



Total Income from Farming in the United Kingdom

Second estimate for 2016

This release presents the second estimate of Total Income from Farming (TIFF) for the United Kingdom for 2016. This is an improved estimate based on additional data that replaces the figures published in April 2017. Details are provided in the revisions section of this document on page 10. Estimates for earlier years have also been revised due to the availability of additional data.

Total Income from Farming is the total profit from all UK farming businesses on a calendar year basis. It measures the return to all entrepreneurs for their management, labour and capital invested.

Key points:

- Between 2015 and 2016 Total Income from Farming fell by 7.8% (£311 million) in real terms to £3,682 million.
 - The value of all outputs fell by 4.8% to £23,267 million. This was mainly driven by falls in both volume and value for cereals and milk.
 - The cost of intermediate consumption fell by 4.2%, due to lower prices and a general fall in volumes used.
 - A weaker pound led to an increase of 18% in the value of payments under the Basic Payment Scheme.
- Total Income from Farming per annual work unit (AWU)¹ of entrepreneurial labour (farmers and other unpaid labour) fell by 7.1% between 2015 and 2016 in real terms to £19,198.
- In 2016 agriculture contributed 0.47% or £8,237 million to the national economy (Gross Value Added), a fall of 6.0% (£526 million), in real terms.

¹ Annual Work Unit (AWU) is equivalent to the input of one person engaged in agricultural activities of the farm business on a full-time basis for one year.

Summary (in real terms)

Real term value is where previous years' data is adjusted to take account of inflation so the values are comparable.

In real terms Total Income from Farming in 2016 was 7.8% lower than the 2015 total, a fall of £311 million to £3,682 million (Figure 1).

Total Income from Farming per AWU of entrepreneurial labour follows a similar trend to Total Income from Farming, but owing to a decline in the number of farmers and other unpaid workers has performed better over time (Figure 1). In 2016 total Income from Farming per AWU of entrepreneurial labour was 7.1% lower than 2015 at £19,198.

Incomes tend to be volatile and after an overall upward trend from the year 2000 have fallen in each of the most recent three years since reaching a peak in 2013.

Figure 1 Agriculture industry income trends in the United Kingdom (in real terms)

