



18th February 2021

# Farm Accounts in England Results from the Farm Business Survey 2019/20

This release provides further detail behind the income results published on 16th December 2020. The results are sourced from the 2019/20 Farm Business Survey which covers the 2019 harvest and includes the 2019 Basic Payment. Figures cover a March to February year with the most recent year shown ending in February 2020. The release also includes analysis of diversified activities on farms.

## **Key results**

- In 2019/20, average Farm Business Income was lower for cereal, general cropping, lowland grazing livestock, mixed and horticulture farms.
- Average income for cereal farms and general cropping farms decreased by 7
  percent and 21 percent respectively, driven by a combination of lower prices for
  key commodities such as wheat and barley and increased input costs.
- On dairy farms, average income increased by 6 percent, with increases in milk production and revenue from other cattle enterprises offsetting lower average milk prices.
- On lowland grazing livestock farms, lower incomes were driven by reduced output from both cattle and sheep. For LFA grazing livestock farms a reduction in costs, particularly feed, and increased output for sheep led to a 47 percent increase in average income.
- The average Basic Payment across all farm types was £27,800, which was little change compared to 2018. This reflects the very similar Euro / Sterling exchange rates in the September of each year when the payment rates are determined.
- Total income from diversified activities in 2019/20 was £734 million, which was little change on 2018/19. Across all farms, income from diversified enterprises accounted for 28 percent of total Farm Business Income.
- The main diversified activity was letting out buildings for non-farming use, with 45 percent of farms engaging in this activity.

Detailed tables can be found on GOV.uk in the <u>Farm Accounts in England dataset</u>. The results examine farm incomes, outputs and costs for farm types, farm sizes, regions and economic performance groups along with enterprise level gross margins, balance sheet data and flow of fund statements.

Forecasts of income by farm type for the year ending February 2021 and covering the 2020 harvest will be published in March 2021. These can be found at: https://www.gov.uk/government/collections/farm-business-survey

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## What you need to know about this release

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#### **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.

These statistics last underwent a full assessment [Assessment Report 271 Statistics on Agriculture] against the Code of Practice for Statistics in 2014. Since the last review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics across the FBS.

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## **Key words**

Farm Business Income: for non-corporate businesses, Farm Business Income represents the financial return to all unpaid labour (farmers and spouses, non-principal partners and their spouses and family workers) and on all their capital invested in the farm business, including land and buildings. For corporate businesses it represents the financial return on the shareholders capital invested in the farm business.

In essence Farm Business Income is the same as Net Profit, which as a standard financial accounting measure of income is used widely within and outside agriculture. Using the term Farm Business Income rather than Net Profit, gives an indication of the measure's farm management accounting rather than financial accounting origins, accurately describes its composition and is intuitively recognisable to users as a measure of farm income.

**Farm type:** the farm type classification indicates the predominant activity on the farm.

## Section 1 Farm incomes - detailed results

Figures are for March/February years with the most recent year shown ending February 2020. This covered the 2019 harvest and includes the Basic Payment due in the 2019/20 accounting year.

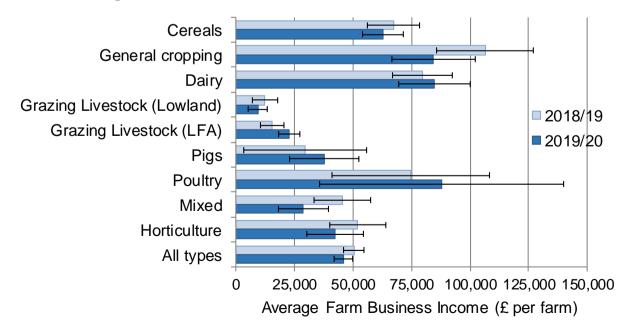
## 1.1 Overview across all farm types

Average Farm Business Income (FBI) across all farm types was £46,000 in 2019/20; a 9 percent decrease compared to 2018/19. More favourable weather conditions compared to 2018 produced higher yields for many crops. However, plentiful supplies contributed to lower prices for key commodities such as wheat and barley. Across all farm types output from livestock fell slightly, reflecting lower prices for some livestock enterprises, for example store and fat cattle. Crop input costs tended to be higher, while those related to livestock were similar or lower than 2018/19, with the most notable reductions for feed and fodder, reflecting lower cereal and straw prices plus superior quantities of home grown grass and silage.

The average Basic Payment across all farm types was £27,800, which was little change compared to 2018. This reflects the very similar Euro / Sterling exchange rates in the September of each year (2018 and 2019) when the payment rates are determined.

Figure 1.1 shows average FBI by farm type together with 95% confidence intervals as error bars. These show the range of values that may apply to the figures. Further details on accuracy or results can be found in <u>Section 3.3</u>.

Figure 1.1 Average FBI (£ per farm) by farm type, with 95% confidence intervals, England 2018/19 and 2019/20



FBI varies both between and within farm types (Figures 1.1 and 1.2). The variation in incomes within farm types reflects a number of factors such as farm size, location and soil type. Some farm types also undertake a diverse range of agricultural activities. For example, horticulture includes specialist glasshouse farms, specialist fruit, specialist hardy nursery stock and market garden vegetable producers who may experience large differences in their production costs and outputs.

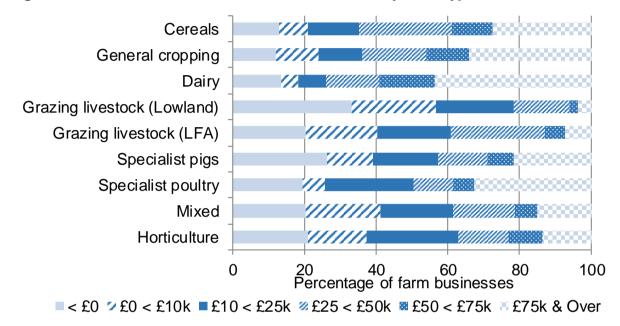


Figure 1.2 Distribution of Farm Business Income by farm type (a), 2019/20

(a) The sample sizes for specialist pig and poultry farms are relatively small with average incomes subject to greater variation.

In 2019/20, at least 12 percent of each farm type failed to make a profit and this figure is much larger for some types, such as lowland grazing livestock (33 percent). At 44 percent of farms, dairy had the largest proportion of farms with an income of more than £75,000, while lowland grazing livestock had the lowest proportion at 4 percent of farms.

#### 1.2 Weather

Autumn 2018 saw mixed conditions. Despite some unsettled periods, many areas had above average sunshine and temperatures in September and October allowing some farmers to make a third or, in some cases, even a fourth cut of silage. Although a lack of forage was still a concern for many as they approached autumn / winter with reduced stocks. Overall, October rainfall was around three quarters of the average and although autumn drilling was delayed in some areas while growers waited for rain before work to prepare suitable seedbeds for 2019 crops, generally conditions were ideal for autumn cultivations.

On the whole, the winter of 2018/19 was mild, particularly February which also had 63 percent more sunshine than average making it the sunniest in a series from 1929 (Figure 1.3 shows hours of sunshine by season in England). Rainfall was 15 percent higher than the average in December but both January and February were drier. Conditions for lambing were generally good and the dry, mild weather also helped encourage early grass growth which in turn reduced demand for expensive winter forage.

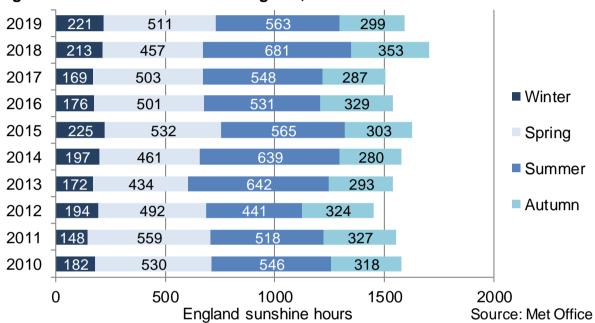
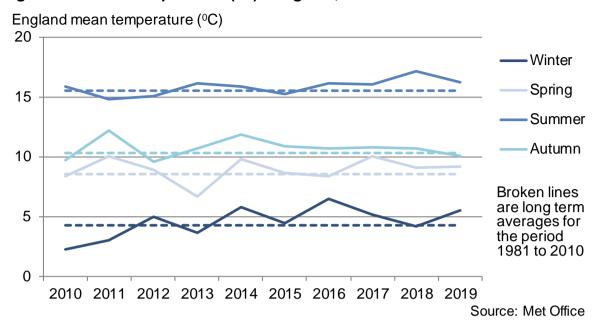


Figure 1.3: Hours of sunshine - England, 2010 to 2019

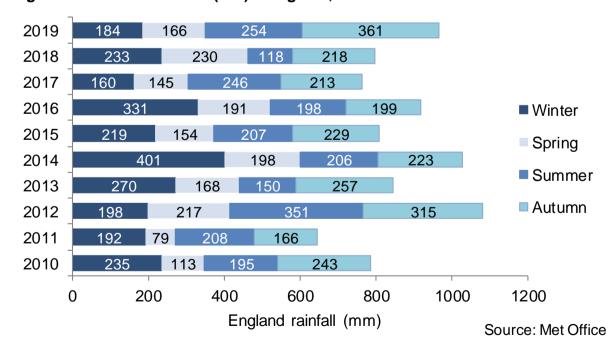
March 2019 began with wet, windy and unsettled weather although it was generally mild. April temperatures were also slightly higher than average while in May they were a little below the long term average (Figure 1.4 shows mean temperature by season in England). Sunshine was above normal across the spring months with April and May also drier than usual. The generally warm, dry spring weather allowed spring sowing to being on lighter land by around mid-March, and on heavier ground by late March / early April.

