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Rural Business Research

# Farm Business Survey

2016/2017

## Horticulture Production in England



Richard Crane, David Deans,  
and Thomas Wedd

**RBR**

*independent research, data and analysis*

Rural Business Research



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**2016/17**

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## **Foreword to the First Series**

This report is one of a series being produced based on the results of the Farm Business Survey (FBS) for England. The annual Farm Business Survey is the most comprehensive and independent survey of farm incomes and provides a definitive data source on the economic and physical performance of farm businesses in England. It is conducted by a Consortium comprising the Universities of Cambridge, Newcastle upon Tyne, Nottingham and Reading, and Askham Bryan, Duchy and Imperial Colleges. The Consortium is led by the University of Nottingham and its members work in partnership, using uniform and standard practices in reporting on their findings to ensure consistent data quality, accuracy and validity. The Survey is financed by Defra and the Consortium values greatly the input of their staff.

These detailed reports for various farm types and enterprises are in addition to the comprehensive Farm Business Survey Reports for Government Office Regions published at [www.farmbusinesssurvey.co.uk](http://www.farmbusinesssurvey.co.uk). The Consortium is seeking by these additional reports to ensure that timely and relevant information is available to farmers, consultants, advisers and other organisations and individuals interested in farming and land management. The analysis and publication of these reports uses data from farm businesses across England, with an individual member of the Consortium undertaking the research analysis. In line with the ethos of the Consortium, these reports present results in such a way as to ensure a significant element of continuity and consistency from one report to the other, whilst also ensuring that each report captures the contemporary issues of relevance to the sector of agriculture in England to which it relates.

We believe these reports will make a valuable and useful contribution to the farming industry and we commend them to you.

**Prof. Martin Seabrook**

(Chief Executive of the Consortium)

Spring 2007

## Foreword to the Twelfth Series

This series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)* represents the twelfth series of outputs that focus on providing independent data and analysis to the individual sectors of agriculture and horticulture. As farmers and growers look towards the future for their businesses, the policy landscape is beginning to emerge. The direction of policy travel for UK agriculture and horticulture will be more focused upon the market and the provision of specific environmental goods, and land-area based payments are likely to be reduced or removed in the future. The direction of policy travel has been accompanied with a guarantee that the Basic Payment will remain until at least 2022. These signals provide both an indication of policy outcomes and a time-frame within which businesses can begin to adapt to a new future. The UK's decision to leave the EU will of course have major implications for agriculture and horticulture; these impacts are likely to bring both challenges and opportunities. While many factors remain uncertain, at the level of the individual business what is required is to position the business to meet the challenges that lie ahead while maximising the outcome of the opportunities that will present themselves. For individual businesses this begins with a need to understand current performance, and to place this within the context of the wider market environment and understand the relative strengths of the business against others within the sector. Within this series of reports, RBR seeks to help businesses to identify their relative strengths and challenges through independent data presented to highlight the key findings and data as appropriate to individual sectors of agriculture and horticulture. It is not possible to manage a process or activity successfully without knowing the underlying data or performance of the process or activity. This series of reports sets out to provide this information at this crucial planning stage for agriculture and horticulture.

The headline data from the Farm Business Survey (FBS) for the 2016/17 financial year, shows that average Farm Business Income (FBI) increased by 20% to £38,000 per farm, taking farm incomes upwards again after a period of six years of falling income levels. At £38,000 per farm FBI is still the second lowest average income from the previous six years. Examining results by farm type, on average, with the exception of Poultry farms, all farm types benefited from an increase in FBI in 2016/17. One of the main drivers for the increased FBI results was a generally lower cost base, with increases in the price of beef, sheep and combinable crops also playing an important part in the increased FBI results. The contribution of increased output from agri-environment, diversification activities and the Basic Payment were also features of the increased FBI result. The exchange rate movement that weakened the value of Sterling in the aftermath of the EU referendum result in 2016, that led to increased output prices during 2016/17, has recently moderated. Should Sterling gain momentum moving forward this will place downward pressure on output prices, but offer some input price advantage, in particular for imported inputs.

As we produce this twelfth series of independent reports, agricultural and horticultural businesses need to prepare for the future if they are to prosper as the market and policy landscapes change. Businesses that understand their costs of production and their relative strengths within a sector will be best placed to compete irrespective of what the future may bring. With this series of reports we aim to help inform agricultural and horticultural businesses about the economics of the sector in which they operate, in order to aid management decision making. It is of crucial importance to recognise that this valuable series of reports would 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 therefore go to the farmers and growers who assist us in this valuable work through their participation in the FBS.

### **Professor Paul Wilson**

Chief Executive Officer, Rural Business Research  
February 2018

[www.ruralbusinessresearch.co.uk](http://www.ruralbusinessresearch.co.uk)

## Acknowledgements

Rural Business Research thanks sincerely all those farmers and growers who have voluntarily provided records and information on which the annual Farm Business Survey, and this report, is based.

The basic information on which this report is based was collected on behalf of, and largely financed by, the Department for Environment, Food and Rural Affairs and is Crown Copyright.

*The views expressed in this publication are those of the authors and are not necessarily shared by other members of the University or by the University as a whole.*

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## SUMMARY

### Section 1

**An overview of the horticultural industry in the United Kingdom (UK) using external data, including government published statistics and information from the press.**

The report illustrates the importance of horticulture to UK agriculture output, the composition of its sectors and highlights historical and current trends in the output, prices and the areas used for horticultural crop production. The review also includes price indices for key products and inputs.

#### Highlights:

- In 2016, the output from horticulture was £3,199 million, 14% of total agricultural output
- During the last decade, there has been an average annual increase of just over 4% in output (based on current prices) for total horticultural production
- Both the vegetable and ornamental sectors experienced an increase in output between 2015 and 2016; the fruit sector saw a 5% reduction in the same period
- Vegetable production remains the largest horticultural sector, in terms of both land use and output, accounting for 42% of total UK horticultural output and 71% of total productive outdoor horticultural area in 2016
- The proportion of total horticultural output from vegetable production has reduced over the last 30 years, from a decade average of 55% in 1987 to 1996, to 43% in the most recent decade, 2007 to 2016
- Output from non-edibles has reduced slightly to a decade average of 36%, from a peak in the previous decade 1997 to 2006 and, fruit at 21%, in the most recent decade has shown a marked increase from the previous decade average
- In 2016 the UK was 36% self-sufficient in all vegetables, 17% in all fruit and 49% in all ornamentals, in terms of value
- The index of producer prices showed some wide variability between 2016 and 2017 with indices for fresh fruit up 8 points and fresh vegetables down 2 points
- The index of purchase prices saw fuel for heating increase in the period 2010 to 2014, but stabilise for the last three years

### Section 2

**A review of the financial results derived from the Farm Business Survey (FBS) for the 2016/17 financial year.**

The stratification of the FBS horticulture sample is explained and key trends are shown for the businesses included both, as a whole, and for the four main sectors of Glass, Fruit, Hardy Nursery Stock (HNS) and Other Horticulture. The results for each group are presented in tables reporting on output, costs and Farm Business Income (FBI) at a business level, per hectare and per £100 of gross output basis.

#### Highlights:

- The number of FBS eligible horticultural businesses in 2016 was 3,002, while the total FBS sample was 188 businesses, representing 6.3% of the national population of eligible horticultural businesses

- Weather conditions for the 2016/17 financial year deteriorated through the season; there were good weather conditions in the early spring, becoming cooler later in the spring, while cool and dull conditions dominated throughout the summer
- Profitability for all horticultural businesses, as measured by Farm Business Income (FBI), rose by 27%, to an average of £43,756 per business in 2016/17
- Specialist Glass and Other Horticulture businesses increased profitability by 11% and 14% respectively
- Profitability for Specialist Hardy Nursery Stock businesses rose by 38% and, most notably, profitability of Specialist fruit businesses more than doubled
- For the whole sample (All horticultural businesses) gross output rose by 24%, variable costs were 24% higher and fixed costs were 21% more than the previous year

## **SECTION 1: THE HORTICULTURAL SECTOR**

### **1.1 *The contribution of horticulture to UK agricultural output***

- Total agricultural output in the UK in 2016 was £23,107 million, down 5% from the previous year
- Total horticultural output in the UK in 2016 was £3,199 million, contributing 14% to total agricultural output
- Total horticultural output increased between 2015 and 2016 by £71 million, up 2%
- Average horticultural output in the ten year period 2007 to 2016 was £2,837 million, an increase of £920 million (47%), compared with the average for the previous ten year period 1997 to 2006

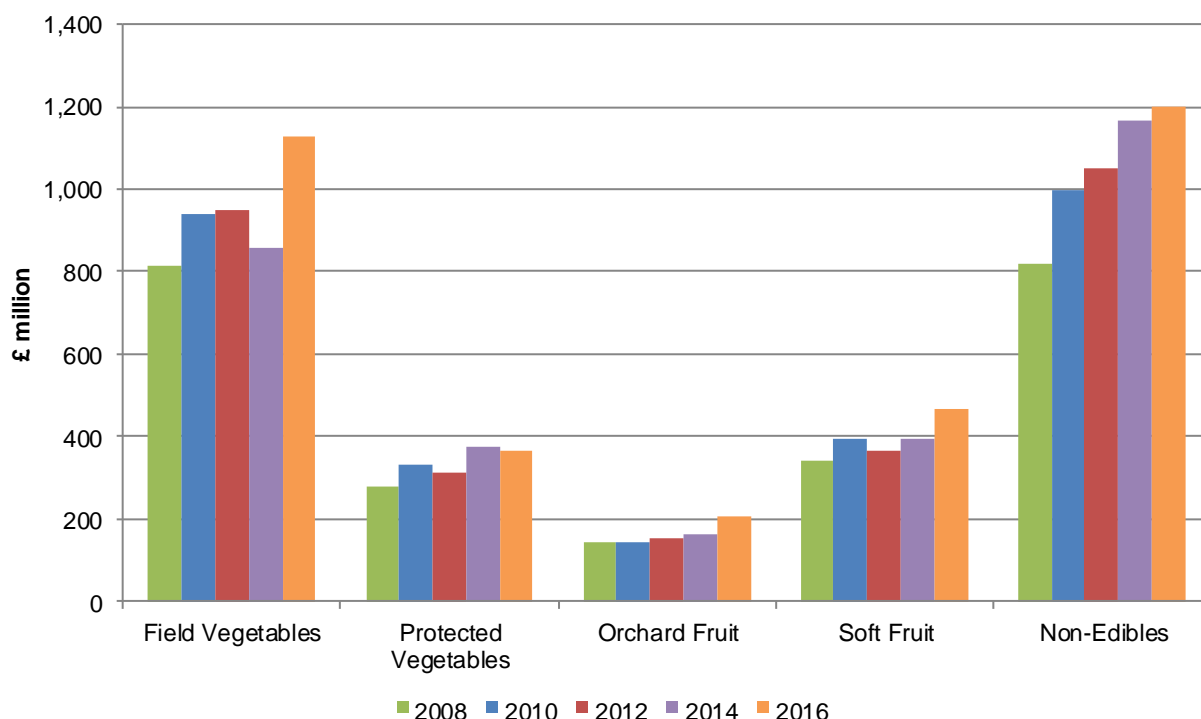
### **1.2 *Historic changes in the composition of the main sectors of horticulture***

- Horticulture can be sub-divided into its three main sectors of fruit, vegetables and non-edibles for reporting purposes
- The area used by each sector has varied over the past thirty years, however, the vegetable sector accounted on average for the largest proportion of the use of land (73%), followed by fruit (20%) and non-edibles (7%) during the past decade, 2007 to 2016
- The total area of land utilised for horticultural production since 1987 averaged 180,562ha; down from 200,015ha in 1987, to a low of 161,945ha in 2016 and a reduction of 8% on 2015
- Output has also varied over the past thirty years, which on average, has seen the vegetable sector as the greatest contributor (49%), followed by non-edibles (35%) and fruit (17%)
- In 2016 actual output for the sectors was:
  - Vegetables 42%
  - Non-edibles 38%
  - Fruit 21%
- In value terms output in 2016 compared with (2015) was:
  - £1,329 million for vegetables (£1,257 million), up 6%
  - £1,202 million for non-edibles (£1,169 million), up 3%
  - £668 million for fruit (£702 million), down 5%

### **1.3 *Horticultural production in the past decade (in current terms)***

- Total annual horticultural output in the UK has averaged £2,808 million in the decade since 2007
- A low of £2,245 million was recorded in 2007 with a high of £3,367 million achieved in 2016
- Between 2007 and 2016 total horticultural output grew by 50% with the different sectors showing a wide variation in growth rates as noted below:
  - Vegetables from £1,061 million to £1,495 million, up 41%
  - Fruit from £417 million to £670 million, up 61%
  - Non-edibles from £768 million to £1,202 million, up 57%

**Figure 1.1 Value of horticultural production (current prices: £m)<sup>1</sup>**



**Table 1.1 Area of outdoor and protected crops in the UK (ha)<sup>1,2</sup>**

	2008	2010	2012	2014	2016
Glasshouse fruit	180	185	202	225	217
Protected Vegetables	677	691	755	855	731
Outdoor Non-Edibles	12,958	11,718	12,308	11,996	11,508
Field Vegetables	116,781	133,565	127,189	131,608	146,088
Orchard Fruit	18,620	18,934	19,289	19,351	19,916
Soft Fruit	9,422	9,683	9,623	9,406	9,531

**Note:** The area of crops in table 1.1 relate to the total area, which for some crops will be for more than one crop harvested from the same area of land in the same cropping year (multiple cropping).

- The area of glasshouse fruit increased by 21% since 2008
- The area of protected vegetables increased by 8% since 2008
- The area of outdoor non-edibles decreased by 11% since 2008; the area has fluctuated throughout the period, but decreased by 4% between 2014 and 2016
- The area of field vegetables increased by 25% since 2008; this sector has shown the largest growth in the period
- The area of orchard fruit has increased by 7% since 2008
- The area of soft fruit has grown by a modest 1% since 2008, peaking in 2011 at 9,710ha; following a reduction in area between 2012 and 2014; the area increased again by 1% between 2014 and 2016

#### 1.4 The horticultural sector in 2016

- The total value of horticultural produce in 2016 amounted to £3,368 million
- Field scale vegetables comprised the largest share of total output at 34%
- Flowers and bloom accounted for the lowest share of the total output at a little over 3%

Figure 1.2 Value of horticultural produce in 2016 by proportion of total output <sup>1</sup>

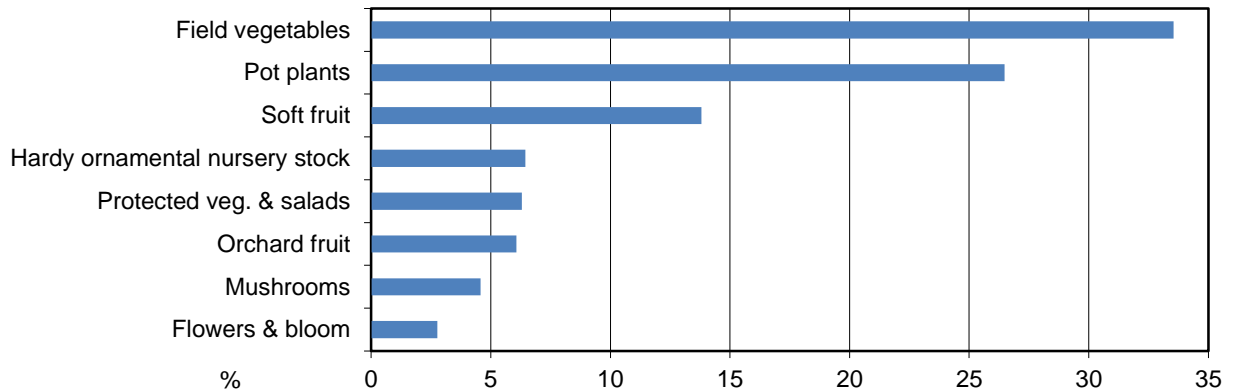
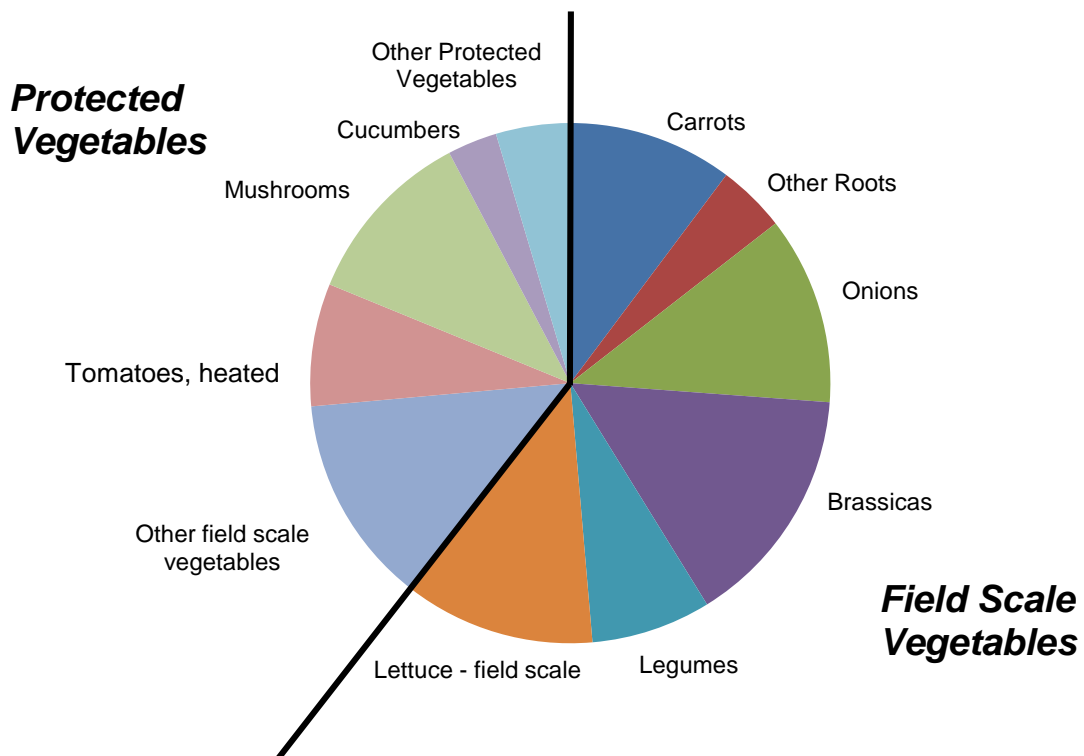
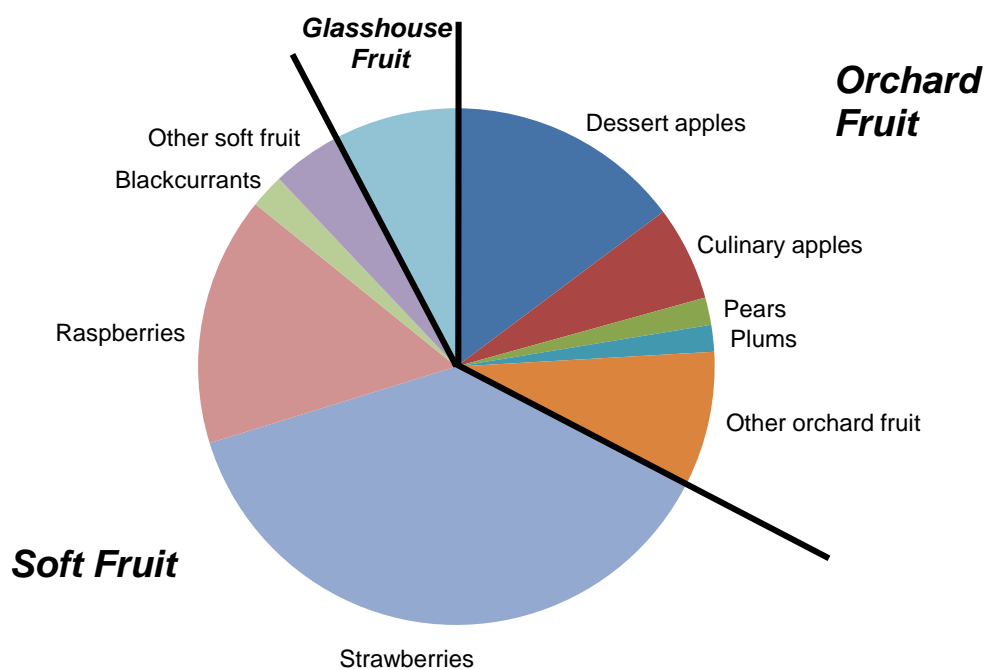


