



Farm Business Survey

2020/2021

Horticulture Production in England



Richard Crane and Rosie Grewer



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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. 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 Sixteenth Series

Welcome to the sixteenth series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)*. Our sixteenth series, covering the 2020/21 financial year largely corresponds with the start of the Covid-19 pandemic impact on farm businesses. In addition, the new Agriculture Act came into being (1 January 2021), alongside other changes to how farm, and other businesses, operate given the UK's exit from the EU. Readers may also be interested in our twice annual intelligence reports, published at www.ruralbusinessresearch.co.uk, and in addition, during the spring and summer of 2020, we produced regular "Coronavirus Impact on Farming in England" reports. The importance of providing the industry and government with independent evidence on the changing fortunes of farm and horticultural business has never been greater. Through submission of data and Coronavirus reports to Defra, our work has helped to support policies that have directly benefited farm businesses, including the Dairy Response Fund in April and May 2020.

The 2020/21 financial year for farmers and growers saw seasonal, market and supply impacts in addition to, and often aligned with, Covid-19 impacts. Reduced winter cropping in 2019, led to an increase in spring cereal cropping in 2020. While cereal and oilseed crops yields were lower, strong cereal, oilseed and straw prices helped offset fixed cost increases. However, greater output prices led to higher concentrate and straw prices affecting livestock farms. There were increases in cattle and sheep prices, following temporary market collapses at the outbreak of Covid-19, but pig prices fared less well and this sector has suffered from processing capacity shortages at abattoirs. General labour shortages, alongside input supply challenges, have had short and medium term impacts. Some diversified activities were initially severely impacted by Covid-19, with "lockdown" leading to cancelled tourist and accommodation bookings, however with a subsequent large increase in demand for UK holidays, demand outstripped supply, providing welcome business recovery.

For the 2020/21 financial year, average Farm Business Income (FBI), derived from our work on the Defra-funded Farm Business Survey (FBS), increased to £51,900 per business, representing an increase of 13% on the previous 2019/20 year, and marginally greater than in 2018/19. In percentage increase terms, Lowland Grazing Livestock saw an increase of 97% in FBI, but this was from a very low base of £9,400 in 2019/20 to £18,400 in 2020/21, resulting in this farm type recording the lowest average FBI once again. Despite the challenges in the dairy sector at the start of the Covid-19 pandemic, with some farmers not having milk collected, Dairy farm businesses returned the highest average FBI of £92,500 (9% up on 2019/20), followed by Poultry (£77,700; down 12%) and Cereals (£71,700; up 14%). Of course, in order to appreciate the full drivers of these average headline data, the costs and revenues that have led to these results need to be understood. Our series of reports provide these details, and increasingly demonstrate that in some farm types it is the non-agricultural business activities that are providing important business level income.

In addition to this series of in depth reports, our free to use interactive online tools provide a further wealth of information at www.farmbusinesssurvey.co.uk. This series of reports, along with previous versions are also all available at www.ruralbusinessresearch.co.uk. The 2020/21 financial year, and our work on the FBS to accurately and independently report on the changing fortunes of farm and horticultural businesses, has been like no other in recent memory. Our sincere thanks go to the farmers and growers for their most valuable contribution, in not only continuing to provide access to their farm business data, but also doing so in the face of changing ways in which we have had to access data and interact with participating farm businesses due to the Covid-19 pandemic. I also thank all my colleagues for the positive way in which they have professionally adapted to the changing work circumstances that we have all experienced since March 2020.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
December 2021

www.ruralbusinessresearch.co.uk

Acknowledgements

Rural Business Research thanks sincerely all those farmers 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 crop production. The review also includes price indices for key products and inputs. The numbers that appear in square brackets relate to the sources of information and these references are fully listed on Page 62.

Highlights:

- In 2020, the output from horticulture was £4,009 million, 15% of total agricultural output [1]
- During the last decade, there has been an average annual increase of 1.9% in output (based on current prices) for total horticultural production [1]
- Vegetable production remains the largest horticultural sector, in terms of both land use and output, accounting for 40% of total UK horticultural output and 72% of total productive outdoor horticultural area in 2020 [1,2]
- The proportion of vegetable production has reduced over the last 30 years, from a decade average of 52% in 1991 to 2000, to 41% in the most recent decade, 2011 to 2020 [1,2]
- Output from ornamentals was an average of 37% during the decade 2011 to 2020, which was 1% above the previous decade [1,2]
- Fruit output, at 22%, has shown an increase from the 18% average in the previous decade [1,2]
- In 2020, the UK was 40.9% self-sufficient in all vegetables, 21.8% in all fruit and 55% in all ornamentals, in terms of value [1,2]
- The index of producer prices showed some wide variability between 2019 and 2020 with indices for fresh fruit up 42 points and fresh vegetables up four points [3]
- The index of purchase prices saw fuel for heating decrease by five points, along with fertilisers & soil improvers by 13 points, while crop protection increased by 13 points [4]

Section 2

A review of the financial results derived from the Farm Business Survey (FBS) for the 2020/21 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 groups 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 2020/21 was 2,539, while the total FBS sample was 147 businesses, representing 5.8% of the national population of eligible horticultural businesses
- Profitability for all horticultural businesses, as measured by Farm Business Income (FBI), increased by 24.8%, to an average of £52,923 per business in 2020/21
- All four horticultural groups (Specialist fruit, Specialist glass, Specialist hardy nursery stock & Other horticulture businesses) experienced an increase in profitability, albeit at different levels

SECTION 1: THE HORTICULTURAL SECTOR

An overview of the horticultural industry in the United Kingdom (UK) using external data, including government published statistics and information from the press. The numbers that appear in square brackets relate to the sources of information and these references are fully listed on Page 62.

1.1 *The contribution of horticulture to UK agricultural output*

- Total agricultural output in the UK in 2020 was £26,670 million, down 8.1% from the previous year
- Total horticultural output in the UK in 2020 was £4,009 million, contributing 15% to total agricultural output
- Total horticultural output increased by £19 million between 2019 and 2020, up by 0.5%
- Average horticultural output in the ten-year period 2011 to 2020 was £3,578 million, an increase of £764 million (27%) compared with the previous 2001 to 2010 period average

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 ornamentals for reporting purposes
- The area used by each sector has varied over the past thirty years, however, during the past decade from 2011 to 2020 the vegetable sector accounted on average for the largest proportion of land use (72%), followed by fruit (21%) and ornamentals (7%)
- The total area of land utilised for horticultural production since 1991 averaged 175,122 ha; from a peak of 213,648 ha in 1986, to a low of 161,945 ha in 2016. The total area increased by 2% from 2019 to 166,136 ha in 2020
- Output has also varied over the past thirty years, which on average has seen the vegetable sector as the greatest contributor (46%), followed by ornamentals (36%) and fruit (18%)
- In 2020 actual output for the sectors was:

○ Vegetables	40%		40% }
○ Ornamentals	34%	compared to	36% }
○ Fruit	26%		24% }
- In value terms, horticultural output in 2020, (compared with 2019) was:

○ £1,611 million for vegetables	(up 2.8% from £1,567 million)
○ £1,358 million for ornamentals	(down 6.5% from £1,453 million)
○ £1,041 million for fruit	(up 7.3% from £970 million)

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

- The value of total annual horticultural production in the UK has averaged £3,348 million in the decade since 2011
- In this decade, production started at a low of £2,947 million in 2011, and increased to a peak of £4,013 million in 2020
- Between 2011 and 2020, total horticultural production grew in value by 36% with the different sectors showing a wide variation in growth rates as noted below:
 - Vegetables from £1,234 million to £1,611 million, up 30%
 - Fruit from £598 million to £1,045 million, up 75%
 - Ornamentals from £1,114 million to £1,358 million, up 22%

Figure 1.1 Value of horticultural production (current prices: £m)¹

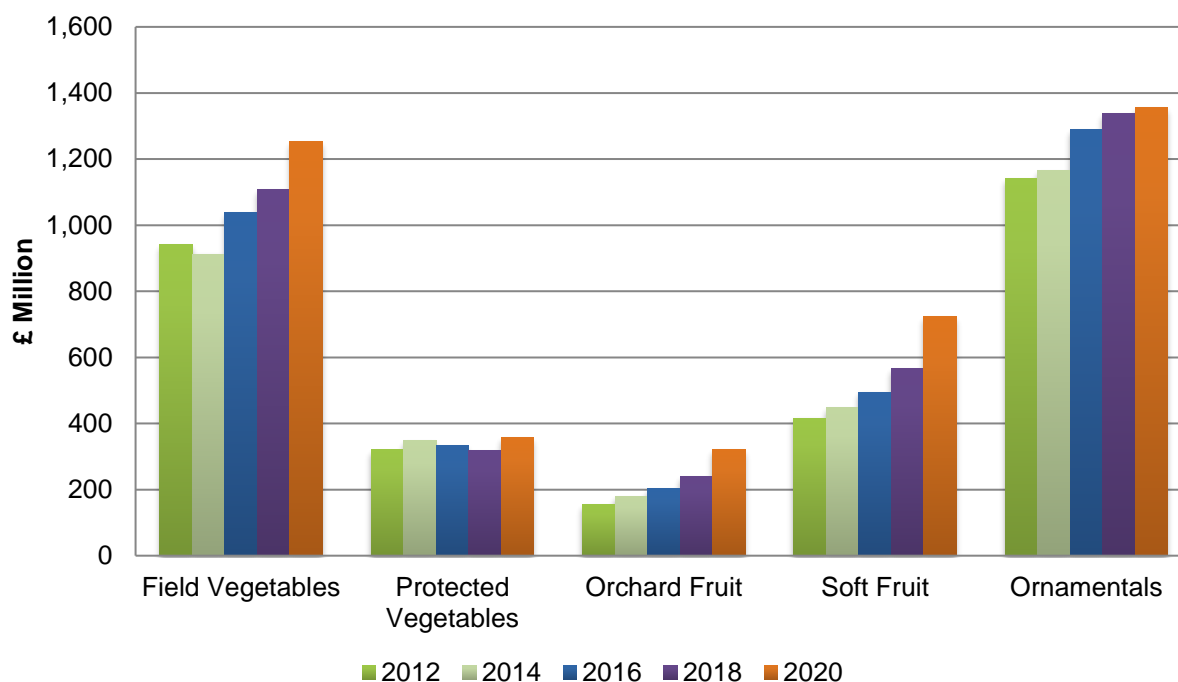


Table 1.1 Area of outdoor and protected crops in the UK (ha)^{1,2}

	2012	2014	2016	2018	2020
Glasshouse crops (excl. protected vegetables)	1,823	1,733	1,919	2,064	2,086
Protected Vegetables	763	861	829	803	825
Outdoor Non-Edibles	12,308	11,996	11,508	11,673	11,455
Field Vegetables	123,460	116,112	112,554	115,938	118,131
Orchard Fruit	24,185	23,437	25,144	23,930	23,090
Soft Fruit	9,334	9,376	9,991	10,562	10,549

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 crops (excluding protected vegetables) increased by 14.4% from 2012
- The area of protected vegetables increased by 8.1% from 2012
- The area of outdoor ornamentals decreased by 6.9% from 2012
- The area of field vegetables decreased by 4.3% from 2012, but increased by 1.9% from 2018
- The area of orchard fruit decreased by 4.5% from 2012
- The area of soft fruit has grown by 13% from 2012, but fell by just 0.1% between 2018 and 2020

