	1 103	993	1 092	1 129
of which:	oilseed rape	378	332	404	357	460	498
	sugar beet not for stockfeeding	196	173	177	169	162	154
	hops	3	2	2	2	2	2
	peas for harvesting dry and field beans	222	208	276	249	235	242
	linseed	54	71	31	12	32	30
	other crops	181	192	214	204	201	203
Potatoes		169	166	165	158	145	149
Horticulture		188	172	173	176	176	175
of which:	vegetables grown in the open	128	119	120	124	125	125
	orchard fruit (c)	31	28	28	26	25	24
	soft fruit (d)	13	10	9	9	9	9
	plants and flowers (e)	14	14	14	15	14	15
	glasshouse crops	2	2	2	2	2	2
Livestock numbers (thousand head)							
Total cattle and calves		11 887	11 135	10 602	10 345	10 517	10 603
of which:	dairy cows	2 662	2 336	2 251	2 227	2 192	2 131
	beef cows	1 811	1 842	1 708	1 657	1 700	1 739
	heifers in calf	784	718	701	728	680	691
Total sheep and lambs		43 851	42 264	36 716	35 834	35 846	35 890
of which:	ewes and shearlings (f)	20 830	20 449	17 921	17 630	17 599	17 665
	lambs under one year old	21 834	20 857	17 769	17 310	17 335	17 275
Total pigs		7 791	6 482	5 845	5 588	5 047	5 161
of which:	sows in pig and other sows for breeding	681	537	527	483	443	449
	gilts in pig	108	73	71	74	73	66
Total fowl (g)		128 261	154 504	163 875	155 005	165 324	. .
of which:	table fowl including broilers	77 605	105 689	112 531	105 137	116 774	119 912
	laying fowl (h)	32 495	28 687	29 895	28 778	29 274	29 662
	growing pullets	10 449	9 461	9 367	9 784	8 286	8 156

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) For various reasons, the crop area figures and livestock numbers shown in this table may differ slightly from those shown in chapter 6.

(b) Before 2000 Scottish minor holdings were not included; data for earlier years are therefore not directly comparable.

(c) Includes non-commercial orchards.

(d) Includes wine grapes.

(e) Hardy nursery stock, bulbs and flowers.

(f) Improvements to the questions on sheep were introduced in 1995; data for earlier years are therefore not directly comparable.

(g) Improvements to the Census methodology were introduced in 1997 to account for poultry production on unregistered units; data for earlier years are therefore not directly comparable.

(h) Excludes fowls laying eggs for hatching.

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

6 Tables 3.3 and 3.4 compare numbers and sizes of holdings and enterprises for 2003 and confirm the continuing trend towards larger holdings and enterprises. Tables 3.5 and 3.6 show the relative sizes of all holdings in England, Wales, Scotland and Northern Ireland and of holdings in less favoured areas. The largest holdings in terms of European size units (ESU) are found in England while the largest in terms of area are found in Scotland. Northern Ireland has the smallest holdings in terms of both ESUs and area. Table 3.7 shows agricultural holdings by farm type, size and country.

7 European size units measure the financial potential of the holding in terms of the margins which might be expected from crops and stock. The margins used are gross margins standardised at 1987-89 values. The threshold of 8 ESU is judged to be the minimum for full-time holdings.

Table 3.3 UK numbers and sizes of holdings (a)

Minor holdings are excluded for England and Wales in 1998.

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

At June of each year

		1998		2003	
		Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU
Size of holding (ESU)	under 8 European Size Units (ESU)	125.5	3.0	191.9	3.3
	8 to under 40 ESU	65.4	15.2	58.0	14.8
	40 to under 100 ESU	41.6	30.1	34.2	27.7
	100 to under 200 ESU	16.0	24.8	14.8	25.6
	200 ESU and over	6.3	26.9	6.0	28.5
	Total	254.8	100.0	304.8	100.0
	Average size (ESUs):				
	All holdings		34.6		25.9
	Holdings 8 ESU and over		66.2		67.7
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Total area on holdings	under 20 hectares	117.8	887	178.8	874
	20 to under 50 hectares	56.3	1858	47.3	1565
	50 to under 100 hectares	40.2	2856	36.7	2623
	100 hectares and over	40.6	11657	42.0	12166
	Total	254.8	17258	304.8	17228
	Average area (hectares):				
	All holdings		67.7		56.5
	Holdings 8 ESU and over		. .		. .
	% of total area on holdings with 100 hectares and over		67.5		70.6
Tillage and grass area (b) (c)	0.1 to under 20 hectares	111.8	838	136.4	803
	20 to under 50 hectares	55.7	1838	46.5	1562
	50 to under 100 hectares	38.8	2748	35.6	2542
	100 hectares and over	31.2	6151	32.7	6484
	Total	237.6	11575	251.2	11391
	Average crops and grass area per holding (hectares) (d)		48.7		45.3
	% of total crops and grass area on holdings with 100 hectares and over		53.1		56.9

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

continued

Table 3.3 continued

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

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

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

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

Table 3.4 UK numbers and sizes of enterprises

Minor holdings are excluded for England and Wales in 1998.

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

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

		1998		2003	
		Number of holdings (thousand)	Hectares (thousand)	Number of holdings (thousand)	Hectares (thousand)
Cereals (excluding maize)	0.1 to under 15 hectares	26.4	184.0	20.8	158.3
	15 to under 30 hectares	13.5	288.9	11.1	254.4
	30 to under 50 hectares	10.0	390.8	8.3	341.8
	50 to under 100 hectares	12.0	846.4	10.2	742.9
	100 hectares and over	9.3	1 703.9	8.3	1 561.4
	Total	71.3	3 414.0	58.7	3 058.8
	average area (hectares) (a)		47.9		52.1
	% of total cereals area on holdings with 100 hectares and over		49.9		51.0
Oilseed rape	0.1 to under 10 hectares	3.5	21.9	1.7	14.5
	10 to under 20 hectares	5.2	73.2	3.2	54.8
	20 to under 30 hectares	3.4	81.1	2.5	68.5
	30 to under 50 hectares	3.4	121.6	2.6	104.3
	50 hectares and over	2.5	207.7	2.6	218.0
	Total	18.1	505.5	12.7	460.2
	average area (hectares) (a)		27.9		36.3
	% of total oilseed rape area on holdings with 50 hectares and over		41.1		47.4
Sugar beet	0.1 to under 10 hectares	3.7	20.7	2.8	16.2
(England and Wales only)	10 to under 20 hectares	2.6	37.3	2.1	30.0
	20 hectares and over	2.9	130.3	2.6	115.9
	Total	9.2	188.4	7.4	162.1
	average area (hectares) (a)		20.4		21.8
	% of total sugar beet area on holdings with 20 hectares and over		69.2		71.5
Potatoes	0.1 to under 2 hectares	6.5	3.5	4.4	2.5
	2 to under 5 hectares	3.0	10.1	1.8	7.1
	5 to under 10 hectares	3.2	23.1	2.1	17.8
	10 to under 20 hectares	3.0	41.8	2.1	32.3
	20 hectares and over	2.3	85.4	1.8	85.6
	Total	18.0	163.9	12.2	145.3
	average area (hectares) (a)		9.1		11.9
	% of total potato area on holdings with 20 hectares and over		52.1		58.9

continued

Table 3.4 continued

		1998		2003	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (thousand)	Number of livestock (thousand)
Dairy cows	1 to 49 dairy cows	15.2	396.5	10.1	265.2
	50 to 99	12.7	910.2	8.7	658.2
	100 and over	7.5	1 115.7	7.8	1 268.9
	Total	35.4	2 422.4	26.6	2 192.3
	average size of herd (head)		68		82
	% of total dairy cows in herds of 100 and over		46.1		57.9
Beef cows	1 to 4 beef cows	13.7	33.4	11.8	32.6
	5 to 9	11.9	81.4	9.8	74.4
	10 to 19	15.9	221.5	12.5	186.1
	20 to 29	9.2	220.3	7.8	192.9
	30 to 49	9.9	376.5	8.3	320.1
	50 and over	10.8	995.2	9.4	893.0
	Total	71.5	1 928.4	59.6	1 699.1
	average size of herd (head)		27		29
	% of total beef cows in herds of 50 and over		51.6		52.6
Sheep breeding flock	1 to 19 breeding sheep	11.2	108.6	15.6	153.1
	20 to 49	14.3	474.7	13.6	466.8
	50 to 124	20.8	1 704.0	17.0	1 445.1
	125 to 499	29.0	7 491.8	23.3	6 107.2
	500 and over	11.9	11 284.7	9.8	9 427.0
	Total	87.2	21 063.8	79.2	17 599.3
	average size of flock (head)		241		222
	% of total breeding sheep in flocks of 500 and over		53.6		53.6
Pig breeding herd	1 to 4 breeding pigs	3.6	7.2	2.4	6.0
	5 to 24	2.7	29.7	1.1	14.5
	25 to 99	1.6	87.8	0.7	43.0
	100 and over	2.0	641.1	1.2	448.5
	Total	9.9	765.7	5.4	512.0
	average size of herd (head)		77		95
	% of total breeding pigs in herds of 100 and over		83.7		87.6
Fattening pigs (Fattening pigs of over 20kg liveweight excluding barren sows)	1 to 9 fattening pigs	2.3	9.2	2.5	10.1
	10 to 49	2.3	53.9	1.2	30.1
	50 to 299	2.4	347.1	1.1	171.3
	300 to 999	2.2	1 261.1	1.2	728.3
	1,000 and over	1.5	3 521.9	1.0	2 208.4
	Total	10.7	5 193.2	6.9	3 148.1
	average size of herd (head)		486		455
	% of total fattening pigs in herds of 1,000 and over		67.8		70.1
Broilers (b) (Includes small numbers of other table fowl in Scotland and Northern Ireland)	1 to 9,999 broilers	1.7	901.2	1.8	703.3
	10,000 to 99,999	0.9	36 648.6	0.7	32 880.2
	100,000 and over	0.3	59 623.5	0.4	83 208.1
	Total	2.9	97 173.3	2.9	116 791.7
	average size of flock (head)		33 659		39 698
	% of total broilers in flock of 100,000 and over		61.4		71.2

continued

Table 3.4 continued

		1998		2003	
		Number of holdings (thousand)	Number of livestock (thousand)	Number of holdings (thousand)	Number of livestock (thousand)
Laying fowls (b)	1 to 999 laying fowls	26.8	1 032.4	30.8	828.1
	1,000 to 4,999	0.6	1 724.9	0.5	1 328.9
	5,000 to 19,999	0.7	7 046.2	0.6	6 591.1
	20,000 and over	0.3	32 888.1	0.3	30 158.7
	Total	28.6	42 691.6	32.3	38 906.8
	average size of flock (head)		1 495		1 205
	% of total laying fowls in flocks of 20,000 and over		77.0		77.5

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

(b) Figures for 1998 and 2003 are not directly comparable because of a register improvement exercise for poultry holdings that took place in England and Wales between these years.

Table 3.5 Agricultural holdings by size and country 2003 (a)

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

At June

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU
Size of holding (ESU)								
under 8 ESU	115.1	2.6	23.7	5.0	34.7	3.1	15.3	9.8
8 to under 40 ESU	33.8	12.1	7.9	27.5	7.3	14.4	9.4	33.6
40 to under 100 ESU	23.0	25.8	3.7	37.9	5.1	31.2	3.1	35.4
100 to under 200 ESU	10.9	26.1	0.9	20.6	2.4	30.5	0.7	16.9
200 ESU and over	5.1	33.4	0.2	8.9	0.7	20.7	0.1	4.3
Total	187.9	100.0	36.5	100.0	50.2	100.0	28.5	100.0
Average size (ESU):								
All holdings		30.8		16.4		21.2		18.5
Holdings 8 ESU and over		77.4		44.7		66.5		36.0
	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	114.7	494.9	21.4	102.9	28.9	151.4	12.3	124.4
20 to under 50 hectares	25.8	854.4	6.1	204.2	6.3	207.3	9.7	313.9
50 to under 100 hectares	21.2	1.5	5.0	353.7	5.7	412.1	4.7	321.3
100 hectares and over	26.2	6 228.7	4.0	791.5	9.4	4 764.7	1.8	307.6
Total	187.9	9 099.1	36.5	1 452.2	50.2	5 535.6	28.5	1 067.3
Average area (hectares):								
All holdings		48.4		39.8		110.3		37.4
Holdings 8 ESU and over		112.8		96.2		257.0		61.5
% of total area on holdings with 100 hectares and over		68.5		54.5		86.1		28.8

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

Table 3.6 Agricultural holdings wholly or mainly in Less Favoured Areas by size and country 2003 (a)

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

At June

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU
Size of holding (ESU)								
under 8 ESU	16.3	5.1	15.3	5.2	8.4	3.9	11.0	12.5
8 to under 40 ESU	5.4	25.3	6.1	31.7	4.9	20.4	6.9	42.2
40 to under 100 ESU	3.1	42.7	2.7	40.2	3.1	39.4	1.7	33.1
100 to under 200 ESU	0.7	19.8	0.5	16.5	1.1	27.6	0.2	10.2
200 ESU and over	0.1	7.1	0.1	6.4	0.2	8.7	-	2.0
Total	25.6	100.0	24.7	100.0	17.7	100.0	19.9	100.0
Average size (ESU):								
All holdings		17.6		16.4		28.5		30.0
Holdings 8 ESU and over		45.8		40.8		52.3		15.3
% of total ESU on:								
LFA holdings		7.8		70.0		47.8		57.8
non-LFA holdings		92.2		30.0		52.2		42.2
	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	14.6	70.4	13.5	68.2	5.7	41.8	8.5	89.9
20 to under 50 hectares	3.9	131.2	4.3	146.0	3.0	100.8	7.0	224.4
50 to under 100 hectares	3.3	236.7	3.7	265.4	3.1	226.1	3.1	211.3
100 hectares and over	3.7	978.1	3.2	660.8	5.9	3 824.6	1.3	221.2
Total	25.6	1 416.4	24.7	1 140.4	17.7	4 193.3	19.9	746.8
Average area (hectares):								
All holdings		55.4		46.2		237.1		37.6
Holdings 8 ESU and over		133.0		103.8		346.4		62.6
% of total area on holdings with 100 hectares and over		69.1		57.9		91.2		29.6
% of total area on:								
LFA holdings		15.6		78.5		83.4		70.0
non-LFA holdings		84.4		21.5		16.6		30.0

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

2004

Table 3.7 UK Agricultural holdings by farm type, size and country 2003 (a)

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

At June

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU
Dairy								
under 8 ESU	0.6	0.1	0.1	0.2	-	0.1	0.1	0.2
8 to under 40 ESU	2.6	5.8	0.8	9.8	0.1	1.2	1.8	17.7
40 to under 100 ESU	6.8	37.0	1.5	40.9	0.7	29.1	2.1	50.6
100 to under 200 ESU	3.7	41.1	0.6	35.1	0.7	53.4	0.5	27.0
200 ESU and over	0.7	15.9	0.1	13.9	0.1	16.3	-	4.5
Total	14.3	100.0	3.1	100.0	1.6	100.0	4.6	100.0
Cattle and sheep (LFA)								
under 8 ESU	6.0	8.1	5.6	6.2	4.5	5.0	10.1	24.4
8 to under 40 ESU	4.2	38.8	5.3	42.3	4.0	28.0	5.1	57.4
40 to under 100 ESU	1.4	39.2	1.7	39.7	2.2	44.1	0.4	15.3
100 to under 200 ESU	0.2	10.1	0.2	9.1	0.4	19.0	-	2.9
200 ESU and over	-	3.9	-	2.6	-	3.9		
Total	11.8	100.0	12.8	100.0	11.2	100.0	15.6	100.0
Cattle and sheep (lowland)								
under 8 ESU	23.7	16.9	2.3	11.9	0.5	6.7	3.3	27.4
8 to under 40 ESU	8.3	41.7	1.1	41.6	0.3	29.3	1.3	56.0
40 to under 100 ESU	1.4	24.2	0.2	29.5	0.1	33.8	0.1	14.3
100 to under 200 ESU	0.3	11.2	-	12.0	-	30.2	-	2.3
200 ESU and over	0.1	6.0	-	5.0			-	-
Total	33.8	100.0	3.6	100.0	0.9	100.0	4.7	100.0
Cereals								
under 8 ESU	3.8	1.1	0.1	5.7	0.9	2.8	0.3	16.9
8 to under 40 ESU	7.4	12.1	0.1	26.5	1.4	20.2	0.2	44.1
40 to under 100 ESU	6.0	29.7	-	36.7	0.7	34.0	-	27.0
100 to under 200 ESU	3.0	30.7	-	31.2	0.3	25.6	-	12.0
200 ESU and over	1.1	26.4			0.1	17.4	-	-
Total	21.3	100.0	0.3	100.0	3.3	100.0	0.5	100.0
General cropping								
under 8 ESU	0.7	0.2	-	1.1	0.1	0.1	0.1	2.9
8 to under 40 ESU	2.1	4.0	-	13.9	0.3	3.4	0.1	22.0
40 to under 100 ESU	2.9	15.7	-	39.3	0.7	21.1	0.1	27.0
100 to under 200 ESU	1.8	20.8	-	45.5	0.6	37.4	-	25.4
200 ESU and over	1.6	59.4			0.3	38.0	-	22.7
Total	9.2	100.0	0.1	100.0	2.1	100.0	0.3	100.0
Pigs and poultry								
under 8 ESU	4.1	1.0	0.5	2.0	0.1	0.3	0.2	3.0
8 to under 40 ESU	1.1	7.7	-	8.8	0.1	14.3	0.2	28.6
40 to under 100 ESU	0.8	17.3	-	20.5			0.1	30.9
100 to under 200 ESU	0.6	25.1	-	22.7	-	19.2	-	12.4
200 ESU and over	0.4	49.0	-	46.1	-	66.1	-	25.0
Total	7.0	100.0	0.5	100.0	0.4	100.0	0.5	100.0

continued

Table 3.7 continued

At June

	England		Wales		Scotland		Northern Ireland	
	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU	Number of holdings (thousand)	Percent of total ESU
Horticulture								
under 8 ESU	4.0	3.3	0.4	8.3	0.3	7.3	0.1	4.7
8 to under 40 ESU	3.6	21.2	0.1	26.4	0.1	23.5	0.1	27.2
40 to under 100 ESU	1.3	22.9	-	14.8	-	17.4	-	27.2
100 to under 200 ESU	0.4	14.7	-	17.7	-	51.9	-	17.6
200 ESU and over	0.3	37.9	-	32.9			-	23.3
Total	9.5	100.0	0.5	100.0	0.4	100.0	0.3	100.0
Mixed								
under 8 ESU	2.8	1.2	0.3	3.6	0.3	0.8	0.3	5.8
8 to under 40 ESU	3.4	11.7	0.2	21.3	0.7	13.0	0.5	38.7
40 to under 100 ESU	2.2	22.1	0.1	34.3	0.6	28.8	0.1	34.4
100 to under 200 ESU	1.0	22.4	-	23.3	0.3	27.8	-	21.0
200 ESU and over	0.8	42.6	-	17.5	0.1	29.6		
Total	10.3	100.0	0.6	100.0	2.0	100.0	1.0	100.0
Other								
under 8 ESU	69.5	29.5	14.4	68.4	4.4	59.9	0.8	12.5
8 to under 40 ESU	1.2	14.1	0.2	26.7	0.1	40.1	0.1	28.1
40 to under 100 ESU	-	1.4	-	5.0			-	42.7
100 to under 200 ESU	-	1.6			-	-	-	16.7
200 ESU and over	-	53.4	-	-	-	-		
Total	70.7	100.0	14.6	100.0	4.6	100.0	1.0	100.0
Total								
under 8 ESU	115.1	2.6	23.7	5.0	11.2	2.4	15.3	9.8
8 to under 40 ESU	33.8	12.1	7.9	27.5	7.2	14.4	9.4	33.6
40 to under 100 ESU	23.0	25.8	3.7	37.9	5.1	31.5	3.1	35.4
100 to under 200 ESU	10.9	26.1	0.9	20.6	2.4	30.8	0.7	16.9
200 ESU and over	5.1	33.4	0.2	8.9	0.7	20.9	0.1	4.3
Total	187.9	100.0	36.5	100.0	26.6	100.0	28.5	100.0

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

Labour force in agriculture (Table 3.8)

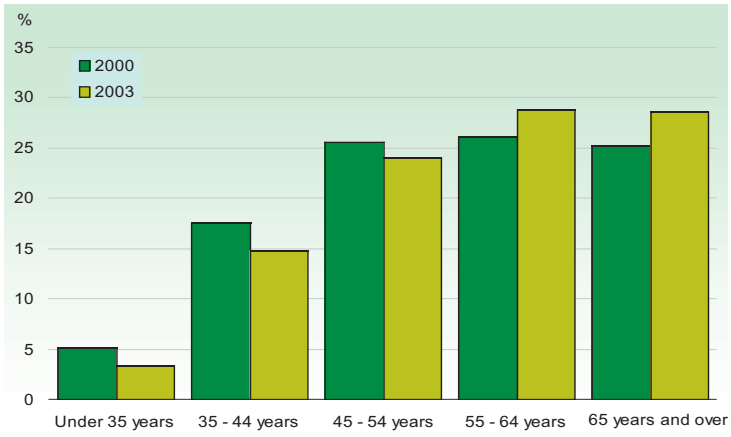
8 The total labour force at June 2004 is estimated to have risen by 2.5 per cent to 546 thousand persons compared with June 2003. The total number of workers rose by 4.7 per cent while the number of farmers, partners, directors and spouses rose by 1.4 per cent. Further analysis is taking place to better understand the drivers behind changes in the agricultural labour force.

Age of holders, agricultural training (Charts 3.5, 3.6, tables 3.9 to 3.12)

9 Twenty-nine per cent of holders in the United Kingdom were aged 65 years or older in 2003, up from 25 per cent in 2000, while the number of holders younger than 35 years old fell from 5.2 per cent in 2000 to 3.4 per cent in 2003.

10 In 2000, 22 per cent of holder managers possessed either basic training or full agricultural training; the majority had practical experience only. The proportion of holder managers with some agricultural training increases with farm size; a greater proportion of small holdings were run by holder managers with only practical experience. The definition of a holder is tighter here than for age distribution as data on training is available only for holders who are also responsible for the day to day running of the holding.

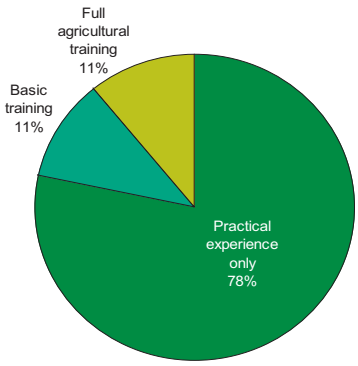
Chart 3.5 Age of holders in the UK (a)



(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 the holders whether or not the holder is also the manager of the holding.

source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 3.6 Agricultural training of holder managers in the UK 2000 (a)



(a) The data in this chart relate only to holders who are responsible for the day to day running of the holding. The exact definition of holder varies between countries of the UK.

source: Defra website, http://statistics.defra.gov.uk/esg/

Fixed capital stock (Table 3.13)

11 Agriculture's total volume of fixed capital stock is estimated to have been 0.9 per cent lower at the end of 2004 compared to the end of 2003. This is a decline of around 12 per cent on the 1993-95 average level. In recent years, buildings and works and plant and machinery have shown a decline in fixed capital stock, while that of vehicles has increased slightly since 2000. 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 3.8 UK labour force in agriculture

The data cover main and minor holdings in the UK.

Enquiries: Lindsey Clothier +44 (0)1904 455319 email: lindsey.j.clothier@defra.gsi.gov.uk

Thousand persons — At June of each year

	Average of 1993-95	2001 (a)	2001 (b)	2002	2003	2004
Workers						
Regular whole-time:						
male	93	69	70	65	60	58
female	13	11	11	11	10	10
Total	107	80	82	76	70	68
Regular part-time: (c)						
male	30	22	23	22	21	23
female	25	19	19	18	17	17
Total	54	41	42	40	38	41
Seasonal or casual:						
male	55	45	45	46	45	50
female	29	19	19	18	18	19
Salaried managers	8	13	14	13	13	15
Total workers	253	198	202	194	184	192
Farmers, partners, directors and spouses						
whole-time	. .	174	168	164	160	156
part-time (c)	. .	186	198	193	190	198
Total farmers, partners, directors and spouses	374	352	367	356	349	354
Total labour force						
(including farmers and their spouses) (d) (e)	627	550	568	550	533	546

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) These results exclude the effect of the register improvement in England and are directly comparable with previous years.

(b) These results and those for following years include the effect of the register improvement in England and are NOT directly comparable with previous years.

(c) 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.

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

(e) Figures exclude schoolchildren and most trainees.

Table 3.9 Holders age by farm type in the UK (a)

Enquiries: Lindsey Clothier +44 (0)1904 455319 email: lindsey.j.clothier@defra.gsi.gov.uk

Thousand persons

	FARM TYPE								
	Cereals	General cropping	Horti-culture	Pigs and poultry	Dairy	Cattle & sheep (LFA and lowland)	Mixed	Other	All types
2000									
Holders age									
Under 35 years	1.1	0.6	0.3	0.3	1.5	5.3	0.7	1.9	11.7
as a % of the total	4	5	3	5	6	7	5	4	5
35 - 44 years	5.2	2.4	1.4	1.2	5.3	12.8	3.0	7.9	39.2
as a % of the total	19	19	17	20	22	17	21	15	18
45 - 54 years	7.0	3.3	2.1	1.7	7.1	18.0	4.1	13.6	56.9
as a % of the total	25	26	26	27	29	24	29	25	26
55 - 64 years	7.5	3.4	2.6	1.7	6.4	19.0	3.7	14.1	58.2
as a % of the total	27	27	31	27	26	25	26	26	26
65 years and over	6.6	2.8	1.9	1.3	4.1	20.3	2.9	16.3	56.2
as a % of the total	24	22	23	21	17	27	20	30	25
Total	27.3	12.6	8.3	6.2	24.4	75.4	14.3	53.8	222.2
Total %	100	100	100	100	100	100	100	100	100
2003									
Holders age									
Under 35 years	0.8	0.5	0.1	0.2	1.0	4.1	0.6	2.1	9.3
as a % of the total	3	3	1	3	4	5	4	2	3
35 - 44 years	4.9	2.3	1.3	1.3	4.7	13.0	2.4	10.3	40.3
as a % of the total	17	17	14	16	21	16	16	11	15
45 - 54 years	7.1	3.6	2.3	2.0	6.3	18.8	4.1	21.1	65.2
as a % of the total	24	26	25	24	28	23	27	23	24
55 - 64 years	8.4	4.1	3.1	2.7	6.2	22.8	4.8	26.1	78.3
as a % of the total	29	29	35	33	28	28	32	29	29
65 years and over	7.8	3.5	2.2	2.0	4.1	23.5	3.1	31.1	77.5
as a % of the total	27	25	25	24	18	29	21	34	29
Total	29.0	14.0	9.1	8.1	22.4	82.2	15.0	90.6	270.5
Total %	100	100	100	100	100	100	100	100	100

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Table 3.10 Holders age by farm size in the UK (a) (b)

Enquiries: Lindsey Clothier +44 (0)1904 455319 email: lindsey.j.clothier@defra.gsi.gov.uk

Thousand persons

	<8 ESU	8 <40	40 <100	100 <200	200 and over	Total
2000						
Holders age						
Under 35 years	4.9	3.2	2.1	1.0	0.5	11.7
as a % of the total	5	6	6	5	5	5
35 - 44 years	15.3	9.5	7.9	4.3	2.1	39.2
as a % of the total	15	17	22	23	24	18
45 - 54 years	24.8	13.8	10.1	5.5	2.6	56.9
as a % of the total	24	25	28	30	30	26
55 - 64 years	26.5	15.2	9.3	5.0	2.3	58.2
as a % of the total	25	28	26	27	26	26
65 years and over	32.9	12.9	6.3	2.9	1.3	56.2
as a % of the total	31	24	18	15	14	25
Total	104.4	54.7	35.7	18.6	8.8	222.2
Total %	100	100	100	100	100	100
2003						
Holders age						
Under 35 years	4.8	2.1	1.4	0.7	0.4	9.3
as a % of the total	3	4	4	4	4	3
35 - 44 years	18.5	9.2	6.7	3.8	2.1	40.3
as a % of the total	12	17	20	22	24	15
45 - 54 years	35.2	13.1	9.1	5.1	2.7	65.2
as a % of the total	22	24	28	29	30	24
55 - 64 years	45.4	15.8	9.6	5.1	2.4	78.3
as a % of the total	29	29	29	29	27	29
65 years and over	53.3	14.0	6.0	2.8	1.3	77.5
as a % of the total	34	26	18	16	14	29
Total	157.2	54.1	32.8	17.6	8.8	270.5
Total %	100	100	100	100	100	100

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Table 3.11 Agricultural training of holder managers by farm type in the UK (a) (b)

Enquiries: Lindsey Clothier +44 (0)1904 455319 email: lindsey.j.clothier@defra.gsi.gov.uk

Thousand persons

	FARM TYPE								
	Cereals	General cropping	Hortic-ulture	Pigs and poultry	Dairy	Cattle and sheep (LFA and lowland)	Mixed	Other	All types
1990									
Agricultural training									
Practical experience only	10.2	13.2	7.1	3.8	21.6	57.6	10.6	37.3	161.4
as a % of the total	69	66	73	74	73	84	72	83	78
Basic training	2.3	3.2	1.1	0.6	4.6	5.5	2.2	3.9	23.3
as a % of the total	15	16	12	11	16	8	15	9	11
Full agricultural training	2.3	3.6	1.6	0.8	3.5	5.9	2.0	3.7	23.3
as a % of the total	16	18	16	15	12	9	14	8	11
Total	14.7	19.9	9.7	5.2	29.6	69.0	14.8	44.9	208.0
Total %	100	100	100	100	100	100	100	100	100
2000									
Agricultural training									
Practical experience only	15.6	7.4	5.4	4.4	14.7	57.3	8.8	43.2	156.9
as a % of the total	64	66	75	78	68	84	69	88	78
Basic training	4.1	1.7	0.8	0.6	3.7	5.5	1.9	2.9	21.2
as a % of the total	17	15	11	11	17	8	15	6	11
Full agricultural training	4.8	2.1	1.0	0.6	3.2	5.1	2.0	3.0	21.9
as a % of the total	20	19	14	11	15	8	16	6	11
Total	24.5	11.2	7.2	5.6	21.7	68.0	12.7	49.1	200.0
Total %	100	100	100	100	100	100	100	100	100

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Data in this table relate only to holders that are also responsible for the day to day running of the holding - ie holder managers. The exact definition of holder varies between countries of the UK.

(b) These data were not collected in 2003.

Table 3.12 Agricultural training of holder managers by farm size in the UK (a) (b) (c)

Enquiries: Lindsey Clothier +44 (0)1904 455319 email: lindsey.j.clothier@defra.gsi.gov.uk

Thousand persons

	<8 ESU	8 <40	40 <100	100 <200	200 and over	Total
1990						
Agricultural training						
Practical experience only	80.9	49.8	23.9	5.7	1.2	161.4
as a % of the total	84	78	67	57	45	78
Basic training	7.2	7.2	6.4	2.0	0.5	23.3
as a % of the total	7	11	18	20	20	11
Full agricultural training	7.9	6.7	5.5	2.3	0.9	23.3
as a % of the total	8	10	15	23	35	11
Total	96.0	63.7	35.8	9.9	2.6	208.0
Total %	100	100	100	100	100	100
2000						
Agricultural training						
Practical experience only	84.7	38.9	20.9	9.1	3.2	156.9
as a % of the total	89	79	66	56	45	78
Basic training	5.4	5.4	5.6	3.3	1.5	21.2
as a % of the total	6	11	18	20	21	11
Full agricultural training	5.1	5.3	5.1	3.9	2.5	21.9
as a % of the total	5	11	16	24	34	11
Total	95.2	49.6	31.6	16.3	7.3	200.0
Total %	100	100	100	100	100	100

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Data in this table relate only to holders that are also responsible for the day to day running of the holding - ie holder managers. The exact definition of holder varies between 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) These data were not collected in 2003.

Table 3.13 Fixed capital stock of UK agriculture

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

Indices 2000 = 100 At year end

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Gross capital stock (excluding land and livestock capital assets)						
Buildings and works	106.9	100.0	98.1	96.1	94.4	93.0
Plant and machinery	108.8	100.0	97.8	95.8	95.0	94.9
Vehicles	92.5	100.0	100.3	101.1	102.3	102.6
Total	106.8	100.0	98.1	96.3	95.1	94.2

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

Chapter 4 Overseas Trade

Key Findings

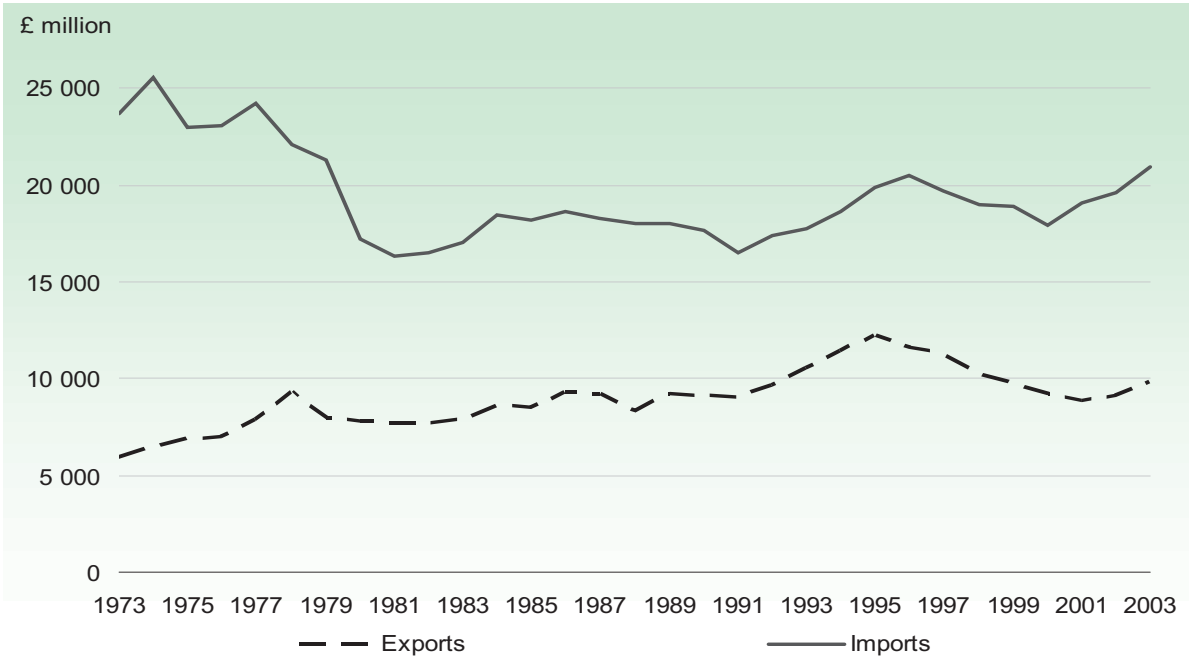
In 2003:

- The value of food, feed and drink exports in 2003 was £9.9 billion, an increase of 11 per cent over 2002.
- The value of food, feed and drink imports in 2003 increased by 9.7 per cent to £21 billion.
- The trade gap in food, feed and drink widened in 2003 by 8.7 per cent to £11 billion.
- Principal destinations for exports were the Irish Republic (16 per cent), France (12 per cent), USA (9.1 per cent), Spain (8.7 per cent) and Germany (6.2 per cent).
- The most important trade partners for imports were the Netherlands (15 per cent), France (13 per cent), Irish Republic (9.8 per cent), Germany (6.9 per cent) and Spain (6.2 per cent).

Introduction

1 The Overseas Trade Statistics presented in this chapter are based on data collected by HM Customs & Excise 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; however, since the beginning of 1993 the collection of trade statistics has been divided into two categories: that transacted between the United Kingdom and countries outside the European Union (extra-EU trade) and that between the United Kingdom and its European Union partners (intra-EU trade). Extra-EU trade statistics are compiled, as before, from Customs declarations by importers, exporters and their agents; intra-EU trade statistics are compiled using a system linked to traders' VAT returns, known as Intrastat.

Chart 4.1 UK trade in food, feed and drink in real terms at 2003 prices



source: Defra website, http://statistics.defra.gov.uk/esg/

2 The trade statistics shown here may not match those shown in the commodities tables in Chapter 6 where, for example, trade in meat includes the carcase weight equivalent of trade in live animals and trade in milk is of raw milk before processing and not of processed and packaged milk and cream which are shown here.

3 Overseas Trade Statistics for 2004 were not available at the time of publication; however, the tables and charts published on the Defra website will be updated when the data are available.

Trade in food, feed and drink (Table 4.1, chart 4.1)

4 The value of food, feed and drink exports in 2003 was £9.9 billion, 11 per cent up on 2002 when it stood at £8.9 billion, while the value of food, feed and drink imports in 2003 was £21 billion, 9.7 per cent higher than in 2002 when it stood at £19 billion.