Figure 1.3 Composition of vegetable output in 2016<sup>2</sup>



- Field scale vegetable production accounts for 74% of total value of vegetable produce, including brassicas, carrots, legumes, parsnips, turnips, swede, asparagus, watercress, leeks, lettuce, rhubarb, celery and onions (dry bulb and green)
- Brassicas account for the largest proportion by category of the total value of vegetables at 15%
- Protected vegetables include crops grown in both heated and cold glasshouses and polythene tunnels and account for 26% of total vegetable value
- Mushrooms and tomatoes between them contribute the highest proportion by value of protected vegetables, at 11% and 8% respectively

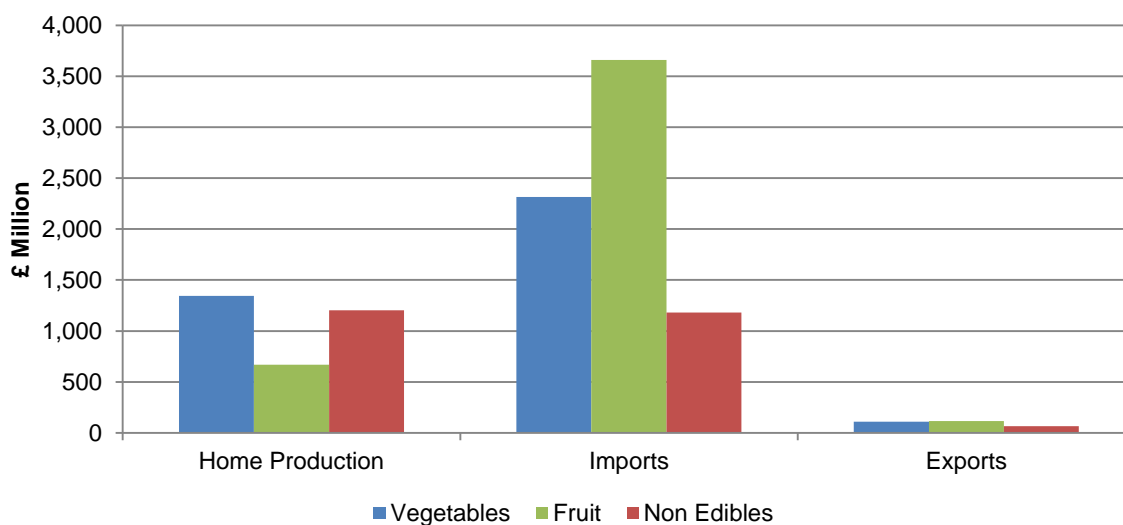
**Figure 1.4 Composition of fruit output in 2016<sup>2</sup>**



- Total fruit output by value was £669 million, with the production of field grown soft fruit generating £400 million (60%), orchard fruit £217 million (32%) and glasshouse fruit £53 million (8%)
- Strawberry production contributed the greatest share of all soft fruit production at £253 million (63%), and 38% of total fruit production
- Dessert apples accounted for 46% of orchard fruit output in 2016
- Dessert apples recorded an increase of 28% in output, between 2015 and 2016
- Plums accounted for 5% of orchard fruit with output down 17% in 2016, compared with the previous year

## 1.5 Imports and exports of horticultural products

Figure 1.5 Value of vegetables, fruit and non-edibles 2016 (£m)<sup>2</sup>



### Vegetables

- The UK was 38% self-sufficient in all vegetables in terms of value in 2016, averaging 40% since 2007
- Between 2015 and 2016 the value of exports increased by 13%, whilst the value of imports rose by 11%
- The value of home produced vegetables in actual prices increased by 27% between 2007 and 2016, to £1,343 million

### Fruit

- In 2016, in terms of value, the UK was around 18% self-sufficient in fruit, averaging the same rate since 2007
- Between 2015 and 2016 the value of exports increased by 18%, whilst the value of imports also rose by 18%
- The value of home production in actual prices increased between 2007 and 2016 by 48%, to £670 million

## Non-edibles

- In terms of value, self-sufficiency for ornamentals in 2016 was 52%, averaging 51% since 2007; self-sufficiency has increased by 5% in the past decade
- Between 2015 and 2016 the value of exports increased by 20%, whilst the value of imports rose by 10%
- The value of home production in actual prices increased between 2007 and 2016 by 57%, to £1,202 million

### 1.6 Farm gate prices (actual): recent trends

- The fruit and vegetable sectors have seen significant price fluctuations between 2009 and 2016 with, for example, the minimum and maximum price for plums and brussels sprouts ranging by around 91% and 173% respectively
- The price fluctuation of top fruit has been more marked than soft fruit with an average price increase of 55%, compared with 28%
- Brassica vegetables, namely brussels sprouts, cabbage and calabrese, have shown considerable inter-year variability, with an average price change of 152%, since 2009
- Vegetables excluding brassicas, namely carrots and parsnips, also showed inter-year variability, with an average price change of 33%, since 2009
- Salad crops, i.e. lettuce, tomatoes and cucumbers recorded price changes of 52%, 67% and 44% respectively over the period 2009 to 2016

Figure 1.6 Average soft fruit farm gate actual prices<sup>3</sup>

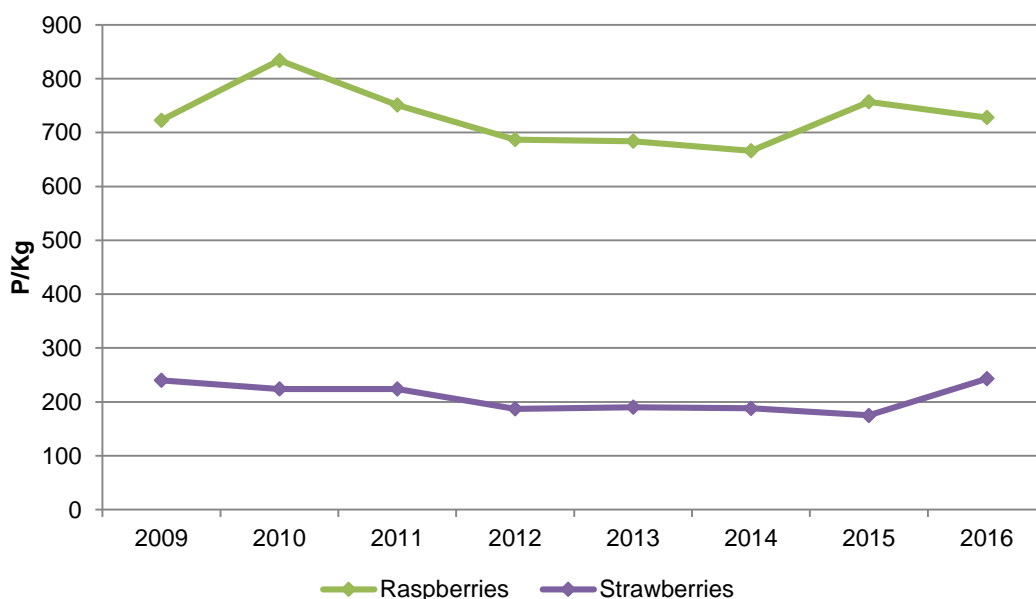




Figure 1.7 Average top fruit farm gate actual prices<sup>3</sup>

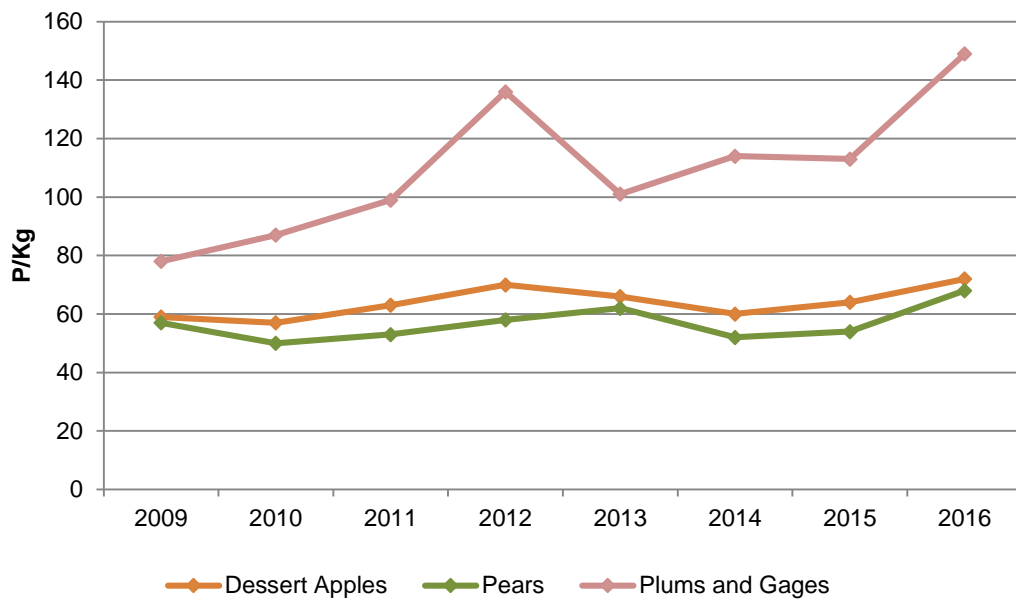
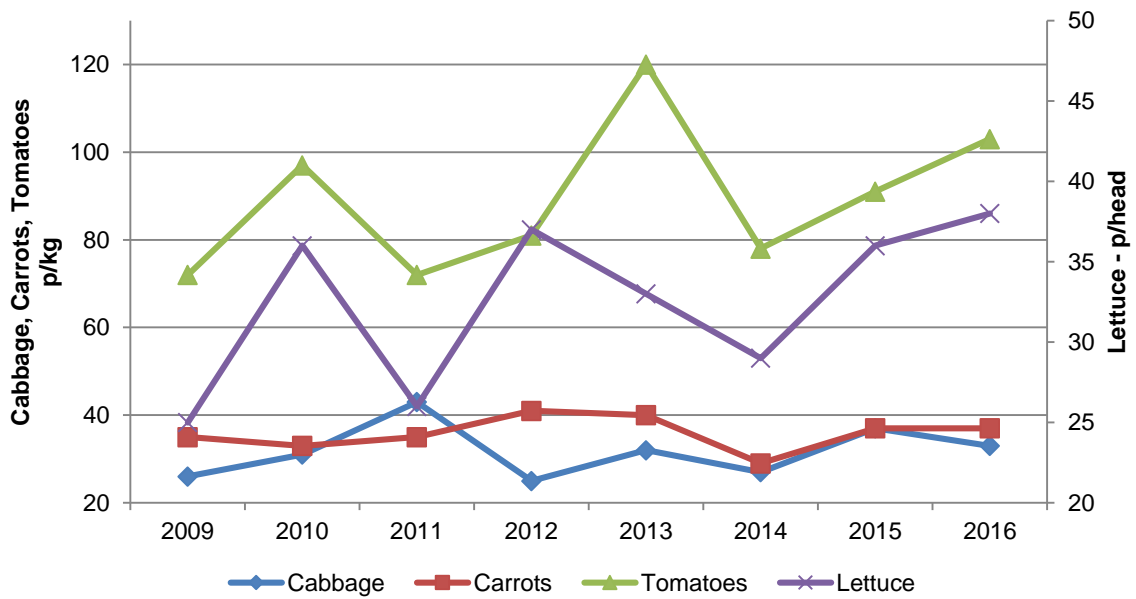


Figure 1.8 Average vegetable farm gate actual prices<sup>3</sup>



## 1.7 Price Indices in the UK

Table 1.2 Index of producer prices (Index: 2010 =100)<sup>4</sup>

	2012	2013	2014	2015	2016	2017
Dessert apples	118.0	117.1	104.0	104.7	103.3	117.5
Dessert pears	116.9	129.4	102.8	99.8	111.3	127.2
Strawberries	87.4	84.0	91.4	95.1	103.7	108.6
All fresh fruit	103.7	104.8	97.6	101.2	106.9	114.9
Lettuce	110.1	104.9	100.0	98.7	108.6	106.3
Onions	68.3	96.9	94.9	93.2	104.9	110.5
Cabbage	120.3	113.4	94.9	106.9	115.4	118.4
All fresh vegetables	108.6	110.2	103.1	105.9	114.7	112.6
Flowers & plants	109.3	110.9	109.5	107.2	106.3	105.7

- The 2017 indices for all fresh fruit shows an increase on 2016, whilst all fresh vegetables and flowers and plants show small decreases

**Table 1.3 Index of purchase prices (index 2010 =100)<sup>4,5</sup>**

	2012	2013	2014	2015	2016	2017
<b>Current Inputs</b>						
Seeds	105.2	113.9	100.9	95.6	98.1	103.6
Fertilisers & soil improvers	125.2	113.1	106.5	101.5	83.2	89.9
Plant protection	102.0	97.7	102.6	102.5	102.5	106.2
Fuel for heating	118.8	126.8	132.1	127.9	124.1	127.8
Hired labour*	105.8	108.0	111.1	112.5	114.9	118.8
<b>Capital inputs</b>						
Machinery & other equipment	94.3	96.8	115.9	121.4	121.4	122.4
Buildings	107.4	107.7	108.4	107.2	107.0	111.2
<b>Finance inputs</b>						
Bank rate	100	100	100	100	80	58

\* Rural Business Research imputed hourly labour rates

- The index of purchase prices have shown an increase of 5 points for seeds, 6 points for fertilisers and soil improvers and 4 points for plant protection between 2016 and 2017
- Fuel for heating increased every year in the period 2011 to 2014, decreased in 2015 and 2016 and has increased by 4 points between 2016 and 2017
- Labour costs increased by 4 points between 2016 and 2017
- The index for machinery & other equipment has shown a negligible increase of 1 point since 2015



## SECTION 2: FINANCIAL RESULTS FOR HORTICULTURE IN ENGLAND

### 2.1 Introduction to the data

The following series of tables are drawn from a sample of farmers and growers who participate in the Farm Business Survey (FBS) in England and whose businesses are classified under one of the four main Defra horticultural type groups. These four type groups of Specialist Glass, Specialist Fruit, Specialist Hardy Nursery Stock and Other Horticulture are defined below.

For the purposes of the Defra classification, field scale vegetable producers are classified as General Cropping farms, and so their results are not included in these tables, although smaller scale outdoor vegetable producers are recorded in the 'Other Horticulture' typology group.

