



22 May 2019

# Total Income from Farming in England

First estimate for 2018

This release presents the first estimate of Total Income from Farming (TIFF) for England for 2018. Estimates for earlier years have also been revised slightly due to the availability of additional data. Details are provided in the revision section.

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.

# Results for 2018 compared to 2017, in current prices, show:

Total Income from Farming in England fell by £721 million (-18%) to £3,358 million

The key changes were:

- An increase of 392 million (+2%) in gross output to £19,658 million
  - Crop output value rose by 2% to £8,037 million. The cold, wet spring followed by the dry, hot summer contributed to lower yields of key crops however better prices helped offset production falls.
  - The value of total livestock output rose by 2% to £9,700 million. Prices were generally higher but the challenging weather conditions affected volumes; the late cold spring disrupted lambing and the hot, dry summer led to poor grass growth and difficulties feeding livestock.
- The cost of intermediate consumption increased by 8% to £12,309 million. All costs were higher, in particular other goods and services, animal feed, fertilisers and fuel.

Total Income from Farming in the United Kingdom is £4,697 million; England is the largest contributor accounting for 71% of this total, Scotland 14%, Northern Ireland 8% and Wales 7%. Detailed United Kingdom figures can be found <u>here.</u>

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## Summary of overall trends

Notes:

- The term income used throughout this Notice refers to Total Income from Farming. This is the total profit from all farming businesses on a calendar year basis
- Values in this section are expressed in real terms, adjusted to take into account inflation to allow more meaningful comparisons between years over the longer term.

The key drivers of agricultural income include the volume of production, commodity prices and the cost of inputs. These are themselves driven by a range of factors such as the weather, exchange rates, oil price and global supply and stocks of commodities. As a result, agricultural income tends to be volatile and fluctuate from year to year.

Incomes have generally followed an overall upward trend from the year 2000 (Figure 1). However, in spite of high levels of production that year TIFF fell sharply in 2015 driven by lower commodity prices and a less favourable exchange rate. In 2016 the exchange rate improved but a poor harvest and continued low commodity prices kept income low. In 2017, TIFF approached its highest point in 20 years as a result of a favourable combination of a weaker pound, strong commodity prices and high levels of production.

In 2018 incomes fell from this high level in spite of the total value of production remaining high. The value of production increased slightly with lower crop yields being more than offset by strong commodity prices. However, the price of key inputs (particularly energy, fertilisers and feed) increased sharply pushing up the costs of production. As a result incomes fell by 19% to just below £3.4 billion.

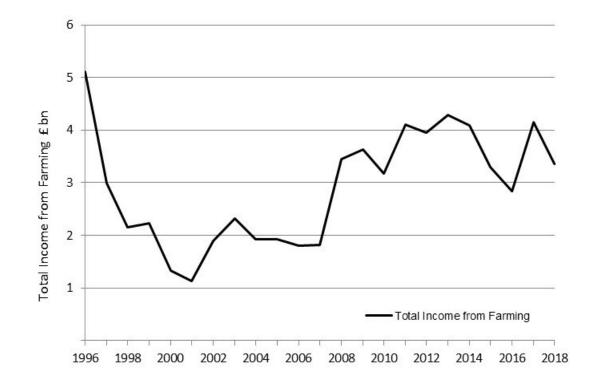


Figure 1 Agriculture industry income trends in England (in real terms)

