

Farm Business Survey

2015/2016

Crop Production in England



Ben Lang



Crop Production in England 2015/2016

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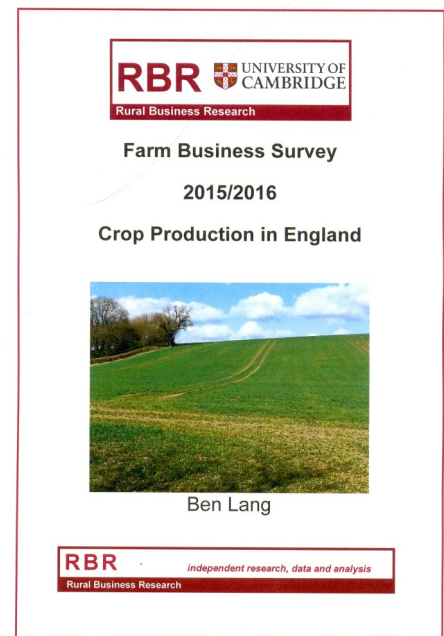
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Crop Production in England 2015/2016

The full printed version of the report is now available and comprises:

- Overview of Profitability, Assets and Liabilities
- Arable Farm Performance: Agriculture
- Agri-environment, Diversification, Single Payment
- Crop Enterprise Performance
- Net Margin and Cost of Production Estimation
- Organic Arable Performance Estimation
- Weather, Economic Context and Policy



Appendix 1 Agricultural Output and Costs Comparison by
Farm Type, District, Size and Performance (35 tables)

Appendix 2 Gross Margin Results for Comparison by Farm Type,
District, Size and Performance - Non Organic (119 tables)

Price £25 including postage and packing

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Foreword to the Eleventh Series

With this eleventh series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)*, our focus of providing independent data and analysis to the individual sectors has arguably never been of such importance. The collective decision of the UK voting public on the 23 June 2016 to leave the EU will have large impacts on agricultural and horticultural sectors. Issues of policy, trade, exchange rates and labour availability are now very much front and centre in the minds of many businesses. Ensuring that the enterprises that constitute the farm business are profitable is of even greater importance given the uncertainty which now exists in the industry. Brexit will also bring opportunities, and those seeking to make the most of the opportunities that will arise will need independent data to support effective decision making. In this eleventh series, RBR seeks to provide these independent data in a revised and succinct format which places the data results at the heart of each report; we have focused our succinct comments on key results within the tables to draw to the attention of readers the central highlights. Our increasing focus on the presentation of data and results flows from internal and external feedback.

Setting the context to this series, data from the Farm Business Survey (FBS) for the 2015/16 financial year, shows that average Farm Business Income (FBI) decreased by 21% to £31,400 per farm. Examining results by farm type, on average, only General Cropping, Less Favoured Areas (LFA) Grazing Livestock and Horticulture recorded increases in FBI; by contrast Dairy and Specialist Pig farms recorded FBI decreases of around 50% on 2014/15 levels. Average FBI was at its lowest point for a number of years in 2015/16. The immediate impact of Brexit on exchange rates has however led to recent increases in commodity prices, and the overall outlook for 2016/17 is consequently more positive, though farm type variation remains and not all sectors are likely to witness improvements for 2016/17. Moving forward however, businesses will need to understand the impact of the exchange rate movement on the costs incurred, and a greater focus on budgeting and cost management will be the order of the day in order to capitalise on the exchange rate benefit. Cost comparison from the independent data produced within these reports provides valuable information in relation to costs and returns across each sector to aid managers in this respect.

With respect to the policy environment for agriculture and horticulture moving forward, the rigorous and independent FBS data presented in these reports will be of crucial importance for evidenced-based policy making. Our research work within the FBS programme could not be possible without the direct support of our farmer and grower co-operators and the wider support of agricultural and horticultural businesses and sector stakeholders; our thanks are given to them all.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
March 2017

www.ruralbusinessresearch.co.uk

ACKNOWLEDGEMENTS

Rural Business Research is very grateful to the farmers who have voluntarily provided records and information on which the FBS and this report are based.

Rural Business Research staff across England collected farm data. At the Rural Business Unit, Richard Dexter and Mark Reader designed the reporting system and Joy Meyrick and Stephen Horsley contributed to production of the report.

1 Overview of Profitability, Assets and Liabilities

1.0 Summary of Profitability, Assets and Liabilities

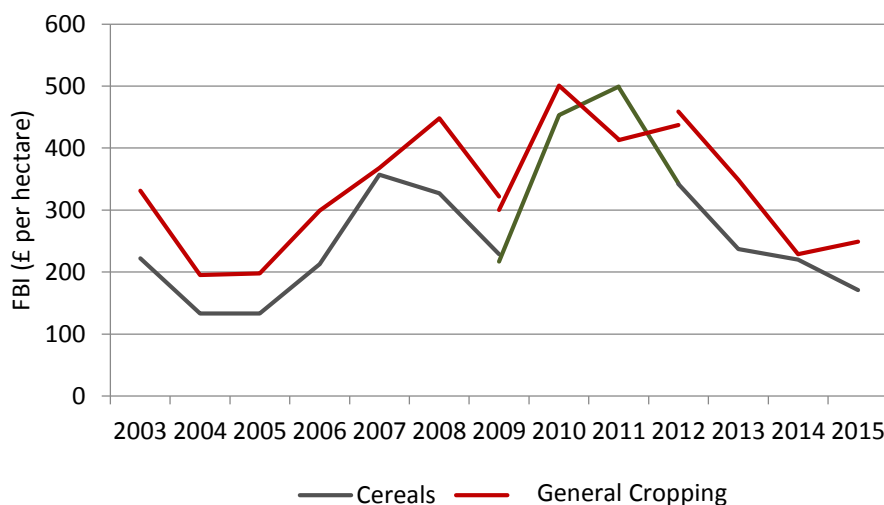
- Lowest Cereals and General Cropping Farm Business Income (FBI) for 10 years
- Record non-organic wheat, barley and oilseed rape yields
- Wheat, sugar beet and potato areas reduced as spring cropping increased
- Cereal, oilseed, protein crop prices between 70 and 80 per cent of five year average
- Lower intensity of cropping reduced labour, machinery and variable cost spend
- Fertiliser prices reduced
- Lagging the decline in FBI, land prices started to fall
- Machinery investment on Cereals farms has reduced since 2011
- Green technology reached 13 per cent of machinery expenditure on Cereals farms
- Borrowing, mainly as loans, continued to rise

1.1 Time Series Farm Business Income on Cereals and General Cropping Farms

Reduced sugar beet cropping resulted in a change of farm classification in which some farms changed from Cereals to General Cropping in the (Farm Business Survey) FBS sample. The remaining General Cropping farms were larger than the 2014 sample of farms. As a result of this change, care should be taken when comparing the performance of General Cropping farms against previous years' results.

Figure 1.1 shows the long term FBI from 2004 to 2015.

Figure 1.1 Time Series FBI for Cereals and General Cropping Farms in England,



1 Overview of Profitability, Assets and Liabilities

- The Farm Business Income of arable farms fell to its lowest level in ten years, at £172 per hectare for Cereals farms and £248 per hectare for General Cropping farms.
- Crop output increased on Cereals farms, mainly due to record non organic wheat, barley and oilseed rape yields, but reduced on General Cropping farms, driven by the lower potato price.
- Although most arable businesses were profitable in 2015/2016, about 18 per cent of Cereals farms and 15 per cent of General Cropping farms, failed to generate positive FBI in the year.

Tables 1.1 and 1.2 respectively summarise the average profitability of Cereals and General Cropping farms in 2014/15 and 2015/16 (£ per hectare unless stated).

Table 1.1 Cereals Farms - Farm Business Income

	2015	2016
Number of farms	368	360
Area of farm (ha)	205	208
Crop output	895	832
Livestock output	33	40
Agri-environment	41	35
Other output	223	239
SPS (2015)	183	
BPS (2016)		166
Total Output	1375	1312
Variable costs	502	498
Fixed costs	659	649
Total costs	1161	1147
Profit on sale of assets	6	7
Farm Business Income	220	172
Less labour	14	19
Add interest	23	27
Less rental costs	112	116
Net Farm Income	118	64

Table 1.2 General Cropping Farms - Farm Business Income

	2015	2016
Number of farms	162	143
Area of farm (ha)	227	252
Crop output	1403	1243
Livestock output	68	47
Agri-environment	41	43
Other output	233	259
SPS (2015)	178	
BPS (2016)		160
Total Output	1923	1751
Variable costs	746	624
Fixed costs	953	882
Total costs	1699	1510
Profit on sale of assets	6	3
Farm Business Income	229	248
Less labour	4	0
Add interest	31	33
Less rental costs	110	117
Net Farm Income	147	164

1 Overview of Profitability, Assets and Liabilities

1.2 Farm Business Income 2015/2016

Variable and Fixed Costs

The headline changes to variable and fixed costs are summarised in figures 1.2 and 1.3.

Figure 1.2 Cereals Farms, Variable Costs 2014/2015 and 2015/16

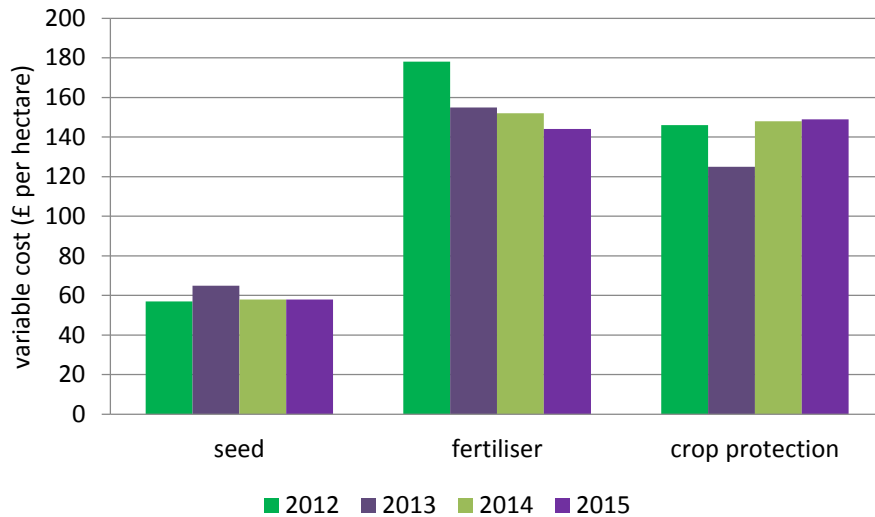
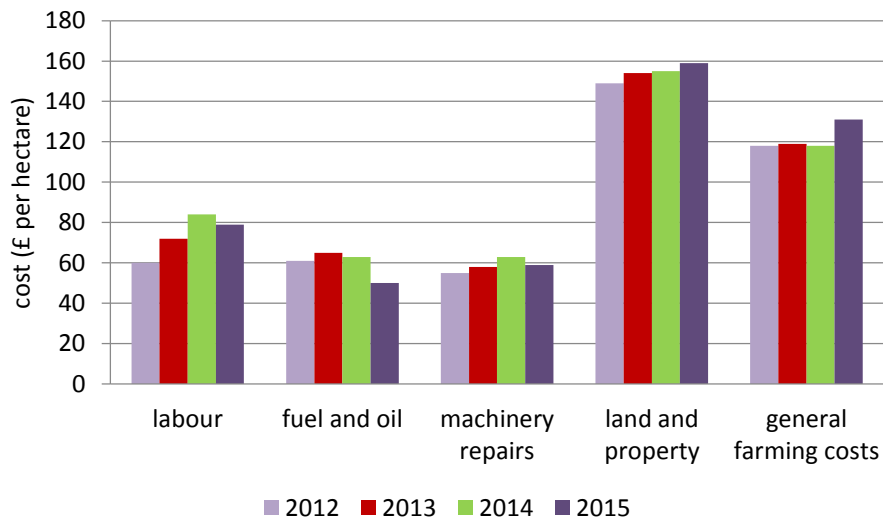


Figure 1.3 Cereals Farms, Fixed Costs 2014/2015 and 2015/16



- Farmers grew a reduced area of wheat, sugar beet and potatoes replaced with increased spring cropping and uncropped land and controlled costs with the result that labour and machinery costs also reduced.
- Despite higher unit costs of seed and crop protection materials, expenditure was unchanged on Cereals farms.