The data in this report were compiled from the 2015/16 and 2016/17 FBS and can be accessed at:

- [www.farmbusinesssurvey.co.uk](http://www.farmbusinesssurvey.co.uk) and at
- [www.defra.gov.uk/statistics/foodfarm/farmmanage/fbs/publications/farmaccounts](http://www.defra.gov.uk/statistics/foodfarm/farmmanage/fbs/publications/farmaccounts)

### 2.2 Definition of horticultural type groups

*Horticultural businesses are defined as businesses where horticultural crops or permanent crops including fruit, either alone or in combination, account for over two thirds of total standard output.*

#### **Specialist glass**

- Market garden vegetables and flowers under glass (either alone or in combination) accounting for more than two thirds of the total standard output of the business, including walk-through polythene tunnels
- The specialist glass businesses have been further sub-divided into those businesses with mainly edible crops (more than 50% of crop output from edible crops) and those with mainly non-edible crops (more than 50% of crop output from non-edible crops)
- In addition to this, the specialist glass group has been sub-divided by the level of intensity of glasshouse production, showing both '50% or more' and '90% or more' of total crop output produced from protected crops

The results from these businesses are found in the following tables:-

- Table 2.4 All specialist glass businesses
- Table 2.5 Specialist glass businesses, mainly edible crops
- Table 2.6 Specialist glass, mainly non-edible crops
- Table 2.7 Specialist glass (50% or more of crop output from glasshouse production)
- Table 2.8 Specialist glass (50% or more of crop output from glasshouse production), mainly edible crops
- Table 2.9 Specialist glass (50% or more of crop output from glasshouse production), mainly non-edible crops
- Table 2.10 Specialist glass (90% or more of crop output from glasshouse production)
- Table 2.11 Specialist glass (90% or more of crop output from glasshouse production), mainly edible crops
- Table 2.12 Specialist glass (90% or more of crop output from glasshouse production), mainly non-edible crops

### **Specialist fruit**

- Fruit (top and soft fruit) accounting for more than two thirds of total standard output of the business
- The specialist fruit group has three sub-groups of mainly top fruit businesses

The results from these businesses are found in the following tables:-

- Table 2.13 All specialist fruit businesses
- Table 2.14 Specialist fruit businesses, mainly top fruit
- Table 2.15 Specialist fruit businesses, mainly top fruit-excluding cider
- Table 2.16 Specialist fruit businesses, cider

### **Specialist hardy nursery stock**

- Hardy nursery stock (HNS) accounting for more than two thirds of total standard output of the business
- The specialist HNS group has two sub-groups; intensive HNS crops with output more than £175,000 per hectare and extensive HNS crops with output less than £175,000 per hectare

The results from these businesses are found in the following tables:-

- Table 2.17 All specialist HNS businesses
- Table 2.18 Intensive HNS crops – crop output more than £175,000 per hectare
- Table 2.19 Extensive HNS crops – crop output less than £175,000 per hectare

### **Other horticulture**

- Businesses in which none of the above categories accounts for more than two thirds of standard output
- The ‘other horticulture’ group has one sub-group of mainly outdoor vegetable growers

The results from these businesses are found in the following tables:-

- Table 2.20 All other horticulture businesses
- Table 2.21 Mainly outdoor vegetables – 50% or more of crop output derived from outdoor vegetables

## **2.3 The Sample**

The Farm Business Survey (FBS) covers businesses with a Standard Output (SO) of 25,000 euros and above. SO is representative of the level of output that could be expected on the average farm under “normal” conditions (i.e. no disease outbreaks or adverse weather) and measures the total value of output of any one enterprise – it is calculated on a per head basis for livestock and per hectare basis for crops.

The sample is drawn from a stratified population of seven regions in England by the four main horticultural typologies of Specialist Glass, Specialist Fruit, Specialist Hardy Nursery Stock and Other Horticulture. Within each stratum a single weight is calculated as the ratio of numbers of businesses in the population and in the sample. The weighting of the FBS results is a two stage process with, firstly, an initial weight being produced and, secondly this initial weight is then adjusted by a calibration procedure. The weights are based on population data from the June business register (see Table 2.1) and are calculated for each design stratum. The initial weights for the FBS are based on the inverse sampling fraction. Suppose for example, there were 250 Cereal farms in the population and of these, 50 were sampled then these 50 sampled farms would be given an initial sample weight of 5 (250/50). These weights are then adjusted (Calibration Weighting) so that they produce representative population totals for a series of calibration variables for which accurate population values are known from other sources. This ensures that the weights produce precise estimates of other variables, with minimal bias, despite the inevitable imperfections of the sampling strategy. This weight when applied to each business represents the number of times that the

business' data must be replicated in order to 'represent' the businesses not selected for the sample, so as to reflect the entire population. This weight is applied to all variables.

Since 2010, the classification to farm type for the June Survey database has been based on Standard Output (SO). A minimum size threshold is also used in order to eliminate those businesses which are not deemed to be commercially active. For horticultural crops, the threshold is: one hectare of orchard, 0.5 hectare of vegetable crops or 0.1 hectare of protected crops.

As the FBS sample is drawn from a business level dataset with a minimum Standard Output (SO) of 25,000 euros, the smallest 'commercial' horticultural businesses by June Survey definition are therefore not eligible for the FBS.

The number of FBS eligible horticultural businesses in 2016 was 3,002, while the total FBS sample for the 2016 cropping year was 188 businesses, representing 6.3% of the national population of eligible horticultural businesses.

**Table 2.1 FBS sample compared with eligible\* horticultural businesses for 2016**

(\*Businesses with Standard Output of 25,000 euros and above)

	<b>England population 2016 June Survey (number of businesses)</b>	<b>FBS sample 2016 (number of businesses)</b>	<b>FBS sample as a % of population</b>
Specialist Glass	283	61	21.6%
Specialist Fruit	762	46	6.0%
Specialist HNS	807	40	5.0%
Other Horticulture	1,150	41	3.6%
<b>All Horticulture</b>	<b>3,002</b>	<b>188</b>	<b>6.3%</b>

The 'All Horticulture' group results are based on a sample of 188 businesses and no outliers have been removed from this group.

Within the four broad horticulture groups, over 50 different crops are recorded and they are grown in varying systems ranging from heated glasshouses to orchard fruit production, with market garden and Spanish tunnel production in between. Such diversity makes the raising of a representative sample very difficult, resulting in reporting often being based upon groups of a variety of similar but not identical activities to ensure minimum sample size criteria are met and the robustness of the data is maintained.

## **2.4 Overview of 2016/17**

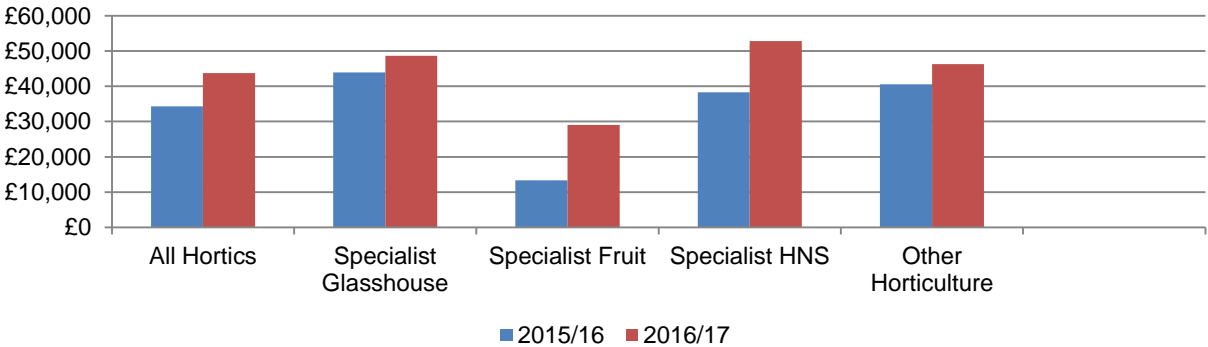
- The average profitability as measured by Farm Business Income (FBI) increased by 27% to £43,756 per business for the whole sample of businesses in 2016/17, when compared with 2015/16
- All four horticultural groups experienced an increase in profitability (Specialist glasshouse, Specialist fruit, Specialist hardy nursery stock and All other horticultural businesses), although some categories of horticultural production fared better than others, with nursery stock showing a marked improvement
- Weather conditions in 2016 deteriorated over the season
  - There were good weather conditions in the early spring, which helped vegetable growers with early drilling and planting
  - Weather conditions during the remainder of the spring were cooler, which hampered the progress of planting and crop development of spring vegetable crops
  - The summer was cool and dull, which affected crop development, and helped keep supply and demand in balance

## **2.5 Financial results for 2015/16 and 2016/17**

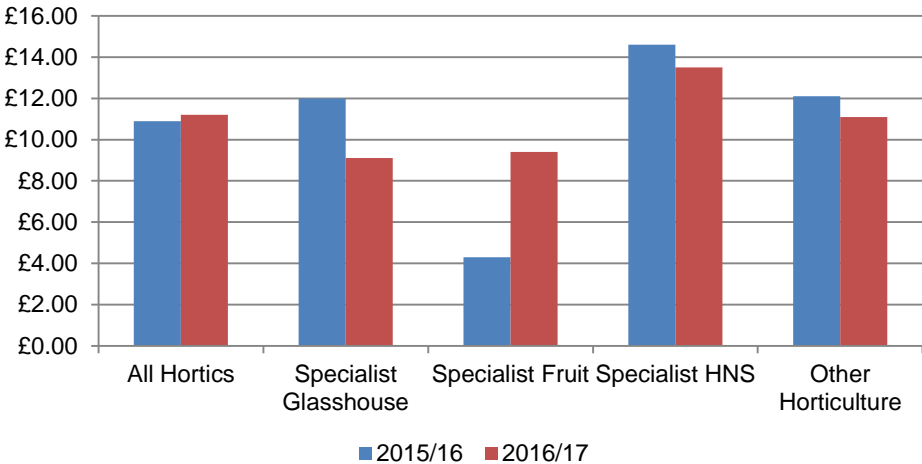
- The results in this section are shown for businesses classified according to the Defra classification system, as described in section 2.3 of this report and are shown on a:
  - 'per business', 'per hectare' and 'per £100 of gross output' basis with
  - results where applicable, based on the productive cropping area of the business
- Average results are shown for the 2015 and 2016 harvest years, together with premium results for the 2016 harvest year, where the sample size is large enough for publication:
  - The premium results are for the top quartile of businesses, as measured by a ratio of farm business output to farm business costs (including unpaid labour) and are shown on a per hectare basis
  - Note that the farm weights are used to allocate farms into quartiles, so the number of farms in a quartile will not necessarily be equivalent to a quarter of the sample; this methodology provides for a better representation of the full farm population
- The horticultural sector represents a very diverse group of growers, with some operating highly intensive glasshouse operations and others engaged in more extensive top fruit and vegetable production
- Overall, average Farm Business Income (FBI) of horticultural businesses increased by 27%, to £43,756 per business in 2016; average total gross output for the sector increased by 24%, to £392,205 per business, compared with 2015, while total costs increased by 22%:
  - There was a rise in profitability among all of four main horticulture type groups in 2016 i.e. Specialist glasshouse, Specialist fruit, Specialist hardy nursery stock and All other horticultural businesses
  - Specialist fruit businesses saw the largest increase, up 118% to an average of £29,076 per business followed Specialist hardy nursery stock up 38%, to £52,794
  - All specialist glass business recorded an increase of 11%, up to £48,706 per business, whilst All 'Other horticulture' businesses increased by 14% in profitability, with FBI up to £46,287 per business



**Figure 2.1 Average FBI per business for Horticultural Businesses in England by farm type**



**Figure 2.2 Average FBI per £100 of gross output for Horticultural Businesses in England by farm type**



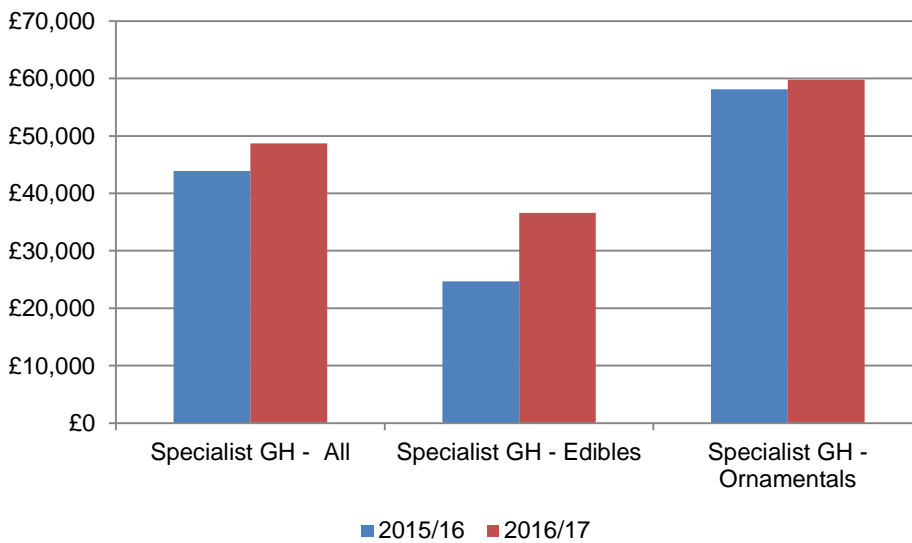
**2.6 Specialist Glass [Tables 2.4 to 2.12]**

There are nine tables reporting on the financial results of specialist glass businesses, differentiating between crop types (edible crops vs. ornamentals) and the level of glasshouse production.

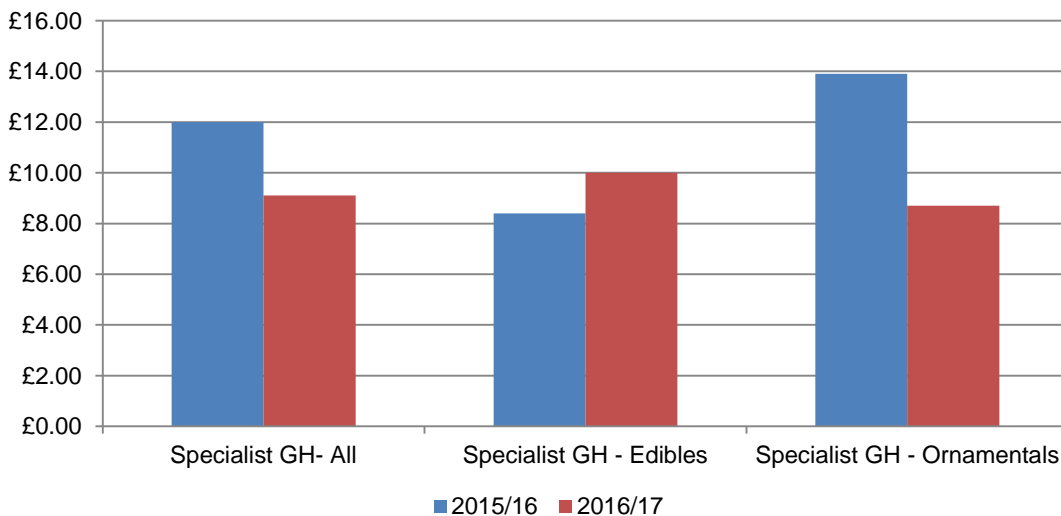
- A number of businesses within the specialist glasshouse group have some outdoor crop production; the group has been sub-divided according to the intensity of glasshouse production between businesses with 50% or more of crop output derived from glasshouse production (Tables 2.7 to 2.9) and those with 90% or more of crop output derived from glasshouse production (Tables 2.10 to 2.12)
- Specialist Glass, all crops [Table 2.4]
  - The group includes both heated and unheated glasshouses and polytunnels
  - Average productive cropping area in 2016 was 1.76ha, of which protected production was 1.02ha
  - The sample of 61 specialist glass businesses is split between 26 businesses specialising in edible crops and 35 businesses specialising in ornamental crops
  - On a per business basis in 2016, Farm Business Income (FBI) increased by 11% to £48,706, with this increase derived predominately from the edible sector
  - FBI showed a decrease of 8% on a per hectare basis and a slight decrease in costs per £100 of output

- The composition of cropping on these holdings was similar between 2016 and 2017, except for glasshouse crops which recorded an increase in soft fruit and for outdoor crops there was a reduction in the importance of fruit
- The average FBI for all glasshouse businesses rose by 11%, to £48,706
- The financial performance of the premium group (top quartile) was down (11% on per hectare basis) on the previous year; average FBI per hectare for these 21 businesses in the group in 2016 was £39,324/ha, compared with £44,385/ha for the 21 businesses in the premium group in 2015, or £12.60 per £100 of gross output in comparison to £15.10 in 2015

**Figure 2.3 Average FBI per business for specialist glasshouse businesses in England by farm type**



**Figure 2.4 Average FBI per £100 of gross output for specialist glasshouse businesses in England by farm type**

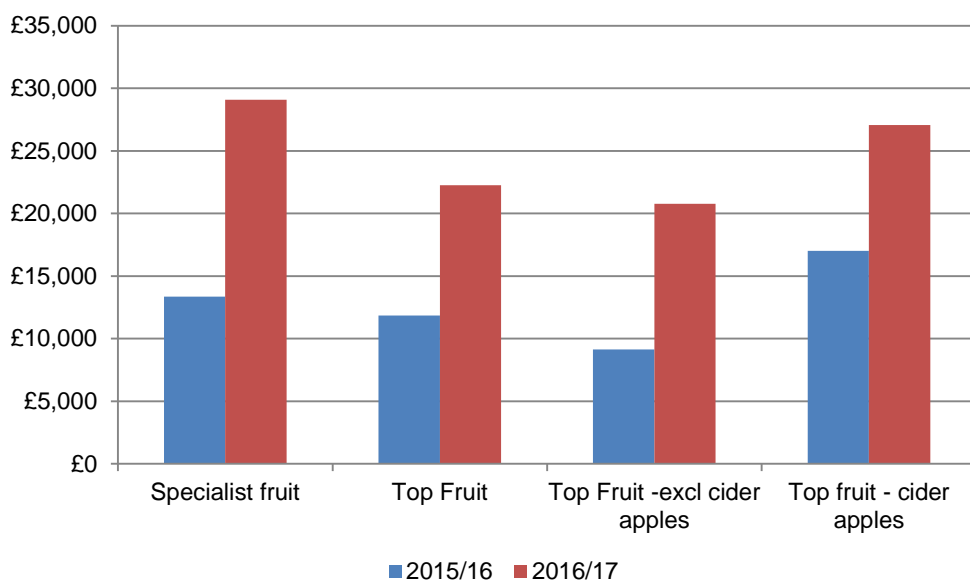


- *Specialist Glass, mainly edible crops [Table 2.5]*
  - Profitability for this group at £36,619 per business, was an increase of 49% on the previous year
  - Productive cropping area increased by 11%, and on a per hectare basis, Farm Business Income (FBI) increased by 34% to £13,642
  - Costs per £100 of output were down around 5%, due to growth in output of some 25%
  
- *Specialist Glass, mainly non-edible crops [Table 2.6]*
  - Profitability for this group increased by 3% to £59,768 per business
  - The productive cropping area increased by 21% to 0.91ha, leading to a 15% decrease in Farm Business Income (FBI) on a per hectare basis, to £65,829
  - Total costs per £100 of output increased by 3%, and although output was up by almost two thirds, the costs also increased, leaving little change in the margin
  