5 The value of exports of food, feed and drink has fallen by 19 per cent in real terms from its peak in 1995. This is a consequence of the combination of the strength of sterling, BSE, lower world commodity prices, economic difficulties in the Far East and latterly foot and mouth disease. The value of imports has risen by 5.3 per cent in real terms over the same period. As a consequence the trade gap in food, feed and drink has widened by 45 per cent in real terms between 1995 and 2003 to £11 billion.

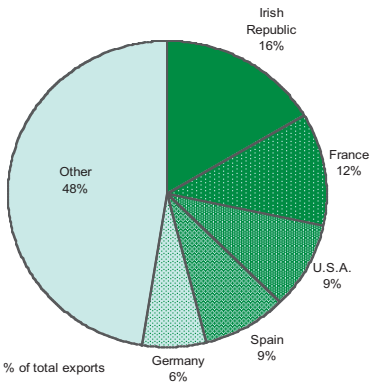
Self-sufficiency (Table 4.1)

6 Self-sufficiency, which is calculated as the value of production of raw food divided by the value of raw food for human consumption, is estimated in 2004 to be 63 per cent for all food and 74 per cent for indigenous type food. From 1988 to 1995, the two self-sufficiency series remained broadly level but declined from 1996 to 2001 from when the series levelled out again. The decline from 1996 to 2001 has been shaped by the high level of the pound/euro exchange rate, the impact of BSE and the beef export ban introduced in 1996 and the impact of foot and mouth disease in 2001.

Trading partners (Charts 4.2, 4.3)

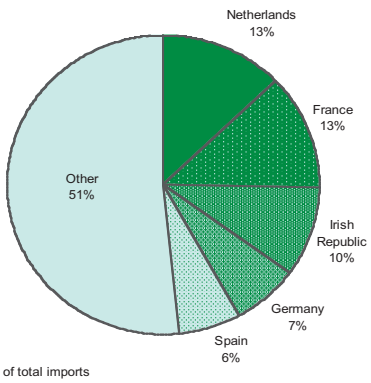
7 Principal destinations of food, feed and drink exports to the European Union in 2003 were the Irish Republic (£1.6 billion), France (£1.2 billion), Spain (£859 million) and Germany (£630 million). The principal European Union countries exporting food, feed and drink to the United Kingdom in 2003 were the Netherlands (£2.7 billion), France (£2.6 billion), the Irish Republic (£2.1 billion) and Germany (£1.4 billion).

Chart 4.2 UK exports of food, feed and drink by country of destination 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.3 UK imports of food, feed and drink by country of despatch 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

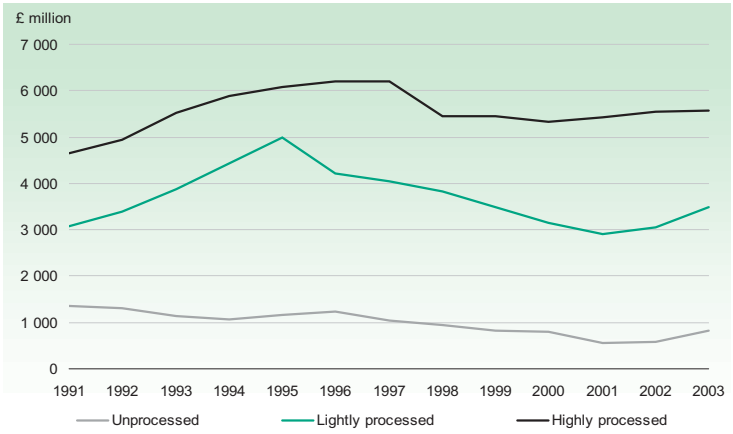
8 Principal non-EU destinations of food, feed and drink exports in 2003 were the USA (£903 million), South Korea (£203 million), Japan (£177 million) and Canada (£163 million) while the main non-EU countries exporting to the United Kingdom were the USA, (£795 million), Brazil (£597 million), Australia (£495 million) and South Africa (£410 million).

Exports and imports (Charts 4.4, 4.5)

9 Between 1994 and 2003, in real terms at 2003 prices:

- Exports of highly processed foods and drink, such as confectionery, canned meats, jams, alcoholic drinks, and ice cream, fell by 5.7 per cent.
- Exports of lightly processed foods and drinks, i.e. goods that retain their raw recognisable form, such as meat, cheese and butter, powdered milk, flour and sugar, fell by 21 per cent.
- Exports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, fell by 23 per cent.

Chart 4.4 UK exports of food, feed and drink by degree of processing (in real terms at 2003 prices)

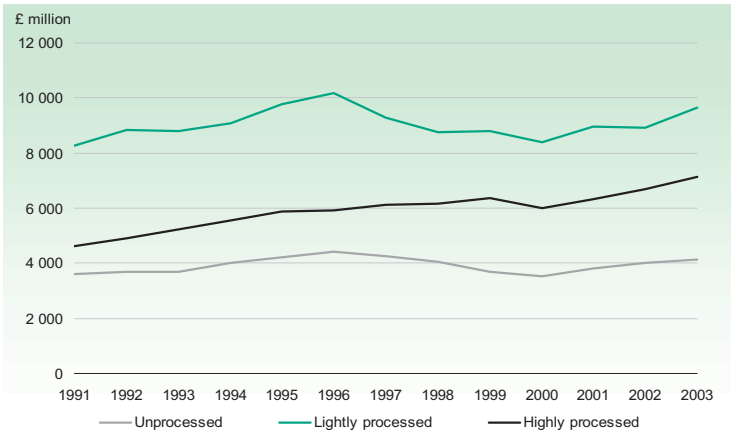


source: Defra website, http://statistics.defra.gov.uk/esg/

10 Between 1994 and 2003, in real terms at 2003 prices:

- Imports of highly processed foods and drink, such as confectionery, canned meats, jams, alcoholic drinks and ice cream, increased by 28 per cent.
- Imports 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, increased by 6.3 per cent.
- Imports of unprocessed commodities, such as fresh fruit and vegetables, honey, eggs, milk and cream and unmilled cereals, increased by 2.7 per cent.

Chart 4.5 UK imports of food, feed and drink by degree of processing (in real terms at 2003 prices)



source: Defra website, http://statistics.defra.gov.uk/esg/

Trade in key commodities (Table 4.2)

11 Between 1994 and 2003, in real terms at 2003 prices:

- The value of exports of whisky fell by 15 per cent to £2.4 billion; the value of wine imports increased by 44 per cent to £2.2 billion.

- The value of exports of lamb and mutton fell by 43 per cent; exports were banned during the outbreak of foot and mouth disease in 2001 but partially recovered in 2002 and 2003.
- The pattern of beef exports reflects the export ban on beef imposed in March 1996 after the British Government acknowledged a link between BSE and CJD; the value of imports increased by 45 per cent while the value of exports fell by 97 per cent.
- The value of pork imports rose by 133 per cent while exports declined by 65 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 55 per cent while the value of exports increased by 5.1 per cent.
- All trade in breakfast cereal has increased with the value of imports more than doubling and exports increasing by 46 per cent.
- The value of cheese imports increased by 8.3 per cent.

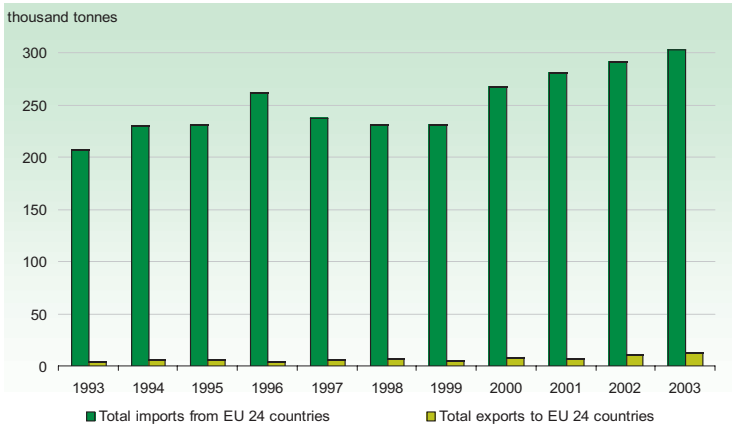
Trade with EU 24 countries (Charts 4.6 to 4.17)

12 In May 2004, ten new Member States - Cyprus, Malta, Hungary, Poland, the Slovak Republic, Latvia, Estonia, Lithuania, the Czech Republic and Slovenia - joined the European Union. This section describes the trade in several key commodities between 1993 and 2003, between the United Kingdom and the 24 Member States that now make up the rest of the European Union (the EU 24 countries): bacon and ham, pork, mutton and lamb, beef and veal, milk and cream, and unmilled wheat. The detailed tables 4.4 to 4.8 used to produce these analyses have been published on the Defra website at http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp.

Bacon and ham

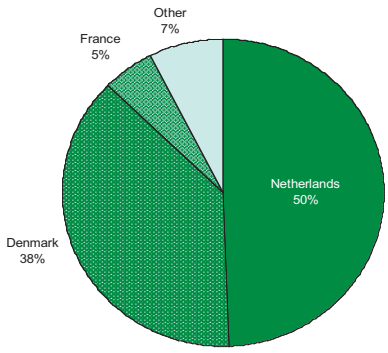
13 Imports of bacon and ham from the EU 24 countries have been far in excess of exports for many years. Total imports have fluctuated, reaching a peak in 1996, declining and then, from 1999, rising strongly, to 303 thousand tonnes in 2003. In 2003, the Netherlands and Denmark accounted for 87 per cent of all imported bacon and ham.

Chart 4.6 Trade with EU 24 countries: Bacon and ham



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.7 Trade with EU 24 countries: Imports of bacon and ham 2003

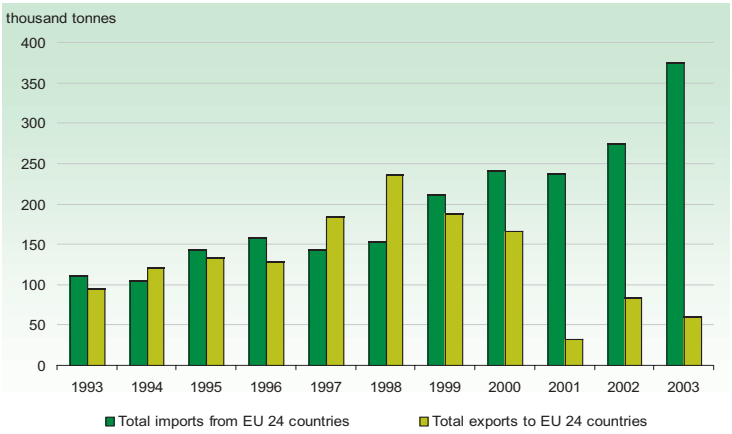


source: Defra website, http://statistics.defra.gov.uk/esg/

Pork

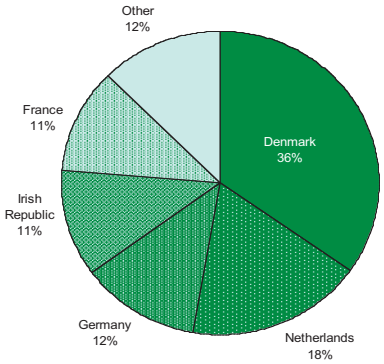
14 Exports of pork to the EU 24 countries grew strongly in 1997 and 1998. Since 1998, exports have declined rapidly. The dip in 2001 is the result of a ban on exports during the outbreak of foot and mouth disease that year. Imports have outperformed exports except in the two strong years for exports in 1997 and 1998. Since 1998, imports have risen rapidly to 376 thousand tonnes in 2003, while exports declined. Denmark and the Netherlands accounted for over half of the imports of pork in 2003. Another 43 per cent was contributed by Germany, the Irish Republic, France, Belgium and Luxembourg.

Chart 4.8 Trade with EU 24 countries: Pork



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.9 Trade with EU 24 countries: Imports of pork 2003

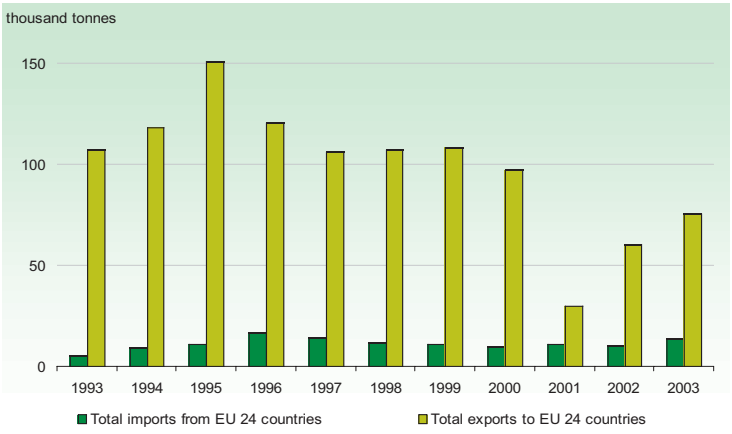


source: Defra website, http://statistics.defra.gov.uk/esg/

Lamb and mutton

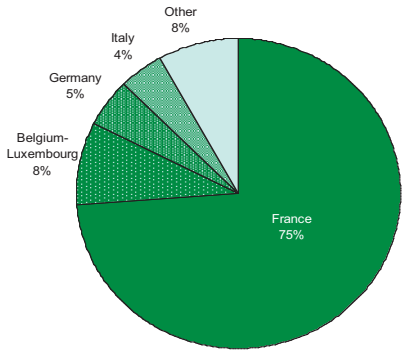
15 The United Kingdom has exported much more lamb and mutton to the EU 24 countries than it has imported from these countries for many years. Exports peaked in 1995 but have since declined. The ban on exports during the outbreak of foot and mouth disease shows in the dip in 2001 followed by a recovery to 75 thousand tonnes. About three-quarters of all lamb and mutton exported to the EU 24 countries in 2003 went to France with another 21 per cent going to Belgium, Luxembourg, Germany, Italy and the Irish Republic.

Chart 4.10 Trade with EU 24 countries: Lamb and mutton



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.11 Trade with EU 24 countries: Exports of lamb and mutton 2003

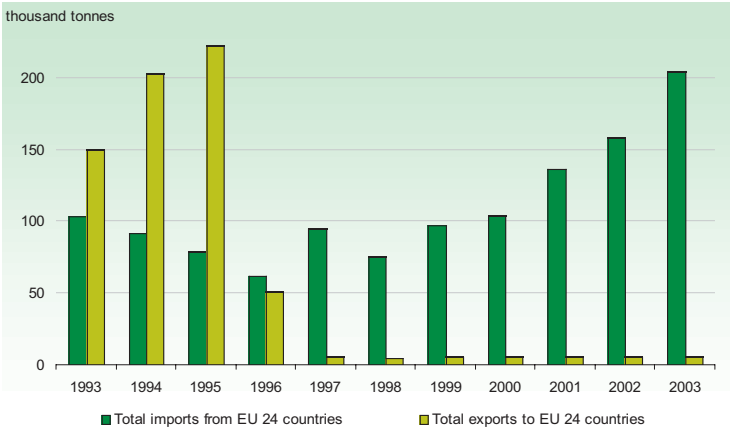


source: Defra website, http://statistics.defra.gov.uk/esg/

Beef and veal

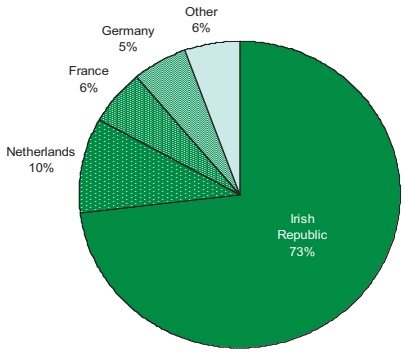
16 In 1993, 1994 and 1995, the United Kingdom exported significantly more beef and veal to the EU 24 countries than it imported. However, following the Government's announcement in March 1996 of a link between BSE and new variant CJD, exports of beef originating in the United Kingdom were banned. The small amounts of exports seen here from 1997 are of beef and veal of non-UK origin which have been imported into the United Kingdom and then exported. Since the ban began, imports from the EU 24 countries have risen strongly reaching 204 thousand tonnes in 2003. The Irish Republic accounted for almost three-quarters of the imports in 2003, with the Netherlands, France and Germany accounting for a further 21 per cent.

Chart 4.12 Trade with EU 24 countries: Beef and veal



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.13 Trade with EU 24 countries: Imports of beef and veal 2003

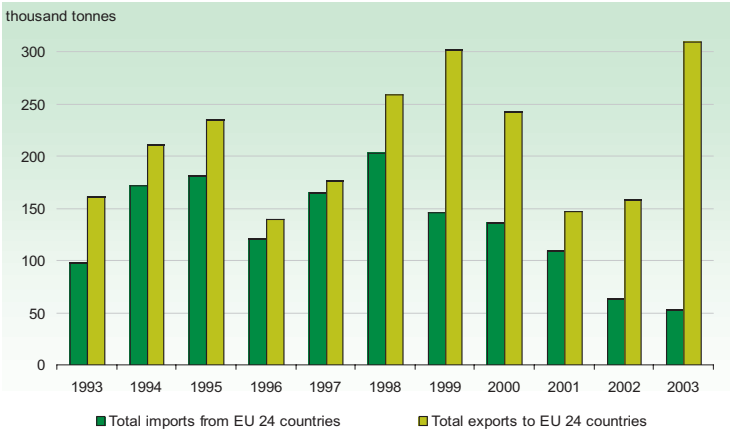


source: Defra website, http://statistics.defra.gov.uk/esg/

Milk and cream

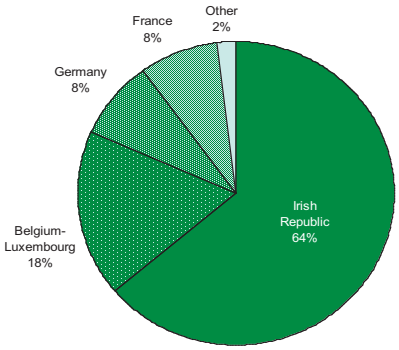
17 From 1993 to 1998, exports and imports of milk and cream followed a similar pattern but with exports to the EU 24 countries always exceeding imports from these countries. However since 1998, imports have declined while exports peaked in 1999 before declining to a plateau in 2001 and 2002. Exports then rose sharply in 2003 to 310 thousand tonnes. Almost two-thirds of this total was exported to the Irish Republic with a further 34 per cent exported to Belgium, Luxembourg, Germany and France.

Chart 4.14 Trade with EU 24 countries: Milk and cream



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.15 Trade with EU 24 countries: Exports of milk and cream 2003

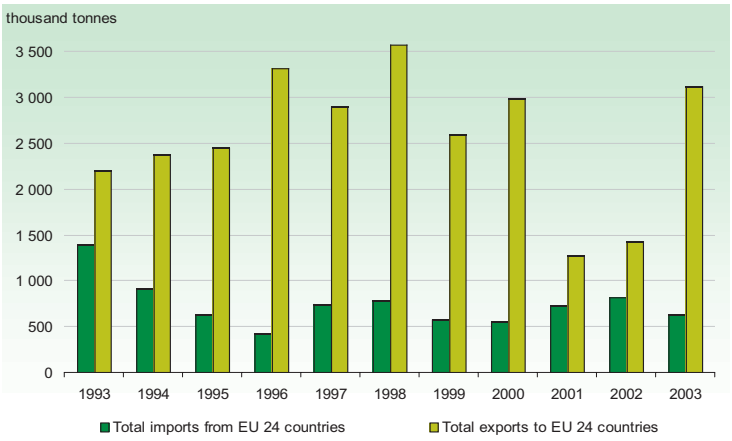


source: Defra website, http://statistics.defra.gov.uk/esg/

Unmilled wheat

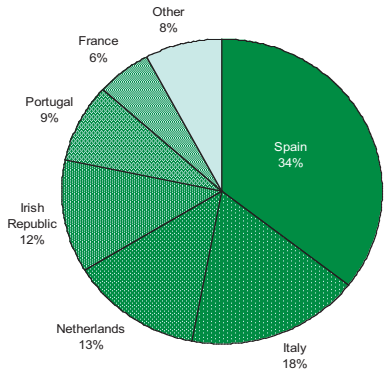
18 Exports of unmilled wheat to the EU 24 countries have exceeded imports from these countries. The drop in exports in 2001 and 2002 was due to poor harvests resulting from bad weather. In 2003, exports rose to 3,121 thousand tonnes; two-thirds of this went to Spain, Italy and the Netherlands. A further 18 per cent went to Portugal, France and Germany.

Chart 4.16 Trade with EU 24 countries: Unmilled wheat



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 4.17 Trade with EU 24 countries: Exports of unmilled wheat 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

Table 4.1 UK trade in food, feed and drink by SITC division (at current prices) and self-sufficiency

Enquiries: Clare Burgon on +44 (0)1904 455326 email: clare.f.burgon@defra.gsi.gov.uk

£ million Calendar years

	SITC division code	Title	Average of 1993-95	2000	2001	2002	2003	2004
Exports								
	01	Meat	1 211.6	627.1	418.7	513.8	603.9	. .
	02	Dairy	714.5	654.5	612.2	619.3	760.5	. .
	03	Fish	684.8	698.5	745.6	762.3	891.4	. .
	04	Cereals	1 242.7	1 261.4	1 085.0	1 135.5	1 344.4	. .
	05	Fruit and Veg	405.6	394.0	394.8	432.2	472.6	. .
	06	Sugar	378.2	360.6	357.1	325.7	342.4	. .
	07	Coffee, tea, etc.	651.9	585.4	593.8	615.6	628.1	. .
	08	Animal feed	363.6	324.0	291.5	311.1	330.5	. .
	09	Misc.	409.2	546.8	605.8	621.1	683.3	. .
	11	Drink	2 840.6	3 078.4	3 240.6	3 329.0	3 502.5	. .
	22 + S4	Oils	197.2	171.6	160.8	249.7	321.8	. .
		Total	9 100.1	8 702.3	8 505.7	8 915.2	9 881.4	. .
Imports								
	01	Meat	2 062.2	2 406.7	2 775.9	2 891.8	3 365.7	. .
	02	Dairy	1 082.6	1 189.6	1 279.1	1 324.6	1 538.4	. .
	03	Fish	1 053.1	1 338.3	1 449.9	1 438.8	1 439.0	. .
	04	Cereals	1 015.2	1 098.1	1 247.6	1 310.2	1 391.0	. .
	05	Fruit and Veg	3 503.1	3 980.2	4 221.1	4 528.0	4 930.9	. .
	06	Sugar	821.4	712.0	788.0	792.3	858.4	. .
	07	Coffee, tea, etc.	1 174.1	1 103.6	1 093.0	1 169.3	1 194.4	. .
	08	Animal feed	796.7	704.7	788.1	757.4	902.7	. .
	09	Misc.	786.4	829.0	833.5	888.0	1 062.1	. .
	11	Drink	1 858.1	2 706.4	2 926.8	3 118.1	3 323.5	. .
	22+S4	Oils	831.5	759.8	864.2	872.1	937.7	. .
		Total	14 984.4	16 828.5	18 267.1	19 090.6	20 943.8	. .
UK self-sufficiency in food as a % of:								
	all food		73.7	66.8	62.9	62.5	63.8	63.4
	indigenous type food		86.1	80.3	75.3	75.6	76.9	74.2

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

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, 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.

Table 4.2 UK trade in key commodities in real terms at 2003 prices

Enquiries: Clare Burgon on +44 (0)1904 455326 email: clare.f.burgon@defra.gsi.gov.uk

£ million Calendar years

		Average of 1993-95	1999	2000	2001	2002	2003
Whisky	Imports	49.3	54.3	60.4	71.4	71.3	84.9
	Exports	2 794.4	2 337.2	2 329.5	2 429.5	2 382.8	2 412.5
Wine	Imports	1 485.1	2 102.9	1 797.7	1 935.9	2 085.7	2 192.2
	Exports	58.7	126.4	125.4	124.9	141.6	142.0
Cheese	Imports	666.4	690.8	639.9	684.3	665.9	743.9
	Exports	167.1	149.7	137.9	154.1	158.2	179.4
Poultrymeat	Imports	414.3	599.3	575.8	595.0	581.0	662.3
	Exports	167.5	176.0	147.6	173.7	147.3	171.0
Beef and veal	Imports	424.9	333.3	348.4	410.5	470.6	552.8
	Exports	614.2	21.6	22.3	19.6	18.6	19.9
Wheat, unmilled	Imports	226.9	141.0	137.6	152.7	151.6	118.0
	Exports	474.2	263.6	298.1	140.4	122.2	292.0
Lamb and mutton	Imports	250.0	213.0	212.5	203.9	234.7	252.1
	Exports	339.4	226.0	214.8	82.1	146.8	191.0
Pork	Imports	228.9	236.1	293.0	351.1	340.6	464.0
	Exports	205.2	161.7	150.6	40.0	76.4	65.0
Breakfast	Imports	37.0	47.3	52.6	67.8	77.9	75.8
cereals	Exports	187.7	308.2	278.4	266.7	262.3	276.2
Milk and cream	Imports	63.7	51.9	44.3	42.4	32.3	29.9
	Exports	165.8	152.4	125.6	108.5	113.3	167.7
Bacon and ham	Imports	579.2	437.3	485.9	594.1	585.0	622.6
	Exports	17.5	16.0	22.7	21.5	31.5	38.6
Butter	Imports	324.6	252.5	249.9	256.3	261.8	281.1
	Exports	160.7	115.2	88.6	83.6	72.9	75.0
Eggs and	Imports	40.5	34.7	46.5	53.3	67.5	84.1
egg products	Exports	31.0	23.5	21.9	24.1	32.5	29.1

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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.

Table 4.3 UK trade in key commodities by volume

Enquiries: Clare Burgon on +44 (0)1904 455326 email: clare.f.burgon@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	1999	2000	2001	2002	2003
Whisky	Imports	8.4	30.1	9.9	11.6	13.8	16.3
(million litres)	Exports	264.2	271.5	281.4	287.7	267.9	277.9
Wine	Imports	806.2	974.6	925.3	1 036.0	1 128.2	1 220.0
(million litres)	Exports	11.2	23.7	23.8	20.0	28.5	24.5
Cheese	Imports	207.3	277.4	254.8	274.4	285.2	315.6
	Exports	58.8	61.5	58.5	67.9	82.3	89.8
Poultrymeat	Imports	192.4	298.2	298.8	291.4	317.1	346.6
	Exports	118.7	204.3	191.2	222.0	243.8	268.3
Beef and veal	Imports	132.3	142.6	153.3	193.4	226.1	269.4
	Exports	232.5	5.6	5.4	5.4	5.3	5.7
Wheat, unmilled	Imports	1 239.6	1 195.1	1 176.3	1 304.8	1 367.6	984.7
	Exports	3 455.2	2 853.1	3 671.3	1 626.1	1 624.0	3 661.5
Lamb and	Imports	113.9	113.2	109.2	93.2	101.8	111.5
mutton	Exports	127.8	109.2	98.3	30.4	61.1	75.8
Pork	Imports	120.2	214.5	245.5	239.2	275.9	380.5
	Exports	126.2	214.6	193.6	35.9	89.5	69.4
Breakfast	Imports	19.5	38.4	36.4	52.1	55.7	61.0
cereals	Exports	87.7	188.1	187.1	160.2	159.9	159.1
Milk and cream	Imports	150.9	146.3	137.2	110.1	63.9	52.5
	Exports	206.4	304.2	247.4	149.0	159.4	312.0
Bacon and ham	Imports	223.0	231.3	267.9	281.3	291.6	303.2
	Exports	6.4	6.2	9.2	7.3	10.7	13.9
Butter	Imports	117.5	113.3	118.0	115.2	116.0	118.4
	Exports	53.0	56.1	45.5	40.8	38.8	44.4
Eggs and	Imports	26.0	24.6	45.6	54.2	69.0	70.4
egg products	Exports	13.7	15.2	15.0	10.5	18.8	17.6

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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.

Chapter 5 Prices

Key Findings

In 2004:

- The average producer price of agricultural products rose by 3.3 per cent.
- The average producer price of crop products rose by 4.1 per cent.
- The average producer price of livestock and livestock products rose by 2.8 per cent.
- The average price of agricultural inputs rose by 6.8 per cent.
- Provisional results for Great Britain suggest a fall of 0.4 per cent in average farm rents.
- The average price of agricultural land in England fell by 0.2 per cent in 2003 but increased in Wales by 8.6 per cent and is expected to have increased in Northern Ireland by 16 per cent.

Introduction

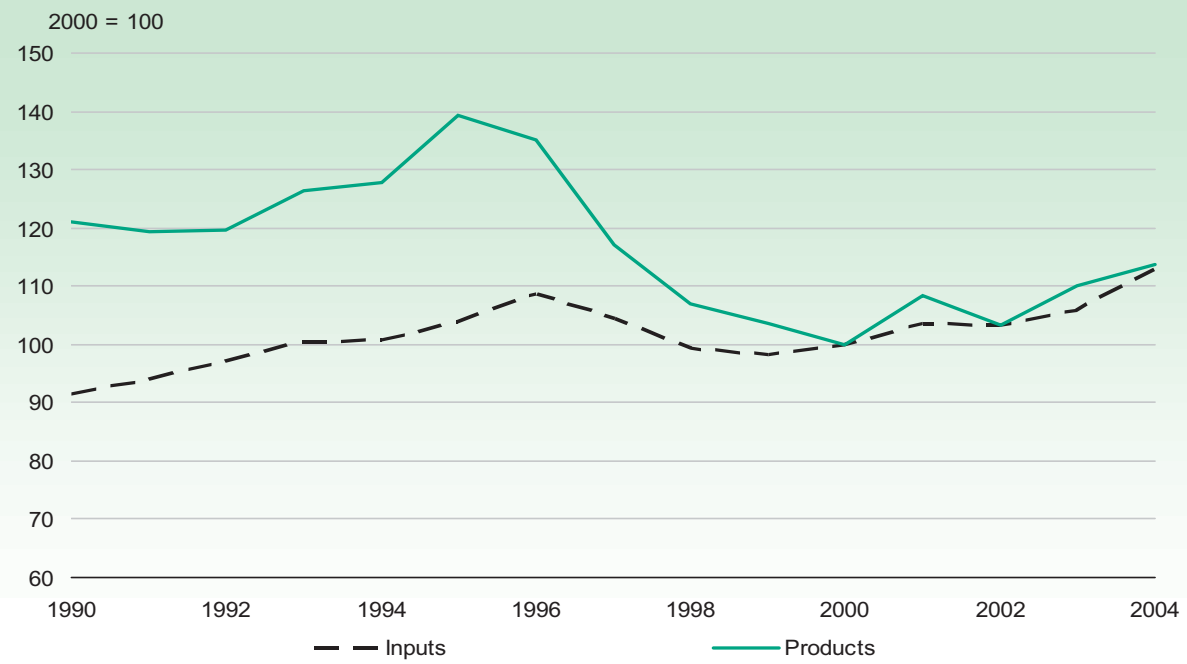
1 This chapter presents price indices for agricultural products and inputs, indices for average farm rents and average prices for sales of agricultural land.

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 direct subsidy payments. The price changes presented in Table 8.2 include subsidy payments and are based on current production and therefore may differ from the price movements presented here.

3 The indices for average farm rents refer to the calendar year while the surveys on which they are based are conducted in October. No survey was run for England and Wales in 2003 and estimates for this year are based on trends for previous years. Due to the duration of periods for rent settings, the values applying to the calendar year are deemed to be mainly (approximately 75 per cent) carried over from those recorded in the preceding October. The derivation of the changes are driven primarily by developments in 2003 and only to a lesser extent (approximately 25 per cent) by conditions in 2004.

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

Chart 5.1 UK price indices for agricultural products and inputs



source: Defra website, http://statistics.defra.gov.uk/esg/

Price indices (Table 5.1, chart 5.1)

5 The average producer price of agricultural products rose by 3.3 per cent in 2004 while the average price of agricultural inputs rose by 6.8 per cent per cent. Prices for products are 18 per cent below the peak in 1995 with the largest falls being in the prices of potatoes (47 per cent), cereals (31 per cent) and seeds (27 per cent). The average price of agricultural inputs is 8.8 per cent higher than in 1995.

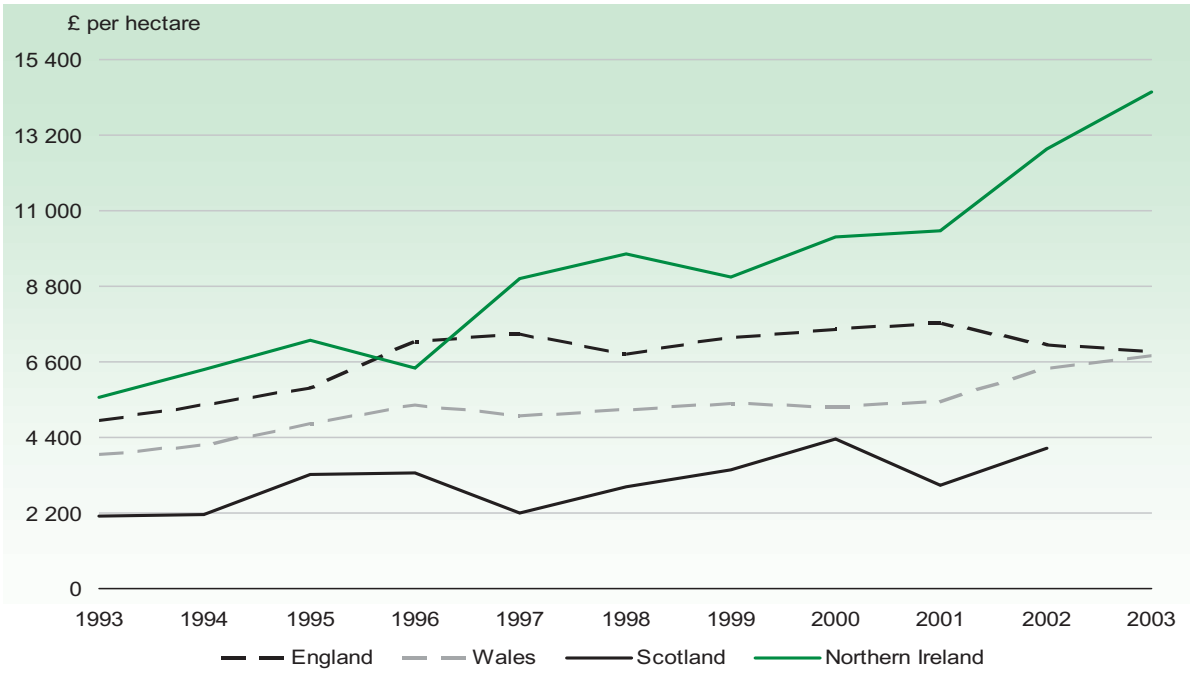
6 In 2004 the average price of crop products rose by 4.1 per cent; in particular the price for potatoes rose by 33 per cent, that for forage crops rose by 16 per cent and that for cereals rose by 9.2 per cent. The price for fresh fruit fell by 10 per cent and that for fresh vegetables fell by 9.7 per cent. The average price of livestock and livestock products rose by 2.8 per cent with increases in all categories. Prices for livestock for slaughter and export rose by 2.3 per cent, milk rose by 3.1 per cent, eggs rose by 4.9 per cent and other livestock products rose by 3.1 per cent.

7 The average price of agricultural inputs rose by 6.8 per cent; of this, the average price of inputs which are currently consumed in agriculture rose by 7.3 per cent and for those inputs which contribute to agricultural investment, the average price rose by 2.8 per cent. All inputs increased in price except for seeds which fell by 2.2 per cent. In particular, the price for fertilisers and soil improvers rose by 11 per cent, livestock feedingstuffs rose by 8.0 per cent, other goods and services rose by 8.1 per cent and the price of energy and lubricants rose by 7.8 per cent.

Farm rents (Table 5.2)

8 Provisional results for Great Britain in 2004 suggest a fall of 0.4 per cent in average farm rents. Average rents in England fell by 1.3 per cent and in Wales rose by 6.3 per cent although rents for full agricultural tenancies fell by 2.4 per cent.

Chart 5.2 UK prices of agricultural land (all sales) at 2003 prices



source: Defra website, http://statistics.defra.gov.uk/esg/

Agricultural land prices (Table 5.3, chart 5.2)

9 The average price of agricultural land in England fell by 0.2 per cent in 2003 but increased in Wales by 8.6 per cent and is expected to have increased in Northern Ireland by 16 per cent. In Northern Ireland most land sales involve relatively small areas and the number of recorded sales has been declining in recent years. These factors, coupled with difficulties with data collection, mean figures for 2004 have been estimated. No data is yet available for Scotland.

10 Over the longer term, all of the four countries of the United Kingdom have shown upward trends in the average price for agricultural land since 1993. The increase in land prices in Northern Ireland however has outstripped those elsewhere.