Figure 1.4: Mean temperature (°C) - England, 2010 to 2019



Summer 2019 began with generally wet conditions; many parts of England saw double the average rainfall (Figure 1.5 shows rainfall by season in England). However, the latter part of June and most of July were fairly settled with the end of July bringing record-breaking temperatures and plenty of sunshine. Rainfall in July was 9 percent above average but this varied widely across the country. The wet conditions increased disease pressure for crops in some regions and in the South East there were reports of hailstorms damaging large areas of fruit.

Figure 1.5: Annual rainfall (mm) - England, 2010 to 2019



August was rather unsettled, with sunshine, rainfall and mean temperature all above the long term average. A hot spell at the end of the month set a new record high

temperature for the Bank Holiday weekend. Overall, the warm, wet summer aided grass growth, providing good forage stocks for the winter months but also making for a prolonged and difficult harvest in some areas.

Wet conditions dominated many areas of the country in both September and October 2019 with rainfall above the long term average by 54 percent and 36 percent respectively. This made conditions for autumn cultivations difficult for some and hindered the maize harvest and lifting of sugar beet. For livestock farmers on heavier soil the wet weather meant housing cattle earlier to minimise poaching.

## 1.3 Results by farm type

The following section provides detailed results for each farm type. Where table numbers are referred to in the text, these can be found within the dataset spreadsheet at: <a href="https://www.gov.uk/government/statistics/farm-accounts-in-england">https://www.gov.uk/government/statistics/farm-accounts-in-england</a>

£ per farm Basic Payment Scheme 120,000 N Diversified income £106,400 Agri-environment payments Agriculture £84,400 \* Farm business income £67,300 70.000 £62,800 \* £28,900 £52,100 £45,500 £42.400 ж 20,000 -30,000 19/20 18/19 19/20 19/20 19/20 18/19 18/19 18/19 Cereals General cropping Mixed Horticulture

Figure 1.6: Average FBI for cropping farms, broken down by cost centres 2018/19 and 2019/20

Source: Farm Business Survey

Note: the figures in bold above each column are the average FBI per farm. FBI can be lower than the total height of the bars where average income from agriculture is below zero.

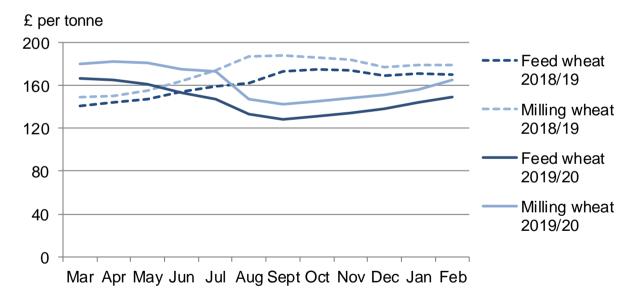
FBI can be considered as comprising income from four different 'segments' (i.e. cost centres) of the business: agriculture, agri-environment, diversification and the Basic

Payment. However, as the methodology<sup>1</sup> to allocate costs to each of these segments involves a degree of estimation, results should be interpreted with caution.

#### Cereal farms

On cereal farms, average Farm Business Income decreased by 7 percent in 2019/20 to £62,800 (dataset Table 5.1). This was primarily driven by an increase in agricultural costs; variable costs rose by 14 percent, with increases particularly to fertilisers and crop protection, while fixed costs went up by 7 percent (dataset Table 5.3). Higher costs were partially offset by a 7 percent rise in crop output. Average crop areas increased for wheat, barley, pulses and sugar beet. Growing conditions were also generally more favourable than 2018 leading to higher yields (Table 1.1 and dataset Table 11), while prices (which started the period strongly before gradually falling) tended to be lower (Figure 1.7). Overall, cereal farms achieved a positive return on their agricultural activities of just £780 (Figure 1.6) compared to £10,200 in 2018/19. Income from diversified activities, particularly renting out buildings, continued to be a major source of income, and rose by 8 percent. The Basic Payment increased by 5 percent accounting for just under two thirds of total Farm Business Income on this type of farm.

Figure 1.7: Average wheat prices - England and Wales, March 2018 to February 2020



Source: Monthly Corn Returns

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<sup>&</sup>lt;sup>1</sup> Details of this methodology can be found under FBS documents at: https://www.gov.uk/guidance/farm-business-survey-technical-notes-and-guidance

Table 1.1: Average crop yields, 2014 to 2019 (tonnes per hectare)

	2014	2015	2016	2017	2018	2019
Wheat (England)	8.6	9.0	7.9	8.3	7.8	9.0
Winter Barley (England)	7.1	7.6	6.4	6.9	6.8	7.8
Spring Barley (England)	5.8	6.2	5.7	5.5	5.0	6.4
Winter Oilseed rape (England)	3.7	3.9	3.1	3.9	3.4	2.6
Potatoes (UK)	47.4	49.2	44.9	49.1	41.6	45.4
Sugar beet (UK)	79.8	74.1	71.2	83.4	69.1	74.5

Source: Defra statistics

Comparing farm performance groups<sup>2</sup>, on average low performers failed to generate a positive income from farming<sup>3</sup> activities in either 2018/19 or 2019/20 and their losses increased slightly. Medium performers moved from a positive income of £6,000 for the agricultural cost centre in 2018/19 to a negative, with an average loss of £2,500 in 2019/20. Average income from farming activities for high performing farms was £41,700, a decrease of nearly a third compared to 2018/19 (dataset <u>Table 7.2</u>).

Figure 1.8 shows the proportion of winter wheat grown in England for the 2019 harvest within different bands of production costs<sup>4</sup>. The average production cost for winter wheat was approximately £162 per tonne whilst the average selling price was around £147 per tonne.

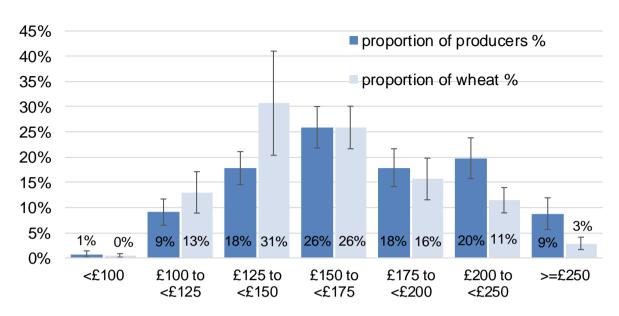
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<sup>&</sup>lt;sup>2</sup> Based on the ratio of outputs to inputs, including unpaid labour.

<sup>&</sup>lt;sup>3</sup> Excludes income from the Basic Payment Scheme, Agri-environment and diversified activities.

<sup>&</sup>lt;sup>4</sup> The costs are on a full economic basis including an imputed charge for any unpaid labour (including that of the farmer and spouse), as well as an imputed rental charge for owner occupied land. The value of any straw has been deducted from the costs so that the data presented here reflects the price of grain required to break even. Note also that this analysis covers only winter wheat and excludes organic and in-conversion wheat.

Figure 1.8: Proportion of winter wheat produced by cost of production<sup>5</sup>, 2019 harvest



Cost of production (£ per tonne)

Source: Farm Business Survey, England

Note: this analysis covers only winter wheat and excludes wheat that is organic or inconversion.

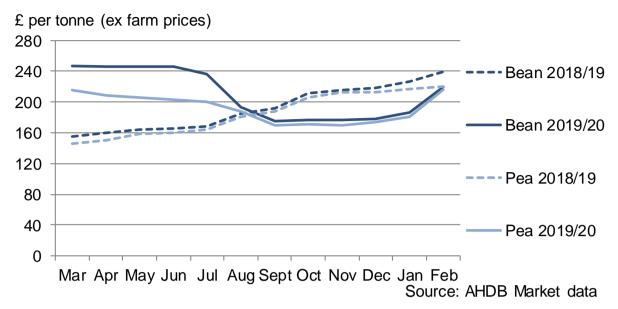
## General cropping farms

On general cropping farms average income fell by just over a fifth to £84,400 (dataset Table 5.4) with a decrease in agricultural output the main driver. As with cereal farms, plentiful supplies following a more successful harvest contributed to lower prices (Figures 1.9 and 1.10) which offset higher yields (Table 1.1). Oilseed rape was an exception with prices remaining firm but yield and area decreased reflecting pest issues, particularly Cabbage stem flea beetle. Other crops, such as wheat, pulses and sugar beet also saw reductions in average area. Agricultural costs rose by 1 percent overall compared to 2018/19 with increases in variable costs (notably other crop costs and casual labour) mitigated by a fall in fixed costs of 5 percent. On average there was a positive return of £16,000 from the agricultural cost centre (Figure 1.6) compared to £38,900 in 2018/19. Output from agri-environment activities rose by nearly 50 percent while the average Basic Payment fell by 4 percent to £43,400 (dataset Table 5.5), partially influenced by a slightly smaller average farm area.

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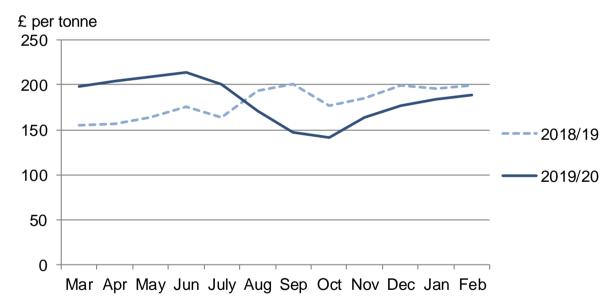
<sup>&</sup>lt;sup>5</sup> The costs are on a full economic basis including an imputed charge for any unpaid labour (including that of the farmer and spouse), as well as an imputed rental charge for owner occupied land. The value of any straw has been deducted from the costs so that the data presented here reflects the price of grain required to break even. Note also that this analysis covers only winter wheat and excludes organic and in-conversion wheat.