# Table 1 Aggregate Agricultural Accounts: Summary of real term price production andincome accounts for England (a)(b)

| £ million   |                   |        |        |        |        | Calenda | ar years |
|---|-------------------|--------|--------|--------|--------|---------|----------|
|   | Average 2013-2017 | 2013   | 2014   | 2015   | 2016   | 2017    | 2018     |
| Total crop output   | 8,103             | 8,833  | 8,526  | 7,880  | 7,215  | 8,060   | 8,037    |
| Total livestock output                                    | 9,609             | 10,159 | 10,089 | 9,374  | 8,778  | 9,647   | 9,700    |
| 10. Other agricultural activities                         | 911               | 886    | 925    | 917    | 902    | 922     | 920      |
| 11. Inseparable non-agricultural activities               | 977               | 976    | 917    | 984    | 1,012  | 995     | 1,002    |
| 12. Output at market prices (sum 1-11)                    | 19,600            | 20,855 | 20,458 | 19,154 | 17,907 | 19,625  | 19,658   |
| 14. Gross output at basic prices (12+13)                  | 19,600            | 20,855 | 20,458 | 19,154 | 17,907 | 19,625  | 19,658   |
| 25. Total intermediate consumption (sum 15-24)            | 11,957            | 12,839 | 12,275 | 11,788 | 11,246 | 11,638  | 12,309   |
| 26. Gross value added at market prices (12-25)            | 7,642             | 8,016  | 8,182  | 7,366  | 6,660  | 7,986   | 7,349    |
| 27. Gross value added at basic prices (14-25)             | 7,642             | 8,016  | 8,182  | 7,366  | 6,660  | 7,986   | 7,349    |
| 28. Total consumption of fixed capital                    | 3,159             | 3,211  | 3,251  | 3,116  | 3,112  | 3,106   | 3,228    |
| 29. Net value added at market prices (26-28)              | 4,483             | 4,805  | 4,931  | 4,250  | 3,548  | 4,881   | 4,121    |
| 30. Net value added at basic prices (27-28)               | 4,483             | 4,805  | 4,931  | 4,250  | 3,548  | 4,881   | 4,121    |
| 31. Other subsidies (less taxes) not linked to production | 2,061             | 2,233  | 1,939  | 1,894  | 2,123  | 2,117   | 2,111    |
| 32. Net value added at factor cost (29+31)                | 6,544             | 7,038  | 6,870  | 6,144  | 5,671  | 6,998   | 6,232    |
| 33. Compensation of employees                             | 2,047             | 2,058  | 2,009  | 2,054  | 2,041  | 2,071   | 2,108    |
| 34. Rents   | 491               | 470    | 495    | 502    | 499    | 488     | 481      |
| 35. Interest  | 277               | 229    | 276    | 299    | 295    | 285     | 285      |
| 36. Total Income from Farming (32-33-34-35)               | 3,730             | 4,280  | 4,090  | 3,290  | 2,835  | 4,155   | 3,358    |

#### Source: Defra

(a)Real term price is where previous year's data is adjusted to take account of inflation so the values are comparable

(b) GDP deflator used to convert current prices into real term prices is sourced from Office of National Statistics series YBGB:Gross Domestic Product (Expenditure) at market prices deflator

# Detailed comparison between current year and previous year (2018 compared to 2017)

# Year-on-year comparisons are made on the basis of current prices which have not been adjusted to take into account inflation.

The following commentary refers to table 2, detailed production and income accounts from the aggregate agricultural accounts.

#### Headline figures

In 2018 Total Income from Farming fell by £721 million to £3,358 million, an 18% decrease on 2017. The main contributors to this decrease are the rise in animal feed (+£291 million), goods and services (+£310 million), fertiliser (+£113 million), labour costs (+£75 million) and energy (+72 million).

Conversely the value of the output of potatoes fell by £211 million and oilseed rape by £115 million.

Gross value added at basic price, which identifies agriculture's contribution to the Gross Domestic Product (GDP), fell by £492 million (-6%) to £7,349 million.

Direct payments to farmers rose by £32 million (+2%) to £2,111 million due to higher agrienvironment payments.

### **Outputs: Crops**

Overall output of crops value rose by £124 million or 1.6% to £8,037 million and accounted for 41% of the total value of agricultural output. This was mainly driven by better prices offsetting the falls in production.

Cereal harvests were down on 2017, yields fell affected by the dry, hot weather and cropped area showed little change. The value of production was boosted by higher prices helping to offset the fall in production.

The value of wheat increased by £115 million (+6.3%) to £1,948 million, barley also increased £23 million (+3.8%) to 620 million, both crops produced lower yields due to the challenging weather however the overall value increased due to higher prices offsetting the fall in volume.

The value of oilseed rape decreased by £115 million (-16%) to £598 million driven by lower production and price. In 2017 oilseed rape yields reached a record high, in 2018 they fell back to more average levels whilst planted area increased by 7.1%.

The value of sugar beet increased by £17 million (+7.4%) to £246 million. Entirely driven by price, whilst planted area was 4.5% higher, yields were down around one fifth on the 2017 record high resulting in a 15% fall in production.

Potatoes decreased in value by £211 million (-35%) to £399 million. A slight reduction in planted area and lower yield affected by the summer drought contributed to a fall in production and price.

The value of vegetables decreased by £37 million to £1,201 million, driven by lower volumes as a result of the challenging weather conditions. Planting was delayed due to the cold, wet spring and subsequent drought of the hot dry summer. Higher prices failed to offset falls in production. Fruit fared better and despite a late start to the season, the hot, dry weather resulted in an early harvest with production slightly up on the year. Overall the value of fruit rose by £12 million to £595 million.