1.4 The horticultural sector in 2020

- The total value of horticultural output in 2020 amounted to £4,013 million
- Field scale vegetables comprised the largest share of total output at 31%
- Flowers and bulbs accounted for the lowest share of the total output at 3%

Figure 1.2 Value of horticultural produce in 2020 by proportion of total output ¹

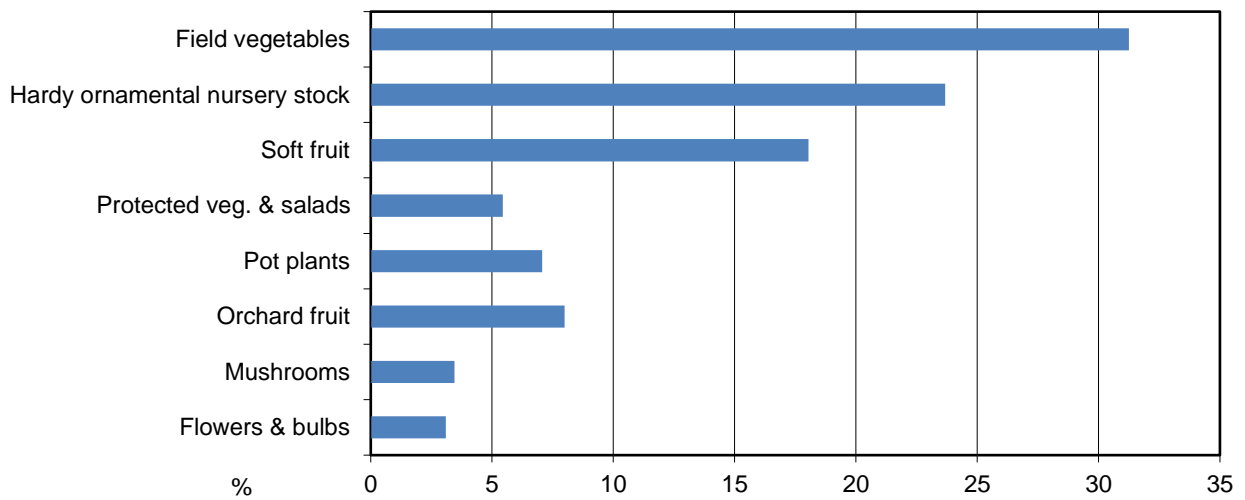
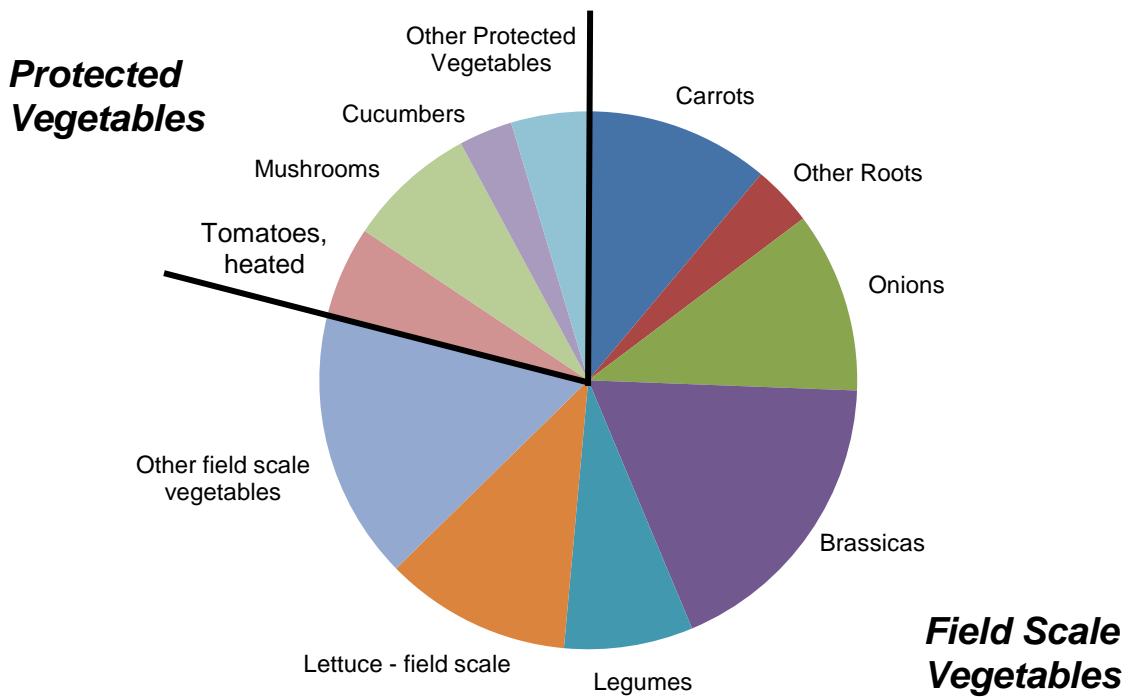
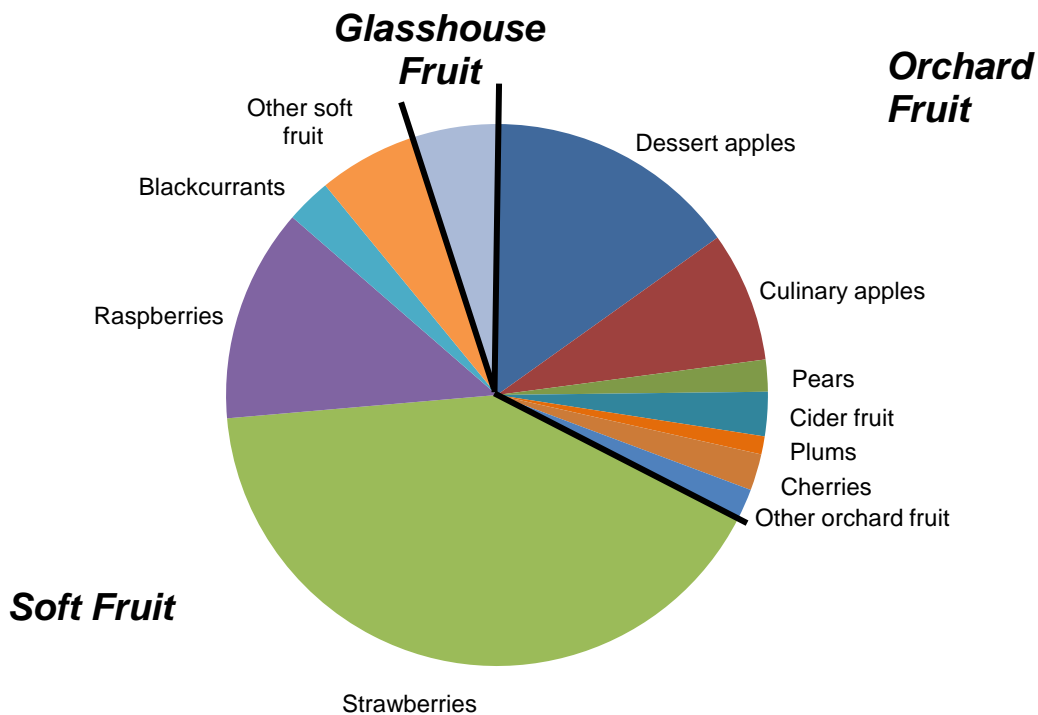


Figure 1.3 Composition of vegetable output in 2020²



- Field scale vegetable production account for 79% of total value of vegetables produced, including brassicas, carrots, legumes, parsnips, turnips, swede, courgette, asparagus, watercress, leeks, lettuce, rhubarb, celery and onions (dry bulb and green)
- Brassicas account for the largest single proportion by category of the total vegetable value at 18%, followed closely by Other field scale vegetables at 16%
- Protected vegetables, including crops grown in both heated and cold glasshouses and polythene tunnels, account for 21% of total vegetable value
- Mushrooms and tomatoes are the highest contributing protected vegetables to the total vegetable production value, at 8% and 5% respectively

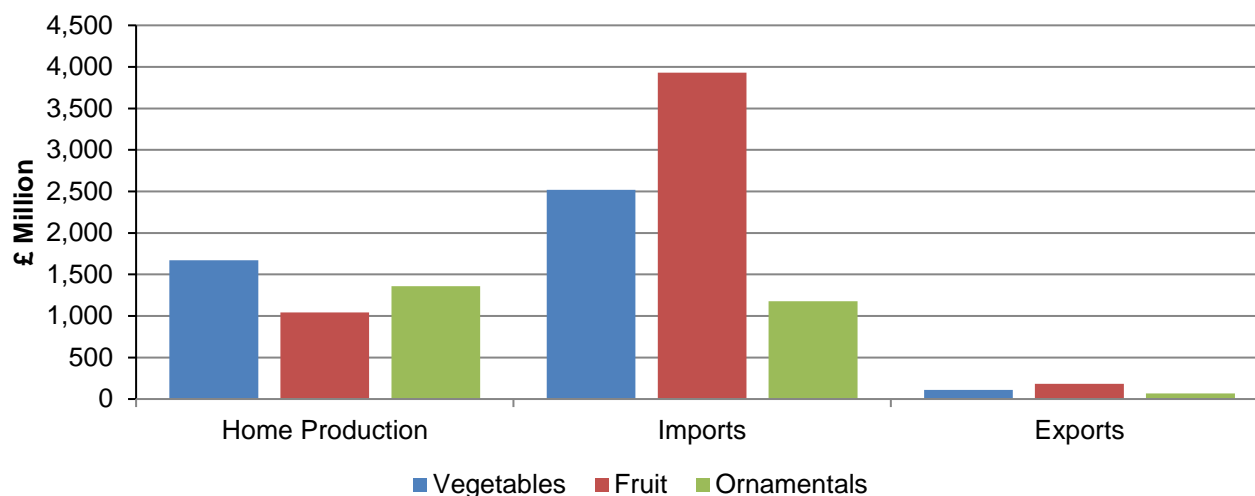
Figure 1.4 Composition of fruit output in 2020²



- Total fruit output by value was £1,045 million, with the production of field grown soft fruit generating £653 million (62.5%), orchard fruit £340 million (32.6%) and glasshouse fruit £51 million (4.9%)
- Strawberry production contributed the greatest share of all soft fruit production at £429 million (66%), 41% of total fruit production
- Dessert apples accounted for 46% of orchard fruit output (£158 million) in 2020, and was 15% of total fruit production with raspberries just below at 13%

1.5 Imports and exports of horticultural products

Figure 1.5 Value of vegetables, fruit and ornamentals 2020 (£m)^{1,2}



Vegetables

- The UK was 40.9% self-sufficient in all vegetables in terms of value in 2020, averaging 39% during the decade 2011 and 2020
- Between 2019 and 2020 the value of imports decreased by 2.2% to £2,519 million, whilst the value of exports dropped by 14% to £111 million
- The value of home-produced vegetables in actual prices increased by 36.9% between 2011 and 2020, to an all time high of £1,670 million

Fruit

- In 2020, in terms of value, the UK was 21.8% self-sufficient in fruit, 4% above the average over the past decade, since 2011
- Exports and imports of fruit are of the greatest value for the three groups of horticultural produce. Between 2019 and 2020 fruit exports increased by 17.4% to £184 million, and the value of imports grew by 0.8% to £3,929 million
- The value of home production in actual prices increased between 2011 and 2020 by 74.2%, and is now at the highest level of £1,045 million