- *Specialist glass businesses (50% or more crop output from glasshouse production) [Tables 2.7 – 2.9]*
  - These three tables provide the results for all specialist glasshouse businesses where 50% or more of the output is derived from glasshouse production, and for the sub groups of those specialising in the production of edible and non-edible crops
  - The average profitability per hectare of this group is £33,966 which is lower than those with 90% or more output from glasshouse production at £45,317
  
- *Specialist glass businesses (90% or more crop output from glasshouse production) [Table 2.10]*
  - These tables provide the results for specialist glasshouse businesses where 90% or more of the output is derived from glasshouse production
  - Average Farm Business Income (FBI) decreased by 9% to £45,068 per business
  - FBI per hectare decreased 29% to £45,317 with the premium group recording a FBI of £92,662 per hectare; average FBI per £100 of gross output was £9.90 for the group, compared with £13.60 in the previous year
  
- *Specialist glass businesses (90% or more crop output from glasshouse production) – Mainly edible crops [Table 2.11]*
  - Tomato production accounted for 45% and soft fruit 46% of all glasshouse output for these businesses in 2016
  - Gross margin per hectare remained static at £195,490; variable costs per hectare fell by 36%; total fixed costs per hectare were down by 1%, and Farm Business Income (FBI) per hectare decreased by 18% during 2016, down from £24,891 to £20,450
  
- *Specialist glass businesses (90% or more crop output from glasshouse production) – Mainly non-edible crops [Table 2.12]*
  - Both variable and fixed costs per hectare increased during the year (12% and 6% respectively); Farm Business Income (FBI) per hectare decreased by 28%, to £69,495 in 2015

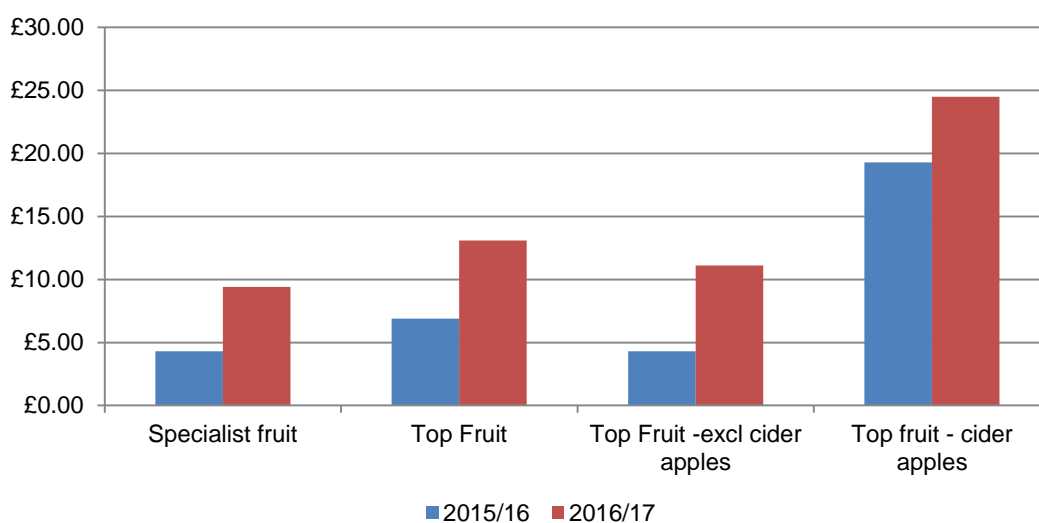
## 2.7 Specialist Fruit [Tables 2.13 to 2.16]

- There are four tables reporting on the financial results for this type group and its sub-groups:
  - Table 2.13 shows the results for all specialist fruit businesses
  - Table 2.14 shows a sub group of this sample for businesses with over 90% of their total crop output derived from top fruit and
  - Tables 2.15 and 2.16 splits this down further to a group excluding cider apple growers and a group of predominantly cider apple growers

**Figure 2.5 Average FBI per business for specialist fruit businesses in England by farm type**



**Figure 2.6 Average FBI per £100 of gross output for specialist fruit businesses in England by farm type**



- *Specialist fruit businesses [Table 2.13]*
  - Within the specialist fruit group in 2016, around 53% of crop output was from top fruit and 46% from soft fruit production; a significant proportion of the total output (19% in 2016) is derived from other activities, for example, adding value to the crop by means of on-farm processing of fruit or offering customised pack house services to other growers
  - The average Farm Business Income (FBI) per business of £29,076 in 2016/17 was up 118% compared to the year before
  - FBI per hectare in 2016 was £3,443 for businesses in the premium group, compared with the average of £1,539/ha
  
- *Mainly top fruit businesses - 90% or more crop output derived from top fruit [Table 2.14]*
  - The group includes businesses that specialise in top fruit production, with 90% or more of their total crop output derived from top fruit
  - In 2016, approximately 48% of crop output was derived from dessert apples & pears and 17% from cider apples
  - Yields for dessert apples decreased for the 2016 harvest year (24.2 tonnes per hectare) compared with 2015 (29.2 tonnes per hectare), while yields for cider apples increased very marginally (from 35.4 to 36.2 tonnes per hectare)
  - Prices for dessert apples rose from £450 to £598, whilst prices for cider apples improved slightly from £120 to £123 per tonne
  - Average Farm Business Income (FBI) was £22,252 per business and £1,626 per hectare, up from the £11,833 per business and £716 per hectare in 2015
  
- *Mainly top fruit businesses – 90% or more crop output derived from top fruit, excluding cider apple growers [Table 2.15]*
  - This sub-group of specialist top fruit growers consists of 23 growers in 2016, predominantly growing top fruit for eating
  - In 2016/17, around 56% of crop output was from dessert apples and pears, 8% from culinary apples for processing and the fresh market and the remaining 35% from other tree fruit
  - Approximately 25% of the total gross output was derived from other output, i.e. not from cropping
  - Farm Business Income (FBI) per business increased from £9,123 in 2015/16 to £20,780 in 2016/17
  
- *Mainly top fruit businesses – 90% or more crop output derived from cider apples [Table 2.16]*
  - Among the sub-groups of top fruit businesses, cider apple growers saw the smallest increase in Farm Business Income (FBI), up by 59% to £27,070 per business in 2016
  - On a 'per hectare' basis, the total gross margin increased by 21% to £4,805
  - Cider apple growers had the highest FBI on a £100 of gross output basis of all horticulture business types, with an average of £24.50 in 2016/17

**Table 2.2 Top fruit yields, prices and output\* – 2015/16 and 2016/17**

Top Fruit		2015/16	2016/17
Culinary Apples	tonnes/ha	19.4	24.2
	£/tonne	244	494.5
	<b>£ output/ha</b>	<b>4,734</b>	<b>11,970</b>
Dessert Apples	tonnes/ha	29.2	24.2
	£/tonne	450	597.6
	<b>£ output/ha</b>	<b>12,855</b>	<b>14,166</b>
Cider Apples	tonnes/ha	35.4	36.2
	£/tonne	120	123.4
	<b>£ output/ha</b>	<b>4,252</b>	<b>4,471</b>
Pears	tonnes/ha	24.0	17.5
	£/tonne	447	855.5
	<b>£ output/ha</b>	<b>10,748</b>	<b>14,968</b>

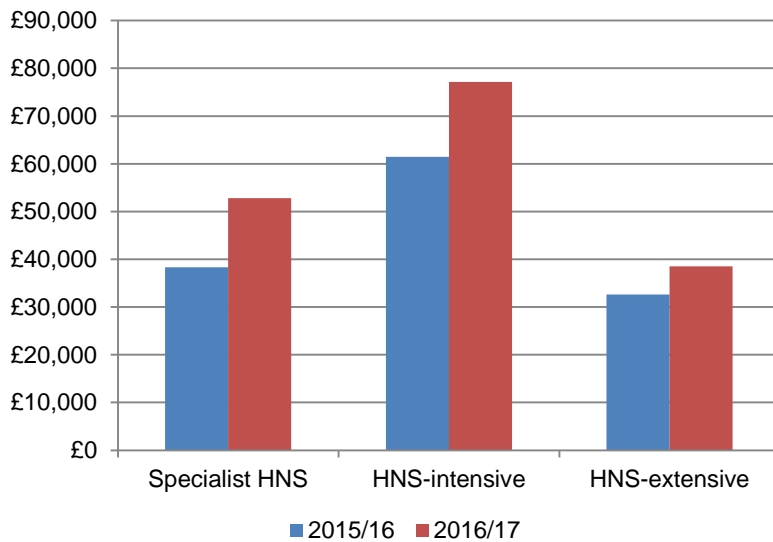
**Note:** \* The areas used when calculating the per hectare figures are field areas (not tree areas) and the fruit tonnage is for all the fruit sold either fresh or for processing and juice.

## 2.8 Specialist Hardy Nursery Stock [Tables 2.17 to 2.19]

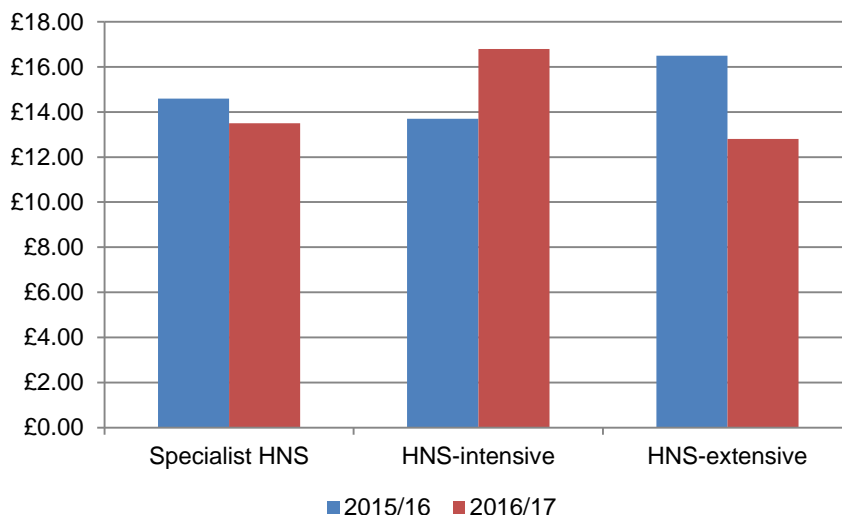
- There are three tables reporting on the financial results of Specialist Hardy Nursery Stock (HNS) businesses:
  - Table 2.17 covers all HNS businesses in the sample with tables 2.18 and 2.19 being sub-groups of the main sample
  - Table 2.18 is for businesses that have a crop output of more than £175,000 per hectare
  - Table 2.19 is for businesses that have a crop output of less than £175,000 per hectare
  
- *Specialist HNS businesses [Table 2.17]*
  - This group of businesses include growers of young HNS plants under protection, those growing plants outdoors and on hard standings, and a combination of these production systems
  - For these businesses, crop output was divided between outdoor production at 82% and protected production at 18%
  - Farm Business Income (FBI) per business increased by 38%, driven mainly by an increase in gross output, from £262,445 to £389,857
  - In 2016/17 FBI per hectare was £11,507 for all HNS

- Average FBI per £100 of gross output was £13.50 in 2016/17, while for the premium businesses it was £22.40; just over one and a half times greater than the average
- The gross output per hectare for intensive HNS was more than three times greater at £330,538, than for extensively produced stock, at £88,125

**Figure 2.7 Average FBI per business for specialist HNS businesses in England, by proportion of output from protected and outdoor crops**



**Figure 2.8 Average FBI per £100 of gross output for specialist HNS businesses in England, by proportion of output from protected and outdoor crops**



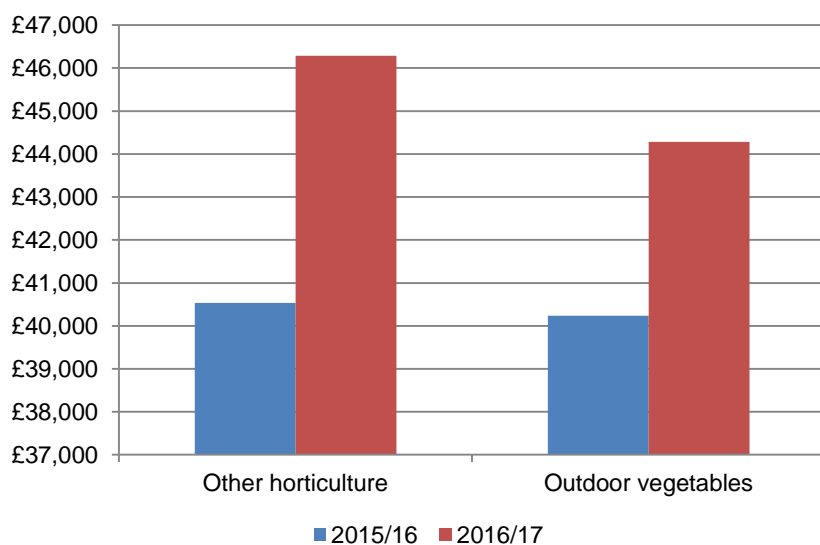
- *Intensive HNS businesses (crop output more than £175,000 per hectare) [Table 2.18]*
  - The sub-group covers businesses with a crop output of more than £175,000 per hectare
  - These businesses grow a significant amount of HNS under glass or walk-through polythene tunnels as well as outdoors on hard standings, and also higher value field crops
  - Average Farm Business Income (FBI) per business increased by 26%, to £77,164

- *Extensive HNS businesses (crop output less than £175,000 per hectare) [Table 2.19]*
  - The table refers to a group of businesses with crop output of less than £175,000 per hectare, including rootstock and larger trees, as well as shrubs and smaller nursery stock
  - The average cropping area in 2016/17 was 3.42 ha
  - Farm Business Income (FBI) per business increased to £38,542 up 18%

## 2.9 Other Horticulture [Tables 2.20 and 2.21]

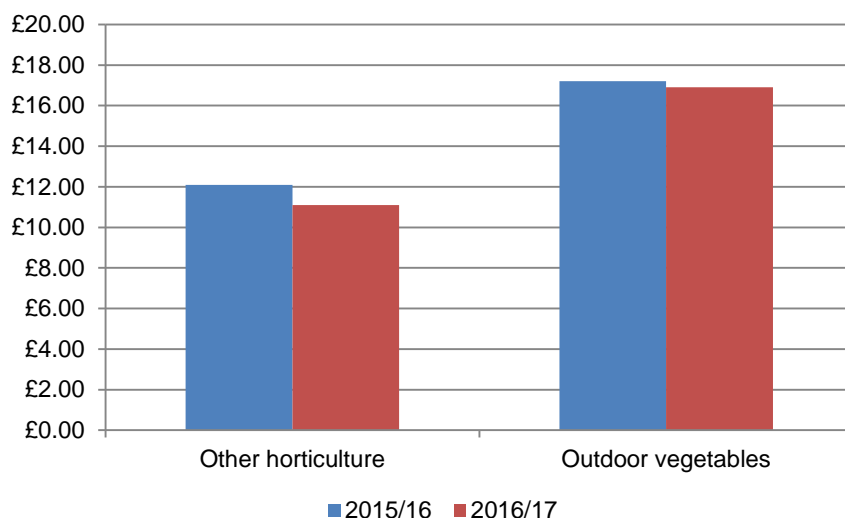
- *Other horticultural businesses [Table 2.20]*
  - The table refers to a diverse group of farms, for which crop output is comprised of a combination of small scale outdoor vegetables, ornamentals, soft fruit, top fruit and farm crops
  - In 2016/17 the output from outdoor vegetables accounted for 23% of total crop, and for soft fruit and glasshouse crops the proportions were 29% and 15% respectively
  - Farm Business Income (FBI) per business for this group of farms increased from £40,536 in 2015 to £46,287 in 2016, up 14%
  - Premium businesses recorded a FBI per hectare of £2,596, 70% greater than the average of £1,525
- *Mainly outdoor vegetables – 50% or more output derived from outdoor vegetables [Table 2.21]*
  - Average cropping area of this group decreased from 15.8ha in 2015/16 to 14.12ha in 2016/17
  - Farm Business Income (FBI) per business rose by 10% to £44,280 while FBI per hectare increased by 23% to £3,135
  - Gross output per hectare rose 25% in the period, to £18,530 with total variable costs up by 27% to £4,165 per hectare and fixed costs were up by 25% to £13,406 per hectare

**Figure 2.9 Average FBI per business for other horticulture businesses and mainly outdoor vegetable crops in England**





**Figure 2.10 Average FBI per £100 of gross output for other horticulture businesses and mainly outdoor vegetable crops in England**



## 2.10 Balance Sheet Information [Tables 2.22 and 2.23]

- The assets, liabilities and net worth for the horticulture sample are reported in table 2.22
- The percentage equity in the business remained much the same during the year for all horticultural businesses types
- The value of the balance sheet total assets rose by just under 1% to an average of £907,286 for all horticulture businesses in 2016/17, while the year-on-year change for total external liabilities was up by just over 4% to £139,122 for the period
- Table 2.23 reports on the net worth and percentage equity for the Defra main farm type classifications used in England; the average net worth for all businesses is approximately £1,797,617 per business, representing 89.8% equity
- Those businesses that are predominantly land based have the highest net worth, while those with intensive livestock systems and less land have a lower net worth and percentage equity
- Consequently, lowland cattle & sheep farms and cereal farms have the highest percentage equity at 93.3%; while pig and poultry farms respectively have the lowest percentage equity at 78.4% and 71.4%, with horticulture in mid-range at 84.6%