1 Overview of Profitability, Assets and Liabilities

- Probably due to the reduction in the potato area, variable costs fell on General Cropping farms. Fertiliser expenditure was lower due to both reduced prices and the reduced fertiliser requirement of the crops grown.
- Land and property costs, and general farming costs, which are fixed regardless of changes to farming activity, increased during the year.

1.3 Assets and Liabilities

Table 1.3 and 1.4 respectively show the Cereals Farms Balance Sheet and General Cropping Farms Balance Sheet for the 2015/2016 financial year.

Table 1.3 Cereals Farms Balance Sheet (£/ha)

	Opening 2015	Closing 2015
Number of farms	360	360
Area of farm (ha)	205	208
Assets		
Land and buildings	11,152	11,740
Machinery	834	832
BPS Entitlement	246	165
Other fixed assets	42	44
Current assets	1,154	1,158
Liabilities	957	995
Net Worth	12,472	12,944

Table 1.4 General Cropping Farms Balance Sheet (£/ha)

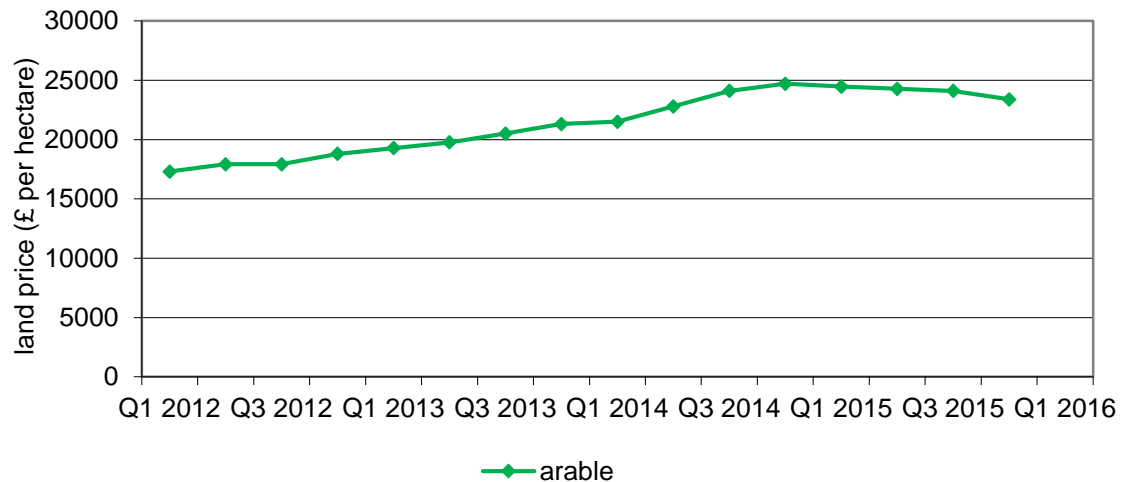
	Opening 2015	Closing 2015
Number of farms	143	143
Area of farm (ha)	227	252
Assets		
Land and buildings	11,464	12,113
Machinery	813	827
BPS Entitlement	240	159
Other fixed assets	85	84
Current assets	976	1,025
Liabilities	1,228	1,319
Net Worth	11,212	11,821

- The net worth of Cereals and General Cropping farms increased by four and five per cent respectively to £12,944 and £11,821 per hectare. The increase was again driven by higher property values, but liabilities also increased.
- Lagging behind the financial performance of arable farming, land prices increased during the year, but had started to fall by late 2015 and early 2016.

Figure 1.4 shows arable land values from 2011 to April 2016.

1 Overview of Profitability, Assets and Liabilities

Figure 1.4 Arable land values from January 2012 to December 2015



Source: Reanalysed from surveyors industry commentary

- At the start of the trading season for Basic Payment, English non SDA (non severely disadvantaged areas) entitlement values averaged £200 to £210 per hectare¹. The market firmed to £240 to £250 per hectare on the realisation that supply matched closely with demand². These values are similar to the £246 and £240 per hectare that we estimated for Cereals and general Cropping farms respectively.
- At the end of the claim year, non SDA Basic Payment Entitlement traded for around £180 to £170 per hectare³. Our estimated closing valuation was £165 and £159 per hectare respectively on Cereals and General Cropping farms.
- Investment in machinery is shown in figure 1.5 below and the closing value of machinery is shown in figure 1.6. Some of the changes shown relate to the change in the sample of farms, resulting from reduced sugar beet cropping, as some farms transferred from General Cropping to Cereals.

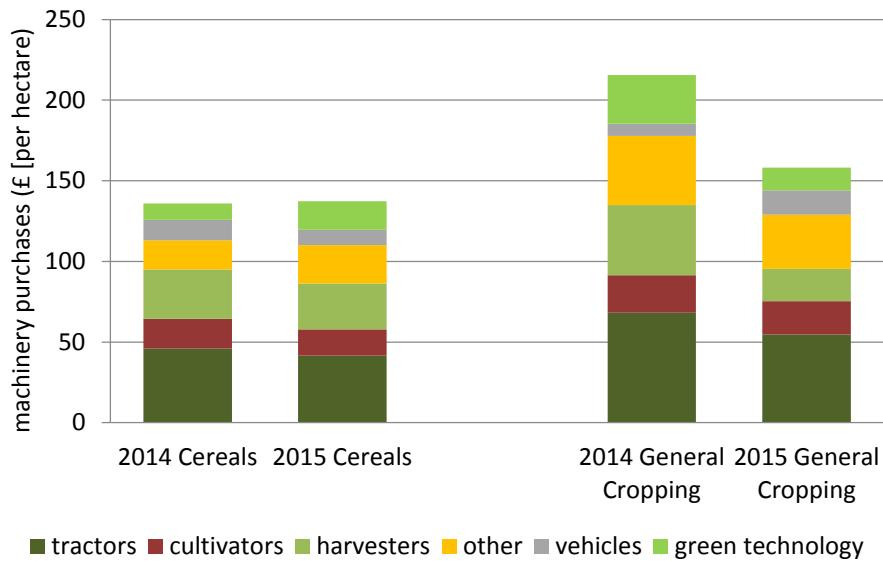
¹ Farmers Weekly Interactive, www.fwi.co.uk , 9 October 2015

² Farmers Weekly, 4 December 2015

³ Mark Dyson Chartered Surveyors, www.markdysonproperty.co.uk

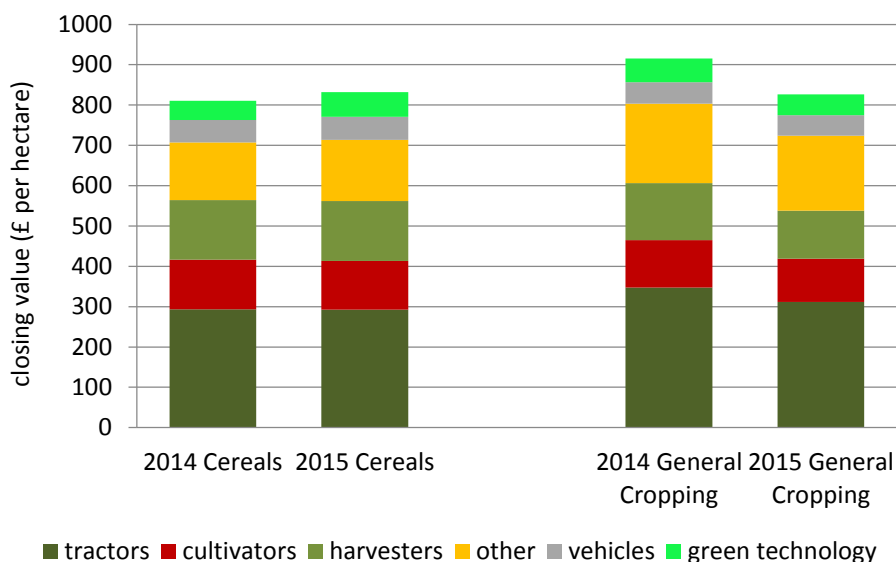
1 Overview of Profitability, Assets and Liabilities

Figure 1.5 Net Machinery Expenditure on Cereals and General Cropping Farms 2014/2015 and 2015/16



- Farmers reduced their expenditure on machinery in 2015 and the closing value of machinery on arable farms decreased overall. Net expenditure on machinery averaged £137 per hectare on Cereals farms; this was similar to the previous year but expenditure has tended to reduce since 2013.
- On General Cropping farms, machinery expenditure of £158 was similar to previous years, although expenditure varies annually according to availability of funds.

Figure 1.6 Closing Valuation of Machinery on Cereals and General Cropping Farms 2014/2015 and 2015/16



- Investment in green technology, including solar and wind generation capacity, reached 13 per cent of overall machinery expenditure on cereals farms and 7 per cent on General Cropping farms.

1 Overview of Profitability, Assets and Liabilities

- Borrowing, mainly in the form of loans, increased on Cereals and General Cropping farms as liabilities rose by four and eight per cent respectively to £995 and £1,316 per hectare. Borrowing trends over the last ten years on Cereals and General Cropping farms are shown in figures 1.7 and 1.8.