Figure 1.9: Average field bean and pea prices - GB, March 2018 to February 2020



Source: Agriculture and Horticulture Development Board

Figure 1.10: Average potato maincrop prices, UK - March 2018 to February 2020



Source: Agriculture and Horticulture Development Board

When comparing farm performance groups, the average FBI for the lowest 25 percent remained negative in 2019/20 with increased losses compared to 2018/19. FBI for medium performers fell by around a quarter to £77,700 (dataset <u>Table 7.4</u>). Income from the agricultural cost centre followed a similar pattern with the low performers failing to generate a positive income, again with increased average losses compared to 2018/19, while medium performers made a positive return of £17,400 a decrease of just over 50 percent compared to 2018/19. High performing

general cropping farms saw a decrease in income on agricultural activities of 40 percent.

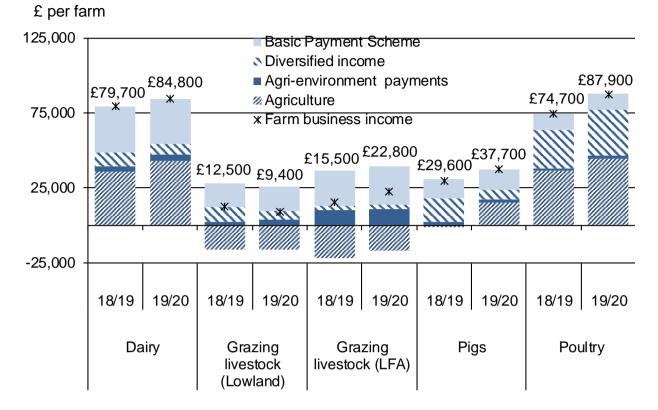
#### Mixed farms

Average Farm Business Income on mixed farms decreased by 36 percent in 2019/20 to £28,900 (dataset Table 5.22). These type of farms reflect the enterprises found in the other more specialised farm types. A 5 percent fall in total farm business output was driven by lower output from both crops and livestock. Unlike most other farm types both variable and fixed costs saw little change compared to 2018/19. Output from agri-environment activities rose by 54 percent while the Basic Payment remained similar to 2018/19. Diversification output rose, with a particular increase in revenue from renting out buildings (dataset Table 5.23). On average mixed farms failed to generate a positive return on their farming activities in 2019/20 (Figure 1.3), with increased losses compared to 2018/19 (dataset Table 5.22).

### Horticulture farms

Farms in the horticulture sample cover the three main sectors of fruit, vegetables and non-edibles, grown both under cover and in the open. The incomes presented are the average across all of these sectors. Note that the nature of this sector and the size of the sample means that individual farms can strongly influence the results. On horticulture farms average Farm Business Income fell by 19 percent between 2018/19 and 2019/20 to £42,400. Agricultural costs increased by nearly a third. Variable costs rose by 45 percent, notably for seed, other crop costs and casual labour, while increases to machinery running costs and general farming costs were factors in an 11 percent rise to fixed costs. These increases were only partly mitigated by a rise in agricultural output of 21 percent, the result of higher output from glasshouse and outdoor flowers, nursery stock, soft fruit and top fruit. Income from diversified activities, an important source of revenue for horticulture farms (Figure 1.3), increased by 42 percent with food processing and retailing activities accounting for most of the rise.

Figure 1.11: Average FBI broken down by cost centre for livestock farms, 2018/19 and 2019/20



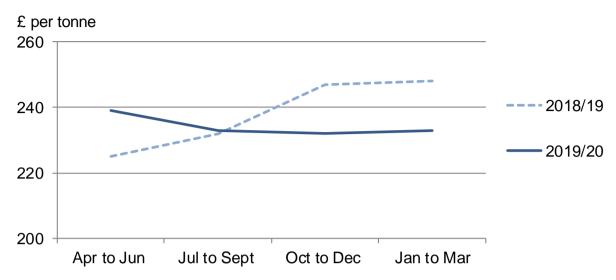
Source: Farm Business Survey

Note: the figures in bold above each column are the average FBI per farm. FBI can be lower than the total height of the bars where average income from agriculture is below zero.

#### **Dairy Farms**

Average Farm Business Income on dairy farms increased by 6 percent to £84,800 (dataset Table 5.7) in 2019/20. Within the agriculture cost centre production rose by 2 percent (reflecting a rise in average dairy cow numbers rather than yield, Table 1.2) although the average milk price was 29.7 pence per litre, a 2 percent fall on the previous year. It is important to note that there is a wide variation in milk prices with some farmers receiving considerably more or less than the average. Revenue from other cattle enterprises, important to many dairy farms, increased by 4 percent. Variable costs fell by 2 percent, most notably for feed reflecting lower cereal and straw prices (Figure 1.12 and dataset table 5.9) and, for some, a greater quantity of home grown grass and silage compared to 2018. These decreases were offset by a rise in fixed costs, particularly machinery depreciation, rent and general farming costs. Income from diversification activities fell by around a fifth while the average Basic Payment was little changed on 2018/19 (dataset Table 5.7). On dairy farms income from agri-environment activities rose by about a quarter to £4,100.

Figure 1.12: Average compound feed prices for cattle and calves - GB, 2018/19 to 2019/20



Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain.

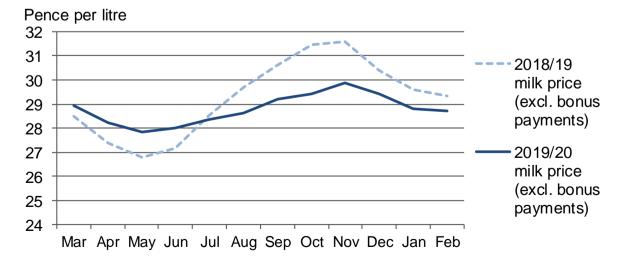
Table 1.2: Average herd size for dairy cows (a) - England, 2014 to 2019

	2014	2015	2016	2017 <sup>(b)</sup>	2017 <sup>(c)</sup>	2018	2019
Cattle Tracing scheme (all holdings)	89	89	90	93	93	97	101
Cattle Tracing Scheme (holdings with >= 10 dairy cows)	142	143	146	151	151	156	160
Farm Business Survey (specialist dairy farms)	172	172	174	189	187	188	191

Sources: Cattle Tracing Scheme (CTS), Farm Business Survey England

- (a) Dairy cows are defined as female dairy cows over 2 years old with offspring from the CTS.
- (b) Farm Business Survey data based on 2010 Standard Outputs.
- (c) Farm Business Survey data based on 2013 Standard Outputs.

Figure 1.13: Average farm gate milk prices (UK) - March 2018 to February 2020



Source: Milk prices surveys Defra, RESAS, DAERA

In 2019/20, 44 percent of dairy farms averaged a FBI of over £75,000 while 14 percent failed to make a profit (Figure 1.2). When analysed by performance bands, the lower performers failed to make a positive return on agriculture in both 2018/19 and 2019/20 with increased losses in 2019/20 (dataset <u>Table 7.6</u>). The medium 50 percent of performers achieved an average income on their agricultural activities of £32,500, an increase of just over 50 percent compared to 2018/19. For the highest performing 25 percent the return on agriculture was 7 percent higher than 2018/20 at £142,100.

Based on enterprise data from the FBS, the average price for milk sold was 29.7 pence per litre in 2019/20 (compared to 30.3 pence per litre in 2018/19) whilst the average cost of production was 28.2 pence per litre. Note that the cost of production is on a full economic basis (see footnote to Figure 1.14) and is spread across all milk produced including any that is used on the farm. The distribution according to cost of production is shown in Figure 1.14. Around 38 percent of milk producers produced milk at a cost of less than 27.5 pence per litre, accounting for 53 percent of the milk produced in 2019/20.

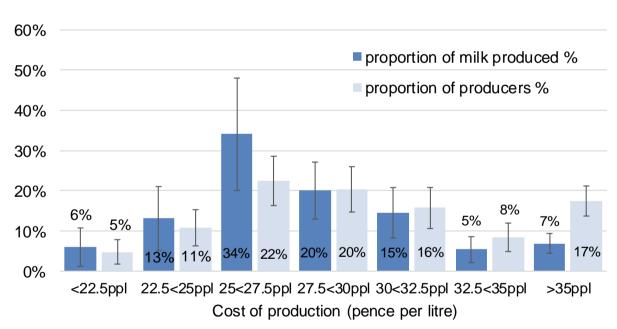


Figure 1.14: Production costs (a) of milk - England, 2019/20

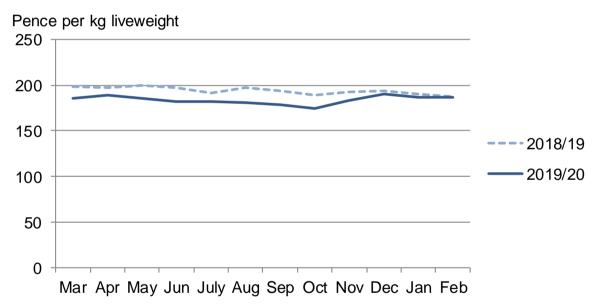
Source: Farm Business Survey, England

(a) Production costs shown here include all financial aspects of dairy enterprises such as any unpaid labour (including that of the farmer and spouse), herd depreciation and an estimated rental equivalent for land that is owned. An allowance is also made for non-milk revenue, most of which is from the sale of dairy calves, which is applied as a reduction to cost. This is to take into account the value of by-products from milk production. As a result, the production costs here represent the price that would have to be paid on all milk produced for dairy enterprises to break even.

