



Farmer's Intentions: Results from the Farm Business Survey, England 2014/15 (livestock farms)

In 2014/15, the Farm Business Survey (FBS) collected data from a subset of livestock (dairy, LFA and lowland grazing livestock, pigs and poultry) farms within the main survey. This data covered farmers' aspirations and plans for 2016 and 2017 for the whole business and for individual enterprises, the strength of these intentions and the reasons behind them. It also included any innovations or new practices adopted by the business in 2015. This will be the final publication of this series as data will no longer be collected within the Farm Business Survey. Key results are given below.

Major changes to the farm business

- Around half of livestock farms (49%) planned to carry out a major change to the business in 2016 or 2017. Major changes were more likely for dairy and lowland grazing livestock farms and/or for those with a net worth of at least £2 million.
- For those planning a change, the most common reason given was to increase profitability (67%).
- The most common changes planned were to production levels on agricultural enterprises (35%) and to output on diversified enterprises (13%). The strength of intention for carrying out these changes was relatively strong; 45% and 53% (respectively) of those planning to make these changes indicated that plans were well developed and the changes were almost certain to be implemented.

Enterprise level changes

- Major changes to agricultural enterprises were more likely to involve increasing an existing enterprise (by at least 10%) than reducing, stopping or commencing something new. Milk enterprises were most likely (40%) to have major changes planned (largely to increase production); combinable crop enterprises were least likely (15%).
- Very few livestock farms (6%) had an existing enterprise that added value by selling direct to customers or by processing (e.g. packaging, butchering, on-farm cheese production). Of those that did, 22% planned a major change in 2016 or 2017.

Enquiries on this publication to: Katherine Merrett or Chris Silwood, Department for Environment, Food and Rural Affairs. Tel: ++ 44 (0)20 8026 3463 or ++ 44 (0)20 8026 2899, email: FBS.queries@defra.gsi.gov.uk.

An Official Statistics publication

Defra official statistics are produced to the high professional standards set out in the Code of Practice for Official Statistics.

- Around 13% of livestock businesses planned a major change to a diversification enterprise within the next two years. The planned change was largely to increase an existing enterprise (7% of livestock businesses) or to start a new enterprise (6%). The most common new enterprise type was tourism activities.

Major investment in the farm business

- Just over a third (36%) of livestock farms planned a major investment in their business in 2016 or 2017. Farms in the south of the country and dairy and pig farms were more likely to have planned a major investment.
- The most common area for investment was in buildings (19%).

Innovation

- Around a quarter of livestock businesses (27%) had introduced some form of new or innovative practice in the 12 months to November 2015.
- Of those livestock business that had introduced a new or innovative practice, 44% had introduced specialist equipment. For 39%, the new practice was linked to business practices and for 17% linked to livestock husbandry. Nine percent had introduced a new practice related to renewable energy or water management and for 7% the new practice was linked to crop husbandry.

Detailed results

Information about farmers' aspirations and plans for the future is important in helping to assess where the industry is going, which, in turn, can help shape policy decisions. It is important, for example, in the context of structural change, CAP reform, food production issues and developments in the environmental footprint of farming.

It is not easy to obtain reliable data on farmers' intentions. The Farm Business Survey (FBS) was identified as a good research medium to collect this information and additional questions were included for the first time within the 2010/11 campaign. By using the FBS, relationships can be explored between farmers' intentions and farm type, size, profitability and location. This is the last year for which this data will be collected.

This information will also be of help to farmers, enabling them to have a clearer idea of where the industry is heading. With this information they can better decide whether their businesses and activities are in-line with the intentions of others in the industry, whether they wish to continue along their current path, or whether they wish to pursue a different approach to their business.

The data used in this analysis was collected by telephone in November 2015 from a subset of 411 livestock¹ farms taking part in the 2014/15 FBS. Completion was voluntary. The Farm Business Survey covers those farms with at least 25 thousand euros of standard output. Given the small sample size and the type of the questions that were asked, it is not possible to draw conclusions about the population based on this data. The survey data has therefore not been weighted.

¹ Dairy, LFA grazing livestock, lowland grazing livestock, pigs and poultry farms.

This release provides the main results from the survey together with [confidence intervals](#). A full breakdown of results, by farm type, farm size, region, farm tenure, farmer's age, net worth and farm economic performance can be found at: <https://www.gov.uk/government/collections/farm-business-survey#documents>.

Regression models were fitted to the key "high level" survey question results to help determine the main factors driving responses. In each case seven factors were considered - farm type, farm size, region, net worth, economic performance, farmer's age and farm tenure.

1 Major changes to the farm business

Key findings:

- Around half of livestock farms (49%) planned to carry out a major change to the business in 2016 or 2017. Major changes were more likely for dairy and lowland grazing livestock farms and/or for those with a net worth of at least £2 million.
- For those planning a change, the most common reason given was to increase profitability (67%).
- The most common changes planned were to production levels on agricultural enterprises (35%) and to output on diversified enterprises (13%). The strength of intention for carrying out these changes was relatively strong; 45% and 53% (respectively) of those planning to make these changes indicated that plans were well developed and the changes were almost certain to be implemented.

Farmers were asked about any major changes that they intended to make to their business in 2016 or 2017. A major change was defined as being an intention, aspiration or plan that would lead to a change in the land use of that business, the output generated from the business, the economic efficiency of the business, or the strategic direction/continuation of the business. Changes planned to individual agricultural (e.g. milk, beef, sheep, etc.) and diversified enterprises are explored further in [section 2](#).

Farmers were also asked to provide an indication of their strength of intention to carry out this change and the reason for the change.

Strength of intention	Definition
Low	Planning underway, most details still to be sorted out
Medium	Most elements in place, some details still to be sorted out
High	Very well developed plans, almost certain to go ahead

Around half of livestock businesses (49%) planned to undertake a major change in 2016 or 2017 (Table 1). The most common planned changes were to production levels on agricultural enterprises (35%) and to output on diversified enterprises (13%). See [section 2](#) for further detail. The strength of intention was strong with 45% and 53% (respectively) of those planning these two types of change stating that plans were well developed and would almost certainly be implemented.