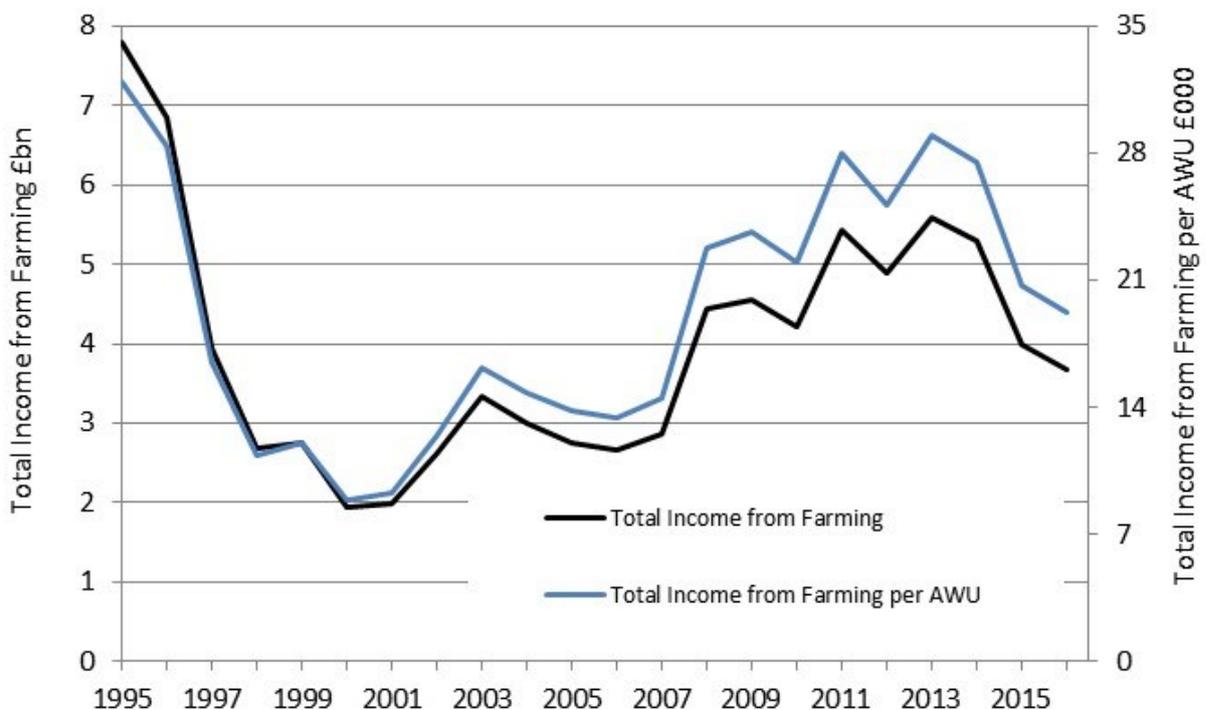


Table 1 Aggregate Agricultural Accounts: Summary of real term price production and income accounts for the United Kingdom

£ million	Calendar years						
	2010	2011	2012	2013	2014	2015	2016
Total crop output	8 123	9 761	9 509	9 799	9 367	8 693	8 138
Total livestock output	12 403	13 515	13 892	14 748	14 614	13 336	12 691
10 Other agricultural activities	1 008	1 104	1 075	1 093	1 144	1 118	1 098
11 Inseparable non-agricultural activities	1 029	1 080	1 103	1 221	1 193	1 263	1 295
12 Output (at market prices)	22 562	25 460	25 579	26 861	26 318	24 410	23 223
13 Total subsidies (less taxes) on product	31	30	22	22	21	37	44
14 Gross output at basic prices (12+13)	22 594	25 490	25 600	26 883	26 339	24 447	23 267
25 Total intermediate consumption	15 021	16 146	16 441	17 124	16 365	15 683	15 029
26 Gross value added at market prices (12-25)	7 541	9 314	9 138	9 738	9 953	8 727	8 193
27 Gross value added at basic prices (14-25)	7 573	9 343	9 159	9 759	9 974	8 764	8 237
28 Total consumption of Fixed Capital	3 883	4 174	4 246	4 139	4 140	4 000	4 024
29 Net value added at market prices (26-28)	3 658	5 140	4 891	5 599	5 813	4 726	4 169
30 Net value added at basic prices (27-28)	3 690	5 170	4 913	5 620	5 834	4 763	4 213
31 Other taxes on production	- 123	- 130	- 128	- 122	- 101	- 97	- 94
32 Other subsidies on production	3 841	3 748	3 455	3 467	2 998	2 881	3 097
33 Net value added at factor cost (30+31+32)	7 407	8 788	8 240	8 965	8 731	7 547	7 216
34 Compensation of employees	2 446	2 521	2 493	2 496	2 453	2 549	2 538
35 Rent	483	516	523	540	566	571	571
36 Interest	252	317	329	344	406	435	426
37 Total Income from Farming (33-34-35-36)	4 226	5 434	4 895	5 585	5 305	3 993	3 682

The following commentary refers to table 1.

The value of all outputs fell by 4.8% to £23,267 million. Overall cereal production was down, driven by a return to more typical yields following the record yields of 2015 and, despite market prices strengthening in the latter part of the year, cereal prices for the year as a whole were lower. Similarly milk production and price was lower in 2016.

The cost of intermediate consumption fell by 4.2%, due to lower prices and a general fall in volumes used. This led to a 6.0% (£526 million) fall in gross value added at basic price to £8.2 billion.