## **Grazing livestock farms (lowland)**

On lowland grazing livestock farms average income fell by a quarter in 2019/20 to £9,400 (dataset Table 5.10), which is the lowest average income for this farm type since 2006/07. Cattle output, a main revenue source, was a major contributing factor, falling by 10 percent as a result of lower prices for both fat and store cattle (Figures1.15). This reflected plentiful supplies and a decrease in average cattle numbers per farm. Output from sheep and crop enterprises also fell by 8 and 13 percent respectively. Reductions in both fixed and variable agricultural costs were insufficient to offset the drop in output; overall, the contribution to Farm Business Income from agricultural activities on this type of farm fell to minus £16,300 (dataset Table 5.10). The average Basic Payment was virtually unchanged on 2018/19 while income from agri-environment schemes increase by 41 percent. Income from diversified activities reduced by 19 percent, primarily due to decreases in food processing and retailing.

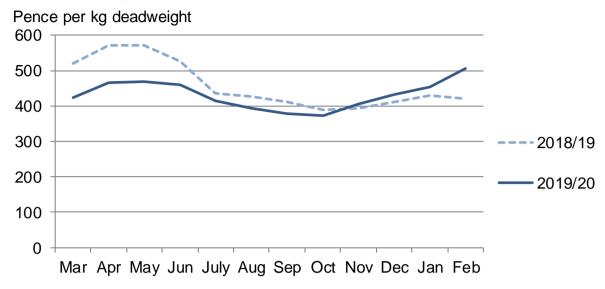
Figure 1.15: Average price for clean cattle (liveweight), GB - March 2018 to February 2020



Source: Agriculture and Horticulture Development Board (Meat Services)

When analysed by performance bands, all groups failed to make a positive return from agriculture in 2019/20 (dataset <u>Table 7.8</u>), which was also the case in 2018/19. Low performers also failed to generate a positive return for the business as a whole in both 2018/19 and 2019/20, with increased losses in 2019/20 compared to the previous year. The top 25 percent of performers made an average loss of around £8,100 on their agricultural activities in 2019/20 but had an overall income of £45,200.

Figure 1.16: Deadweight Standard Quality Quotation (SQQ)<sup>(a)</sup> price, UK - March 2018 to February 2020



Source: Agriculture and Horticulture Development Board (Meat Services)

(a) The Deadweight SQQ is for lamb carcasses falling in the 12-21.5 kg weight bracket.

For Less favoured Area (LFA) grazing livestock farms average income

## **Grazing livestock farms (Less Favoured Area)**

was £22,800, an increase of nearly 50 percent compared to 2018/19. Input costs fell by 5 percent largely driven by substantially reduced costs for purchased feed and fodder (Figure 1.17). As on lowland farms, output from cattle enterprises fell, but sheep output increased by 7 percent with higher average prices for breeding ewes and hoggs, an important source of income on these farms, a key factor. Output from crop enterprises also rose. These factors combined resulted in the overall agricultural output remaining virtually unchanged compared to 2018/19, though income from agricultural activities remained negative. Income from agrienvironment schemes increased by 9 percent and accounted for half of Farm Business Income on this farm type while the average Basic Payment rose by 6 percent (dataset Table 5.13).

As with lowland grazing livestock farms, when analysed by performance bands all groups of LFA farms failed to make a positive return from agriculture in 2019/20 (dataset <u>Table 7.10</u>), although losses were reduced compared to 2018/19. Low performers also failed to generate a positive return for the business as a whole in both 2018/19 and 2019/20, but again losses were reduced compared to the previous year.

£ per tonne

260

255

250

245

240

235

230

225

220

215

Figure 1.17: Average compound feed prices for sheep<sup>(a)</sup>, GB - 2018/19 to 2019/20

Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain

Oct to Dec

Jan to Mar

(a) The above trends in sheep feed prices may not reflect those of individual compounds. They are weighted by the very seasonal production of compounds in each month. Summer prices are largely influenced by changes to the prices of finishing compounds, whereas winter prices are largely influenced by breeding compounds



## Specialist pig farms

Jul to Sept

Apr to Jun

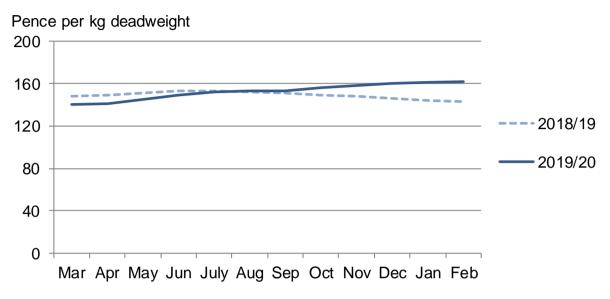
The relatively small size of the sector and of the sample in the survey means that our estimates for this farm type are subject to greater levels of uncertainty than in other sectors.

For specialist pig farms average income increased by just over a quarter to £37,700 (dataset Table 5.16). Whilst pig prices firmed throughout 2019 (Figure 1.18) against a backdrop of African Swine Fever in China and elsewhere, a combination of reduced throughput and a fall in the closing valuation (due to numbers lower than at the beginning of the year) resulted in a decrease in pig output of 7 percent. This was more than offset by a reduction in both fixed and variable costs, particularly feed (Figure 1.19), machinery, labour and land costs. For those pig farms who also grew crops, there was an increase in crop enterprise output of 7 percent. Overall there was an average positive return of £15,000 from the agricultural cost centre (dataset Table 5.16 and Figure 1.11) compared to minus £1,000 in 2018/19. Income from diversification activities fell, while there were small increases to both agrienvironment payments and the Basic Payment.

In this sector, individual farms can have a large influence on the results. In 2018/19, the average income for specialist pig farms was influenced by a small number of new farms joining the survey, which were not part of the sample in 2019/20. Contract

rearers are also well represented in the FBS sample. Business models for contract rearing operations are varied and these type of farms may not be impacted by price variations to the same extent as non contract rearing farms

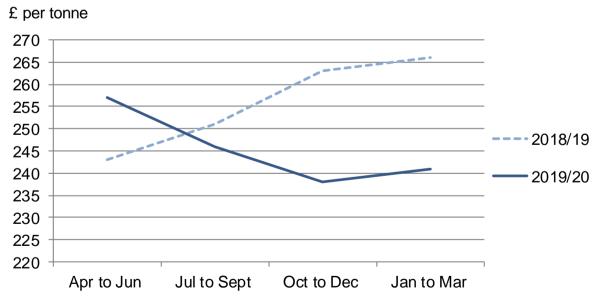
Figure 1.18: Deadweight Average Pig Price (APP), GB - March 2018 to February 2020



Source: Agriculture and Horticulture Development Board (Meat Services)

Note: the All Pig Price (APP) series was introduced in April 2014. For more information measures see <a href="https://pork.ahdb.org.uk/prices-stats/prices/">https://pork.ahdb.org.uk/prices-stats/prices/</a>

Figure 1.19: Average compound feed prices for pigs, GB - 2018/19 to 2019/20



Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain

## **Specialist Poultry farms**



The relatively small size of the sector and of the sample in the survey means that our estimates for this farm type are subject to greater levels of uncertainty than in other sectors.

At £87,900 the average income of specialist poultry farms was 18 percent higher than in 2018/19 (dataset Table 5.19). Output from eggs rose by 60 percent compared to 2018/19 driven by an increase in quantity rather than price (which fell). In terms of quantity, this is in line with the trend seen in UK statistics for production, but not for price where UK statistics show a small increase (Figure 1.20). At the same time there was a drop in output from birds for poultry meat, which fell by nearly a quarter. Combined, these factors meant agricultural output decreased by 6 percent, but this was more than offset by a substantial fall in costs. Both variable and fixed costs went down, particularly for feed, veterinary fees, medicines and other livestock costs (partially reflecting lower numbers) and also for machinery and rent. Diversified output rose by 18 percent with marked increases for rental income, food processing and retailing and tourism.

Note that these changes for specialist poultry farms should be treated with caution because of the small sample size and the range of enterprises covered by this farm type. For example, there are farms producing broilers, turkeys, ducks and geese and for laying flocks the systems cover organic and conventional free range enterprises as well as enriched cages. In 2019/20, there was also a particularly influential poultry farm in the sample. Reweighting this farm so it only represents itself in the results would reduce average Farm Business Income for specialist poultry farms to £67,900. For more information on weighting see <a href="Section 3.1">Section 3.1</a>

Pence per dozen 100 80 Free range 2018 60 Free range 2019 40 Enriched 2018 20 **Enriched** 2019 0 Q1 Q2 Q3 Q4

Figure 1.20: Quarterly Egg Packing Station prices, UK - 2018 and 2019

Source: Quarterly UK Egg Packing Station Survey

## **Section 2 Diversification**

A possible and rational response to the changing position of agriculture in the UK economy is for farmers to seek to enhance their income from sources other than conventional farming production through diversifying their business activities. Diversification is widely thought to offer considerable scope for improving the economic viability of many farm businesses. Many farm diversification activities can also provide benefits for the wider rural economy and community by, for example, encouraging and providing additional job opportunities.

Most farm businesses engage in other activities in addition to those carried out on their own farm, even if only hire work for another farmer. However, the definition of diversified activity adopted here excludes agricultural work on another farm and is restricted to non-agricultural work of an entrepreneurial nature on or off farm but which utilises farm resources.

Using this definition, 68 percent of farm businesses in England had some diversified activity in 2019/20, up from 65 percent in 2018/19. The main diversified activity is letting out buildings for non-agricultural use; when this is excluded, the proportion of farms with some other diversified activity was 49 percent in 2019/20 (Figure 2.1), 3 percent higher than in 2018/19. The proportion of farms generating solar energy in 2019/20 was 22 percent, 2 percent lower than 2018/19, while those generating other sources of renewable energy<sup>6</sup> accounted for 11 percent of farms in 2019/20, 1 percent higher than the 2018/19 proportion.