Table 1: Type of change planned^(a) in 2016 or 2017 and strength of intention

Types of change	Percentage of livestock businesses ^(b) (%)	Strength of intention		
		Low	Med	High
No major change identified	51 (±5)	Not collected		
Start, end or change production by at least 10% on any individual agricultural enterprise ^(c)	35 (±5)	14	41	45
Start, end or change output by at least 10% on any diversification enterprise ^(c)	13 (±3)	24	24	53
Increase farmed area/business by 10%	11 (±3)	39	25	36
Other major change to whole business	6 (±2)	17	35	48
Change management control of at least 10% of farmed area/business	5 (±2)	38	24	38
Fully or semi-retire by reducing time spent on farm work by at least 50%	5 (±2)	30	35	35
Decrease farmed area/business by 10%	3 (±2)	36	21	43
Switch to significantly more intensive methods of production	3 (±2)	Insufficient data		
Start, end or change output by at least 10% on any specific value added enterprise ^(c)	2 (±1)	Insufficient data		
Switch to significantly less intensive methods of production	2 (±1)	Insufficient data		

Source: Farm Business Survey, England 2014/15.

Based on responses from 411 livestock businesses.

(a) Farm businesses could select more than one option.

(b) 95% confidence intervals shown in brackets below estimate.

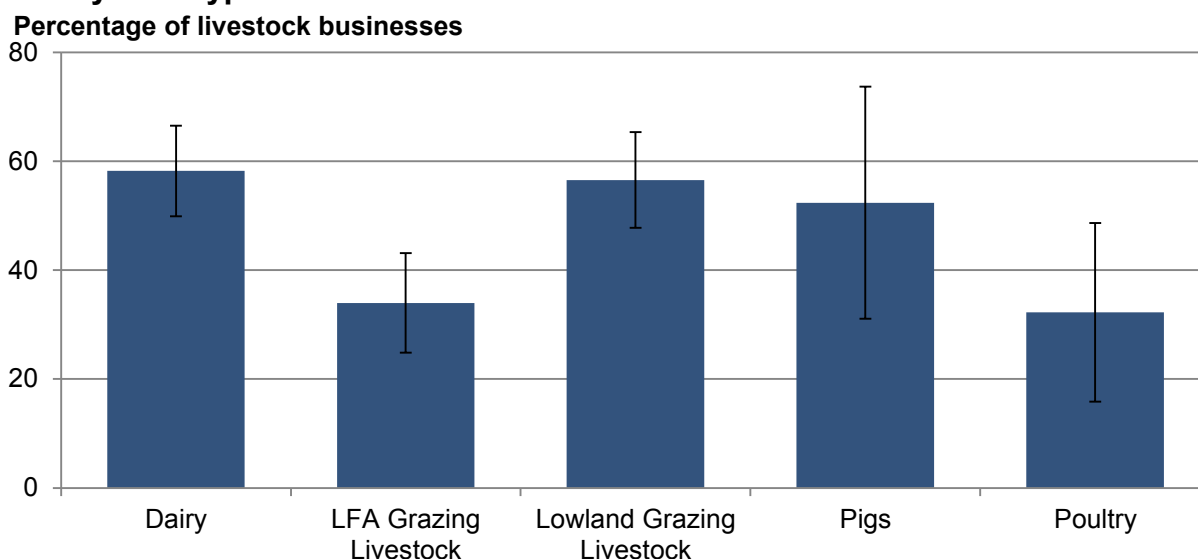
(c) Further details are given in [section 2](#) about the enterprise level changes.

The likelihood of making a major change to the farm business was significantly² related to farm type and net worth. Dairy (58%) and lowland grazing livestock farms (57%) were more likely to have planned a major change within the next two years (Figure 1), whilst poultry (32%) and LFA grazing livestock (34%) farms were less likely. Livestock

² A generalised linear regression model was fitted to examine which factors (farm type, farm size, region, farm tenure, farmer age, net worth and farm performance) were significant. Farm type and net worth were significant at the 5% level.

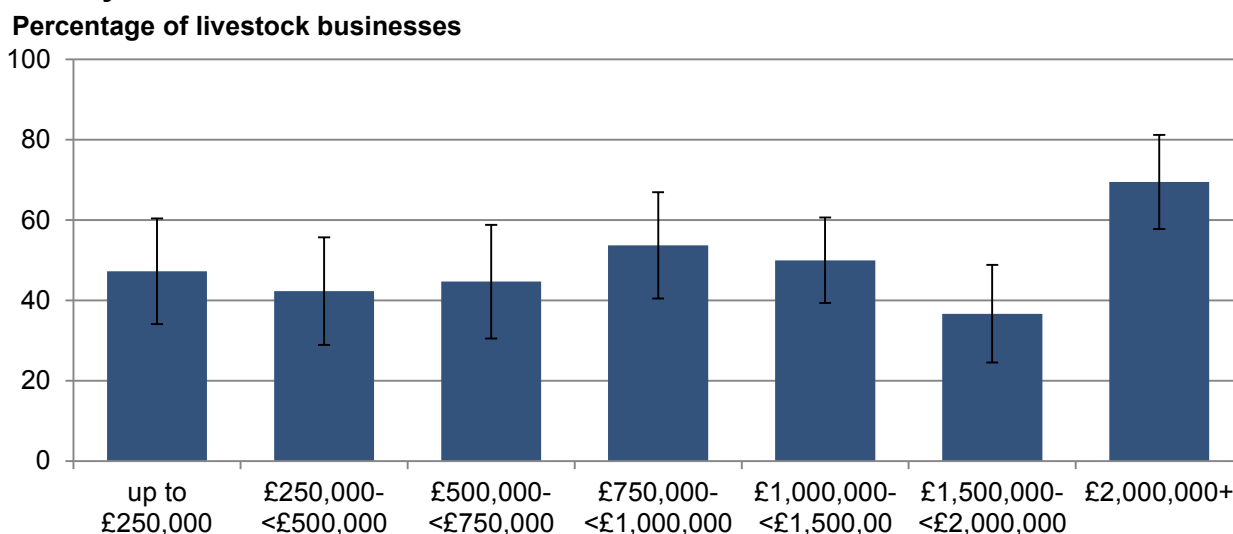
businesses with a net worth of at least £2 million were more likely to have planned a major change (Figure 2) than other farms.

Figure 1: Percentage of livestock farms intending to make a major change in 2016 or 2017 by farm type



Source: Farm Business Survey, England 2014/15.