The pound weakened against the euro in 2016 and subsequently increased the value of direct payments to UK farmers with the net value of support payments paid under the Basic Payment Scheme 18% higher in 2016 than 2015. Payments are set in Euros and converted to sterling each year using the exchange rate set by the European Central Bank every September. In 2016 €1=85.2p compared to €1=73.1p in 2015.

Labour, rent and interest remained virtually unchanged on the year.

Aggregate Agricultural Accounts: production and income accounts: main findings in current price

The following commentary refers to table 2 detailed production and income accounts from the aggregate agricultural accounts. Values are expressed in current prices, i.e. based on prices in the year in question.

Headline figures

In 2016 Total Income from Farming fell by £242 million to £3,682 million, a 6.2% decrease on 2015. The key contributors to the change were the falls in the value of wheat by £432 million, milk by £398 million and oilseed rape by £170 million. In contrast these were somewhat offset by an increase in direct payments of £273 million, potatoes by £171 million combined with reductions in animal feed costs of £181million and fertiliser costs of £142 million.

As a result gross value added at basic price, which identifies agriculture's contribution to the Gross Domestic Product (GDP), fell by 4.4% (£375 million) to £8,237 million.

Outputs: Crops

Overall output of crops value fell by 4.7% to £8,138 million, with decreases in wheat, oilseed rape, sugar beet and barley more than offsetting the increases in potatoes, vegetable and horticulture.

Cereal harvests were down on last year as yields returned to more typical levels following the record highs of 2015 and despite strengthening prices in the latter part of the year, lower prices for the year as a whole drove values down.

The value of wheat fell by £432 million to £1,620 million. Planted area was little changed on the year and quality generally good however yield was much lower than the record high of 2015 resulting in volumes down by 12%. Price fell by 10%, as the higher prices seen in the second half of the year failed to offset the low prices at the beginning of the year.

The value of barley fell by £129 million to £699 million, driven by both price and volume. Whilst planted area was 2% higher, yield returned to more average levels, resulting in an 9.1% fall in volume. Low prices at the beginning of the year, despite an upturn in the second half, resulted in a 7.2% fall in price.

Oilseed rape saw a fall in value of £170 million to £541 million, this 24% decrease was largely due to a fall in volume as lower yield and a reduction in crop area led to a 30% decrease in production.

In 2016, the value of sugar beet fell by £23 million to £150 million. Planted area fell for the fifth year running and led to a further 8.5% fall in volume with price down by 5.5% on the year.

Potatoes rose in value by £171 million to £747 million in 2016. An 8% increase in planted area and price increase of around a quarter contributed to this rise.

The value of vegetables increased by £80 million to £1,402 million, driven by higher prices for most vegetable types. Price rises were also seen in the fruit sector however these failed to offset the lower production levels, down 11% on 2015 which resulted in an overall decrease in value of £22 million to £668 million.

Outputs: Livestock

Overall the total value of output of livestock was 3.2% lower at £12,691 million.

Milk decreased in value by £398 million to £3,292 million, driven by lower production and price. A combination of poorer grass quality due to variable weather conditions and dairy farmers attempting to reduce key costs such as the use of supplementary feeds left production 3.3% lower than 2015. The average price of milk in 2016 (calendar year) was 22.6 pence per litre (ppl) compared to 24.5 ppl in 2015, 8% lower.

The value of eggs fell by £78 million to £603 million, entirely price-driven as volume of throughput at egg packing stations rose by 4.2%, pushing price down by 15%.

The value of livestock primarily for meat rose by £90 million with increases seen in all sectors. The value of cattle meat remained little changed. Higher slaughterings and heavier calf and adult cattle weights resulted in a 2.5% increase in volumes whilst prices were 1.2% lower.

Pig meat rose in value by £19 million to £1,099 million. This rise is entirely due to higher production, with levels higher in the first half of the year compared to 2015 which drove the price down for the year as a whole. The value of sheep meat increased by £33 million to £1,153 million with production 3.4% lower and price 6.6% higher on 2015.