Ornamentals

- In terms of value, self-sufficiency for ornamentals in 2020 was 55%, averaging 54% since 2011
- Between 2019 and 2020 the value of imports decreased to £1,178 million, down 4.1%, while the value of exports dropped by 11.4% to £68 million
- The value of home production in actual prices increased between 2011 and 2020 by 21.9% to £1,358 million

1.6 Farm gate prices (actual): recent trends

- The fruit and vegetable sectors have seen significant price fluctuations between 2011 and 2020. As shown in Figure 1.6, strawberries were at their highest price within this period, averaging 449 p/kg during 2020, raspberries were at their highest price since 2011, averaging 859 p/kg in 2020
- Top fruits shown in Figure 1.7 are also all at their highest value in the 2011 to 2020 period. In the last ten years dessert apple prices rose from a low of 63 p/kg to a high of 109 p/kg in 2020. Plums & gages have seen the largest increase, from 99 p/kg in 2011 to 187 p/kg in 2020
- Brassicas, namely brussel sprouts, cabbage and calabrese, have shown considerable inter-year variability, with an average price fluctuation between lowest and highest prices of 181% during the 2011 to 2020 period
- Vegetables excluding brassicas, namely carrots and parsnips, also showed inter-year variability, with an average price changes of 40%, between the highest and lowest point in the last ten years
- Salad crops, i.e. lettuce, tomatoes and cucumbers, recorded price changes between lowest and highest point of 115%, 67% and 54% respectively over the period 2011 to 2020

Figure 1.6 Average soft fruit farm gate actual prices³

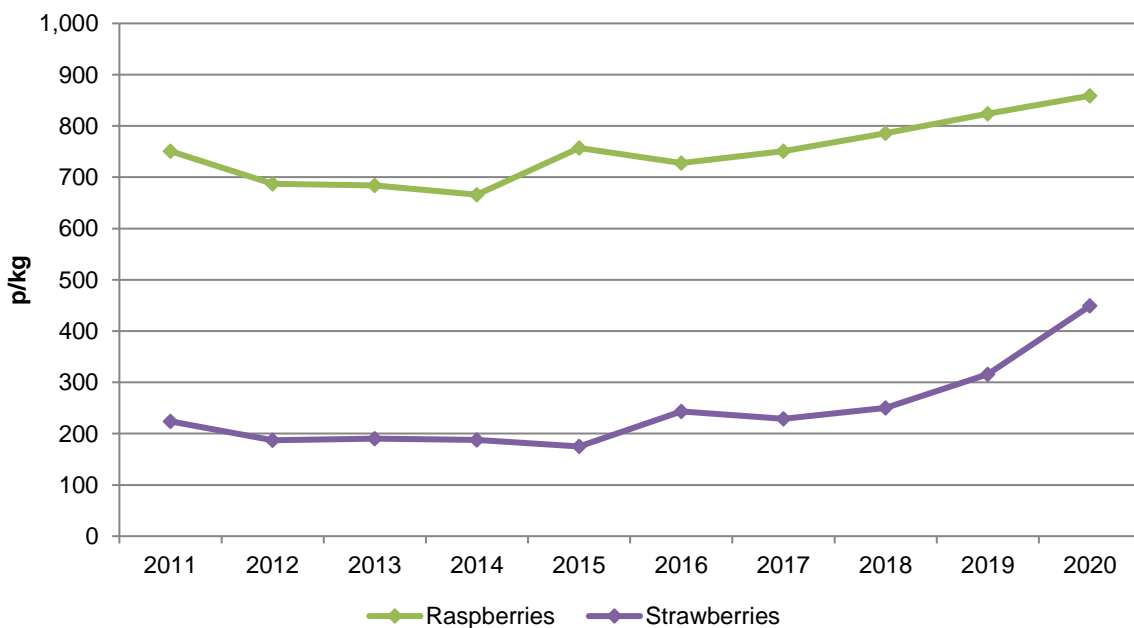


Figure 1.7 Average top fruit farm gate actual prices³

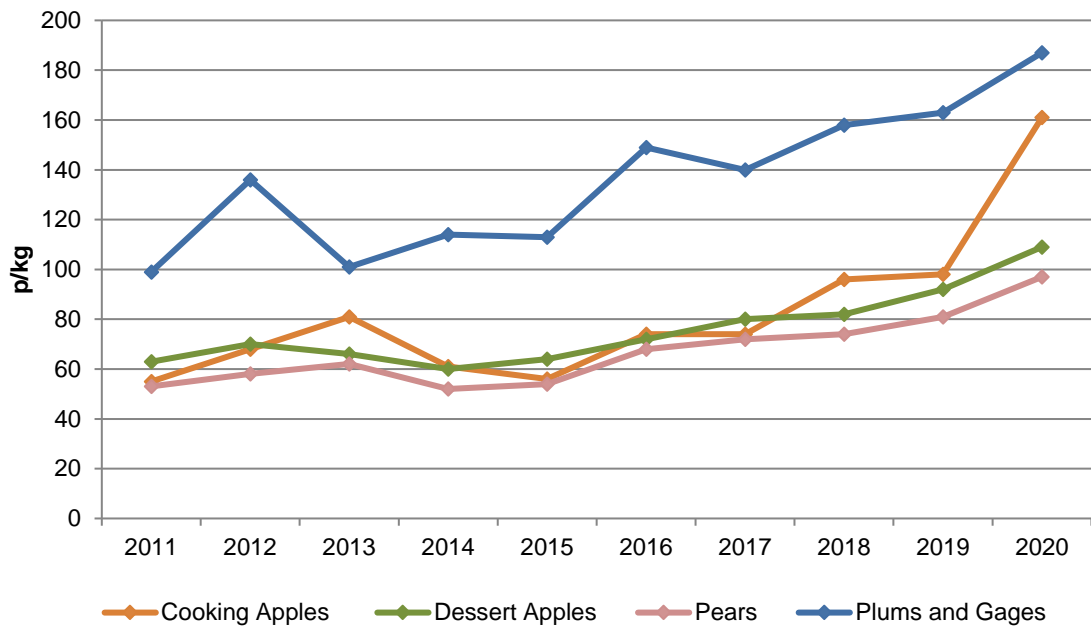
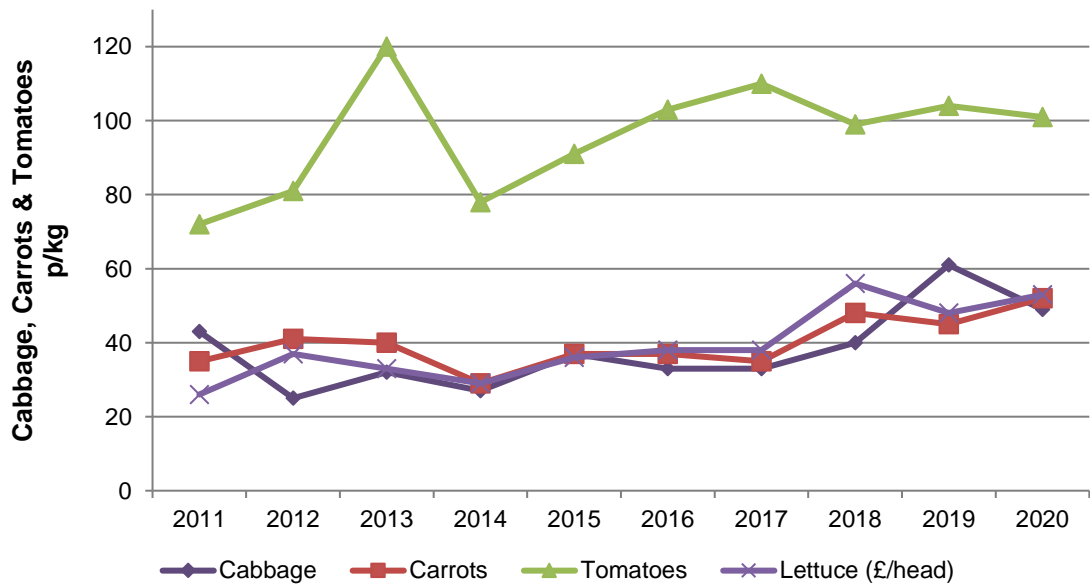


Figure 1.8 Average vegetable farm gate actual prices³



1.7 Price Indices in the UK

Table 1.2 Index of producer prices (Index: 2015 =100)⁴

	2015	2016	2017	2018	2019	2020
Dessert apples	100.0	102.4	115.5	123.0	125.9	143.5
Dessert pears	100.0	110.7	127.4	131.2	143.2	170.6
Strawberries	100.0	111.8	117.6	116.5	133.4	185.2
All fresh fruit	100.0	107.6	115.3	119.5	130.2	172.2
Lettuce	100.0	111.1	107.9	138.2	121.4	132.9
Onions	100.0	114.4	116.6	130.4	161.0	142.2
Cabbage	100.0	109.7	113.4	126.1	140.6	147.2
All fresh vegetables	100.0	110.1	107.0	119.6	125.1	128.7
Flowers & plants	100.0	100.9	105.1	105.4	106.3	105.0

- Data based on a calendar year. These periods most closely resemble the FBS data
- Output indices reflect the price farmers and growers receive for their produce at farm gate price. Because of the fluctuating value of inputs and outputs over a longer period, some years are often reset, so future movements can be compared against a baseline
- The index prices for 2015 are all set to 100.0 to show the relative change in prices
- Fruits show significant increases from 2019 to 2020 indices; dessert apples saw an increase of 18 points, whereas dessert pears and strawberries saw significant increases of 27 and 52 points respectively
- Vegetables show slight increases from 2019 to 2020 indices; with lettuce rising by 12 points and cabbage rising by seven points, with the exception of onions, dropping by 19 points
- Flowers & plants have decreased to 105.0

Table 1.3 Index of purchase prices (index 2015 =100)^{4,5}

	2015	2016	2017	2018	2019	2020
Current Inputs						
Seeds	100.0	101.5	100.0	111.6	113.3	113.4
Fertilisers & soil improvers	100.0	82.6	89.6	100.8	103.2	90.5
Plant protection	100.0	100.0	106.8	134.2	133.0	146.0
Fuel for heating	100.0	97.1	100.7	107.5	111.6	106.5
Full-Time hired labour*	100.0	102.2	105.6	108.7	112.3	112.3
Capital inputs						
Machinery & other equipment	100.0	100.0	100.8	106.0	107.5	107.6
Buildings	100.0	99.4	103.4	107.9	110.5	110.8

* Farm Business Survey figures

- Input indices reflect the prices farmers and growers pay for goods and services, either used in the production process or investments required for production
- As in Table 1.2, the 2015 figures are set to a baseline of 100.0 to show the change in input prices for the following three years
- The index of purchase prices has shown a decrease of 13 points for fertilisers and five points for heating fuel between 2019 and 2020
- Full-time hired labour costs for Agricultural & related trades have grown steadily year on year, increasing by 12 points since 2015. It should be noted that within the Horticultural industry there is a strong reliance on casual labour which is not included in this index
- After the significant increase of five points from 2017 to 2018, machinery & other equipment returned to a lesser increase of one point from 2018 to 2019 but it has remained the same between 2019 to 2020
- Buildings inputs have also shown a smaller increase of 0.3 points compared to the previous year's three point increase

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, farms growing field scale vegetables and arable crops are classified as General Cropping farms, and so their results are not included in these tables, although farms growing field scale vegetables without arable crops are recorded in the 'Other horticulture' typology group.