Figure 2: Percentage of livestock farms intending to make a major change in 2016 or 2017 by net worth



Source: Farm Business Survey, England 2014/15

For those intending to make a major change to the business, the most common reasons given were to increase profitability (67%, Table 2), due to the age of farmer/grower or a desire to hand over to children/successor (both 20%) or that the business was not economically viable without change (19%).

Table 2: Reasons for planned business level change^(a)

Reason given for change	Percentage of livestock businesses (%)	95% confidence interval (%)
To increase profitability	67	±6
Age of farmer/grower	20	±6
A desire to hand over to children/successor	20	±6
Business is not economically viable unless it changes	19	±5
For personal reasons	11	±4
Focussing on other business interests	6	±3
Other reason	15	±5

Source: Farm Business Survey, England 2014/15.

Based on responses from 202 livestock businesses that indicated they planned a major change in 2016 or 2017.

(a) Farm businesses could select more than one option.

2 Enterprise level changes

Key findings:

- Major changes to agricultural enterprises were more likely to involve increasing an existing enterprise (by at least 10%) than reducing, stopping or commencing something new. Milk enterprises were most likely to have major changes planned (largely to increase production); combinable crop enterprises were least likely.
- Very few livestock farms (6%) had an existing enterprise that added value by selling direct to customers or by processing (e.g. packaging, butchering, on-farm cheese production). Of those that did, 22% planned a major change in 2016 or 2017.
- Around 13% of livestock businesses planned a major change to a diversification enterprise within the next two years. The planned change was largely to increase an existing enterprise (7% of livestock businesses) or to start a new enterprise (6%). The most common new enterprise type was tourism activities.

Farmers were asked about their intentions to make major changes to individual agricultural (e.g. milk, beef, sheep, etc.) and on-farm diversified enterprises in 2016 or 2017. For each type of enterprise the farmer could specify whether they were planning to commence, end, increase or reduce production. It has not been possible to produce statistics for all enterprise types due to small sample sizes.

2.1 Agricultural enterprises

Over a third of livestock businesses had planned a major change to at least one of their existing agricultural enterprises within the next two years ([section 1](#)). This change was more likely to involve increasing an existing enterprise (26% of livestock businesses, Table 3) than reducing (8%), ending (5%) or starting a new one (2%). Changes were most likely to existing milk enterprises (40% of those with this enterprise type had planned a major change) and least likely for combinable crops (15%, Figure 3). Of those with an existing milk enterprise, 32% intended to increase production by at least 10% and 8% intended to cease or reduce production by at least 10%. Intention was strong for this group; almost two thirds (63%) indicated a strong intention for change (high intention - very well developed plans).

Table 3: Type of major change planned in 2016 or 2017 to agricultural enterprises^(a), livestock businesses

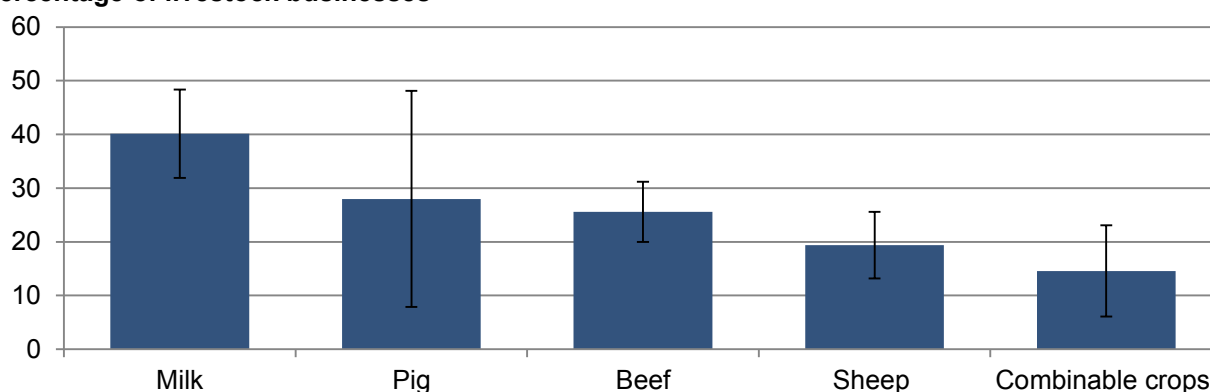
Type of major change	Percentage of livestock businesses (%)	95% confidence interval (%)
Start a new agricultural enterprise	2	±1
Increase an existing agricultural enterprise by at least 10%	26	±4
Reduce an existing agricultural enterprise by at least 10%	8	±3
Stop an existing agricultural enterprise	5	±2
No major change planned to an agricultural enterprise	65	±5

Source: Farm Business Survey, England 2014/15

(a) Farm businesses might have more than one agricultural enterprise (e.g. beef and combinable crops) and have different plans for each one. For example a farm business may be increasing their sheep enterprise but could be stopping their beef enterprise.

Figure 3: Percentage of livestock businesses with planned major changes to existing agricultural enterprises^{(a)(b)} in 2016 or 2017

Percentage of livestock businesses



Source: Farm Business Survey, England 2014/15.

(a) Restricted to just those farm businesses which have the corresponding agricultural enterprise. Excludes starting up of new enterprises. For example 40% of those with a milk enterprise planned a major change to that enterprise type.

(b) Due to insufficient data it has not been possible to produce statistics for eggs, broiler, root crops and other agricultural enterprises.

2.2 Added value enterprises

Very few livestock farms (6%) had an existing enterprise that added value by selling direct to customers or by processing (e.g. packaging, butchering, on-farm cheese production). Of those that did, 22% planned a major change in 2016 or 2017.

2.3 Other diversified enterprises

Over forty percent (43%) of livestock businesses had an existing diversified enterprise on farm. Around 13% of all livestock businesses planned a major change to a diversification enterprise within the next two years ([section 1](#)). The planned change was largely to increase an existing enterprise (7% of livestock businesses) or to start a new enterprise (6%, Table 4). Tourism was both the most commonly cited new enterprise type as well as

the most common existing enterprise type identified for change (28%, Figure 4). The proposed change was largely to increase.