**Table 2.3 All horticultural businesses**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
Number of businesses	193	188	193	188	193	188
Productive cropping area (ha)	17.12	17.89	17.12	17.89		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>315,329</b>	<b>392,205</b>	<b>18,414</b>	<b>21,919</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	38,411	56,048	2,243	3,132	12.2	14.3
Fertilisers & composts	9,546	10,213	557	571	3.0	2.6
Crop protection	9,369	8,875	547	496	3.0	2.3
Market charges	18,641	26,694	1,089	1,492	5.9	6.8
Packing materials	17,971	19,638	1,049	1,097	5.7	5.0
Horticultural sundries	12,761	12,976	745	725	4.0	3.3
Glasshouse fuel	2,410	2,369	141	132	0.8	0.6
Other variable costs	1,186	1,057	69	59	0.4	0.3
<b>Total variable costs</b>	<b>110,294</b>	<b>137,870</b>	<b>6,441</b>	<b>7,705</b>	<b>35.0</b>	<b>35.2</b>
<b>Total gross margin</b>	<b>205,035</b>	<b>254,335</b>	<b>11,973</b>	<b>14,214</b>	<b>65.0</b>	<b>64.8</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	46,287	68,633	2,703	3,836	14.7	17.5
Regular unpaid	29,924	30,644	1,747	1,713	9.5	7.8
Casual labour	40,862	46,681	2,386	2,609	13.0	11.9
Power & machinery costs:						
Contract & hire	7,925	7,147	463	399	2.5	1.8
Fuel & electricity	9,805	11,663	573	652	3.1	3.0
Repairs	8,304	8,489	485	474	2.6	2.2
Machinery depreciation	10,590	12,706	618	710	3.4	3.2
Glasshouse depreciation	1,556	2,283	91	128	0.5	0.6
Rent (incl. imputed)	15,020	16,429	877	918	4.8	4.2
Other costs:						
Occupier's repairs	6,437	5,873	376	328	2.0	1.5
Permanent crop depreciation	993	1,377	58	77	0.3	0.4
Water	1,553	1,637	91	91	0.5	0.4
Sundries	15,929	22,076	930	1,234	5.1	5.6
<b>Total fixed costs</b>	<b>195,185</b>	<b>235,638</b>	<b>11,398</b>	<b>13,169</b>	<b>61.9</b>	<b>60.1</b>
<b>Management &amp; investment income</b>	<b>9,849</b>	<b>18,697</b>	<b>575</b>	<b>1,045</b>	<b>3.1</b>	<b>4.8</b>
Minus: management salaries	373	414	22	23	0.1	0.1
Plus: farmer & spouse labour	23,804	23,907	1,390	1,336	7.5	6.1
<b>Net farm income</b>	<b>33,280</b>	<b>42,191</b>	<b>1,943</b>	<b>2,358</b>	<b>10.6</b>	<b>10.8</b>
<b>Farm business income</b>	<b>34,351</b>	<b>43,756</b>	<b>2,006</b>	<b>2,445</b>	<b>10.9</b>	<b>11.2</b>

### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Glasshouse crops		
Flowers & nursery stock	15.4	18.1
Tomatoes	0.8	0.8
Lettuce	0.2	0.2
Soft fruit	2.4	2.1
Other glasshouse crops	2.3	2.2
Outdoor crops		
Flowers and nursery stock	23.9	24.9
Vegetables	17.2	8.4
Other outdoor crops	4.6	10.0
Top fruit		
Dessert apples and pears	6.4	7.2
Culinary apples	0.6	0.8
Cider apples	1.4	1.4
Plums	0.8	0.9
Other top fruit	1.8	1.7
Soft fruit		
Strawberries	13.8	13.0
Raspberries	5.5	6.3
Blackcurrants	0.1	0.1
Other soft fruit	2.6	2.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops and tillages	15	16
Stores	6	6
Glasshouses	6	7
Equipment	28	29
Livestock	1	1
Other	44	41
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>451,252</b>	<b>515,189</b>

**Table 2.4 All specialist glass businesses**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
Number of businesses	67	61	67	61	67	61
Productive cropping area (ha)	1.46	1.76	1.46	1.76		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>364,822</b>	<b>532,304</b>	<b>250,103</b>	<b>302,987</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	59,974	95,560	41,115	54,393	16.4	18.0
Fertilisers & composts	10,748	13,529	7,368	7,701	2.9	2.5
Crop protection	2,813	3,516	1,929	2,001	0.8	0.7
Market charges	16,914	24,951	11,595	14,202	4.6	4.7
Packing materials	22,094	37,924	15,147	21,586	6.1	7.1
Horticultural sundries	14,358	23,759	9,843	13,524	3.9	4.5
Glasshouse fuel	15,207	12,753	10,425	7,259	4.2	2.4
Other variable costs	28	25	19	14	0.0	0.0
<b>Total variable costs</b>	<b>142,138</b>	<b>212,016</b>	<b>97,443</b>	<b>120,680</b>	<b>39.0</b>	<b>39.8</b>
<b>Total gross margin</b>	<b>222,684</b>	<b>320,288</b>	<b>152,660</b>	<b>182,307</b>	<b>61.0</b>	<b>60.2</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	71,576	121,455	49,069	69,132	19.6	22.8
Regular unpaid	33,129	33,042	22,711	18,807	9.1	6.2
Casual labour	34,296	35,429	23,512	20,166	9.4	6.7
Power & machinery costs:						
Contract & hire	2,338	4,001	1,603	2,277	0.6	0.8
Fuel & electricity	9,384	17,872	6,433	10,173	2.6	3.4
Repairs	5,299	8,459	3,632	4,815	1.5	1.6
Machinery depreciation	6,615	9,898	4,535	5,634	1.8	1.9
Glasshouse depreciation	6,344	12,385	4,349	7,049	1.7	2.3
Rent (incl. imputed)	7,396	9,803	5,070	5,580	2.0	1.8
Other costs:						
Occupier's repairs	7,869	11,061	5,395	6,296	2.2	2.1
Permanent crop depreciation	36	108	25	61	0.0	0.0
Water	2,004	2,134	1,374	1,215	0.5	0.4
Sundries	17,033	25,667	11,677	14,610	4.7	4.8
<b>Total fixed costs</b>	<b>203,320</b>	<b>291,313</b>	<b>139,386</b>	<b>165,815</b>	<b>55.7</b>	<b>54.7</b>
<b>Management &amp; investment income</b>	<b>19,364</b>	<b>28,974</b>	<b>13,275</b>	<b>16,492</b>	<b>5.3</b>	<b>5.4</b>
Minus: management salaries	922	867	632	493	0.3	0.2
Plus: farmer & spouse labour	29,569	29,758	20,271	16,938	8.1	5.6
<b>Net farm income</b>	<b>48,011</b>	<b>57,866</b>	<b>32,914</b>	<b>32,937</b>	<b>13.2</b>	<b>10.9</b>
<b>Farm business income</b>	<b>43,912</b>	<b>48,706</b>	<b>30,104</b>	<b>27,723</b>	<b>12.0</b>	<b>9.1</b>



**Table 2.5 Specialist glass businesses, mainly edible crops**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	29	26	29	26	29	26
Productive cropping area (ha)	2.42	2.68	2.42	2.68		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>292,524</b>	<b>365,870</b>	<b>120,818</b>	<b>136,298</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	29,900	33,260	12,349	12,391	10.2	9.1
Fertilisers & composts	6,342	8,567	2,620	3,191	2.2	2.3
Crop protection	3,740	3,877	1,545	1,444	1.3	1.1
Market charges	10,085	9,853	4,165	3,670	3.4	2.7
Packing materials	10,762	11,756	4,445	4,379	3.7	3.2
Horticultural sundries	14,266	23,242	5,892	8,658	4.9	6.4
Glasshouse fuel	27,437	14,735	11,332	5,489	9.4	4.0
Other variable costs	66	53	27	20	0.0	0.0
<b>Total variable costs</b>	<b>102,598</b>	<b>105,343</b>	<b>42,375</b>	<b>39,244</b>	<b>35.1</b>	<b>28.8</b>
<b>Total gross margin</b>	<b>189,926</b>	<b>260,526</b>	<b>78,443</b>	<b>97,054</b>	<b>64.9</b>	<b>71.2</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	45,825	84,186	18,927	31,362	15.7	23.0
Regular unpaid	32,574	29,366	13,454	10,940	11.1	8.0
Casual labour	57,933	43,255	23,927	16,114	19.8	11.8
Power & machinery costs:						
Contract & hire	1,173	1,645	484	613	0.4	0.4
Fuel & electricity	7,843	21,247	3,239	7,915	2.7	5.8
Repairs	5,653	6,992	2,335	2,605	1.9	1.9
Machinery depreciation	5,966	7,754	2,464	2,889	2.0	2.1
Glasshouse depreciation	5,992	7,010	2,475	2,612	2.0	1.9
Rent (incl. imputed)	8,210	11,198	3,391	4,171	2.8	3.1
Other costs:						
Occupier's repairs	8,436	11,299	3,484	4,209	2.9	3.1
Permanent crop depreciation	86	225	35	84	0.0	0.1
Water	2,057	2,005	850	747	0.7	0.5
Sundries	11,154	17,927	4,607	6,678	3.8	4.9
<b>Total fixed costs</b>	<b>192,903</b>	<b>244,110</b>	<b>79,672</b>	<b>90,939</b>	<b>65.9</b>	<b>66.7</b>
<b>Management &amp; investment income</b>	<b>-2,977</b>	<b>16,416</b>	<b>-1,229</b>	<b>6,116</b>	<b>-1.0</b>	<b>4.5</b>
Minus: management salaries	409	504	169	188	0.1	0.1
Plus: farmer & spouse labour	28,557	26,863	11,795	10,007	9.8	7.3
<b>Net farm income</b>	<b>25,171</b>	<b>42,775</b>	<b>10,396</b>	<b>15,935</b>	<b>8.6</b>	<b>11.7</b>
<b>Farm business income</b>	<b>24,664</b>	<b>36,619</b>	<b>10,187</b>	<b>13,642</b>	<b>8.4</b>	<b>10.0</b>



**Table 2.6 Specialist glass businesses, mainly non-edible crops**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	38	35	38	35	38	35
Productive cropping area (ha)	0.75	0.91	0.75	0.91		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>418,164</b>	<b>684,641</b>	<b>558,645</b>	<b>754,070</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	82,163	152,583	109,766	168,057	19.6	22.3
Fertilisers & composts	13,999	18,071	18,702	19,904	3.3	2.6
Crop protection	2,130	3,185	2,845	3,508	0.5	0.5
Market charges	21,953	38,770	29,327	42,701	5.2	5.7
Packing materials	30,456	61,875	40,687	68,150	7.3	9.0
Horticultural sundries	14,427	24,232	19,273	26,690	3.5	3.5
Glasshouse fuel	6,184	10,938	8,261	12,047	1.5	1.6
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>171,311</b>	<b>309,654</b>	<b>228,862</b>	<b>341,056</b>	<b>41.0</b>	<b>45.2</b>
<b>Total gross margin</b>	<b>246,853</b>	<b>374,987</b>	<b>329,782</b>	<b>413,014</b>	<b>59.0</b>	<b>54.8</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	90,576	155,567	121,005	171,343	21.7	22.7
Regular unpaid	33,538	36,407	44,805	40,099	8.0	5.3
Casual labour	16,857	28,265	22,520	31,131	4.0	4.1
Power & machinery costs:						
Contract & hire	3,198	6,157	4,272	6,782	0.8	0.9
Fuel & electricity	10,521	14,783	14,056	16,282	2.5	2.2
Repairs	5,037	9,802	6,729	10,796	1.2	1.4
Machinery depreciation	7,093	11,861	9,476	13,063	1.7	1.7
Glasshouse depreciation	6,604	17,304	8,823	19,059	1.6	2.5
Rent (incl. imputed)	6,795	8,527	9,078	9,391	1.6	1.2
Other costs:						
Occupier's repairs	7,451	10,842	9,954	11,942	1.8	1.6
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	1,965	2,252	2,625	2,481	0.5	0.3
Sundries	21,370	32,752	28,549	36,073	5.1	4.8
<b>Total fixed costs</b>	<b>211,006</b>	<b>334,519</b>	<b>281,893</b>	<b>368,442</b>	<b>50.5</b>	<b>48.9</b>
<b>Management &amp; investment income</b>	<b>35,847</b>	<b>40,469</b>	<b>47,890</b>	<b>44,572</b>	<b>8.6</b>	<b>5.9</b>
Minus: management salaries	1,301	1,199	1,737	1,320	0.3	0.2
Plus: farmer & spouse labour	30,316	32,408	40,501	35,695	7.2	4.7
<b>Net farm income</b>	<b>64,863</b>	<b>71,678</b>	<b>86,653</b>	<b>78,947</b>	<b>15.5</b>	<b>10.5</b>
<b>Farm business income</b>	<b>58,114</b>	<b>59,768</b>	<b>77,637</b>	<b>65,829</b>	<b>13.9</b>	<b>8.7</b>





**Table 2.7 Specialist glass businesses (50% or more of crop output from glasshouse production)**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	57	53	57	53	57	53
Productive cropping area (ha)	0.91	1.06	0.91	1.06		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>349,907</b>	<b>375,916</b>	<b>383,759</b>	<b>355,449</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	55,992	59,818	61,409	56,561	16.0	15.9
Fertilisers & composts	12,642	10,942	13,866	10,346	3.6	2.9
Crop protection	2,538	2,584	2,784	2,444	0.7	0.7
Market charges	16,980	15,594	18,623	14,745	4.9	4.1
Packing materials	17,842	23,612	19,569	22,326	5.1	6.3
Horticultural sundries	11,784	17,129	12,924	16,197	3.4	4.6
Glasshouse fuel	17,244	11,801	18,912	11,159	4.9	3.1
Other variable costs	38	30	41	28	0.0	0.0
<b>Total variable costs</b>	<b>135,061</b>	<b>141,511</b>	<b>148,127</b>	<b>133,806</b>	<b>38.6</b>	<b>37.6</b>
<b>Total gross margin</b>	<b>214,846</b>	<b>234,406</b>	<b>235,631</b>	<b>221,644</b>	<b>61.4</b>	<b>62.4</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	76,783	75,956	84,211	71,820	21.9	20.2
Regular unpaid	34,410	33,847	37,739	32,004	9.8	9.0
Casual labour	26,825	35,389	29,420	33,462	7.7	9.4
Power & machinery costs:						
Contract & hire	2,733	2,733	2,998	2,584	0.8	0.7
Fuel & electricity	8,548	14,810	9,375	14,004	2.4	3.9
Repairs	5,457	6,987	5,985	6,606	1.6	1.9
Machinery depreciation	7,132	8,394	7,822	7,937	2.0	2.2
Glasshouse depreciation	6,796	7,504	7,454	7,096	1.9	2.0
Rent (incl. imputed)	6,296	8,055	6,905	7,616	1.8	2.1
Other costs:						
Occupier's repairs	8,319	10,752	9,124	10,166	2.4	2.9
Permanent crop depreciation	48	128	53	121	0.0	0.0
Water	2,079	1,868	2,280	1,766	0.6	0.5
Sundries	17,562	17,205	19,261	16,269	5.0	4.6
<b>Total fixed costs</b>	<b>202,990</b>	<b>223,626</b>	<b>222,628</b>	<b>211,450</b>	<b>58.0</b>	<b>59.5</b>
<b>Management &amp; investment income</b>	<b>11,856</b>	<b>10,780</b>	<b>13,003</b>	<b>10,193</b>	<b>3.4</b>	<b>2.9</b>
Minus: management salaries	471	1,025	517	969	0.1	0.3
Plus: farmer & spouse labour	31,105	30,682	34,114	29,011	8.9	8.2
<b>Net farm income</b>	<b>42,490</b>	<b>40,437</b>	<b>46,600</b>	<b>38,235</b>	<b>12.1</b>	<b>10.8</b>
<b>Farm business income</b>	<b>40,991</b>	<b>35,922</b>	<b>44,957</b>	<b>33,966</b>	<b>11.7</b>	<b>9.6</b>



**Table 2.8 Specialist glass businesses (50% or more of crop output from glasshouse production) - mainly edible crops\***

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	25	23	25	23	25	23
Productive cropping area (ha)	1.07	1.25	1.07	1.25		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>225,673</b>	<b>261,855</b>	<b>211,443</b>	<b>209,217</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	20,532	22,802	19,237	18,219	9.1	8.7
Fertilisers & composts	6,366	8,278	5,965	6,614	2.8	3.2
Crop protection	2,608	2,585	2,444	2,065	1.2	1.0
Market charges	11,959	11,053	11,205	8,831	5.3	4.2
Packing materials	8,809	10,365	8,254	8,282	3.9	4.0
Horticultural sundries	6,332	12,094	5,932	9,663	2.8	4.6
Glasshouse fuel	29,820	14,270	27,940	11,401	13.2	5.4
Other variable costs	81	62	76	50	0.0	0.0
<b>Total variable costs</b>	<b>86,507</b>	<b>81,510</b>	<b>81,052</b>	<b>65,125</b>	<b>38.3</b>	<b>31.1</b>
<b>Total gross margin</b>	<b>139,166</b>	<b>180,345</b>	<b>130,391</b>	<b>144,092</b>	<b>61.7</b>	<b>68.9</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	41,073	47,696	38,483	38,109	18.2	18.2
Regular unpaid	30,973	28,427	29,020	22,713	13.7	10.9
Casual labour	30,485	37,395	28,563	29,878	13.5	14.3
Power & machinery costs:						
Contract & hire	880	1,267	824	1,013	0.4	0.5
Fuel & electricity	4,588	19,692	4,299	15,733	2.0	7.5
Repairs	4,791	6,198	4,489	4,952	2.1	2.4
Machinery depreciation	4,762	5,817	4,462	4,648	2.1	2.2
Glasshouse depreciation	7,019	8,165	6,576	6,524	3.1	3.1
Rent (incl. imputed)	5,309	7,411	4,974	5,921	2.4	2.8
Other costs:						
Occupier's repairs	7,851	11,265	7,356	9,000	3.5	4.3
Permanent crop depreciation	104	266	97	212	0.0	0.1
Water	1,735	1,525	1,626	1,219	0.8	0.6
Sundries	9,548	11,438	8,946	9,138	4.2	4.4
<b>Total fixed costs</b>	<b>149,117</b>	<b>186,562</b>	<b>139,715</b>	<b>149,060</b>	<b>66.1</b>	<b>71.2</b>
<b>Management &amp; investment income</b>	<b>-9,952</b>	<b>-6,218</b>	<b>-9,324</b>	<b>-4,968</b>	<b>-4.4</b>	<b>-2.4</b>
Minus: management salaries	488	586	457	468	0.2	0.2
Plus: farmer & spouse labour	27,728	26,047	25,980	20,811	12.3	9.9
<b>Net farm income</b>	<b>17,288</b>	<b>19,244</b>	<b>16,198</b>	<b>15,375</b>	<b>7.7</b>	<b>7.3</b>
<b>Farm business income</b>	<b>19,001</b>	<b>16,919</b>	<b>17,803</b>	<b>13,518</b>	<b>8.4</b>	<b>6.5</b>

### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Glasshouse crops		
Flowers & nursery stock	2.4	0.8
Tomatoes	33.1	32.0
Lettuce	2.6	1.3
Soft fruit	31.4	34.1
Other glasshouse crops	29.3	30.8
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.9	0.7
Fruit	0.3	0.3
Other outdoor crops	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops & tillages	4	3
Stores	5	5
Glasshouses	37	39
Equipment	20	21
Livestock	0	0
Other	35	32
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>276,269</b>	<b>323,776</b>

*\* no premium figures, sample too small*

**Table 2.9 Specialist glass businesses (50% or more of crop output from glasshouse production) - mainly non-edible crops**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	32	30	32	30	32	30
Productive cropping area (ha)	0.78	0.88	0.78	0.88		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>457,917</b>	<b>481,653</b>	<b>589,654</b>	<b>548,751</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	86,822	94,131	111,800	107,244	19.0	19.5
Fertilisers & composts	18,099	13,411	23,306	15,280	4.0	2.8
Crop protection	2,477	2,584	3,190	2,944	0.5	0.5
Market charges	21,346	19,804	27,487	22,563	4.7	4.1
Packing materials	25,696	35,891	33,088	40,891	5.6	7.5
Horticultural sundries	16,524	21,797	21,277	24,834	3.6	4.5
Glasshouse fuel	6,310	9,513	8,125	10,838	1.4	2.0
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>177,274</b>	<b>197,132</b>	<b>228,273</b>	<b>224,594</b>	<b>38.7</b>	<b>40.9</b>
<b>Total gross margin</b>	<b>280,643</b>	<b>284,521</b>	<b>361,380</b>	<b>324,157</b>	<b>61.3</b>	<b>59.1</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	107,830	102,152	138,851	116,383	23.5	21.2
Regular unpaid	37,399	38,870	48,158	44,285	8.2	8.1
Casual labour	23,643	33,529	30,445	38,200	5.2	7.0
Power & machinery costs:						
Contract & hire	4,345	4,091	5,594	4,661	0.9	0.8
Fuel & electricity	11,991	10,285	15,441	11,718	2.6	2.1
Repairs	6,036	7,718	7,772	8,793	1.3	1.6
Machinery depreciation	9,193	10,782	11,838	12,284	2.0	2.2
Glasshouse depreciation	6,603	6,892	8,502	7,852	1.4	1.4
Rent (incl. imputed)	7,154	8,651	9,212	9,856	1.6	1.8
Other costs:						
Occupier's repairs	8,727	10,276	11,238	11,708	1.9	2.1
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,378	2,185	3,062	2,490	0.5	0.5
Sundries	24,529	22,552	31,585	25,694	5.4	4.7
<b>Total fixed costs</b>	<b>249,827</b>	<b>257,984</b>	<b>321,699</b>	<b>293,923</b>	<b>54.6</b>	<b>53.6</b>
<b>Management &amp; investment income</b>	<b>30,816</b>	<b>26,537</b>	<b>39,682</b>	<b>30,234</b>	<b>6.7</b>	<b>5.5</b>
Minus: management salaries	457	1,431	588	1,631	0.1	0.3
Plus: farmer & spouse labour	34,040	34,978	43,833	39,851	7.4	7.3
<b>Net farm income</b>	<b>64,400</b>	<b>60,084</b>	<b>82,927</b>	<b>68,454</b>	<b>14.1</b>	<b>12.5</b>
<b>Farm business income</b>	<b>60,109</b>	<b>53,538</b>	<b>77,402</b>	<b>60,996</b>	<b>13.1</b>	<b>11.1</b>



**Table 2.10 Specialist glass businesses (90% or more of crop output from glasshouse production)**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	42	39	42	39	42	39
Productive cropping area (ha)	0.78	0.99	0.78	0.99		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>366,792</b>	<b>453,265</b>	<b>468,188</b>	<b>455,767</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	57,444	71,430	73,324	71,825	15.7	15.8
Fertilisers & composts	11,663	13,699	14,887	13,775	3.2	3.0
Crop protection	2,703	2,744	3,450	2,759	0.7	0.6
Market charges	15,363	18,388	19,609	18,490	4.2	4.1
Packing materials	19,107	28,694	24,389	28,853	5.2	6.3
Horticultural sundries	13,270	19,502	16,938	19,610	3.6	4.3
Glasshouse fuel	22,008	14,184	28,092	14,263	6.0	3.1
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>141,557</b>	<b>168,642</b>	<b>180,689</b>	<b>169,573</b>	<b>38.6</b>	<b>37.2</b>
<b>Total gross margin</b>	<b>225,235</b>	<b>284,623</b>	<b>287,499</b>	<b>286,193</b>	<b>61.4</b>	<b>62.8</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	70,397	90,467	89,858	90,967	19.2	20.0
Regular unpaid	35,300	35,089	45,058	35,283	9.6	7.7
Casual labour	32,184	42,878	41,081	43,114	8.8	9.5
Power & machinery costs:						
Contract & hire	2,245	3,453	2,866	3,472	0.6	0.8
Fuel & electricity	8,422	19,755	10,750	19,864	2.3	4.4
Repairs	5,744	8,633	7,332	8,681	1.6	1.9
Machinery depreciation	7,756	9,559	9,900	9,612	2.1	2.1
Glasshouse depreciation	7,586	9,482	9,683	9,535	2.1	2.1
Rent (incl. imputed)	7,030	8,684	8,973	8,732	1.9	1.9
Other costs:						
Occupier's repairs	10,263	13,573	13,100	13,648	2.8	3.0
Permanent crop depreciation	0	188	0	189	0.0	0.0
Water	2,185	2,127	2,789	2,139	0.6	0.5
Sundries	15,964	19,878	20,377	19,987	4.4	4.4
<b>Total fixed costs</b>	<b>205,076</b>	<b>263,766</b>	<b>261,767</b>	<b>265,222</b>	<b>55.9</b>	<b>58.2</b>
<b>Management &amp; investment income</b>	<b>20,159</b>	<b>20,856</b>	<b>25,732</b>	<b>20,971</b>	<b>5.5</b>	<b>4.6</b>
Minus: management salaries	440	581	561	584	0.1	0.1
Plus: farmer & spouse labour	32,186	31,771	41,084	31,947	8.8	7.0
<b>Net farm income</b>	<b>51,906</b>	<b>52,047</b>	<b>66,255</b>	<b>52,334</b>	<b>14.2</b>	<b>11.5</b>
<b>Farm business income</b>	<b>49,765</b>	<b>45,068</b>	<b>63,522</b>	<b>45,317</b>	<b>13.6</b>	<b>9.9</b>





**Table 2.11 Specialist glass businesses (90% or more of crop output from glasshouse production) - mainly edible crops\***

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	16	14	16	14	16	14
Productive cropping area (ha)	1.03	1.21	1.03	1.21		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>325,180</b>	<b>328,018</b>	<b>314,460</b>	<b>272,170</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	18,717	17,416	18,100	14,451	5.8	5.3
Fertilisers & composts	8,645	10,102	8,360	8,382	2.7	3.1
Crop protection	3,377	2,399	3,265	1,990	1.0	0.7
Market charges	20,539	16,495	19,862	13,686	6.3	5.0
Packing materials	13,345	13,489	12,905	11,192	4.1	4.1
Horticultural sundries	5,323	13,077	5,148	10,850	1.6	4.0
Glasshouse fuel	52,938	19,437	51,193	16,128	16.3	5.9
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>122,884</b>	<b>92,415</b>	<b>118,833</b>	<b>76,681</b>	<b>37.8</b>	<b>28.2</b>
<b>Total gross margin</b>	<b>202,296</b>	<b>235,603</b>	<b>195,627</b>	<b>195,490</b>	<b>62.2</b>	<b>71.8</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	58,586	55,118	56,655	45,734	18.0	16.8
Regular unpaid	29,245	27,753	28,281	23,028	9.0	8.5
Casual labour	48,218	52,629	46,629	43,669	14.8	16.0
Power & machinery costs:						
Contract & hire	1,524	1,591	1,474	1,320	0.5	0.5
Fuel & electricity	6,271	31,476	6,064	26,117	1.9	9.6
Repairs	7,792	7,561	7,535	6,273	2.4	2.3
Machinery depreciation	6,094	6,356	5,893	5,274	1.9	1.9
Glasshouse depreciation	12,090	12,385	11,692	10,276	3.7	3.8
Rent (incl. imputed)	6,062	7,174	5,862	5,952	1.9	2.2
Other costs:						
Occupier's repairs	12,925	15,936	12,498	13,223	4.0	4.9
Permanent crop depreciation	0	461	0	382	0.0	0.1
Water	2,099	1,861	2,030	1,544	0.6	0.6
Sundries	11,213	12,149	10,844	10,080	3.4	3.7
<b>Total fixed costs</b>	<b>202,119</b>	<b>232,448</b>	<b>195,456</b>	<b>192,872</b>	<b>62.2</b>	<b>70.9</b>
<b>Management &amp; investment income</b>	<b>177</b>	<b>3,155</b>	<b>171</b>	<b>2,618</b>	<b>0.1</b>	<b>1.0</b>
Minus: management salaries	266	179	257	149	0.1	0.1
Plus: farmer & spouse labour	25,977	25,039	25,120	20,776	8.0	7.6
<b>Net farm income</b>	<b>25,888</b>	<b>28,014</b>	<b>25,034</b>	<b>23,245</b>	<b>8.0</b>	<b>8.5</b>
<b>Farm business income</b>	<b>25,740</b>	<b>24,647</b>	<b>24,891</b>	<b>20,450</b>	<b>7.9</b>	<b>7.5</b>

### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Glasshouse crops		
Flowers & nursery stock	0.0	0.0
Tomatoes	44.3	44.5
Lettuce	3.4	1.8
Soft fruit	39.6	46.0
Other glasshouse crops	12.4	7.5
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.2	0.1
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops & tillages	1	2
Stores	4	4
Glasshouses	42	44
Equipment	17	18
Livestock	0	0
Other	36	33
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>406,270</b>	<b>418,954</b>

*\* no premium figures, sample too small*

**Table 2.12 Specialist glass businesses (90% or more of crop output from glasshouse production) - mainly non-edible crops**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	26	25	26	25	26	25
Productive cropping area (ha)	0.65	0.85	0.65	0.85		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>388,729</b>	<b>539,157</b>	<b>596,866</b>	<b>634,280</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	77,860	108,472	119,548	127,610	20.0	20.1
Fertilisers & composts	13,254	16,166	20,350	19,018	3.4	3.0
Crop protection	2,347	2,981	3,604	3,507	0.6	0.6
Market charges	12,634	19,686	19,398	23,160	3.2	3.7
Packing materials	22,145	39,122	34,002	46,024	5.7	7.3
Horticultural sundries	17,460	23,909	26,808	28,127	4.5	4.4
Glasshouse fuel	5,702	10,582	8,755	12,449	1.5	2.0
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>151,401</b>	<b>220,918</b>	<b>232,466</b>	<b>259,894</b>	<b>38.9</b>	<b>41.0</b>
<b>Total gross margin</b>	<b>237,327</b>	<b>318,239</b>	<b>364,400</b>	<b>374,386</b>	<b>61.1</b>	<b>59.0</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	76,623	114,709	117,650	134,947	19.7	21.3
Regular unpaid	38,492	40,120	59,101	47,198	9.9	7.4
Casual labour	23,731	36,190	36,438	42,575	6.1	6.7
Power & machinery costs:						
Contract & hire	2,625	4,730	4,031	5,564	0.7	0.9
Fuel & electricity	9,556	11,717	14,672	13,784	2.5	2.2
Repairs	4,664	9,369	7,161	11,022	1.2	1.7
Machinery depreciation	8,632	11,756	13,254	13,830	2.2	2.2
Glasshouse depreciation	5,211	7,492	8,002	8,814	1.3	1.4
Rent (incl. imputed)	7,540	9,720	11,578	11,434	1.9	1.8
Other costs:						
Occupier's repairs	8,860	11,953	13,604	14,062	2.3	2.2
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,230	2,310	3,424	2,717	0.6	0.4
Sundries	18,469	25,178	28,357	29,620	4.8	4.7
<b>Total fixed costs</b>	<b>206,634</b>	<b>285,244</b>	<b>317,272</b>	<b>335,569</b>	<b>53.2</b>	<b>52.9</b>
<b>Management &amp; investment income</b>	<b>30,693</b>	<b>32,996</b>	<b>47,127</b>	<b>38,817</b>	<b>7.9</b>	<b>6.1</b>
Minus: management salaries	531	856	816	1,007	0.1	0.2
Plus: farmer & spouse labour	35,460	36,388	54,447	42,808	9.1	6.7
<b>Net farm income</b>	<b>65,622</b>	<b>68,528</b>	<b>100,758</b>	<b>80,618</b>	<b>16.9</b>	<b>12.7</b>
<b>Farm business income</b>	<b>62,431</b>	<b>59,073</b>	<b>95,858</b>	<b>69,495</b>	<b>16.1</b>	<b>11.0</b>



**Table 2.13 All specialist fruit businesses**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	47	46	47	46	47	46
Productive cropping area (ha)	19.57	18.89	19.57	18.89		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>313,961</b>	<b>307,897</b>	<b>16,043</b>	<b>16,301</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	8,006	6,840	409	362	2.5	2.2
Fertilisers & composts	6,608	4,253	338	225	2.1	1.4
Crop protection	17,439	12,978	891	687	5.6	4.2
Market charges	36,422	47,748	1,861	2,528	11.6	15.5
Packing materials	34,419	26,715	1,759	1,414	11.0	8.7
Horticultural sundries	16,075	13,270	821	703	5.1	4.3
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	1,615	550	83	29	0.5	0.2
<b>Total variable costs</b>	<b>120,583</b>	<b>112,354</b>	<b>6,162</b>	<b>5,948</b>	<b>38.4</b>	<b>36.5</b>
<b>Total gross margin</b>	<b>193,378</b>	<b>195,543</b>	<b>9,882</b>	<b>10,352</b>	<b>61.6</b>	<b>63.5</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	22,974	25,483	1,174	1,349	7.3	8.3
Regular unpaid	20,462	20,745	1,046	1,098	6.5	6.7
Casual labour	69,785	67,708	3,566	3,585	22.2	22.0
Power & machinery costs:						
Contract & hire	7,522	6,886	384	365	2.4	2.2
Fuel & electricity	9,415	9,051	481	479	3.0	2.9
Repairs	9,099	7,549	465	400	2.9	2.5
Machinery depreciation	11,361	11,204	581	593	3.6	3.6
Glasshouse depreciation	323	196	17	10	0.1	0.1
Rent (incl. imputed)	17,147	14,983	876	793	5.5	4.9
Other costs:						
Occupier's repairs	7,335	6,242	375	330	2.3	2.0
Permanent crop depreciation	3,512	3,541	179	187	1.1	1.1
Water	2,139	1,426	109	75	0.7	0.5
Sundries	15,294	13,282	782	703	4.9	4.3
<b>Total fixed costs</b>	<b>196,368</b>	<b>188,295</b>	<b>10,034</b>	<b>9,969</b>	<b>62.5</b>	<b>61.2</b>
<b>Management &amp; investment income</b>	<b>-2,990</b>	<b>7,249</b>	<b>-153</b>	<b>384</b>	<b>-1.0</b>	<b>2.4</b>
Minus: management salaries	289	264	15	14	0.1	0.1
Plus: farmer & spouse labour	18,111	18,397	925	974	5.8	6.0
<b>Net farm income</b>	<b>14,832</b>	<b>25,381</b>	<b>758</b>	<b>1,344</b>	<b>4.7</b>	<b>8.2</b>
<b>Farm business income</b>	<b>13,354</b>	<b>29,076</b>	<b>682</b>	<b>1,539</b>	<b>4.3</b>	<b>9.4</b>



**Table 2.14 Specialist fruit businesses, mainly top fruit**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	31	33	31	33	31	33
Productive cropping area (ha)	16.52	13.69	16.52	13.69		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>170,792</b>	<b>169,647</b>	<b>10,341</b>	<b>12,396</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	771	578	47	42	0.5	0.3
Fertilisers & composts	2,565	2,079	155	152	1.5	1.2
Crop protection	11,190	8,589	678	628	6.6	5.1
Market charges	26,087	28,569	1,580	2,087	15.3	16.8
Packing materials	14,661	9,628	888	704	8.6	5.7
Horticultural sundries	7,946	4,610	481	337	4.7	2.7
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	332	617	20	45	0.2	0.4
<b>Total variable costs</b>	<b>63,551</b>	<b>54,669</b>	<b>3,848</b>	<b>3,994</b>	<b>37.2</b>	<b>32.2</b>
<b>Total gross margin</b>	<b>107,240</b>	<b>114,978</b>	<b>6,493</b>	<b>8,401</b>	<b>62.8</b>	<b>67.8</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	13,768	19,060	834	1,393	8.1	11.2
Regular unpaid	19,973	18,681	1,209	1,365	11.7	11.0
Casual labour	24,078	19,565	1,458	1,430	14.1	11.5
Power & machinery costs:						
Contract & hire	6,396	6,518	387	476	3.7	3.8
Fuel & electricity	6,462	6,217	391	454	3.8	3.7
Repairs	6,986	4,918	423	359	4.1	2.9
Machinery depreciation	9,553	8,646	578	632	5.6	5.1
Glasshouse depreciation	37	33	2	2	0.0	0.0
Rent (incl. imputed)	10,830	10,754	656	786	6.3	6.3
Other costs:						
Occupier's repairs	3,114	3,739	189	273	1.8	2.2
Permanent crop depreciation	4,511	4,194	273	306	2.6	2.5
Water	655	732	40	53	0.4	0.4
Sundries	10,143	9,199	614	672	5.9	5.4
<b>Total fixed costs</b>	<b>116,507</b>	<b>112,256</b>	<b>7,054</b>	<b>8,202</b>	<b>68.2</b>	<b>66.2</b>
<b>Management &amp; investment income</b>	<b>-9,266</b>	<b>2,722</b>	<b>-561</b>	<b>199</b>	<b>-5.4</b>	<b>1.6</b>
Minus: management salaries	208	188	13	14	0.1	0.1
Plus: farmer & spouse labour	17,217	16,666	1,043	1,218	10.1	9.8
<b>Net farm income</b>	<b>7,743</b>	<b>19,200</b>	<b>469</b>	<b>1,403</b>	<b>4.5</b>	<b>11.3</b>
<b>Farm business income</b>	<b>11,833</b>	<b>22,252</b>	<b>716</b>	<b>1,626</b>	<b>6.9</b>	<b>13.1</b>





