

## Aggregate agricultural output and income, 2022

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The 2022 provisional estimate for agricultural output has reached an all-time high following an exceptional year of price increases across the majority of commodities that have offset increases in input prices. It is anticipated that the current rises in costs of living will be more evident in the 2023 estimate.

In 2022, it is estimated that both gross value added and total income from farming increased for the third consecutive year (nearly 40% and just over 55% respectively). Aggregate agricultural output increased over 20% in 2022, alongside an increase of around 15% in intermediate consumption.

- The value of aggregate agricultural output (gross output) rose by just over £400 million (or 23%) to just over £2.1 billion in 2022.
- Intermediate consumption (the goods and services consumed or used in the production process) increased by nearly £180 million (or 15%) to around £1.4 billion in 2022. This is, in effect, an increase in costs.
- Gross value added (aggregate agricultural output, less intermediate consumption) increased by around £225 million (or 38%) to just over £810 million in 2022.
- Total income from farming increased by around £215 million (a little over 55%) to nearly £600 million in 2022. This increase can be explained by a rise in milk value, the largest contributor to livestock value. Milk reached record high farmgate prices of 51.6 pence per litre in 2022 as a result of high production costs.
- The value of output from cereals has increased by £25 million (just over 80%) in 2022 following disruption to the global cereals market by the war in Ukraine.
- The value of output from cattle remained high at nearly £495 million (an increase of over 10% from 2021). The value of output from sheep showed a further increase of £20 million (or 7%) to just under £310 million. Gross output from cattle and sheep is estimated to be 37% of the value of agricultural output in Wales.
- Livestock increased overall by nearly 10% whilst livestock products showed a larger increase of 45%. This increase was largely driven by the dairy sector although increases were also seen in other products.
- In looking more closely at intermediate consumption, feeding stuffs increased by just over £60 million (or 15%) to just over £460 million. Feeding stuffs are the largest component of intermediate consumption, at around a third.
- The value of other subsidies increased by £1 million (1%) to £283 million. The majority of which was attributed to the Basic Payment Scheme and Glas Tir payments.

### About this release

This release provides provisional estimates of aggregate agricultural output and total income from farming at the Wales level for 2022. These estimates make use of information available up to March 2023.

The Aggregate Agricultural Account is compiled using data from a wide variety of sources, for example, agricultural surveys, livestock markets, marketing organisations and the Department for Environment, Food and Rural Affairs (DEFRA). COVID-19 had relatively little impact on the collection of the data. See [Key Quality Information](#) for details.

In the next annual release scheduled for May 2024 (provisional), the figures for both 2021 and 2022 will be revised to incorporate additional up-to-date information.

## **Wider Context**

### **Impact of the Ukraine Crisis**

The 2022 aggregate agricultural output and income data cover the 2022 calendar year. It therefore includes the Ukraine Crisis which began in the final week of February 2022. Notable impacts of the war include but are not limited to the substantial increase in the value of output from cereal. There are likely to be further impacts because of the war and the results are likely to be seen in next year's release of the 2023 results once estimates have been revised with more up-to-date figures.

### **Impact of the Cost-of-Living**

Farmers will be experiencing the impact of the Cost-of-Living Crisis now. Whilst the 2022 provisional estimates have demonstrated a good year financially for farming in Wales, it is anticipated that the 2023 estimates may more accurately reflect the increase on key intermediate consumption variables such as (but not limited to) animal feed and fertiliser. It is also important to consider that these figures are at an aggregate level and whilst the data points to a positive year, this will not be true for all farmers.

### **The effect of the COVID-19 pandemic**

The calendar year 2022 to which this release relates continued to be affected by the COVID-19 pandemic (the first lockdown started on 23rd March 2020). However, the overall impact at the aggregate level was more limited.

It is acknowledged that due to the remaining effects of the pandemic in 2022 there is more uncertainty around these financial estimates; however, as the impact of COVID-19 on data collection was fairly limited, the estimates are still considered robust.