Table 5.1 UK price indices for agricultural products and inputs

Enquiries: Allan Howsam on +44 (0)1904 455253 email: allan.howsam@defra.gsi.gov.uk

Indices (a) 2000 = 100 Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Producer prices for agricultural products (b)	131.0	100.0	108.3	103.3	109.9	113.6
of which:						
Crop products:	133.5	100.0	112.0	104.0	110.7	115.2
Cereals	166.1	100.0	107.8	95.0	105.2	114.9
Industrial crops	142.3	100.0	111.9	114.4	120.2	121.8
Forage crops	98.0	100.0	126.8	125.5	75.9	88.1
Fresh vegetables	101.3	100.0	113.6	112.7	125.6	113.4
Potatoes	163.9	100.0	131.0	90.0	105.6	140.3
Fresh fruit	98.5	100.0	99.0	113.9	124.2	111.6
Seeds	134.3	100.0	104.0	95.7	107.4	108.7
Flowers and plants	96.8	100.0	105.3	106.8	107.9	105.3
Other crop products	121.2	100.0	106.0	98.9	104.4	106.8
Livestock and livestock products:	129.4	100.0	105.8	102.7	109.5	112.5
Livestock (for slaughter and export)	125.1	100.0	101.3	103.2	109.3	111.8
Milk	136.0	100.0	113.7	101.0	106.4	109.8
Eggs	133.2	100.0	104.8	109.6	131.4	137.9
Other livestock products	135.8	100.0	107.7	100.0	107.4	110.7
Prices of agricultural inputs:	101.7	100.0	103.6	103.2	105.8	113.0
of which:						
Currently consumed in agriculture:	103.5	100.0	104.3	103.7	106.5	114.3
Livestock feedingstuffs	131.3	100.0	107.4	103.5	105.2	113.7
Seeds	122.0	100.0	109.2	105.5	113.1	110.7
Fertilisers and soil improvers	96.1	100.0	115.8	110.3	119.0	132.5
Plant protection products	108.2	100.0	96.8	95.8	95.7	100.6
Maintenance and repair of plant and machinery	81.5	100.0	104.3	109.4	116.0	122.5
Energy, lubricants	80.3	100.0	96.7	92.4	100.5	108.4
Maintenance and repair of buildings	90.4	100.0	102.1	104.9	108.4	113.2
Veterinary services	97.9	100.0	98.6	97.8	101.5	103.8
Other goods and services	92.8	100.0	102.5	105.5	105.1	113.7
Contributing to agricultural investment (c):	89.9	100.0	99.0	100.0	101.5	104.4
Machinery and other equipment	86.4	100.0	97.4	95.7	95.1	96.1
Transport equipment	95.9	100.0	97.3	97.8	99.1	101.5
Buildings	84.5	100.0	103.3	107.8	112.1	118.2
Engineering and soil improvement operations	84.0	100.0	102.4	107.4	110.7	114.0

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Table 5.2 UK farm rents

Enquiries: Michael Rowland on +44 (0)1904 455557 email: michael.rowland@defra.gsi.gov.uk

Average per hectare: indices 2000 = 100 Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
England:	full agricultural tenancies (a)	86.9	100.0	97.4	94.1	92.8	90.7
	average (b)	84.8	100.0	99.8	100.9	100.0	98.8
Wales:	full agricultural tenancies (a)	93.8	100.0	98.8	103.7	118.6	115.8
	average (b)	77.4	100.0	107.1	121.2	132.3	140.6
Scotland (c)		70.1	100.0	99.6	99.3	101.4	101.4
Great Britain		97.0	100.0	100.4	102.5	102.8	102.4
Northern Ireland (d)		99.8	100.0	101.1	95.6	91.2	91.2

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Average rent estimates for full agricultural tenancies up to 1995 were sourced from the rent enquiry. For 1995 to 1997, a weighted average of rent enquiry and annual survey of tenanted land data was used. From 1998, estimates were sourced from the annual survey of tenanted land. This was not run in 2003 and this year's estimate is based on previous years' trend.

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

(c) Scottish estimates prior to 1998 related to crops and grassland only. From 1998 onwards, crops and grassland were replaced by a non less favoured area classification.

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

Table 5.3 UK agricultural land prices

Enquiries: Clare Burgon on +44 (0)1904 455326 email: clare.f.burgon@defra.gsi.gov.uk

£ per hectare of all sales (a) Calendar years

	Average of 1993-95	1999	2000	2001	2002	2003
England	4 294	6 673	7 082	7 398	6 905	6 894
Wales	3 418	4 934	4 981	5 189	6 239	6 777
Scotland	1 907	3 158	4 103	2 894	3 984	. .
Northern Ireland	5 070	8 268	9 632	9 961	12 456	14 475

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Chapter 6 Commodities

Key findings

In 2004:

- The total value of production of all commodities at current prices including subsidies directly related to products was £17 billion, 2.5 per cent higher than in 2003.

The value of production for:

- Wheat increased by 8.5 per cent to £1.7 billion.
- Barley fell by 8.2 per cent to £660 million.
- Oilseed rape fell by 9.8 per cent to £376 million.
- Sugar beet fell by 7.0 per cent to £298 million.
- Fresh vegetables fell by 6.2 per cent to £936 million.
- Plants and flowers increased by 3.3 per cent to £796 million.
- Potatoes increased by 31 per cent to £680 million.
- Fresh fruit increased by 2.8 per cent to £316 million.
- Beef increased by 3.6 per cent to £2.3 billion.
- Pigmeat increased by 1.7 per cent to £681 million.
- Mutton and lamb increased by 3.2 per cent to £1.0 billion.
- Poultrymeat fell by 0.1 per cent to £1.2 billion.
- Milk increased by 3.8 per cent to £2.7 billion.
- Eggs increased by 5.8 per cent to £432 million.

The total value of intermediate consumption was £9.0 billion, of which:

- The total cost of purchased seeds fell by 4.4 per cent to £273 million.
- The cost of animal feeds increased by 4.4 per cent to £2.5 billion.

Cereals

Total cereals (Table 6.1)

1 The area of cereals planted increased by 2.4 per cent leading to a rise in the volume of production of 2.4 per cent in 2004. The increased area was due to favourable planting conditions, higher prices towards the end of 2003 and a cut in the compulsory set-aside rate from 10 to 5 per cent for the 2004/05 marketing year. This latter

measure was taken to help mitigate the tight supply situation across Europe caused by the severe drought that affected the harvest in 2003. Concerns about the tight supply situation resulted in high prices at the start of the year but these weakened as it became clear that the 2004 pre-harvest supply situation was not as difficult as initially thought. The 2004 harvest in the United Kingdom was severely disrupted by wet weather and this affected grain quality. Plentiful supplies of new crop grain in mainland Europe helped weaken post-harvest prices, although average prices for the year as a whole were slightly higher than in 2003. The total value of production in the United Kingdom increased by 2.8 per cent to £2.4 billion.

Wheat (Table 6.2)

2 There was an increase in the area of wheat planted due to good planting conditions and higher grain prices towards the end of 2003. An 8.3 per cent increase in area combined with a small fall in yield resulted in an 8.3 per cent increase in production. The harvest in some parts of the country, particularly in the north and east of England, was badly affected by very wet weather during August and this produced large regional variations in the quality of milling wheat supplies and prices.

3 The value of production of wheat increased by 8.5 per cent to £1.7 billion due mainly to the increase in the volume of production. Prices started high in 2004 and despite falling by around £30/tonne over the course of the year, average annual ex-farmgate prices of wheat increased slightly over 2003 by £2 and £1/tonne for milling and feed wheat respectively. Exports fell by over 40 per cent to around 2.2 million tonnes due to lower availability from the 2003 harvest and high prices in the first half the year. Imports fell by 25 per cent to around 740 thousand tonnes as millers were able to source a greater proportion of supplies from the high quality harvest in the United Kingdom in 2003. Overall, total domestic uses of wheat were unchanged from 2003 as a slight decline in use for seed was balanced out by increased use for animal feed.

Barley (Table 6.3)

4 There was an 8.7 per cent fall in the volume of barley production due to a fall in average yields and a 6.3 per cent fall in area planted as land was planted with wheat and oilseed instead. The value of barley production fell by 8.2 per cent to £660 million. Like wheat, barley prices started the year strongly before falling away. For the year as a whole there were falls in the average annual prices of £3/tonne for malting and £1/tonne for feed barley compared to 2003. Exports of barley fell by 38 per cent to around 695 thousand tonnes while imports increased by 31 per cent to around 76 thousand tonnes. Total domestic uses increased by 1.2 per cent as high wheat prices helped to increase demand for barley for animal feed use.

Oats (Table 6.4)

5 The value of production of oats fell by 9.8 per cent to £65 million. A reduction in area planted of 11 per cent and a fall in yields combined to give a fall in production of 16 per cent. High prices at the start of the year helped to give an increase in the average annual prices of £3/tonne for feed and £0.3/tonne for milling oats. Total domestic uses increased slightly as lower demand by the milling sector was offset by higher animal feed use. Exports fell by around 44 per cent.

Table 6.1 Total UK cereals

Enquiries: Alex Clothier on +44 (0)1904 455068 email: alex.clothier@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production							
Area (thousand hectares)		3 086	3 348	3 014	3 245	3 059	3 133
Volume of harvested production		20 443	23 988	18 959	22 965	21 511	22 030
Value of production (£ million) (a)		2 883	2 336	2 023	2 180	2 332	2 398
Supply and use							
Production		20 443	23 988	18 959	22 965	21 511	22 030
Imports from:	the EU	2 460	1 890	2 158	2 239	1 949	1 717
	the rest of the world	474	914	828	772	645	649
Exports to:	the EU	3 257	3 836	1 859	2 478	4 240	2 953
	the rest of the world	1 657	1 793	574	254	827	54
Total new supply		18 463	21 163	19 512	23 244	19 038	21 390
Change in farm and other stocks		- 568	453	-1 788	2 084	-2 057	191
Total domestic uses		19 031	20 710	21 300	21 159	21 094	21 198
Production as % of total new supply for use in the UK		111	113	97	99	113	103

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

Table 6.2 UK wheat

Enquiries: Alex Clothier on +44 (0)1904 455068 email: alex.clothier@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production							
Area (thousand hectares)		1 810	2 086	1 635	1 996	1 837	1 990
Yield (tonnes per hectare)		7.5	8.0	7.1	8.0	7.8	7.8
Volume of harvested production		13 506	16 704	11 580	15 973	14 288	15 473
Value of production (£ million) (a)		1 862	1 578	1 227	1 479	1 532	1 663
of which:	sales	1 421	995	1 010	836	1 149	1 050
	subsidies (b)	345	458	350	446	440	447
	on farm use	70	40	43	39	79	85
	change in stocks	26	85	- 176	159	- 136	82
Prices (average prices weighted by volumes of sales (£ per tonne))							
Milling wheat		122.7	73.8	81.8	70.9	83.2	85.6
Feed wheat		110.0	65.9	74.6	62.6	75.0	75.8
Supply and use							
Production		13 506	16 704	11 580	15 973	14 288	15 473
Imports from:	the EU	951	556	736	826	633	378
	the rest of the world	232	621	569	542	352	362
Exports to:	the EU	2 311	2 993	1 277	1 429	3 121	2 187
	the rest of the world	1 053	679	349	195	657	20
Total new supply		11 325	14 208	11 259	15 717	11 495	14 006
Change in farm and other stocks		- 110	1 056	-2 151	2 522	-1 911	569
Total domestic uses		11 436	13 152	13 410	13 195	13 406	13 437
of which:	flour milling	5 264	5 617	5 667	5 616	5 592	5 596
	animal feed	5 053	6 483	6 626	6 478	6 714	6 741
	seed	333	265	298	281	281	280
	other uses and waste	785	788	819	820	819	820
Production as % of total new supply for use in the UK		119	118	103	102	124	110
% of home grown wheat in milling grist		79	82	85	83	85	86

UK wheat (crop years: July-June)

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

		1999/00	2000/01	2001/02	2002/03	2003/04
Production and output						
Volume of harvested production		14 867	16 704	11 580	15 973	14 288
Value of production (£ million) (a)		1 508	1 539	1 287	1 453	1 710
of which:	sales	1 033	1 058	829	986	1 157
	subsidies (b)	420	458	350	446	440
	on farm use	47	37	44	39	119
	change in stocks	9	- 14	64	- 17	- 6

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Excludes farm saved seed.

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

Table 6.3 UK barley

Enquiries: Alex Clothier on +44 (0)1904 455068 email: alex.clothier@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production							
Area (thousand hectares)		1 156	1 128	1 245	1 101	1 078	1 010
Yield (tonnes per hectare)		5.4	5.8	5.4	5.6	5.9	5.8
Volume of harvested production		6 277	6 492	6 660	6 128	6 370	5 815
Value of production (£ million) (a)		933	685	724	624	719	660
of which:	sales	517	312	290	261	323	290
	subsidies (b)	213	244	259	242	253	231
	on farm use	211	137	152	143	159	120
	change in stocks	- 8	- 8	23	- 21	- 15	19
Prices (average prices weighted by volumes of sales (£ per tonne))							
Malting barley		128.5	75.4	76.8	72.4	82.1	79.4
Feed barley		107.3	64.8	67.5	58.2	70.7	69.5
Supply and use							
Production		6 277	6 492	6 660	6 128	6 370	5 815
Imports from:	the EU	152	50	79	51	51	72
	the rest of the world	19	20	21	31	7	4
Exports to:	the EU	840	716	466	893	947	661
	the rest of the world	604	1 114	216	58	170	34
Total new supply		5 004	4 732	6 078	5 259	5 311	5 196
Change in farm and other stocks		- 467	- 631	364	- 513	- 129	- 312
Total domestic uses		5 471	5 363	5 714	5 772	5 440	5 508
of which:	brewing/distilling	1 768	1 885	1 934	1 916	1 945	1 848
	animal feed	3 439	3 247	3 570	3 651	3 299	3 459
	seed	194	187	165	162	152	160
	other uses and waste	69	44	45	43	44	41
Production as % of total new supply for use in the UK		126	137	110	117	120	112

UK barley (crop years: July-June)

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

		1999/00	2000/01	2001/02	2002/03	2003/04
Production and output						
Volume of harvested production		6 581	6 492	6 660	6 128	6 370
Value of production (£ million) (a)		726	690	706	644	739
of which:	sales	323	297	292	254	336
	subsidies (b)	259	244	259	242	253
	on farm use	142	142	150	145	169
	change in stocks	1	6	5	3	- 19

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Excludes farm saved seed.

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

Table 6.4 UK oats

Enquiries: Alex Clothier on +44 (0)1904 455068 email: alex.clothier@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production							
Area (thousand hectares)		104	109	112	126	122	108
Yield (tonnes per hectare)		5.4	5.9	5.5	6.0	6.2	5.8
Volume of harvested production		565	640	621	753	749	630
Value of production (£ million) (a)		81	65	65	70	73	65
of which:	sales:	40	27	28	27	33	29
	subsidies (b)	19	23	23	28	29	25
	on farm use	20	13	13	10	11	16
	change in stocks	1	2	-	5	-	- 5
Prices (average prices weighted by volumes of sales (£ per tonne))							
Milling oats		109.8	64.2	68.8	57.3	63.2	63.6
Feed oats		108.0	65.1	65.5	53.7	60.4	63.4
Supply and use							
Production		565	640	621	753	749	630
Imports from:	the EU	2	7	10	18	11	25
	the rest of the world	1	-	-	-	-	-
Exports to:	the EU	92	107	108	144	157	88
	the rest of the world	-	-	-	-	-	-
Total new supply		476	540	523	627	603	567
Change in farm and other stocks		9	27	- 1	75	- 16	- 65
Total domestic uses		467	513	524	552	619	632
of which:	milling	211	261	287	312	322	316
	animal feed	230	233	217	219	278	297
	seed	19	16	18	17	15	16
	other uses and waste	7	3	3	4	4	3
Production as % of total new supply for use in the UK		121	119	119	120	124	111

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Excludes farm saved seed.

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

Industrial crops

Oilseed rape (Table 6.5)

6 The total area planted increased by 2.8 per cent. Plantings in some areas were adversely affected by the lack of autumn rainfall. Patchy late growth and poor weather conditions over the summer and during harvest led to a fall in average yields of 12 per cent. This resulted in a fall in the overall volume of harvested production of 9.2 per cent. Market prices were strong for the first half of the year but dropped in the second half contributing to an overall fall in the value of sales of 7.0 per cent. The value of production dropped by 9.8 per cent to £376 million. Payments of subsidies totalled £118 million, the highest amount in the last five years.

Linseed (Table 6.6)

7 The 2003 linseed crop had bucked the trend with increases in area grown, volume and value of production. The 2004 crop returned to the previous declining trend with falls in area, volume and value of production. The area fell by 10 per cent compared with 2003. Average yields fell by 2.2 per cent leading to a fall of 12 per cent in the overall volume of harvested production. The value of production was estimated at £16 million, of which almost half were payments of subsidies.

Sugar beet and sugar (Table 6.7)

8 Despite slightly higher average yields in 2004, the fall in the area of contracted sugar beet led to an overall fall in the volume of production by 3.5 per cent. This, coupled with a drop in the average market price of 3.7 per cent, resulted in the overall value of production falling by 7.0 per cent to £298 million. After the previous year's exceptional sugar content, estimates returned to more usual levels at around 17.20 per cent. Production as a percentage of total new supply for use in the United Kingdom was 74 per cent.

Table 6.5 UK oilseed rape

Enquiries: Melanie Riley on +44 (0)1904 455067 email: melanie.riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production						
Area (thousand hectares)	449	402	451	432	542	558
Yield (tonnes per hectare)	2.6	2.9	2.6	3.4	3.3	2.9
Volume of harvested production	1 187	1 157	1 157	1 468	1 771	1 609
of which:						
Production not on set-aside land:						
Area (thousand hectares)	378	332	404	357	460	498
Yield (tonnes per hectare) (a)	2.8	2.9	2.6	3.5	3.4	3.0
Production (a)	1 039	965	1 038	1 246	1 548	1 471
Production on set-aside land:						
Area (thousand hectares)	71	70	48	75	82	59
Yield (tonnes per hectare) (a)	2.0	2.8	2.5	2.9	2.7	2.3
Production (a)	148	192	119	221	223	138
Value of production (£ million) (b)	391	249	276	298	417	376
of which: sales	209	158	167	205	283	263
subsidies (c) (d)	186	110	104	80	113	118
change in stocks	- 4	- 19	4	12	21	- 5
Supply and use						
Production	1 187	1 157	1 157	1 468	1 771	1 609
Imports from: the EU	238	273	530	265	136	199
the rest of the world	147	15	75	62	-	-
Exports to: the EU	34	50	16	162	271	93
the rest of the world	23	-	-	45	1	31
Total new supply	1 516	1 396	1 746	1 587	1 634	1 683
Production as % of total new supply for use in the UK	79	83	66	92	108	96

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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 not produced on set-aside land, with an average oil content of 43%.

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

(d) In 2000, an area of crop contaminated with GM material was destroyed. The valuation of subsidies includes both the subsidy payments for this area and the compensation payments made.

Table 6.6 UK linseed

Enquiries: Melanie Riley on +44 (0)1904 455067 email: melanie.riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production						
Area (thousand hectares)	99	74	31	13	34	31
Yield (tonnes per hectare)	1.3	0.6	1.2	1.4	1.7	1.7
Volume of harvested production	122	43	39	18	59	52
of which:						
Production not on set-aside land:						
Area (thousand hectares)	87	72	31	12	32	30
Yield (tonnes per hectare) (a)	1.3	0.6	1.2	1.3	1.7	1.7
Production (a)	109	40	38	16	56	50
Production on set-aside land:						
Area (thousand hectares)	12	2	-	1	2	1
Yield (tonnes per hectare) (a)	1.2	1.3	1.3	2.9	1.5	1.5
Production (a)	14	3	1	2	3	1
Value of production (£ million)	88	34	16	6	18	16
of which: sales	16	8	6	3	10	9
subsidies (b)	72	29	10	3	8	7
change in stocks	- 1	- 3	-	-	1	-
Supply and use						
Production	122	43	39	18	59	52
Imports from: the EU	1	4	1	1	1	2
the rest of the world	24	3	25	21	10	3
Exports to: the EU	29	63	44	9	22	36
the rest of the world	1	1	-	-	-	2
Total new supply	118	- 14	20	32	48	19
Production as % of total new supply for use in the UK	101	- 295	190	58	122	268

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) These figures are based on a standard (9%) moisture content.

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

Table 6.7 UK sugar beet and sugar

Enquiries: Melanie Riley on +44 (0)1904 455067 email: melanie.riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Sugar beet							
Area (thousand hectares)		196	173	177	169	162	154
Yield (adjusted tonnes per hectare)		45.6	52.5	47.0	56.5	56.6	57.5
Volume of harvested production		8 939	9 079	8 335	9 557	9 168	8 850
Value of production (£ million)		350	252	256	283	321	298
Sugar content %		16.75	17.10	17.16	17.38	18.74	17.20
Prices (average market price (£ per adjusted tonne)) (a)		39.3	27.8	30.8	29.6	35.0	33.7
Sugar (refined basis)							
Production (b)		1 306	1 325	1 222	1 430	1 368	1 350
Imports from:	the EU	97	143	121	118	122	121
	the rest of the world	1 113	1 101	1 118	1 104	1 008	1 149
Exports to:	the EU	66	120	132	127	132	180
	the rest of the world	422	578	497	329	565	616
Total new supply		2 028	1 871	1 832	2 197	1 800	1 824
Production as % of total new supply for use in the UK		64	71	67	65	76	74

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Forage crops

9 The total value of production of forage plants fell by 7.2 per cent to £163 million in 2004. This includes: peas, beans and maize grown for stockfeed, farm transfer of peas and beans, hay and dried grass, grass for grazing livestock and non-agricultural horse grazing, and subsidies.

Peas and beans for stockfeed (Table 6.8)

10 The combined value of production for peas and beans for stockfeed fell by 13 per cent to £128 million in 2004. The area of dried peas grown for stockfeed fell by 9.7 per cent, which combined with a 12 per cent fall in yield to give a fall in production of 20 per cent. The area of field beans grown for stockfeed increased by 8.0 per cent in 2004; this was partially offset by a fall in yield of 4.1 per cent which resulted in a 3.6 per cent increase in production.

Table 6.8 UK peas and beans for stockfeed

Enquiries: Joanne Gardiner on +44 (0)1904 455076 email: joanne.gardiner@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Peas for harvesting dry (a)						
Area (thousand hectares)	63	71	81	74	63	57
Yield (tonnes per hectare)	3.9	3.7	3.5	3.4	3.9	3.5
Volume of harvested production	247	260	285	254	248	198
Value of production (£ million)	51	40	47	38	40	30
of which: sales	27	21	25	19	23	17
subsidies (b)	24	19	22	19	17	13
Field beans						
Area (thousand hectares)	144	124	173	164	165	178
Yield (tonnes per hectare)	3.2	3.9	3.5	3.9	3.9	3.7
Volume of harvested production	462	485	606	632	639	661
Value of production (£ million)	105	74	95	88	106	98
of which: sales	49	39	53	46	59	55
subsidies (b)	56	35	42	42	48	43

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) The figures presented here cover only that part of the crop which is assumed to be used for stockfeed (about 80% to 90% of total production); the remainder is included in UK fresh vegetables, table 6.9.

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

Vegetables and horticultural products

Fresh vegetables (Table 6.9)

11 The area of field vegetables remained static in 2004 and the value of production fell by 2.9 per cent to £697 million. The value of cauliflowers increased by 15 per cent with winter cauliflowers being of good quality. The value of production of cabbages fell by 11 per cent and that of carrots increased by 4.2 per cent. Yields and quality of root crops were high although the variable weather led to disease problems and wet weather hindered the planting and drilling of many brassica crops. The value of mushrooms fell by 9.7 per cent to £107 million.

12 Wet, cool and overcast weather during 2004 led to some delay in the establishment of the new season crops and delayed maturity for those grown under fleece. Waterlogged soils made conditions difficult for harvest and hail showers delayed land preparation.

13 The area of protected vegetables fell by 17 cent with the decline being attributed to lettuce crops and, to a lesser extent, cucumber crops. Low light levels had an adverse effect on average yields and the value of production fell by 15 per cent to £238 million. The cool and wet summer increased disease levels and further reduced the demand for traditional summer salads. This was in direct contrast to 2003 when the hot dry summer resulted in high demand which in some cases outstripped supply. The overall value of tomatoes fell by 28 per cent to £57 million and lettuces fell by 20 per cent to £84 million.

Table 6.9 UK fresh vegetables

Enquiries: Lesly Lawton on +44 (0)1904 455072 email: lesly.lawton@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production							
Area (thousand hectares):		163	138	129	120	124	124
of which:	grown in the open (a) (b)	161	137	128	119	124	124
	protected (c)	2	1	1	1	1	1
Value of production (£ million):		991	887	1 022	952	998	936
of which:	grown in the open	669	573	718	665	718	697
	protected	323	313	305	287	280	238
of which:	subsidies (d)	9	4	5	4	4	3
Selected crops:	cabbages	68	49	62	57	61	54
	carrots	86	75	163	147	126	131
	cauliflowers	66	43	31	38	41	47
	lettuces	112	83	99	86	105	84
	mushrooms	153	150	150	137	119	107
	peas	58	61	54	55	53	47
	tomatoes	68	85	79	80	79	57
Prices (farmgate price (£ per tonne))							
Selected crops:	cauliflowers	236.1	274.1	285.3	331.0	332.7	289.0
	tomatoes	620.2	751.6	724.9	793.7	1 042.3	724.0
Supply and use (e)							
Total production		3 036	2 923	2 857	2 582	2 547	2 656
Supplies from the Channel Islands		20	15	14	12	12	12
Imports from:	the EU	1 211	1 424	1 783	1 660	1 639	1 734
	the rest of the world	194	222	264	279	279	338
Exports to:	the EU	256	233	228	248	292	216
	the rest of the world	32	55	36	68	75	29
Total new supply		4 173	4 296	4 654	4 217	4 110	4 495
Production as % of total new supply for use in the UK		73	68	61	61	62	59

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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) Trade figures relate to fresh produce where distinguishable.

Plants and flowers (Table 6.10)

14 The overall area for plants and flowers increased in 2004 to 21 thousand hectares. The total value of production increased by 3.3 per cent to £796 million. The total value of production of the relatively small flowers and bulbs sector remained static. Narcissus continued to be the predominant crop of this sector. This has continued to be a competitive sector despite strong competition from abroad.

15 The value of hardy nursery stock rose by 4.8 per cent. It was a difficult and challenging year for nursery stock sales. Poor weather at times led to a surplus of stock and high wastage. Overall production values remained static though there was a steady upward shift in returns for specimen container plants, fruit plant stocks and herbaceous perennials.

16 The value of protected plants and flowers rose by 1.3 per cent. 2004 was a poor year for many growers as a result of wet weather at key marketing times. Initially, production was on par with previous years but the poor weather reduced demand and increased disease and wastage.

Table 6.10 UK plants and flowers (a)

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

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production						
Area (thousand hectares) (b):	20	20	19	22	21	21
Value of production (£ million)	601	679	688	750	771	796
of which: flowers and bulbs in the open (c)	55	32	32	32	33	33
hardy plants and flowers, nursery stock	301	375	393	441	456	478
protected crops	246	273	263	277	282	285
Trade (£ million)						
Imports						
Bulbs	36	31	40	43	43	47
Cut flowers	234	355	413	549	552	563
Foliage	14	20	21	27	27	19
Indoor plants	76	87	112	112	100	100
Outdoor plants	38	28	35	42	55	57
Trees	7	30	34	47	52	56
Other	13	22	22	29	33	33
Total Imports (exc. Channel Islands)	419	572	676	849	862	875
Exports						
Bulbs	7	7	7	6	8	9
Cut flowers	13	19	21	18	23	28
Foliage	3	2	2	2	1	2
Indoor plants	2	1	1	1	-	-
Trees	2	1	1	1	1	1
Other	2	2	1	3	3	4
Total Exports	32	36	38	33	41	48

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) More statistics for plants and flowers are available in the publication "Basic Horticultural Statistics", which can be found on the internet at: http://statistics.defra.gov.uk/esg/publications/bhs/default.asp.

(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) Including forced flower bulbs.

Potatoes

Potatoes (Table 6.11)

17 The total area for all potatoes increased by 2.4 per cent in 2004; the area for earlies increased by 9.2 per cent whereas maincrop increased by only 1.7 per cent. Average yields were higher than 2003 and, together with the slight increase in area, resulted in a rise in production of 6.7 per cent to 6.3 million tonnes. Market prices remained very strong throughout the year. The average price per tonne paid to registered producers for all potatoes increased by 14 per cent, rising from £103 in 2003 to £118 in 2004. The value of sales increased by 18 per cent to £664 million.

Table 6.11 UK potatoes

Enquiries: Melanie Riley on +44 (0)1904 455067 email: melanie.riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production						
Area (thousand hectares)	169	166	165	158	145	149
of which: early	16.2	12.2	13.9	14.3	13.5	14.8
maincrop	153	154	151	144	132	134
Yield (tonnes per hectare):						
early	23.4	22.6	12.4	16.4	20.0	17.4
maincrop	41.3	41.4	42.8	46.7	42.9	45.2
all potatoes	39.5	40.0	40.2	44.0	40.7	42.5
Volume of harvested production	6 673	6 636	6 649	6 966	5 918	6 316
of which: early	380	276	172	235	271	257
maincrop	6 293	6 359	6 477	6 732	5 647	6 060
End year stocks	3 406	2 986	3 435	3 387	2 916	2 715
Value of production (£ million)	732	453	655	480	518	680
of which: sales	722	504	588	468	562	664
on farm seed use	23	8	17	15	5	7
change in stocks	- 12	- 60	50	- 4	- 48	10
Prices (average price paid to registered producers (£ per tonne)) (a)						
early potatoes	145.9	132.3	183.7	110.3	132.3	178.5
maincrop potatoes	125.6	80.7	106.7	75.5	99.1	112.0
all potatoes	126.0	83.3	111.3	81.0	102.9	117.6

continued

Table 6.11 continued

Thousand tonnes (unless otherwise specified) — Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Supply and use						
Total production	6 673	6 636	6 649	6 966	5 918	6 316
Supplies from the Channel Islands	43	43	36	39	31	35
Imports	1 104	1 270	1 900	1 788	1 709	1 708
of which:						
early from:						
the EU	61	86	98	96	68	94
the rest of the world	139	61	74	68	75	95
maincrop from:						
the EU	151	167	488	152	124	259
the rest of the world	8	7	10	10	7	8
processed (raw equivalent) from:						
the EU	670	905	1 169	1 425	1 390	1 201
the rest of the world	41	16	22	10	11	11
seed from:						
the EU	34	29	38	28	34	40
the rest of the world	-	-	-	-	-	-
Exports	296	372	343	460	444	244
of which:						
raw to:						
the EU	111	154	119	176	176	93
the rest of the world	48	7	2	4	7	5
processed (raw equivalent) to:						
the EU	62	96	110	155	166	67
the rest of the world	14	33	26	21	20	19
seed to:						
the EU	30	36	57	49	14	47
the rest of the world	31	46	28	56	62	14
Total new supply	7 523	7 577	8 242	8 334	7 213	7 816
Change in stocks	- 203	- 720	449	- 48	- 471	- 202
Total domestic uses	7 726	8 297	7 793	8 382	7 684	8 017
of which: used for human consumption	6 287	6 675	6 606	6 892	6 448	6 830
seed for home crops (including seed imports)	492	454	422	416	368	367
support buying	433	. .	. .	. .	. .	. .
chats, waste and retained stockfeed	803	1 168	766	1 074	867	821
Production as % of total new supply for use in the UK	89%	88%	81%	84%	82%	81%

UK potatoes (crop years: June-May)

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

	1999/00	2000/01	2001/02	2002/03	2003/04 (provisional)
Production					
Volume of harvested production	7 131	6 636	6 649	6 966	5 918
Value of production (£ million)	447	634	561	422	704
of which: sales	437	626	530	413	698
on farm seed use	23	9	19	7	5
change in stocks	- 12	- 2	12	2	1
Prices (average realised return (£ per tonne)) (a)	73.4	116.6	98.6	71.9	131.6

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

Fresh fruit

Fresh fruit (Table 6.12)

18 The area of orchard fruit fell by 4.1 per cent while the value of production increased by 3.7 per cent to £106 million. Fruit sizes of all varieties of apples and pears were above average with some fruit size excessive for market requirements. Dessert apples increased in value by 19 per cent. Pears fell in value by 22 per cent. Wet conditions in the summer resulted in the loss of some plums due to rot and caused cherries to split.

19 The area of soft fruit increased by 11 per cent and the value of production increased by 2.9 per cent. The value of production of raspberries rose by 19 per cent but strawberries fell by 8.6 per cent. The area of raspberry production increased though the strawberry area remained static. The cool and wet summer meant that supplies of strawberries and raspberries exceeded demand and an increased proportion of the raspberry crop was frozen. The marketing period of the strawberry crop was affected by imported fruit from both the Netherlands and the USA.

Table 6.12 UK fresh fruit

Enquiries: Lesly Lawton on +44 (0)1904 455072 email: lesly.lawton@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Production						
Area (thousand hectares):	41	33	33	27	27	27
of which: orchard fruit (a)	29	24	24	20	19	18
soft fruit (b)	12	9	9	7	8	9
End year stocks (c)	111	79	82	62	61	56
Value of production (£ million) (d):	259	232	239	243	307	316
of which: orchard fruit	119	83	95	85	102	106
soft fruit	137	137	127	135	172	177
of which: sales	264	230	238	252	306	318
change in stocks (c)	- 5	2	1	- 8	1	- 2
Selected crops: dessert apples	57	36	37	32	32	38
culinary apples	33	23	19	27	35	41
pears	13	8	14	14	10	8
raspberries	31	26	26	29	41	48
strawberries	70	84	81	89	105	96
Prices (farmgate price (£ per tonne))						
Selected crops: dessert apples	359.5	357.8	352.2	385.2	460.3	376.4
culinary apples	231.8	215.3	175.7	285.7	471.7	378.1
pears	417.1	283.3	352.1	402.9	344.0	348.1
Supply and use (e)						
Total production	430	306	331	290	267	329
Supplies from the Channel Islands	20	15	14	12	12	12
Imports from: the EU	1 127	1 273	1 310	1 362	1 244	1 219
the rest of the world	1 226	1 480	1 569	1 640	1 752	2 015
Exports to: the EU	63	59	73	69	78	104
the rest of the world	2	-	1	1	1	1
Total new supply	2 738	3 015	3 151	3 235	3 195	3 470
Change in stocks	- 12	6	2	- 19	- 1	- 6
Total domestic uses	2 750	3 009	3 149	3 254	3 196	3 476
Production as % of total new supply for use in the UK	16	10	10	9	8	9

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Livestock

Cattle and calves: beef and veal (Table 6.13)

20 The total value of production of beef and veal, including subsidies, changes in work-in-progress and imported cattle, rose by 3.6 per cent in 2004 to £2.3 billion. The value of home-fed production of cattle and calves reared in the United Kingdom rose to £1.3 billion, an increase of 8.6 per cent. Clean cattle prices were strong in 2004, peaking at 108 pence per kg in July. Despite a subsequent fall in prices because of the increased availability of cattle due to a delay in finishing, average annual prices still remained significantly higher than those of 2003. Clean cattle marketings increased by 2.5 per cent in 2004 continuing the recovery seen after the outbreak of foot-and-mouth disease in 2001. Home-fed production of beef and veal rose by 1.8 per cent to 712 thousand tonnes with the amount of beef available for domestic uses rising slightly to 996 thousand tonnes.

Pigs and pigmeat (Table 6.14)

21 The total value of production of pigmeat increased by 1.7 per cent in 2004 to £681 million. Changes in the value of work-in-progress offset a fall of 0.8 per cent in the value of home-fed production of meat from pigs fattened in the United Kingdom. The value of home-fed production, at £675 million, was the lowest since publication of Agriculture in the United Kingdom began in 1988. Finished pig prices strengthened throughout the first half of 2004 with a peak of 109 pence per kg in May, owing to stable domestic supplies and a strong European pig market. In the second half of the year deadweight prices fell to just under 100 pence per kg, mainly due to an increase in domestic pig supplies; falling prices in the European Union also had an impact on the United Kingdom market.

22 Marketings of clean pigs fell by 3.4 per cent, a less severe fall than the decline seen in recent years. This reflects the recovery in sow productivity as incidences of PMWS and PNDS, the pig wasting diseases, were less acute in 2004. June Census results indicate that the decline in the pig breeding herd seems to be levelling off. Clean pig carcase weights continued to rise, averaging 75 kg in 2004, which is around 5.5 kg a pig more than the average in 1999.

23 Home-fed production of pork remained unchanged in 2004 at 574 thousand tonnes. An increase in imports, partly offset by an increase in exports, led to the amount of pork available for domestic uses increasing by 0.4 per cent to 929 thousand tonnes. Home-cured production of bacon fell by 3.2 per cent to 196 thousand tonnes, with the amount available for domestic uses declining by 0.5 per cent to 486 thousand tonnes. Imports accounted for more than half of the domestic supplies of bacon and ham.