Percentage of farm businesses Farms with diversified activity 80% Farms with diversified activity other than letting buildings 70% 60% 50% Ι I Τ Ι Ι 40% 30% 20% 10% 0% 2013/14 2014/15 2015/16 2016/17 2017/18(a) 2017/18 2018/19 2019/20

Figure 2.1: Percentage of farms with diversified activities, England - 2013/14 to 2019/20

Source: Farm Business Survey, England

<sup>(</sup>a) Current farm typology is based on 2013 standard output coefficients. Farm typology from 2013/14 to 2017/18(a) is based on 2010 standard output coefficients.

<sup>&</sup>lt;sup>6</sup> Other sources of renewable energy includes power generating, wind turbines, anaerobic digestion and renewable heat initiatives

Total income from diversified activities in 2019/20 was £734 million (dataset <u>Table 15.3</u>), little change from 2018/19 (£740 million). Across all farm types, income from diversified enterprises accounted for 28 percent of total FBI in 2019/20 (£2,597 million) although there were wide variations between farms (Figure 222).

**2018/19 2019/20** >0%-<5% 5%-<25% 25%-<50% 50%-<75% 75%-<100% 100% or more Farm income negative Diversified income negative 0 5 30 10 15 20 25 Percentage of farm businesses

Figure 22: Distribution of farms according to proportion of FBI from diversified enterprises, England - 2018/19 to 2019/20

Source: Farm Business Survey, England

(a) Excludes farms with no diversified activities. 2016/17 survey results have not been included due to change in typology to 2013 standard output coefficients. 2017/18 results have been recalculated on 2013 standard output coefficients for comparability.

For 39 percent of farm businesses with diversified activities, income from these activities accounted for at least a quarter of their total FBI, matching the 2018/19 proportion. For 24 percent of farm businesses, the income from diversification was greater than 50 percent of their total income, exceeding the combined income from other sources of the farm business (compared to 22 percent in 2018/19). For just under a quarter (24 percent) of farm businesses with diversified activities, their FBI and/or diversified income was negative. Farms without diversified enterprises have been excluded from this analysis.

A total income<sup>7</sup> of £734 million was generated from diversified activities by 38,400 farms. These farms had an average diversified enterprise income of £19,100 (Table 2.1). Those farms with food processing and retailing enterprises generated 28 percent of their total FBI (£50 million of £182 million) from this activity, whilst those letting out buildings generated 32 percent (£521 million of £1,650 million) from this activity. Those farms generating renewable energy (excluding solar power),

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<sup>&</sup>lt;sup>7</sup> Revenue net of costs.

generated 12 percent of their total income (£56 million of £475 million) from these activities matching the 2018/19 proportion.

Table 2.1: Income from diversified enterprises, England - 2019/20

	No. of	% of	Total Farm	Income of	Average
	farms	farms	Business	diversified	enterprise
			Income for	enterprise	income(a)
			these farms	(£m)	(£/farm)
			(£m)		
Farm Business income (including					
diversification)	56,500		2,597		
Farms which engage in:					
Diversified enterprises (all kinds)	38,400	68%	2,048	734	19,100
Letting buildings for non-farming use	25,500	45%	1,650	521	20,400
Processing/retailing of farm produce	5,600	10%	182	50	8,900
Sport and recreation	7,500	13%	444	22	3,000
Tourist accommodation and catering	3,300	6%	180	16	4,800
Solar energy	12,600	22%	897	38	3,100
Other sources of renewable energy(b)	6,000	11%	475	56	9,400
Other diversified activities	6,700	12%	336	30	4,500

Source: Farm Business Survey, England

Although just over two thirds (68 percent) of farms had a diversified activity, the total value of diversified enterprise output (£1,430 million) was only 8 percent of total farm business output (£18,081 million). For farms that engaged in any diversified enterprise, average enterprise output from diversification was £37,300 (Table 2.2). For those farms with diversified enterprises, the output for these enterprises (£1,430 million) equated to 10 percent of their total farm output (£14,137 million). Letting buildings for non-farming use accounted for 51 percent of diversified output, while the contribution from tourism, sport and recreation, solar energy and other diversified activities was much smaller. On average, tourist accommodation and catering generated the greatest output per farm (£32,400), whilst other renewable energy sources (excluding solar) generated £23,600 per farm.

<sup>(</sup>a) Average here refers to the mean calculated over farms which have that enterprise

<sup>(</sup>b) Other sources of renewable energy includes power generating, wind turbines, anaerobic digestion and renewable heat initiatives.

Table 2.2: Value of output from diversified enterprises, England - 2019/20

<u> </u>	No of	0/ of	Total farms	Output of	A. (0.10.00
	No. of	% of	Total farm	Output of	Average
	farms	farms	business	diversified	enterprise
			output for	enterprise	output(a)
			these	(£m)	(£/farm)
			farms	,	,
			(£m)		
Farm Business Output (incl.			(2111)		
• `	50 500		10.001		
diversification)	56,500		18,081		
Farms which engage in:					
Diversified enterprises (all kinds)	38,400	68%	14,137	1,430	37,300
Letting buildings for non-farming use	25,500	45%	10,808	729	28,600
Processing/retailing of farm produce	5,600	10%	1,612	162	28,700
Sport and recreation	7,500	13%	2,853	93	12,400
Tourist accommodation and catering	3,300	6%	1,344	107	32,400
Solar energy	12,600	22%	6,266	94	7,500
Other sources of renewable energy(b)	6,000	11%	3,034	142	23,600
Other diversified activities	6,700	12%	2,280	104	15,500

Source: Farm Business Survey, England

<sup>(</sup>a) Average here refers to the mean calculated over farms which have that enterprise

<sup>(</sup>b) Other sources of renewable energy includes power generating, wind turbines, anaerobic digestion and renewable heat initiatives.

## **Section 3 Survey details**

Data on the income of farm businesses is used in conjunction with other information on the agricultural sector to help inform policy decisions (e.g. Reform of Pillar 1 and Pillar 2 of Common Agricultural Policy) and to help monitor and evaluate current policies relating to agriculture in the United Kingdom. It also informs wider research into the economic performance of the agricultural industry. The data are provided to the EU as part of the Farm Accountancy Data Network (FADN) and are also used widely by the industry for benchmarking purposes.

## 3.1 Survey content and methodology

The FBS is an annual survey providing information on the financial position and physical and economic performance of farm businesses in England. The sample of farm businesses covers all regions of England and all types of farming with the data being collected by face to face interview with farmers. Results are weighted to represent the full population of farm businesses that have at least 25 thousand Euros of standard output<sup>8</sup> as recorded in the annual June Survey of Agriculture and Horticulture. In 2018, this accounted for approximately 57,100 farm businesses. In 2016 the sample was reduced from 1,800 to 1,750 farm businesses.

For further information about the FBS please see: <a href="https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey">https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey</a>

#### 3.2 Data analysis

The results from the FBS relate to farms which have a standard output of at least 25,000 Euros. Initial weights are applied to the FBS records based on the inverse sampling fraction for each design stratum (farm type by farm size). Table 4.1 shows the distribution of the sample compared with the distribution of businesses from the 2019 June Survey of Agriculture and Horticulture. These initial weights are then adjusted (using calibration weighting<sup>9)</sup> so that they can produce unbiased estimates of a number of different target variables.

## 3.3 Accuracy and reliability of the results

In common with other statistical surveys, the published estimates of income from the FBS are subject to sampling error, as we are not surveying the whole population. We show error bars based on 95% confidence intervals for mean FBI as a measure

<sup>8</sup> For a definition of standard output please see the UK classification document here <a href="https://www.gov.uk/farm-business-survey-technical-notes-and-guidance">https://www.gov.uk/farm-business-survey-technical-notes-and-guidance</a>

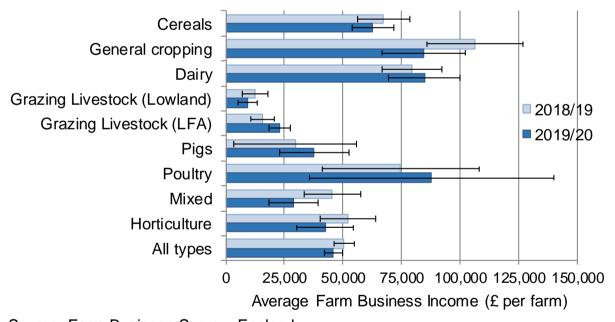
<sup>&</sup>lt;sup>9</sup> Further information on calibration weighting can be found here: https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

of uncertainty that may apply to the estimated means. These error bars show the range of values that may apply to the figures. They mean that we are 95% confident that this range contains the true value. They are calculated as the standard errors (se) multiplied by 1.96 to give the 95% confidence interval (95% CI). Standard errors (and therefore confidence intervals) only give an indication of the sampling error. They do not reflect any other sources of survey errors, such as non-response bias.

For the FBS, the confidence limits shown are appropriate for comparing groups within the same year only; they should not be used for comparing with previous years since they do not allow for the fact that many of the same farms will have contributed to the FBS in both years.

Figure 3.1 shows average FBI split by farm type, with 95% confidence limits as range bars around the averages. The smaller range of possible values that could apply to grazing livestock, dairy, cereal and mixed farms types reflects relatively large sample sizes and the relative homogeneity of these sectors in terms of the range of income levels across the farms in each of these types.

Figure 3.1: Average FBI by farm type, with 95% confidence limits, England 2018/19 and 2019/20



Source: Farm Business Survey, England.