Figure 1.7 Short and Long Term Closing Liabilities on Cereals Farms, 2014 to 2015

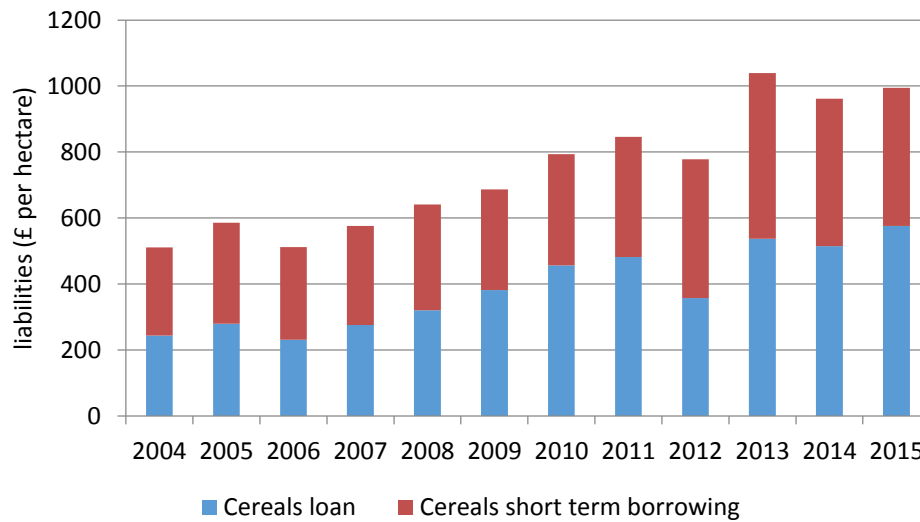
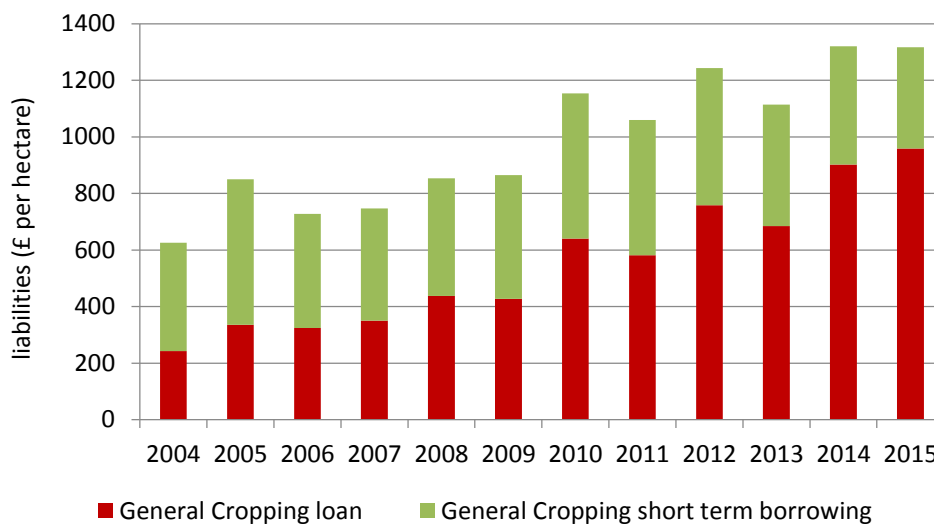


Figure 1.8 Short and Long Term Closing Liabilities on General Cropping Farms, 2004 to 2015



2 Arable Farm Performance: Agriculture

2.0 Agriculture Performance

- Agriculture performance reduced on Cereals farms
- Spring crop area was six per cent above five year average
- Winter and spring barley areas twenty and five per cent above five year average
- Oilseed rape area 14 per cent below 2012 peak
- Peas and beans area 38 and 40 per cent above five year average
- Rapid increase in arable maize area to 42,000 hectares
- Sugar beet area 23 per cent lower than in 2014 due to reduced requirement
- Potato area nine per cent below five year average due to market
- Cereals farms reduced agriculture fixed cost expenditure by four per cent
- General Cropping farms reduced fixed cost expenditure by 13 per cent
- The performance of General Cropping farms varied according to crops grown

The results presented in this Chapter relate solely to the activity of **agriculture**. The outputs, costs and agricultural Farm Business Income (FBI) attributable to this activity can be summed with that from agri-environment scheme participation, diversification outside agriculture and the Basic Payment Scheme (BPS) to give results for the whole farm business. Whilst output and variable costs can be readily split between cost centres, some element of estimation is needed in order to share labour, machinery, property and overhead costs. Within the FBS, this is carried out on a consistent basis using an agreed approach¹.

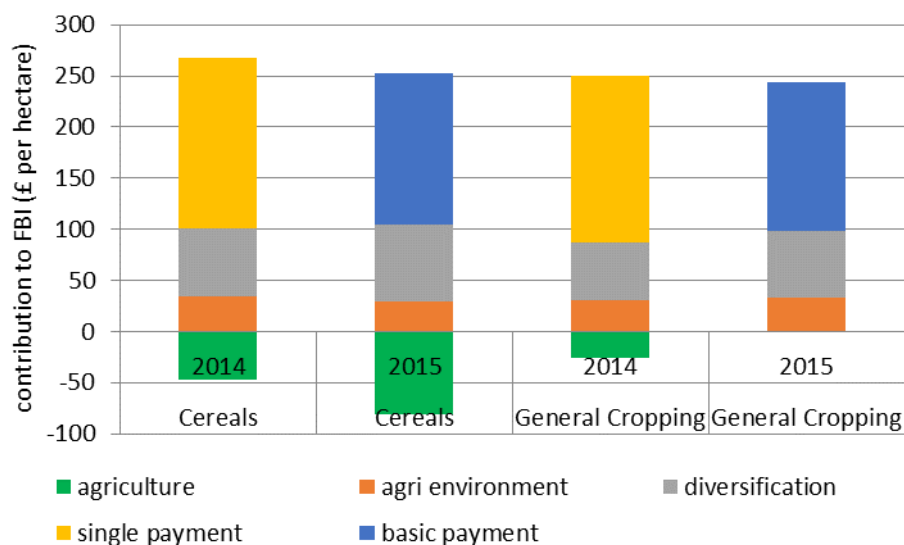
2.1 Agriculture, Agri-environment, Diversification and Single Payment

These relative contributions from the four cost centres described above are summarised in figure 2.1 below.

¹ Appendix 2 (Item VI) Farm Accounts in England 2008/2009 Defra statistics
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/423700/fbs-fixedcostmethod-23apr15.pdf

2 Arable Farm Performance: Agriculture

Figure 2.1 The Contribution of Agriculture, Agri environment, Diversification and Single Payment to FBI on Cereals and General Cropping Farms, 2014 and 2015



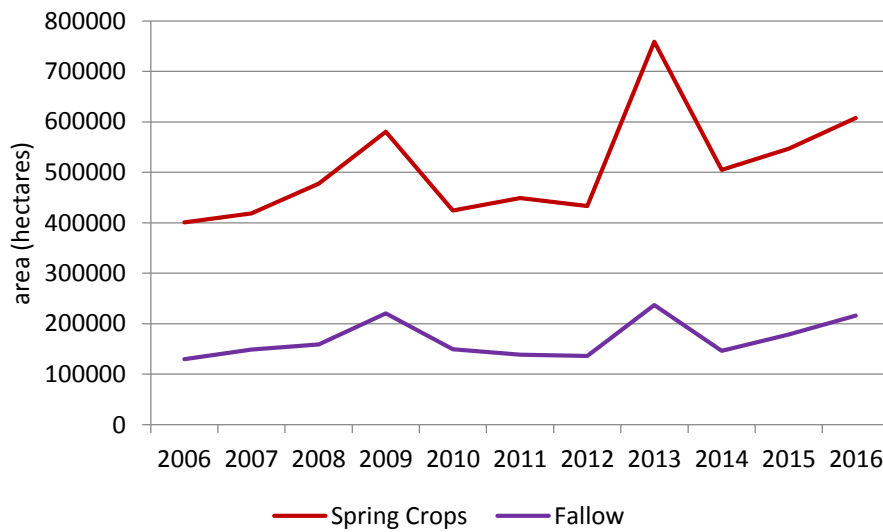
- On Cereals farms, the contribution to FBI from agriculture of -£81 per hectare was negative and lower in 2015 than in 2014. The contribution from the first year of BPS was lower than the final year of the Single Payment Scheme in 2014 and agri environment receipts fell whilst the contribution from diversification increased.
- General Cropping farms shared the reduced receipt of BPS and increased diversification performance. In part due to the change to the sample of farms, the contribution to FBI from agriculture and agri environment activity improved. The net contribution from agriculture was £0 per hectare.

2.2 Cropping and Crop Areas

- Driven by the need to disrupt blackgrass reproduction and following a general favourable experience of growing spring crops in 2013, farmers grew an increased area of spring crops in 2015, six per cent above the five year average. The increase in spring cropping is shown in figure 2.2.

2 Arable Farm Performance: Agriculture

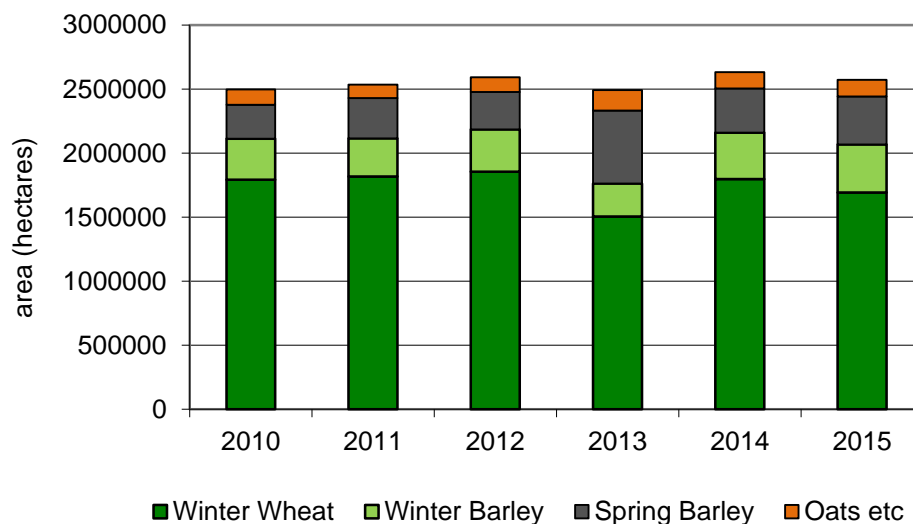
Figure 2.2 Area of Spring Cropping and Fallow Land in England, 2006 to 2016



Source: Defra June Survey

The areas of cereal crops, break crops and intensive crops are shown in figures 2.3, 2.4 and 2.5 below.