The data in this report were compiled from the 2019/20 and 2020/21 FBS and can be accessed at:

- www.farmbusinesssurvey.co.uk and at
- <https://www.gov.uk/government/collections/farm-business-survey>

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 ornamental crops (more than 50% of crop output from ornamental 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 ornamental 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 ornamental 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 ornamental 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; mainly top fruit, top fruit excluding cider apples and specialist cider

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, and so the smallest 'commercial' horticultural businesses by June Survey definition are therefore not eligible for the FBS. 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. 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 via a calibration procedure. The weights are based on population data from the June business register and are calculated for each design stratum. The weight when applied to each business represents the number of times that business' data must be replicated in order to 'represent' businesses not selected for the sample, so as to reflect the entire population, and applies to all variables.

The classification to farm type for the June Survey database is 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: 1.0 hectare of orchard, 0.5 hectare of vegetable crops or 0.1 hectare of protected crops.

The number of FBS eligible conventional and organic horticultural businesses in 2020/21 was 2,539, while the total FBS sample for the 2020 cropping year was 147 businesses, representing 5.8% of the national population of eligible horticultural businesses.

Table 2.1 FBS sample compared with eligible* horticultural businesses for 2020

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

	England population 2020 June Survey (number of businesses)	FBS sample 2020 (number of businesses)	FBS sample as a % of population
Specialist Glass	256	39	15.2%
Specialist Fruit	674	46	6.8%
Specialist HNS	647	22	3.4%
Other Horticulture	962	40	4.2%
All Horticulture	2,539	147	5.8%

The 'All Horticulture' group results are based on a sample of 147 businesses and no outliers have been removed from this group.

Within the four broad horticulture groups, approximately 70 crop types 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.

It is important to note that all surveys are subject to sampling error as they are not measuring the whole population, the FBS is no exception. It is common practice to publish 95% confidence intervals and error bars alongside any published estimated figures to give the reader an indication of the size of the sampling error. These signify that we are 95% confident that this range contains the true value. For simplicity within these reports, the confidence intervals have not always been published. Readers should be aware that the figures calculated from the FBS data have a level of uncertainty around them and that all figures are estimates. Generally, the smaller the sample size the greater the sampling error and the less confidence we have in the estimates. For details on the FBS confidence intervals, please refer to Defra FBS publications <https://www.gov.uk/government/collections/farm-business-survey>

Results for this survey can be accessed at:

<http://farmbusinesssurvey.co.uk> and

<https://www.gov.uk/government/collections/farm-business-survey#farm-accounts-in-england>

2.4 Overview of 2020/21

- The average profitability as measured by Farm Business Income (FBI) increased by 24.8% to £52,923 per business for the whole sample of businesses in 2020/21, when compared with 2019/20
- All four horticultural groups (Specialist fruit, Specialist Glass, Specialist hardy nursery stock & Other horticulture businesses) experienced an increase in profitability, albeit at different levels

2.5 Financial results for 2019/20 and 2020/21

- 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
 - results are based on the productive cropping area of the business
- Average results are shown for the 2019 and 2020 harvest years, together with premium results for the 2020 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
 - 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 total fixed costs include imputed items such as labour and rent, to calculate Management & investment income. When benchmarking businesses, these imputed costs are included so that businesses can be compared on an equal basis. However, adjustments are made to these figures to show Farm Business Income, which more closely resembles the actual profit of the business
- 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, the average Farm Business Income (FBI) of horticultural businesses increased by 24.8%, to £52,923 per business in 2020; average total gross output for the sector decreased by 16.5%, to £409,056 per business, compared with 2019, while total costs decreased by 20.4%

- Specialist glass and Hardy Nursery Stock businesses were the two more profitable sectors of horticulture, and although Specialist Fruit had a much better year it was from a low base
- Where the data are derived from a sample of less than 15 holdings, there is a lower degree of confidence in the figures

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 2020 was 4.29ha, of which protected production was 1.2ha
 - The sample of 39 specialist glass businesses is split between 17 businesses specialising in edible crops and 22 businesses specialising in ornamental crops
 - On a per business basis in 2020, Farm Business Income (FBI) increased by 11% to £101,156. However, although the ornamental sector had a much improved year with FBI increasing by 64%, the edible sector experienced a fall in FBI of 30%
 - The rise in profitability corresponded with an increase in the productive area, but in addition to that, profitability on a per hectare basis rose by only 7%
 - The composition of cropping for these holdings was similar for both years, with just over 60% of crop output derived from the ornamental sector
- *Specialist glass, mainly edible crops [Table 2.5]*
 - Profitability for this group, at £75,061 per business, showed a decrease of 30% compared to the previous year
 - Although this was partly due to a 16% fall in the average cropping area, profit per hectare also fell by 17% to £18,152/ha
 - This appears to be due to an increase in overhead costs outweighing an increase in Gross margin per hectare
 - On a per £100 of gross output basis, this meant Farm Business Income fell from £17.60 to £11.20
 - The financial performance of the premium group (top quartile) was nearly three times higher than the average results in 2020, on a per hectare basis
- *Specialist glass, mainly ornamental crops [Table 2.6]*
 - In contrast to the edible group, profitability for this group increased by 64% to £124,198 per business
 - Although this was partly due to a 28% increase in the average cropping area, profit per hectare also increased by 28% to £28,062 per hectare
 - On a per £100 of gross output basis, this meant Farm Business Income rose from £8.10 to £12.00
- *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 ornamental crops
 - These groups are semi-intensive and still have significant outdoor cropping

- *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, with 10% or less from outdoor production
 - Average Farm Business Income (FBI) fell by 32% to £67,926 per business

- *Specialist glass businesses (90% or more crop output from glasshouse production) – Mainly edible crops [Table 2.11]*
 - Tomato production accounted for 47% and soft fruit 17% of all glasshouse output for this sample of businesses in 2020
 - Although output per hectare increased marginally, costs increased, in particular overhead costs

- *Specialist glass businesses (90% or more crop output from glasshouse production) – Mainly ornamental crops [Table 2.12]*
 - The ornamental sector fared better than the edible sector, although profit per hectare did fall by 5%
 - With a profit per hectare at £100,138, this is over three times higher than the margin from the edible group

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
 - 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

- *Specialist fruit businesses [Table 2.13]*
 - Within the specialist fruit group in 2020, crop output was made up from 42% top fruit, 55% soft fruit and 3% other crops
 - Profitability for this group actually increased to £35,752, despite a 28% fall in output, with savings in casual labour
 - The average cropping area was similar in both years at approximately 19 hectares
 - 29% of the Gross Output is derived from other non-crop activities such as adding value to the crop by means of on-farm processing of fruit or offering customised pack house services to other growers

- *Mainly top fruit businesses - 90% or more crop output derived from top fruit [Table 2.14]*
 - This group includes businesses that specialise in top fruit production, with 90% or more of their total crop output derived from top fruit
 - In 2020, approximately 79% of crop output was derived from dessert & culinary apples, 5% from cider apples and 6% from plums
 - Average yields for dessert apples increased marginally but could not make up for a fall in the average price to £592.50/tonne
 - The average price of fruit does not reveal the very wide variation in prices with some fruit achieving Grade 1 supermarket prices while less marketable fruit only achieve juicing prices
 - Cider apple yields were much poorer in 2020, at an average of 20t/ha, and with only an £8 increase in price per tonne, output per hectare fell by £1,027/ha
 - Average Farm Business Income (FBI) was £12,727 per business and £749 per hectare, both less than the previous year

- *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 21 growers in 2020, predominantly growing top fruit for eating
 - The average area for these holdings remained at 14 hectares, and although the gross margin per hectare fell by 13%, savings in labour and other overhead costs meant that the profit increased to £802/ha
- *Mainly top fruit businesses – 90% or more crop output derived from cider apples [Table 2.16]*
 - The data are derived from a modest sample size and thus there is a lower degree of confidence in the figures
 - The cropping area remained constant at approximately 40 hectares, but the much lower yields meant that the Gross Output per holding fell by 21% and the profit per business was halved to an average £24,606 in 2020/21

Table 2.2 Top fruit yields, prices and output* – 2019/20 and 2020/21

Top Fruit		2019/20	2020/21
Culinary Apples	tonnes/ha	17.4	24.4
	£/tonne	381.4	443.5
	£ output/ha	6,639	10,833
Dessert Apples	tonnes/ha	26.7	28.6
	£/tonne	665.3	592.5
	£ output/ha	17,384	16,397
Cider Apples	tonnes/ha	30.2	20.3
	£/tonne	120.4	128.4
	£ output/ha	3,634	2,607
Pears	tonnes/ha	8.9	8.1
	£/tonne	911.2	836.6
	£ output/ha	8,079	6,799

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 75% and protected production at 25%
 - Total gross output decreased by 15%, but a larger fall in fixed costs led to a 26% increase in Farm Business Income (FBI) per business, to £89,474
 - Premium businesses from this group produced an average FBI of £61,747/ha compared with the average of £42,613/ha in 2020/21
- *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.
 - Profitability increased by 6% to £109,760 in 2020/21, despite a smaller cropping area
- *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
 - These businesses derive far less of their crop output from under glass or polythene (10%), with the vast majority coming from outdoor stock (90%)
 - Farm Business Income (FBI) increased to £78,162 per business, or £29,564 per hectare

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 outdoor vegetables, ornamentals, soft fruit, top fruit and farm crops
 - In 2020/21, soft fruit accounted for 42% of crop, followed by farm crops at 22%, outdoor vegetables at 11% and glasshouse crops at 14%
 - Farm profitability increased by 5% to £27,536 per business, despite a fall in Gross Output
 - Premium businesses recorded a FBI per hectare of £4,050, compared to the average of £1,273, and derive the majority (52%) of their output from soft fruit
- *Mainly outdoor vegetables – 50% or more output derived from outdoor vegetables [Table 2.21]*
 - Sub-group of other horticultural businesses with more than 50% of output derived from outdoor vegetable production
 - Average cropping area of this group continues to fall, averaging 8.3ha in 2020/21
 - Farm Business Income (FBI) per hectare fell by 23%, due to a significant fall in crop output from £21,314/ha in 2019/20 to £13,132/ha in 2020/21

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
- 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 farm types is approximately £1,941,510 per business, representing 88.7% equity (proportion of assets over liabilities)
- The percentage equity for all horticultural businesses was 81.4% in 2020/21, although the average net worth of £751,864 is lower than the 'All farms'
- 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