The value of other crop products, including seeds and straw increased significantly by £335 million to £763 million. Demand for straw from the livestock industry resulted in an increase in both production and price however this higher value is reflected in the costs livestock farmers incurred which is shown in other goods and service costs.

#### **Outputs: Livestock**

Overall the value of total livestock output (including livestock products) increased by £229 million (+2.4%) to £9,700 million and accounted for just under half of the total value of agricultural output.

In spite of challenging weather, the value of livestock output primarily for meat increased by  $\pounds 207$  million (+4%) to  $\pounds 5,567$  million, with increases seen across all sectors, with the

exception of pigs. The value of poultry meat increased by £199 million to £2,223 million. Increased demand boosted both production and price.

The value of milk, the largest individual contributor to the value of all outputs, increased by  $\pounds 40$  million (+1.4%) to  $\pounds 2,836$  million.

#### Intermediate consumption

The total cost of intermediate consumption to the industry rose by £883 million (+8%) to  $\pm$ 12,309 million. This was mainly driven by higher animal feed, other goods and services, energy and fertiliser costs, with smaller increases seen across all other costs.

The cost of animal feed, the largest contributor to the value of inputs, increased by £291 million to £3,673 million as a result of both increased price and volume. The cold weather in spring led to greater demand for animal feed as livestock were kept inside for longer and the hot summer affected forage and grass growth. Higher cereal prices kept the annual feed price higher than 2017.

Other goods and services increased by £310 million to £2,572 million reflecting the increased demand for straw by the livestock industry.

The cost of energy increased by £72 million (+8.0%) to £968 million, driven by increased oil prices.

The cost of fertiliser rose by £113 million (+13%) to £1,001 million, a consequence of the higher oil price as usage was down.

#### **Compensation of employees**

The total value of compensation to employees was £2,108 million, a rise of £75 million. In line with the national living wage increase average labour costs were higher whilst labour volume was slightly down on the previous year.

#### Other subsidies on production

The value of direct payments on production, consisting of Basic Payment Scheme and Agrienvironment scheme payments, was little changed on the year at £2,108 million, a result of the stable exchange rate and an increase in the value of the Country Stewardship Scheme. In 2018 €1 =89.3 pence compared to €1=89.5 pence in 2017.

# Table 2 Aggregate Agricultural Accounts: Current price production and incomeaccounts for England

| £ million   |        |        | Ca              | endar years       |
|---|--------|--------|-----------------|-------------------|
|   | 2017   | 2018   | Change<br>17-18 | % Change<br>17-18 |
| Output at market prices                                   |        |        |                 |                   |
| 1. Cereals  | 2 506  | 2 657  | 151             | 6%                |
| of which: wheat   | 1 833  | 1 948  | 115             | 6%                |
| barley  | 598    | 620    | 23              | 4%                |
| 2. Industrial crops                                       | 1 123  | 987    | - 136           | -12%              |
| of which: oilseed rape                                    | 713    | 598    | - 115           | -16%              |
| protein crops   | 151    | 113    | - 37            | -25%              |
| sugar beet  | 229    | 246    | 17              | 7%                |
| 3. Forage plants  | 147    | 178    | 31              | 21%               |
| <ol> <li>Vegetables and horticultural products</li> </ol> | 2 514  | 2 456  | - 58            | -2%               |
| of which: fresh vegetables                                | 1 238  | 1 201  | - 37            | -3%               |
| plants and flowers  | 1 276  | 1 255  | - 21            | -2%               |
| 5. Potatoes (including seeds)                             | 610    | 399    | - 211           | -35%              |
| 6. Fruit  | 583    | 595    | 12              | 2%                |
| 7. Output of other crop products including seeds          | 429    | 763    | 335             | 78%               |
| Total crop output (sum 1 to 7)                            | 7 913  | 8 037  | 124             | 2%                |
| 8. Livestock  | 6 216  | 6 386  | 170             | 3%                |
| primarily for meat  | 5 360  | 5 567  | 207             | 4%                |
| of which: cattle  | 1 454  | 1 487  | 32              | 2%                |
| pigs  | 1 045  | 986    | - 59            | -6%               |
| sheep   | 644    | 675    | 31              | 5%                |
| poultry   | 2 024  | 2 223  | 199             | 10%               |
| gross fixed capital formation                             | 856    | 820    | - 36            | -4%               |
| of which: cattle  | 461    | 460    | - 2             | -                 |
| pigs  | 4      | 3      | - 1             | -19%              |
| sheep   | 197    | 138    | - 59            | -30%              |
| poultry   | 194    | 218    | 25              | 13%               |
| 9. Livestock products                                     | 3 255  | 3 314  | 59              | 2%                |
| of which: milk  | 2 797  | 2 836  | 40              | 1%                |
| eggs  | 385    | 382    | - 3             | -1%               |
| Total livestock output (8 + 9)                            | 9 471  | 9 700  | 229             | 2%                |
| 10. Other agricultural activities                         | 906    | 920    | 14              | 2%                |
| 11. Inseparable non-agricultural activities               | 977    | 1 002  | 24              | 3%                |
| 12. Output at market prices (sum 1 to 11)                 | 19 266 | 19 658 | 392             | 2%                |
| 13. Total subsidies (less taxes) on product               | -      | -      | -               | -                 |
| 14. Gross output at basic prices (12 + 13)                | 19 266 | 19 658 | 392             | <b>2%</b>         |