**Table 2.15 Specialist fruit businesses, mainly top fruit-excluding cider**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	21	23	21	23	21	23
Productive cropping area (ha)	15.63	11.98	15.63	11.98		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>213,890</b>	<b>187,725</b>	<b>13,685</b>	<b>15,666</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	1,067	726	68	61	0.5	0.4
Fertilisers & composts	1,509	1,619	97	135	0.7	0.9
Crop protection	13,806	8,928	883	745	6.5	4.8
Market charges	38,085	36,271	2,437	3,027	17.8	19.3
Packing materials	22,180	12,500	1,419	1,043	10.4	6.7
Horticultural sundries	11,856	5,845	759	488	5.5	3.1
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	0	8	0	1	0.0	0.0
<b>Total variable costs</b>	<b>88,504</b>	<b>65,898</b>	<b>5,663</b>	<b>5,499</b>	<b>41.4</b>	<b>35.1</b>
<b>Total gross margin</b>	<b>125,386</b>	<b>121,827</b>	<b>8,022</b>	<b>10,166</b>	<b>58.6</b>	<b>64.9</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	19,295	22,871	1,234	1,909	9.0	12.2
Regular unpaid	22,255	19,608	1,424	1,636	10.4	10.4
Casual labour	34,572	24,561	2,212	2,050	16.2	13.1
Power & machinery costs:						
Contract & hire	5,487	4,702	351	392	2.6	2.5
Fuel & electricity	8,558	7,022	548	586	4.0	3.7
Repairs	7,570	4,983	484	416	3.5	2.7
Machinery depreciation	10,427	9,214	667	769	4.9	4.9
Glasshouse depreciation	56	43	4	4	0.0	0.0
Rent (incl. imputed)	11,200	10,437	717	871	5.2	5.6
Other costs:						
Occupier's repairs	3,149	3,137	201	262	1.5	1.7
Permanent crop depreciation	5,293	3,924	339	327	2.5	2.1
Water	835	831	53	69	0.4	0.4
Sundries	12,160	9,584	778	800	5.7	5.1
<b>Total fixed costs</b>	<b>140,858</b>	<b>120,918</b>	<b>9,012</b>	<b>10,091</b>	<b>65.9</b>	<b>64.4</b>
<b>Management &amp; investment income</b>	<b>-15,472</b>	<b>909</b>	<b>-990</b>	<b>76</b>	<b>-7.2</b>	<b>0.5</b>
Minus: management salaries	317	245	20	20	0.1	0.1
Plus: farmer & spouse labour	18,892	17,612	1,209	1,470	8.8	9.4
<b>Net farm income</b>	<b>3,102</b>	<b>18,275</b>	<b>198</b>	<b>1,525</b>	<b>1.5</b>	<b>9.7</b>
<b>Farm business income</b>	<b>9,123</b>	<b>20,780</b>	<b>584</b>	<b>1,734</b>	<b>4.3</b>	<b>11.1</b>



**Table 2.16 Specialist fruit businesses, cider\***

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	10	10	10	10	10	10
Productive cropping area (ha)	18.21	19.26	18.21	19.26		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>88,354</b>	<b>110,460</b>	<b>4,852</b>	<b>5,735</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	203	90	11	5	0.2	0.1
Fertilisers & composts	4,584	3,585	252	186	5.2	3.2
Crop protection	6,185	7,478	340	388	7.0	6.8
Market charges	3,138	3,351	172	174	3.6	3.0
Packing materials	279	226	15	12	0.3	0.2
Horticultural sundries	466	565	26	29	0.5	0.5
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	967	2,610	53	136	1.1	2.4
<b>Total variable costs</b>	<b>15,823</b>	<b>17,907</b>	<b>869</b>	<b>930</b>	<b>17.9</b>	<b>16.2</b>
<b>Total gross margin</b>	<b>72,531</b>	<b>92,553</b>	<b>3,983</b>	<b>4,805</b>	<b>82.1</b>	<b>83.8</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	3,197	6,583	176	342	3.6	6.0
Regular unpaid	15,607	15,646	857	812	17.7	14.2
Casual labour	4,003	3,206	220	166	4.5	2.9
Power & machinery costs:						
Contract & hire	8,134	12,464	447	647	9.2	11.3
Fuel & electricity	2,453	3,583	135	186	2.8	3.2
Repairs	5,867	4,706	322	244	6.6	4.3
Machinery depreciation	7,882	6,785	433	352	8.9	6.1
Glasshouse depreciation	0	0	0	0	0.0	0.0
Rent (incl. imputed)	10,124	11,790	556	612	11.5	10.7
Other costs:						
Occupier's repairs	3,049	5,708	167	296	3.5	5.2
Permanent crop depreciation	3,014	5,077	166	264	3.4	4.6
Water	311	406	17	21	0.4	0.4
Sundries	6,286	7,939	345	412	7.1	7.2
<b>Total fixed costs</b>	<b>69,927</b>	<b>83,893</b>	<b>3,840</b>	<b>4,355</b>	<b>79.1</b>	<b>75.9</b>
<b>Management &amp; investment income</b>	<b>2,604</b>	<b>8,660</b>	<b>143</b>	<b>450</b>	<b>2.9</b>	<b>7.8</b>
Minus: management salaries	0	0	0	0	0.0	0.0
Plus: farmer & spouse labour	14,015	13,568	770	704	15.9	12.3
<b>Net farm income</b>	<b>16,620</b>	<b>22,228</b>	<b>913</b>	<b>1,154</b>	<b>18.8</b>	<b>20.1</b>
<b>Farm business income</b>	<b>17,017</b>	<b>27,070</b>	<b>934</b>	<b>1,405</b>	<b>19.3</b>	<b>24.5</b>

### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Top fruit		
Dessert apples & pears	0.0	0.0
Culinary apples	0.0	2.1
Cider apples	98.6	96.7
Plums	0.0	0.0
Other top fruit	0.2	0.1
Soft fruit		
Strawberries	0.0	0.0
Raspberries	0.0	0.0
Blackcurrants	0.0	0.0
Other soft fruit	0.0	0.0
Other crops	1.2	1.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops & tillages	1	1
Stores	3	4
Glasshouses	0	0
Equipment	32	32
Livestock	3	6
Other	61	58
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>283,074</b>	<b>273,394</b>

*\* no premium figures, sample too small*

**Table 2.17 All specialist hardy nursery stock businesses**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	37	40	37	40	37	40
Productive cropping area (ha)	2.67	4.59	2.67	4.59		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>262,445</b>	<b>389,857</b>	<b>98,233</b>	<b>84,972</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	64,074	96,241	23,983	20,976	24.4	24.7
Fertilisers & composts	10,850	12,642	4,061	2,755	4.1	3.2
Crop protection	1,591	2,605	596	568	0.6	0.7
Market charges	11,982	15,056	4,485	3,282	4.6	3.9
Packing materials	9,350	11,713	3,500	2,553	3.6	3.0
Horticultural sundries	11,154	11,555	4,175	2,518	4.3	3.0
Glasshouse fuel	524	413	196	90	0.2	0.1
Other variable costs	1,283	906	480	197	0.5	0.2
<b>Total variable costs</b>	<b>110,808</b>	<b>151,130</b>	<b>41,475</b>	<b>32,940</b>	<b>42.2</b>	<b>38.8</b>
<b>Total gross margin</b>	<b>151,637</b>	<b>238,727</b>	<b>56,758</b>	<b>52,032</b>	<b>57.8</b>	<b>61.2</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	50,002	87,999	18,716	19,180	19.1	22.6
Regular unpaid	30,243	30,743	11,320	6,701	11.5	7.9
Casual labour	9,578	14,246	3,585	3,105	3.6	3.7
Power & machinery costs:						
Contract & hire	3,023	2,558	1,132	558	1.2	0.7
Fuel & electricity	5,469	8,369	2,047	1,824	2.1	2.1
Repairs	3,675	4,623	1,376	1,008	1.4	1.2
Machinery depreciation	5,821	8,438	2,179	1,839	2.2	2.2
Glasshouse depreciation	1,009	1,159	378	253	0.4	0.3
Rent (incl. imputed)	7,068	9,349	2,646	2,038	2.7	2.4
Other costs:						
Occupier's repairs	5,266	4,111	1,971	896	2.0	1.1
Permanent crop depreciation	13	52	5	11	0.0	0.0
Water	1,079	1,418	404	309	0.4	0.4
Sundries	15,823	36,920	5,923	8,047	6.0	9.5
<b>Total fixed costs</b>	<b>138,071</b>	<b>209,988</b>	<b>51,680</b>	<b>45,768</b>	<b>52.6</b>	<b>53.9</b>
<b>Management &amp; investment income</b>	<b>13,566</b>	<b>28,739</b>	<b>5,078</b>	<b>6,264</b>	<b>5.2</b>	<b>7.4</b>
Minus: management salaries	321	441	120	96	0.1	0.1
Plus: farmer & spouse labour	26,281	25,635	9,837	5,587	10.0	6.6
<b>Net farm income</b>	<b>39,527</b>	<b>53,933</b>	<b>14,795</b>	<b>11,755</b>	<b>15.1</b>	<b>13.8</b>
<b>Farm business income</b>	<b>38,308</b>	<b>52,794</b>	<b>14,339</b>	<b>11,507</b>	<b>14.6</b>	<b>13.5</b>



**Table 2.18 Intensive hardy nursery stock - crop output more than £175,000 per hectare\***

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	15	18	15	18	15	18
Productive cropping area (ha)	1.34	1.39	1.34	1.39		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>448,392</b>	<b>460,507</b>	<b>333,682</b>	<b>330,538</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	107,766	112,477	80,197	80,733	24.0	24.4
Fertilisers & composts	20,023	17,694	14,900	12,700	4.5	3.8
Crop protection	1,624	1,809	1,208	1,299	0.4	0.4
Market charges	23,822	22,484	17,728	16,138	5.3	4.9
Packing materials	21,370	20,547	15,903	14,748	4.8	4.5
Horticultural sundries	22,007	14,801	16,377	10,624	4.9	3.2
Glasshouse fuel	1,381	831	1,027	596	0.3	0.2
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>197,992</b>	<b>190,643</b>	<b>147,340</b>	<b>136,838</b>	<b>44.2</b>	<b>41.4</b>
<b>Total gross margin</b>	<b>250,401</b>	<b>269,864</b>	<b>186,341</b>	<b>193,700</b>	<b>55.8</b>	<b>58.6</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	93,098	101,545	69,281	72,886	20.8	22.1
Regular unpaid	35,092	33,051	26,115	23,723	7.8	7.2
Casual labour	20,017	21,873	14,896	15,700	4.5	4.7
Power & machinery costs:						
Contract & hire	2,698	3,086	2,008	2,215	0.6	0.7
Fuel & electricity	6,847	6,446	5,095	4,627	1.5	1.4
Repairs	4,691	4,417	3,491	3,171	1.0	1.0
Machinery depreciation	5,971	6,034	4,443	4,331	1.3	1.3
Glasshouse depreciation	1,632	1,511	1,214	1,084	0.4	0.3
Rent (incl. imputed)	6,297	7,422	4,686	5,328	1.4	1.6
Other costs:						
Occupier's repairs	7,332	5,113	5,456	3,670	1.6	1.1
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	1,580	1,498	1,176	1,076	0.4	0.3
Sundries	25,502	25,401	18,978	18,232	5.7	5.5
<b>Total fixed costs</b>	<b>210,757</b>	<b>217,398</b>	<b>156,840</b>	<b>156,042</b>	<b>47.0</b>	<b>47.2</b>
<b>Management &amp; investment income</b>	<b>39,644</b>	<b>52,465</b>	<b>29,502</b>	<b>37,658</b>	<b>8.8</b>	<b>11.4</b>
Minus: management salaries	953	934	709	671	0.2	0.2
Plus: farmer & spouse labour	27,561	26,867	20,510	19,284	6.1	5.8
<b>Net farm income</b>	<b>66,252</b>	<b>78,398</b>	<b>49,303</b>	<b>56,271</b>	<b>14.8</b>	<b>17.0</b>
<b>Farm business income</b>	<b>61,472</b>	<b>77,164</b>	<b>45,746</b>	<b>55,386</b>	<b>13.7</b>	<b>16.8</b>



### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Hardy nursery stock		
Glasshouse crops	21.5	23.7
Outdoor crops	77.3	75.8
Other crops	1.1	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops & tillages	47	44
Stores	8	6
Glasshouses	6	5
Equipment	15	15
Livestock	0	0
Other	24	30
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>478,444</b>	<b>512,527</b>

*\* no premium figures, sample too small*

**Table 2.19 Extensive hardy nursery stock - crop output less than £175,000 per hectare\***

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	18	16	18	16	18	16
Productive cropping area (ha)	2.47	3.42	2.47	3.42		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>197,323</b>	<b>301,027</b>	<b>79,739</b>	<b>88,125</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	53,329	96,945	21,551	28,380	27.0	32.2
Fertilisers & composts	7,243	9,709	2,927	2,842	3.7	3.2
Crop protection	1,591	3,396	643	994	0.8	1.1
Market charges	7,651	12,335	3,092	3,611	3.9	4.1
Packing materials	4,162	5,530	1,682	1,619	2.1	1.8
Horticultural sundries	7,073	12,320	2,858	3,607	3.6	4.1
Glasshouse fuel	115	59	46	17	0.1	0.0
Other variable costs	0	0	0	0	0.0	0.0
<b>Total variable costs</b>	<b>81,165</b>	<b>140,293</b>	<b>32,799</b>	<b>41,071</b>	<b>41.1</b>	<b>46.6</b>
<b>Total gross margin</b>	<b>116,158</b>	<b>160,733</b>	<b>46,940</b>	<b>47,054</b>	<b>58.9</b>	<b>53.4</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	36,031	46,322	14,560	13,561	18.3	15.4
Regular unpaid	29,008	32,662	11,722	9,562	14.7	10.9
Casual labour	5,484	10,811	2,216	3,165	2.8	3.6
Power & machinery costs:						
Contract & hire	2,001	1,518	809	444	1.0	0.5
Fuel & electricity	4,836	7,612	1,954	2,228	2.5	2.5
Repairs	3,403	5,208	1,375	1,525	1.7	1.7
Machinery depreciation	4,296	6,337	1,736	1,855	2.2	2.1
Glasshouse depreciation	888	1,257	359	368	0.4	0.4
Rent (incl. imputed)	7,401	9,829	2,991	2,877	3.8	3.3
Other costs:						
Occupier's repairs	4,084	3,333	1,650	976	2.1	1.1
Permanent crop depreciation	14	108	6	32	0.0	0.0
Water	910	1,464	368	429	0.5	0.5
Sundries	11,557	19,252	4,670	5,636	5.9	6.4
<b>Total fixed costs</b>	<b>109,913</b>	<b>145,715</b>	<b>44,416</b>	<b>42,658</b>	<b>55.7</b>	<b>48.4</b>
<b>Management &amp; investment income</b>	<b>6,245</b>	<b>15,019</b>	<b>2,523</b>	<b>4,397</b>	<b>3.2</b>	<b>5.0</b>
Minus: management salaries	0	0	0	0	0.0	0.0
Plus: farmer & spouse labour	26,937	27,398	10,885	8,021	13.7	9.1
<b>Net farm income</b>	<b>33,181</b>	<b>42,417</b>	<b>13,409</b>	<b>12,417</b>	<b>16.8</b>	<b>14.1</b>
<b>Farm business income</b>	<b>32,603</b>	<b>38,542</b>	<b>13,175</b>	<b>11,283</b>	<b>16.5</b>	<b>12.8</b>

### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Hardy nursery stock		
Glasshouse crops	8.1	9.4
Outdoor crops	91.6	90.6
Other crops	0.2	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops & tillages	35	36
Stores	10	11
Glasshouses	4	4
Equipment	14	15
Livestock	0	0
Other	37	34
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>368,604</b>	<b>507,577</b>