The value of poultry meat rose by £26 million to £2,246 million, chiefly production-driven as prices fell by 2.0%.

Intermediate consumption

The total cost of intermediate consumption fell by £382 million to £15,029 million. In general most intermediate consumption costs fell with animal feed and fertiliser the main contributors.

The cost of fertiliser fell by £142 million to £1,249 million, as the lower oil prices in the first half of the year put downward pressure on price overall.

In 2016 the cost of animal feed fell by £181 million to £4,549 million, a combination of reduced volumes and feed price. Depressed cereal prices in the first half of the year helped keep the annual average price lower combined with reduced use as farmers strived to make efficiencies.

Energy costs fell by £46 million to £1,144 million, wholly price driven as lower global oil prices at the beginning of the year kept overall annual average price down. Typical weather conditions and efficiency savings kept volumes virtually unchanged on the year.

Compensation of employees

The total value of compensation to employees was £2,538 million, a £33 million increase resulting from higher rates of pay which offset the 2.1% decline in numbers employed.

Other subsidies on production

Direct payments, including payments on product, rose by £273 million to £3,141 million. Overall this is a 9.5% increase in payments and is mainly due to the change in euro/sterling exchange rate and is a significant contributor to Total Income from Farming. In 2016 payments under the Environmental Stewardship Entry Level Scheme reduced by £70 million as 2010/211 agreement final payments were made.

Table 2 Aggregate Agricultural Accounts: Current price production and income accounts for the United Kingdom

£ million	Calendar years			
	2015	2016	Change 15-16	% Change 15-16
1 Output of cereals	2 970	2 411	- 560	-19%
of which:				
wheat	2 052	1 620	- 432	-21%
barley	828	699	- 129	-16%
oats	85	87	2	2%
2 Output of industrial crops	1 053	859	- 194	-18%
of which:				
oilseed rape	711	541	- 170	-24%
protein crops	137	131	- 6	-4%
sugar beet	173	150	- 23	-14%
3 Output of forage plants	269	278	9	3%
4 Output of vegetables and horticultural products	2 470	2 604	134	5%
of which:				
fresh vegetables	1 322	1 402	80	6%
plants and flowers	1 149	1 202	53	5%
5 Output of potatoes (including seeds)	577	747	171	30%
6 Output of fruit	690	668	- 22	-3%
7 Output of other crop products incl. seeds	513	572	59	11%
Total crop output (sum 1-7)	8 542	8 138	- 404	-5%
8 Output of livestock	8 654	8 705	51	1%
primarily for meat	7 396	7 487	90	1%
of which:				
cattle	2 756	2 764	8	0%
pigs	1 080	1 099	19	2%
sheep	1 119	1 153	33	3%
poultry	2 220	2 246	26	1%
gross fixed capital formation	1 258	1 219	- 40	-3%
of which:				
cattle	687	646	- 41	-6%
pigs	4	4	1	14%
sheep	290	304	14	5%
poultry	278	265	- 13	-5%
9 Output of livestock products	4 451	3 986	- 465	-10%
of which:				
milk	3 690	3 292	- 398	-11%
eggs	681	603	- 78	-12%
Total livestock output (8+9)	13 106	12 691	- 414	-3%
10 Other agricultural activities	1 099	1 098	- 1	0%
11 Inseparable non-agricultural activities	1 241	1 295	54	4%
12 Output (at market prices) (sum 1 to 11)	23 987	23 223	- 765	-3%
13 Total subsidies (less taxes) on product	37	44	7	20%
14 Gross output at basic prices (12+13)	24 024	23 267	- 757	-3%

continued

Table 2 (continued) Aggregate Agricultural Accounts: Current price production and income accounts for the United Kingdom