The range of values that could apply to general cropping and horticulture farm types reflect a more diverse range of agricultural activities, e.g. general cropping is made up of arable crop and field scale vegetable producers, while horticulture includes specialist fruit producers, hardy nursery stock and fruit and vegetables grown in glasshouses. As a result these sectors are less homogeneous in terms of income levels.

Confidence limits for specialist pig and poultry farms are affected by the relatively small samples and a huge range in scale of production. Individual farms can have a large influence on the results. In 2018/19, the average income for specialist pig farms was influenced by a small number of new farms joining the survey, which were not part of the sample in 2019/20. In 2019/20, there was also a particularly influential poultry farm in the sample. Reweighting this farm so it only represents itself in the results would reduce average Farm Business Income for specialist poultry farms to £67,900. For more information on weighting see Section 3.1

#### 3.4 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 statistics last underwent a full assessment [Assessment Report 271 Statistics on Agriculture] against the Code of Practice for Statistics in 2014. Since the last review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics across the FBS.

## 3.5 Availability of results

Detailed tables covering income, outputs and costs for each farm type can be found here <a href="https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey">https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey</a>

Defra statistical notices can be viewed on the Food and Farming Statistics pages on the Defra website at: <a href="https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics">https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics</a>. This site also shows details of future publications, with pre-announced dates.

#### 3.6 User engagement

As part of our ongoing commitment to compliance with the Code of Practice for Official Statistics (<a href="http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a>) 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 contact 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 statistical release and enquiries about these statistics are also welcome.

Please contact Alison Wray at: fbs.queries@defra.gov.uk .

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## Section 4: Classification of survey farms by type of farming and size of business

## 4.1 Standard Outputs and Standard Labour Requirements

A revised classification of farm types was introduced in 2010/11 based on Standard Outputs, which caused changes to the distribution of farms by farm type. Further details of the revised classification and its effect on the FBS sample can be found at: https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

At the same time, the lower size threshold for the FBS was changed from 0.5 Standard Labour Requirements (SLR) (in annual full-time equivalents) to a standard output of 25,000 euros. Therefore, the results published here relate to farms for which the total standard output from cropping and stocking activities is at least 25,000 euros.

The SLR of a farm represents the normal labour requirement, in Full Time Equivalents, for all the enterprises on a farm under typical conditions. The SLR for a farm is calculated from standard coefficients applied to each enterprise on the farm. The standard coefficients represent the input of labour required per head of livestock or per hectare of crops for enterprises of average size and performance.

Farms in the sample are grouped by type of farm based on the EC system of classification defined by Commission Regulation 1242/2008 (with minor modifications to adapt it to United Kingdom conditions). This classification system uses Standard Outputs per hectare of crop area and per head of livestock estimated over a 5 year period. For 2013/14 (in line with the EU regulation), Standard Outputs were recalculated for the period 2008-2012 (referred to as 2010 Standard Outputs). From 2018/19, the classification of farms is based on 2013 standard output coefficients. 2017/18 results have been recalculated and presented in this release to allow comparability between 2017/18 and 2018/19. The results published here are therefore not directly comparable with those published in earlier years which are based on previous standard output coefficients.

The Standard Output (SO) is a financial measure used to classify farm type. Standard outputs measure the total value of output of any one enterprise - per head for livestock and per hectare for crops. For crops, this is the main product (e.g. wheat, barley, peas) plus any by-product that is sold, for example straw. For livestock it is the value of the main product (milk, eggs, lamb, pork) plus the value of any secondary product (calf, wool) minus the cost of replacement. Until 2010, standard gross margins were used for the classification of farms. Standard outputs and standard gross margins differ in that no variable costs are deducted in the derivation of standard outputs. Each farm is assigned a total SO by aggregating the SOs for its agricultural enterprises. The farm is classified into a 'particular' type of farming by evaluating the proportion of its total SO deriving from different enterprises.

In the EC typology the particular types are grouped into seventeen principal types. The latter are not entirely suitable for use in the United Kingdom and alternative groupings have therefore been adopted for the FBS. <u>Table 4.1</u> shows how the constituent EC particular types are grouped to give twenty main types and nine robust types.

The varied nature of the definitions used for the EC particular types of farming does not permit a simple description to be given of all of the main types adopted in the Survey but the chief characteristics may be summarised as follows:

- Cereals: farms on which cereals, oilseeds, peas and beans harvested dry
  account for over two-thirds of their total SO (holdings with more than twothirds of their total SO in set-aside are excluded from the survey results).
- General cropping: Farms with over two-thirds of their total SO in arable crops (including field scale vegetables) or a mixture of arable and horticultural crops; and holdings where arable crops account for more than one-third of total SO and no other grouping accounts for more than onethird.
- Dairy: farms where the dairy enterprise, including followers, accounts for over two-thirds of their total SO.
- LFA grazing livestock: farms with more than two-thirds of their total SO in cattle and sheep except holdings classified as dairy. A farm is classified as in the LFA if 50 percent or more of its total area is in the EC Less Favoured Area (both Disadvantaged and Severely Disadvantaged).
- Lowland grazing livestock: farms with more than two-thirds of their total SO in cattle and sheep except holdings classified as dairy. A farm is classified as "lowland" if less than 50 percent of its total area is in the EC Less Favoured Area.
- Specialist pigs: farms on which pigs account for over two-thirds of their total SO.
- Specialist poultry: farms on which poultry account for over two-thirds of their total SO.
- Mixed: farms where crops account for one-third, but less than two-thirds of total SO and livestock accounts for one-third, but less than two-thirds of total SO. It also includes holdings with mixtures of cattle and sheep and pigs and poultry and holdings where one or other of these groups is dominant, but does not account for more than two-thirds of the total SO.

#### 4.2 Less Favoured Area Classification

The Less Favoured Areas (LFA) classification was established<sup>10</sup> in 1975 as a means to provide support to mountainous and hill farming areas. Within the LFA are the Severely Disadvantaged Areas (SDA) and the Disadvantaged Areas (DA). The SDA are more environmentally challenging areas and largely upland in character. A map showing the LFA, SDA and DA can be seen in Figure 4.1.

Farm business size in the United Kingdom is measured in SLR expressed in terms of full-time equivalents. Four size groups are defined for this report:

Part-time (less than 1 SLR)

Small (greater than or equal to 1 less than 2 SLRs)

Medium (greater than or equal to 2 less than 3 SLRs)

Large (greater than or equal to 3 SLRs)

## 4.3 Economic and physical farm size

The average economic and physical sizes of farms as estimated from the FBS sample and as recorded in the June Survey are shown according to type of farming and size in <a href="Table 4.2">Table 4.2</a> at the end of Section 4. Such comparisons cannot be exact because there are some differences of detail between classification procedure in the FBS and that used in the analyses of holdings in the June Survey. In the analyses of the June Survey, standard outputs are applied to the cropping and stocking as recorded on the survey day whilst in the FBS they are applied to the hectares of crop and average numbers of livestock over the year as a whole. Moreover, in the FBS, the minimum unit is a whole farm business, which may comprise more than one holding, while in the June Survey the holdings making up a farm may be treated separately.

### 4.4 Economic performance

Economic performance for each farm is measured as the ratio between economic output (mainly sales revenue) and inputs (costs). The inputs for this calculation include an adjustment for unpaid manual labour. The higher the ratio, the higher the economic efficiency and performance. The farms are then ranked and allocated to performance bands based on economic performance percentiles:

Low performance band - bottom 25 percent of economic performers.

Medium performance band - middle 50 percent of performers.

High performance band - top 25 percent of performers.

-

<sup>&</sup>lt;sup>10</sup> Council Directive 75/268/EEC.

Table 4.1: UK farm classification

UK farm classification system (revised 2010): composition of robust, main and other farm types by constituent EC type

Robust types (a)	Main types	EC farm types
1. Cereals	1. Cereals	151
2. General cropping	2. General cropping	161, 162, 163, 166, 613, 614, 615, 616
3. Horticulture	3. Specialist fruit	361
	4. Specialist glass	211, 212, 213
	5. Specialist hardy nursery stock	232
	6. Other horticulture	221, 222, 223, 231, 233, 351, 352, 353, 354, 362, 363, 364, 365, 380, 611, 612
4. Specialist pigs	7. Specialist pigs	511, 512, 513
5. Specialist poultry	8. Specialist poultry	521, 522. 523
6. Dairy	9. Dairy (LFA)	450 (LFA)
	10. Dairy (Lowland)	450 (non-LFA)
7. LFA grazing livestock	11. Specialist sheep (SDA)	481 (SDA)
	12. Specialist beef (SDA)	460 (SDA)
	13. Mixed grazing livestock (SDA)	470, 482, 483, 484 (SDA)
	14. Various grazing livestock (DA)	460, 470, 481, 482, 483, 484 (DA)
8. Lowland grazing livestock	15. Various grazing livestock (Lowland)	460, 470, 481, 482, 483, 484 (Lowland)
9. Mixed	16. Cropping and dairy	831, 832
	17. Cropping, cattle and sheep	833, 834
	18. Cropping, pigs and poultry	841
	19. Cropping and mixed livestock	842, 843, 844
	20. Mixed livestock	530, 731, 732, 741, 742
	21. Non-classifiable holdings	

<sup>(</sup>a) EC Typology described in Commission Regulation 1242/2008.

<sup>(</sup>b) Not included in Farm Business Survey results.