Sheep and lambs: mutton and lamb (Table 6.15)

24 The total value of production of sheepmeat, including subsidies, changes in work-in-progress, imported live animals and exports of breeding animals, rose by 3.2 per cent to just over £1.0 billion in 2004, due mainly to an increase in subsidy payments of 7.2 per cent. The value of home-fed production of sheepmeat from sheep reared in the United Kingdom, increased to £697 million, a rise of 0.6 per cent. Firm demand for sheepmeat and relatively tight supplies kept sheep prices high for the first four months of 2004. Prices subsequently declined although there was a slight recovery towards the end of the year.

25 Clean sheep marketings remained virtually unchanged in 2004 and the June Census results showed very little change in the size of the flock. Clean sheep carcase weights averaged 19.4 kg per head, a 2.3 per cent rise on the average weight in 2003. Home-fed sheepmeat production rose by 2.6 per cent to 314 thousand tonnes. The amount of sheepmeat available for domestic uses rose by 5.1 per cent to 377 thousand tonnes, with imports rising by 5.7 per cent.

Poultry and poultrymeat (Table 6.16)

26 Production of poultrymeat rose by 6.0 per cent in 2004 to 1.6 million tonnes with slaughterings of birds rising by 7.0 per cent. The total value of production declined by 0.1 per cent to £1.2 billion. Imports rose by 9.2 per cent and exports rose by 1.1 per cent.

27 Average producer poultrymeat prices declined this year across the board; broiler meat fell by 3.8 per cent to 66 pence per kg, turkey meat fell 6.8 per cent to 116 pence per kg, duck meat fell by 3.8 per cent to 163 pence per kg and goose meat fell by 2.8 per cent to 438 pence per kg. However the price of meat from boiling fowls rose slightly to 9.6 pence per kg.

Gross indigenous production

28 Two measures of production are shown in tables 6.13, 6.14 and 6.15. Gross indigenous production is a measure of animal production commonly used in other European Union Member States and is therefore useful for making international comparisons. It is measured as total slaughterings plus all live exports minus all live imports of breeding and non-breeding livestock. Home-fed production includes imports and exports of non-breeding animals only, i.e. it is measured as total slaughterings plus live exports (non-breeding) minus live imports (non-breeding).

Table 6.13 UK cattle and calves: beef and veal

Enquiries: Steve Walton on +44 (0)1904 455090 email: steve.walton@defra.gsi.gov.uk

Thousand tonnes (unless otherwise stated) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Population						
Total cattle and calves (thousand head at June)	11 887	11 133	10 600	10 343	10 517	10 551
of which: dairy cows	2 662	2 336	2 251	2 227	2 192	2 133
beef cows	1 811	1 842	1 708	1 656	1 700	1 735
dairy heifers in calf	563	532	502	470	441	461
beef heifers in calf	221	186	199	257	239	228
other	6 629	6 238	5 940	5 732	5 945	5 994
Production (a) (b)						
Total home-fed marketings (thousand head)	3 634	2 419	2 143	2 289	2 273	2 329
of which: steers, heifers and young bulls	2 431	2 263	2 046	2 187	2 181	2 217
calves	488	152	92	98	87	101
cows and adult bulls	715	4	5	4	5	12
Average dressed carcase weight (kg) (c):						
steers, heifers and young bulls	298	309	313	315	319	319
calves	74	27	27	26	26	26
cows and adult bulls	285	249	258	243	237	265
Production (dressed carcase weight):						
home-fed production	946	704	645	694	699	712
gross indigenous production	940	701	634	682	686	706
Value of production (£ million)	2 473	1 993	1 786	2 126	2 178	2 256
of which: value of home-fed production	2 070	1 113	997	1 113	1 166	1 266
subsidies (d)	436	899	831	980	964	1 016
change in work-in-progress (e)	- 19	- 18	- 39	36	50	- 25
less imported livestock	14	2	2	3	2	1
plus breeding animals exported	1	. .	. .	. .	. .	. .

continued

Table 6.13 continued

Thousand tonnes (unless otherwise stated) — Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Prices						
Store cattle (£ per head) (f):						
1st quality Hereford/cross bull calves (g)	178.1	79.5	. .	84.9	112.7	109.8
1st quality beef/cross yearling steers (h)	474.7	400.0	. .	403.9	451.5	470.6
Finished cattle (pence per kg liveweight): All clean cattle	124.3	89.8	87.5	91.4	95.2	101.2
Over Thirty Month Scheme (i)						
Over Thirty Month Scheme:						
clean cattle throughput (thousand head)	. .	62	55	65	43	39
cull cattle throughput (thousand head)	. .	910	562	766	679	696
receipts (£ million)	. .	260.0	158.2	236.7	198.9	199.2
Supply and use (dressed carcase weight) (j)						
Home-fed production (a) (b)	946	704	645	694	699	712
Imports from: the EU (k)	151	133	189	211	216	211
the rest of the world	53	64	74	88	90	88
Exports to: the EU (l)	219	9	8	10	11	12
the rest of the world	61	-	-	-	-	-
Total new supply	870	892	900	983	995	999
Change in stocks	- 61	- 21	- 1	- 6	2	3
Total domestic uses	931	914	901	989	994	996
Home-fed production as % of total new supply for use in the UK	109%	79%	72%	71%	70%	71%
Closing stocks	113	40	39	33	35	38

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Measures of marketings, production and value exclude all cattle removed from the food chain by the Over Thirty Month Scheme, and the Selective Cull. Payments to producers for the Over Thirty Month Scheme are included as subsidies in the value of production. Payments under the Selective Cull are not included as the payments are for the replacement of capital assets.

(b) Cattle slaughtered during the outbreak of foot-and-mouth disease in 2001 and under the Livestock Welfare Disposal Scheme are also not included in marketings, production and value as these animals were removed from the food chain. Foot-and-mouth disease compensation payments are not included in the value of production as these have been treated as compensation for exceptional losses.

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

(d) Comprising hill livestock compensatory allowances, suckler cow premium, beef special premium, deseasonalisation premium, extensification payments and slaughter premium. Includes payments made under the Over Thirty Month Scheme and the Calf Processing Aid Scheme.

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

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

(g) Category changes: Prior to January 2002, 1st quality Hereford/cross bull calves. From January 2002, Hereford/cross bull calves.

(h) Category changes: Prior to January 2002, 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.

(i) Cattle slaughtered under the Over Thirty Month Scheme are not included within the volume of production. Receipts for the Over Thirty Month Scheme are included as subsidies.

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

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

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

Table 6.14 UK pigs and pigmeat

Enquiries: Steve Walton on +44 (0)1904 455090 email: steve.walton@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Population						
Total pigs (thousand head at June)	7 791	6 482	5 845	5 588	5 047	5 038
of which: sows in pig and other sows for breeding	681	537	527	483	443	432
gilts in pig	108	73	71	74	73	66
other	7 002	5 872	5 247	5 030	4 531	4 540
Production (a)						
Total home-fed marketings (thousand head)	15 045	12 378	10 567	10 285	8 987	8 679
of which: clean pigs	14 660	12 055	10 383	9 968	8 740	8 430
sows and boars	386	323	184	316	247	249
Average dressed carcase weight (kg) (b):						
clean pigs	67	71	72	73	74	75
sows and boars	140	148	156	156	161	161
Production (dressed carcase weight):						
home-fed production	1 031	899	777	774	687	679
gross indigenous production	1 030	900	777	774	687	679
Value of production (£ million)	1 083	794	749	682	670	681
of which: value of home-fed production	1 080	821	738	689	681	675
change in work-in-progress (c)	- 4	- 31	11	- 10	- 14	3
less imported livestock	. .	. .	. .	. .	. .	. .
plus breeding animals exported	6	4	-	2	3	2
Prices (pence per kg deadweight)						
Clean pigs	107.1	94.4	97.8	93.3	102.6	102.7
Supply and use of pork (dressed carcase weight) (d) (e)						
Home-fed production (a)	810	721	605	625	574	574
Imports from: the EU (f)	132	269	259	310	421	428
the rest of the world	-	5	2	6	3	8
Exports to: the EU (g)	145	175	35	80	67	68
the rest of the world	13	33	4	15	7	13
Total new supply	785	786	828	846	924	929
Change in stocks	-	- 7	4	- 2	- 2	-
Total domestic uses	785	794	824	847	925	929
Home-fed production as % of total new supply for use in the UK	103%	92%	73%	74%	62%	62%
Closing stocks	12	8	12	10	8	8
Supply and use of bacon and ham (product weight) (d)						
Home-cured production (a)	233	214	203	200	203	196
Imports from: the EU	230	268	281	292	301	302
the rest of the world	-	-	-	-	-	-
Exports to: the EU	4	9	7	10	14	12
the rest of the world	1	1	-	1	-	1
Total new supply	458	473	477	481	491	486
Change in stocks	-	- 1	1	- 2	2	- 1
Total domestic uses	458	474	476	482	489	486
Home-cured production as % of total new supply for use in the UK	51%	45%	43%	42%	41%	40%
Closing stocks	2	4	5	3	5	5

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

continued

Table 6.14 continued

(a) Pigs slaughtered during outbreaks of foot-and-mouth disease and classical swine fever, and under Livestock Welfare Disposal Schemes are not included in marketings, production and value as these animals were removed from the food chain. Foot-and-mouth disease compensation payments are not included in the value of production as these have been treated as compensation for exceptional losses.

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

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

(d) Does not include meat offals or trade in preserved or manufactured meat products.

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

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

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

Table 6.15 UK sheep and lambs: mutton and lamb

Enquiries: Steve Walton on +44 (0)1904 455090 email: steve.walton@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Population						
Total sheep and lambs (thousand head at June)	43 851	42 264	36 716	35 834	35 846	35 848
of which: breeding flock	20 858	20 449	17 921	17 630	17 599	17 702
lambs under 1 year old	21 834	20 857	17 769	17 310	17 335	17 217
others	1 159	959	1 026	894	911	929
Production (a)						
Total home-fed marketings (thousand head)	21 119	19 635	13 322	15 342	15 265	15 287
of which: clean sheep and lambs	18 600	17 143	11 550	13 417	13 346	13 369
ewes and rams	2 519	2 492	1 772	1 925	1 919	1 918
Average dressed carcase weight (kg) (b):						
clean sheep and lambs	18	18	19	19	19	19
ewes and rams	27	28	28	29	28	29
Production (dressed carcase weight):						
home-fed production	397	383	267	307	306	314
gross indigenous production	397	383	267	307	306	314
Value of production (£ million)	1 250	954	622	888	977	1 009
of which: value of home-fed production	766	638	442	623	693	697
subsidies (c)	494	337	184	275	288	309
change in work-in-progress (d)	- 3	- 15	- 2	- 10	- 4	3
less imported livestock	7	7	1	-	-	-
plus breeding animals exported	-	-	-	-	-	-
Prices						
Store sheep (£ per head): (e)						
Lambs, hoggets and tegs	40.0	34.5	. .	. .	37.7	46.2
Finished sheep (pence per kg estimated dressed carcase weight) (f):						
Great Britain	230.7	196.4	. .	233.4	271.1	263.6
Northern Ireland	212.0	182.7	. .	222.8	239.9	228.6

continued

Table 6.15 continued

Thousand tonnes (unless otherwise specified) — Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Supply and use (dressed carcase weight) (g)							
Home-fed production (a)		397	383	267	307	306	314
Imports from:	the EU (h)	12	17	15	14	16	17
	the rest of the world	120	117	98	109	120	127
Exports to:	the EU (i)	173	124	38	69	83	83
	the rest of the world	3	1	-	1	1	1
Total new supply		352	392	342	360	358	374
Change in stocks		1	- 5	- 1	- 1	-	- 2
Total domestic uses		351	396	342	361	358	377
Home-fed production as % of total new supply for use in the UK		113%	98%	78%	85%	85%	84%
Closing stocks		14	9	8	8	8	6

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Sheep slaughtered during the outbreak of foot-and-mouth disease in 2001 and under the Livestock Welfare Disposal Scheme are not included in marketings, production and value as these animals were removed from the food chain. Foot-and-mouth disease compensation payments are not included in the value of production as these have been treated as compensation for exceptional losses.

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

(c) Comprising variable premium, hill livestock compensatory allowances, sheep annual premium and 'light lambs' welfare disposal scheme.

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

(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 live from the Irish Republic.

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

2004

Table 6.16 UK poultry and poultrymeat

Enquiries: Michael Chatten on +44 (0)1904 455098 email: michael.j.chatten@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Population							
Total poultry (thousand head at June) (a):		120 378	157 138	166 881	156 290	167 097	168 152
of which:	chickens and other table fowls	77 605	105 689	112 531	105 137	116 774	119 912
	birds in the laying flock (b)	32 495	28 687	29 895	28 778	29 274	29 662
	fowls for breeding	7 712	10 667	12 083	11 307	10 990	8 201
	turkeys, ducks & geese (c)	2 566	12 095	12 373	11 069	10 060	10 376
Production							
Slaughterings (millions) (d):		755	797	823	811	837	895
of which:	fowls	705	754	777	770	797	857
	turkeys	37	25	24	21	21	21
	ducks & geese	13	19	22	20	20	18
Production (carcase weight) (e):		1 349	1 463	1 505	1 475	1 515	1 606
of which:	chickens and other table fowls	990	1 171	1 213	1 212	1 255	1 349
	boiling fowls (culled hens)	50	51	49	50	50	49
	turkeys	277	198	192	166	164	168
	ducks & geese	31	43	50	46	46	40
Value of production (£ million):		1 327	1 233	1 266	1 170	1 231	1 230
of which:	fowls	874	833	859	837	874	884
	change in work-in-progress in fowls (f)	12	2	15	- 22	- 4	-
	turkeys, ducks, geese	393	335	323	273	290	269
	exports of live poultry	43	60	62	70	69	77
	hatching eggs for export	16	13	17	24	19	20
	less live poultry imported	7	5	5	5	5	6
	less hatching eggs imported	3	5	5	7	11	14
Prices (average producer prices (pence per kg carcase weight)):							
Chickens and other table fowls		86.2	70.7	70.4	68.7	68.6	66.0
Boiling fowls (culled hens)		40.5	10.6	9.6	9.8	9.5	9.6
Turkeys		126.0	129.9	123.6	113.5	124.1	115.7
Ducks		133.5	169.8	164.7	169.2	169.1	162.6
Geese		221.1	318.0	270.5	396.2	450.7	438.0
Supply and use (carcase weight) (e)							
Production		1 349	1 463	1 505	1 475	1 515	1 606
Imports from:	the EU	210	321	302	328	347	377
	the rest of the world	1	33	43	37	63	70
Exports to:	the EU	84	116	140	151	156	170
	the rest of the world	36	58	46	63	104	92
Total new supply		1 440	1 643	1 663	1 626	1 664	1 790
Change in stocks		-	- 13	8	- 9	11	-
Total domestic uses		1 440	1 657	1 655	1 635	1 653	1 790
Production as % of total new supply for use in the UK		94%	89%	90%	91%	91%	90%

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Improvements to the Census methodology were introduced in 1997 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 birds to be slaughtered.

Livestock products

Milk (Table 6.17)

29 The value of milk produced in the United Kingdom for human consumption in 2004 rose by 3.8 per cent to £2.7 billion. The increase was mainly driven by the introduction of dairy premium payments in 2004. There was only a slight increase of 0.4 per cent in the value of milk sold to dairy companies for processing, a result of higher average farmgate prices in 2004 which were offset by a fall of 2.6 per cent in volume. The prospect of going over quota at the end of the 2003/04 quota year encouraged producers to cut their milk production and low production continued into the 2004/05 quota year. The higher farmgate prices were the result of a number of factors including the relatively low volumes of milk produced over the year and strong demand for butter and skimmed milk powder outside the United Kingdom.

30 There was a fall of 30 million litres in the volume of milk processed on farm for sale direct to consumers resulting in a drop in value of 15 per cent to £62 million. Milk production in the 2003/04 quota year exceeded quota for the first time since 1999/2000 resulting in a superlevy charge of £8.0 million. The value of milk production was boosted by the introduction of the Dairy Premium and Additional Payment amounting to £108 million, to compensate milk producers for cuts in price support made as part of CAP reform.

Milk products (Table 6.18)

31 Cheese production is estimated to have risen by 3.5 per cent to 376 thousand tonnes in 2004. A 3.8 per cent increase in imports, only marginally offset by an increase in exports, led to the amount of cheese available for domestic uses increasing by 2.2 per cent to 608 thousand tonnes.

32 Butter production is estimated to have fallen by 8.1 per cent to 123 thousand tonnes. A fall in imports was offset by a fall in exports and an increase in butter leaving stocks resulting in a 1.5 per cent increase in the amount of butter available for domestic uses. Low milk production in the European Union meant that markets for butter were strong and commodity prices remained high despite the cuts in intervention prices on 1 July. No butter was bought into intervention in the United Kingdom during the intervention purchasing period between 1 March and 31 August.

33 Production of skimmed milk powder is expected to have fallen by 25 per cent. An increase in imports was offset by a larger increase in exports but the release of 25 thousand tonnes from stocks led to an increase of 23 per cent in the amount of skimmed milk powder available for domestic uses. Like butter, low milk production in the European Union meant that markets for skimmed milk powder were strong and commodity prices remained high despite the cuts in intervention prices. Intervention purchases of skimmed milk powder in the United Kingdom between 1 March and 31 August were significantly lower than in 2003 at only 1,900 tonnes. The strong prices provided an opportunity for stocks of skimmed milk powder held in intervention in the European Union to be sold and stocks were almost exhausted by the end of the year.

Hen Eggs (Table 6.19)

34 The value of production of eggs for human consumption increased by 5.8 per cent to £432 million. The total quantity of eggs produced for human consumption rose by 0.2 per cent to 679 million dozen; of this, production of processed eggs fell by 3.9 per cent whilst eggs sold in shell, which accounted for almost 80 per cent of the eggs sold for human consumption in 2004, rose by 1.3 per cent. The weighted average price of eggs graded in the United Kingdom rose by 7.2 per cent to 50.3 pence per dozen.

Table 6.17 UK milk

Enquiries: Colin Beattie on +44 (0)1904 455095 email: colin.j.beattie@defra.gsi.gov.uk

Million litres (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Population and yield						
Dairy herd (annual average, thousand head) (a)	2 702	2 354	2 251	2 224	2 203	2 134
Average yield per dairy cow (litres per annum)	5 318	5 978	6 346	6 494	6 634	6 668
Production						
Milk from the dairy herd (b)	14 368	14 071	14 283	14 440	14 611	14 226
Milk from the beef herd (b)	7	7	7	7	7	7
less on farm waste and milk fed to stock	261	277	283	269	264	259
Volume for human consumption	14 114	13 801	14 007	14 178	14 354	13 974
Value of production (£ million)	3 332	2 393	2 822	2 466	2 627	2 728
of which: raw milk leaving farm (c)	3 247	2 300	2 658	2 392	2 554	2 565
raw milk processed on farm (d)	112	86	85	75	73	62
subsidies	. .	22	79	. .	. .	108
less levies (e)	27	15	. .	. .	. .	8
Prices (average price received by milk producers, net of delivery charges (pence per litre)) (f)						
Farmgate price of milk excluding bonus payments	24.5	16.9	19.1	17.0	18.0	18.5
Farmgate price of milk including bonus payments	24.9	16.9	19.3	17.1	18.0	18.5
Supply and use (g)						
Production	14 375	14 078	14 290	14 447	14 584	14 138
Imports	181	105	64	72	105	64
Exports	134	445	414	421	400	418
Total new supply	14 301	13 738	13 940	14 099	14 289	13 784
of which:						
for liquid consumption	6 831	6 768	6 761	6 756	6 630	6 459
for manufacture	7 093	6 550	6 741	6 965	7 281	6 960
of which: butter (h)	283	270	259	279	274	251
cheese	3 232	3 032	3 568	3 449	3 425	3 532
cream (h)	273	266	286	286	318	352
condensed milk (i)	714	522	536	491	375	354
milk powder - full cream	537	932	781	825	888	824
milk powder - skimmed	1 475	889	663	973	1 379	989
other	578	640	649	663	622	657
dairy wastage and stock change	113	91	105	72	115	92
other uses (j)	301	329	333	306	263	274

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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) Comprising milk co-responsibility levy from 1977 to 1993 and milk superlevy.

(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 on the utilisation of milk by dairies run by Defra and the agricultural departments in Scotland and Northern Ireland.

(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.

Table 6.18 UK milk products

This data shows UK production and supplies of milk products manufactured by both dairy companies and on farm. The data is quoted in thousand tonnes and is not directly comparable with the data shown in table 6.17, which is quoted in million litres.

Enquiries: Colin Beattie on +44 (0)1904 455095 email: colin.j.beattie@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Butter (a) (b)							
Production (c)		141	132	126	136	134	123
Imports from: (d)	the EU	53	80	76	97	118	116
	the rest of the world	62	38	40	19	-	-
Exports to:	the EU (e)	44	40	36	35	33	22
	the rest of the world	8	6	5	4	11	12
Total new supply (e)		203	204	201	213	208	204
Change in stocks (f)		- 17	- 5	1	1	- 2	- 8
Total domestic uses (e) (f)		220	209	200	212	209	213
Production as % of total new supply for use in the UK		69%	64%	63%	64%	64%	60%
Closing stocks (f)		22	17	18	19	17	9
Cheese							
Production (c)		347	340	395	380	363	376
Imports from: (g)	the EU	184	226	247	255	288	299
	the rest of the world	20	29	28	31	28	28
Exports to: (g)	the EU	35	49	58	64	73	72
	the rest of the world	22	10	10	19	17	19
Total new supply		494	536	601	583	589	613
Change in stocks		- 2	-	5	- 3	- 5	5
Total domestic uses		496	536	596	585	595	608
Production as % of total new supply for use in the UK		70%	63%	66%	65%	62%	61%
Closing stocks (h)		22	10	15	12	7	12
Cream - fresh, frozen, sterilized							
Production (b) (c)		270	270	290	290	290	254
Imports from:	the EU	3	10	17	15	15	15
	the rest of the world	-	-	-	-	-	-
Exports to:	the EU	76	81	83	91	112	82
	the rest of the world	2	1	1	-	1	-
Total new supply		196	198	224	214	191	187
Change in stocks		. .	. .	. .	. .	. .	. .
Total domestic uses		196	198	224	214	191	187
Production as % of total new supply for use in the UK		138%	137%	130%	135%	152%	136%
Closing stocks		. .	. .	. .	. .	. .	. .

continued

Table 6.18 continued

Thousand tonnes (unless otherwise specified) Calendar years

		Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Condensed milk (i)							
Production		190	162	161	174	158	161
Imports from:	the EU	12	15	14	12	20	23
	the rest of the world	-	-	-	-	-	-
Exports to:	the EU	13	29	20	28	20	10
	the rest of the world	43	2	1	1	-	-
Total new supply		145	145	153	156	157	174
Change in stocks		-	- 1	3	- 1	- 2	- 2
Total domestic uses		145	146	150	157	159	176
Production as % of total new supply for use in the UK		131%	111%	105%	112%	101%	92%
Closing stocks		11	7	10	9	7	5
Milk powder - full cream							
Production		81	105	87	105	101	83
Imports from:	the EU	7	11	8	9	13	17
	the rest of the world	-	-	-	-	-	-
Exports to:	the EU	24	28	29	42	39	38
	the rest of the world	42	74	57	60	78	72
Total new supply		22	14	9	12	- 2	- 10
Change in stocks		-	- 1	3	- 1	- 2	- 1
Total domestic uses		22	15	6	13	- 1	- 9
Closing stocks		3	3	6	5	3	2
Skimmed milk powder							
Production		130	83	71	87	115	87
Imports from:	the EU	13	14	23	17	32	50
	the rest of the world	-	-	-	-	-	-
Exports to:	the EU (e)	43	77	26	21	30	51
	the rest of the world	14	35	4	9	26	27
Total new supply (e)		86	- 15	63	75	91	59
Change in stocks		- 1	- 66	7	16	22	- 25
Total domestic uses (e)		87	50	56	59	69	84
Production as % of total new supply for use in the UK		152%	- 535%	111%	115%	126%	147%
Closing stocks		14	5	12	28	51	25

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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) In 2001, New Zealand Milk entered a partnership with Arla Foods and manufacturing operations were switched from the United Kingdom to Denmark. Consequently, New Zealand butter is entering the United Kingdom via Denmark and is included in Danish butter imports statistics.

(e) Includes the use for animal feed.

(f) In addition to stocks in public coldstores surveyed by Defra, closing stocks include all intervention stocks in private cold stores. Total domestic uses do not equate exactly with consumption since changes in unrecorded stocks are not included in the calculation.

(g) Includes processed cheese.

(h) Cheese stocks held in public cold stores. Public coldstores make their storage space available to the public or to the Rural Payments Agency, formerly the Intervention Board. The ownership of the store whether public or private is irrelevant.

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

Table 6.19 UK hen eggs

Enquiries: Michael Chatten on +44 (0)1904 455098 email: michael.j.chatten@defra.gsi.gov.uk

Million dozen (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Population and yield						
Number of fowls laying eggs for eating (millions) (a)	34	30	29	28	28	28
Average yield per layer (number of eggs per bird per year)	276	292	292	290	295	292
Production						
Volume of production of eggs	880	826	817	793	791	793
of which: eggs for human consumption	784	718	706	680	678	679
eggs for hatching (b)	84	95	96	95	98	97
hatching eggs for export (c)	3	5	6	10	6	7
waste	9	9	9	9	9	9
Value of production of eggs for human consumption (£ million) (d)	406	353	342	356	409	432
Prices (pence per dozen)						
Weighted average price of eggs graded in the UK (e)	40.8	36.7	35.7	39.9	46.9	50.3
Supply and use						
UK production of eggs for human consumption	784	718	706	680	678	679
of which: eggs sold in shell	679	581	571	541	535	542
eggs processed	105	136	136	139	142	137
Imports from (f): the EU	59	91	113	140	144	156
the rest of the world	2	3	4	11	5	4
Exports to (f): the EU	18	15	8	15	14	12
the rest of the world	2	3	3	3	1	1
Total new supply	825	793	812	813	811	826
Production as % of total new supply for use in the UK	95%	90%	87%	84%	84%	82%

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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 6.16).

(c) Hatching eggs for exports are valued in table 6.16.

(d) Excludes the value of eggs for hatching.

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

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

Purchased seeds and animal feed

Purchased seeds (Table 6.20)

35 The total volume of purchased seeds fell by 3.7 per cent in 2004. The total value of production was also down, by 4.4 per cent, to £273 million. The main changes related to a reduction in the purchased volume of certified cereal seeds and in purchased and home saved seed potatoes.

Animal feed (Table 6.21)

36 The total cost of all purchased animal feed increased by 4.4 per cent to £2.5 billion in 2004. This was despite a fall in total feed volumes of 1.6 per cent and reflected increases in feed ingredient costs, particularly of cereals, seen in the first half of the year. Compound feed volumes increased by 0.5 per cent as falls in cattle feed volumes were offset by a rise in the pig and sheep feed sectors. A modest increase of 2.8 per cent in pig feed followed the addressing of health issues and associated restocking of the pig herd. There was an increase of 2.0 per cent in the use of straight concentrates while inter/intra farm transfer of feed fell by 16 per cent.

Table 6.20 UK purchased seeds

Enquiries: Melanie Riley on +44 (0)1904 455067 email: melanie.riley@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Cereals (a)	451	340	350	308	303	286
Grass and clover	12	11	11	11	11	11
Root and fodder crops	47	45	60	55	54	57
Potatoes (b)	484	466	447	439	371	350
Vegetable and other horticultural seeds (c)	116	137	149	162	173	173
Total purchased seeds	1 111	998	1 016	975	912	878
Total value of all purchased seeds (£ million)	336	263	291	276	286	273

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Restricted to the purchase of certified seeds only.

(b) Includes farm-saved seeds.

(c) Includes bulbs and seeds for hardy nursery stock, flowers, sugar beet and oilseed rape.

Table 6.21 UK animal feed

Including direct inter-farm and intra-farm transfer.

Enquiries: Joanne Gardiner on +44 (0)1904 455076 email: joanne.gardiner@defra.gsi.gov.uk

Thousand tonnes (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Compounds:						
cattle	4 263	3 948	4 230	4 124	4 406	4 351
calves	288	184	180	177	193	196
pigs	2 471	2 112	1 970	1 802	1 560	1 604
poultry (a)	3 148	3 059	3 243	3 456	3 337	3 343
other	673	729	704	627	692	721
Total (b)	10 868	9 888	10 180	10 077	10 083	10 137
Straight concentrates (c)	6 634	6 825	7 053	6 361	7 054	7 198
Non-concentrates (d)	545	525	525	525	525	525
Inter/intra farm transfer	2 737	2 850	3 000	3 170	3 387	2 846
Total purchased animal feed	20 786	20 088	20 758	20 132	21 049	20 705
Value of purchased animal feed (£ million) (e)	2 950	2 140	2 367	2 219	2 365	2 468

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

(b) Including imports, less exports.

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

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

(e) See Table 8.1 for a breakdown of this total.

Chapter 7 Organic Farming

Key findings

- The total area of land that was organically managed (either fully organic or in-conversion) fell by 4.0 per cent between March 2003 and December 2003.
- Permanent and temporary pasture accounts for 86 per cent of organically managed land in the United Kingdom.
- 54 per cent of the United Kingdom's organically managed land is in Scotland, covering 373 thousand hectares.
- 64 per cent of producers and growers and 84 per cent of processors and importers are located in England.
- 29 per cent of organic livestock producers are located in the southwest region of England.
- In 2004, there were 217 thousand cattle, including 90 thousand dairy cows, 716 thousand sheep, 67 thousand pigs, 2,561 thousand poultry and 1.5 thousand other livestock, being reared organically in the United Kingdom.

Introduction

1 Organic farming is a method of farming that requires farmers to operate to a system based on ecological principles and which imposes strict limitations on the inputs that can be used in order to minimise damage to the environment and wildlife. Emphasis is placed on natural methods of production and pest control.

2 In partnership with the various organic sector bodies in the United Kingdom, Defra collected and published data on the organic sector during 2003. Data previously published in Agriculture in the United Kingdom 2003 were for the area of organically managed land, either fully organic or in–conversion, and the number of producers/growers and processors/importers registered with the organic sector bodies. These data have been updated. In addition, data have been collected for the first time on producers and numbers of organic livestock.

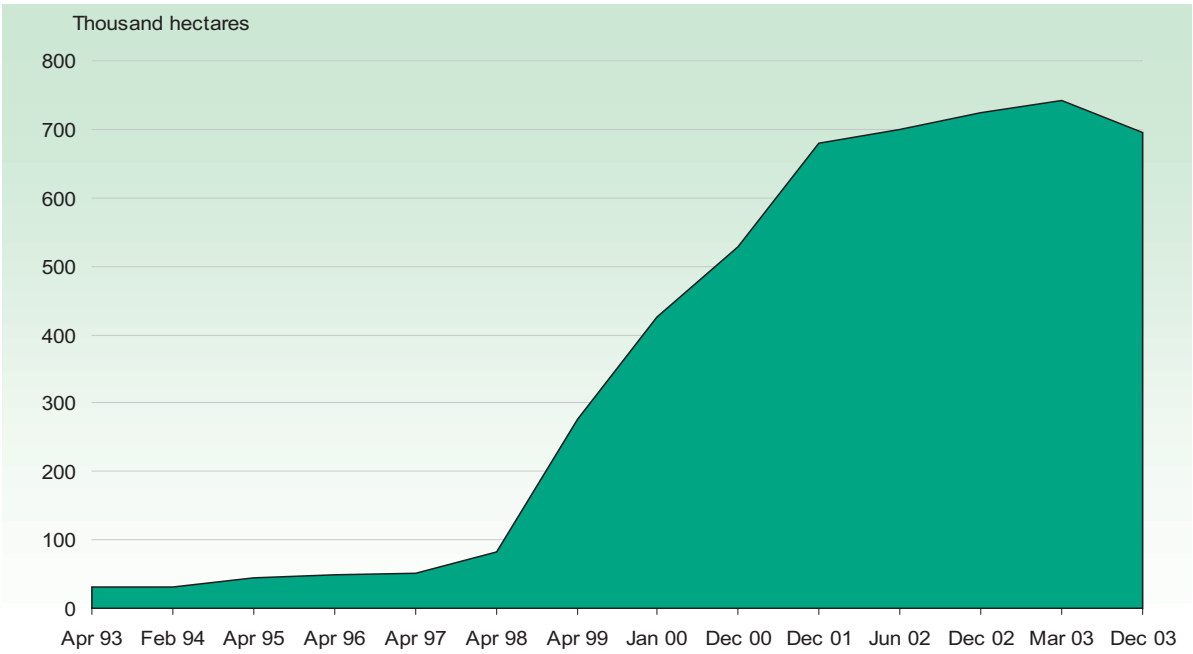
3 Work continues with the organic sector bodies to further develop the data collected and published. If you have any comments on the statistics shown here or on future requirements, please contact Michael Rowland by email at the following address: michael.rowland@defra.gsi.gov.uk. The tables in this chapter will be updated on the Defra website when further data becomes available.

Organic and in-conversion land (Table 7.1, charts 7.1 to 7.3)

4 The total area of land that was organically managed, that is either fully organic or in-conversion, fell by 4.0 per cent between March 2003 and December 2003, peaking in March 2003 at 741 thousand hectares, after several years of very notable increases.

5 The late 1990s and early 2000s saw increases in the area of organically managed land 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.

Chart 7.1 UK organically managed land 1993 to 2003

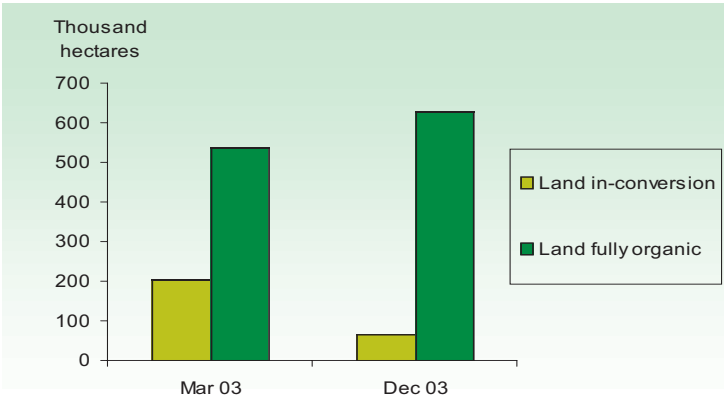


source: Defra website, http://statistics.defra.gov.uk/esg/

6 The area of in-conversion land fell by 138 thousand hectares between March 2003 and December 2003 while the area of fully organic land rose by 93 thousand hectares. Ninety per cent of the organically managed land in the United Kingdom was fully organic in December 2003.

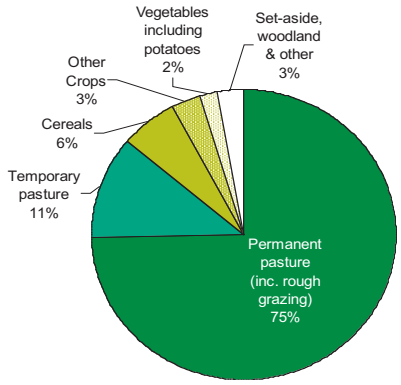
7 Permanent and temporary pasture accounted for 86 per cent of fully organic or in-conversion land in the United Kingdom. The remainder was made up of cereals and other crops, vegetables including potatoes and set-aside, woodland and other uses.

Chart 7.2 UK organically managed land 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 7.3 UK organically managed land use at December 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

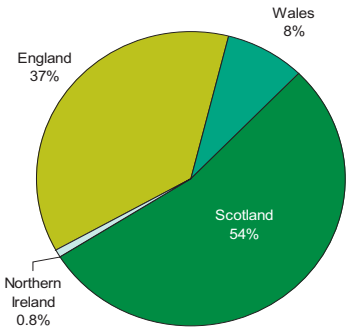
Regional analysis (Tables 7.1 to 7.3, charts 7.4 and 7.5)

8 Fifty-four per cent of the United Kingdom's organically managed land is in Scotland covering 372 thousand hectares; 37 per cent is in England; 8.4 per cent in Wales and 0.8 per cent in Northern Ireland. Over half of organically managed land in England is situated in the southwest and southeast of the country.

9 Increases in the areas of organically managed land in England, Wales and Northern Ireland between March and December 2003 were offset by a 13 per cent fall in Scotland which arose from the withdrawal of a number of hill farms when they reached the end of their five-year payment arrangements under the Organic Aid Scheme.