£ million	Calendar years			
	2015	2016	Change 15-16	% Change 15-16
Intermediate consumption				
15 Seeds	712	731	19	3%
16 Energy	1 190	1 144	- 46	-4%
of which: electricity and fuels for heating	379	362	- 16	-4%
motor and machinery fuels	811	782	- 29	-4%
17 Fertilisers	1 392	1 249	- 142	-10%
18 Plant protection products	963	952	- 11	-1%
19 Veterinary expenses	463	459	- 4	-1%
20 Animal feed	4 730	4 549	- 181	-4%
of which: compounds	2 845	2 769	- 75	-3%
straights	1 292	1 226	- 66	-5%
feed produced & used on farm	593	553	- 40	-7%
21 Total maintenance	1 600	1 604	4	0%
of which: materials	948	954	6	1%
buildings	653	650	- 2	0%
22 Agricultural services	1 099	1 098	- 1	0%
23 FISIM	98	104	6	6%
24 Other goods and services	3 166	3 139	- 27	-1%
25 Total intermediate consumption (sum 15 to 24)	15 412	15 029	- 382	-2%
26 Gross value added at market prices (12-25)	8 576	8 193	- 382	-4%
27 Gross value added at basic prices (14-25)	8 612	8 237	- 375	-4%
28 Total consumption of Fixed Capital	3 931	4 024	93	2%
of which: equipment	1 753	1 807	53	3%
buildings	970	995	25	3%
livestock	1 208	1 222	14	1%
cattle	701	660	- 40	-6%
pigs	4	5	1	30%
sheep	287	279	- 8	-3%
poultry	217	279	62	29%
29 Net value added at market prices (26-28)	4 644	4 169	- 475	-10%
30 Net value added at basic prices (27-28)	4 681	4 213	- 468	-10%
31 Other taxes on production	- 96	- 94	2	-2%
32 Other subsidies on production	2 831	3 097	266	9%
33 Net value added at factor cost (30+31+32)	7 417	7 216	- 201	-3%
34 Compensation of employees	2 505	2 538	33	1%
35 Rent	561	571	9	2%
36 Interest	427	426	- 1	0%
37 Total income from farming (33-34-35-36)	3 924	3 682	- 242	-6%

Aggregate balance sheet for the United Kingdom agricultural industry

The following commentary refers to table 1.

The agricultural balance sheet values the assets and liabilities for agriculture at the end of each calendar year and estimates the net worth of the industry. Net worth was estimated to be £261 billion at December 2016 and shows a fall of 0.8% on 2015. In general regional land prices showed a slight decline on the year halting the long term increase in the value of land. Total liabilities showed an increase on 2015, as bank borrowing for agriculture increased.

Table 3: Aggregate balance sheet for the United Kingdom agricultural industry

£ million	As at December each year			
	2013	2014	2015	2016
At current prices				
Assets				
Fixed (a):				
Land (b)	216 347	232 223	227 107	224 649
Buildings, plant, machinery and vehicles	32 712	33 333	33 851	34 737
Breeding livestock	8 225	7 232	5 781	6 608
Total fixed	257 284	272 788	266 738	265 994
Current:				
Trading livestock	4 129	4 098	4 205	4 210
Crops and stores	3 961	4 006	4 010	3 730
Debtors, cash deposits	5 487	5 740	5 711	5 818
Total current	13 577	13 844	13 925	13 759
Total Assets	270 861	286 632	280 663	279 752
Liabilities (c)				
Long and medium term:				
AMC, SASC (d)	1 777	1 980	1 992	2 230
Building Societies and Institutions	1 144	1 316	1 226	1 256
Bank loans	6 740	7 534	7 994	8 768
Family Loans	524	536	444	522
Other	23	70	75	66
Total long and medium term	10 208	11 437	11 731	12 842
Short term:				
Leasing	82	61	54	47
Hire purchase	1 296	1 347	1 417	1 462
Trade Credit	2 081	1 880	1 655	1 873
Bank overdrafts	2 226	2 134	2 290	2 247
Other	45	120	43	39
Total short term	5 730	5 542	5 458	5 669
Total Liabilities	15 938	16 978	17 189	18 511
Net worth	254 923	269 653	263 474	261 241
In real terms (as deflated by the gdp deflator):				
Indices 2013 = 100				
GDP deflator	100	102	102	104
Total assets	100	104	102	99
Total liabilities	100	105	106	112
Net worth	100	104	101	99

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

(b) Includes values for arable land and pasture in Great Britain & Northern Ireland based on land area from June Surveys.