Figure 2.3 Cereal Crop Area, 2010 to 2015 in England

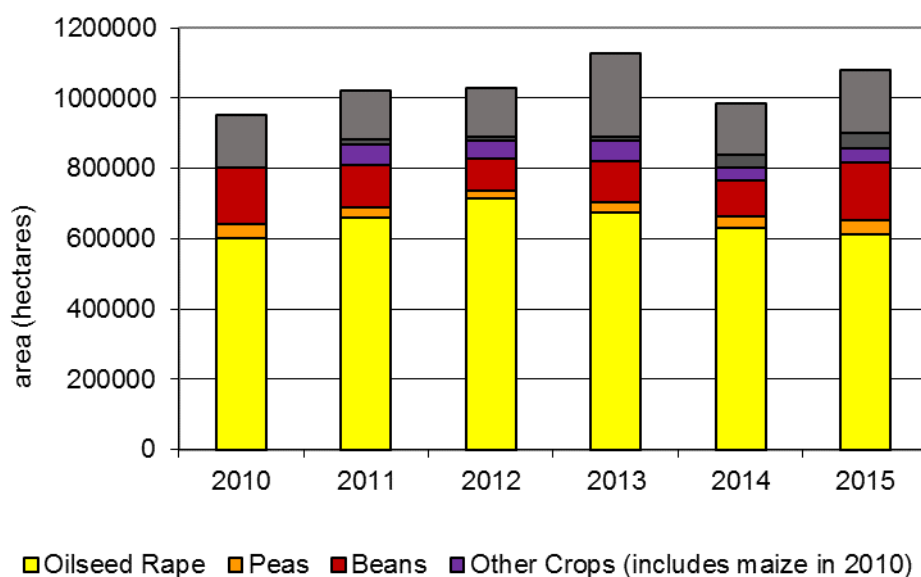


Source: Defra June Survey

- At 2.54 million hectares, the area of cereals was one per cent higher than the five year average. Grown over 1.693 million hectares, the wheat crop was three per cent below the five year average. Farmers grew a record 376,000 hectares of winter barley; this was 20 per cent above the five year average. Spring barley and other cereals exceeded the five year average by five per cent.

2 Arable Farm Performance: Agriculture

Figure 2.4 Break Crop Area, 2008 to 2015 in England



Source: Defra June Survey

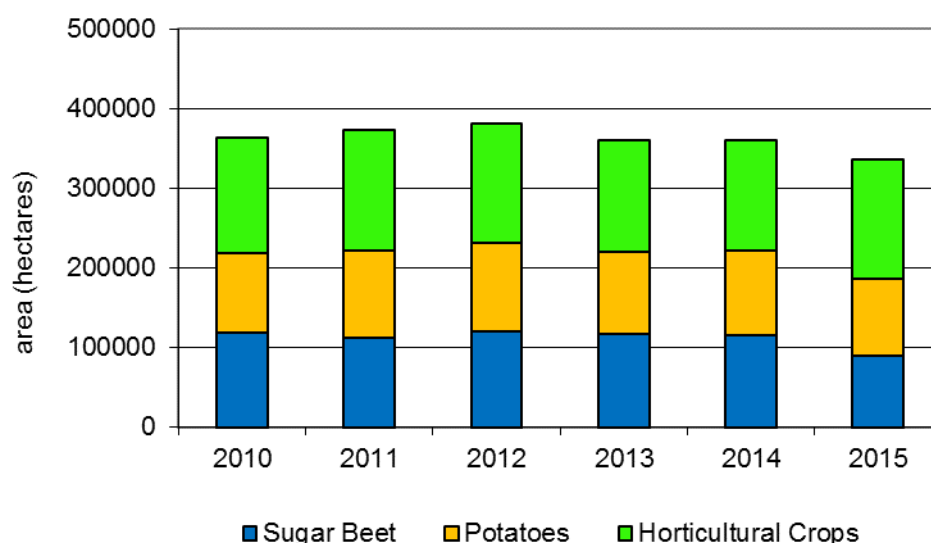
- The area of oilseed rape reduced by a further three per cent to 611,000 hectares, and 14 per cent below its peak area in 2012. The ban on the use of neonicotinoids was cited as the main reason for the reduction in the oilseed rape area¹. This change was replicated across the EU with an estimated 7.5 per cent reduction in the oilseed rape area².
- At 42,000 and 165,000 hectares respectively the areas of peas and beans were 38 per cent and 40 per cent above the five year average.
- The area of maize, including maize for AD, continued to rise, reaching 42,000 hectares from only 15,000 hectares as recently as 2011. Some 19 per cent of the total maize area was grown for AD.
- At 179,000 hectares, the area of fallow exceeded the five year average by 11 per cent. The use of fallow was a further way of meeting EFA requirements.

¹ Farmers Weekly Interactive, www.fwi.co.uk, 15 December 2015

² Farmers Weekly, 19 December 2014

2 Arable Farm Performance: Agriculture

Figure 2.5 Sugar Beet, Potato and Horticultural Crop Area 2008 to 2015 in England



Source: Defra June Survey

- Reduced Contract Tonnage Entitlement (CTE) was the driver of the lower area of sugar beet to 90,000 hectares. This was 23 per cent lower than in both 2014 and the five year average.
- At 90,000 hectares, the potato area was nine per cent lower than the five year average, and a record low area. Following two years of high production, and in the context of reducing consumption, growers had been urged to reduce production¹.
- The area of horticultural crops recovered to around 150,000 hectares. Traditional vegetables, including onions, carrots and vining peas accounted for much of the increased area.
- Bioenergy crops were grown on 93,000 hectares, this is 1.6 per cent of the total arable area and 23 per cent lower than in 2014². Overall, 41,000 hectares of wheat, 34,000 hectares of maize, 7,000 hectares of *Miscanthus*, 3,000 hectares of short rotation coppice and 300 hectares of oilseed rape were produced.
- The fastest increase in crop area was maize for anaerobic digestion, which reached 52,280 hectares in 2016.
- For the third successive year, the new plantings of *Miscanthus* reduced as the number of growers reduced for the first time.

2.3 Cereals Farms Performance (excluding organic farms)

The 2015 harvest year sample of Cereals farms included farms previously classified as General Cropping, but which changed type by reducing the area of sugar beet. The resulting group of farms grew similar crops to 2014 and comparison is feasible.

- The average FBI due to agriculture was -£80 (-£45 in 2014) due mainly to reduced crop output of £982 per hectare (6.6 per cent lower than the previous year).

¹ Farmers Weekly, 20 February 2015

² Crops Grown for Bioenergy in England and the UK: 2015, Defra, 8 December 2015

2 Arable Farm Performance: Agriculture

- Whilst variable costs were unchanged on 2014, fixed costs were four per cent lower at £653 per hectare. Farmers reduced expenditure on labour, fuel and repairs, whilst other costs, including rent, were similar to the previous year. The reduced area of winter crops in favour of spring crops is likely to have contributed to the overall four per cent reduction in expenditure on labour, and nine per cent reduction in expenditure on machinery.
- FBI from agriculture reduced across all tenure groups (owner occupied, tenanted and mixed tenure)

2.4 General Cropping Farms Performance (excluding organic farms)

- The sample of General Cropping farms reduced in the year as some growers opted to reduce the area of sugar beet grown, which in turn resulted in their reclassification to Cereals farms. The contribution of agriculture on General Cropping farms increased to -£3 per hectare (-£27 per hectare in the previous year).
- Despite the significant contribution of the potato crop to output on some farms, overall output reduced by 13 per cent to £1,392 per hectare whilst variable costs expenditure was also lower. These changes were due to the reduced area of potatoes and the reduced area, output and gross margin of sugar beet.
- By reducing cropping with potatoes and sugar beet, General Cropping farmers reduced their fixed cost expenditure by 13 per cent to £905 per hectare. Expenditure on hired labour reduced by 17 per cent to £199 per hectare whilst expenditure on machinery, including depreciation, reduced by 15 per cent to £349 per hectare.

3 Agri-environment, Diversification, Single Payment

3.0 Agri environment, Diversification and Single Payment Summary

- About 10,000 Entry Level Stewardship (ELS) agreements expired
- Agri environment output reduced by 15 per cent on Cereals farms
- Diversification output increased, driven by higher rents and green energy
- Rental activity remains the main source of diversification output
- Diversification opportunities continue to be greatest in London and the South East
- Contribution to FBI of Basic Payment Scheme (BPS) was ten per cent lower than from SPS in 2014

The results presented in this Chapter relate to **agri-environment scheme participation, diversification outside agriculture and the Basic Payment scheme**. The outputs, costs and net income attributable to these activities can be summed with that from agriculture to give FBI for the whole farm business. Whilst output and variable costs can be readily split between cost centres, some element of estimation is needed in order to share labour, machinery, property and overhead costs. Within the FBS, this is carried out on a consistent basis using an agreed approach¹.

3.1 Agri-environment

The output, costs and contribution of agri environment scheme participation to FBI is shown in Table 3.1.

Table 3.1 Agri-environment Output and Costs, Cereals and General Cropping Farms 2014/2015 and 2015/2016

2014/2015 and 2015/2016				
	Cereals		General Cropping	
	£ per hectare			
	2014	2015	2014	2015
Agri environment output	41	35	41	43
Agri environment costs	7	6	10	9
Agri environment FBI	34	29	31	33
Whole business FBI	220	172	229	248

- Agri environment receipts on most lowland farms were lower in 2015 than in 2014, due to expiry of Environmental Stewardship agreements and a delay in the start of the Countryside Stewardship Scheme, that replaced it, to the start of 2016. On Cereals farms, average agri environment receipts fell to £35 in 2015. The apparent increase in agri environment scheme receipts on General Cropping farms, to an average of £43

¹ Appendix 2 (Item VI) Farm Accounts in England 2008/2009 Defra statistics
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/423700/fbs-fixedcostmethod-23apr15.pdf

3 Agri-environment, Diversification, Single Payment

per hectare, results from the change to the sample of farms due to the decline in sugar beet production.

3.2 Diversification

Table 3.2 shows the performance of diversified activities on arable farms in 2014 and 2015.

Table 3.2 Diversification Output and Costs, Cereals and General Cropping Farms, 201/2015 and 2015/2016

	Cereals		General Cropping	
	£ per hectare			
	2014	2015	2014	2015
Diversification output	113	136	110	156
Of which:				
Rental	79	90	73	87
Recreation	7	8	4	27
Food processing and retailers	1	2	8	16
Tourism	6	7	8	5
Other	19	28	17	19
Costs	46	61	48	86
Diversification FBI	67	75	62	70
Whole farm FBI	220	172	229	248

- Diversification output increased, by 20 and 42 per cent respectively, on Cereals and General Cropping farms. The main drivers of increased output were higher rents and an increase in the 'other' category which includes green energy projects such as solar and heat.
- The region with the highest contribution to FBI from diversification (£151 and £123 per hectare respectively on Cereals and General Cropping farms) was London in the South East where rental receipts averaged £201 per hectare. The East Midlands Cereals farms and Yorkshire and Humber General Cropping farms had the lowest contribution to diversification of £35 and £36 per hectare respectively.