Table 2.3 All horticultural businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	151	147	151	147	151	147
Productive cropping area (ha)	16.10	14.12	16.10	14.12		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	489,939	409,056	30,427	28,961	100.0	100.0
Variable costs						
Seed & young plants	72,855	65,682	4,524	4,650	14.9	16.1
Fertilisers & composts	14,367	11,868	892	840	2.9	2.9
Crop protection	11,507	7,620	715	540	2.3	1.9
Market charges	33,932	22,929	2,107	1,623	6.9	5.6
Packing materials	26,130	17,708	1,623	1,254	5.3	4.3
Horticultural sundries	17,220	14,132	1,069	1,001	3.5	3.5
Glasshouse fuel	4,007	3,465	249	245	0.8	0.8
Other variable costs	436	277	27	20	0.1	0.1
Total variable costs	180,453	143,680	11,207	10,173	36.8	35.1
Total gross margin	309,486	265,376	19,220	18,789	63.2	64.9
Fixed costs						
Labour:						
Regular paid	91,100	70,240	5,658	4,973	18.6	17.2
Regular unpaid	33,149	32,075	2,059	2,271	6.8	7.8
Casual labour	62,294	46,155	3,869	3,268	12.7	11.3
Power & machinery costs:						
Contract & hire	10,176	7,128	632	505	2.1	1.7
Fuel & electricity	15,088	12,463	937	882	3.1	3.0
Repairs	10,764	8,227	668	582	2.2	2.0
Machinery depreciation	14,016	12,273	870	869	2.9	3.0
Glasshouse depreciation	2,941	3,016	183	214	0.6	0.7
Rent (incl. imputed)	17,024	17,510	1,057	1,240	3.5	4.3
Other costs:						
Occupier's repairs	8,059	6,313	500	447	1.6	1.5
Permanent crop depreciation	2,870	2,183	178	155	0.6	0.5
Water	2,241	1,787	139	127	0.5	0.4
Sundries	21,277	19,066	1,321	1,350	4.3	4.7
Total fixed costs	290,999	238,436	18,072	16,881	59.4	58.3
Management & investment income	18,487	26,940	1,148	1,907	3.8	6.6
Minus: management salaries	416	216	26	15	0.1	0.1
Plus: farmer & spouse labour	25,979	25,304	1,613	1,792	5.3	6.2
Net farm income	44,050	52,027	2,736	3,684	9.0	12.7
Farm business income	42,392	52,923	2,633	3,747	8.7	12.9

Crop output per cent of total crop output (%)

	Average 2019/20	Average 2020/21
Glasshouse crops		
Flowers & nursery stock	17.8	22.7
Tomatoes	1.2	1.6
Lettuce	0.1	0.1
Soft fruit	2.5	3.0
Other glasshouse crops	3.6	4.9
Outdoor crops		
Flowers and nursery stock	30.7	30.9
Vegetables	5.3	2.5
Other outdoor crops	6.0	6.0
Top fruit		
Dessert apples and pears	8.0	5.5
Culinary apples	0.4	0.5
Cider apples	0.6	0.5
Plums	0.6	0.5
Other top fruit	1.0	0.7
Soft fruit		
Strawberries	10.8	9.7
Raspberries	7.7	8.4
Blackcurrants	0.1	0.1
Other soft fruit	3.8	2.4
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20	Average 2020/21
Crops and tillages	19	16
Stores	7	8
Glasshouses	7	8
Equipment	24	26
Livestock	0	0
Other	43	43
Total	100	100
Tenant's capital (£)	679,073	580,943

Table 2.4 All specialist glass businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	42	39	42	39	42	39
Productive cropping area (ha)	4.16	4.29	4.16	4.29		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	780,197	865,251	187,717	201,710	100.0	100.0
Variable costs						
Seed & young plants	133,130	157,925	32,031	36,816	17.1	18.3
Fertilisers & composts	26,663	34,387	6,415	8,016	3.4	4.0
Crop protection	6,532	6,384	1,572	1,488	0.8	0.7
Market charges	26,591	30,785	6,398	7,177	3.4	3.6
Packing materials	26,465	27,254	6,368	6,354	3.4	3.1
Horticultural sundries	24,914	35,597	5,994	8,299	3.2	4.1
Glasshouse fuel	33,730	29,893	8,115	6,969	4.3	3.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	278,025	322,224	66,893	75,118	35.6	37.2
Total gross margin	502,173	543,027	120,824	126,592	64.4	62.8
Fixed costs						
Labour:						
Regular paid	192,167	200,299	46,236	46,694	24.6	23.1
Regular unpaid	37,957	35,701	9,133	8,323	4.9	4.1
Casual labour	41,181	53,987	9,908	12,586	5.3	6.2
Power & machinery costs:						
Contract & hire	8,579	9,329	2,064	2,175	1.1	1.1
Fuel & electricity	24,340	28,263	5,856	6,589	3.1	3.3
Repairs	13,364	15,026	3,215	3,503	1.7	1.7
Machinery depreciation	20,159	20,096	4,850	4,685	2.6	2.3
Glasshouse depreciation	20,311	22,869	4,887	5,331	2.6	2.6
Rent (incl. imputed)	19,179	19,240	4,614	4,485	2.5	2.2
Other costs:						
Occupier's repairs	14,519	15,927	3,493	3,713	1.9	1.8
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,930	2,922	705	681	0.4	0.3
Sundries	31,992	32,328	7,697	7,537	4.1	3.7
Total fixed costs	426,677	455,987	102,659	106,301	54.7	52.7
Management & investment income	75,495	87,039	18,164	20,291	9.7	10.1
Minus: management salaries	1,028	709	247	165	0.1	0.1
Plus: farmer & spouse labour	31,611	30,508	7,606	7,112	4.1	3.5
Net farm income	106,078	116,838	25,523	27,238	13.6	13.5
Farm business income	91,219	101,156	21,947	23,582	11.7	11.7

Premium businesses	Per hectare	Per £100 of gross output	Crop output per cent of total crop output (%)		
			Average 2019/20	Average 2020/21	Premium 2020/21 ^
	2020/21 ^	2020/21 ^			
Number of businesses	11	11			
Productive cropping area (ha)	11.33				
	£ per hectare	average %			
Gross output	192,552	100.0			
Variable costs					
Seed & young plants	32,635	16.9	Glasshouse crops		
Fertilisers & composts	5,945	3.1	Flowers & nursery stock	54.3	54.9
Crop protection	1,009	0.5	Tomatoes	7.8	7.3
			Lettuce	0.2	0.2
Market charges	6,046	3.1	Soft fruit	10.3	7.9
Packing materials	5,241	2.7	Other glasshouse crops	17.8	20.5
Horticultural sundries	5,752	3.0			
Glasshouse fuel	7,211	3.7	Outdoor crops		
Other variable costs	0	0.0	Flowers & nursery stock	7.3	8.1
			Vegetables	0.1	0.1
Total variable costs	63,839	33.2	Fruit	1.6	0.6
			Other outdoor crops	0.7	0.3
Total gross margin	128,713	66.8	Total	100.0	100.0
					100.0
			Distribution of tenant's type capital (%)		
				Average	Average
				2019/20	2020/21
					Premium
					2020/21 ^
Fixed costs					
Labour:			Crops & tillages	4	4
Regular paid	40,706	21.1	Stores	9	9
Regular unpaid	3,929	2.0	Glasshouses	29	28
Casual labour	11,014	5.7	Equipment	20	19
			Livestock	0	0
Power & machinery costs:			Other	38	40
Contract & hire	3,034	1.6	Total	100	100
Fuel & electricity	4,362	2.3			
Repairs	4,223	2.2	Tenant's capital (£)	1,132,707	1,288,619
Machinery depreciation	4,465	2.3		3,417,072	
Glasshouse depreciation	5,542	2.9			
Rent (incl. imputed)	3,149	1.6			
Other costs:					
Occupier's repairs	3,073	1.6			
Permanent crop depreciation	0	0.0			
Water	303	0.2			
Sundries	6,726	3.5			
Total fixed costs	90,527	47.0			
Management & investment income	38,186	19.8			
Minus: management salaries	87	0.0			
Plus: farmer & spouse labour	3,282	1.7			
Net farm income	41,381	21.5			
Farm business income	39,009	20.3			

^ Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Table 2.5 Specialist glass businesses, mainly edible crops

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	18	17	18	17	18	17
Productive cropping area (ha)	4.91	4.14	4.91	4.14		
	Average £/business		Average £/hectare		Average %	
Gross output	610,479	669,764	124,289	161,964	100.0	100.0
Variable costs						
Seed & young plants	59,733	82,969	12,161	20,064	9.8	12.4
Fertilisers & composts	23,786	30,763	4,843	7,439	3.9	4.6
Crop protection	6,817	5,681	1,388	1,374	1.1	0.8
Market charges	10,832	16,111	2,205	3,896	1.8	2.4
Packing materials	11,613	9,556	2,364	2,311	1.9	1.4
Horticultural sundries	26,112	49,817	5,316	12,047	4.3	7.4
Glasshouse fuel	42,027	33,827	8,556	8,180	6.9	5.1
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	180,920	228,724	36,834	55,311	29.6	34.1
Total gross margin	429,559	441,040	87,455	106,654	70.4	65.9
Fixed costs						
Labour:						
Regular paid	141,990	160,523	28,908	38,818	23.3	24.0
Regular unpaid	34,386	33,151	7,001	8,017	5.6	4.9
Casual labour	28,701	40,253	5,843	9,734	4.7	6.0
Power & machinery costs:						
Contract & hire	2,991	2,902	609	702	0.5	0.4
Fuel & electricity	22,604	33,915	4,602	8,201	3.7	5.1
Repairs	11,421	10,745	2,325	2,599	1.9	1.6
Machinery depreciation	16,634	15,217	3,387	3,680	2.7	2.3
Glasshouse depreciation	17,856	24,629	3,635	5,956	2.9	3.7
Rent (incl. imputed)	17,229	16,547	3,508	4,002	2.8	2.5
Other costs:						
Occupier's repairs	13,363	13,097	2,721	3,167	2.2	2.0
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	3,570	3,770	727	912	0.6	0.6
Sundries	19,319	21,085	3,933	5,099	3.2	3.1
Total fixed costs	330,066	375,836	67,199	90,886	54.1	56.1
Management & investment income	99,493	65,204	20,256	15,768	16.3	9.7
Minus: management salaries	879	178	179	43	0.1	0.0
Plus: farmer & spouse labour	30,486	29,355	6,207	7,099	5.0	4.4
Net farm income	129,100	94,381	26,284	22,823	21.1	14.1
Farm business income	107,639	75,061	21,915	18,152	17.6	11.2

Table 2.6 Specialist glass businesses, mainly ornamental crops

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	24	22	24	22	24	22
Productive cropping area (ha)	3.45	4.43	3.45	4.43		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	937,861	1,037,877	271,499	234,504	100.0	100.0
Variable costs						
Seed & young plants	201,314	224,115	58,278	50,638	21.5	21.6
Fertilisers & composts	29,336	37,587	8,492	8,493	3.1	3.6
Crop protection	6,267	7,004	1,814	1,583	0.7	0.7
Market charges	41,231	43,743	11,936	9,884	4.4	4.2
Packing materials	40,262	42,883	11,655	9,689	4.3	4.1
Horticultural sundries	23,801	23,040	6,890	5,206	2.5	2.2
Glasshouse fuel	26,022	26,419	7,533	5,969	2.8	2.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	368,233	404,790	106,599	91,461	39.3	39.0
Total gross margin	569,628	633,086	164,900	143,043	60.7	61.0
Fixed costs						
Labour:						
Regular paid	238,780	235,423	69,124	53,193	25.5	22.7
Regular unpaid	41,274	37,952	11,948	8,575	4.4	3.7
Casual labour	52,773	66,115	15,277	14,938	5.6	6.4
Power & machinery costs:						
Contract & hire	13,770	15,004	3,986	3,390	1.5	1.4
Fuel & electricity	25,952	23,272	7,513	5,258	2.8	2.2
Repairs	15,170	18,806	4,391	4,249	1.6	1.8
Machinery depreciation	23,434	24,404	6,784	5,514	2.5	2.4
Glasshouse depreciation	22,591	21,315	6,540	4,816	2.4	2.1
Rent (incl. imputed)	20,990	21,617	6,076	4,884	2.2	2.1
Other costs:						
Occupier's repairs	15,592	18,426	4,514	4,163	1.7	1.8
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,336	2,173	676	491	0.2	0.2
Sundries	43,765	42,257	12,669	9,548	4.7	4.1
Total fixed costs	516,427	526,765	149,499	119,020	55.1	50.8
Management & investment income	53,202	106,321	15,401	24,023	5.7	10.2
Minus: management salaries	1,167	1,178	338	266	0.1	0.1
Plus: farmer & spouse labour	32,656	31,525	9,453	7,123	3.5	3.0
Net farm income	84,691	136,669	24,517	30,880	9.0	13.2
Farm business income	75,965	124,198	21,991	28,062	8.1	12.0