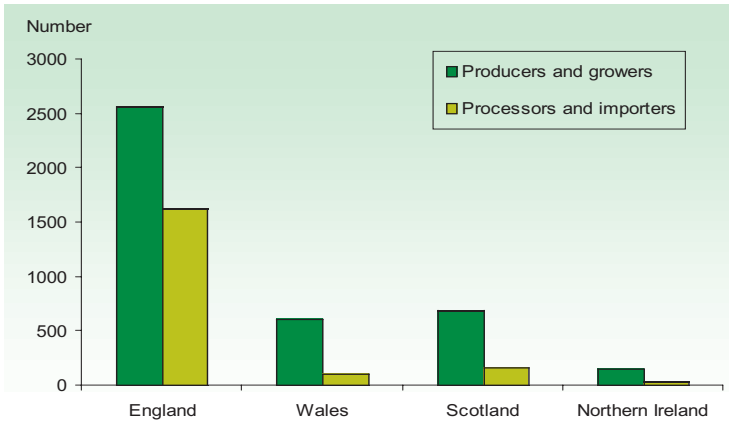
10 Despite over half of the organically managed land being in Scotland, only 17 per cent of organic producers and growers are found there. Sixty-four per cent are located in England, 15 per cent in Wales and 3.7 per cent in Northern Ireland. Over half of producers and growers in England are located in the southwest and southeast of the country. A map showing the distribution of organic holdings by postcode can be found on the Defra website in an annex to this chapter at http://statistics.defra.gov.uk/esg/publications/auk/2004/default.asp. Chart 7.5 also shows that 84 per cent of processors and importers of organic food in the United Kingdom are located in England, with 8.7 per cent in Scotland, 5.6 per cent in Wales and 1.7 per cent in Northern Ireland.

Chart 7.4 UK organically managed land at December 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 7.5 UK producers and growers, and processors and importers at December 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

Livestock statistics (Tables 7.4 and 7.5)

11 Statistics on producers and numbers of organic livestock have been collected for the first time. These show that the greatest proportion, 29 per cent, of organic livestock producers are located in the southwest region of England and that, in the United Kingdom, there were 217 thousand cattle, including 90 thousand dairy cows, 716 thousand sheep, 67 thousand pigs, 2,561 thousand poultry and 1.5 thousand other livestock in 2004.

Annex to Chapter 7 Organic Farming

12 An annex to this chapter with a summary of the background to organic farming and a map of the distribution of organic holdings in the United Kingdom can be found on the Defra website at: http://statistics.defra.gov.uk /esg/publications/auk/default.asp.

Table 7.1 UK organic and in-conversion land

Enquiries: Michael Rowland on +44 (0)1904 455557 email: michael.rowland@defra.gsi.gov.uk

Thousand hectares

	March 2003	December 2003
Land, in-conversion		
North East	15.3	6.8
North West	7.7	2.6
Yorkshire & Humberside	2.3	1.7
East Midlands	2.9	1.6
West Midlands	6.0	3.7
Eastern	4.1	3.0
South West	18.0	10.9
South East (inc. London)	11.5	6.6
England	67.8	36.9
Wales	13.7	8.0
Scotland	121.3	20.4
Northern Ireland	1.5	0.8
United Kingdom	204.3	66.1
Land, fully organic		
North East	12.4	22.1
North West	15.1	19.9
Yorkshire & Humberside	7.0	8.1
East Midlands	12.0	16.1
West Midlands	23.4	25.5
Eastern	7.8	9.7
South West	78.1	86.3
South East (inc. London)	28.3	34.4
England	184.0	222.0
Wales	41.4	50.2
Scotland	307.3	352.2
Northern Ireland	4.1	5.1
United Kingdom	536.9	629.5

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

Table 7.2 UK organic and in-conversion land use

Enquiries: Michael Rowland on +44 (0)1904 455557 email: michael.rowland@defra.gsi.gov.uk

Thousand hectares

	March 2003	December 2003
Land, in-conversion		
Cereals	11.2	7.0
Other crops	6.5	4.1
Fruit & nuts (nuts not included in Mar 03)	0.4	0.2
Vegetables (including potatoes)	3.0	2.0
Herbs & ornamentals (included nuts in Mar 03)	-	0.1
Temporary pasture	18.1	10.7
Set-aside	3.5	2.3
Permanent pasture (a)	159.1	38.5
Woodland	1.1	0.7
Field margins	-	. .
Non cropping	0.2	0.3
Environmental schemes	0.3	. .
Other	-	0.2
Unknown	0.8	0.1
Total	204.3	66.1
Land, fully organic		
Cereals	25.7	35.1
Other crops	14.1	17.9
Fruit & nuts (nuts not included in Mar 03)	1.5	1.3
Vegetables (including potatoes)	9.7	12.3
Herbs & ornamentals (included nuts in Mar 03)	0.2	0.2
Temporary pasture	58.9	67.3
Set-aside	3.4	4.6
Permanent pasture (a)	413.9	482.0
Woodland	5.6	4.8
Field margins	0.1	. .
Non cropping	1.4	0.7
Environmental schemes	0.1	. .
Other	-	0.7
Unknown	2.4	2.5
Total	536.9	629.5

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Includes rough grazing.

Table 7.3 UK organic producers, growers, processors and importers - regional breakdown

Enquiries: Michael Rowland on +44 (0)1904 455557 email: michael.rowland@defra.gsi.gov.uk

Number of businesses

	March 2003	December 2003
Producers and growers		
North East	73	73
North West	171	165
Yorkshire & Humberside	136	132
East Midlands	220	217
West Midlands	330	320
Eastern	248	250
South West	1 026	1 007
South East (inc. London)	418	406
England	2 622	2 570
Wales	618	610
Scotland	725	687
Northern Ireland	139	150
United Kingdom	4 104	4 017
Processors and/or importers (a)		
North East	34	30
North West	122	124
Yorkshire & Humberside	118	122
East Midlands	175	189
West Midlands	138	135
Eastern	224	233
South West	333	347
South East (inc. London)	393	450
England	1 537	1 630
Wales	103	109
Scotland	152	169
Northern Ireland	33	33
United Kingdom	1 825	1 941

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.

Table 7.4 UK producers of organic and in-conversion livestock at December 2003

Enquiries: Micahel Rowland on +44 (0)1904 455557 email: michael.rowland@defra.gsi.gov.uk

	Number of producers (a)	% of UK total
North East	51	2%
North West	118	5%
Yorkshire & Humberside	81	3%
East Midlands	133	5%
West Midlands	190	7%
Eastern	98	4%
South West	743	29%
South East (inc. London)	222	9%
England	1 636	63%
Wales	449	17%
Scotland	384	15%
Northern Ireland	119	5%
United Kingdom	2 588	100%

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) This is the first time this data has been collected by Defra and so no comparisons with past data can be made.

Table 7.5 UK estimates of organic and in-conversion livestock numbers 2004

Enquiries: Michael Rowland on +44 (0)1904 455557 email: michael.rowland@defra.gsi.gov.uk

Thousand head

	Estimated livestock numbers (a) (b)
Cattle	
Beef	27.5
Dairy cows	90.1
Suckler cows	71.3
Calves	26.3
Other cattle	1.6
Total cattle	216.8
Sheep	
Breeding sheep	437.1
Other sheep	279.3
Total sheep	716.4
Pigs	
Breeding sows	21.0
Fattening pigs	45.0
Other pigs	0.6
Total pigs	66.6
Poultry	
Broilers	1 059.7
Laying hens	1 420.6
Other poultry	80.9
Total poultry	2 561.2
Other livestock	
Goats	0.7
Other livestock	0.8
Total other livestock	1.5

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) This is the first time this data has been collected by Defra and so no comparisons with past data can be made.

(b) The figures have been compiled from a combination of annual figures recorded for the year ending 1 January 2004 and imputed figures for the year 2004. Due to the nature of the imputation further analysis e.g. by region is not possible.

Chapter 8 Accounts

Key Findings

In 2004:

- Total Income from Farming is estimated to have fallen by 5.4 per cent (8.1 per cent in real terms) to £3.0 billion.
- The value of output including subsidies directly related to products increased by 2.5 per cent or £412 million.
- The value of output of cereals rose by £66 million or 2.8 per cent, despite wet weather disrupting the harvest which affected grain quality.
- The total value of livestock production increased by £61 million or 1.0 per cent, and the value of output of livestock products increased by £107 million or 3.4 per cent.
- Total subsidies less taxes directly linked to products amounted to £2.3 billion, 7.6 per cent more than in 2003.
- Intermediate consumption rose by £458 million or 5.4 per cent due in part to the rise in the oil price.
- Gross value added fell by 0.6 per cent to £7.9 billion while net value added rose by 0.4 per cent to £5.4 billion.
- Net value added at factor cost was £5.8 billion, 0.4 per cent lower than in 2003.
- Labour costs increased by 4.6 per cent and interest payments increased by 12 per cent.
- Net worth fell by 1.5 per cent (4.2 per cent in real terms) to £102 billion.
- Total liabilities increased by 5.5 per cent.
- After a period of relative stability the value in real terms of net worth and total assets has begun to fall.

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 in the United Kingdom in 2004 is estimated to have fallen by 5.4 per cent (8.1 per cent in real terms) compared with its 2003 level. In real terms, Total Income from Farming is now at a level more in line with levels of the late eighties; it is 70 per cent above the low point in 2000 and 50 per cent below the peak in 1995. 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.

4 Total Income from Farming 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 8.1, 8.2, charts 8.1, 8.2)

5 The value of output including subsidies directly related to products increased by 2.5 per cent or £412 million, in 2004. The volume increased by 0.6 per cent with increases for cereals, plants and flowers, potatoes, fruit, livestock and eggs; and falls for industrial crops, forage plants, vegetables and milk. Prices received were 1.9 per cent higher, with notable increases for sugar beet and potatoes and significant falls for vegetables and fruit. Intermediate consumption rose by £458 million or 5.4 per cent, with expenditure on many items increasing due to price rises. The largest increases were in energy (19 per cent) and in fertilisers (8.6 per cent).

6 Gross value added for the industry, which represents its contribution to national GDP, was £7.9 billion, down by 0.6 per cent on 2003. Net value added at factor cost is the best measure of value added by the industry because it includes all subsidies, some of which are not included in output, e.g. set-aside and agri-environment payments. It makes no allowance for interest, rent or labour costs. In 2004, net value added at factor cost was £5.8 billion, 0.4 per cent lower than in 2003.

7 Total Income from Farming is derived by deducting interest, rent and paid labour costs from net value added at factor cost. Labour costs increased by 4.6 per cent. Interest payments increased by 12 per cent mainly due to increases in the interest rates. Total Income from Farming fell by 5.4 per cent to £3.0 billion.

Balance sheets (Table 8.3)

8 After a period of relative stability the value in real terms of net worth and total assets has begun to fall. At current prices, the value of total assets fell by 0.9 per cent (3.6 per cent in real terms) to £113 billion while total liabilities increased by 5.5 per cent (2.6 per cent in real terms) to £10 billion. Net worth consequently fell by 1.5 per cent (4.2 per cent in real terms) to £102 billion. The current price valuations are net of depreciation and exclude the value of quota.

9 The value of fixed assets fell by 2.2 per cent to £102 billion; of this, the value of land and buildings, which forms the greatest proportion of the total value of assets, fell by 2.4 per cent. The value of current assets rose by 14 per cent to £10 billion. Long and medium-term liabilities rose by 4.5 per cent to £4.9 billion and short-term liabilities rose by 6.4 per cent to £5.4 billion. Bank overdrafts (short-term loans) fell by 1.1 per cent while trade credit increased by 17 per cent.

Capital account (Table 8.4)

10 The capital account within Table 8.4 shows estimates of changes in the assets held by the agricultural sector in the United Kingdom.

11 The revised estimate of total gross fixed capital formation in non-livestock assets for 2003 is £1.7 billion, a 16 per cent increase. The provisional estimate of total gross fixed capital formation in buildings, works, plant, machinery and vehicles in 2004 is £1.8 billion. This is an increase of 6.0 per cent over 2003. Consumption of fixed non-livestock assets decreased slightly, by 1.3 per cent between 2003 and 2004.

12 Capital formation and capital consumption in livestock measure the output value due to the production of breeding animals and the depreciation of breeding animals (mainly dairy cows, beef cows, ewes, sows and egg laying poultry). In 2004 the value of capital formation in livestock decreased by £63 million mainly due to a 19 per cent fall in capital formation in cattle which was only partly offset by increases in capital formation in sheep, pigs and poultry.

13 Consumption of fixed capital in livestock (approximated by assuming that all depreciation takes place at the time animals leave the breeding herds) decreased by 5.4 per cent. Net capital formation in livestock is estimated to be negative in 2004.

14 Changes in inventories contribute to income. Stocks of crops were higher with large increases in the production of wheat, barley and potatoes offsetting a decrease in oilseed rape. Stocks of work-in-progress animals were lower with reductions in slaughter cattle and sheep for breeding outweighing increases in cattle for breeding and slaughter sheep and pigs.

Revaluation account

15 Revaluation (holding gains), which measures the change in value between the time of production and the end of the accounting period due to changes in price, fell by £535 million in 2004. A rise in the value of work-in-progress of non-breeding livestock production was offset by a fall in the value of replacement animals for breeding herds. The value of work-in-progress of crop production fell by £536 million due to weak cereal prices at the end of the accounting period. Revaluation is not included in the production and income account and thus does not contribute to income.

Interest

16 Interest charges payable on farmers' borrowings for agricultural purposes including land purchases, net of interest on short-term deposits, are estimated to have increased by 12 per cent in 2004 to £526 million. Both the average interest rate and the level of farmers' borrowings rose in 2004.

Changes in volume of capital assets

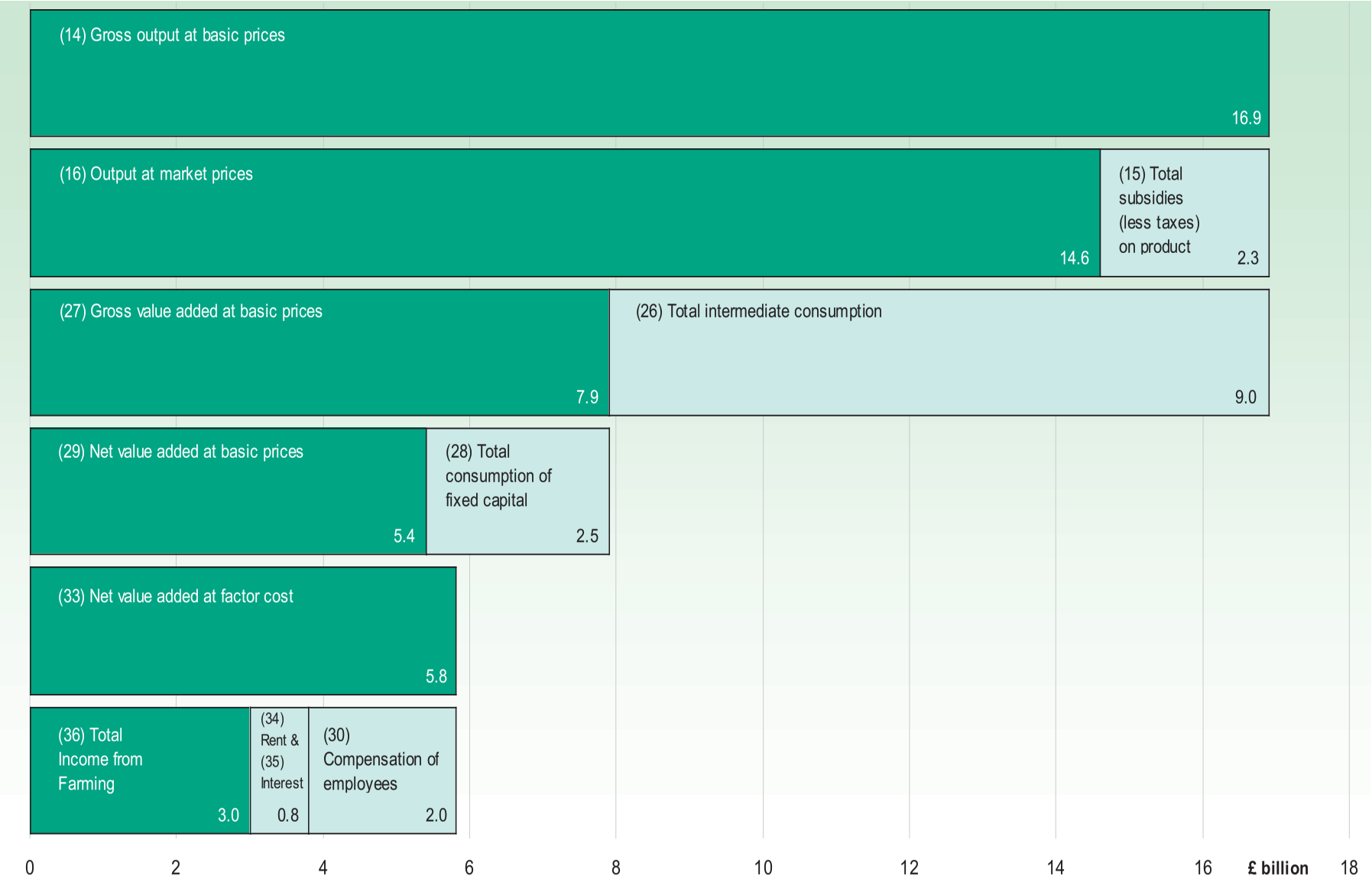
17 The total volume of gross fixed capital formation rose by 5.1 per cent in 2004 while its value only rose by 1.6 per cent mainly due to weak cattle prices; of this, gross fixed capital formation in non-livestock assets rose by 6.6 per cent while fixed capital formation in livestock rose by 1.6 per cent. Consumption of fixed capital rose for the first time since 1997, increasing by 0.7 per cent in 2004. This was due to a 3.8 per cent increase in consumption of fixed capital in livestock which was offset by a 0.5 per cent fall in the consumption of fixed capital in non-livestock assets.

Definition of terms used in Tables 8.1 and 8.2

18 The following list is provided to aid the user with the terms used in tables 8.1 and 8.2.

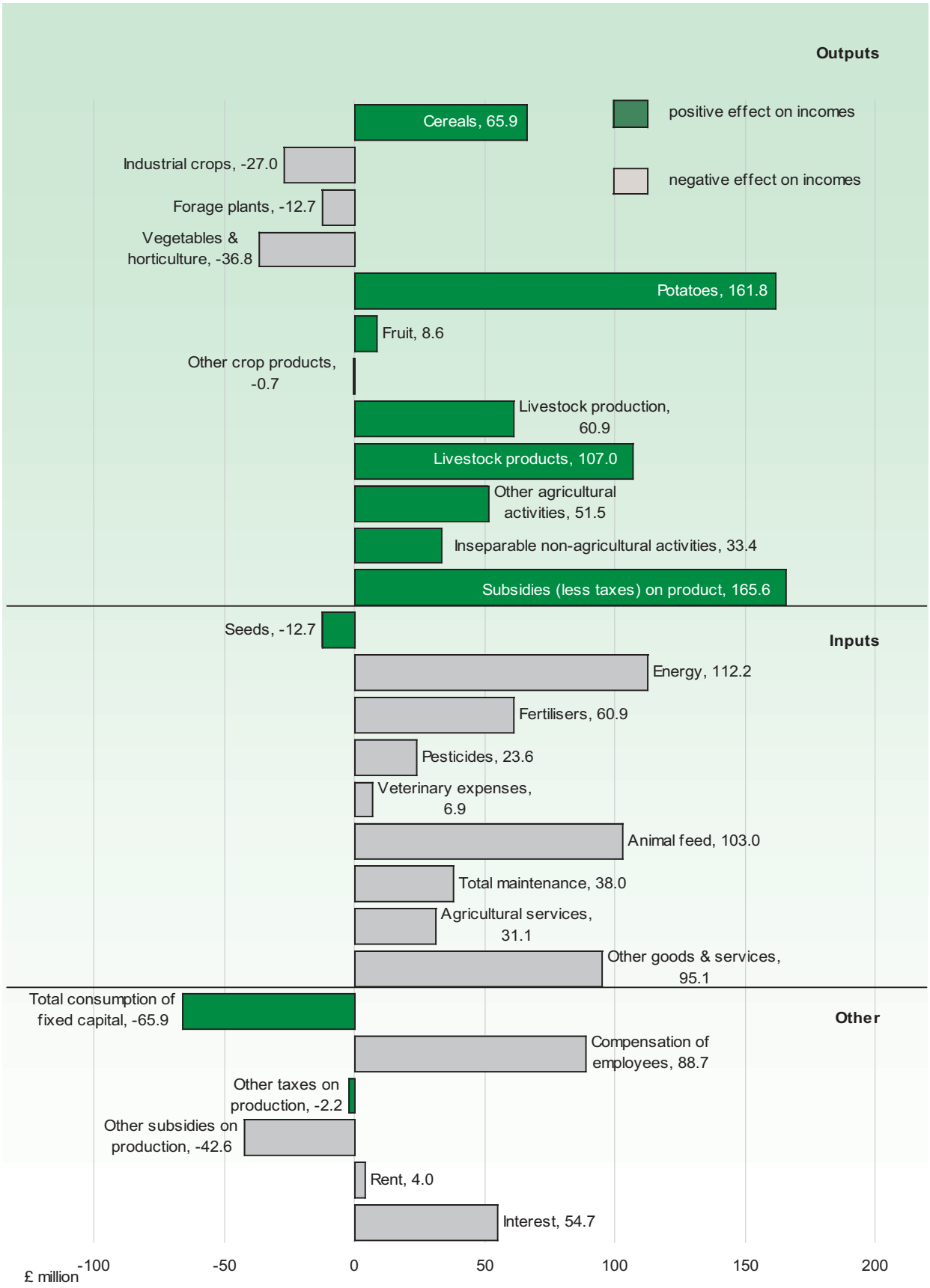
Term	Table 8.1 reference number	Definition
Agricultural industry		All activities taking place within businesses that carry out any agricultural activities. These businesses include all farms and specialist agricultural contractors.
Capital formation in livestock	9	Production of animals that will be used as the means of production, e.g. breeding animals.
Other agricultural activities	12	Agricultural activities that do not result in sales of final product, e.g. quota leasing, contract work.
Inseparable non-agricultural activities	13	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.
Gross output at basic prices	14	Output including directly paid subsidies that are linked to production of a specific product. 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 a specific product.
Subsidies (less taxes) on product	15	Subsidies and taxes on product are shown in detail in Table 8.7; all subsidies are recorded on an as due basis.
Intermediate consumption	26	Consumption of goods and services, e.g. feed, seeds, fertiliser, pesticides.
Gross value added (at basic prices)	27	Gross output at basic prices less intermediate consumption.
Consumption of fixed capital	28	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 at basic prices	29	Gross value added at basic prices less consumption of fixed capital.
Compensation of employees	30	The full costs of employees to the business including national insurance contributions.
Other subsidies (less taxes) on production	32	Subsidies and taxes not linked to production of a specific product, e.g. agri-environment payments, set-aside, 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 8.1 Main components of the UK production and income account in 2004 (£ billion)



source: Defra website, http://statistics.defra.gov.uk/esg/

Chart 8.2 Changes in value of outputs and inputs between 2003 and 2004 (£ million)



source: Defra website, http://statistics.defra.gov.uk/esg/

Table 8.1 UK production and income account at current prices

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

£ million Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Output (a)						
1 Total cereals	2 883	2 336	2 023	2 180	2 332	2 398
wheat	1 862	1 578	1 227	1 479	1 532	1 663
rye	4	3	3	2	2	3
barley	933	685	724	624	719	660
oats and summer cereal mixtures	81	65	65	70	73	65
other cereals	3	5	4	5	5	6
2 Total industrial crops	1 137	776	810	899	1 067	1 040
oil seeds	479	283	291	304	436	392
oilseed rape	391	249	276	298	417	376
other oilseeds	88	34	16	6	18	16
sugar beet	350	252	256	283	321	298
other industrial crops	308	241	262	313	311	349
fibre plants	10	8	3	2	3	2
hops	19	11	10	8	7	7
others (b)	279	221	249	303	301	341
3 Total forage plants	191	139	170	156	176	163
4 Total vegetables and horticultural products	1 592	1 566	1 710	1 702	1 769	1 732
fresh vegetables	992	887	1 023	952	998	936
plants and flowers	601	679	688	750	771	796
5 Total potatoes (including seeds)	732	453	655	480	518	680
6 Total fruit	259	232	239	243	307	316
7 Other crop products including seeds	42	40	40	27	34	33
8 Total crop output (Sum 1 to 7)	6 836	5 542	5 647	5 687	6 203	6 362
9 Total livestock production	7 071	5 516	5 177	5 718	5 966	6 026
primarily for meat	6 264	5 127	4 577	5 024	5 217	5 341
cattle	2 473	1 993	1 786	2 126	2 178	2 256
pigs	1 083	794	749	682	670	681
sheep	1 250	954	622	888	977	1 009
poultry	1 327	1 233	1 266	1 170	1 231	1 230
other animals	131	153	155	158	161	166
gross fixed capital formation	807	389	600	694	748	685
cattle	530	188	345	381	460	374
pigs	14	6	5	7	7	8
sheep	146	64	122	177	154	172
poultry	116	131	127	128	128	130
10 Total livestock products	3 802	2 791	3 202	2 876	3 101	3 208
milk	3 332	2 393	2 822	2 466	2 627	2 728
eggs	406	353	342	356	409	432
raw wool	41	23	17	19	21	21
other animal products	23	23	21	35	45	28

continued

8.1 continued

£ million

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
				Calendar years		
11 Total livestock output (9 + 10)	10 873	8 308	8 379	8 594	9 067	9 235
12 Total other agricultural activities	625	638	637	650	650	702
agricultural services	509	586	609	607	609	640
leasing-out quota	116	51	28	43	41	62
13 Total inseparable non-agricultural activities	315	466	604	542	576	609
14 Gross output at basic prices (8 + 11 + 12 + 13)	18 649	14 953	15 267	15 473	16 496	16 907
15 Total subsidies (less taxes) on product (c)	1 852	2 187	1 923	2 132	2 180	2 345
16 Output at market prices (14 - 15)	16 797	12 766	13 343	13 341	14 316	14 562
of which:						
transactions within the agricultural industry						
feed wheat	70	40	43	39	79	85
feed barley	211	137	152	143	159	120
feed oats	20	13	13	10	11	16
seed potatoes	23	8	17	15	5	7
straw	250	190	219	271	269	299
contract work	509	586	609	607	609	640
leasing of quota	116	51	28	43	41	62
total capital formation in livestock	807	389	600	694	748	685
Intermediate consumption						
17 Seeds	336	263	291	276	286	273
cereals	116	71	75	64	66	60
other	220	192	216	212	220	213
18 Energy	591	695	686	647	605	717
electricity	242	230	242	236	207	255
fuels	349	465	444	411	397	462
19 Fertilisers	816	738	760	757	706	767
20 Pesticides	565	579	531	534	509	533
21 Veterinary expenses	272	256	243	250	255	262
22 Animal feed	2 950	2 140	2 367	2 219	2 365	2 468
compounds	1 753	1 283	1 398	1 377	1 348	1 441
straights	895	667	761	650	768	806
feed purchased from other farms	301	189	208	192	249	220
23 Total maintenance (d)	1 006	941	982	958	1 044	1 082
materials	663	651	659	634	698	727
buildings	342	291	323	324	346	356
24 Agricultural services	509	586	609	607	609	640
25 Other goods and services (d) (e)	2 054	2 086	2 053	2 082	2 166	2 261

continued

8.1 continued

£ million

Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
26 Total intermediate consumption (Sum 17 to 25)	9 097	8 285	8 522	8 330	8 544	9 002
27 Gross value added at basic prices (14 - 26)	9 551	6 669	6 745	7 143	7 951	7 905
28 Total consumption of fixed capital	2 561	2 481	2 560	2 559	2 615	2 549
equipment	1 180	1 256	1 250	1 248	1 198	1 190
buildings (d) (f)	597	692	687	690	650	633
livestock	785	534	624	621	767	726
cattle	507	278	322	342	461	425
pigs	15	8	6	8	7	9
sheep	153	120	169	143	173	168
poultry	110	128	126	129	126	124
29 Net value added at basic prices (27 - 28)	6 990	4 187	4 185	4 584	5 337	5 356
30 Compensation of employees (g)	1 817	1 893	1 943	1 958	1 916	2 004
31 Other taxes on production	- 68	- 92	- 78	- 81	- 91	- 93
32 Other subsidies on production (c)	239	297	536	556	622	580
animal disease compensation	8	29	23	54	61	55
set-aside	182	127	180	143	177	131
agri-environment schemes (h)	49	140	168	195	223	244
other including Less Favoured Areas schemes (i)	-	-	165	165	162	150
33 Net value added at factor cost (29 + 31 + 32)	7 161	4 392	4 643	5 059	5 869	5 843
34 Rent	179	224	251	240	296	299
rent paid (j)	179	303	330	337	387	395
rent received (k)	. .	- 79	- 78	- 98	- 92	- 95
35 Interest (l)	549	628	557	483	471	526
36 Total Income from Farming (33 - 30 - 34 - 35)	4 616	1 647	1 892	2 379	3 186	3 014

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Output is net of VAT collected on the sale of non-edible products. Figures for total output include subsidies on product but not other subsidies.

(b) Includes straw and minor crops.

(c) “Subsidies on product”: subsidies linked to products which provide an incentive to produce those products. “Other subsidies on production”: subsidies other than “Subsidies on products” from which agricultural producers can benefit as a consequence of engaging in production.

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

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

(f) 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.

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

(h) Includes Environmentally and Nitrate Sensitive Areas, Countryside Stewardship and Management schemes, and Moorland, Habitat and Organic Farming Schemes.

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

(j) 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.

(k) 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.

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

Table 8.2 Changes in UK outputs and inputs

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

£ million Calendar years

	Current price value		Changes %		
	2003	2004	value	volume	price
Output (a)					
1 Total cereals	2 332	2 398	3	2	-
wheat	1 532	1 663	9	8	-
rye	2	3	25	11	13
barley	719	660	- 8	- 9	1
oats and summer cereal mixtures	73	65	- 10	- 13	3
other cereals	5	6	12	1	12
2 Total industrial crops	1 067	1 040	- 3	- 5	2
oil seeds	436	392	- 10	- 8	- 2
oilseed rape	417	376	- 10	- 8	- 2
other oilseeds	18	16	- 13	- 12	- 1
sugar beet	321	298	7	- 3	11
other industrial crops	311	349	12	- 1	14
fibre plants	3	2	- 31	- 32	2
hops	7	7	-	-	-
others (b)	301	341	13	- 1	14
3 Total forage plants	176	163	- 7	- 3	- 5
4 Total vegetables and horticultural products	1 769	1 732	- 2	2	- 4
fresh vegetables	998	936	- 6	-	- 6
plants and flowers	771	796	3	5	- 2
5 Total potatoes (including seeds)	518	680	31	14	15
6 Total fruit	307	316	3	17	- 12
7 Other crop products including seeds	34	33	- 2	3	- 5
8 Total crop output (Sum 1 to 7)	6 203	6 362	3	3	-
9 Total livestock production	5 966	6 026	1	1	-
primarily for meat	5 217	5 341	2	1	2
cattle	2 178	2 256	4	- 4	7
pigs	670	681	- 2	2	- 4
sheep	977	1 009	3	4	-
poultry	1 231	1 230	-	5	- 5
other animals	161	166	3	-	3
gross fixed capital formation	748	685	- 8	2	- 10
cattle	460	374	- 19	- 3	- 16
pigs	7	8	23	3	19
sheep	154	172	12	14	- 2
poultry	128	130	2	2	-
10 Total livestock products	3 101	3 208	3	- 3	6
milk	2 627	2 728	4	- 3	7
eggs	409	432	6	2	4
raw wool	21	21	- 1	-	- 1
other animal products	45	28	- 38	- 42	5
11 Total livestock output (9 + 10)	9 067	9 235	2	- 1	2
12 Total other agricultural activities	650	702	8	- 3	11
agricultural services	609	640	5	-	5
leasing-out quota	41	62	49	- 29	111
13 Total inseparable non-agricultural activities	576	609	6	2	4
14 Gross output at basic prices (8 + 11 + 12 + 13)	16 496	16 907	2	1	2
15 Total subsidies (less taxes) on product (c)	2 180	2 345	8	- 1	9

continued

8.2 continued

£ million

Calendar years

	Current price value		Changes %		
	2003	2004	value	volume	price
16 Output at market prices (14 - 15)	14 316	14 562	2	1	1
of which:					
transactions within the agricultural industry					
feed wheat	79	85	7	7	-
feed barley	159	120	- 25	- 30	7
feed oats	11	16	47	34	9
seed potatoes	5	7	32	- 17	59
straw	269	299	11	- 1	13
contract work	609	640	5	-	5
leasing of quota	41	62	49	- 29	111
total capital formation in livestock	748	685	- 8	2	- 10
Intermediate consumption					
17 Seeds	286	273	- 4	- 2	- 2
cereals	66	60	- 9	- 5	- 3
other	220	213	- 3	- 1	- 2
18 Energy	605	717	19	6	12
electricity	207	255	23	8	13
fuels	397	462	16	5	11
19 Fertilisers	706	767	9	- 2	11
20 Pesticides	509	533	5	3	2
21 Veterinary expenses	255	262	3	-	3
22 Animal feed	2 365	2 468	4	-	5
compounds	1 348	1 441	7	-	6
straights	768	806	5	3	2
feed purchased from other farms	249	220	- 12	- 16	5
23 Total maintenance (d)	1 044	1 082	4	- 1	4
materials	698	727	4	-	4
buildings	346	356	3	- 1	4
24 Agricultural services	609	640	5	-	5
25 Other goods and services (d) (e)	2 166	2 261	4	- 1	6
26 Total intermediate consumption (Sum 17 to 25)	8 544	9 002	5	-	6
27 Gross value added at basic prices (14 - 26)	7 951	7 905	- 1	2	- 2
28 Total consumption of fixed capital	2 615	2 549	- 3	1	- 3
equipment	1 198	1 190	- 1	-	-
buildings (d) (g)	650	633	- 3	- 1	- 2
livestock	767	726	- 5	4	- 9
cattle	461	425	- 8	7	- 14
pigs	7	9	18	1	16
sheep	173	168	- 3	-	- 3
poultry	126	124	- 1	- 1	-

continued

8.2 continued

£ million

Calendar years

	Current price value		Changes %		
	2003	2004	value	volume	price
29 Net value added at basic prices (27 - 28)	5 337	5 356	-	2	- 2
30 Compensation of employees (g)	1 916	2 004	5	1	3
31 Other taxes on production	- 91	- 93	2	-	3
32 Other subsidies on production (c)	622	580	- 7	. .	. .
animal disease compensation	61	55	- 10	. .	. .
set-aside	177	131	- 26	. .	. .
agri-environment schemes (h)	223	244	10	. .	. .
other including Less Favoured Areas schemes (i)	162	150	- 7	. .	. .
33 Net value added at factor cost (29 + 31 + 32)	5 869	5 843	-	2	- 2
34 Rent	296	299	1	. .	. .
rent paid (j)	387	395	2	. .	. .
rent received (k)	- 92	- 95	4	. .	. .
35 Interest (l)	471	526	12	. .	. .
36 Total Income from Farming (33 - 30 - 34 - 35)	3 186	3 014	- 5	1	- 6

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Output is net of VAT collected on the sale of non-edible products. Figures for total output include subsidies on product but not other subsidies.

(b) Includes straw and minor crops.

(c) “Subsidies on product”: subsidies linked to products which provide an incentive to produce those products. “Other subsidies on production”: subsidies other than “Subsidies on products” from which agricultural producers can benefit as a consequence of engaging in production.

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

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

(f) 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.

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

(h) Includes Environmentally and Nitrate Sensitive Areas, Countryside Stewardship and Management schemes, and Moorland, Habitat and Organic Farming Schemes.

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

(j) 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.

(k) 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.