Table 4: Type of change planned in 2016 or 2017 to other diversified enterprises^(a), livestock businesses

	Percentage of livestock businesses ^(b)		
	No existing diversified enterprise	With an existing diversified enterprise	All livestock farms
Percentage of livestock farms	57 (±5)	43 (±5)	
Planning a major change to other diversified enterprises	6 (±3)	23 (±6)	13 (±3)
Type of change:			
Start a new enterprise	6 (±3)	5 (±3)	6 (±2)
Increase existing enterprise	-	16 (±5)	7 (±2)
Reduce/stop existing enterprise	-	5 (±3)	2 (±1)

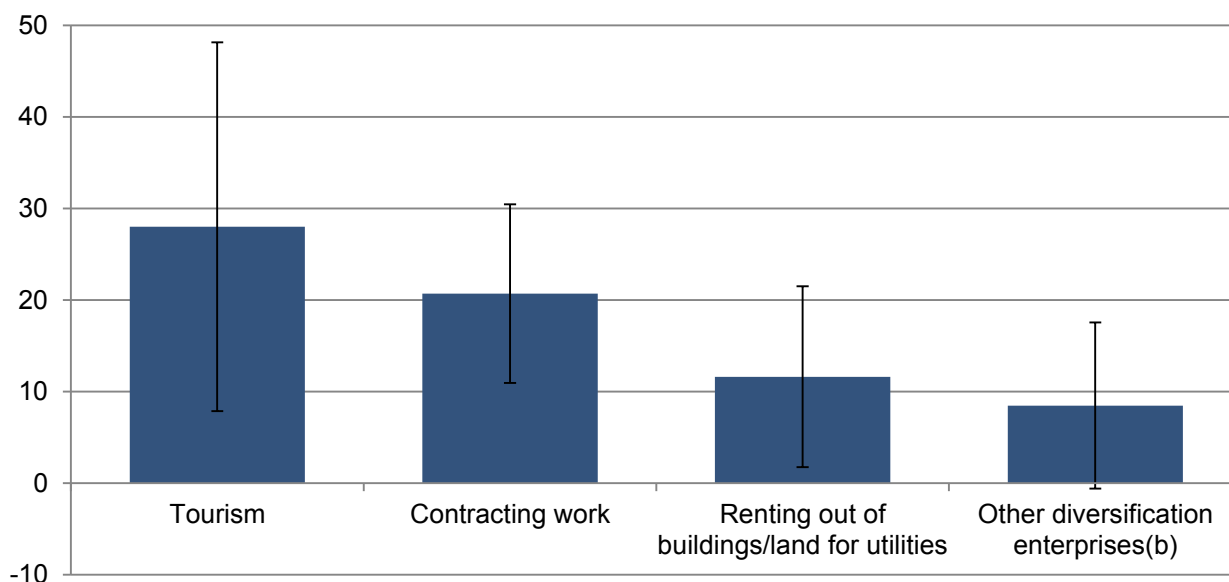
Source: Farm Business Survey, England 2014/15

(a) Farm businesses might have more than one diversified enterprise and have different plans for each one. For example a farm business may be increasing their tourism enterprise but could be stopping their contracting enterprise.

(b) 95% confidence intervals are shown in brackets next to the estimate.

Figure 4: Percentage of livestock businesses with planned changes to existing diversification enterprises^{(a)(b)} in 2016 or 2017

Percentage of livestock businesses



Source: Farm Business Survey, England 2014/15.

(a) Restricted to just those livestock businesses with the particular diversified enterprise. Excludes starting up of new enterprises. For example 21% of those farms undertaking contracting work planned a major change to that enterprise.

(b) "Other diversification enterprises" includes leisure activities, generating electricity and any other type of diversification enterprise.

3 Major Investment in the farm business

Key findings:

- Just over a third (36%) of livestock farms planned a major investment in their business in 2016 or 2017. Farms in the south of the country and dairy and pig farms were more likely to have planned a major investment.
- The most common area for investment was in buildings (19%).

Just over a third (36%) of livestock businesses planned to make a major investment in their business within the next two years (Table 5). A 'major investment' was defined as one that would be a central part of securing the medium term (3-5 years) strategic direction of the business³.

The most common areas for investment were in buildings (19%) and new machinery/plant (15%). The strength of intention to undertake major investments was mixed. For those planning to invest in new buildings, 39% indicated that they had a strong intention to go ahead (high intention - very well developed plans). For those planning to invest in green energy, 71% indicated that they only had the ideas in place (low intention).

Table 5: Percentage of livestock businesses considering a major investment in the farm business^(a) in 2016 or 2017 and the strength of intention

Type of major investment	Percentage of livestock businesses ^(b) (%)	Strength of intention		
		Low	Med	High
No major investment	64 (±5)	Not Collected		
Buildings (including waste storage)	19 (±4)	38	23	39
Machinery and plant	15 (±3)	44	27	29
Land purchase	6 (±2)	57	17	26
Green energy (solar, wind turbines, biomass)	3 (±2)	71		29
Other major investment	3 (±2)	27	36	36

Source: Farm Business Survey, England 2014/15.

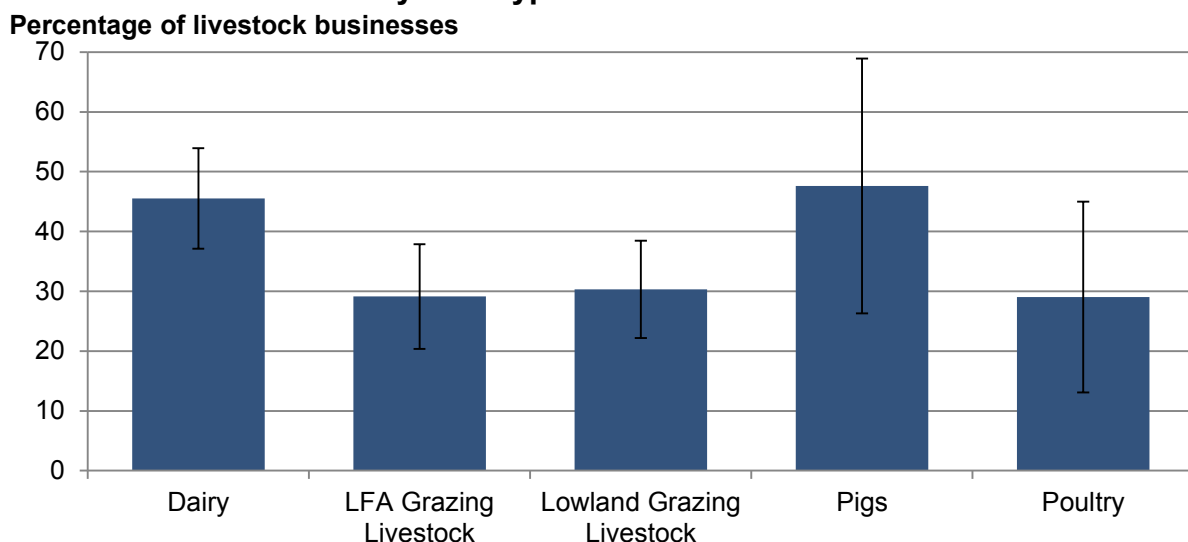
(a) Farm businesses could select more than one option.