3 Agri-environment, Diversification, Single Payment

3.3 Basic Payment Scheme (BPS)

Table 3.3 shows the output and costs of direct payments on arable farms in 2014 and 2015.

Table 3.3 Single Payment Scheme Output and Costs 2014/2015 and Basic Payment Output and Costs 2015/2016, Cereals and General Cropping Farms

	Cereals		General Cropping	
	£ per hectare			
	2014	2015	2014	2015
Single Payment	183	n/a	178	n/a
Basic Payment	n/a	166	n/a	160
Costs	17	17	15	14
Contribution to FBI	166	149	163	146
Whole farm FBI	220	172	229	248

- The contribution of BPS to FBI in its first year was ten per cent lower than from the Single Payment Scheme in 2014. The BPS accounted for 87 per cent of FBI on Cereals farms and 59 per cent of FBI on General Cropping farms in 2015.
- The BPS, which replaced the Single Payment Scheme, was introduced in 2015. Detailed scheme rules included the introduction of a Greening payment. To receive this payment, all but the smallest Cereals and General Cropping farms were required to introduce an Ecological Focus (EFA) and to follow crop diversification rules, unless they were organic.
- These rules were easily followed by the majority of farm businesses but caused considerable cost and inconvenience for the small number of farmers growing continuous wheat and for contractors who block crop contract farms.
- In 2015, the exchange rate for conversion of BPS to sterling was €1 = £0.73129¹. The resulting lowland payments were £178.85 per hectare comprising £125.66 per hectare for the standard payment and £55.72 per hectare for the greening element².

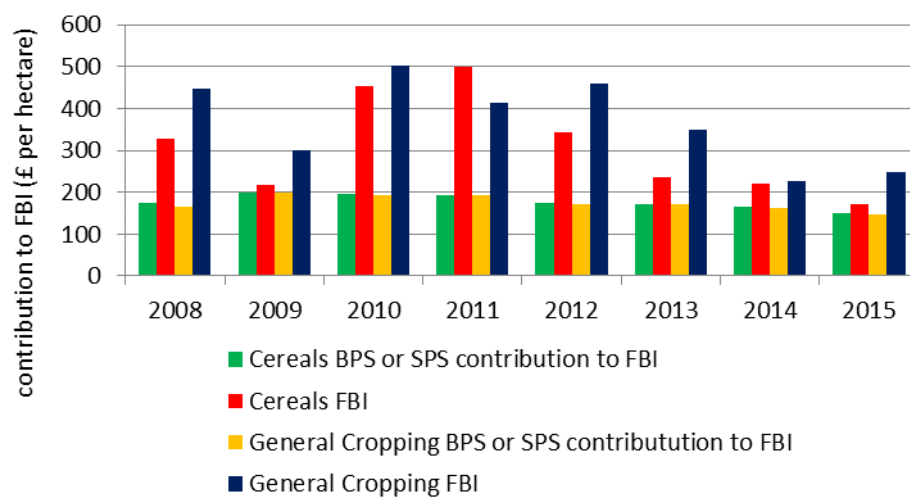
The relative value of direct payments to overall FBI is shown in Figure 3.1.

¹ Farmers Weekly, 2 October 2015

² Farmers Weekly, 13 November 2015

3 Agri-environment, Diversification, Single Payment

Figure 3.1 Net Contribution of Single Payment to FBI on Cereals and General Cropping Farms, 2006 to 2015



4 Crop Enterprise Performance

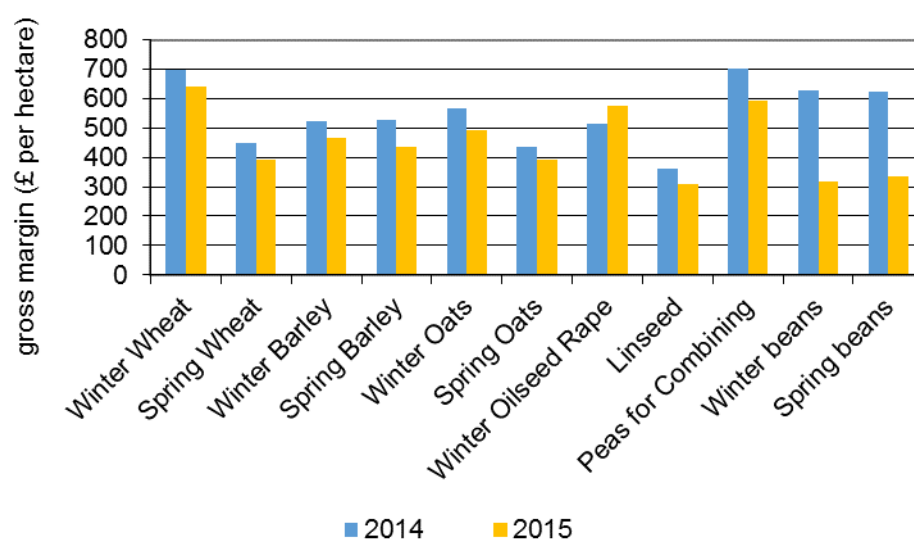
4.0 Crop Gross Margins

- RECORD YIELDS OF NON ORGANIC WHEAT, BARLEY AND OILSEED RAPE
- Winter wheat yield of 9.8 tonnes per hectare – 21% above five year average
- Exceptionally low prices for all crops except potatoes
- Regional variation in OSR yield due to uncontrolled cabbage stem flea beetle
- Oversupply of beans resulting in lower price and reduced margin
- Potato crop benefited from higher prices in response to reduced production
- Favourable weather for crop establishment and crop development

4.1 Crop Gross Margins (excluding organic crops)

The gross margin performance of combinable crops in 2014 and 2015 is summarised in Figure 4.1.

Figure 4.1 Gross Margins of Arable Crops 2014/2015 and 2015/2016



- Winter oilseed rape and potatoes achieved higher gross margins in 2015 than in 2014 whilst other crops achieved lower gross margins.

4.2 Winter Wheat

- The average gross margin was £641 per hectare (£698 in 2014), 23 per cent below the five year average and the lowest since 2009.

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- The non organic winter wheat yield of 9.8 tonnes per hectare was the highest rise since records began and exceeded the five-year average by 21 per cent. The price, of £114 per tonne, was 27 per cent below the five-year average (but lower prices were recorded as recently as 2009). Crop output was worth five per cent less than in 2014.
- Variable costs were similar to 2014 but nine per cent higher than the five year average. Higher crop protection prices were mitigated by lower fertiliser prices.

Farmers grew a reduced area of Group 2 and Group 3 wheats in 2015 in favour of Group 1 and Group 4 wheats. Table 4.1 shows their choices.

Table 4.1 Percentage Allocation of Wheat area to nabim group 2011 to 2015, Great Britain

	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Group 1	17	17	14	17	18
Group 2	11	9	12	8	5
Group 3	15	21	15	12	9
Group 4	54	52	56	63	68

Source: AHDB/HGCA planting and variety survey

- Favourable progress was made with drilling in autumn 2014 with 20 per cent of the crop drilled by the end of September¹. However, the dry spell offered minimal opportunities for the control of blackgrass using a stale seedbed approach, and may not have been ideal for use of pre emergence herbicide².
- Mild autumn conditions raised the risk of virus as aphid populations remained high into December. There were concerns about the risk of foliar disease, in part due to the mild autumn and early drilling. However, overall levels of foliar disease were very low in historic terms and incidence in 2015 was the third lowest since 1970³. *Septoria tritici* was the most common foliar disease but levels were low. Yellow rust was not recorded ear disease levels were low. Wheat crops received an average of 3.6 fungicide applications (3.6 applications in 2014).
- Bright weather in March, April and June and relatively cool conditions in June and July are likely reasons for the high crop yields achieved in 2015⁴.
- The harvest was characterised by an early start and a late finish. Wet harvest conditions delayed the progress of harvest during August⁵. By the start of September, 60 per cent of the UK wheat crop had been harvested⁶. By mid September, 70 per cent of the crop had been harvested, but quality, and hagberg levels in particular, had started to decline⁷.

Table 4.2 shows the quality of wheat crops at the 2014 and 2015 harvests.

¹ ADAS Arable Crop Report, September 2014

² Farmers Weekly, 17 October 2014

³ Crop Monitor, www.cropmonitor.co.uk, 2015

⁴ Farmers Weekly Interactive, www.fwi.co.uk, 11 November 2015

⁵ Farmers Weekly Interactive, www.fwi.co.uk, 28 August 2015

⁶ Farmers Weekly Interactive, www.fwi.co.uk, 3 September 2015

⁷ Farmers Weekly Interactive, www.fwi.co.uk, 16 September 2015

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Table 4.2 Cereal Quality Survey 2014 and 2015, Great Britain

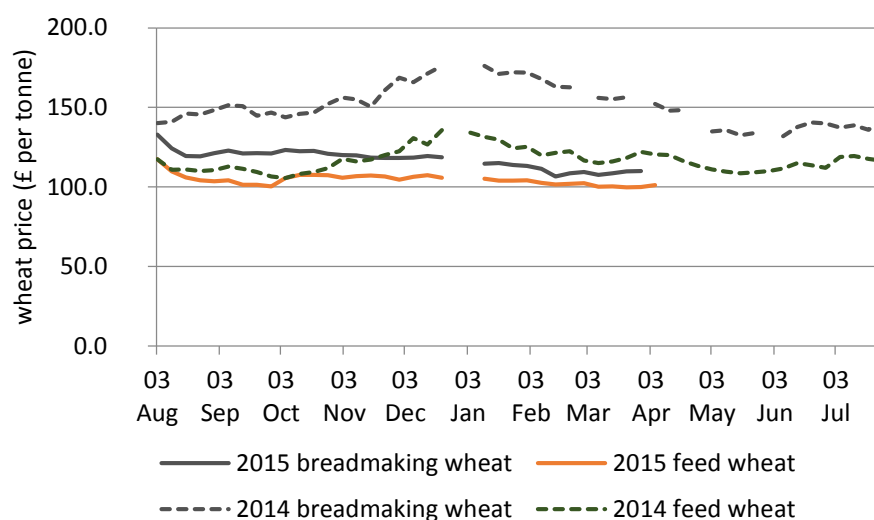
	specific weight kg/hl 2014	specific weight kg/hl 2014	hagberg s 2014	hagberg s 2014	protein % 2014	protein % 2014
Group 1	78.1	79.3	330	312	12.2	12.7
Group 2	78.4	79.9	337	319	11.8	12.3
Group 3	76.3	77.8	294	266	11.0	11.2
Group 4	76.3	77.6	289	257	10.7	11.0

Source: AHDB/HGCA Cereal Quality Survey Final Results

- Protein and specific weights were relatively high, whilst hagberg falling number was lower than in 2014. The quality of the harvest prompted favourable responses from domestic wheat buyers:
- Marketing of the 2015 harvest was difficult due to high worldwide production, the exceptional UK harvest and the strength of sterling.
- At harvest, favourable harvest progress in France and the US reduced prices by £2 per tonne to around £112 per tonne¹. At 9 September, the price averaged around £100 per tonne².