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

Table 8.3 Aggregate balance sheets for UK agriculture

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

£ million — As at December each year

	Average of 1993-95	1999	2000	2001	2002	2003 (provisional)
At current prices						
Assets						
Fixed (a):						
Land and buildings	58 288	93 482	94 718	97 390	93 893	91 666
Plant, machinery and vehicles	7 380	7 715	7 369	7 271	7 047	6 949
Breeding livestock	5 539	2 824	3 645	3 942	3 827	3 851
Total fixed	71 207	104 022	105 732	108 602	104 767	102 466
Current:						
Trading livestock	3 444	2 231	2 093	1 892	2 607	2 891
Crops and stores	2 811	2 138	2 234	2 197	2 039	2 496
Debtors, cash deposits	3 515	4 090	4 115	4 017	4 219	4 734
Total current	9 770	8 459	8 443	8 106	8 866	10 122
Total assets	80 978	112 481	114 175	116 708	113 632	112 588
Liabilities						
Long- and medium-term:						
AMC and SASC (b)	1 082	1 381	1 405	1 344	1 310	1 299
Building societies and institutions	225	352	398	382	387	452
Bank loans	1 525	2 337	2 378	2 216	2 264	2 410
Family loans	318	443	432	452	447	464
Other	127	181	233	249	272	266
Total long- and medium-term	3 277	4 694	4 847	4 643	4 680	4 892
Short-term:						
Leasing	360	136	95	94	113	130
Hire purchase	534	473	481	520	592	731
Trade credit	1 248	1 291	1 256	1 201	1 234	1 442
Bank overdrafts	2 730	3 059	3 030	2 832	2 973	2 939
Other	111	126	114	118	127	120
Total short-term	4 982	5 085	4 977	4 765	5 039	5 362
Total liabilities	8 259	9 779	9 823	9 408	9 719	10 254
Net worth	72 719	102 701	104 351	107 300	103 913	102 334
In real terms (as deflated by the retail price index):						
Indices 2000 = 100						
Total assets	83	101	100	102	96	93
Total liabilities	99	102	100	95	95	98
Net worth	82	101	100	102	96	92

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

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

Table 8.4 UK accumulation accounts

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

£ million — Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Capital account						
Gross fixed capital formation	2 651	1 610	2 011	2 153	2 445	2 483
Acquisitions less disposals of non-livestock assets:	1 844	1 220	1 412	1 459	1 697	1 798
buildings and works	518	358	435	422	513	574
plant and machinery	1 079	688	787	825	948	980
vehicles	247	174	190	211	236	244
Capital formation in livestock (a):	807	389	600	694	748	685
cattle	530	188	345	381	460	374
sheep	146	64	122	177	154	172
pigs	14	6	5	7	7	8
poultry	116	131	127	128	128	130
Consumption of fixed capital	2 561	2 481	2 560	2 559	2 615	2 549
Non-livestock assets:	1 777	1 948	1 937	1 938	1 847	1 823
buildings and works	597	692	687	690	650	633
plant and machinery	999	1 043	1 047	1 045	993	980
vehicles	181	213	203	203	204	210
Livestock (b):	785	534	624	621	767	726
cattle	507	278	322	342	461	425
sheep	153	120	169	143	173	168
pigs	15	8	6	8	7	9
poultry	110	128	126	129	126	124
Changes in inventories	8	- 107	- 70	155	- 133	74
stocks of crops	- 2	-	- 97	142	- 177	98
work-in-progress livestock	10	- 107	28	13	43	- 24
Total income from farming	4 616	1 647	1 892	2 379	3 186	3 014
Capital Transfers	100	17	1 334	36	21	20
Foot and mouth disease payments:	. .	. .	1 250	. .	. .	. .
culled cattle	. .	. .	672	. .	. .	. .
culled sheep	. .	. .	414	. .	. .	. .
culled pigs	. .	. .	15	. .	. .	. .
welfare disposals of cattle	. .	. .	102	. .	. .	. .
welfare disposals of sheep	. .	. .	29	. .	. .	. .
welfare disposals of pigs	. .	. .	13	. .	. .	. .
other livestock (culled and welfare)	. .	. .	5	. .	. .	. .
Other capital transfers	74	10	75	22	1	-
Capital grants	26	7	9	14	20	20
Other changes in the volume of assets						
Exceptional Disposals (due to foot-and-mouth disease) (c):	. .	. .	465	. .	. .	. .
breeding cattle	. .	. .	177	. .	. .	. .
slaughter cattle	. .	. .	121	. .	. .	. .
breeding sheep	. .	. .	91	. .	. .	. .
slaughter sheep	. .	. .	53	. .	. .	. .
breeding pigs	. .	. .	4	. .	. .	. .
slaughter pigs	. .	. .	14	. .	. .	. .
other livestock	. .	. .	5	. .	. .	. .

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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.
(c) Livestock culled due to foot and mouth disease measures are treated as exceptional losses as defined in the European System of Accounts 1995.

Table 8.5 UK revaluation account

Enquiries: Barbara Boize on +44 (0)1904 455089 email: barbara.boize@defra.gsi.gov.uk

£ million Calendar years

	2000	2001	2002	2003	2004 (provisional)
Livestock production work-in-progress (non-breeders)					
cattle	- 78	- 58	248	166	65
sheep	12	- 47	77	24	6
pigs	99	- 69	40	44	- 15
poultry (a)	6	5	- 1	11	- 1
Total	38	- 170	364	245	55
Replacement animals for breeding herds					
cattle	23	134	109	- 62	- 57
sheep	5	- 27	33	12	3
pigs	1	- 1	1	1	-
Total	30	106	142	- 49	- 54
Crop production work-in-progress					
wheat	- 40	98	- 137	356	- 272
barley	- 5	-	- 18	81	- 65
potatoes	167	- 104	- 80	235	- 157
other crops (b)	13	10	12	11	- 42
Total	135	4	- 223	682	- 536
Total holding gains	203	- 60	283	878	- 535

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

Table 8.6 UK interest

Enquiries: Barbara Boize on +44 (0)1904 455089 email: barbara.boize@defra.gsi.gov.uk

£ million (unless otherwise specified) Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Interest rates						
average bank base lending rate in the UK	6.1%	6.0%	5.1%	4.0%	3.7%	4.4%
average rate of interest on bank advances to agriculture	8.7%	8.2%	7.3%	6.2%	5.9%	6.6%
Interest charges (all lending to the farm business) on:						
bank advances	374	441	377	325	321	. .
AMC and SASC loans (a)	102	125	118	94	84	. .
instalment credit	47	48	44	43	46	. .
leased assets	23	7	6	6	7	. .
other credit (b)	31	43	44	40	35	. .
less interest earned on money held on short-term deposit	28	36	32	25	22	. .
Total	549	628	557	483	471	526

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

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

Table 8.7 Changes in volume of UK capital assets

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

Indices 2000 = 100 Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Total volume of gross fixed capital formation						
Gross fixed capital formation:	154.9	100.0	114.4	115.6	126.4	132.9
non-livestock:	171.8	100.0	113.9	115.6	136.2	145.2
buildings and works	178.0	100.0	119.8	113.6	134.7	152.9
plant and machinery	174.6	100.0	110.7	113.9	135.4	141.1
vehicles	148.2	100.0	114.7	127.6	143.1	144.8
livestock	118.6	100.0	115.9	115.8	107.7	109.4
Total volume of capital consumption						
Consumption of fixed capital	101.8	100.0	97.6	92.1	91.1	91.7
non-livestock:	104.0	100.0	98.1	96.2	93.2	92.7
buildings and works	103.9	100.0	98.8	96.7	90.1	89.2
plant and machinery	106.9	100.0	97.2	95.1	93.6	93.1
vehicles	91.0	100.0	100.1	100.6	101.6	102.4
livestock	93.9	100.0	96.0	80.4	84.2	87.3

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

Chapter 9 Productivity

Key Findings

In 2004:

- Total factor productivity increased by 0.8 per cent.
- The volume of final output increased by 1.1 per cent.
- The volume of all inputs increased by 0.3 per cent.
- The volume of total labour in annual work units (or full-time person equivalent) was unchanged as the continuing shift to part-time working offset the increase in the head count of total labour.
- Labour productivity as measured by net value added per annual work unit increased by 2.0 per cent.

Over the longer term:

- Since 1973, productivity has grown by 47 per cent, the volume of final output has increased by 22 per cent and the volume of all inputs has fallen by 18 per cent.
- After 1984, the rate of productivity in the United Kingdom fell behind that of more productive Member States of the European Union.

Introduction

1 A key measure of agriculture's economic performance and a key component of its competitiveness is its productivity; that is, how efficiently the agricultural industry uses the resources that are available to turn inputs into outputs. It is a key measure of the economic sustainability of United Kingdom farming and food, an important driver of farm incomes and an essential foundation for the environmental and social contributions which farming and food make.

2 Productivity measures are based on the ratio of the volume of outputs and the volume of inputs. However, measuring productivity is not straightforward and comparisons need to be interpreted carefully both because of practical problems in obtaining robust data and because productivity performance, particularly in agriculture, is often shaped by factors outside farmers' control, such as climate, topography and location for example, which are not easily susceptible to change.

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

Productivity (Table 9.1, chart 9.1)

4 Total factor productivity increased by 0.8 per cent in 2004 due to an increase of 1.1 per cent in the volume of final output (gross output less transactions in the industry) which was greater than the 0.3 per cent increase in the volume of all inputs (including fixed capital, paid and entrepreneurial labour).

Table 9.1 UK productivity

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

Volume indices 2000=100 Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Final output (gross output less transactions within the industry)	102.3	100.0	93.8	98.8	97.8	98.8
All inputs (including fixed capital, paid and entrepreneurial labour)	112.8	100.0	98.8	96.0	93.7	93.9
Net value added per AWU of all labour (a)	75.6	100.0	86.2	113.2	115.8	118.1
Total factor productivity (b)	90.8	100.0	95.0	102.8	104.4	105.2

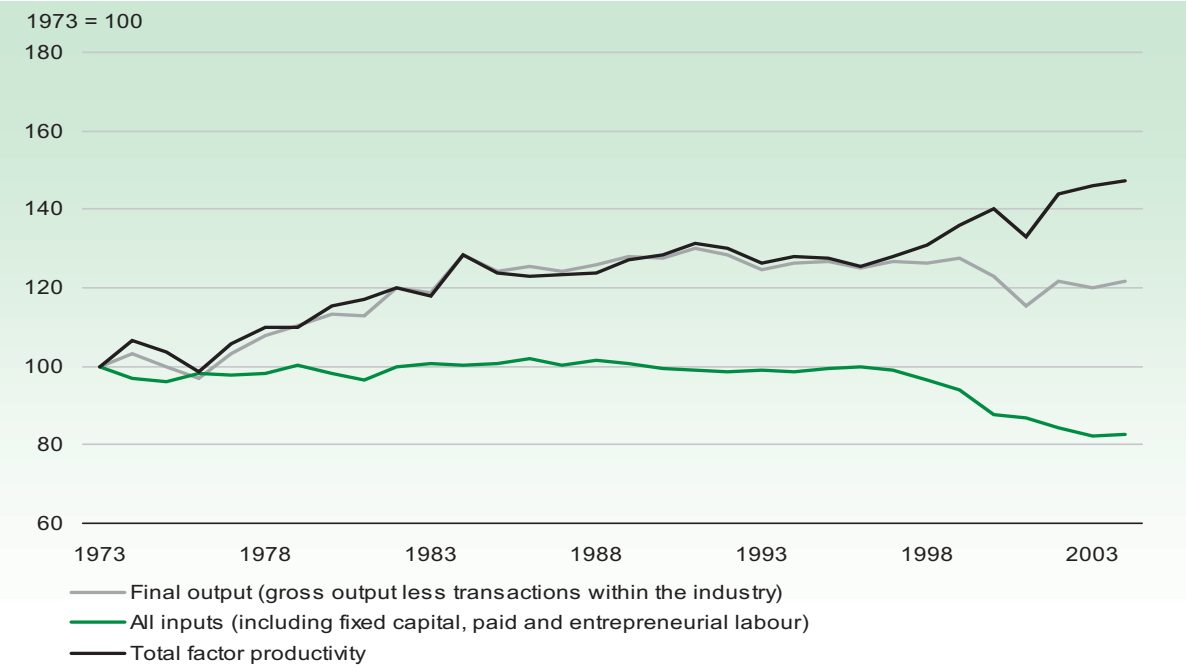
source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(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).

5 Over the longer term, since 1973 the productivity of the agricultural industry in the United Kingdom has increased by 47 per cent. The volume of final output has increased by 21 per cent while the volume of all inputs has fallen by 18 per cent. Increases in labour productivity have been the key factor driving this growth; since 1973 labour productivity as measured by net value added per annual work unit has more than tripled.

Chart 9.1 UK total factor productivity 1973 to 2004

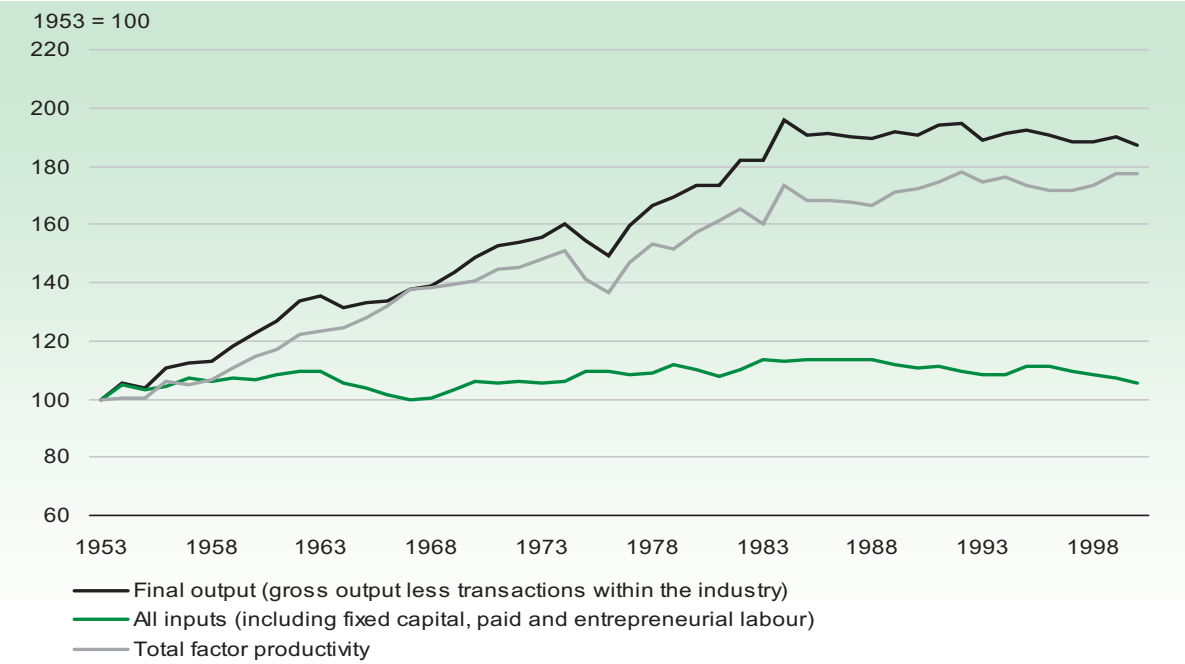


source: Defra website, http://statistics.defra.gov.uk/esg/

6 The increase in total factor productivity in the 1970s and early 1980s was due to an increase in outputs without a corresponding increase in inputs; reductions in labour input were counteracted by increases in other forms of input. From 1984 to 1996 total factor productivity did not grow as no significant changes occurred in the volumes of outputs and inputs. After 1996 total factor productivity increased, driven by falls in the volume of inputs. The dip in total factor productivity and output that can be seen in 2001 is attributable to the effect of the outbreak of foot and mouth disease in that year. A recovery followed in 2002 and continued with small increases in total factor productivity in 2003 and 2004.

Total factor productivity from 1953 (Chart 9.2)

Chart 9.2 UK total factor productivity 1953 to 2000



source: Defra website, http://statistics.defra.gov.uk/esg/

7 Chart 9.2 shows the total factor productivity series taken back to 1953 using historical data. Because the data prior to 1973 was compiled using different methodology there may be an artificial break in the series at that point. It is also the time when the United Kingdom joined the European Union and the Common Agricultural Policy.

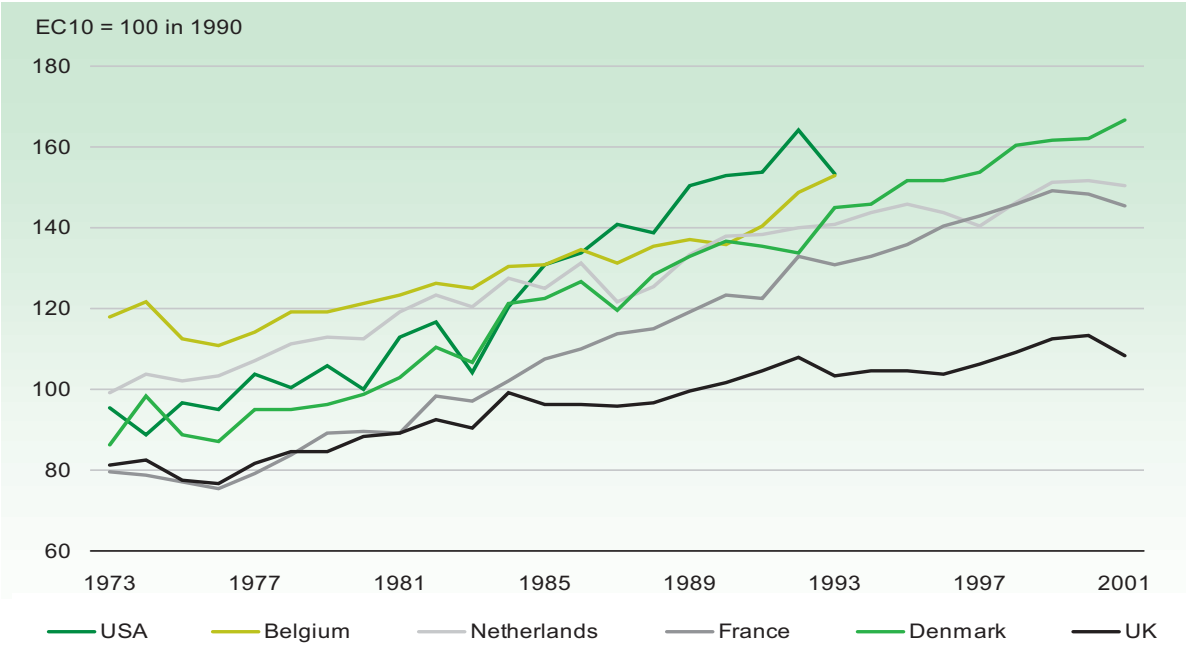
8 Simple analysis shows that total factor productivity growth in the United Kingdom has a break in 1984. From 1953 to 1984 total factor productivity grew at 1.7 per cent per annum whereas from 1984 to 2000 the rate fell to only 0.3 per cent. Output grew at 1.9 per cent per year before 1984 but after 1984 it contracted at -0.1 per cent. This was caused by the falls of animal products, horticulture and fruit while crop and animal outputs were stagnant.

9 The growth in total factor productivity after 1984 came from inputs falling faster than outputs at -0.4 per cent per annum, whereas they were growing at 0.2 per cent before 1984. The intermediate inputs (seed, fertiliser, pesticide, feed and miscellaneous) which had grown rapidly in earlier years, ceased expanding after 1984. Of the capital inputs, only buildings and land improvements continued to grow as livestock stabilised and machinery declined. The land input also declined very slowly but the driving force behind input reduction was the continued shedding of labour.

International benchmarking (Chart 9.3)

10 Analysis of total factor productivity enables the EU 10 countries to be divided into two groups. The more productive northern European countries, Denmark, France, the Netherlands and Belgium, start from high levels of total factor productivity and have high growth rates. The low growth rate countries, which are not shown, are Ireland, Italy, Greece, Germany and Luxembourg. The United Kingdom stands out because it started in the "high growth club" but switched to the "low growth club" in 1984. After 1984 the growth rate for France was 2.2 per cent per annum and for Denmark 2.0 per cent per annum, while the rate for the United Kingdom was only 0.9 per cent.

Chart 9.3 Total factor productivity for UK, USA and selected Member States



source: Defra website, http://statistics.defra.gov.uk/esg/

Volume indices (Table 9.2)

11 Total crop output and inseparable non-agricultural activities contributed to the increase in the volume of output in 2004 but were partly offset by falls in livestock output and other agricultural activities. In more detail, the volume of production of:

- Cereals rose by 2.4 per cent with increases in wheat and rye partly offset by falls in barley and oats.
- Industrial crops fell by 4.5 per cent as production of oilseeds, sugar beet and other industrial crops all fell.
- Forage plants fell by 2.7 per cent.
- Vegetables and horticultural products rose by 2.0 per cent due to an increase in the production of plants and flowers.
- Potatoes rose by 14 per cent.
- Fruit rose by 17 per cent.
- Livestock production rose by 0.7 per cent as increases in the production of pigs, sheep and poultry were offset by a fall in the production of cattle.
- Livestock products fell by 2.8 per cent principally due to a fall in the production of milk.

- Other agricultural activities fell by 2.6 per cent due to a fall in the leasing out of quota.
- Inseparable non-agricultural activities rose by 1.6 per cent.

12 Total intermediate consumption fell in 2004 as increases in the volumes of energy and pesticides were offset by falls in other inputs. In more detail, the volume of consumption of :

- Seeds fell by 2.4 per cent primarily due to a fall in the consumption of cereal seeds.
- Energy increased by 6.0 per cent due to increases in the consumption of electricity and fuels.
- Fertilisers fell by 1.9 per cent.
- Pesticides rose by 2.7 per cent.
- Veterinary expenses fell by 0.2 per cent.
- Animal feeds fell by 0.5 per cent as increases in the consumption of compound and straight feeds were offset by a fall in the consumption of feed purchased from other farms.
- Maintenance fell by 0.6 per cent as consumption of both materials and buildings fell.
- Agricultural services rose by 0.1 per cent.
- Other goods and services fell by 1.3 per cent.

Labour (Table 9.3)

13 The total cost of paid labour rose by 4.6 per cent in 2004 as a result of slight increases in paid labour input and average wages. The volume of the total labour force was unchanged. The volume of paid labour has fallen by 63 per cent since 1973 reflecting the outflow of labour from the industry.

Table 9.2 UK output and input volume indices

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

Indices 2000 = 100 Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Output						
1 Total cereals	86.3	100.0	79.9	96.0	90.0	92.2
wheat	81.2	100.0	69.8	95.8	85.8	93.0
rye	116.7	100.0	104.5	90.9	86.4	95.5
barley	98.2	100.0	102.4	94.4	97.9	89.1
oats and summer cereal mixtures	88.9	100.0	97.1	118.0	112.6	98.3
other cereals	53.5	100.0	69.0	80.3	76.9	77.4
2 Total industrial crops	115.9	100.0	96.3	108.1	114.1	108.9
oil seeds	128.4	100.0	102.2	123.1	154.2	142.3
oilseed rape	106.6	100.0	103.5	128.6	156.6	144.8
other oilseeds	286.6	100.0	90.2	42.7	138.1	121.3
sugar beet	98.5	100.0	91.8	105.3	101.0	97.5
other industrial crops	127.4	100.0	94.4	96.6	91.5	90.2
fibre plants	100.3	100.0	60.5	34.2	57.2	38.9
hops	180.3	100.0	94.3	94.5	70.9	70.9
others (a)	125.9	100.0	95.4	98.3	93.1	92.1
3 Total forage plants	98.9	100.0	115.7	116.3	115.4	112.3
4 Total vegetables and horticultural products	106.2	100.0	96.6	96.3	92.8	94.6
fresh vegetables	111.6	100.0	96.3	89.4	87.1	86.9
plants and flowers	99.7	100.0	97.0	106.6	101.3	106.2
5 Total potatoes (including seeds)	107.1	100.0	105.9	106.8	92.2	104.9
6 Total fruit	126.1	100.0	105.6	95.8	107.8	126.2
7 Other crop products including seeds	108.6	100.0	99.3	69.2	82.2	84.2
8 Total crop output (sum 1 to 7)	98.6	100.0	91.3	98.8	95.7	98.2
9 Total livestock production	110.4	100.0	92.2	97.7	96.7	97.3
primarily for meat	109.6	100.0	90.1	96.2	96.1	96.6
cattle	119.5	100.0	88.7	102.8	104.8	101.0
pigs	118.7	100.0	91.7	87.5	77.4	78.8
sheep	106.0	100.0	71.7	81.6	82.4	85.3
poultry	94.3	100.0	103.7	100.9	102.8	108.4
other animals	98.6	100.0	99.7	99.8	99.3	99.3
gross fixed capital formation	118.6	100.0	115.9	115.8	107.7	109.4
cattle	119.0	100.0	116.0	110.4	111.6	108.1
pigs	164.8	100.0	84.3	126.0	101.1	104.1
sheep	172.4	100.0	155.7	173.2	124.5	142.2
poultry	99.7	100.0	95.8	95.3	94.9	96.9
10 Total livestock products	102.4	100.0	100.9	102.0	103.3	100.3
milk	102.5	100.0	101.2	102.3	103.4	100.5
eggs	99.8	100.0	100.7	98.4	98.4	99.9
raw wool	107.8	100.0	83.1	86.3	84.4	84.1
other animal products	125.7	100.0	88.6	140.3	175.1	102.1
11 Total livestock output (9 + 10)	107.5	100.0	95.2	99.2	98.9	98.4
12 Total other agricultural activities	99.2	100.0	99.8	101.7	101.6	98.9
agricultural services	84.8	100.0	103.8	103.4	103.8	103.9
leasing out quota	266.1	100.0	54.4	81.5	75.9	53.6

continued

Table 9.2 continued

Indices 2000 = 100 — Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
13 Total inseparable non-agricultural activities	79.8	100.0	126.3	109.8	112.8	114.5
14 Gross output at basic prices (8 + 11 + 12 + 13)	102.8	100.0	94.9	99.5	98.2	98.9
15 Total subsidies (less taxes) on product (b)	101.4	100.0	85.6	98.5	98.8	97.8
16 Output at market prices (14 - 15)	103.2	100.0	96.4	99.7	98.2	99.1
of which						
transactions within the agricultural industry						
feed wheat	107.3	100.0	95.8	103.2	163.2	174.4
feed barley	92.8	100.0	108.2	114.9	108.0	75.5
feed oats	96.3	100.0	103.3	97.1	96.2	129.1
seed potatoes	146.4	100.0	113.6	118.7	48.2	40.0
straw	130.9	100.0	94.7	97.8	92.1	90.8
contract work	84.8	100.0	103.8	103.4	103.8	103.9
leasing of quota	266.1	100.0	54.4	81.5	75.9	53.6
total capital formation in livestock	118.6	100.0	115.9	115.8	107.8	109.4
Intermediate consumption						
17 Seeds	108.5	100.0	104.4	99.5	98.6	96.2
cereals	132.8	100.0	102.8	90.6	89.1	84.3
other	100.3	100.0	105.0	102.6	101.9	100.4
18 Energy	107.4	100.0	102.0	101.0	86.6	91.7
electricity	106.7	100.0	109.0	111.1	90.7	98.4
fuels	107.4	100.0	98.6	96.1	84.5	88.5
19 Fertilisers	111.2	100.0	88.0	91.9	79.3	77.8
20 Pesticides	90.3	100.0	94.7	96.2	91.9	94.4
21 Veterinary expenses	109.3	100.0	96.2	100.1	98.2	98.0
22 Animal feed	107.3	100.0	103.4	100.8	104.9	104.4
compounds	111.1	100.0	102.9	102.3	102.2	102.6
straights	103.2	100.0	103.9	95.2	106.1	109.2
feed purchased from other farms	95.9	100.0	105.2	111.2	119.8	100.9
23 Total maintenance (c)	121.0	100.0	101.9	95.9	99.6	98.9
materials	117.1	100.0	98.5	90.7	94.1	93.7
buildings	129.4	100.0	109.5	107.7	111.9	110.7
24 Agricultural services	84.8	100.0	103.8	103.4	103.8	103.9
25 Other goods and services (c) (d)	116.8	100.0	95.5	93.3	94.0	92.8
26 Total intermediate consumption (sum 17 to 25)	109.0	100.0	98.9	97.3	96.3	96.2
27 Gross value added at basic prices (14 - 26)	95.2	100.0	90.0	102.0	100.4	102.0
28 Total consumption of fixed capital	103.2	100.0	98.7	93.9	93.6	94.3
equipment	107.1	100.0	99.9	99.8	100.4	100.2
buildings (c)	103.9	100.0	98.8	96.7	90.1	89.2
livestock	93.9	100.0	96.0	80.4	84.2	87.3
cattle	85.9	100.0	86.1	74.4	82.2	88.0
pigs	125.9	100.0	68.7	99.4	78.8	79.8
sheep	99.6	100.0	120.5	79.1	77.5	77.2
poultry	96.7	100.0	98.1	98.7	96.2	94.8
29 Net value added at basic prices (27 - 28)	90.7	100.0	85.1	107.0	104.7	106.7

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

continued

Table 9.2 continued

(a) Includes straw and minor crops.

(b) "Subsidies on product": subsidies linked to products which provide an incentive to production of those products. "Other subsidies on production": subsidies other than "Subsidies on product" from which agricultural producers can benefit as a consequence of engaging in production.

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

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

Table 9.3 UK costs and volumes of labour engaged in agricultural work (a)

Enquiries: Simone Pfuderer on +44 (0)1904 455080 email: simone.pfuderer@defra.gsi.gov.uk

Calendar years

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
Paid labour costs (£ million) (b)	1 817	1 893	1 943	1 958	1 916	2 004
Annual work unit (thousand) (c)						
Entrepreneurial labour	248	220	219	211	205	203
Paid labour	152	113	110	104	96	98
Labour force	400	333	329	315	301	301

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Table 9.3 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 and the cost of trainees.

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

Chapter 10 Subsidies

Key Findings

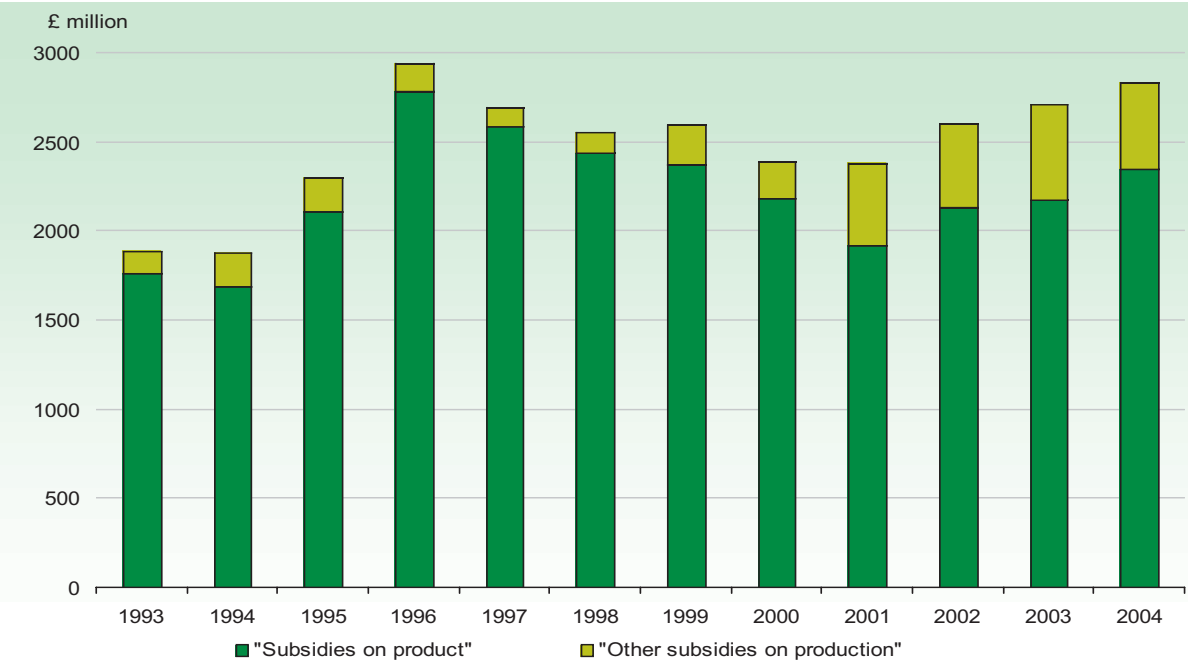
In 2004:

- Total subsidies less levies paid to farmers rose by 4.5 per cent to £2.8 billion.
- Payments less levies paid, which were directly linked to the production of products, rose by 7.6 per cent to £2.3 billion while other payments received by farmers, less levies paid, as a consequence of engaging in agricultural production fell by 8.4 per cent to £487 million.
- Direct payments to arable farmers, including payments for set-aside, fell by 4.8 percent to £1.1 billion.
- Direct payments to livestock farmers rose by 5.7 per cent to £1.3 billion.
- Dairy farmers received, after deduction of superlevy, £100 million.
- Payments through less favoured areas support schemes fell by 7.3 per cent to £150 million.
- Payments through agri-environment schemes rose by 9.5 per cent to £244 million.

Introduction

1 This chapter gives details of direct subsidies and compensation paid to farmers and which are included in the production and income account shown in chapter 8; payments and levies directly linked to the production of products are labelled as “subsidies on product” in the account, while other payments received as a consequence of engaging in agricultural production are labelled as “other subsidies on production”.

Chart 10.1 Subsidies and other payments made to farmers



source: Defra website, http://statistics.defra.gov.uk/esg/

Payments and levies directly linked to the production of products ("Subsidies on product") (Tables 10.1, 10.2, chart 10.1)

2 In 2004, total payments of subsidies linked to the production of products (less milk superlevy) made to farmers in the United Kingdom, are estimated to have risen by 7.6 per cent to £2.3 billion. Of this, arable farmers received £921 million, down by 0.7 per cent as a fall in payment rates was offset by an increase in the area claimed; this excludes payments for set-aside, which are included in "other subsidies on production". Beef producers received £1.0 billion, up by 5.3 per cent and sheep farmers received £309 million, up by 7.2 per cent, largely due to increases in payment rates. Dairy producers received £108 million through the Dairy Premium and Additional Payment, introduced in 2004 as part of reform of the Common Agricultural Policy, which was offset by an £8.0 million milk superlevy.

Other payments received as a consequence of engaging in agricultural production ("Other subsidies on production") (Tables 10.1, 10.2, chart 10.1)

3 Other payments received as a consequence of engaging in agricultural production are referred to as "other subsidies on production" in the production and income account in chapter 8.

4 Arable area payments made to arable farmers for land set-aside are estimated to have fallen by 26 per cent, to £131 million, due to a fall in the area claim ed and also a fall in payment rates. Payments of animal disease compensation, principally for cattle slaughtered as a result of bovine tuberculosis control measures, are expected to have fallen to £55 million. Payments to farmers under the less favoured areas support schemes (Hill Farm Allowance in England, Tir Mynydd in Wales, Less Favoured Area Support Scheme in Scotland and Less Favoured Area Compensatory Allowance in Northern Ireland) fell by 7.3 per cent as the safety net which applied since the schemes began came to an end. Payments to farmers taking part in agri-environment schemes rose by 9.5 per cent to £244 million.

Capital grants and transfers (Table 10.3)

5 Capital grants and transfers appear in the capital account as opposed to the production and income account because they are not related to the activity of production. They are estimated to have totalled £20 million in 2004.

Annex to Chapter 10 Subsidies

6 An annex to this chapter with a summary of the background to the Common Agricultural Policy and current subsidies can be found on the website at http://statistics.defra.gov.uk/esg/publications/auk/default.asp.

Table 10.1 UK payments and levies in the production and income account

Shows payments after deduction for modulation where appropriate.

Enquiries: Keith Seabridge on +44 (0)1904 455081 email: keith.seabridge@defra.gsi.gov.uk

£ million — Calendar years

	Average 1993-95	2000	2001	2002	2003	2004 (provisional)
Payments less levies directly linked to the production of agricultural products ("Subsidies on product")						
Crop subsidies						
Arable area payments on:						
wheat	345	458	350	446	440	447
barley	213	244	259	242	253	231
oats, rye, mixed corn and triticale	23	29	28	32	34	31
oilseed rape	158	110	104	80	113	118
linseed	19	29	10	3	8	7
peas and beans - stockfeed and human consumption	80	54	64	61	65	56
other crops	14	7	12	11	11	10
Other crop subsidies (a)	97	11	3	2	3	20
Livestock subsidies:						
Beef Special Premium (b)	195	216	241	236	239	257
Suckler Cow Premium (b)	183	191	219	204	210	230
Slaughter Premium	. .	43	76	133	136	150
Extensification Payment Scheme	. .	122	118	137	145	159
Over Thirty Month Scheme	. .	260	158	237	199	184
Hill Livestock Compensatory Allowance - cattle	58	55	. .	. .	. .	. .
Beef National Envelope	. .	13	19	34	35	36
Sheep Annual Premium	435	283	181	264	279	294
Sheep National Envelope	. .	. .	. .	10	8	14
Hill Livestock Compensatory Allowance - sheep	58	54	. .	. .	. .	. .
Foot-and-mouth disease 'light lambs' (c)	. .	. .	3	. .	. .	. .
Other subsidies:						
Paid to dairy producers	. .	22	79	. .	. .	108
Levies: (d)						
Milk superlevy	- 23	- 15	. .	. .	. .	- 8
Other levies prior to 1994 (e)	- 10	. .	. .	. .	. .	. .
Total "subsidies on product"	1 852	2 187	1 923	2 132	2 180	2 345
Other payments less levies received as a consequence of engaging in agricultural production ("Other subsidies on production")						
Arable Area Payments on set-aside	182	127	180	143	177	131
Animal disease compensation (f)	8	29	23	54	61	55
Less favoured areas support schemes (g)	. .	. .	165	165	162	150

continued

Table 10.1 continued

£ million — Calendar years

	Average 1993-95	2000	2001	2002	2003	2004 (provisional)
Agri-environment schemes:						
Countryside Stewardship & Arable Stewardship Schemes	10	30	41	56	70	77
Countryside Premium & Rural Stewardship Schemes	1	5	9	9	16	22
Tir Cymen & Tir Gofal	3	8	13	12	16	20
Countryside Management Scheme	. .	. .	1	3	3	5
Organic farming schemes	. .	17	18	23	18	15
Environmentally Sensitive Areas Scheme	23	63	70	75	83	87
Nitrate Sensitive Areas	3	3	2	2	. .	. .
Sites or Areas of Special Scientific Interest	8	12	12	12	13	14
Energy Crops Scheme	. .	-	-	-	-	1
Other (h)	1	2	3	3	4	4
Taxes including vehicle licences	- 68	- 92	- 78	- 81	- 91	- 93
Total "other subsidies on production"	171	205	459	475	532	487
Total subsidies less levies	2 023	2 392	2 382	2 607	2 711	2 832

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) CAP hops and herbage seeds support, hemp and flax aid, oilseed rape and linseed support.