(b) 95% confidence intervals shown in brackets below the estimate.

³ Examples include land and machinery purchases, new grain stores, glasshouses or accommodation for migrant farm labour. Investment in the private farmhouse (unless for B&B) was not included. More detailed guidance was given to data collectors.

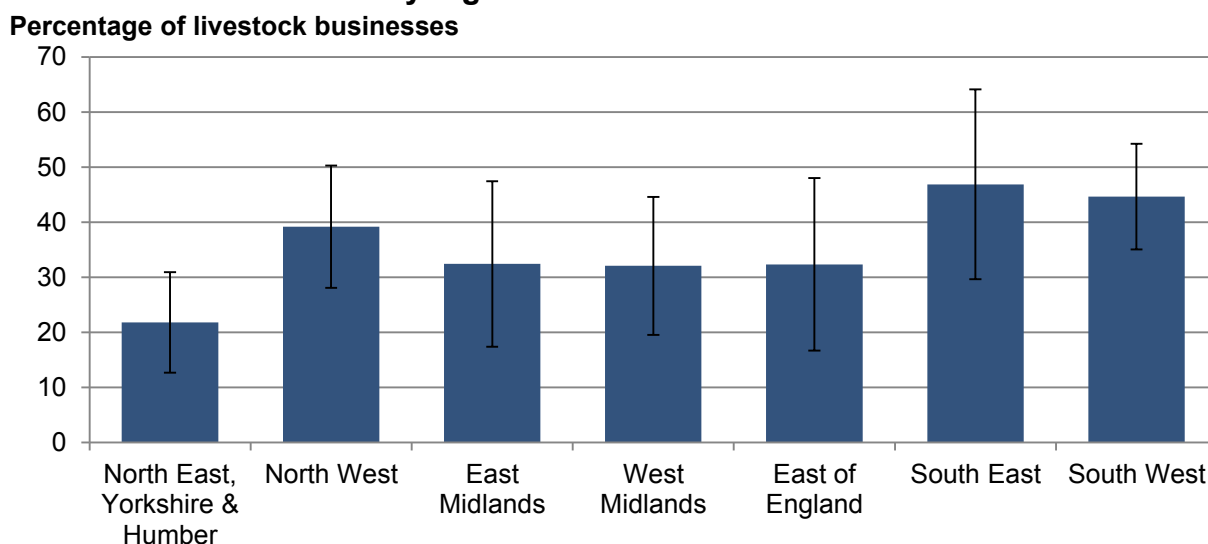
The likelihood of planning a major investment was significantly⁴ related to region and farm type. Farms in the south of the country (47% in the South East, 45% in the South West, Figure 6) were more likely to be planning a major investment than those in other parts of the country. Dairy and pig farms (46% and 48%, respectively, Figure 5) were more likely to have such a plan than other livestock farm types.

Figure 5: Percentage of livestock farms planning a major investment in the farm business in 2016 or 2017 by farm type



Source: Farm Business Survey, England 2014/15

Figure 6: Percentage of livestock farms planning a major investment in the farm business in 2016 or 2017 by region



Source: Farm Business Survey, England 2014/15

⁴ A generalised linear regression model was fitted to examine which factors (farm type, farm size, region, farm tenure, farmer age, net worth and farm performance) were significant. Region and farm type were significant at the 5% level.

4 Innovation

Key findings:

- Around a quarter (27%) of livestock businesses had introduced some form of new or innovative practice in the 12 months to November 2015.
- For 44% the new/innovative practice was related to using specialist equipment, for 39% this was linked to business practice.
- Of those that had introduced a new/innovative practice, over half (54%) stated that this was as a result of the farmer's own ideas.
- Of those that had introduced a new/innovative practice, 44% had used their own technical expertise to introduce the innovation(s).

Following scoping work⁵ undertaken in 2014, a question was introduced on innovative (or new) practices introduced on farms during the previous year. For this survey an innovation was not necessarily 'cutting edge', but was defined as being something new to the farm or the marketplace. This could be a single significant change or a series of smaller incremental changes that together constituted a significant change.

Around a quarter of livestock businesses (27%) had introduced some form of new or innovative practice in the 12 months to November 2015 (Table 6). Around a fifth (21%) had introduced one innovation, a further 5% had introduced two innovations and 2% had introduced at least three innovations.

Table 6: Percentage of livestock businesses that had introduced a new practice/innovation in the year to November 2015

	Percentage of livestock businesses (%)	95% confidence interval (%)
Did not introduce a new/ innovative practice	73	±4
Introduced 1 new/innovative practice	21	±4
Introduced 2 new/innovative practices	5	±2
Introduced at least 3 new/innovative practices	2	±1

Source: Farm Business Survey, England 2014/15.
Based on responses from 411 livestock businesses.

The uptake of a new/innovative practice was significantly related to region and farmer age⁶. Farms in the west of the country, in the East Midlands (Figure 7) and farmers under 55 (Figure 8) were more likely to be undertaking a new or innovative practice than those in other areas and older farmers.