Figure 4.2 shows the average price of feed and bread making wheat sold from the 2015 harvest and Figure 4.3 compares the actual price achieved in 2015 with the two previous years.

Figure 4.2 Wheat Price 2014/2015 and 2015/2016

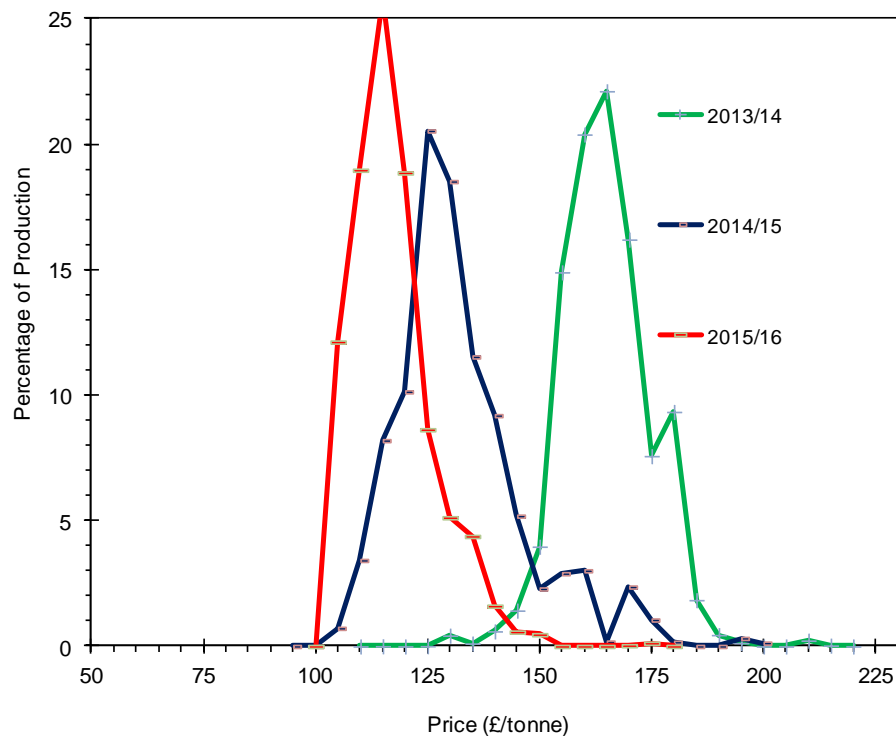


Source: Defra

¹ Farmers Weekly Interactive, www.fwi.co.uk, 23 July 2015

² Farmers Weekly Interactive, www.fwi.co.uk, 10 September 2015

Figure 4.3 Wheat Price Achieved 2013/2014 to 2016/2017



- The value of wheat straw on farms in England averaged £47 per hectare (£56 per hectare in 2014).
- Standing straw prices were lower in 2015 than in 2014. At auction in July 2015, crops sold for between £14 per hectare in Dorset to £23 per hectare in Devon¹. Prices of around £15.50 were achieved in Shropshire and Gloucestershire. In December, baled straw sold for £21 to £42 per tonne².

4.3 Spring Wheat

- Despite a record yield of 6.6 tonnes per hectare, which exceeded the five-year average by 34 per cent, the crop gave the lowest cereal gross margin of £392 per hectare (£451 per hectare in 2014), 36 per cent lower than the five-year average and equal with spring oats. The average expenditure on fertiliser and crop protection increased in 2015.
- Spring wheat increased in popularity as some growers introduced spring wheat to meet the BPS 'three crop rule'. In some cases, spring wheat may have been grown in place of winter wheat.

¹ Farmers Weekly Interactive, www.fwi.co.uk, 15 July 2015

² Farmers Weekly Interactive, www.fwi.co.uk, 3 December 2015

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4.4 Winter Barley

- A record winter barley yield of eight tonnes per hectare, but low price of £105 per tonne gave a low gross margin of only £467 per hectare (£523 in 2014).

4.5 Spring Barley

- The average spring barley gross margin was £436 per hectare (£526 in 2014).
- Spring barley yielded a record 6.5 tonnes per hectare; this was a little higher than the 2014 yield of 6.3 tonne per hectare. The price of £105 per tonne exceeded the winter barley price by £7 per tonne. The UK had an exportable surplus estimated at 500,000 tonnes, but demand was muted due to high production in other European countries and the high value of sterling¹.

4.6 Winter Oats

- Winter oats yielded an exceptional 7.3 tonnes per hectare and gave a gross margin of £494 per hectare (£568 in 2014). High quality and yields tended to suppress prices for milling oats².
- The combination of high yield and low variable costs ensured that winter oats generated the second highest gross margin among combinable crops. Winter oat variable costs reduced due to the variability of less expensive seed.

4.7 Spring Oats

- The spring oat gross margin was £392 per hectare (£436 in 2014). Spring oats were the only cereal that did not achieve a record yield in 2015, but at 6 tonnes per hectare, the yield was still ten per cent higher than the five year average.

4.8 Winter Oilseed Rape

- Across the whole of England, the winter oilseed rape gross margin of £576 per hectare (£514 per hectare in 2014) was competitive against other combinable crops but lower than the wheat or pea gross margin. It was 18 per cent lower than the five-year average. The oilseed rape price of £277 per tonne was virtually unchanged on the previous year
- There was considerable regional performance of the oilseed rape crop, driven by the varying incidence of Cabbage stem flea beetle (CSFB). Winter oilseed rape crops established well in September 2014³. As well as flea beetle in some areas, slugs were also an important pest of the crop.
- Crop protection expenditure increased by two per cent as farmers reduced fungicide applications and many increased insecticide applications or control of CSFB. Overall,

¹ Market Outlook, Autumn 2015, Gleadell

² Market Outlook, Autumn 2015, Gleadell

³ ADAS Arable Crop Report, September 2014

oilseed crops received an average of 3.2 fungicide applications (3.5 in 2014)¹. In the mild autumn conditions, *Phoma* developed rapidly².

- The growing season was characterised by cool, dry sunny weather with an extended period for pod fill, giving the potential for high yield³. A possible record oilseed rape of 7.2 tonnes per hectare was recorded by farmer Steve Tuer on a farm near Northallerton, Yorkshire⁴.
- Farmers were reluctant to sell oilseed rape in March 2015 as new crop prices fell to around £240 per tonne⁵. Prices rose to around £246 per tonne in early September as crude oil prices rose⁶. By mid December 2015, the price was £252 per tonne⁷. Oil quality was generally good at around 42 to 48 per cent⁸.
- Consequently, the greatest problems were found on farms with shorter rotations. The problem has been less apparent where rain fell early after drilling, allowing stronger crop development.
- Farmers resorted to comprehensive spray programmes in which they made multiple applications of non-selective insecticides. The environmental consequences of replacing a selective seed treatment with multiple non-selective insecticide applications were a concern for some farmers. Of the crops that have successfully survived the winter, we are unsure about the likely level of weevil damage to stems in due course.
- Findings from an FBS based assessment of the neonicotinoid seed treatment ban are set out in the table below⁹.

4.9 Linseed

- The linseed gross margin averaged £308 per hectare (£361 per hectare in 2014) and was again the lowest gross margin of any crop.

4.10 Peas for Combining

- In order to meet the Basic Payment Scheme crop diversification rules, many farmers grew peas and beans for the first time in 2015, or returned after a break of many years.
- Peas achieved the second highest combinable crop gross margin after winter wheat of £594 per hectare and 11 per cent below the five year average. Due to yield variability and the mix of market outlets for different varieties, annual variation in performance of the pea crop is expected; in 2014, the gross margin was £704 per hectare.
- The yield of 3.8 tonnes per hectare exceeded the five year average by 11 per cent but the price was 14 per cent below average at £248 per tonne.

¹ Crop Monitor, www.cropmonitor.co.uk

² Crop News from NIAB-TAG, December 2014

³ Farmers Weekly, 17 July 2015

⁴ FarmBusiness.cc, 27 August 2015

⁵ Farmers Weekly, 27 March 2015

⁶ Farmers Weekly Interactive, www.fwi.co.uk, 2 September 2015

⁷ Farmers Weekly Interactive, www.fwi.co.uk, 17 December 2015

⁸ Farmers Weekly Interactive, www.fwi.co.uk, 3 September 2015

⁹ Scott, C. and Bilsborrow, P, An interim assessment of the neonicotinoid seed treatment ban on oilseed rape in England, School of Agriculture Food and Rural Development, Newcastle University, 2016

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- Marrowfat contracts were available in Spring 2015 for a fixed price of around £345 per tonne or minimum price of around £325 per tonne¹. Large blue contracts were available for around £200 per tonne. At September 2015, marrowfat prices were around £300 per tonne and large blue prices around £150 per tonne². High carryover stocks of peas depressed prices of unsold crop in the autumn³.
- In general, growing conditions were favourable for pea production with adequate moisture, low disease incidence⁴. Pea and bean weevils were present in crops in April 2015⁵. This is likely to account for the seven per cent reduction in crop protection expenditure.

4.11 Winter and Spring Beans

- At £334 and £317 per hectare respectively, winter and spring bean gross margins were the second lowest after linseed and lower than any of the cereal gross margins. In 2014, the gross margins of these crops were £625 and £629 per hectare.
- Spring and winter peas both gave yields of 4.4 tonnes per hectare but the spring crop sold for a premium of £10 per tonne at £145 per tonne.
- There was little change to winter bean variable cost expenditure in comparison to 2014. Spring beans were grown at costs that were eight per cent lower.
- Rain may have reduced the quality of beans at harvest, as when dried the crop often had high levels of broken and split beans⁶. In the North of England, beans had minimal insect damage but higher moisture content. Crops exceeding 15 per cent moisture were sold at discounted prices.
- Futures prices for 2015 beans sold in April for November movement were about £160 per tonne⁷. Feed beans traded for around £175 per tonne in July. In November, high farm stocks depressed prices, but the UK benefited from a poor yielding bean harvest in France. Feed beans were worth around £120 to £125 per tonne and human consumption beans were around £140 to £145 per tonne⁸.

4.12 Sugar Beet

- The sugar beet gross margin averaged £1,032 (£1,719 in 2014). This was 18 per cent below the five-year average.
- Comparison between the 2014 and 2015 should be made with care, as it is possible that the smaller area of sugar beet was grown on land best suited to its production in 2015.
- At 76 tonnes per hectare, the yield was the second highest recorded and eight per cent higher than the five-year average. The price, including bonuses and haulage reduced to £26 per tonne, which was 18 per cent lower than the five year average.