continued

#### Table 2 (continued) Aggregate Agricultural Accounts: Current price production and income accounts for England Calendar vears

f million

| £ million   |        |        | Ca     | endar years |
|---|--------|--------|--------|-------------|
|   | 2017   | 2018   | Change | % Change    |
|   | 2017   | 2010   | 17-18  | 17-18       |
| Intermediate consumption                                  |        |        |        |             |
| 15. Seeds and planting stock                              | 640    | 665    | 26     | 4%          |
| 16. Energy  | 896    | 968    | 72     | 8%          |
| 17. Fertilisers   | 888    | 1 001  | 113    | 13%         |
| 18. Plant protection products                             | 877    | 903    | 26     | 3%          |
| 19. Veterinary expenses                                   | 273    | 295    | 22     | 8%          |
| 20. Animal feed   | 3 382  | 3 673  | 291    | 9%          |
| 21. Total maintenance                                     | 1 224  | 1 232  | 8      | 1%          |
| 22. Agricultural services                                 | 896    | 910    | 13     | 2%          |
| 23. FISIM   | 89     | 90     | 1      | 2%          |
| 24. Other goods and services                              | 2 261  | 2 572  | 310    | 14%         |
| 25. Total intermediate consumption (sum 15 to 24)         | 11 426 | 12 309 | 883    | 8%          |
| 26. Gross value added at market prices (12 - 25)          | 7 841  | 7 349  | - 492  | -6%         |
| 27. Gross value added at basic prices (14 - 25)           | 7 841  | 7 349  | - 492  | -6%         |
| 28. Total consumption of fixed capital                    | 3 049  | 3 228  | 179    | 6%          |
| of which: equipment                                       | 1 452  | 1 553  | 101    | 7%          |
| buildings   | 712    | 742    | 31     | 4%          |
| livestock   | 885    | 932    | 47     | 5%          |
| 29. Net value added at market prices (26 - 28)            | 4 792  | 4 121  | - 671  | -14%        |
| 30. Net value added at basic prices (27 - 28)             | 4 792  | 4 121  | - 671  | -14%        |
| 31. Other subsidies (less taxes) not linked to production | 2 078  | 2 111  | 32     | 2%          |
| 32. Net value added at factor cost (29 + 31)              | 6 870  | 6 232  | - 638  | -9%         |
| 33. Compensation of employees                             | 2 033  | 2 108  | 75     | 4%          |
| 34. Rents   | 479    | 481    | 2      | -           |
| 35. Interest  | 279    | 285    | 5      | 2%          |
| 36. Total Income from Farming (32 - 33 - 34 - 35)         | 4 079  | 3 358  | - 721  | -18%        |

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

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

(a) due to methodology differences sub total data contained in this table may not agree with sub totals shown in Chapter 3 Agriculture in the United Kingdom

# **Description of Total Income from Farming**

Total Income from Farming is income generated by production within the agriculture industry including subsidies and represents business profits and remuneration for work done by owners and other unpaid workers. It excludes changes in the values of assets, including stocks, due to price changes but includes non-agricultural activities such as further processing or tourist activities where these cannot be separated from the agricultural business. It is the preferred measure of aggregate income for the agricultural industry conforming to internationally-agreed national accounting principles required by the UK National Accounts.

Total Income from Farming is designed to show the performance of the whole of the agricultural industry. A measure of individual farm incomes, Farm Business Income, designed to compare performance across different types of farming, is available in the publication 'Farm Accounts in England 2017/2018' at:

https://www.gov.uk/government/statistics/farm-accounts-in-england.