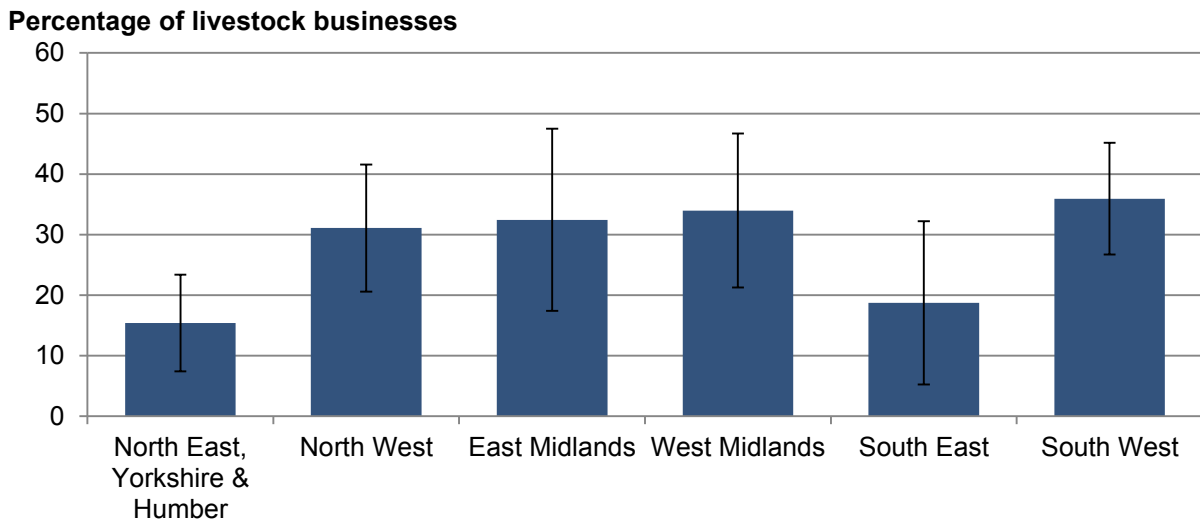
Up to three new/innovative practices were recorded for each farm. These have been grouped for analysis (Annex A). Of those livestock business that had introduced a new or

⁵ ["Farm Business Innovation, Cooperation and Performance", Rural Business Research, July 2014](#)

⁶ A generalised linear regression model was fitted to examine which factors (farm type, farm size, region, farm tenure, farmer age, net worth and farm performance) were significant. Region and age of farmer were significant at the 5% level.

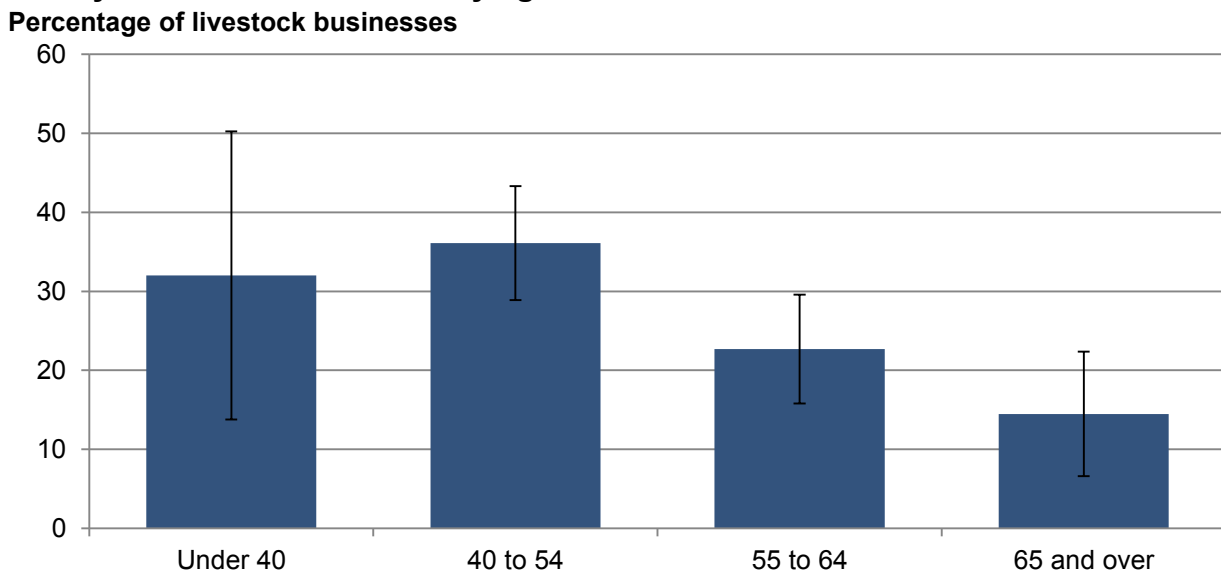
innovative practice, for 44% this was related to the use of specialist equipment, for 39% the new practice was linked to business practices (Table 7).

Figure 7: Percentage of livestock farms that introduced a new practice/ innovation in the year to November 2015 by region



Source: Farm Business Survey, England 2014/15

Figure 8: Percentage of livestock farms that introduced a new practice/ innovation in the year to November 2015 by age of farmer



Source: Farm Business Survey, England 2014/15

Table 7: Type of new practice/innovation introduced^{(a)(b)}

Innovations ^(c)	Percentage of livestock businesses (%)	95% Confidence Interval (%)
Specialist equipment	44	±9
Business practice	39	±9
Livestock husbandry	17	±7
Renewable energy/water conservation	9	±5
Crop husbandry	7	±5

Source: Farm Business Survey, England 2014/15

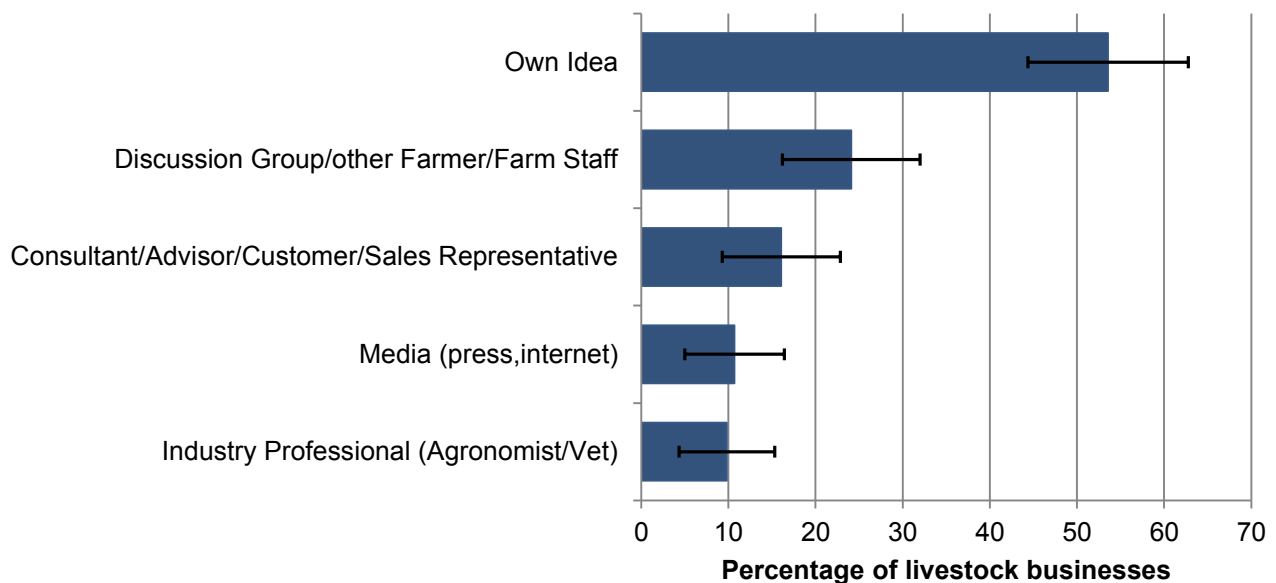
(a) Based on responses from 112 livestock businesses that had introduced an innovative practice in the 12 months to November 2015. Up to 3 practices were recorded for each farm.