(b) Includes extensification premium and deseasonalisation premium.

(c) A scheme introduced as part of the Livestock Welfare Disposal Scheme to dispose of lambs that could not be marketed as a result of the ban on exports and restrictions on movement of sheep arising from the outbreak of foot-and-mouth disease in 2001.

(d) Excludes levies paid to non-governmental organisations. These are included in the production and income account (table 8.1) under 'other goods and services'.

(e) Wheat, barley, oats, rye, mixed corn and milk co-responsibility levies.

(f) Tuberculosis, brucellosis, salmonella, Chernobyl, Newcastle and Aujeszky's disease, swine fever and avian influenza compensation and BEIC egg scheme.

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

(h) Includes Moorland, Habitat and Countryside Access Farming schemes.

Table 10.2 UK subsidies and other payments by country in 2004

Shows payments after deduction for modulation where appropriate.

Enquiries: Keith Seabridge on +44 (0)1904 455081 email: keith.seabridge@defra.gsi.gov.uk

£ million Calendar year

	England	Wales (a)	Scotland	Northern Ireland	UK
Payments less levies directly linked to the production of agricultural products ("Subsidies on product")					
Crop subsidies					
Arable area payments on:					
wheat	427	3	15	2	447
barley	147	4	75	6	231
oats, rye, mixed corn and triticale	24	1	7	-	31
oilseed rape	109	-	8	-	118
linseed	7	-	-	-	7
peas and beans - stockfeed and human consumption	54	-	1	-	56
other crops	9	1	-	-	10
Total Arable area payments	776	9	106	9	901
Other crop subsidies (b)	. .	. .	. .	. .	20
Livestock subsidies:					
Beef Special Premium	129	25	52	52	257
Suckler Cow Premium	90	26	67	46	230
Slaughter Premium	78	12	29	31	150
Extensification Payment Scheme	64	14	44	37	159
Over Thirty Month Scheme	119	22	14	28	184
Beef National Envelope	17	5	12	3	36
Sheep Annual Premium	115	86	73	20	294
Sheep National Envelope	10	4	-	1	14
Dairy Premium & Additional Payment	. .	. .	. .	. .	108
Milk superlevy	. .	. .	. .	. .	- 8
Total "subsidies on product"	. .	. .	. .	. .	2 345
Other payments received less levies received as a consequence of engaging in agricultural production ("Other subsidies on production")					
Arable area payments - set-aside	113	1	15	1	131
Less favoured areas support schemes (c)	34	33	61	22	150
Animal disease compensation	. .	. .	. .	23	55
Agri-environment schemes:					
Countryside Stewardship & Arable Stewardship	77	. .	. .	. .	77
Countryside Premium & Rural Stewardship	. .	. .	22	. .	22
Tir Cymen & Tir Gofal	. .	20	. .	. .	20
Countryside Management Scheme	. .	. .	. .	5	5
Organic farming schemes	7	3	5	-	15
Environmentally Sensitive Areas	66	5	11	5	87
Sites or Areas of Special Scientific Interest	10	1	3	-	14
Other schemes (d)	3	1	-	-	4
Taxes including vehicle licences	. .	. .	. .	. .	- 93
Total "other subsidies on production"	. .	. .	. .	. .	487
Total subsidies	. .	. .	. .	. .	2 832

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Includes some estimates for schemes in Wales.

(b) CAP hops and herbage seeds support, hemp and flax aid, oilseed rape and linseed support.

(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) Includes Moorland and Habitat Schemes, and in England, the ERDP energy crops scheme and entry level scheme pilot.

Table 10.3 UK capital payments

Enquiries: Keith Seabridge on +44 (0)1904 455081 email: keith.seabridge@defra.gsi.gov.uk

£ million Calendar years

	Average 1993-95	2000	2001	2002	2003	2004 (provisional)
BSE - animal disease (from 1988)	25	1	1	1	-	-
BSE - selective cull (from 1997)	. .	-	-	-	-	. .
Scrapie (from 1998)	. .	-	-	-	-	-
Sheep national envelope - Quota purchase	. .	. .	. .	-	. .	. .
Pig welfare disposal scheme	. .	9	4	. .	. .	. .
Pig industry restructuring scheme	. .	. .	47	22	. .	. .
Foot and mouth disease (a)	. .	. .	1 103	. .	. .	. .
Non-marketing of milk (1980 - 1986 and 1994)	44	. .	. .	. .	. .	. .
Milk outgoers (1984 - 1994)	1	. .	. .	. .	. .	. .
Milk quota cuts (1987 - 1997)	34	. .	. .	. .	. .	. .
Capital grants (b)	26	7	9	14	20	20

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) For full breakdown see table 8.4.

(b) Includes farm diversity, farm & conservation, agriculture improvement scheme, agriculture & horticulture and farm structures grants.

Chapter 11 Conservation and land management

Land designation, protection and management (Table 11.1)

1 Traditional farming methods together with climatic conditions and the underlying geology have produced distinctive regional landscapes. 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 corn crake, barn owl, hedge sparrow, field poppy, corn cockle and corn flower.

2 Areas of the UK have been designated to give protection, mainly for reasons of national landscape and/or nature conservation importance. For example, Sites of Special Scientific Interest (SSSIs) are notified for the importance of the flora, fauna, geological or landform features. National Parks have been designated for their unique landscapes, natural habitats and recreational opportunities and Areas of Outstanding Natural Beauty (AONBs) (in Scotland National Scenic Areas (NSAs)) for their landscapes. Environmentally Sensitive Areas (ESAs) are designated for high landscape, wildlife or historic value. Many of these areas are supported by management plans and agri-environment schemes.

3 The table 11.1 shows areas of land designations and some of those protected by voluntary management schemes in England, Wales, Scotland and Northern Ireland. Though these designations are predominantly on agricultural land, the data in the table include areas, such as estuaries, wetlands, moorlands and forests, that are not under agricultural management.

4 National Parks were first designated in the 1950s in England and Wales. There are now 11 parks and proposals for 2 more in the New Forest and the South Downs. Scotland's 2 National Parks are Loch Lomond and the Trossachs (designated 2002), and the Cairngorms (designated 2003). There is a proposal in Northern Ireland for The Mournes to become a National Park. The aims of National Parks are to: conserve and enhance the natural beauty, wildlife and cultural heritage; promote public understanding and enjoyment of the special qualities of the area; further economic and social development of the communities and encourage sustainable use of natural resources. Funding is available in English and Welsh National Parks for management agreements for projects that meet local environmental circumstances and priorities. Outside National Parks, Areas of Outstanding Natural Beauty (AONB) or in Scotland, National Scenic Areas (NSA) have been designated. Some of these however, exist within recently created National Parks.

5 Local and National Nature Reserves are established to protect locally or nationally important areas of wildlife, habitat and geological formations and for scientific research. Local Nature Reserves are relatively small and account for less than 0.2 per cent of the land area, but are locally significant.

6 Sites of Special Scientific Interest (SSSIs) in England, Scotland and Wales and Areas of Special Scientific Interest (ASSIs) in Northern Ireland are designated and administered, by English Nature, Scottish Natural Heritage, Countryside Council for Wales and the Environmental and Heritage Service (Northern Ireland) (see chapter 12 paragraphs 8 - 10). Management agreements are made with landowners to carry out activities to conserve and enhance the features for which the sites were designated, e.g. rare species, habitats or geological features. English Nature makes payments through its Wildlife Enhancement Scheme; these agreements can stand alone or augment agri-environment scheme agreements. An agri-environment scheme agreement for land

that includes an SSSI or ASSI will incorporate the management of that site into the agreement. In Scotland SSSIs are part of Scottish Natural Heritage's Natural Care Strategy, their schemes and agreements complement those of the Scottish Rural Development Programme.

7 Some sites are given enhanced protection due to their national, European and/or worldwide importance. For example, Special Protection Areas and Special Areas for Conservation have been proposed or designated under the EU Birds and Habitat Directives respectively and make up the Natura 2000 sites network. These, together with Ramsar sites (designated under the Ramsar Convention for wetlands) are based on the national networks of SSSIs and National Nature Reserves. These designations are not mutually exclusive and a site may be in more than one category.

8 Over 50 per cent of the area of land in England is designated as Nitrate Vulnerable Zones (NVZ) and also smaller areas in Scotland, Wales and Northern Ireland (see table 11.1). Mandatory limits to the use of fertilisers are defined to protect ground and river water catchment areas.

9 The National Trust and Scottish National Trust own a total of 3,280 km^2 of land in the UK. Over 80 per cent of the National Trust's land is farmed or is dependent on farming for its management. The Trusts holds this land 'for purposes of promoting permanent preservation for the benefit of the nation'. These benefits include: environmental quality; landscape; historic features and cultural values; diversity of wildlife and habitats and opportunities for public access as well as the production of food. They aim to preserve the traditional character of the area with active farm management, by working closely with their tenants, providing advice and developing whole farm plans.

10 There are a range of land management initiatives and schemes such as ones by The Countryside Agency (CA) or The Environment Agency (EA). Some are for water and flood management. The EA Upper Wharfedale best practice project looks at all aspects of the catchment area particularly related to flood defence, including geomorphology, hydrology and wildlife habitats, by using whole farm plans. In the Northumberland National Park, CA co-ordinate an initiative covering the whole park and looking at sustainable upland farm management.

11 On an individual farm basis, Integrated Farm Management (IFM) aims to integrate biological processes into modern farming practices using advanced technology to provide the basis for efficient and profitable production which is economically viable and environmentally responsible. This involves the consideration in agricultural organisation and planning of:

- soil management, crop nutrition and crop protection;
- pollution control and waste management;
- energy efficiency;
- animal husbandry;
- landscape features, habitat and wildlife.

Table 11.1 Designated and protected areas mainly on agricultural land, by country 2004 (a)

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

	National Parks	Area of Outstanding Natural Beauty / National Scenic Areas (b) (c)	Local Nature Reserve	Area / Site of Specific Scientific Interest designation	National Nature Reserve	Special Area of Conservation	Special Protection Area	Ramsar	Nitrate Vulnerable Zone	Environ-mentally Sensitive Area designation	Less Favoured Area designation	National Trust
	National		Local	National		Natura 2000 sites (d), European designation (on SSIs &/or NNRs)						
England												
thousand hectares	994	2 071	34	1 073	86	887	636	331	6 919	1 176	2 211	193
number	8	37	1 016	4 113	213	235	79	70	. .	22	. .	. .
% of total land (e)	8%	16%	-	8%	1%	7%	5%	3%	53%	9%	17%	1%
Wales												
thousand hectares	409	105	5	277	24	107	76	51	35	519	1 648	45
number	3	5	57	1 021	67	73	7	13	. .	6	. .	. .
% of total land (e)	20%	5%	-	13%	1%	5%	4%	2%	2%	25%	79%	2%
Scotland												
thousand hectares	568	1 002	9	1 005	117	963	625	313	1 126	1 451	6 902	78
number	2	40	36	1 451	66	238	138	51	. .	10	. .	. .
% of total land (e)	7%	12%	-	13%	1%	12%	8%	4%	14%	18%	86%	1%
Northern Ireland												
thousand hectares	. .	336	3	93	2	56	71	76	2	221	826	12
number	. .	9	39	212	9	52	11	17	. .	5	. .	. .
% of total land (e)	. .	24%	-	7%	-	4%	5%	5%	-	16%	58%	1%

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

(a) Land in this table does not necessarily receive payment for land management.

(b) Generally Areas of Outstanding Natural Beauty and National Parks are mutually exclusive, however, some Areas of Outstanding Natural Beauty exist within the Broads National Park and National Scenic Areas remain within the Scottish National Parks.

(c) The total number of Areas of Outstanding Natural Beauty in England and Wales is 41, as the Wye Valley Area of Outstanding Natural Beauty spans both countries, the respective areas are included in each country in this table.

(d) The Natura 2000 sites can be in more than one designation.

(e) 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.

Rural development programmes (Tables 11.2 to 11.4)

12 The land based, agri-environment schemes are managed under the Rural Development Programmes (RDP) by Defra, Scottish Executive Environment and Rural Affairs Department, Welsh Assembly Government and Department of Agriculture and Rural Development (Northern Ireland). The programmes also include project based schemes for processing and marketing, rural enterprise and vocational training.

13 Since the introduction of ESA schemes in 1987, the agri-environment schemes throughout the UK, have made payments to farmers for 5 to 10 year agreements to: improve and extend wildlife habitats; conserve historic, geological and landscape features and to restore traditional aspects of the countryside. The ESA scheme payments have contributed significantly to land management in both SSSIs and National Parks that are also within the ESA designation.

14 In England, a new scheme, Environmental Stewardship (ES) , will be introduced in 2005. A Higher Level ES, will replace the present agri-environment schemes (Countryside Stewardship and ESA) and will operate alongside Entry Level and Organic Entry Level ES elements. In Scotland the present schemes will be replaced by Land Management Contracts in 3 tiers. In Wales an entry level scheme, Tir Cynnal will continue alongside Tir Gofal, while in Northern Ireland an Entry Level Countryside Management Scheme will be introduced in mid 2005 to augment their Countryside Management scheme.

15 The entry level schemes aim to encourage large numbers of farmers across all farmland to implement simple and effective environmental management on their farms. They will address issues such as diffuse pollution, loss of biodiversity and loss of landscape character. Organic Entry Level (England) is open to organic farmers not receiving other organic scheme payments. In Wales the Organic Farming Scheme's aims are to encourage farmers to convert to an organic way of farming and provides financial support for this process as well as for organic maintainance.

16 The introduction of cross compliance in the Single Payment Scheme, provides a baseline for the reduction of environmental damage, by including the protection of soils (erosion, organic matter and structure), water courses and ancient monuments.

17 Table 11.2 shows expenditure on individual environment and conservation schemes by country. The figures for organic farming are for conversion programmes and organic maintenance aid introduced in June 2003 in England and May 2004 in Scotland. A single scheme year has been used as the individual schemes use different years. The data for each scheme is in the year in which the bulk of that scheme's payments are made. In Wales Tir Cymen is being phased out and replaced by Tir Gofal, in Scotland Rural Stewardship replaced Countryside Premium in 2001.

18 The combined payments for the main agri-environment schemes, stewardship and ESA, have increased in 2004: in England by 9 per cent; in Wales by 17 per cent; in Scotland by 20 per cent and in Northern Ireland by 18 per cent. Payment for Organic Conversion has decreased as land in the scheme has become fully organic. The payments and areas for SSSIs and ASSIs are for management agreements outside the RDPs, as mentioned in paragraph 6, the overall payments for these have increased by over 11 per cent. Farm woodland grants have been included in tables 11.2 and 11.3, although they are not included in the production and income account (chapter 8). The grants are to enhance the environment through encouraging the planting of woodland on farms to improve the landscape, provide new habitats and increase biodiversity. In England and Scotland payments have increased by 13 per cent, though they have fallen by a third in Northern Ireland.

19 The Less Favoured Area designation (see table 11.1) covers upland areas where beef and sheep farmers receive a compensatory allowance which contributes to maintaining the landscape and rural communities. These are:

in England - Hill Farm Allowance; in Wales - Tir Mynydd; in Scotland - Less Favoured Area Support Scheme and in Northern Ireland - Less Favoured Area Compensatory Allowances. These payments are on an area basis rather than per head of livestock. Total payments for the UK have dropped by 7.3 per cent in 2004 to around £150 million as the safety net used during the 3 years' transition period from the Hill Livestock Compensatory Allowances has been phased out.

20 Table 11.3 shows the area of land in the various environment schemes by country. The area gives a measure of schemes uptake, although payments can be for boundaries, field margins or other forms of management not necessarily related to the land area. This table shows the cumulative areas of land within individual schemes by country, i.e. all the land receiving payments within that scheme for that year, and not just new agreement holders. For SSSIs, ASSIs and ESAs the area of land in table 11.3 relates to the non RDP payments for management schemes and not necessarily the total area of land designated (which is shown in table 11.1). SSSIs or ASSIs managed within ESA or stewardship schemes, are included in the data for ESA or other management schemes in tables 11.2, 11.3 and 11.4.

21 Areas of land in ESA and stewardship schemes continued to increase. Between 2002 and 2003, the increase in England was 12 per cent, in Wales 22 per cent, in Scotland 4.6 per cent and by 17 per cent in Northern Ireland. In 2004, there was a further increase in England and Northern Ireland of 5.7 and 2.5 per cent. The area of land receiving non RDP payments for SSSIs or ASSIs has increased by 5 per cent.

22 Another measure of scheme uptake is the number of agreements. Table 11.4 shows the number of agreements each year in the main agri-environment schemes, stewardship and ESA. Between 2002 and 2003 the number of agreements increased by 23 per cent Northern Ireland, in England and Scotland the number increased by 7.1 and 0.5 per cent respectively. In Scotland the numbers include both stewardship schemes so the table shows new entrants to stewardship schemes, in Wales the only data available is for Tir Gofal, therefore the table shows new entrants as well as transfers from Tir Cymen and so is not comparable. In 2004 in England and Northern Ireland there were further increases of 5.0 and 8.6 per cent.

23 Further information on their specific schemes can be found on the websites for:

Defra,http://www.defra.gov.uk/erdp/default.htm

Scottish Executive Environment and Rural Affairs Department: http://www.scotland.gov.uk/Topics/Rural

Welsh Assembly Government: http://www.countryside.wales.gov.uk/

Department of Rural Development (Northern Ireland): http://www.dardni.gov.uk/frames/rdpni01.htm

24 Please contact Barbara Norton for any general enquiries regarding this chapter, 01904 455577, barbara.norton@defra.gsi.gov.uk. Further information on any of the schemes, initiatives, designated or protected areas can be found on the appropriate websites.

Table 11.2 Environmental schemes - payments by country

Enquiries: Keith Seabridge on +44 (0)1904 455081 email: keith.seabridge@defra.gsi.gov.uk

£ million — Scheme years

	Average of 1993-95	2000	2001	2002 (a)	2003 (a)	2004 (a) (provisional)
Total expenditure (b)	55	151	362	375	401	420
England						
Hill Farm Allowance Scheme	. .	. .	42	39	39	34
Environmentally Sensitive Areas Scheme	20	41	46	53	61	66
Countryside and Arable Stewardship Schemes	10	30	41	56	70	77
Entry Level Scheme - pilot	. .	. .	. .	. .	1	1
Organic farming schemes	-	15	26	15	10	7
Nitrate Sensitive Areas Scheme	3	3	2	2	. .	. .
Habitat & Moorland schemes	1	2	2	2	2	2
Woodland schemes (b)	3	6	8	9	11	11
Energy crops schemes	. .	-	-	-	-	9
Sites of Special Scientific Interest (c)	7	8	8	8	9	10
Wales						
Tir Mynydd	. .	. .	36	39	37	33
Environmentally Sensitive Areas Scheme	2	7	6	7	6	5
Tir Cymen	3	5	5	4	3	2
Tir Gofal	. .	2	8	8	12	18
Organic farming schemes	. .	. .	3	3	3	3
Habitat & Moorland schemes	. .	. .	1	1	1	1
Woodland schemes (b)	2	-	-	-	-	. .
Sites of Special Scientific Interest (c)	2	2	2	1	1	1
Scotland						
Less Favoured Area Support Scheme	. .	. .	62	63	62	61
Environmentally Sensitive Areas Scheme	1	9	11	10	11	11
Countryside Premium Scheme	1	5	9	6	6	6
Rural Stewardship Scheme	. .	. .	. .	3	10	16
Organic farming schemes	. .	3	5	5	5	5
Habitat & Moorland schemes	1	-	-	-	-	-
Woodland schemes (b)	2	4	4	6	6	6
Sites of Special Scientific Interest (c)	. .	2	2	3	3	3
Northern Ireland						
Less Favoured Area Compensatory Allowances Scheme	. .	. .	25	23	24	22
Environmentally Sensitive Areas Scheme	1	6	7	5	5	5
Countryside Management Scheme	. .	. .	1	3	3	5
Organic farming schemes	. .	-	-	-	-	-
Woodland schemes (b)	-	1	1	1	-	-
Areas of Special Scientific Interest (c)	. .	-	-	-	-	-

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) Includes some estimates relating to schemes in Wales.

(b) Woodland schemes are not included in the production and income account (table 8.1). The totals shown here will not therefore match totals shown in Chapter 8 Accounts or Chapter 10 Subsidies.

(c) Payments for Sites of Special Scientific Interest or Areas of Special Scientific Interest that are managed under Environmentally Sensitive Area or stewardship schemes are included under the appropriate Environmentally Sensitive Area or stewardship scheme.

Table 11.3 Environmental schemes - area of land in schemes by country

Enquiries: Keith Seabridge on +44 (0)1904 455081 email: keith.seabridge@defra.gsi.gov.uk

Thousand hectares	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
						Scheme year
England						
Environmentally Sensitive Areas Scheme (a)	346	550	579	620	640	650
Countryside and Arable Stewardship Schemes	73	259	341	426	527	584
Entry Level Scheme - pilot	. .	. .	. .	. .	31	31
Organic farming schemes	2	96	138	157	174	. .
Nitrate Sensitive Areas Scheme	14	10	6	5	. .	. .
Habitat and Moorland Schemes	8	23	23	10	10	7
Woodland schemes	19	36	41	46	50	52
Sites of Special Scientific Interest (a)	. .	. .	. .	154	200	220
Wales						
Environmentally Sensitive Areas Scheme (a)	. .	. .	180	180	175	171
Tir Cymen	. .	61	52	13	4	. .
Tir Gofal	. .	50	. .	97	174	. .
Organic farming schemes	. .	34	. .	49	52	55
Habitat and Moorland Schemes	. .	7	7	7	6	6
Woodland schemes	-	2	2	2	2	. .
Sites of Special Scientific Interest (a)	42	63	57	48	40	48
Scotland						
Environmentally Sensitive Areas Scheme (a)	191	772	771	816	855	. .
Countryside Premium Scheme	. .	464	602	602	544	. .
Rural Stewardship Scheme	. .	. .	. .	145	236	. .
Organic farming schemes	15	212	233	304	375	. .
Habitat and Heather Moorland Schemes	-	4	3	2	2	. .
Woodland schemes	11	50	53	57	62	65
Sites of Special Scientific Interest (a)	. .	287	312	332	339	340
Northern Ireland						
Environmentally Sensitive Areas Scheme (a)	83	154	148	144	146	126
Countryside Management Scheme	. .	. .	19	57	90	116
Organic farming schemes	. .	1	4	5	5	5
Woodland schemes	19	54	54	42	46	28
Areas of Special Scientific Interest (a)	-	2	2	2	3	4

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) All land designated as Environmentally Sensitive Areas, Sites of Special Scientific Interest or Areas of Special Scientific Interest does not necessarily receive management payments. The areas in this table represent land receiving payments only.

Table 11.4 Land Management schemes - Number of agreement holders

Enquiries: Keith Seabridge on +44 (0)1904 455081 email: keith.seabridge@defra.gsi.gov.uk

	Average of 1993-95	2000	2001	2002	2003	2004 (provisional)
England						
Environmentally Sensitive Areas Scheme	6 163	10 915	11 263	12 027	12 500	13 000
Countryside Stewardship	4 350	12 100	13 880	15 380	16 850	17 810
Wales						
Environmentally Sensitive Areas Scheme	. .	2 257	2 327	2 438	2 386	. .
Tir Cymen/Gofal (a)	. .	. .	. .	906	1 609	. .
Scotland						
Environmentally Sensitive Areas Scheme	968	2 709	2 697	2 947	2 900	. .
Countryside Premium/Rural Stewardship Scheme	. .	1 201	1 478	1 803	1 872	. .
Northern Ireland						
Environmentally Sensitive Areas Scheme (b)	. .	4 229	4 234	4 479	4 634	4 810
Countryside Management Scheme	. .	. .	357	1 277	2 437	2 872

source: Defra website, http://statistics.defra.gov.uk/esg/publications/auk/2004/excel.asp

(a) The data shown here is for Tir Gofal only; data for Tir Cymen will be added when this becomes available.

(b) The Environmentally Sensitive Areas Scheme in Northern Ireland ended in 2002 when it was replaced by the New Environmentally Sensitive Areas Scheme (NESA).

Chapter 12 Environment

Introduction

1 In the UK, agricultural activities cover around three-quarters of the land area and produce two-thirds of UK food. The agricultural sector is made up of around 307,000 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.

Environmental impacts

2 This section brings together physical data to show the state and trend of the impacts of agriculture on the environment. The data have been selected to put these impacts into context and show the agricultural contribution to environmental issues. They cover all the major environmental issues for which reliable sources already exist. The e-Digest of Environment Statistics is available at:
http://www.defra.gov.uk/environment/statistics/index.htm,
where further information or definitions relating to any of the charts or tables sourced as the e-Digest can be found.

Landscape Table 12.1

3 Agriculture plays a key role in shaping the character of the UK landscape. Traditional farming methods together with climatic conditions and the underlying geology have produced distinctive regional landscapes. The local landscape is 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 UK.

4 Agricultural landscapes are the outcomes of the interactions between farming, natural resources and the environment and include amenity, cultural and recreation values. Perceptions of landscape are rooted in history and local, regional and national cultures. Traditional buildings and field boundaries are important features of the landscape. Any changes to these features such as the removal of hedgerows and change in building methods or materials, can change the character of the landscape. Table 12.1 shows the 1998 lengths of linear landscape features together with the change in lengths between 1990 and 1998, as reported by the Countryside Survey 2000. Further information on the C S 2000 can be found at: http://www.cs2000.org.uk/results.htm.

Habitat & species Table 12.2, charts 12.1, 2 & 3

5 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 12.2 shows the estimated stock of broad habitats in the UK in 1998 and the change in stock between 1990 and 1998.

Table 12.1 Change in stock of linear landscape features in GB 1990 to 1998

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

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

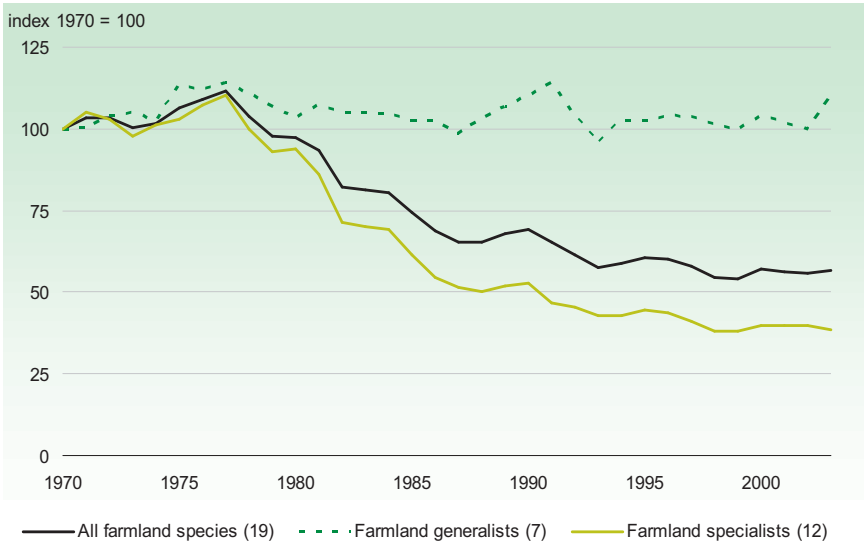
	England and Wales			Scotland		
	1998 Length	Change in length 1990-1998		1998 Length	Change in length 1990-1998	
	thousand km		%	thousand km		%
Hedge	449.3	- 0.4	-	19.0	0.8	4.6
Remnant Hedge	52.3	- 13.5	- 20.9	5.3	- 0.9	- 20.0
Wall	105.8	- 2.7	- 2.5	87.1	- 1.5	- 1.7
Line of trees/shrubs/relict hedge and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

Source: CS2000, Defra e-Digest of Environmental Statistics

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

7 Chart 12.1 shows the trends in farmland bird populations since 1970. Bird populations are considered good indicators of the state of wildlife in the countryside 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 in the food chain. The chart shows that total farmland bird populations declined by almost half between 1978 and 1993, but have been relatively stable since. Further information can be found on the Defra, RSPB, BTO and JNCC websites.

Chart 12.1 UK farmland bird index 1970 to 2003



source: Defra, RSPB, BTO

Table 12.2 Changes in stock of broad habitats in the UK 1990 to 1998

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

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

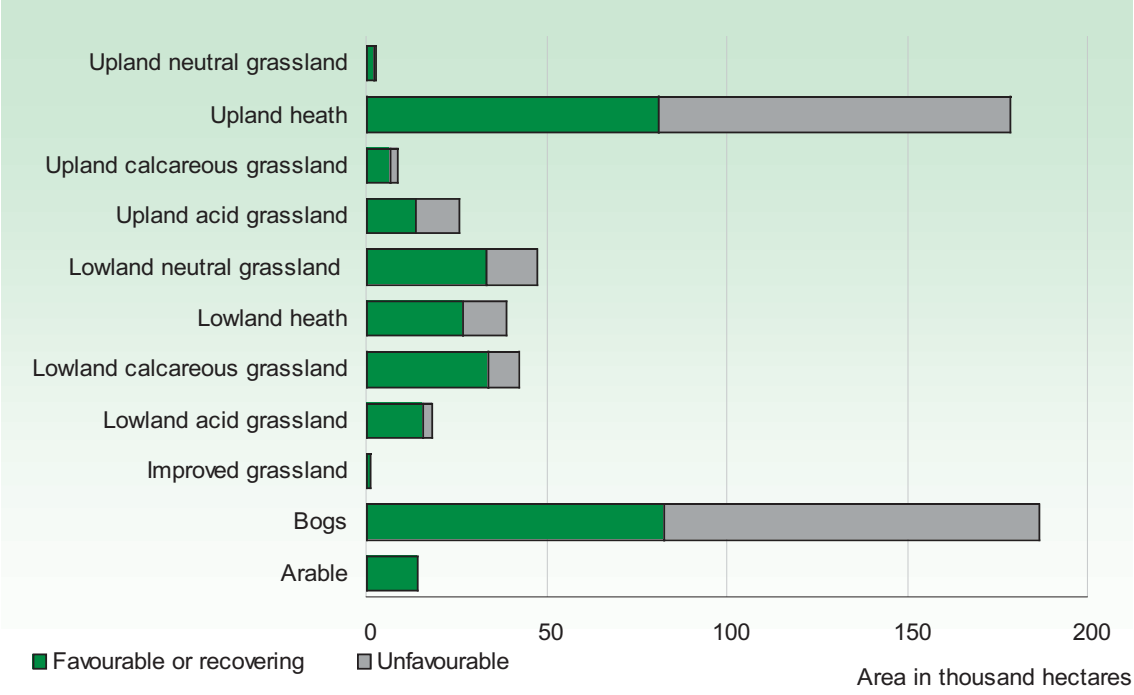
Broad Habitat	England and Wales			Scotland			Northern Ireland			United Kingdom		
	total 1998	change 1990-98		total 1998	change 1990-98		total 1998	change 1990-98		total 1998	change 1990-98	
	thousand ha		%	thousand ha		%	thousand ha		%	thousand ha		%
Woodland habitats												
Broadleaved, Mixed and Yew Woodland	1 171	42	4	300	25	9	51	4	9	1 522	72	5
Coniferous Woodland	380	- 16	- 4	993	7	1	61	6	12	1 435	- 3	-
Intensive agriculture												
Improved Grassland	4 431	- 102	- 2	1 051	- 1	-	568	141	33	6 050	37	1
Arable and Horticultural	4 609	49	1	639	38	7	59	- 20	- 25	5 307	67	1
Semi-natural habitats												
Neutral Grassland	444	38	10	168	- 30	- 15	254	- 118	- 32	867	- 109	- 12
Bog	180	- 1	- 1	2 038	- 17	- 1	148	- 13	- 8	2 367	- 32	- 1
Dwarf Shrub Heath	485	-	-	1 002	- 58	- 5	13	- 1	- 8	1 500	- 59	- 4
Acid Grassland	547	- 116	- 17	748	- 39	- 5	28	- 2	- 8	1 324	- 157	- 10
Fen, Marsh and Swamp	210	43	27	337	55	19	53	- 12	- 19	600	86	17
Bracken	273	24	8	166	4	3	4	-	5	443	28	6
Calcareous Grassland	38	- 9	- 19	27	- 5	- 16	1	-	- 7	66	- 15	- 18
Montane	1	-	-	48	-	-	. .	. .	. .	. .	. .	. .
Inland Rock	17	- 8	- 28	38	15	59	6	. .	. .	56	. .	. .
Water												
Standing Open Water and Canals	106	1	0.7	85	1	0.6	. .	. .	. .	. .	. .	. .
Rivers and Streams	43	-1	-2.7	21	-	0.9	. .	. .	. .	. .	. .	. .

Source: CS2000, Northern Ireland Countryside Survey 2000, Defra e-Digest of Environmental Statistics

8 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 UK (see chapter 11 paragraph 6). English Nature assesses the condition of SSSIs in England using categories agreed for the UK through the Joint Nature Conservation Committee (JNCC).

9 The extent and condition of SSSIs varies across the English regions and between the different habitats (see chart 12.2). Bogs and upland heaths together account for over a third of the SSSI area and two thirds of the area of SSSIs under agricultural management. They are particularly sensitive to overgrazing and burning, which causes changes in vegetation and physical damage to the land. As a result less than half of either bog or upland heath SSSI area is in a good condition. In general SSSIs in lowland areas are in a more favourable condition than those in upland areas.

Chart 12.2 Condition of habitats on agriculturally managed SSSIs (England)

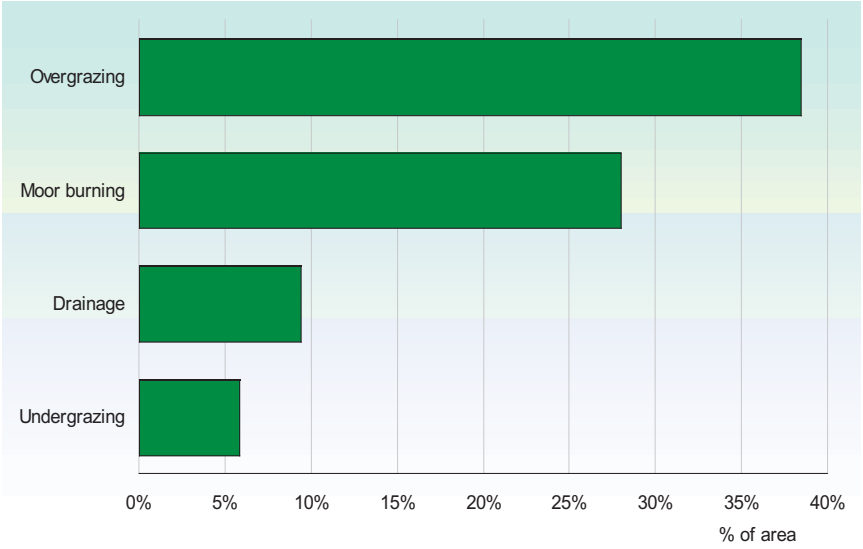


source: English Nature

10 Currently (2004) 65 per cent of SSSI land area is in a favourable or recovering condition, leaving 35 per cent in an unfavourable condition. However, of the agriculturally managed SSSI land area, 55 per cent is in a favourable or recovering condition. Chart 12.3 shows the major agricultural reasons for unfavourable conditions on all SSSIs in England. Across the whole series of SSSIs the main cause of unfavourable conditions include overgrazing, inappropriate moor burning, lack of scrub control, inappropriate forestry and woodland management and lack of appropriate ditch management. A large proportion of sites have damage by more than one factor. Generally, if a SSSI is in a favourable or recovering condition, it means that the habitats and species are in a healthy state and are being conserved for the future by appropriate management. If a SSSI is assessed as unfavourable, it means there is a current lack of appropriate management, or that there are other damaging impacts which need to be addressed.

11 National Nature Reserves (NNR) (table 11.1) account for an area about a tenth the area of SSSIs. Generally NNRs are in a better condition, mainly over 80 per cent are in a good or recovering condition. Bogs account for nearly half of the agriculturally managed NNRs, of this area 27 per cent is in a poor condition. Further information on the condition of England's SSSIs and NNRs can be found on the English Nature website at: http://www.english-nature.org.uk/Special/sssi/reportIndex.cfm

Chart 12.3 Major agricultural reasons for unfavourable conditions on SSSIs (England) 2004



source: English Nature

Water (Charts 12.4, 12.5)

12 River and groundwater are important resources for agriculture. Water used for agriculture represents about 1 per cent of water abstracted, but water abstraction for irrigation is increasing. Agricultural use, in drainage and for irrigation, alters the flow of water and can speed up overland flow rates, contributing to flooding and soil erosion, also reducing infiltration and the recharge of aquifers.