Figure 4.1: Regional boundaries used within tables

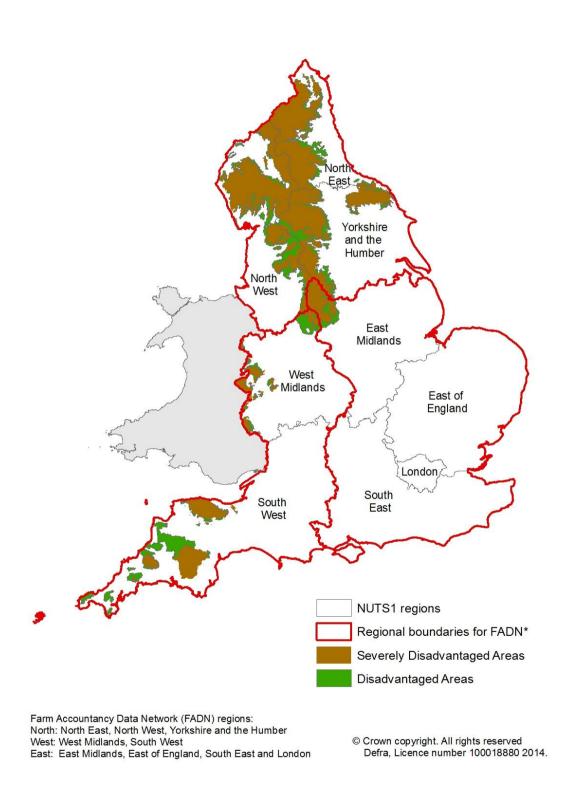


Table 4.2: Farm Business Survey 2019/20: Sample Characteristics - England by size groups<sup>(a)</sup>

Type of Farming	Size	Number of	Number of Businesses at	Average Size of Business by Standard Labour Reguirement		Average Total Area (hectares)	
		Businesses in Sample	June Survey 2019	Sample	June Survey 2019	Sample	June Survey 2019
Cereals	Part-Time	90	6,841	0.7	0.5	80	72
	Small	107	3,428	1.5	1.4	170	173
	Medium	63	1,568	2.4	2.4	267	280
	Large	83	2,158	5.7	5.7	579	618
	All Sizes	343	13,995	1.7	1.8	181	205
General Cropping	Part-Time	11	1,906	0.6	0.5	55	97
	Small	22	1,208	1.5	1.5	129	113
	Medium	21	806	2.5	2.4	175	162
	Large	79	1,823	10.0	10.0	464	424
	All Sizes	133	5,743	3.7	4.0	208	213
Dairy <sup>(b)</sup>	Part-Time Small Medium	23 35	740 834	1.6 2.5	1.4 2.5	60 79	49 76
	Large	170	4,106	6.8	7.0	190	176
	All Sizes	228	5,680	6.0	5.6	168	145
Lowland Grazing Livestock (c)	Part-Time	55	5,926	0.8	0.6	51	44
	Small	84	3,755	1.5	1.4	83	71
	Medium	66	1,460	2.5	2.4	110	113
	Large	75	1,586	5.5	5.7	258	272
	All Sizes	280	12,727	1.6	1.7	87	88
LFA Grazing Livestock (c)	Part-Time	19	2,895	0.7	0.6	65	62
	Small	52	1,862	1.5	1.4	115	128
	Medium	44	940	2.5	2.5	171	230
	Large	87	1,145	5.8	5.2	411	532
	All Sizes	202	6,842	2.3	1.9	168	182
Specialist Pigs <sup>(b)</sup>	Part-Time Small Medium	8 13	569 252	1.1 2.5	0.9 2.4	16 48	16 31
	Large	45	554	14.6	15.0	146	126
	All Sizes	66	1,375	6.1	6.8	65	63
Specialist Poultry	Part-Time	7	459	0.7	0.5	16	14
	Small	14	252	1.5	1.4	23	22
	Medium	20	227	2.4	2.5	20	35
	Large	55	697	11.8	14.0	92	101
	All Sizes	96	1,635	6.4	6.7	55	55
Mixed	Part-Time	17	2,134	0.7	0.6	68	47
	Small	32	1,373	1.5	1.5	101	96
	Medium	39	834	2.4	2.4	136	145
	Large	77	1,611	6.4	6.6	331	340
	All Sizes	165	5,952	2.8	2.7	162	151
Horticulture	Part-Time	14	417	0.8	0.7	7	16
	Small	20	543	1.4	1.5	11	15
	Medium	10	458	2.3	2.4	8	20
	Large	107	1,154	14.7	17.1	38	81
	All Sizes	151	2,572	7.8	8.5	23	46
All Types	Part-Time	217	21,137	0.7	0.6	62	59
	Small	358	13,171	1.5	1.4	110	108
	Medium	311	7,379	2.5	2.5	149	157
	Large	778	14,834	7.9	8.3	288	314
	All Sizes	1,664	56,521	3.0	3.0	144	150

<sup>(</sup>a) The estimates shown in this publication are based on sample results weighted by type and by size.

<sup>(</sup>b) 'Part-Time' and 'Small' sizes merged due to very low respective sample numbers.

<sup>(</sup>c) Lowland Grazing Livestock and LFA Grazing Livestock farm types exclude specialist horse enterprises.

## Section 5: Notes on tables, definitions of FBS survey terms

## 5.1 Accounting years

To ensure consistency in harvest/crop year and commonality of subsidies within any one FBS year, only farms which have accounting years ending between 31 December and 30 April inclusive are allowed into the survey. (For Scotland, accounting years up to 31 May are allowed).

The FBS accounting year for an individual farm in the survey is normally the same as the tax year for that business (for convenience in compiling the account). The tax year will normally be chosen by the farmer, not the tax authorities.

Aggregate results are presented in terms of an accounting year ending at end-February, the approximate average of all farms in the FBS. Thus the results relate, on average, to March - February years

## 5.2 Business Outputs, Inputs, Costs and Income

- Farm business income for sole traders and partnerships represents the financial return to all unpaid labour (farmers and spouses, non-principal partners and directors and their spouses and family workers) and on all their capital invested in the farm business, including land and buildings. For corporate businesses it represents the financial return on the shareholders capital invested in the farm business. Note that prior to 2008/09 directors remuneration was not deducted in the calculation of FBI. It is used when assessing the impact of new policies or regulations on the individual farm business. Although FBI is equivalent to financial Net Profit, in practice they are likely to differ because Net Profit is derived from financial accounting principles whereas FBI is derived from management accounting principles. For example in financial accounting output stocks are usually valued at cost of production, whereas in management accounting they are usually valued at market price. In financial accounting depreciation is usually calculated at historic cost whereas in management accounting it is often calculated at replacement cost.
- Farm corporate income represents the return on own capital invested in the farm business, to risk and to entrepreneurship. It is derived by deducting unpaid labour, both manual and managerial, from FBI. This allows the profitability of sole traders and partnerships to be compared directly with that of companies. Currently we are able to deduct an estimate of unpaid manual labour but not of unpaid managerial labour and so the data are only approximate. However, we plan to undertake a research project to produce a method for deriving an estimate of unpaid managerial labour, so that we can produce better data for this measure in future.

- Farm investment income represents the return on all capital invested in the farm business whether borrowed or not, to risk and to entrepreneurship. It is a general measure of the profitability of farming as an activity rather than of a particular business. It is derived by adding net interest payments to Farm Corporate Income. Since currently the data for Farm Corporate income are only approximate, so too are the data for Farm Investment Income.
- Net Farm Income (NFI) is intended as a consistent measure of the profitability of tenant-type farming<sup>11</sup> which allows farms of different business organisation, tenure and indebtedness to be compared. It represents the return to the farmer and spouse alone for their manual and managerial labour and on the tenant-type capital<sup>12</sup> invested in the farm business.

To represent the return to farmer and spouse alone, a notional deduction is made for any unpaid labour provided by non-principal partners and directors, their spouses and by others; this unpaid labour is valued at average local market rates for manual agricultural work.

To confine the measure to the tenant-type activities and assets of the business, an imputed rent is deducted for owner-occupied land and buildings and for landlord-type improvements made by the tenant. No deduction is made for interest payments on any farming loans, overdrafts or mortgages; interest earned on financial assets is also excluded.

• Cash income is the difference between total revenue and total expenditure. Revenue is: receipts adjusted for debtors; and expenditure is: purchases adjusted for creditors. It is assumed, therefore, that all end of year debtor and creditor payments are settled in full, even though this may happen beyond the end of the accounting year. Cash income represents the cash return to the group with an entrepreneurial interest in the business (farmers and spouses, non-principal

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<sup>&</sup>lt;sup>11</sup> Tenant-type farming was never conceived of as including non-agricultural activities on farm (using farm resources) except perhaps for value added activities such as small-scale food processing, e.g. sales of farm produced butter and cream and retail sales of farm produced liquid milk. However, recent research has revealed that many of the more varied non-agricultural activities which have been increasing on farms over the years have been inadvertently included in the calculation of NFI, with the result that about three-quarters of non-agricultural activities on farm by value are currently included and one-quarter excluded, without any clear basis for this division. Although this means that the definition of NFI has become untenable on the current basis, it has been decided to continue with historical practice for reasons of continuity, rather than to change the definition, pending the introduction of a wider measure to include all on-farm business activities.

<sup>&</sup>lt;sup>12</sup> Tenant-type capital comprises livestock, machinery, crops in store, stocks of consumables, work in progress, orchards, other permanent crops, glasshouses, cash and other assets needed to run the business. It does not include land and buildings.

- partners and directors and their spouses and family workers) for their manual and managerial labour and on all their investment in the business.
- Family farm income is given in Tables 1.4, 2.4 and 3.4. It is a measure of farm income used by the European Commission. It is based upon actual tenure and indebtedness. However, it is a broader measure than net farm income in that it represents the return to all unpaid labour (farmers and spouses, non-principal partners and directors and their spouses and family workers). It also includes breeding livestock stock appreciation although it cannot be realised without reducing the productive capacity of the farm.