**Table 1: Aggregate Agricultural Account, 2015 to 2022**

£ million	Calendar Years							
	2015	2016	2017	2018	2019	2020	2021 Provisional	2022 Forecast
<b>Outputs:</b>								
1. Cereals	21	21	22	25	26	27	31	56
2. Other Crops	7	7	8	8	8	6	11	15
3. Potatoes	13	17	16	20	13	8	13	12
4. Horticulture	42	52	53	52	52	56	53	58
5. Livestock	696	707	733	748	720	818	807	877
<i>of which:</i>								
Cattle	372	376	407	404	375	437	441	494
Sheep	257	267	264	281	270	299	286	307
Pigs	5	5	6	5	6	8	7	9
Poultry	52	47	44	45	60	64	65	61
6. Livestock Products	499	438	578	637	583	580	649	942
<i>of which:</i>								
Milk and Milk Products	440	381	517	568	522	513	570	849
Eggs	43	41	46	53	49	57	71	83
Clip Wool	6	5	3	5	3	1	1	2
7. Capital Formation in Livestock	80	63	63	74	74	56	56	44
8. Other Agricultural Activities	77	76	78	79	80	81	85	94
9. Inseparable Secondary Activities	51	51	52	54	54	55	55	64
<b>10. Gross Output (at market prices) (1+2+3+4+5+6+7+8+9)</b>	<b>1,485</b>	<b>1,431</b>	<b>1,604</b>	<b>1,697</b>	<b>1,610</b>	<b>1,686</b>	<b>1,760</b>	<b>2,161</b>
11. Total Subsidies on Product	0	0	0	0	0	0	0	0
<b>12. Gross Output at basic prices</b>	<b>1,485</b>	<b>1,431</b>	<b>1,604</b>	<b>1,697</b>	<b>1,610</b>	<b>1,686</b>	<b>1,760</b>	<b>2,161</b>
<b>Intermediate Consumption:</b>								
<b>13. Intermediate Consumption</b>	<b>1,058</b>	<b>1,046</b>	<b>1,083</b>	<b>1,114</b>	<b>1,138</b>	<b>1,156</b>	<b>1,174</b>	<b>1,350</b>
<i>of which:</i>								
Feeding stuffs	338	334	350	363	376	387	400	461
Veterinary and Medical Expenses	59	58	60	61	62	62	62	72
Fertilisers and Lime	94	92	95	97	99	99	100	115
Machinery Expenses	125	123	127	129	131	132	133	154
Farm Maintenance	38	38	39	40	41	41	43	47
Contract Work	75	74	76	78	79	79	80	93
Other Farming Costs	305	301	310	316	320	322	324	375
<b>14. FISIM (Financial Intermediation Services Indirectly Measured)</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>13</b>	<b>14</b>	<b>12</b>	<b>10</b>
<b>Value Added and Income:</b>								
<b>15. Gross Value Added at basic prices (12-13)</b>	<b>427</b>	<b>385</b>	<b>521</b>	<b>583</b>	<b>471</b>	<b>530</b>	<b>586</b>	<b>811</b>
<b>16. Gross Value Added at market prices (10-13)</b>	<b>427</b>	<b>385</b>	<b>521</b>	<b>583</b>	<b>471</b>	<b>530</b>	<b>586</b>	<b>811</b>
17. Consumption of Fixed Capital	302	302	306	334	338	326	326	346
<i>of which</i>								
Buildings and Works	90	92	94	97	98	97	101	110
Vehicles, Plant and Machinery	143	147	152	160	163	167	174	193
Livestock	70	63	60	77	76	62	51	43
18. Net Value Added (at basic prices) (15-17)	124	83	215	250	133	204	260	465
19. Other Subsidies	236	270	296	299	293	290	282	283
20. Net Value Added (at factor cost) (18+19)	360	353	510	548	426	494	541	748
21. Compensation of Employees	119	119	104	113	115	137	110	101
22. Interest	35	37	39	40	39	35	34	35
23. Rent	21	22	20	17	16	14	13	13
<b>24. Total Income from Farming (20-21-22-23)</b>	<b>185</b>	<b>176</b>	<b>347</b>	<b>378</b>	<b>255</b>	<b>309</b>	<b>384</b>	<b>599</b>

A longer timeseries of the aggregate agricultural accounts is available to view on [StatsWales](https://stats.wales.gov.uk/).