(c) Financial estimates are derived from the Farm Business Survey. In practice, year-ends vary from December through to April, with concentrations of year-ends at end-December and end-March.

(d) Agricultural Mortgage Company (AMC) and Scottish Agricultural Securities Corporation (SASC)

Revisions

Table 3 details revisions made to 2016 data since the first estimate was published in May 2017. These planned revisions are largely a result of further survey data being made available following the publication of [cereal surveys](#) and [Farm Business Survey Incomes](#) for 2016/2017 with estimates revised to improve quality and accuracy

Table 3: Revisions made to Total Income from Farming for 2016 between May 2017 and November 2017

Total Income from Farming for 2016	Published in May 2017	Published in November 2017	% change
Gross output at basic price (£m)	23 149	23 267	0.5%
Intermediate consumption (£m)	14 953	15 029	0.5%
GVA at basic price (£m)	8 196	8 237	0.5%
NVA at factor cost (£m)	7 149	7 216	0.9%
Total Income from Farming (£m)	3 610	3 682	2.0%

Total Income from Farming is sensitive to small percentage changes in the values of outputs and intermediate consumption. A combination of a revision downwards in output and revision upwards in intermediate consumption leads to more sizeable revisions in percentage terms to Gross Value Added and Total Income from Farming.

Further information on revisions and data correction procedures and standards can be found [here](#).

Summary quality report

A summary quality report for this statistical release can be found on the GOV.UK website at <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/aggregate-agricultural-accounts>.

This is an overview note which is not release specific but will be reviewed and updated at regular intervals. It pulls together key qualitative information on the various dimensions of quality as well as providing a summary of methods used to compile the output. It relates to estimates of Total Income from Farming and aim to provide users with information on usability and fitness for purpose of these estimates.

Quality Assurance

Defra has in place quality assurance processes to check the accuracy and reliability of the aggregate agricultural accounts that includes:

- Ongoing review of methods employed in the calculation of the accounts.

- Assessment of the quality of the estimates of components of the accounts with internal experts.
- Discussion of components of the accounts with external experts.
- Quality assessments made by Eurostat, the statistical office of the European Union.

Development areas

Defra statisticians carry out a continuous review of methods employed in making estimates of the production and income accounts. This may lead to revisions to data series owing to improvements in methods in addition to the use of later information.

Main users and uses of the aggregate agricultural accounts

The aggregate agricultural accounts are used in conjunction with other economic information to:

- Monitor the productivity and competitiveness of the farming industry.
- Inform policy decisions and to help monitor and evaluate current policies relating to agriculture in the UK by Government and in the European Union by the European Commission.
- Inform stakeholders of the performance of the agricultural industry.
- Inform research into the economic performance of the agricultural industry.
- Total Income from Farming sets the context when looking at a number of policies; the agricultural industry, on average, contributes around £4 billion to the national economy and accounts for about 0.5% of national Gross Domestic Product. It is most relevant to policies relating to Common Agricultural Policy reform and the competitiveness of farming.

User engagement

As part of our ongoing commitment to compliance with the Code of Practice for Official Statistics (<http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>), we wish to strengthen our engagement with users of these statistics and better understand the use made of them and the types of decisions that they inform. Consequently, we invite users to make themselves known, to advise us of the use they do, or might, make of these statistics, and what their wishes are in terms of engagement. Feedback on this notice and enquiries about these statistics are also welcome.