## 5.3 Cropping, Stocking and Labour tables

- **Utilised agricultural area** is the crop area, including fodder, set-aside land, temporary and permanent grass and rough grazing in sole occupation (but not shared rough grazing) i.e. the agricultural area of the farm. It includes bare land and forage let out for less than one year.
- Total area of farm is the utilised agricultural area plus woodland and other areas
  of the farm not used for agriculture (e.g. buildings, roads, water, household
  gardens).
- **Total tillage** comprises the utilised agricultural area, plus bare land and forage hired in from others in the accounting period, minus temporary and permanent grass and rough grazing in sole occupation (but not shared rough grazing).
- **Total area farmed** comprises the total area of the farm minus woodlands and buildings, etc. plus net land hired in.
- Adjusted utilised agricultural area comprises the utilised agricultural area with rough grazing in sole occupation converted to a permanent pasture equivalent.
- **Stocking** figures are the average annual level of stocking based on estimated average livestock numbers on the farm for the year, including fractions for livestock on the farm for less than a year.
- Total livestock units are used as an approximate measure of stocking intensity
  and are based on the estimated energy requirements of different species and
  ages of livestock. The factors used are set out in Appendix 2 of 'Farm Incomes in
  the United Kingdom 1999/00'.
- Annual labour units (ALU) are the estimated number of full time worker
  equivalents of persons working on the holding during the year. Part-time workers
  are converted to full-time equivalents in proportion to their actual working time
  related to that of a full-time worker. One ALU represents one person employed
  for 2,200 hours.

## 5.4 Outputs, Inputs and Farm Business Income tables

## **5.4.1 Agricultural output**

Agricultural output is the main measure of individual crop and livestock output. It comprises:

- Crop enterprise output, which is the total value of crops produced by the farm (other than losses in the field and in store). It includes crops used for feed and seed by the farm business and those consumed in the farmhouse and by farm labour. Crop enterprise output is calculated on a "harvest year" as distinct from an "accounting year" basis; that is, it refers only to those crops (with the exception of certain horticultural crops) wholly or partly harvested during the accounting year and excludes any crop carried over from the previous year. Thus valuation changes (between the previous and current crops) are not relevant and the total harvested yield of the crop is valued at market prices (plus any subsidies). However, any difference between the opening valuation of any stocks of previous crops and their ultimate disposal value (sales, used on farm and any end-year stocks) is included in total farm output.
- By-products, forage and cultivations, which cover the value of output of the by-products of agricultural activity, sales of fodder, valuation changes for fodder and cultivations. It also covers revenue from the letting of bare land or forage on a short-term lease.
- Livestock enterprise output comprises the total sales of livestock and livestock products including direct livestock subsidies and production grants received, part of the valuation change (see below), produce consumed in the farmhouse and by labour and the value of milk and milk products fed on the farm (excluding direct suckling) adjusted for debtors at the beginning and end of the year (except for direct livestock subsidies) and transfers between enterprises; less purchases of livestock and livestock products from outside the farm business. Stock appreciation for breeding livestock (cattle, sheep and pigs see paragraph 17) has been excluded from individual livestock enterprise outputs. However, changes in the numbers of breeding livestock between the opening and closing valuation and the total valuation change of trading livestock are included. Unlike crop enterprise output, livestock enterprise output is calculated on an accounting year basis.
- Miscellaneous output covers the value of output from those activities which are still within the agricultural cost centre but do not fall within either livestock or crop enterprise output. These will include revenue from wayleaves, agricultural hirework, sundry woodland sales, contract farming rent, miscellaneous insurance receipts and compensation payments.

#### 5.4.2 Agricultural costs

Agricultural costs comprise payments and the estimated value of non-cash inputs, including home-grown feed and seed, adjusted for changes in stocks and creditors between the beginning and end of the year.

- Total variable costs are taken to be costs of feed, veterinary fees and medicines, other livestock costs, seeds, fertilisers, crop protection and other crop costs.
- Purchased concentrate feed and fodder represents expenditure on feeds and feed additives, including charges for agistment and rented keep
- Home-grown concentrate feed and fodder: includes ex-farm value of all home produced cereals, beans, milk (excluding direct suckling), etc. fed on the farm both from the current and previous years' crops.
- Veterinary fees and medicines consists of veterinary fees and the cost of all medicines.
- Other livestock costs comprise of straw bought specifically for costs bedding materials, breeding costs (including Al and stud fees), miscellaneous dairy expenses, disinfectants, marketing and storage costs of animal products, Milk Development Council levy and other livestock costs not separately identified.
- Purchased and home-grown seeds comprise of expenditure on purchased seeds, plants and trees adjusted for changes in stocks. Home-grown seed from the previous crop is included and charged at estimated market price: any seeds from current crops and sown for a succeeding crop are excluded, but are included in the closing valuation of the crop and hence in enterprise output. This enables the value of home-grown seed used in the production of the current crop to be identified.
- **Fertilisers** include lime, fertilisers and other manures, and is adjusted for changes in stock. Fertilisers sown for next year's crops are treated as if they were still in store and are included in the closing valuation.
- **Crop protection** include costs of pre-emergent sprays, fungicides, herbicides, dusts and insecticides and other crop sprays.
- Other crop costs comprise of all crop inputs not separately specified, e.g. marketing charges, packing materials, British Potato Council levy, baling twine and wire (though not fencing wire).
- **Total fixed costs** are the costs of labour, machinery, contract work, land and buildings, other general farming costs and depreciation.

- Labour (excluding farmer and spouse) comprises of wages and employer's insurance contributions, payments in kind, and salaried management. To calculate net farm income an imputed charge for unpaid labour is made, excluding that of the farmer and spouse, valued at the rate of comparable paid labour. The value of the manual labour of the farmer and spouse is not charged as an input in calculating net farm income (i.e. it is a component of net farm income).
- Contract costs include expenditure on work carried out by agricultural contractors, including the costs of materials employed, such as fertilisers, unless these can be allocated to the specific heading. Costs of hiring machines to be used by the farm's own labour are also included. Expenditure on contract labour is only included here if it is associated with the hiring of a machine. Otherwise it is entered under (casual) labour.
- **Machinery running costs** represent the cost of machinery and equipment repairs, fuel and oil and car mileage expenses. They exclude depreciation.
- Land and building inputs, for the calculation of FBI these comprise any
  rent paid, insurance, rates and repairs to land and buildings incurred by the
  whole business. In the derivation of net farm income land and building costs
  also include an imputed rental charge for owner occupiers but exclude those
  costs associated with land ownership such as the insurance of farm
  buildings, and landlord-type repairs and upkeep.
- Depreciation of machinery, glasshouses and permanent crops.
   Depreciation provisions in respect of machinery, glasshouses and permanent crops (e.g. orchards) are shown on a current cost basis. The rates of depreciation used (generally on a diminishing balance basis for machinery and straight line for glasshouses and permanent crops) are intended to reflect the degree of deterioration of the assets.
- Other general farming costs consist of electricity, heating fuel, water for all farming purposes, insurance (excluding labour and farm buildings), bank charges, professional fees, vehicle licences, and other miscellaneous expenses not recorded elsewhere.
- Interest payments are interest charges on loans taken out for business purposes, net of interest receipts on monies invested temporarily outside the business, are deducted in the calculation of FBI.
- Depreciation of buildings and works are calculated on a current cost basis (generally on a straight line basis over 10 years) with an adjustment to allow for the effect of capital grants.

## 5.4.3 Breeding livestock appreciation (BLSA)

Breeding livestock appreciation represents the change in market prices of breeding cattle, sheep and pigs between the opening and closing valuations. It is not included in the calculation of FBI but is shown separately within dataset Table 5.

#### 5.5 Balance Sheet tables

- Total fixed assets include milk and livestock quotas, as well as land, buildings, breeding livestock, and machinery and equipment. For tenanted farmers, assets can include farm buildings, cottages, quotas, etc., where these are owned by the occupier.
- Liquid assets comprise cash and sundry debtors.
- Bank term loans and other long and medium term loans are loans which exceed 12 months.
- Net Worth represents the residual claim or interest of the owner in the business.
   It is the balance sheet value of assets available to the owner of the business after all other claims against these assets have been met.

## 5.6 Yields and Implied Output Prices

- Crop yields are calculated as total production divided by crop area.
- Implied output prices are average unit returns excluding direct subsidies. For crops they are calculated by dividing the value of sales, closing stocks, farm house consumption, benefits in kind and own-produced feed by total production. Sales are value at prices actually received at the farm gate before the deduction of marketing charges paid direct by the farmer such as drying and cleaning costs. More detailed information about sales volumes is collected for livestock and, in this case, the unit returns refer to sales of livestock including casualties. In both cases, any compensation payments or insurance payouts for output produced in the current year and destroyed are included.

#### 5.7 Flow of Funds Statement

• The Flow of Funds Statement demonstrates how funds have been generated by the business (source of funds) and where these funds have been spent (disposal of funds). It shows the importance of Net Farm Income as a source of funds compared to other sources such as sales of property, changes in loans outstanding and other funds introduced (e.g. from a private source). To derive the amount of cash funds generated by the business a number of adjustments are made to net farm income; specifically depreciation, imputed costs and unpaid labour costs are added back to net farm income. The total cash sources are

completed by adding in sales of property, changes in loans outstanding and transfers into the business of funds from outside. The disposals show how the funds have been spent, for example purchase of property and quotas, capital expenditure and private drawings. The difference between the sources and disposals is a surplus if total sources are greater than total disposals and a deficit if total disposals are greater than total sources.

 The reconciliation of the flow of funds shows how the surplus or deficit has been distributed in terms of financial assets and financial liabilities, i.e. the change between the opening and closing valuations in terms of bank balance, cash-in-hand, debtors and creditors.

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