(b) Renewable energy includes those innovations involving the use of water conservation.

(c) See Annex A for a list of the new practices/innovations included within each category.

Information was also collected about the source of the idea and the technical expertise used to introduce the innovation. Of those that had introduced a new/innovative practice, over half (54%, Figure 9) stated that this was as a result of the farmer's own ideas; for 10% the idea arose from an industry professional, such as an agronomist or vet.

Figure 9: Source of new practice/innovation^(a)

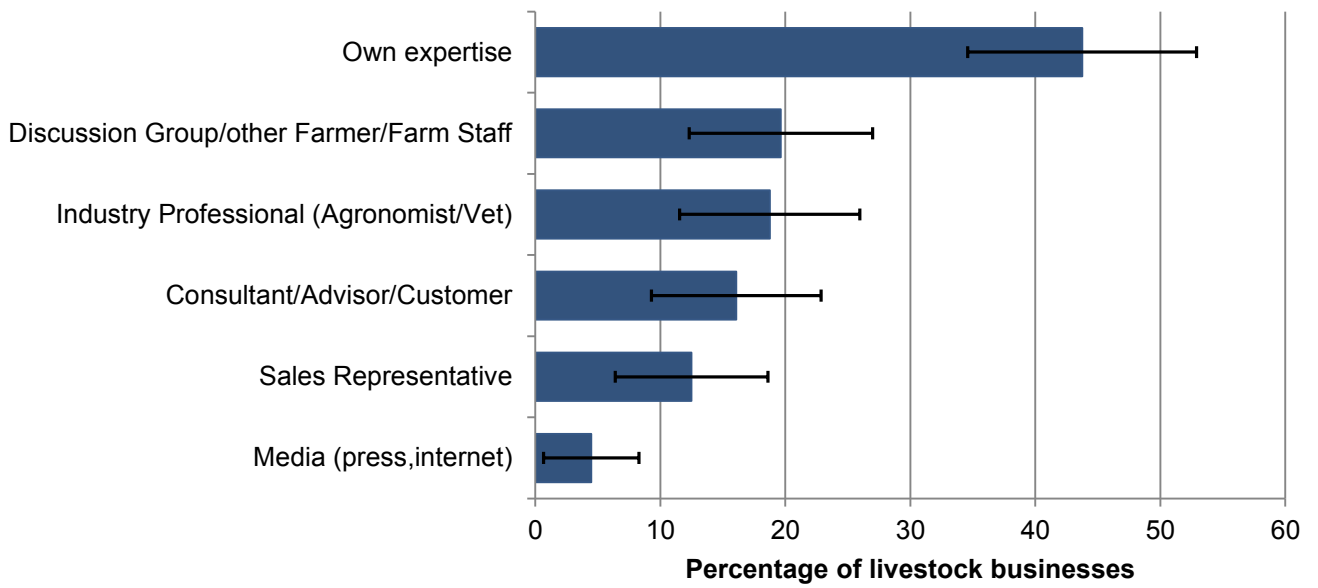


Source: Farm Business Survey, England 2014/15.

(a) Based on responses from 112 livestock businesses that had introduced a new practice/innovation in 2015. More than one source could be selected.

Of those that had introduced a new/innovative practice, 44% (Figure 10) had used their own technical expertise to introduce the innovation(s); for 4% the expertise came from media such as the press or internet.

Figure 10: Technical expertise used^(a)



Source: Farm Business Survey, England 2014/15.

(a) Based on responses from 112 farm businesses that had introduced a new practice/innovation in 2015. More than one area of expertise could be selected.

Survey details

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 around 1,900 farm businesses covers all regions of England and all types of farming with the data being collected by face to face interview with the farmer. Results are weighted to represent the whole population of farm businesses that have at least 25,000 Euros of standard output⁷ as recorded in the annual June Survey of Agriculture and Horticulture. In 2014, this accounted for approximately 57,500 farm businesses.

For further information about the Farm Business Survey please see:

<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey>

For the 2014/15 FBS, a sub-sample of 411 livestock farmers were asked questions about future intentions for their business in November 2015. Participation was voluntary and restricted to specific robust types (dairy, LFA grazing livestock, lowland grazing livestock, pigs and poultry). Those farms that participated in the farmer intentions survey had similar characteristics to those farms in the main FBS in terms of farm type, farm size and geographical location. Full details of the characteristics of responding farms can be found at Annex B.

Data analysis

The results from the FBS relate to farms which have a standard output of at least 25,000 Euros. Given the small sample size and the type of the questions that were asked within this survey, it would not be possible to draw conclusions about the full population based on this data. The results have therefore not been weighted.

Accuracy and reliability of the results

We show 95% confidence intervals against the results. These 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). The standard errors only give an indication of the sampling error. They do not reflect any other sources of survey errors, such as non-response bias.

In order to generate the standard errors for this subset, a completely random sample has been assumed allowing for the finite population.