## Glossary

### **Total income from farming (TIFF)**

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

### **Financial intermediation services indirectly measured (FISIM)**

An estimate of the value of the services provided by financial intermediaries, such as banks, for which no explicit charges are made. Instead these services are paid for as part of the margin between rates applied to savers and borrowers. The supposition is that savers would receive a higher interest rate and borrowers pay a lower interest rate if all financial services had explicit charges. In these accounts, the amounts of interest paid and received are adjusted and the amount of FISIM is recorded with intermediate consumption.

Included in other farming costs (line 13 of the account under intermediate consumption) are items such as pesticides, seeds, utilities, insurance, rates, banking fees and other general costs.

Included in other subsidies (line 19 of the account) are the following:

- The Basic Payment Scheme for 2015 to 2022.
- Agri-environment payments (including Glastir, and legacy schemes such as Tir Mynydd and Tir Gofal) for 2015 to 2022.
- Animal disease compensation (predominantly bovine TB) for 2015 to 2022.
- Payments to Welsh dairy farmers from the:
  - EU Dairy Package: £3.2 million in 2015.
  - EU Conditional Aid Benchmarking Scheme: £3.2 million recorded against 2016, although this was actually paid out in 2017.
  - EU Milk Reduction Fund: £1.1 million recorded against 2016, although this was actually paid out in 2017.

These subsidies are not included in agricultural output since they are decoupled from production, but they are included in total income from farming (TIFF) in accordance with national accounting conventions.

Basic Payment Scheme information included in the 2022 provisional estimate is based on an estimate of the total value that will be paid as a result of applications made in 2022. In other words, the 2022 provisional estimate includes all basic payments made to date **and** an estimate of the value of payments that will be made throughout 2023 (for applications made in 2022).

Differently for agri-environment payments, the 2022 provisional estimate includes Glastir payments made during the year, regardless of when Glastir contracts were actually signed. All of these estimates will be revised in future publications when final figures become available.

## Key quality information

These results are produced using internationally agreed national accounting principles.

Income measures exhibit some degree of volatility across years, influenced by prevailing market conditions. As all the measures of income include an element relating to profits, these measures in the agricultural sector are therefore more volatile than measures in other sectors (which are defined purely in terms of income from wages).

## Rounding

The figures shown in this release have been rounded to the nearest million pounds. Calculations such as percentage or actual change have been made on unrounded figures.

## Potato data

[AHDB](#) ceased production of GB potato market intelligence in July 2021 following an industry vote. Welsh Government are currently investigating alternative sources of data but for this release the 2020 potato figures have been used as an interim estimation.

## Methodology

At the time of publication, not all data are available for 2022 which has meant that some values have been estimated. Consequently, this provisional estimate is subject to a degree of revision when the 2023 estimate is published next year.

The estimates are calculated using a range of available market price data including but not limited to the [AHDB](#) for data on the cereal and milk markets in addition to historical liveweight and prime cull weighted prices. Data from the [BCMS](#) cattle registration and movement records and Defra egg packing [data](#) are also utilised. The latest [June Survey](#) also provides an estimate on production trends within the Welsh agricultural sector.

Given that TIFF is the relatively small difference between two large numbers it is sensitive to small percentage changes in the values of outputs and intermediate consumption. This means that a combination of a smaller revisions in outputs and intermediate consumption leads to more sizeable revisions in percentage terms to Gross Value Added and TIFF.