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>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	31	29	31	29	31	29
Productive cropping area (ha)	1.57	1.54	1.57	1.54		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	768,397	821,157	490,514	533,954	100.0	100.0
Variable costs						
Seed & young plants	116,650	128,682	74,465	83,675	15.2	15.7
Fertilisers & composts	25,365	31,387	16,192	20,409	3.3	3.8
Crop protection	5,502	6,027	3,512	3,919	0.7	0.7
Market charges	36,577	39,301	23,349	25,555	4.8	4.8
Packing materials	31,831	35,521	20,320	23,097	4.1	4.3
Horticultural sundries	16,369	27,235	10,449	17,709	2.1	3.3
Glasshouse fuel	40,268	35,785	25,706	23,269	5.2	4.4
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	272,563	303,938	173,993	197,634	35.5	37.0
Total gross margin	495,834	517,220	316,521	336,320	64.5	63.0
Fixed costs						
Labour:						
Regular paid	183,944	199,464	117,423	129,701	23.9	24.3
Regular unpaid	40,092	37,350	25,593	24,287	5.2	4.5
Casual labour	42,709	53,501	27,264	34,789	5.6	6.5
Power & machinery costs:						
Contract & hire	9,637	11,099	6,152	7,217	1.3	1.4
Fuel & electricity	21,253	21,811	13,567	14,183	2.8	2.7
Repairs	16,014	15,773	10,222	10,257	2.1	1.9
Machinery depreciation	19,551	20,401	12,480	13,266	2.5	2.5
Glasshouse depreciation	25,762	28,918	16,445	18,804	3.4	3.5
Rent (incl. imputed)	14,168	16,015	9,045	10,414	1.8	2.0
Other costs:						
Occupier's repairs	13,559	17,395	8,656	11,311	1.8	2.1
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,597	2,718	1,658	1,767	0.3	0.3
Sundries	32,463	31,100	20,723	20,223	4.2	3.8
Total fixed costs	421,750	455,545	269,228	296,217	54.9	55.5
Management & investment income	74,085	61,674	47,293	40,103	9.6	7.5
Minus: management salaries	714	662	456	430	0.1	0.1
Plus: farmer & spouse labour	33,296	31,274	21,255	20,336	4.3	3.8
Net farm income	106,666	92,287	68,092	60,009	13.9	11.2
Farm business income	89,488	77,364	57,126	50,306	11.6	9.4

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>	
	2019/20 [^]	2020/21 [^]	2019/20 [^]	2020/21 [^]	2019/20 [^]	2020/21 [^]
Number of businesses	12	11	12	11	12	11
Productive cropping area (ha)	1.13	1.17	1.13	1.17		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	407,030	447,492	360,159	383,587	100.0	100.0
Variable costs						
Seed & young plants	27,915	32,593	24,700	27,938	6.9	7.3
Fertilisers & composts	13,828	13,590	12,236	11,649	3.4	3.0
Crop protection	3,580	3,407	3,168	2,920	0.9	0.8
Market charges	14,971	17,252	13,247	14,788	3.7	3.9
Packing materials	6,892	8,171	6,099	7,004	1.7	1.8
Horticultural sundries	10,275	23,738	9,092	20,348	2.5	5.3
Glasshouse fuel	51,950	50,679	45,968	43,442	12.8	11.3
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	129,412	149,430	114,510	128,090	31.8	33.4
Total gross margin	277,618	298,062	245,649	255,497	68.2	66.6
Fixed costs						
Labour:						
Regular paid	67,894	103,963	60,075	89,116	16.7	23.2
Regular unpaid	34,549	32,077	30,570	27,496	8.5	7.2
Casual labour	19,651	32,202	17,388	27,604	4.8	7.2
Power & machinery costs:						
Contract & hire	2,838	3,567	2,511	3,058	0.7	0.8
Fuel & electricity	10,829	12,309	9,582	10,552	2.7	2.8
Repairs	12,704	12,245	11,241	10,496	3.1	2.7
Machinery depreciation	11,781	13,862	10,425	11,883	2.9	3.1
Glasshouse depreciation	24,439	34,965	21,625	29,972	6.0	7.8
Rent (incl. imputed)	7,260	9,256	6,424	7,934	1.8	2.1
Other costs:						
Occupier's repairs	8,200	10,701	7,255	9,173	2.0	2.4
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,338	3,077	2,069	2,638	0.6	0.7
Sundries	13,823	17,331	12,231	14,856	3.4	3.9
Total fixed costs	216,305	285,555	191,397	244,776	53.1	63.8
Management & investment income	61,313	12,507	54,252	10,721	15.1	2.8
Minus: management salaries	235	0	208	0	0.1	0.0
Plus: farmer & spouse labour	30,532	27,805	27,016	23,835	7.5	6.2
Net farm income	91,610	40,312	81,061	34,556	22.5	9.0
Farm business income	73,170	30,270	64,744	25,947	18.0	6.8

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20^	Average 2020/21^
Glasshouse crops		
Flowers & nursery stock	0.0	0.0
Tomatoes	46.3	45.9
Lettuce	1.4	1.1
Soft fruit	16.5	16.8
Other glasshouse crops	35.2	35.6
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.7	0.6
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20^	Average 2020/21^
Crops & tillages	1	0
Stores	2	2
Glasshouses	38	42
Equipment	16	15
Livestock	0	0
Other	44	40
Total	100	100
Tenant's capital (£)	991,462	1,223,543

** no premium figures, sample too small*

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

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	19	18	19	18	19	18
Productive cropping area (ha)	1.95	1.84	1.95	1.84		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	1,088,380	1,124,356	557,311	611,348	100.0	100.0
Variable costs						
Seed & young plants	195,224	206,651	99,966	112,362	17.9	18.4
Fertilisers & composts	35,580	45,828	18,219	24,918	3.3	4.1
Crop protection	7,204	8,154	3,689	4,433	0.7	0.7
Market charges	55,709	57,191	28,526	31,097	5.1	5.1
Packing materials	53,914	57,713	27,607	31,380	5.0	5.1
Horticultural sundries	21,765	30,072	11,145	16,351	2.0	2.7
Glasshouse fuel	29,924	23,700	15,323	12,887	2.7	2.1
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	399,319	429,308	204,474	233,428	36.7	38.2
Total gross margin	689,060	695,047	352,837	377,919	63.3	61.8
Fixed costs						
Labour:						
Regular paid	286,704	276,954	146,808	150,589	26.3	24.6
Regular unpaid	45,001	41,628	23,043	22,635	4.1	3.7
Casual labour	63,127	70,783	32,324	38,487	5.8	6.3
Power & machinery costs:						
Contract & hire	15,658	17,211	8,018	9,358	1.4	1.5
Fuel & electricity	30,483	29,521	15,609	16,051	2.8	2.6
Repairs	18,944	18,637	9,701	10,133	1.7	1.7
Machinery depreciation	26,430	25,706	13,534	13,977	2.4	2.3
Glasshouse depreciation	26,933	24,012	13,791	13,056	2.5	2.1
Rent (incl. imputed)	20,286	21,500	10,387	11,690	1.9	1.9
Other costs:						
Occupier's repairs	18,305	22,826	9,373	12,411	1.7	2.0
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,826	2,427	1,447	1,320	0.3	0.2
Sundries	48,968	42,273	25,075	22,985	4.5	3.8
Total fixed costs	603,666	593,478	309,111	322,693	55.5	52.8
Management & investment income	85,394	101,569	43,726	55,227	7.8	9.0
Minus: management salaries	1,139	1,199	583	652	0.1	0.1
Plus: farmer & spouse labour	35,743	34,089	18,302	18,535	3.3	3.0
Net farm income	119,998	134,459	61,446	73,110	11.0	12.0
Farm business income	103,938	115,577	53,222	62,843	9.5	10.3

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>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	25	24	25	24	25	24
Productive cropping area (ha)	1.08	1.03	1.08	1.03		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	666,882	663,656	619,506	641,219	100.0	100.0
Variable costs						
Seed & young plants	95,476	95,151	88,694	91,934	14.3	14.3
Fertilisers & composts	18,912	23,589	17,568	22,792	2.8	3.6
Crop protection	5,112	5,621	4,749	5,431	0.8	0.8
Market charges	26,688	30,266	24,792	29,243	4.0	4.6
Packing materials	25,936	27,334	24,094	26,410	3.9	4.1
Horticultural sundries	17,555	30,171	16,308	29,150	2.6	4.5
Glasshouse fuel	45,072	36,798	41,870	35,554	6.8	5.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	234,751	248,930	218,074	240,514	35.2	37.5
Total gross margin	432,131	414,726	401,432	400,705	64.8	62.5
Fixed costs						
Labour:						
Regular paid	131,733	139,061	122,375	134,360	19.8	21.0
Regular unpaid	37,324	35,273	34,673	34,080	5.6	5.3
Casual labour	52,151	62,481	48,447	60,368	7.8	9.4
Power & machinery costs:						
Contract & hire	3,272	4,531	3,039	4,378	0.5	0.7
Fuel & electricity	17,148	18,004	15,930	17,395	2.6	2.7
Repairs	13,455	12,185	12,499	11,773	2.0	1.8
Machinery depreciation	17,117	16,990	15,901	16,415	2.6	2.6
Glasshouse depreciation	21,324	23,896	19,809	23,088	3.2	3.6
Rent (incl. imputed)	11,608	12,083	10,783	11,674	1.7	1.8
Other costs:						
Occupier's repairs	14,147	17,442	13,142	16,852	2.1	2.6
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,578	2,786	2,395	2,691	0.4	0.4
Sundries	26,106	23,226	24,252	22,441	3.9	3.5
Total fixed costs	347,964	367,957	323,245	355,516	52.2	55.4
Management & investment income	84,167	46,769	78,187	45,188	12.6	7.0
Minus: management salaries	872	773	810	747	0.1	0.1
Plus: farmer & spouse labour	32,734	31,683	30,409	30,612	4.9	4.8
Net farm income	116,029	77,679	107,786	75,053	17.4	11.7
Farm business income	99,954	67,926	92,853	65,630	15.0	10.2