*\* no premium figures, sample too small*

**Table 2.20 All other horticulture businesses**

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	42	41	42	41	42	41
Productive cropping area (ha)	27.63	30.36	27.63	30.36		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>335,707</b>	<b>417,007</b>	<b>12,149</b>	<b>13,738</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	34,203	52,097	1,238	1,716	10.2	12.5
Fertilisers & composts	10,009	11,780	362	388	3.0	2.8
Crop protection	11,224	11,727	406	386	3.3	2.8
Market charges	13,923	20,840	504	687	4.1	5.0
Packing materials	13,778	15,838	499	522	4.1	3.8
Horticultural sundries	11,675	11,127	422	367	3.5	2.7
Glasshouse fuel	1,921	2,801	69	92	0.6	0.7
Other variable costs	1,166	1,758	42	58	0.3	0.4
<b>Total variable costs</b>	<b>97,898</b>	<b>127,967</b>	<b>3,543</b>	<b>4,216</b>	<b>29.2</b>	<b>30.7</b>
<b>Total gross margin</b>	<b>237,809</b>	<b>289,040</b>	<b>8,606</b>	<b>9,522</b>	<b>70.8</b>	<b>69.3</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	50,350	71,712	1,822	2,362	15.0	17.2
Regular unpaid	33,795	36,728	1,223	1,210	10.1	8.8
Casual labour	45,789	57,549	1,657	1,896	13.6	13.8
Power & machinery costs:						
Contract & hire	12,167	11,265	440	371	3.6	2.7
Fuel & electricity	12,590	14,203	456	468	3.8	3.4
Repairs	11,226	11,808	406	389	3.3	2.8
Machinery depreciation	13,816	17,366	500	572	4.1	4.2
Glasshouse depreciation	1,447	2,015	52	66	0.4	0.5
Rent (incl. imputed)	20,192	23,926	731	788	6.0	5.7
Other costs:						
Occupier's repairs	6,349	5,574	230	184	1.9	1.3
Permanent crop depreciation	501	1,131	18	37	0.1	0.3
Water	1,433	1,810	52	60	0.4	0.4
Sundries	16,068	16,919	581	557	4.8	4.1
<b>Total fixed costs</b>	<b>225,724</b>	<b>272,005</b>	<b>8,168</b>	<b>8,961</b>	<b>67.2</b>	<b>65.2</b>
<b>Management &amp; investment income</b>	<b>12,085</b>	<b>17,035</b>	<b>437</b>	<b>561</b>	<b>3.6</b>	<b>4.1</b>
Minus: management salaries	327	386	12	13	0.1	0.1
Plus: farmer & spouse labour	23,981	25,035	868	825	7.1	6.0
<b>Net farm income</b>	<b>35,739</b>	<b>41,684</b>	<b>1,293</b>	<b>1,373</b>	<b>10.6</b>	<b>10.0</b>
<b>Farm business income</b>	<b>40,536</b>	<b>46,287</b>	<b>1,467</b>	<b>1,525</b>	<b>12.1</b>	<b>11.1</b>

Premium businesses	Per	Per £100	Crop output per cent of total crop output (%)		
	hectare	of gross output	Average	Average	Premium
	2016/17	2016/17	2015/16	2016/17	2016/17
Number of businesses	15	15			
Productive cropping area (ha)	67.66				
	<b>£ per hectare</b>	<b>average %</b>			
<b>Gross output</b>	<b>11,700</b>	<b>100.0</b>			
<b>Variable costs</b>					
Seed & young plants	778	6.6	Glasshouse crops	15.5	15.4
Fertilisers & composts	298	2.5	Outdoor vegetables:		
Crop protection	369	3.2	Brassicas	6.6	4.5
			Legumes	3.2	2.7
Market charges	409	3.5	Salad crops	0.5	0.3
Packing materials	404	3.5	Other outdoor vegetables	27.0	15.3
Horticultural sundries	277	2.4	Flowers & nursery stock	11.0	7.8
Glasshouse fuel	7	0.1	Soft fruit	24.6	29.4
Other variable costs	97	0.8	Top fruit	0.7	0.6
			Farm crops	11.0	23.9
<b>Total variable costs</b>	<b>2,638</b>	<b>22.5</b>	<b>Total</b>	<b>100.0</b>	<b>100.0</b>
					<b>100.0</b>
<b>Total gross margin</b>	<b>9,062</b>	<b>77.5</b>	<b>Distribution of tenant's type capital (%)</b>		
<b>Fixed costs</b>					
Labour:					
Regular paid	1,320	11.3	Crops & tillages	10	10
Regular unpaid	538	4.6	Stores	6	6
Casual labour	1,806	15.4	Glasshouses	6	7
			Equipment	36	39
Power & machinery costs:			Livestock	1	1
Contract & hire	443	3.8	Other	41	38
Fuel & electricity	396	3.4	<b>Total</b>	<b>100</b>	<b>100</b>
Repairs	396	3.4			<b>100</b>
Machinery depreciation	517	4.4	<b>Tenant's capital (£)</b>	<b>459,893</b>	<b>521,114</b>
Glasshouse depreciation	5	0.0		<b>1,155,795</b>	
Rent (incl. imputed)	724	6.2			
Other costs:					
Occupier's repairs	101	0.9			
Permanent crop depreciation	0	0.0			
Water	31	0.3			
Sundries	370	3.2			
<b>Total fixed costs</b>	<b>6,647</b>	<b>56.8</b>			
<b>Management &amp; investment income</b>	<b>2,415</b>	<b>20.6</b>			
Minus: management salaries	15	0.1			
Plus: farmer & spouse labour	372	3.2			
<b>Net farm income</b>	<b>2,772</b>	<b>23.7</b>			
<b>Farm business income</b>	<b>2,596</b>	<b>22.2</b>			

**Table 2.21 Other horticulture businesses, mainly outdoor vegetable crops\***

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2016/17</b>
Number of businesses	20	17	20	17	20	17
Productive cropping area (ha)	15.80	14.12	15.80	14.12		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
<b>Gross output</b>	<b>234,213</b>	<b>261,711</b>	<b>14,822</b>	<b>18,530</b>	<b>100.0</b>	<b>100.0</b>
<b>Variable costs</b>						
Seed & young plants	16,593	21,292	1,050	1,508	7.1	8.1
Fertilisers & composts	5,716	5,529	362	391	2.4	2.1
Crop protection	3,713	4,449	235	315	1.6	1.7
Market charges	7,398	9,633	468	682	3.2	3.7
Packing materials	13,821	13,698	875	970	5.9	5.2
Horticultural sundries	3,705	3,184	234	225	1.6	1.2
Glasshouse fuel	174	174	11	12	0.1	0.1
Other variable costs	753	860	48	61	0.3	0.3
<b>Total variable costs</b>	<b>51,873</b>	<b>58,819</b>	<b>3,283</b>	<b>4,165</b>	<b>22.1</b>	<b>22.5</b>
<b>Total gross margin</b>	<b>182,340</b>	<b>202,891</b>	<b>11,539</b>	<b>14,365</b>	<b>77.9</b>	<b>77.5</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	21,189	36,892	1,341	2,612	9.0	14.1
Regular unpaid	35,414	37,274	2,241	2,639	15.1	14.2
Casual labour	49,135	42,115	3,110	2,982	21.0	16.1
Power & machinery costs:						
Contract & hire	6,878	9,091	435	644	2.9	3.5
Fuel & electricity	7,410	7,634	469	541	3.2	2.9
Repairs	6,431	8,014	407	567	2.7	3.1
Machinery depreciation	10,548	11,591	667	821	4.5	4.4
Glasshouse depreciation	397	597	25	42	0.2	0.2
Rent (incl. imputed)	15,502	16,771	981	1,187	6.6	6.4
Other costs:						
Occupier's repairs	3,730	3,560	236	252	1.6	1.4
Permanent crop depreciation	8	465	1	33	0.0	0.2
Water	907	1,105	57	78	0.4	0.4
Sundries	12,550	14,239	794	1,008	5.4	5.4
<b>Total fixed costs</b>	<b>170,097</b>	<b>189,349</b>	<b>10,765</b>	<b>13,406</b>	<b>72.6</b>	<b>72.4</b>
<b>Management &amp; investment income</b>	<b>12,242</b>	<b>13,542</b>	<b>775</b>	<b>959</b>	<b>5.2</b>	<b>5.2</b>
Minus: management salaries	458	543	29	38	0.2	0.2
Plus: farmer & spouse labour	26,268	27,058	1,662	1,916	11.2	10.3
<b>Net farm income</b>	<b>38,052</b>	<b>40,058</b>	<b>2,408</b>	<b>2,836</b>	<b>16.2</b>	<b>15.3</b>
<b>Farm business income</b>	<b>40,327</b>	<b>44,280</b>	<b>2,552</b>	<b>3,135</b>	<b>17.2</b>	<b>16.9</b>

### Crop output per cent of total crop output (%)

	Average 2015/16	Average 2016/17
Glasshouse crops	4.8	4.9
Outdoor vegetables:		
Brassicas	16.6	15.4
Legumes	6.9	8.1
Salad crops	1.2	1.1
Other outdoor vegetable	68.1	50.5
Flowers & nursery stock	0.1	0.1
Soft fruit	0.1	0.1
Top fruit	0.1	0.2
Farm crops	2.1	19.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Distribution of tenant's type capital (%)

	Average 2015/16	Average 2016/17
Crops & tillages	2	1
Stores	4	4
Glasshouses	3	3
Equipment	36	40
Livestock	2	2
Other	54	49
<b>Total</b>	<b>100</b>	<b>100</b>
<b>Tenant's capital (£)</b>	<b>342,360</b>	<b>334,524</b>

*\* no premium figures, sample too small*

**Table 2.22 Balance sheet data for horticultural businesses**

Group	All horticulture		Specialist glass		Specialist fruit	
	2016/17 Opening	2016/17 Closing	2016/17 Opening	2016/17 Closing	2016/17 Opening	2016/17 Closing
Number of businesses	188		61		46	
<b>Harvest year</b>	2016/17 Opening	2016/17 Closing	2016/17 Opening	2016/17 Closing	2016/17 Opening	2016/17 Closing
<b>Assets</b>						
Fixed assets						
Land, buildings & SPS entitlement	671,265	668,709	445,093	441,504	910,740	902,280
Breeding livestock	554	493	0	0	970	898
Machinery & glasshouses	73,013	77,728	53,765	58,266	69,535	71,328
Permanent crops	18,465	17,708	98	172	56,829	55,094
Miscellaneous business assets	326	326	61	61	344	344
<b>Total fixed assets</b>	<b>763,623</b>	<b>764,964</b>	<b>499,018</b>	<b>500,004</b>	<b>1,038,418</b>	<b>1,029,944</b>
Current assets						
Crops & trading livestock	40,715	42,024	27,829	27,839	13,497	16,152
Goods in store	16,101	16,061	30,658	33,416	7,361	7,255
Liquid assets	80,382	84,237	111,468	136,539	80,062	82,619
<b>Total current assets</b>	<b>137,199</b>	<b>142,321</b>	<b>169,955</b>	<b>197,793</b>	<b>100,920</b>	<b>106,026</b>
<b>Total assets</b>	<b>900,822</b>	<b>907,286</b>	<b>668,973</b>	<b>697,798</b>	<b>1,139,338</b>	<b>1,135,969</b>
<b>Liabilities</b>						
Bank term loan	29,229	30,919	42,360	44,764	29,077	27,864
Other loans	46,408	45,762	15,833	13,266	42,171	45,381
Bank overdraft	16,348	15,857	8,703	11,031	8,535	7,776
Other short term loans	44,310	49,412	74,868	76,780	23,935	28,614
<b>Total external liabilities</b>	<b>136,295</b>	<b>141,949</b>	<b>141,764</b>	<b>145,841</b>	<b>103,719</b>	<b>109,636</b>
<b>Net worth</b>	<b>764,526</b>	<b>765,336</b>	<b>527,209</b>	<b>551,957</b>	<b>1,035,619</b>	<b>1,026,334</b>
Percentage equity (%)	84.9%	84.4%	78.8%	79.1%	90.9%	90.3%

**Table 2.23 A comparison of net worth and percentage equity by farm type**

	Average Assets 2016/17	Average Liabilities 2016/17	Average Net Worth 2016/17	Average % Equity 2016/17
<b>Defra main farm type</b>				
Lowland cattle & sheep	1,312,630	87,984	1,224,646	93.3%
Cereals	2,787,673	222,998	2,564,676	92.0%
Mixed	2,149,027	200,270	1,948,757	90.7%
General cropping	3,278,144	301,699	2,976,445	90.8%
Horticulture	904,054	139,122	764,932	84.6%
Dairy	1,934,022	326,311	1,607,712	83.1%
Pigs	1,384,842	299,681	1,085,161	78.4%
Poultry	1,589,474	454,972	1,134,502	71.4%
<b>All businesses</b>	<b>2,000,995</b>	<b>203,378</b>	<b>1,797,617</b>	<b>89.8%</b>



Group	Specialist HNS		Other horticulture	
	2016/17 Opening	2016/17 Closing	2016/17 Opening	2016/17 Closing
Number of businesses	40		41	
Harvest year	2016/17 Opening	2016/17 Closing	2016/17 Opening	2016/17 Closing
<b>Assets</b>				
Fixed assets				
Land,buildings & SPS entitlement	372,000	372,834	770,450	769,821
Breeding livestock	815	677	225	210
Machinery & glasshouses	51,346	50,130	95,062	105,918
Permanent crops	318	299	9,389	8,585
Miscellaneous business assets	612	612	182	182
<b>Total fixed assets</b>	<b>425,091</b>	<b>424,551</b>	<b>875,308</b>	<b>884,716</b>
Current assets				
Crops & trading livestock	90,514	90,086	27,945	29,856
Goods in store	18,806	19,627	16,626	15,351
Liquid assets	69,474	67,615	80,557	84,067
<b>Total current assets</b>	<b>178,794</b>	<b>177,328</b>	<b>125,128</b>	<b>129,274</b>
<b>Total assets</b>	<b>603,885</b>	<b>601,879</b>	<b>1,000,436</b>	<b>1,013,990</b>
<b>Liabilities</b>				
Bank term loan	20,658	27,437	32,054	32,026
Other loans	30,829	30,397	67,528	64,577
Bank overdraft	18,223	16,519	22,233	22,075
Other short term loans	35,980	36,600	56,478	65,745
<b>Total external liabilities</b>	<b>105,691</b>	<b>110,953</b>	<b>178,293</b>	<b>184,424</b>
<b>Net worth</b>	<b>498,194</b>	<b>490,926</b>	<b>822,143</b>	<b>829,566</b>
Percentage equity (%)	82.5%	81.6%	82.2%	81.8%

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## **Glossary**

### **Costs**

Expenditure plus opening valuation less closing valuation (where appropriate). Interest on borrowed capital, including bank overdrafts is not included in these calculations.

### **Farm Business Income (FBI)**

Represents the return to all unpaid labour (farmers, spouses and others with an entrepreneurial interest in the farm business) and to all their capital invested in the farm business including land and farm buildings. It is defined as Total Farm Output (TFO) minus cost (C): where TFO is defined as the sum of output from: crop enterprises, adjustment for disposal of previous crops, livestock enterprises, separable non-agricultural diversifications, basic payment scheme, agri-environmental payments, other grants and subsidies, miscellaneous receipts; C is defined as variable costs plus fixed costs.

### **Farm crops**

Comprise cereals and other non-horticultural cash crops, fodder crops and grassland.

### **Fixed costs**

These include rent (or imputed rent), regular wages, unpaid manual labour, casual labour, power and machinery costs, glasshouse depreciation, building and general repairs, insurance, water, office expenses and miscellaneous expenditure.

### **Gross output**

Total revenue inclusive of marketing charges, where known, adjusted for changes in valuation of crops and tillage, and less purchases of livestock, or produce for resale. Gross output per hectare reflects the intensity of the system as well as the yields and prices obtained.

### **Labour**

Covers not only the costs of hired labour, but also an appropriate allowance for the unpaid manual labour of the grower and members of the family.

### **Management and investment income**

Total gross output less all costs (including the value of unpaid labour) other than salaried management. It represents the reward to management and use of 'tenant's capital' whether that capital is borrowed or not.

### **Management salaries**

Includes all paid managerial input and represents that part of total paid labour which relates to managerial work

### **Marketing charges**

Include, where known, packhouse charges, paid carriage and commission and handling charges levied on sales.

### **Net farm income**

Represents the return to the grower and spouse for their manual labour as well as for their management and capital investment.

### **Occupier's repairs**

This includes maintenance of glass and the associated heating equipment, as well as traditional tenant type repairs.

### **Per £100 gross output**

Shows the relative importance of the main resources used in each unit product, and in total provide a useful measure of profitability.

### **Power and machinery**

Include contract and hire, fuel, electricity, repairs and an allowance for depreciation. A deduction is made for the private use of vehicles. Machinery depreciation is calculated on a 'replacement cost' basis.

### ***Premium results***

Farm performance is measured as the ratio of farm business output to farm business costs. An imputed value for unpaid manual labour, including that of the farmer and spouse is added to farm business costs. The value of paid managerial input is subtracted. The farms are ranked in descending order according to this ratio and allocated to quartiles with the top quartile (25 percent) representing the high performance band (Premium Group). Note that the farm weights are used to allocate farms to quartiles so the number of farms in a quartile will not necessarily be equivalent to a quarter of the sample.

### ***Rent***

In the case of an owner occupier, an imputed rent is charged in accordance with what a tenant in similar circumstances, including length of occupation, would be paying.

### ***Standards***

Average results are drawn from all businesses in a particular group.

### ***Tenant's capital***

Assets normally provided by tenants and includes growing crops, stores, machinery, livestock, cash and other assets needed to run the business. Permanent crops (including orchards) and glasshouses are also considered to be tenant-type capital. It represents approximately the capital currently invested in the horticultural business. The difficulties involved in making realistic assessments of tenant's capital, particularly of permanent fruit crops, should be kept in mind when interpreting these results.

### ***Total gross margin***

This is the difference between total gross output and total variable costs and measures the contribution of the business towards covering its fixed costs and providing for a profit.

### ***Variable costs***

These vary in direct proportion to the size of each business enterprise and include all purchased seed & plants, fertiliser & composts, crop protection, market charges, packing materials, horticultural sundries, glasshouse fuel and other variable costs.

## **Abbreviations used in this Publication**

/	per
£	pounds (stirling)
Defra	Department for Environment, Food and Rural Affairs
Ave	Average
depn.	Depreciation
Fert	Fertiliser
ha	hectare
HNS	Hardy nursery stock
no.	number
n/a	not applicable

### ***Rounding***

Totals are calculated from unrounded components and may not therefore be the total of the rounded components shown.

### **Derivation of Farm Business Income**

Net Farm Income

Plus:

Value of unpaid labour [excluding farmer & spouse; already taken into account in deriving Net Farm Income]

Imputed rent and rental value

Less:

Net interest payments

Ownership charges [buildings & works depreciation; insurance of farm buildings; landlord-type repairs and upkeep]

Director's remuneration

Equals:

Farm Business Income

## Appendix 1: Reports in this series

- **Crop Production in England**
- **Dairy Farming in England**
- **Hill Farming in England**
- **Horticulture Production in England**
- **Lowland Grazing Livestock in England**
- **Organic Farming in England**
- **Pig Production in England**
- **Poultry Production in England**

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