Welsh Government plan to work with DEFRA and other devolved nations to continue to review the and improve the current processes in place for estimating the aggregate agricultural accounts. It is therefore anticipated that future releases will have further revisions to figures and changes in methodology in place. These changes will be explained in detail in the next release.

## Revisions

As a result of more data becoming available over time, figures for previous years are regularly revised to include up-to-date information. These revisions are intended to enhance the precision of the estimates. Table 2 below shows revisions to figures for 2020 and 2021 that have been made in this edition of the release.

**Table 2: Revisions to the 2020 and 2021 aggregate agricultural account in this release**

*£ million*

		Published 12 May 2022	Published 25 May 2023	Actual change	% change
2020	Gross Output	1,608	1,686	77	4.8%
2020	Intermediate Consumption	1,138	1,156	17	1.5%
2020	Gross Value Added	470	530	60	12.7%
2020	Net Value Added (at factor cost)	425	494	69	16.3%
2020	Total Income from Farming	254	309	55	21.7%
2021	Gross Output	1,695	1,760	64	3.8%
2021	Intermediate Consumption	1,156	1,174	18	1.6%
2021	Gross Value Added	540	586	46	8.5%
2021	Net Value Added (at factor cost)	493	541	48	9.8%
2021	Total Income from Farming	305	384	79	25.9%

The figures for 2020 compare the provisional figures published in May 2022 with the final figures published in May 2023; the comparison is stable. As we would expect, the changes in total income from farming are larger for 2021 when comparing the provisional estimate published in 2022 with the provisional figures published in 2023.

The figures in this release will be revised in the future to include up-to-date information from sources such as the Farm Business Survey for 2022-23.

Any revisions to the 2022 agricultural output and income figures will be published alongside 2023 provisional estimate estimates in May 2024 (provisional). In line with the above, the figures for agricultural output and income in 2020 and 2021 have been revised to incorporate up-to-date information. Figures for 2021 remain provisional.

Methodological and terminological changes were made in 1998 to conform to the requirements of both the 1993 System of National Accounts (SNA) and the UK National Accounts.

## **Well-being of Future Generations Act (WFG)**

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural wellbeing of Wales. The Act puts in place seven wellbeing goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the wellbeing goals, and (b) lay a copy of the national indicators before Senedd Cymru. Under section 10(8) of the Well-being of Future Generations Act, where the Welsh Ministers revise the national indicators, they must as soon as reasonably practicable (a) publish the indicators as revised and (b) lay a copy of them before the Senedd. These national indicators were laid before the Senedd in 2021. The indicators laid on 14 December 2021 replace the set laid on 16 March 2016.

Information on the indicators, along with narratives for each of the wellbeing goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local wellbeing assessments and local wellbeing plans.

### **Further details**

This statistical release is available on the Welsh Government statistics and research web pages: <https://www.gov.wales/aggregate-agricultural-output-and-income-2022>

More detailed statistics for agriculture in Wales can be found on the [Welsh Government Statistics and Research page](#).

## Useful links

DEFRA are scheduled to publish first estimates of [Total Income from Farming](#) in the United Kingdom for 2022 in May 2023. All official statistics on Total Income from Farming in the UK and constituent countries are considered by Defra as “Fully Comparable at level C” of the [UK Countries Comparability Scale](#) across countries.

[Agriculture in the United Kingdom](#) 2022 is due to be published by DEFRA on 25 May 2023.

The Scottish Government published [agricultural income for Scotland](#) leading up to 2020 in May 2021.

Department of Agriculture, Environment and Rural Affairs (DAERA) published [provisional agricultural income figures](#) for Northern Ireland on 27 April 2023.

## Next update

May 2024 (provisional)

## We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to [stats.agric@gov.wales](mailto:stats.agric@gov.wales).

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