Values for England are derived by deduction from the production and income account for the United Kingdom of similar accounts for Northern Ireland, Scotland and Wales. Data contained in this release is based on figures available for all countries as at May 2019.

# Revisions

As more data becomes available, estimates are revised and forecasts replaced. More detailed information on revisions made to the latest United Kingdom account can be found at: <u>https://www.gov.uk/government/publications/total-income-from-farming-in-the-uk.</u>

For further details on revisions to accounts published by Scotland, Wales and Northern Ireland see <u>Scottish Government</u>, <u>Welsh Government</u> and <u>Department of Agriculture and</u> <u>Rural Development</u>, <u>Northern Ireland</u>.

A full statistical methodology and results review of English regional account statistics is being conducted and therefore corresponding regional (NUTS 1, 2 and3 data) are not currently available. The aim of the review is to improve the design and quality of the regional statistics. Regional first estimates for 2018 are due to be published in June 2019 using the new methodology.

# Summary quality report

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

This is an overview note which is not release specific and was last updated in March 2019. 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 aims to provide users with information on usability and fitness for purpose of these estimates.

# Definition of terms used in this release

| Current price                        | The value based on prices during the reference year              |
|--------------------------------------|--|
| Agricultural industry                | All activities taking place within businesses that carry out any |
| <b>C J</b>                           | agricultural activities. These businesses include all farms and  |
|                                      | specialist agricultural contractors.                             |
| Basic prices                         | Market price plus directly paid subsidies that are linked to     |
|                                      | production of a specific product. There have been no direct      |
|                                      | subsidies in England since 2013.                                 |
| Compensation of employees            | The full costs of employees to the business including national   |
|                                      | insurance contributions  |
| Consumption of fixed capital         | The reduction in value (at current prices) of capital assets     |
|                                      | used in the production process, e.g. buildings, plant,           |
|                                      | machinery, vehicles and livestock.                               |
| FISIM                                | Financial Intermediation Services Indirectly Measured            |
|                                      | (FISIM) is an estimate of the value of services provided by      |
|                                      | financial intermediaries, such as banks, for which no explicit   |
|                                      | charges are made, and which are paid for as part of the          |
|                                      | margin between rates applied to savers and borrowers.            |
| Gross Fixed Capital Formation        | The production of animals that will be used as the means of      |
| (GFCF) in livestock                  | production, e.g. breeding animals.                               |
| · · ·                                |  |
| Gross Value Added                    | Gross output less intermediate consumption.                      |
| Inseparable non-agricultural         | Non-agricultural activities that are included within the         |
| activities                           | business level accounts and are inseparable, e.g. some           |
|                                      | cases of bed and breakfast and recreation facilities.            |
| Intermediate consumption             | Goods and services consumed or used as inputs in the             |
|                                      | productive process e.g. feed, seeds, fertiliser, and pesticides. |
| Net Value Added                      | Gross Value Added at basic prices less consumption of fixed      |
|                                      | capital.   |
| Net Value Added at factor cost       | Net Value Added at basic prices plus other subsidies (less       |
|                                      | taxes) on production.  |
| Other agricultural activities        | Agricultural activities that do not result in sales of final     |
|                                      | product, e.g. quota leasing, contract work                       |
| Other subsidies (less taxes)         | Subsidies and taxes not linked to production of a specific       |
| not linked to production             | product, e.g. Single Payment Scheme, agri-environment            |
|                                      | payments, animal disease compensation.                           |
| Output at market prices              | Output excluding subsidies. The output of the agricultural       |
|                                      | industry includes some non-agricultural activities and           |
|                                      | transactions within the industry.                                |
| Subsidies (less taxes) on            | Subsidies and taxes linked to the production of a specific       |
|                                      | agricultural product. All subsidios are recorded on an 'as due'  |
| product                              | agricultural product. All subsidies are recorded on an 'as due'  |
| product                              | basis.   |
| product<br>Total Income from Farming | •  |
| -                                    | basis.   |

# **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.

# **National Statistics status**

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in December 2017 following a compliance check by the Office for Statistics Regulation [Total Income from Farming in the United Kingdom statistics].

The statistics last underwent a full assessment [Assessment Report 271 Statistics on Agriculture] against the Code of Practice for Statistics in 2014.

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- Undertaken a full statistical methodology and results review of English regional account statistics. The aim of the review is to improve the design and quality of the regional statistics and results will be published in the summer of 2019.
- Results for England published separately from results for the English regions. England results are available at an earlier date and will be released as soon as they are considered ready, ahead of the English regional results.

# 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 £9 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 (<u>http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</u>), 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