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>	
	2019/20[^]	2020/21[^]	2019/20[^]	2020/21[^]	2019/20[^]	2020/21[^]
Number of businesses	10	10	10	10	10	10
Productive cropping area (ha)	1.15	1.15	1.15	1.15		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	518,372	519,406	450,695	453,008	100.0	100.0
Variable costs						
Seed & young plants	31,993	35,567	27,816	31,020	6.2	6.8
Fertilisers & composts	17,914	15,974	15,575	13,932	3.5	3.1
Crop protection	4,626	3,999	4,022	3,488	0.9	0.8
Market charges	19,558	20,298	17,004	17,703	3.8	3.9
Packing materials	8,946	9,596	7,778	8,369	1.7	1.8
Horticultural sundries	12,795	26,871	11,125	23,436	2.5	5.2
Glasshouse fuel	67,868	59,629	59,007	52,006	13.1	11.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	163,699	171,934	142,327	149,955	31.6	33.1
Total gross margin	354,674	347,472	308,368	303,053	68.4	66.9
Fixed costs						
Labour:						
Regular paid	88,696	122,322	77,116	106,685	17.1	23.6
Regular unpaid	30,622	30,794	26,624	26,857	5.9	5.9
Casual labour	25,672	37,889	22,321	33,045	5.0	7.3
Power & machinery costs:						
Contract & hire	3,708	4,197	3,224	3,661	0.7	0.8
Fuel & electricity	13,509	13,865	11,745	12,093	2.6	2.7
Repairs	16,365	14,388	14,228	12,549	3.2	2.8
Machinery depreciation	15,169	16,188	13,188	14,118	2.9	3.1
Glasshouse depreciation	31,844	41,083	27,686	35,831	6.1	7.9
Rent (incl. imputed)	9,176	10,748	7,978	9,374	1.8	2.1
Other costs:						
Occupier's repairs	10,664	12,573	9,272	10,966	2.1	2.4
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,808	3,461	2,441	3,019	0.5	0.7
Sundries	16,723	19,352	14,540	16,878	3.2	3.7
Total fixed costs	264,957	326,860	230,365	285,076	51.1	62.9
Management & investment income	89,717	20,612	78,004	17,977	17.3	4.0
Minus: management salaries	307	0	267	0	0.1	0.0
Plus: farmer & spouse labour	27,716	27,817	24,097	24,261	5.3	5.4
Net farm income	117,125	48,429	101,834	42,238	22.6	9.3
Farm business income	90,535	34,487	78,715	30,078	17.5	6.6

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20 [^]	Average 2020/21 [^]
Glasshouse crops		
Flowers & nursery stock	0.0	0.0
Tomatoes	47.4	46.7
Lettuce	1.4	1.1
Soft fruit	16.9	17.1
Other glasshouse crops	34.2	35.1
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.0	0.0
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20 [^]	Average 2020/21 [^]
Crops & tillages	0	0
Stores	2	2
Glasshouses	38	42
Equipment	16	15
Livestock	0	0
Other	44	41
Total	100	100
Tenant's capital (£)	1,279,988	1,427,516

** no premium figures, sample too small*

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

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21[^]	2019/20	2020/21[^]	2019/20	2020/21[^]
Number of businesses	15	14	15	14	15	14
Productive cropping area (ha)	1.02	0.95	1.02	0.95		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	783,094	779,137	768,637	823,902	100.0	100.0
Variable costs						
Seed & young plants	145,154	142,851	142,474	151,058	18.5	18.3
Fertilisers & composts	19,693	29,686	19,330	31,392	2.5	3.8
Crop protection	5,492	6,919	5,391	7,317	0.7	0.9
Market charges	32,267	38,245	31,672	40,443	4.1	4.9
Packing materials	39,231	41,535	38,507	43,921	5.0	5.3
Horticultural sundries	21,280	32,812	20,887	34,697	2.7	4.2
Glasshouse fuel	27,233	18,521	26,730	19,586	3.5	2.4
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	290,351	310,570	284,991	328,414	37.1	39.9
Total gross margin	492,743	468,567	483,646	495,488	62.9	60.1
Fixed costs						
Labour:						
Regular paid	165,411	152,462	162,357	161,222	21.1	19.6
Regular unpaid	42,569	38,858	41,783	41,091	5.4	5.0
Casual labour	72,872	82,168	71,527	86,889	9.3	10.5
Power & machinery costs:						
Contract & hire	2,930	4,799	2,876	5,074	0.4	0.6
Fuel & electricity	19,995	21,318	19,626	22,542	2.6	2.7
Repairs	11,177	10,421	10,971	11,020	1.4	1.3
Machinery depreciation	18,642	17,632	18,298	18,645	2.4	2.3
Glasshouse depreciation	13,092	10,136	12,851	10,719	1.7	1.3
Rent (incl. imputed)	13,511	13,151	13,261	13,907	1.7	1.7
Other costs:						
Occupier's repairs	16,873	21,340	16,561	22,566	2.2	2.7
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,399	2,244	2,355	2,373	0.3	0.3
Sundries	33,449	26,328	32,832	27,841	4.3	3.4
Total fixed costs	412,920	400,857	405,297	423,888	52.7	51.4
Management & investment income	79,823	67,710	78,350	71,600	10.2	8.7
Minus: management salaries	1,315	1,392	1,290	1,472	0.2	0.2
Plus: farmer & spouse labour	36,662	34,778	35,985	36,777	4.7	4.5
Net farm income	115,170	101,096	113,044	106,905	14.7	13.0
Farm business income	107,324	94,697	105,342	100,138	13.7	12.2

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20	Average 2020/21^
Glasshouse crops		
Flowers & nursery stock	98.4	97.5
Tomatoes	0.0	0.0
Lettuce	0.0	0.0
Soft fruit	0.0	0.0
Other glasshouse crops	1.5	2.5
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.0	0.0
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20	Average 2020/21^
Crops & tillages	3	2
Stores	14	15
Glasshouses	24	19
Equipment	19	22
Livestock	0	0
Other	40	43
Total	100	100
Tenant's capital (£)	980,980	990,361

* no premium figures, sample too small

Table 2.13 All specialist fruit businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	40	46	40	46	40	46
Productive cropping area (ha)	19.21	18.69	19.21	18.69		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	436,270	315,059	22,707	16,860	100.0	100.0
Variable costs						
Seed & young plants	14,078	7,739	733	414	3.2	2.5
Fertilisers & composts	5,360	4,308	279	231	1.2	1.4
Crop protection	19,616	12,922	1,021	691	4.5	4.1
Market charges	63,736	35,221	3,317	1,885	14.6	11.2
Packing materials	42,532	25,932	2,214	1,388	9.7	8.2
Horticultural sundries	16,145	9,091	840	486	3.7	2.9
Glasshouse fuel	0	29	0	2	0.0	0.0
Other variable costs	1,522	1,044	79	56	0.3	0.3
Total variable costs	162,988	96,287	8,483	5,153	37.4	30.6
Total gross margin	273,282	218,771	14,224	11,707	62.6	69.4
Fixed costs						
Labour:						
Regular paid	35,861	29,128	1,867	1,559	8.2	9.2
Regular unpaid	24,033	26,290	1,251	1,407	5.5	8.3
Casual labour	112,667	69,698	5,864	3,730	25.8	22.1
Power & machinery costs:						
Contract & hire	11,886	8,114	619	434	2.7	2.6
Fuel & electricity	15,401	11,209	802	600	3.5	3.6
Repairs	10,406	6,487	542	347	2.4	2.1
Machinery depreciation	11,885	10,689	619	572	2.7	3.4
Glasshouse depreciation	156	142	8	8	0.0	0.0
Rent (incl. imputed)	16,456	21,166	857	1,133	3.8	6.7
Other costs:						
Occupier's repairs	9,696	5,737	505	307	2.2	1.8
Permanent crop depreciation	8,334	5,160	434	276	1.9	1.6
Water	1,826	1,795	95	96	0.4	0.6
Sundries	17,118	14,248	891	762	3.9	4.5
Total fixed costs	275,726	209,863	14,351	11,230	63.2	66.6
Management & investment income	-2,443	8,908	-127	477	-0.6	2.8
Minus: management salaries	494	316	26	17	0.1	0.1
Plus: farmer & spouse labour	21,529	20,877	1,121	1,117	4.9	6.6
Net farm income	18,592	29,469	968	1,577	4.3	9.4
Farm business income	19,813	35,752	1,031	1,913	4.5	11.3

Table 2.14 Specialist fruit businesses, mainly top fruit

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	26	28	26	28	26	28
Productive cropping area (ha)	16.70	17.00	16.70	17.00		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	276,095	246,956	16,535	14,530	100.0	100.0
Variable costs						
Seed & young plants	2,240	1,194	134	70	0.8	0.5
Fertilisers & composts	3,530	2,464	211	145	1.3	1.0
Crop protection	17,232	17,107	1,032	1,007	6.2	6.9
Market charges	39,509	38,342	2,366	2,256	14.3	15.5
Packing materials	20,151	17,376	1,207	1,022	7.3	7.0
Horticultural sundries	8,131	10,458	487	615	2.9	4.2
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	2,831	2,661	170	157	1.0	1.1
Total variable costs	93,624	89,601	5,607	5,272	33.9	36.3
Total gross margin	182,470	157,355	10,928	9,258	66.1	63.7
Fixed costs						
Labour:						
Regular paid	24,518	22,296	1,468	1,312	8.9	9.0
Regular unpaid	21,734	21,307	1,302	1,254	7.9	8.6
Casual labour	41,616	32,478	2,492	1,911	15.1	13.2
Power & machinery costs:						
Contract & hire	16,755	13,955	1,003	821	6.1	5.7
Fuel & electricity	13,515	10,525	809	619	4.9	4.3
Repairs	9,004	9,619	539	566	3.3	3.9
Machinery depreciation	11,383	11,522	682	678	4.1	4.7
Glasshouse depreciation	100	92	6	5	0.0	0.0
Rent (incl. imputed)	15,794	16,035	946	943	5.7	6.5
Other costs:						
Occupier's repairs	7,953	4,967	476	292	2.9	2.0
Permanent crop depreciation	11,042	9,154	661	539	4.0	3.7
Water	845	776	51	46	0.3	0.3
Sundries	14,642	13,121	877	772	5.3	5.3
Total fixed costs	188,901	165,847	11,313	9,758	68.4	67.2
Management & investment income	-6,430	-8,493	-385	-500	-2.3	-3.4
Minus: management salaries	437	364	26	21	0.2	0.1
Plus: farmer & spouse labour	18,628	18,438	1,116	1,085	6.7	7.5
Net farm income	11,761	9,581	704	564	4.3	3.9
Farm business income	14,093	12,727	844	749	5.1	5.2

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>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	20	21	20	21	20	21
Productive cropping area (ha)	14.18	14.13	14.18	14.13		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	283,421	256,579	19,993	18,154	100.0	100.0
Variable costs						
Seed & young plants	2,465	1,260	174	89	0.9	0.5
Fertilisers & composts	2,929	2,177	207	154	1.0	0.8
Crop protection	17,482	17,709	1,233	1,253	6.2	6.9
Market charges	43,187	42,662	3,046	3,018	15.2	16.6
Packing materials	22,329	19,304	1,575	1,366	7.9	7.5
Horticultural sundries	8,615	11,255	608	796	3.0	4.4
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	1,921	1,705	135	121	0.7	0.7
Total variable costs	98,927	96,072	6,978	6,797	34.9	37.4
Total gross margin	184,494	160,507	13,014	11,356	65.1	62.6
Fixed costs						
Labour:						
Regular paid	25,257	22,118	1,782	1,565	8.9	8.6
Regular unpaid	20,374	20,483	1,437	1,449	7.2	8.0
Casual labour	45,274	35,233	3,194	2,493	16.0	13.7
Power & machinery costs:						
Contract & hire	17,281	14,139	1,219	1,000	6.1	5.5
Fuel & electricity	14,089	11,089	994	785	5.0	4.3
Repairs	8,968	9,689	633	686	3.2	3.8
Machinery depreciation	11,497	11,442	811	810	4.1	4.5
Glasshouse depreciation	111	103	8	7	0.0	0.0
Rent (incl. imputed)	15,549	15,833	1,097	1,120	5.5	6.2
Other costs:						
Occupier's repairs	8,447	5,161	596	365	3.0	2.0
Permanent crop depreciation	11,064	9,275	780	656	3.9	3.6
Water	835	779	59	55	0.3	0.3
Sundries	14,744	13,237	1,040	937	5.2	5.2
Total fixed costs	193,492	168,583	13,649	11,928	68.3	65.7
Management & investment income	-8,998	-8,076	-635	-571	-3.2	-3.1
Minus: management salaries	484	389	34	27	0.2	0.2
Plus: farmer & spouse labour	18,225	18,560	1,286	1,313	6.4	7.2
Net farm income	8,743	10,096	617	714	3.1	3.9
Farm business income	9,463	11,340	668	802	3.3	4.4