Availability of results

This release contains headline results for each section. The full breakdown of results, by farm type, farm size, region, farm tenure, farmer's age, net worth and farm economic performance can be found at: <https://www.gov.uk/government/collections/farm-business-survey#documents>

⁷ For a definition of standard output please see the UK classification document here <https://www.gov.uk/farm-business-survey-technical-notes-and-guidance>

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

Data Uses

Data from the main FBS are provided to the EU as part of the Farm Accountancy Data Network (FADN). The data have been used to help inform policy decisions (e.g. Reform of Pillar 1 and Pillar 2 of the Common Agricultural Policy) and to help monitor and evaluate current policies relating to agriculture in England (and the EU). It is also widely used by the industry for benchmarking and informs wider research into the economic performance of the agricultural industry.

Information about farmers' aspirations and plans for the future is important in helping to assess where the industry is going, which, in turn, can help shape policy decisions. It is important, for example, in the context of structural change, CAP reform, food production issues and developments in the environmental footprint of farming. Basing decisions on past performance is good but factoring-in the likely shape of the sectors in future makes a much stronger basis for decision making, both from a farmer's perspective and that of government.

User engagement

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

Definitions

Farm Type

Where reference is made to the *type of farm* in this document, this refers to the 'robust type', which is a standardised farm classification system.

Farm Sizes

Farm sizes are based on the estimated labour requirements for the business, rather than its land area. The farm size bands used within the detailed results tables which accompany this publication are shown in the table below. Standard Labour Requirement (SLR) is defined as the theoretical number of workers required each year to run a business, based on its livestock and livestock activities.

Farm size	Definition
Small	less than 2 SLR
Medium	2 to less than 3 SLR
Large	3 or more SLR

Farm 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** - farmers who took part in the farmer intentions survey and were in the bottom 25% of economic performers in this sample
- **Medium performance band** - farmers who took part in the farmer intentions survey and were in the middle 50% of performers in this sample
- **High performance band** - farmers who took part in the farmer intentions survey and were in the top 25% of performers in this sample.

Net worth

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.

Innovation

The OECD definition for innovation has been used as a guide for this survey; this can be regarded as being changes in product(s) or the way they are produced through, for example, new machinery or changes in business practices. For this survey an innovation was not necessarily 'cutting edge', but was defined as being something new to the farm or the marketplace. This could be a single significant change or a series of smaller incremental changes that together constituted a significant change

Major Change

For the purpose of this survey, "Major Change" is identified as an intention/aspiration/plan that will lead to a change in the land use of that business, the output generated from the business, the economic efficiency of the business, or the strategic direction/continuation of the business.

What might be thought of as a single project or event could qualify for more than one of the types of major change response in the survey. For example a (suitably large) purchase of arable land would be recorded as both "*increase farmed area by at least 10%*" and "*start, end or change production by at least 10% on any specific agricultural enterprise*".

Major investment

The definition of 'major investment' is any investment that is planned/been started/intended and that is a central part of securing the medium term (3-5 years) strategic direction of the business.

In the context of this survey a major investment might be one that was:

- Above and beyond normal practice
- Does not happen every year
- Innovative/cutting edge technology
- Necessary to meet legislative requirements (e.g. slurry storage, enriched poultry cages)

- Part of a plan to upgrade or expand
- Not simply replacing like with like/old with new
- Farmer is treating it as a major investment

Added value enterprises

These were defined as activities relating to processing (e.g. on-farm cheese production, packing, butchering, sausage making, vegetable box service) and retailing (selling direct to customers without further processing, e.g. straw, wood sales) of farm produce.

Other diversified enterprises

These included tourism, renting out buildings, power generation, leisure enterprises and contracting.

Annex A: Detailed list of the new practices/innovations included within each category

1. Specialist equipment

- employment of cattle electronic identification (EID) tags and weight monitoring/as a herd management tool
- introduction of milk meters and cow auto ID monitoring/feeding systems
- use of a sheep EID reader/data logger as a flock management tool
- use of a sward lifter to improve grassland quality
- investment in a rotary parlour with an Auto ID system and pedometers
- introduction of a new pen system for artificial insemination, designed to reduce stress and increase conception rates

2. Business practice

- a change in breed of sheep from Swales to Mules for easier management
- cease buying ex-dairy calves for fattening
- introduction of a Beef Shorthorn bull for store calf production and upland grazing management
- investment in a plate cooler and an ice builder in order to cool milk quicker and to allow greater flexibility in the supply chain
- contract rearing as part of beef enterprise

3. Livestock husbandry

- disease screening and testing (mainly for Bovine Virus Diarrhoea) in all cattle and calves as part of a herd health scheme
- implementation of a paddock grazing system as well as being an active member of a grassland discussion group
- saliva testing for underlying disease/health issues in pigs
- ewes and lambs put out immediately after lambing
- antibiotics for drying off cows now only used on selected cows

4. Renewable energy/water conservation

- building of a woodchip powered combined heat and power unit
- installation of a biomass boiler for both dairy premises and farmhouse
- adoption of solar panels
- implementation of water capture equipment
- use of rain harvesting equipment
- introduction of woodland management to produce own wood for biomass boilers

5. Crop husbandry

- use of slot seeding to revitalise old permanent pastures
- measuring of actual grassland height
- spreading of composted dung on water meadows to reduce encroachment of rushes and improve soil structure
- adoption of power harrow for reseeding of grass rather than ploughing and cultivating
- improved spreading efficiency through soil sampling and the targeting of fertiliser and manure

Annex B: Characteristics of responders to the FBS (eligible farms⁸) and the Farmer Intentions Survey

Region	Farms in the FBS eligible for Farmer Intentions Survey	Farmer Intentions Survey sample
North East and Yorkshire & Humber	18%	19%
North West	18%	18%
East Midlands	9%	9%
West Midlands	12%	13%
East England	8%	8%
South East	7%	8%
South West	27%	25%
All farms	100%	100%

Farm Type	Farms in the FBS eligible for Farmer Intentions Survey	Farmer Intentions Survey sample
Dairy	30%	33%
LFA Grazing Livestock	25%	25%
Lowland Grazing Livestock	30%	30%
Pigs	7%	5%
Poultry	9%	8%
All farms	100%	100%

Farm size	Farms in the FBS eligible for Farmer Intentions Survey	Farmer Intentions Survey sample
Small	30%	30%
Medium	20%	21%
Large	51%	49%
All farms	100%	100%

Source: Farm Business Survey, England 2014/15

⁸ Dairy, LFA grazing and Lowland grazing livestock, pigs and poultry farms