¹ Farmers Weekly, 10 April 2015

² Pulse Market Update, September 2015, PGRO

³ Farmers Weekly Interactive, www.fwi.co.uk, 30 September 2015

⁴ Pulse Market Update, July 2015, PGRO

⁵ Farmers Weekly Interactive, www.fwi.co.uk, 22 April 2015

⁶ Market Outlook, Autumn 2015, Gleadell

⁷ Farmers Weekly, 10 April 2015

⁸ Farmers Weekly Interactive, www.fwi.co.uk, 26 November 2015

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- Seed fertiliser and crop protection costs were little changed on 2014, but 'other crop costs' were lower. It possible that farmers based at greater distances from the factories were especially likely to decide not to grow sugar beet due to the haulage cost.
- There were 3,500 sugar beet growers in England in 2015¹. The price received by growers, including transport and bonuses averaged £35 per tonne.
- The contract tonnage entitlement (CTE) and industrial contract entitlement (ICE) sugar beet prices for 2015/2016 were both fixed at £24 per tonne. (CTE was £24 per tonne in 2014).
- Sugar beet was drilled into good seedbeds and moist soils in between the first week of March and mid April 2015². There were some reports of wind blow, capping and bird grazing.
- Crops were at risk from virus yellows (spread by aphids), powdery mildew, leaf miner and downy mildew³. Mangold fly is an increasing pest problem in sugar beet, control is achieved with neonicotinoid seed treatments (which are still approved for use in sugar beet) and with foliar applied pyrethroids⁴.
- In mild autumn conditions, sugar beet saw good late season growth.

4.13 Ware Potatoes

- The gross margin of £4,593 per hectare represented a recovery on last year's £2,535 per hectare and was 27 per cent higher than the five-year average.
- The crop yield of £45.1 tonnes per hectare was exceptional, but the price of £153 per tonne, was in line with the five-year average.
- Crop protection costs were seven per cent higher than the five-year average, although potato seed costs were lower in 2015 than in 2014.
- Planting progress in spring 2015 was slowed by mixed weather conditions, and early growing conditions were cold, slowing crop development.
- Harvest progress, of the reduced planted area, was good and 76 per cent of the crop had been harvested at mid October.
- Prices reduced as harvested volumes exceeded immediate market requirements. In late October, the price was £139 per tonne⁵. As the season progressed, prices improved, reaching £209 per tonne in April 2016.

4.14 Vining Peas

- The vining pea gross margin averaged £972 per hectare (£825 per hectare in 2014).

¹ Crops, 23 May 2015

² British Sugar Beet Review, Summer 2015

³ British Sugar Beet Review, Spring 2016

⁴ Crops, 21 May 2016

⁵ Farmers Weekly, 23 October 2015

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- The average output was £1,510 per hectare and variable costs averaged £538 per hectare, of which seed was £234 per hectare.

4.15 *Miscanthus*

- The *Miscanthus* crop gave an average gross margin of £585 per hectare. The crop yielded about ten tonnes per hectare sold at an average price of about £74 per hectare.

5 Net Margin and Cost of Production Estimation

5.0 Summary of Net Margin and Cost of Production Estimate

- Negative net margins of all crops except potatoes
- Winter crop net margins exceeded spring net margins
- Combinable crop net margins reduced again
- Higher crop yields were the driver of reduced cost of production

5.1 Introduction

In this third year of whole farms analysis, we present net margin and cost of production estimates for the main crops grown in England. The methodology for calculation of FBS net margins on a full economic basis is described at Appendix 3, and includes imputed costs for labour and owner occupied land. Organic crops are excluded from the analysis.

5.2 Results for 2015 (excluding organic crops)

- With the exception of the potato crop, the net margins of all crops were negative. Combinable crop net margins ranged from -£285 per hectare for winter wheat to -£391 for spring wheat. The net margins of sugar beet and potatoes were -£86 and £1,670 per hectare respectively.
- The calculated net margin reflects crop output (yield and price), variable cost and fixed cost performance. The fixed cost element depends on the overall level of whole-farm expenditure, as well as its allocation across enterprises. For example, if the area of cropped land reduces, then the fixed costs must be carried by a smaller area of crops and are higher on an area basis.
- The cost of production exceeded the sale price for all crops, with the exception of potatoes.
- In 2013, the winter wheat cost of production averaged £148 per tonne which exceeded the average sale value of £114 per tonne. About eight per cent of growers either broke even or made a positive return from winter wheat in 2015/2016¹.

5.3 Comparison with Previous Years

- Driven by lower commodity prices, combinable crop net margins reduced successively from 2013 to 2015. The main reason for this was lower commodity prices, but increased crop yields partly mitigated the reduction in output. Variable costs did not change greatly, but fixed costs reduced slightly.

¹ Defra analysis of FBS in Farm Accounts in England 2015 /2016, Defra, 15 December 2016

5 Net Margin and Cost of Production Estimation

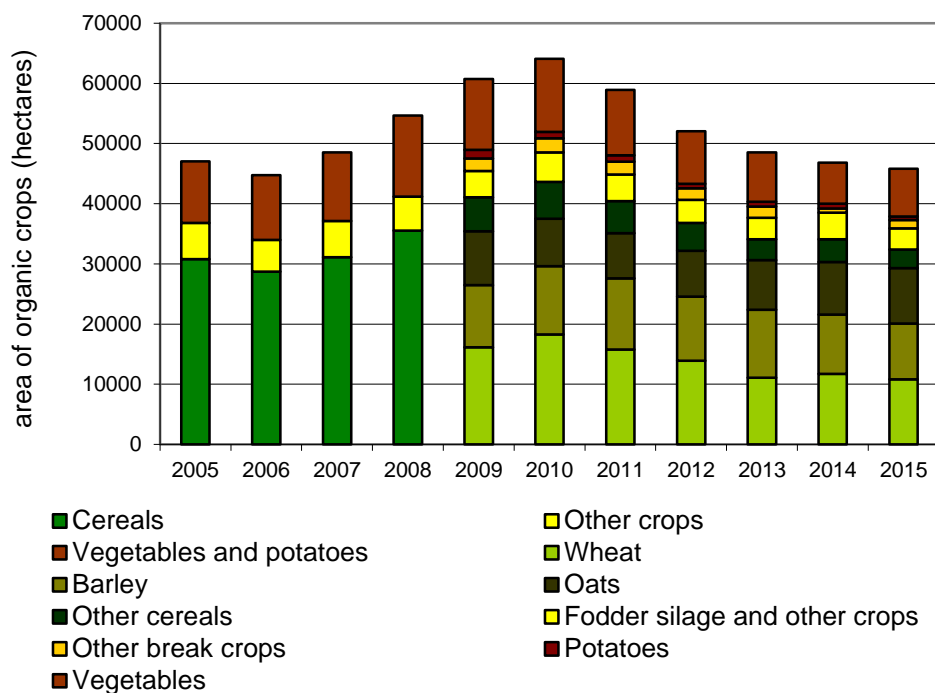
- The main driver of reduced cost of production was increased crop yield. On the basis of crop area, variable costs were similar to 2014 and fixed costs were slightly lower.
- Reduced cost of production due to higher yields suggests higher productivity and also implies more sustainable production as less fuel, crop protection material and less fertiliser was used per unit of output.
- However, given the exceptional level of yield recorded in 2015, an ongoing trend of reduced cost of production is not likely to continue.

6 Organic Arable Performance

6.1 Market Overview and Organic Crop Areas

Figure 6.1 shows further reduction in the area of fully organic arable production, although the rate of reduction was slower than in previous years.

Figure 6.1 Area of Organic Crops in England, 2006 to 2015



- Some 2,233 growers produced 45,800 hectares of organic arable crops. The number of organic producers has apparently stabilised, with neither expansion nor decline. The areas of the main three cereal crops, wheat, barley and oats, were all quite similar at 10,800, 9,300 and 9,200 hectares respectively.
- Over the last five years, only the oat crop has increased, and this was by five per cent. Production of potatoes and other cereals (such as rye, triticale and spelt) saw the greatest decline, both by 34 per cent over five years.
- At 7,900 hectares, the area of organic vegetable remained below the five-year average but recovered from the exceptionally small area of 6,800 hectares grown in 2014.

6.2 The Sample of Organic Farms

In 2015/2016 the FBS included a smaller sample of 18 organic arable farms (including both Cereals and general cropping farm types), in comparison with 22 farms in the previous year.

- The most commonly grown crops on these farms were winter wheat, occupying six per cent of the farm area, spring oats, spring barley, winter oats and spring wheat. Although these farms often had livestock, this accounted for only two per cent of farm output.

6 Organic Arable Performance

6.3 Organic Business Performance

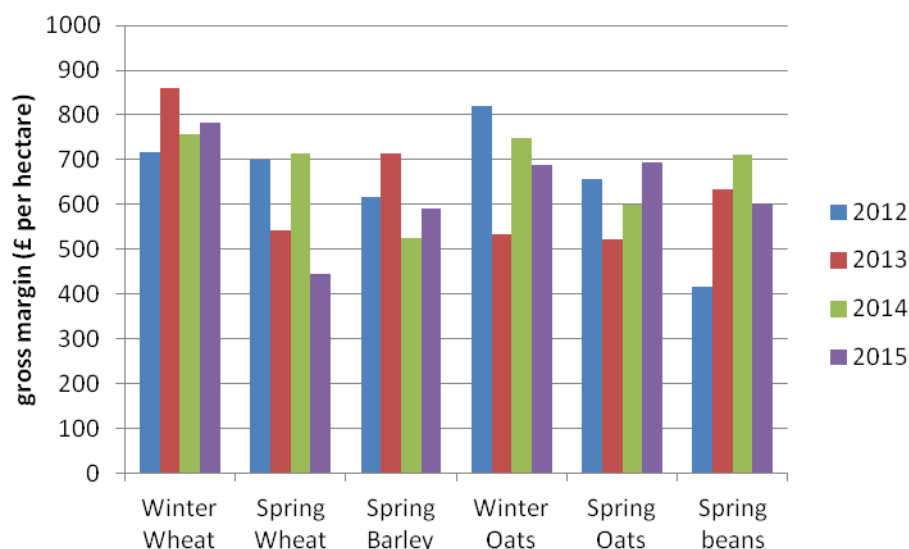
The results presented in this section relate solely to the activity of **agriculture**. The outputs, costs and agricultural Farm Business Income (FBI) attributable to this activity can be summed with that from agri-environment scheme participation, diversification outside agriculture and the Basic Payment Scheme (BPS) to give results for the whole farm business. Whilst output and variable costs can be readily split between cost centres, some element of estimation is needed in order to share labour, machinery, property and overhead costs. Within the FBS, this is carried out on a consistent basis using an agreed approach¹.