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

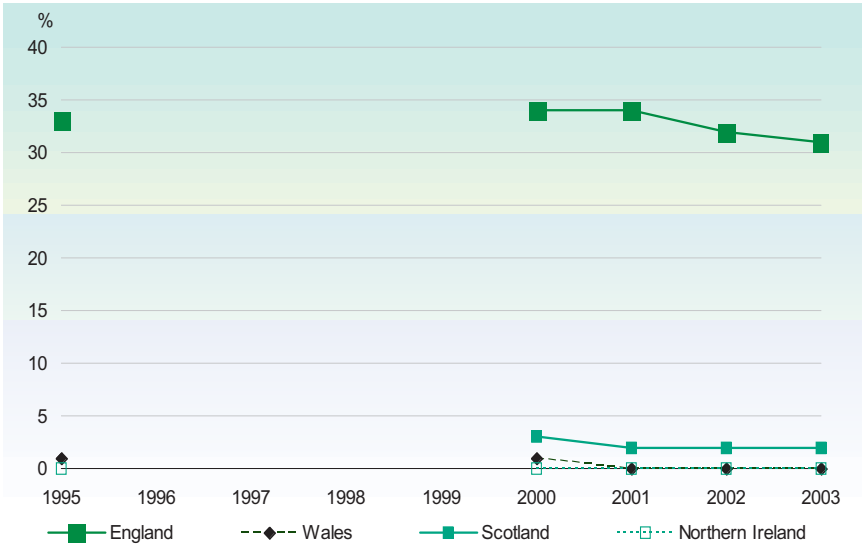
- nitrate pollution in surface and groundwater;
- phosphorus levels in surface water;
- contamination by pesticides and harmful effects of soil erosion sediments and mineral salts resulting in impaired drinking water;
- and other environmental problems such as eutrophication.

14 Chart 12.4 shows the lengths of rivers with nitrates levels over 30 mg NO_3 per litre. In Northern Ireland, Wales and Scotland these remain low, in England levels continue to fall reflecting the decrease in fertiliser use (chart 12.10 and paragraph 30).

15 Chart 12.5 shows phosphate levels in rivers by country. High levels in freshwater can cause eutrophication, which affects the ecological balance of the water environment leading to excessive plant growth.

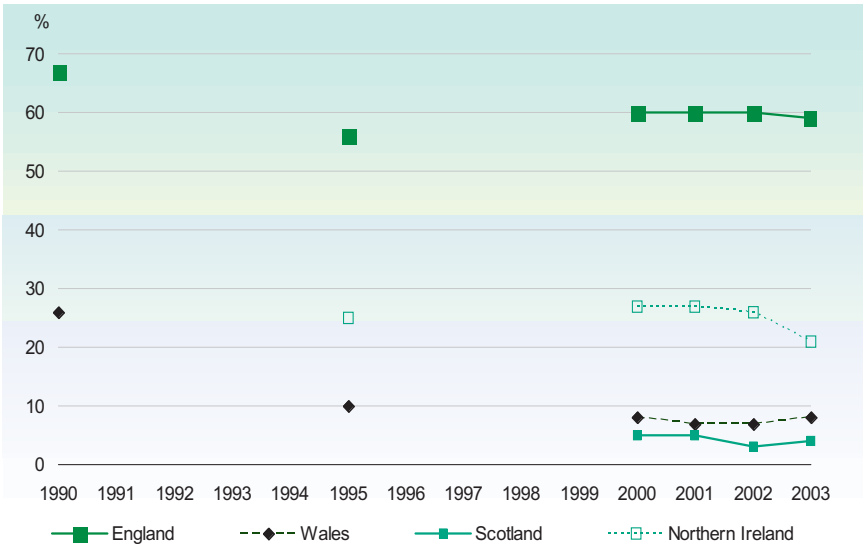
16 Groundwaters flow through permeable rocks and supply water to industry and agriculture, they provide 35 per cent of public drinking water in England and Wales. Groundwater also recharges rivers and wetlands. Water flows relatively slowly through aquifers, and so any pollution takes a long time to be discharged. Nitrate levels in aquifers have been rising over the last 20 years in some cases these exceed health limits (see NVZs, chapter 11 paragraph 8). Further information on water quality can be found on the Environment Agency website at: http://www.environment-agency.gov.uk/subjects/waterquality/?lang=_e

Chart 12.4 Per cent of river length nitrate levels > 30mg NO_3/l 1995-2003



source: Environment Agency, Scottish Environment Protection Agency, Environment and Heritage Service, Defra e-Digest of Environmental Statistics.

Chart 12.5 Per cent of river length phosphate levels > 0.1mg P/l 1990-2003



source: Environment Agency, Scottish Environment Protection Agency, Environment and Heritage Service, Defra e-Digest of Environmental Statistics.

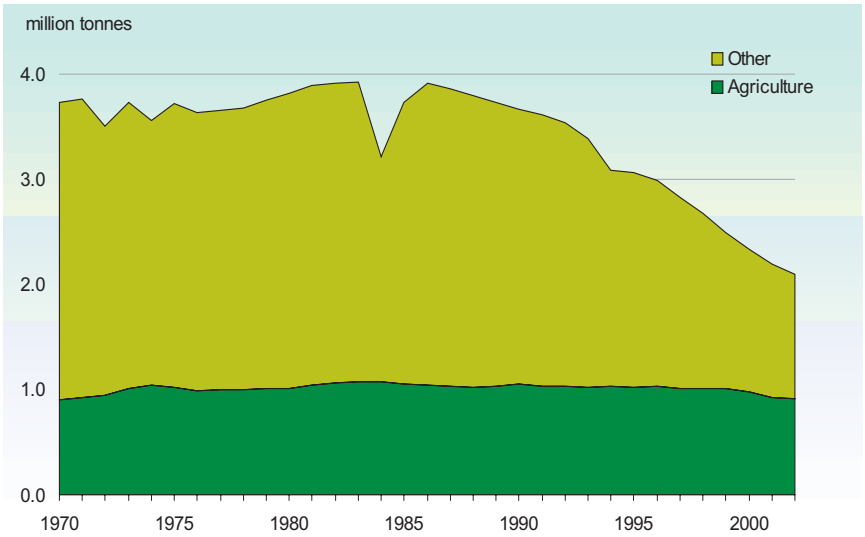
Air (Charts 12.6 to 12.8)

17 Emissions of carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) are of concern as they are greenhouse gasses. Methane and nitrous oxide have global warming potentials greater than carbon dioxide of 21 and 310 times respectively. In 2002, agriculture accounted for 68 per cent of nitrous oxide emissions and 43 per cent of methane emissions in the UK, as shown in charts 12.6 and 12.7.

18 Chart 2.6 shows the UK methane emissions from all sources and that from agriculture. Methane is generated as a result of enteric fermentation in ruminating animals. Over the last 30 years the emissions have remained

fairly constant at around a million tonnes per year, the fall since fall since 1999 reflects a general reduction in livestock numbers over this period.

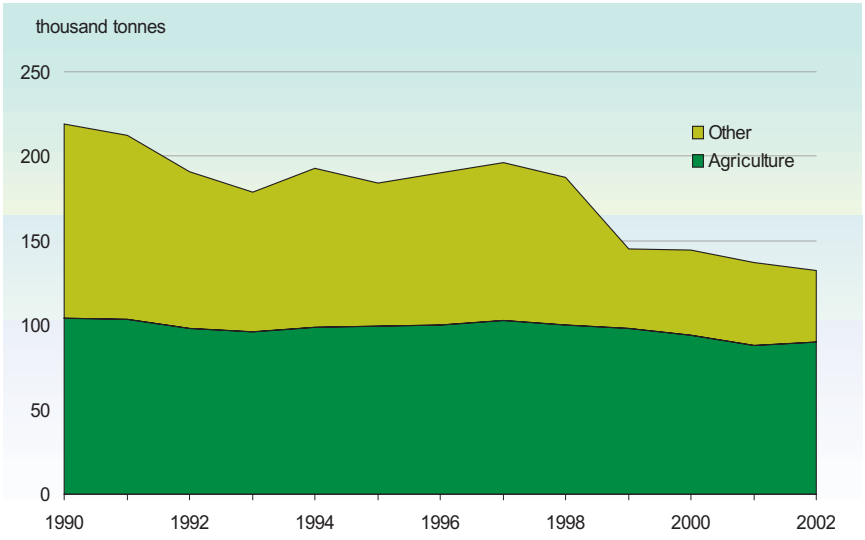
Chart 12.6 Methane emissions by source 1970-2002



source: Netcen, Defra e-Digest of Environmental Statistics

19 Chart 12.7 shows the UK emissions of nitrous oxide from all sources and that from agriculture. Agricultural emissions of nitrous oxides are produced mainly from the oxidation of the nitrogen in fertilisers. The fall since the late nineties in these emissions reflects a reduction in fertiliser use (see chart 12.9 on fertiliser use).

Chart 12.7 Nitrous oxide emissions by source 1990-2002



source: Netcen, Defra e-Digest of Environmental Statistics

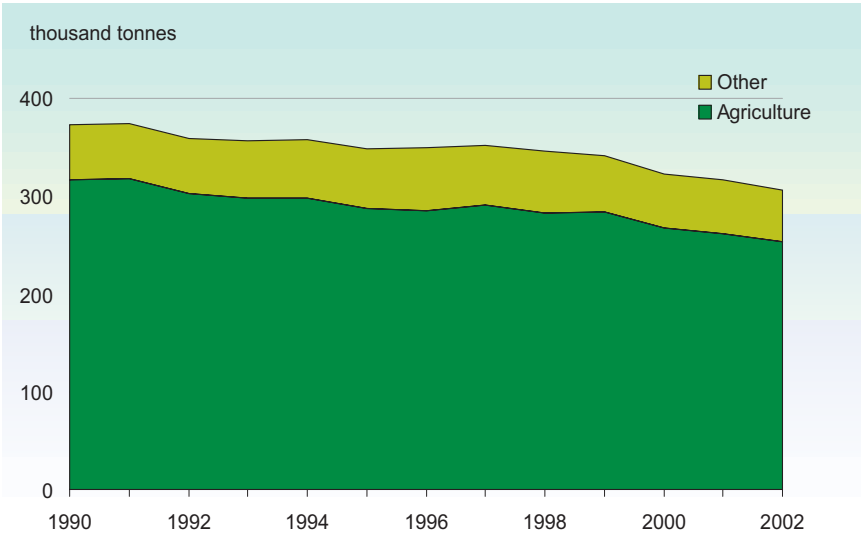
20 Carbon dioxide is emitted during cultivation of arable land or semi-natural vegetation, when the soil is rotated to the surface and exposed to the air, when peat or fenland is drained and during the combustion of fossil fuels to power tractors and machinery. All plant growth, including grass, crops and trees take in carbon from carbon dioxide and release oxygen. This makes vegetation a short term carbon sink, in which carbon is tied up for one, tens or hundreds of years before being re-released, whereas burning fossil fuels releases carbon which has been tied up for millions of years. However, peat bogs sequester carbon for longer as the vegetation is buried

in water logged conditions to form the peat.

21 Chart 12.8 shows that agriculture accounts for 83 per cent of the ammonia (NH_3) emissions in the UK. This is predominately from housing, storing and spreading animal manure particularly that of cattle and pigs. Inorganic fertilisers also produce ammonia as nitrogen reacts with compounds in the soil and air. The affects of ammonia are usually local but it can be deposited further afield by rainfall. Ammonia is a source of nitrogen which can be deposited on, and enrich soils and habitats. This causes harm to some habitats of significant conservation importance: upland heaths; upland bogs and semi-natural grassland where the species growing with little nitrogen can be replaced with faster growing grasses.

22 Ammonia also causes acidification of water and soil effecting the aquatic and plant biodiversity. High concentrations of ammonia in the air can damage plants such as lichens, mosses and heathers. The gradual fall is due to a general reduction in fertiliser use and a reduction in livestock numbers over the last few years.

Chart 12.8 Ammonia emissions by source 1990-2002



source: Netcen, Defra e-Digest of Environmental Statistics

Soil

23 Soil is a limited resource that is essential for all plant growth. Its biological, physical and chemical characteristics need to be maintained or improved. It also provides a habitat for earthworms and other fauna, which are essential for the soil structure and play their part in the wildlife food chain. Agricultural practices have an important part to play in protecting and improving the soil and preventing its loss by erosion. The careful management of soil is essential for all farming so that it remains a renewable resource. Rates of soil erosion from agricultural land are generally significant and are high where sensitive soil systems are managed inappropriately. The Environment Agency (2002) suggests that agriculture contributes to 95 per cent of soil erosion overall. Around 25 per cent of England and Wales is at moderate to high risk of erosion each year. Soil erosion may lead to falling productivity through soil losses and plant damage, as well as increased fertiliser and sowing costs and damage to water courses.

24 Soil organic matter is derived from plants, organic manures and the microbial biomass in the soil and other organic materials added to the soil. Organic matter plays a key role in maintaining soil fertility, structural stability and water holding capacity. The average loss of organic matter from arable soils (England and Wales) between 1980 and 1995 was 18 per cent.

Waste and manure

25 An estimated 100 million tonnes of slurry/manure and waste is produced by agriculture each year. The vast majority of this is natural products, slurry, manure and straw that can be reused. Of the remaining half a million tonnes of waste to be disposed of, the largest components are animal health products, agrochemicals and plastics.

26 The 2004 report of Defra's Farm Practices Survey (England) shows a general reduction in recycling plastic since the previous survey in 2001, the number of farmers recycling plastic silage wrap has fallen from 14 to 8 per cent and recycling fertiliser bags from 14 to 7 per cent. Recycling of cardboard and paper has increased from 16 to 21 per cent. The number of farmers using landfill sites has also fallen and is around 1 to 5 per cent of farmers. Burning continues to be the main way to dispose of waste, especially for plastics and packaging. In many cases nearly 50 per cent of farmers burn these (except plastic crop cover) in the open or use drum incinerators. The full report can be found on the Defra website at: http://statistics.defra.gov.uk/esg/publications/fps/fpsreport.pdf.

27 In 2005 farming will no longer be exempt from the UK's implementation of the EU's Waste Framework Directive, more waste will have to go to licensed landfill sites, unless recycling schemes can be developed.

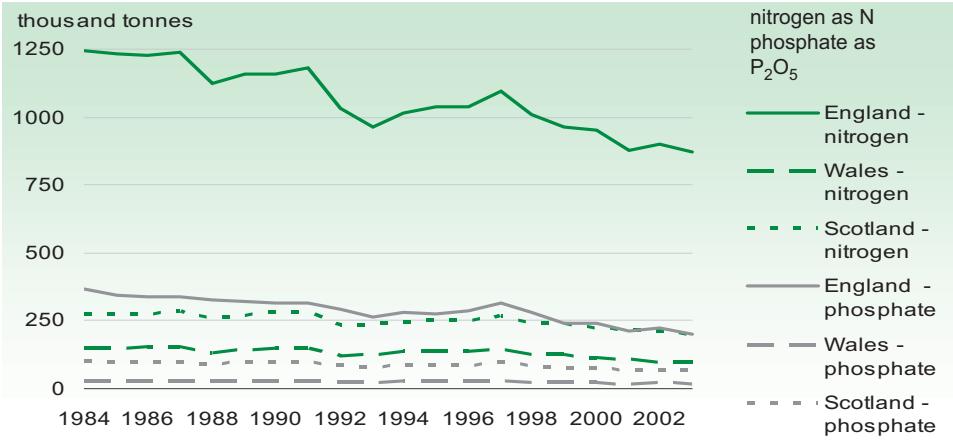
28 As well as slurry and manure being used to fertilise the land, some farm waste, such as straw and poultry manure is now being used as a source of energy, both for heat and power on farm and increasingly for electricity generation (see paragraph 33).

Non renewable resources (Chart 12.9, table 12.3)

29 Agriculture uses inputs of renewable resources such as water, air and soil, and uses finite resources such as oil and diesel. These are used both directly and indirectly in the use of fossil fuels in electricity production and in the manufacturing of fertiliser.

30 Chart 12.9 shows a gradual decline in fertiliser use in Great Britain. Fertiliser is applied at a higher rate on arable land than grass land. As England accounts for over 85 per cent of the arable area of the UK (86 per cent of GB), mainly in the south and east, it therefore uses the majority of the fertiliser.

Chart 12.9 Nitrate & phosphate fertiliser use GB 1984-2003



source: British Survey of Fertiliser Practice, Defra June Census

31 The power used both directly and indirectly by agriculture comes from mainly finite resources. Table 12.3 shows estimated direct and indirect use expressed as PetaJoules - Joules x 10^{15} (PJ) 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 in 2003 has fallen by nearly 10 per cent over 2002, mainly due to a fall of over one third in the use of petroleum.

32 Energy used directly (for heating, lighting and power) by the agricultural industry is around 0.5 per cent of overall UK energy demand. In the table, biomass is the renewable energy used on farm. The indirect energy component of agricultural inputs (for the manufacture of fertilisers, pesticides and machinery) is around 1.3 per cent of overall UK energy demand. The most dominant indirect input of energy, over 50 per cent, arises from the manufacture of fertilisers. Reductions in the use of fertilisers together with efficiency savings during manufacturing have led to a 35 per cent reduction in energy use for fertiliser manufacture since 1985.

33 This table also shows electricity production from biomass and farm waste, this is in addition to the energy produced on farm by biomass - which is mainly as heat. By 2003 this has increased to roughly the same as the electricity used on farm.

Table 12.3 UK direct and indirect energy consumption and electricity generation

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

units: petajoules

	1985	1990	1995	2000	2001	2002	2003
Total energy	180.2	169.0	170.6	142.3	142.8	141.8	128.3
Direct energy	59.0	56.3	62.0	48.8	52.3	47.8	36.2
of which: Coal	-	0.5	0.4	0.2	0.1	0.2	0.1
Biomass	. .	3.1	3.1	3.0	3.0	3.0	3.0
Natural gas	2.9	4.0	4.5	5.5	8.3	8.4	5.3
Electricity	14.4	13.9	14.1	15.8	16.0	14.9	14.5
Petroleum	41.7	34.8	39.9	24.3	24.9	21.3	13.3
Indirect Inputs	121.2	112.7	108.6	93.5	90.5	94.0	92.1
of which: Fertiliser	74.0	69.0	60.0	56.0	51.0	52.0	48.0
Pesticide	10.6	10.1	9.8	8.2	8.6	9.3	10.4
Tractor purchases	15.0	11.4	14.6	9.3	10.3	12.3	13.4
Animal Feeds	21.6	22.2	24.2	20.0	20.6	20.4	20.3
Electricity generation (a)	. .	. .	3.1	6.2	10.6	11.8	14.9

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.

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

Valuation of environmental impacts

34 Environmental accounts are satellite accounts to the main National Accounts compiled by the Office for National Statistics (ONS) for the UK as a whole and are undergoing developments. They provide information on the environmental impact of economic activity and on the importance of natural resources to the economy. Environmental accounts use similar concepts and classifications of industries to those employed in the National Accounts. They reflect the recommended European Union and United Nations frameworks for developing such accounts.

35 The Environmental Accounts compiled by the ONS provide a set of physical accounts. They do not take the step of constructing a value based set of accounts. The stage for the creation of a value led set of environmental accounts is data demanding and methodologically complex. Breakdown at a sectoral level such as for agriculture enables the process to be more manageable.

36 In 2003 – 04 a project was commissioned by Defra, the Department of Agriculture and Rural Development (Northern Ireland), the Scottish Executive and the Welsh Assembly Government to develop a framework for environmental accounts for agriculture.

37 This was undertaken by eftec (Economics for the Environment Consultancy Ltd, London) and IEEP (Institute for European Environmental Policy, London). The aims of the project were to develop a framework for valuing the impacts, both positive and negative, of agriculture on the environment. Existing data sources were identified the physical impacts and valuation methods.

38 This work was in four general areas:

- identification and clarification of the positive and negative impacts of agriculture on the environment;
- identify available data sources and identify gaps;
- develop methodologies for valuation;
- prepare an accounting framework for the UK with a breakdown by country.

39 This project was an important first step in a long term development process of the Environmental Accounts for Agriculture, bringing together relevant information currently available, into an accounting framework and helping to identify areas for further investigation and analysis. It is anticipated that this project will enhance the evidence base on the environmental impact of agriculture to allow improved appraisal and evaluation of agri-enviromental policies, to assess the relative importance of environmental impacts and to better understand the tensions between the economic and environmental dimension of sustainability.

40 There are physical data available on many of the negative impacts of agriculture; pollution and emissions and in many cases valuations. The major gaps identified were for the positive impacts, landscape, habitats and biodiversity as well as for recreational activities. The next steps will be to identify and develop annual physical data for these and other gaps. These will provide year on year changes and start to show trends in the impacts.

41 Developing monetary valuations for the environmental impacts will increase the usefulness of the physical data for comparison with other impacts and with other industrial sectors. It would provide answers to a range of policy questions, such as ‘how important is a given impact compared to other impacts?’ and ‘how much is it worth spending to reduce the negative impacts?’ This information should help to set priorities for public spending and facilitate cost-benefit analysis. The report can be found at: http://statistics.defra.gov.uk/esg/reports/envacc /default.asp.

42 Please contact Barbara Norton for any general enquiries regarding this chapter, 01904 455577, barbara.norton@defra.gsi.gov.uk. For specific queries relating to the charts, follow the website links indicated in the text.

Chapter 13 Key statistics for EU Member States

Key findings

In 2004, of the EU 25 Member States:

- Average entrepreneurial income per unpaid full-time person in the United Kingdom ranked second.
- The gross value added for the United Kingdom was the fifth largest.
- The value of the crop output produced by the United Kingdom was the sixth largest.
- The value of the animal output produced by the United Kingdom was the fifth largest.
- The United Kingdom produced the third largest quantity of wheat.

In 2003, of the countries that now make up the EU 25:

- The United Kingdom produced the third largest quantity of cows' milk.
- The United Kingdom was the ninth largest producer of pigmeat.
- The United Kingdom was the fifth largest producer of beef and veal.
- The United Kingdom was the largest producer of sheep and goat meat.

Of the former EU 15:

- Producer prices for crop products fell by 17 per cent in the United Kingdom since 1995 while rising by 8.5 per cent in the the EU 15.
- Producer prices for animals and animal products fell by 19 per cent in the United Kingdom since 1995 and fell by 3.4 per cent in the the EU 15.
- Purchase prices for the means of agricultural production fell by 1.4 per cent in the United Kingdom since 1995 while rising by 12 per cent in the the EU 15.

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 address for the Eurostat website is:

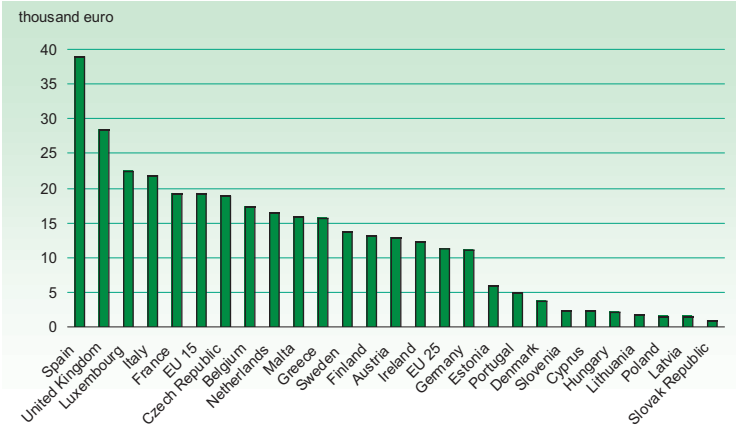
http://epp.eurostat.cec.eu.int/portal/page?_pageid=1090,1&_dad=portal&_schema=PORTAL

2 Please contact Keith Seabridge on keith.seabridge@defra.gsi.gov.uk if you have any general enquiries about this chapter.

Incomes

Entrepreneurial income per Annual Work Unit

Chart 13.1 Entrepreneurial income per unpaid AWU 2004



source: Defra website, http://statistics.defra.gov.uk/esg/

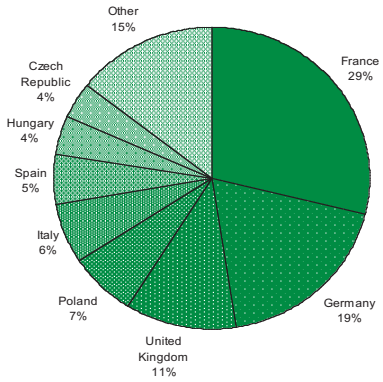
3 Chart 13.1 shows the estimated average income per full-time person equivalent in 2004. This is calculated by dividing total entrepreneurial income by the unpaid labour force in annual work units or full-time person equivalent.

4 The United Kingdom ranked second in the European Union behind Spain. The ten new Member States occupy most of the bottom places.

Agricultural products

Production of wheat

Chart 13.2 Production of wheat 2004



source: Defra website, http://statistics.defra.gov.uk/esg/

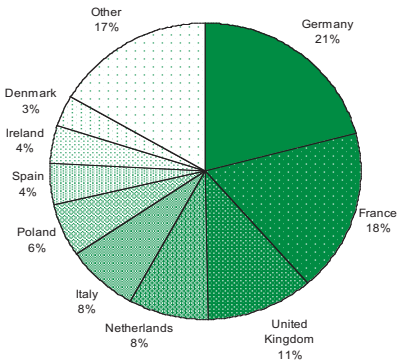
5 Chart 13.2 shows the proportions of wheat produced in Member States in 2004. This is the production of common wheat and durum wheat.

6 The United Kingdom ranked third in the quantity of wheat produced behind France and Germany, having produced about 11 per cent of the EU 25 total.

7 The 10 new Member States produced a little under one-fifth of the total, of which Poland produced about 40 per cent.

Production of cows' milk

Chart 13.3 Production of milk 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

8 Chart 13.3 shows the proportions of cows' milk collected in the EU 25 countries in 2003. 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.

9 The United Kingdom ranked third in the quantity of cows' milk collected behind Germany and France, having produced about 11 per cent of the total for the 25 countries that now make up the EU 25.

10 The 10 new Member States produced a little over one-tenth of the total, of which Poland produced about half.

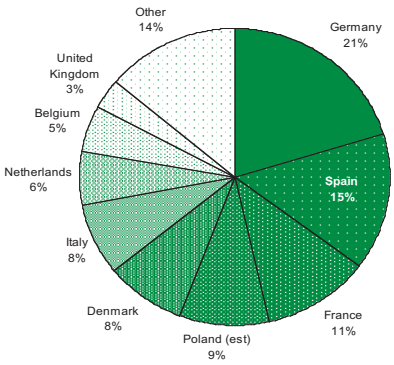
Production of pigmeat

11 Chart 13.4 shows the proportions of pigmeat produced in the EU 25 countries in 2003. This is the total carcase weight of pigs slaughtered in slaughterhouses and on the farm whose meat is declared fit for human consumption.

12 The United Kingdom ranked ninth in the quantity of pigmeat produced with about 3 per cent of the total for the 25 countries that now make up the EU 25.

13 The 10 new Member States produced about 15 per cent of the total, of which Poland produced about two-thirds.

Chart 13.4 Production of pigmeat 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

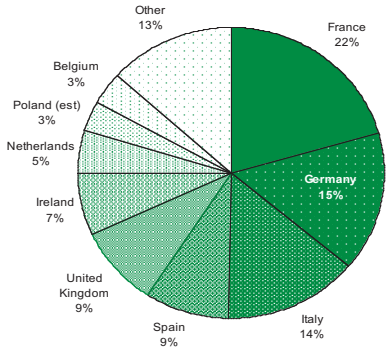
Production of beef and veal

14 Chart 13.5 shows the proportions of beef and veal produced in the EU 25 countries in 2003. This is the carcase weight of bovine animals (calves, bullocks, bulls, heifers and cows) slaughtered in slaughterhouses and on the farm whose meat is declared fit for human consumption.

15 The United Kingdom ranked fifth in the quantity of beef and veal produced behind Germany and France, having produced about 9 per cent of the total for the 25 countries that now make up the EU 25.

16 The 10 new Member States produced about 7 per cent of the total, of which Poland produced just under half.

Chart 13.5 Production of beef and veal 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

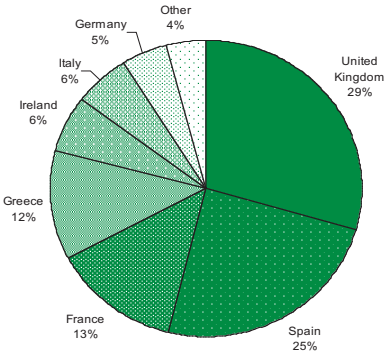
Production of sheep and goat meat

17 Chart 13.6 shows the proportions of sheep and goat meat produced in the EU 25 countries in 2003. This is the carcase weight of sheep, including lambs, and goats slaughtered in slaughterhouses or elsewhere whose meat is declared fit for human consumption.

18 The United Kingdom ranked first in the quantity of sheep and goat meat produced in the European Union having produced almost 30 per cent of the total for the 25 countries that now make up the EU 25.

19 The 10 new Member States produced under 1 per cent of the total.

Chart 13.6 Production of sheep and goat meat 2003



source: Defra website, http://statistics.defra.gov.uk/esg/

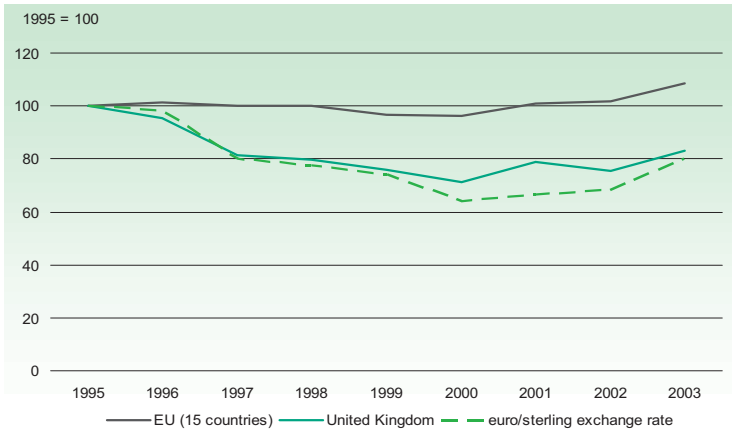
Price indices

Producer price indices, nominal. Crop products

20 The indices in chart 13.7 indicate the trends in the producer prices of crop products as a whole. The sub-indices were weighted by the values of sales in 1995. An index showing the trend in the euro/sterling exchange rate is also shown.

21 Crop prices in the United Kingdom have fallen by 17 per cent since 1995 while those in the EU 15 have risen by 8.5 per cent. Producer prices in the United Kingdom are heavily influenced by the euro/sterling exchange rate.

Chart 13.7 PPI: crop products



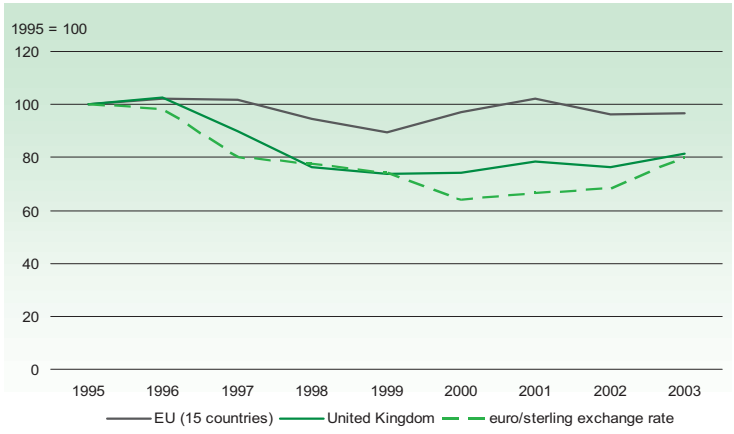
source: Defra website, http://statistics.defra.gov.uk/esg/

Producer price indices, nominal. Animals and animal products.

22 The indices in chart 13.8 indicate the trends in the producer prices of animal and animal products as a whole. The sub-indices were weighted by the values of sales in 1995. An index showing the trend in the euro/sterling exchange rate is also shown.

23 Animal and animal products prices in the United Kingdom have fallen by 19 per cent since 1995 while those in the EU 15 have fallen by 3.4 per cent. Producer prices in the United Kingdom are heavily influenced by the euro/sterling exchange rate.

Chart 13.8 PPI: animals and animal products



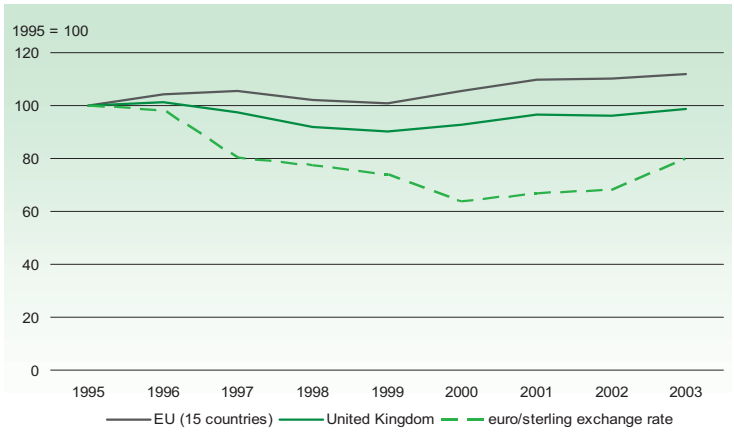
source: Defra website, http://statistics.defra.gov.uk/esg/

Purchase price indices, nominal. Total means of agricultural production.

24 The indices in chart 13.9 indicate the trends in purchase prices of the means of agricultural production as a whole. The sub-indices were weighted by the values of sales in 1995. An index showing the trend in the euro/sterling exchange rate is also shown.

25 Purchase prices of the means of agricultural production in the United Kingdom have fallen by 1.4 per cent since 1995 while those in the EU 15 have risen by 12 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 13.9 PPI: means of agricultural production



source: Defra website, http://statistics.defra.gov.uk/esg/

Value of output

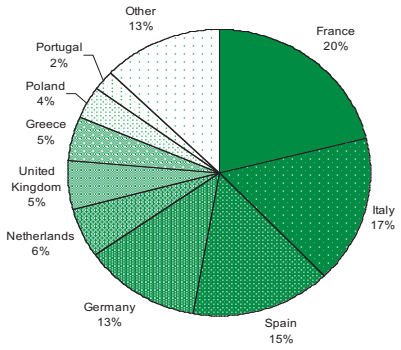
Crop output

26 Chart 13.10 shows the proportions of estimated crop output valued at basic prices in Member States in 2004. The basic price is defined as the price received by the producer, after deduction of all taxes on product but including all subsidies on product. The concept of output comprises sales, changes in stocks, and crop products used as animal feedingstuffs, for processing and own final use by the producers.

27 The United Kingdom ranked sixth in the value of crop output having produced about 5 per cent of the EU 25 total.

28 The 10 new Member States produced about 8 per cent of the total, of which Poland and Hungary accounted for about two-thirds.

Chart 13.10 Crop output at basic prices 2004



source: Defra website, http://statistics.defra.gov.uk/esg/

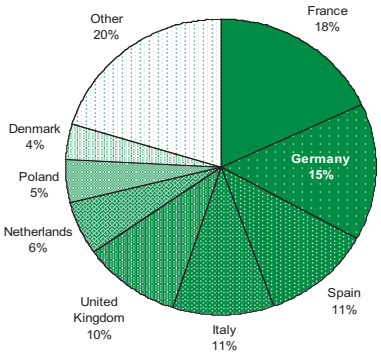
Animal output

29 Chart 13.11 shows the proportions of estimated animal output valued at basic prices in Member States in 2004. The basic price is defined as the price received by the producer, after deduction of all taxes on product but including all subsidies on product. The concept of output comprises sales, changes in stocks, and products used for processing and own final use by the producers.

30 The United Kingdom ranked fifth in the value of animal output having produced about 10 per cent of the EU 25 total.

31 The 10 new Member States produced about 10 per cent of the total, of which Poland accounted for about half.

Chart 13.11 Animal output at basic prices 2004



source: Defra website, http://statistics.defra.gov.uk/esg/

Gross value added

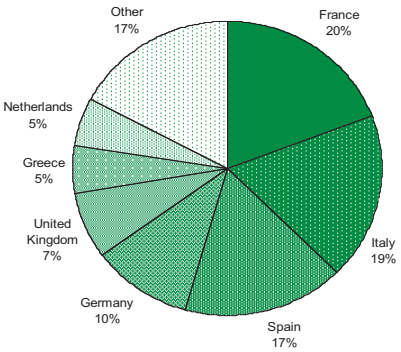
Gross value added at basic prices of the agricultural industry

32 Chart 13.12 shows the proportions of estimated gross value added at basic prices in Member States in 2004. Gross value added at basic prices corresponds to the value of output at basic prices less the value of intermediate consumption. The basic price is defined as the price received by the producer, after deduction of all taxes on product but including all subsidies on product.

33 The United Kingdom contributed about 7 per cent to the total gross value added in the EU 25.

34 The 10 new Member States contributed about 7 per cent to the total, of which Poland accounted for half.

Chart 13.12 Estimated gross value added at basic prices 2004



source: Defra website, http://statistics.defra.gov.uk/esg/