- The average FBI for organic arable farms was -£60 per hectare and similar to that of non organic businesses. The reduction in FBI was also similar to non organic businesses and was driven by lower crop output. Labour, rent and repair costs increased whilst energy and depreciation charges reduced.
- The crops with the greatest production areas on organic farms were winter wheat (6.4 per cent of the area), spring oats, spring barley, winter oats and spring wheat (4.5 per cent of the area). Potatoes and horticultural crops occupied about 1 per cent of the farmed area.
- Under the Countryside Stewardship Scheme (CSS) introduced in 2015, organic rotational land was eligible for maintenance payments of £70 per hectare (£60 per hectare in Organic Entry Level Stewardship) and conversion payments of £175 per hectare (previously £220 per hectare)².

6.4 Organic Crop Performance

Figure 6.2 shows organic gross margin achieved in recent years.

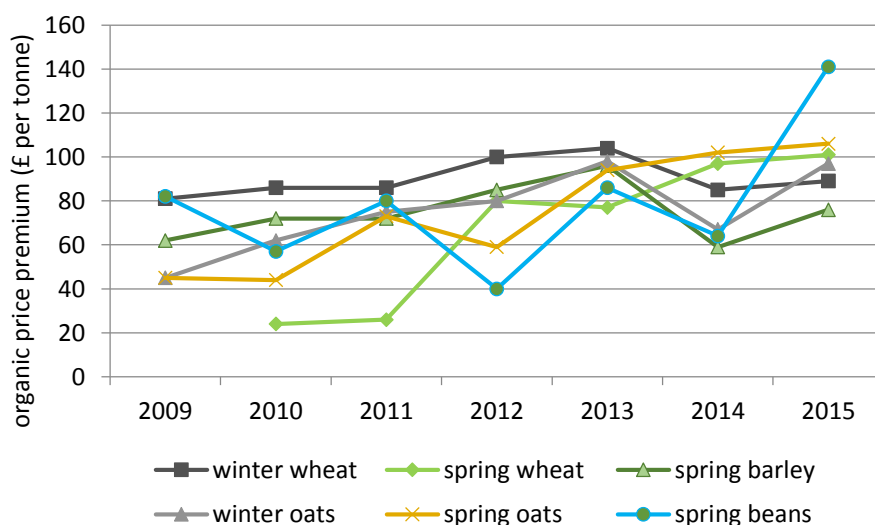
Figure 6.2 Organic Gross Margins 2012 to 2015



¹ Appendix 2 (Item VI) Farm Accounts in England 2008/2009 Defra statistics
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/423700/fbs-fixedcostmethod-23apr15.pdf

² Farmers Weekly Interactive, www.fwi.co.uk, 26 November 2014

Figure 6.3 Organic Price Premium, Wheat and Oats, 2010 to 2015



- Organic crop premiums have tended to increase in recent years and oats have seen the highest increases. In comparison with previous years, beans achieved an exceptional premium in 2015 due to reduced competition from imported sources of protein for livestock feed.
- The organic winter wheat gross margin was £784 per hectare; this was 90 per cent of the five-year average. Winter wheat remained the crop with the highest gross margin among combinable crops, including non-organic crops.
- The crop achieved an average yield of 4.2 tonnes per hectare, which was 8 per cent above the five-year average.
- The average price achieved by organic winter wheat producers was £203 per hectare. At harvest, organic feed wheat averaged £202 per tonne. The price subsequently declined to around £180 per tonne, eventually building to £190 per tonne for crops stored until February.
- At £130 per hectare, variable costs were close to levels last seen in 2009 and 2010 and were 13 per cent below the five-year average.
- Despite achieving a yield of 3.1 tonnes per hectare, which was at the five-year level, spring wheat sold for an exceptionally low price of £217 per tonne, which was 15 per cent lower than the five-year average. The resulting gross margin was £446 per hectare and 34 per cent below the five-year average. Spring wheat was the crop with the lowest gross margin.
- Protein levels were generally low, and hagberg levels of later harvested crops were also low, so milling premiums were not easy to achieve for organic producers¹. Protein levels of ten per cent were common in 2015². Generous premiums, of around £40 per tonne, were reported for the few crops of better milling quality³.

¹ Market Outlook, Autumn 2015, Gleadell

² Saxon Organic Briefing, October 2015

³ Saxon Organic Briefing, April 2016

6 Organic Arable Performance

Spring Barley

- The gross margin performance of spring barley was unremarkable at £590 per hectare, 14 per cent below the five-year average from a crop yielding 3.6 tonnes per hectare, and 8 per cent above the five-year average.
- Organic feed barley price averaged £194 at harvest. Following a similar pattern to wheat, the price reduced to £180 per tonne in December and then recovered to £188 per tonne in April.
- Malting barley quality was generally good with nitrogen levels in the range of 1.3 to 1.7 per cent¹. Growers tended to hold barley in the hope that it would achieve malting quality, but in reality, much of this crop was subsequently sold for feed².

Winter and Spring Oats

- With gross margins of £687 and £694 respectively, winter and spring oats were the best performing crops after winter wheat. In both cases, the crops averaged 3.7 tonnes per hectare. This was a typical yield for the winter crop, but for spring oats, the yield exceeded the five-year average by 20 per cent and the gross margin by 14 per cent.
- The average winter and spring oat prices were £204 and £212 per tonne respectively. Organic milling oats traded for around at £210 at harvest and for crops sold up to October, the price increased to £228 per tonne. As the volume of crop of reasonable quality became apparent, the value reduced steadily to reach £174 per tonne in April 2016.

Spring Beans

- Spring beans achieved a gross margin of £602 per hectare, in line with the five-year average but from a yield of 2.9 tonnes per hectare, 20 per cent above the five-year average.
- The average price achieved was £286 per hectare. From £280 per tonne at harvest, the bean price increased to £300 per tonne in late 2015. The price then reduced to £290 per tonne in early 2016 as substitute protein sources became available, recovering to £300 per tonne from March as compounders faced limited supplies of imported sunflower cake.
- The high cost of import proteins support the price of organic beans³.

¹ Saxon Organic Briefing, October 2015

² Saxon Organic Briefing, January 2016

³ Market Outlook, Autumn 2015, Gleadell

7.0 Weather, Economic Context and Policy Summary

- The Bank of England Base Rate remained at 0.5 per cent in 2015
- Sterling started to weaken against the euro and US dollar in early 2016
- Fertiliser prices reduced for a second successive year
- The 2014 and 2015 weather provided favourable growing conditions for 2015 crops
- Harvest 2015 was wet and prolonged
- Lower commodity prices were the likely reason for ongoing merger and acquisition activity in the agricultural supply chain

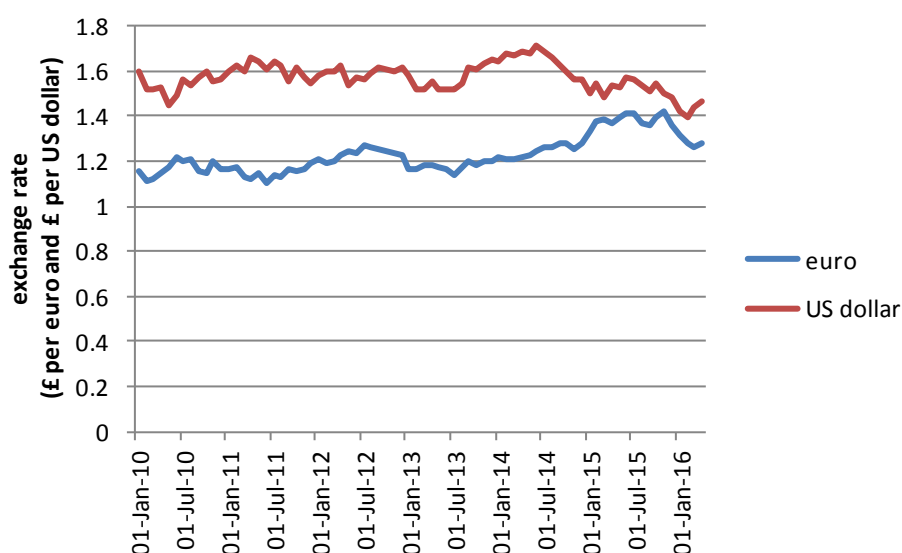
7.1 Economic Environment

Interest and Exchange Rates

The Bank of England base rate remained at 0.5 per cent, this rate was unchanged from March 2009¹.

Figure 7.1 shows exchange rate of the euro and US dollar, relative to sterling.

Figure 7.1 Euro/Sterling Exchange Rate 2010 to 2016



- Sterling strengthened against the euro and US dollar until July to December 2015. The result was lower cost of imported materials but UK crops were less competitive in export markets so

¹ Bank of England, www.bankofengland.co.uk

7 Weather, Economic Context and Policy

crop prices were depressed as a result of the strong currency. Early concerns ahead of the EU Referendum tended to be drivers of weaker currency in early 2016.

- At around £260 per tonne, ammonium nitrate was less expensive than in September 2014 (when the price was £270 per tonne) and September 2013 (when the price was £290 per tonne)¹. Prices rose progressively, eventually reaching £285 per tonne in March and April 2015². Demand was low, due to changed cropping plans, low grain prices and cashflow pressure.
- In a season of changed cropping patterns, low weed and disease burden, spray requirements were lower than in previous years.

7.2 Weather

- September 2014 was the driest since records began and provided generally good conditions for crop establishment. Prolonged dry conditions in April 2015 were a concern for growers of spring crops, particularly in Bedfordshire, Buckinghamshire and Cambridgeshire³. March and April sunshine was above average whilst May was slightly less sunny than average⁴. The summer was cooler and wetter than the two previous years leading to a protracted harvest. September and October were generally settled allowing favourable progress with the sugar beet and potato harvest. Exceptional rainfall in late 2015 caused flooding in parts of North West England.

7.3 Business

There was considerable international interest in acquisition of grain trading businesses in 2015:

There was also further consolidation among suppliers of agricultural inputs:

- A number of businesses announced investments in arable infrastructure in the year:

7.4 Renewable Energy

- In the July summer budget, the Chancellor of the Exchequer announced that renewable generation would no longer be exempt from the Climate Change Levy.
- Greatly reduced support for solar installations was offered under the Renewable Obligation and greatly reduced Feed in Tariffs were offered for renewable developments from January 2016⁵.
- For new Renewable Heat Incentive (RHI) installations accredited after 1 July 2015, the RHI reduced from 8.93 to 7.14 pence per kilowatt hour⁶.

¹ Farmers Weekly Interactive, www.fwi.co.uk, 3 September 2014

² Farmers Weekly Interactive, www.fwi.co.uk, 2 April 2015

³ Farmers Weekly Interactive, www.fwi.co.uk, 29 April 2015

⁴ Meteorological Office, www.metoffice.gov.uk

⁵ Farmers Weekly Interactive, www.fwi.co.uk, 22 July 2015

⁶ RHI

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