Table 2.16 Specialist fruit businesses, cider*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	<i>2019/20[^]</i>	<i>2020/21[^]</i>	<i>2019/20[^]</i>	<i>2020/21[^]</i>	<i>2019/20[^]</i>	<i>2020/21[^]</i>
Number of businesses	6	7	6	7	6	7
Productive cropping area (ha)	40.02	41.51	40.02	41.51		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	208,319	164,523	5,205	3,963	100.0	100.0
Variable costs						
Seed & young plants	161	627	4	15	0.1	0.4
Fertilisers & composts	9,090	4,915	227	118	4.4	3.0
Crop protection	14,924	11,948	373	288	7.2	7.3
Market charges	5,489	1,337	137	32	2.6	0.8
Packing materials	0	855	0	21	0.0	0.5
Horticultural sundries	3,655	3,633	91	88	1.8	2.2
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	11,251	10,853	281	261	5.4	6.6
Total variable costs	44,572	34,168	1,114	823	21.4	20.8
Total gross margin	163,747	130,354	4,092	3,140	78.6	79.2
Fixed costs						
Labour:						
Regular paid	17,681	23,824	442	574	8.5	14.5
Regular unpaid	34,312	28,361	857	683	16.5	17.2
Casual labour	7,771	8,879	194	214	3.7	5.4
Power & machinery costs:						
Contract & hire	11,884	12,379	297	298	5.7	7.5
Fuel & electricity	8,211	5,694	205	137	3.9	3.5
Repairs	9,334	9,017	233	217	4.5	5.5
Machinery depreciation	10,326	12,205	258	294	5.0	7.4
Glasshouse depreciation	0	0	0	0	0.0	0.0
Rent (incl. imputed)	18,057	17,767	451	428	8.7	10.8
Other costs:						
Occupier's repairs	3,387	3,299	85	79	1.6	2.0
Permanent crop depreciation	10,843	8,119	271	196	5.2	4.9
Water	931	751	23	18	0.4	0.5
Sundries	13,689	12,121	342	292	6.6	7.4
Total fixed costs	146,426	142,418	3,659	3,431	70.3	86.6
Management & investment income	17,321	-12,064	433	-291	8.3	-7.3
Minus: management salaries	0	157	0	4	0.0	0.1
Plus: farmer & spouse labour	22,362	17,396	559	419	10.7	10.6
Net farm income	39,683	5,176	992	125	19.0	3.1
Farm business income	56,929	24,606	1,423	593	27.3	15.0

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20^	Average 2020/21^
Top fruit		
Dessert apples	0.0	4.1
Culinary apples	3.0	0.0
Cider apples	94.9	94.9
Plums	0.0	0.0
Other top fruit	0.1	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	1.9	0.9
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20^	Average 2020/21^
Crops & tillages	2	3
Stores	7	7
Glasshouses	0	0
Equipment	23	26
Livestock	7	9
Other	60	55
Total	100	100
Tenant's capital (£)	618,186	578,047

** 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>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	23	22	23	22	23	22
Productive cropping area (ha)	2.61	2.10	2.61	2.10		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	629,726	532,764	241,343	253,733	100.0	100.0
Variable costs						
Seed & young plants	167,515	153,900	64,200	73,296	26.6	28.9
Fertilisers & composts	24,354	16,664	9,334	7,936	3.9	3.1
Crop protection	4,830	2,819	1,851	1,343	0.8	0.5
Market charges	29,182	19,083	11,184	9,088	4.6	3.6
Packing materials	20,050	14,337	7,684	6,828	3.2	2.7
Horticultural sundries	22,950	19,470	8,796	9,273	3.6	3.7
Glasshouse fuel	1,519	904	582	430	0.2	0.2
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	270,399	227,177	103,631	108,195	42.9	42.6
Total gross margin	359,327	305,586	137,712	145,538	57.1	57.4
Fixed costs						
Labour:						
Regular paid	139,645	107,541	53,519	51,217	22.2	20.2
Regular unpaid	39,900	38,695	15,292	18,429	6.3	7.3
Casual labour	35,494	12,735	13,603	6,065	5.6	2.4
Power & machinery costs:						
Contract & hire	6,803	4,199	2,607	2,000	1.1	0.8
Fuel & electricity	11,670	9,968	4,473	4,748	1.9	1.9
Repairs	10,364	8,151	3,972	3,882	1.6	1.5
Machinery depreciation	12,896	11,494	4,943	5,474	2.0	2.2
Glasshouse depreciation	1,866	1,316	715	627	0.3	0.2
Rent (incl. imputed)	11,715	11,303	4,490	5,383	1.9	2.1
Other costs:						
Occupier's repairs	8,795	6,438	3,371	3,066	1.4	1.2
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,864	1,944	1,098	926	0.5	0.4
Sundries	29,889	26,009	11,455	12,387	4.7	4.9
Total fixed costs	311,900	239,794	119,536	114,204	49.5	45.0
Management & investment income	47,426	65,792	18,176	31,334	7.5	12.3
Minus: management salaries	201	135	77	64	0.0	0.0
Plus: farmer & spouse labour	28,947	28,542	11,094	13,593	4.6	5.4
Net farm income	76,172	94,199	29,193	44,863	12.1	17.7
Farm business income	70,776	89,474	27,125	42,613	11.2	16.8

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>	
	2019/20[^]	2020/21[^]	2019/20[^]	2020/21[^]	2019/20[^]	2020/21[^]
Number of businesses	13	13	13	13	13	13
Productive cropping area (ha)	2.17	1.69	2.17	1.69		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	954,824	731,682	439,006	432,306	100.0	100.0
Variable costs						
Seed & young plants	282,458	241,944	129,868	142,950	29.6	33.1
Fertilisers & composts	39,507	24,944	18,165	14,738	4.1	3.4
Crop protection	6,887	3,340	3,166	1,973	0.7	0.5
Market charges	52,991	32,471	24,364	19,185	5.5	4.4
Packing materials	34,138	21,292	15,696	12,580	3.6	2.9
Horticultural sundries	40,308	32,021	18,533	18,919	4.2	4.4
Glasshouse fuel	2,637	1,511	1,212	893	0.3	0.2
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	458,925	357,522	211,003	211,238	48.1	48.9
Total gross margin	495,899	374,160	228,003	221,068	51.9	51.1
Fixed costs						
Labour:						
Regular paid	194,326	143,713	89,346	84,911	20.4	19.6
Regular unpaid	47,652	42,442	21,909	25,077	5.0	5.8
Casual labour	53,770	13,485	24,722	7,967	5.6	1.8
Power & machinery costs:						
Contract & hire	11,933	6,481	5,486	3,829	1.2	0.9
Fuel & electricity	15,002	10,872	6,898	6,423	1.6	1.5
Repairs	14,525	10,162	6,678	6,004	1.5	1.4
Machinery depreciation	17,057	13,821	7,842	8,166	1.8	1.9
Glasshouse depreciation	3,045	1,943	1,400	1,148	0.3	0.3
Rent (incl. imputed)	11,085	10,245	5,097	6,053	1.2	1.4
Other costs:						
Occupier's repairs	12,951	8,753	5,955	5,172	1.4	1.2
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	3,798	2,564	1,746	1,515	0.4	0.4
Sundries	37,764	32,574	17,363	19,246	4.0	4.5
Total fixed costs	422,907	297,055	194,443	175,511	44.3	40.6
Management & investment income	72,992	77,105	33,560	45,557	7.6	10.5
Minus: management salaries	384	243	177	144	0.0	0.0
Plus: farmer & spouse labour	29,231	26,973	13,440	15,937	3.1	3.7
Net farm income	101,839	103,835	46,823	61,350	10.7	14.2
Farm business income	103,912	109,760	47,776	64,850	10.9	15.0

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20 [^]	Average 2020/21 [^]
Hardy nursery stock		
Glasshouse crops	24.4	28.4
Outdoor crops	75.6	71.6
Other crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20 [^]	Average 2020/21 [^]
Crops & tillages	47	38
Stores	7	8
Glasshouses	4	4
Equipment	17	17
Livestock	0	0
Other	25	34
Total	100	100
Tenant's capital (£)	1,176,644	922,362

** 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>	
	2019/20 [^]	2020/21 [^]	2019/20 [^]	2020/21 [^]	2019/20 [^]	2020/21 [^]
Number of businesses	9	8	9	8	9	8
Productive cropping area (ha)	3.17	2.64	3.17	2.64		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	246,546	249,503	77,739	94,372	100.0	100.0
Variable costs						
Seed & young plants	46,088	47,923	14,532	18,126	18.7	19.2
Fertilisers & composts	8,625	7,198	2,720	2,723	3.5	2.9
Crop protection	2,772	2,321	874	878	1.1	0.9
Market charges	3,396	2,621	1,071	991	1.4	1.1
Packing materials	5,119	6,504	1,614	2,460	2.1	2.6
Horticultural sundries	4,334	4,261	1,367	1,612	1.8	1.7
Glasshouse fuel	327	163	103	62	0.1	0.1
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	70,662	70,991	22,281	26,851	28.7	28.5
Total gross margin	175,884	178,513	55,458	67,521	71.3	71.5
Fixed costs						
Labour:						
Regular paid	58,137	38,860	18,331	14,698	23.6	15.6
Regular unpaid	29,537	32,057	9,313	12,125	12.0	12.8
Casual labour	16,648	13,838	5,249	5,234	6.8	5.5
Power & machinery costs:						
Contract & hire	1,046	1,085	330	410	0.4	0.4
Fuel & electricity	6,286	5,594	1,982	2,116	2.5	2.2
Repairs	5,715	5,082	1,802	1,922	2.3	2.0
Machinery depreciation	4,702	4,708	1,483	1,781	1.9	1.9
Glasshouse depreciation	642	617	203	233	0.3	0.2
Rent (incl. imputed)	13,134	9,363	4,141	3,541	5.3	3.8
Other costs:						
Occupier's repairs	4,274	3,118	1,348	1,179	1.7	1.2
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	2,075	1,366	654	517	0.8	0.5
Sundries	19,699	14,438	6,211	5,461	8.0	5.8
Total fixed costs	161,897	130,126	51,048	49,219	65.7	52.2
Management & investment income	13,987	48,387	4,410	18,302	5.7	19.4
Minus: management salaries	0	0	0	0	0.0	0.0
Plus: farmer & spouse labour	29,537	32,057	9,313	12,125	12.0	12.8
Net farm income	43,524	80,443	13,724	30,427	17.7	32.2
Farm business income	42,333	78,162	13,348	29,564	17.2	31.3

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20^	Average 2020/21^
Hardy nursery stock		
Glasshouse crops	10.8	9.6
Outdoor crops	89.2	90.4
Other crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20^	Average 2020/21^
Crops & tillages	29	28
Stores	13	11
Glasshouses	3	3
Equipment	19	17
Livestock	0	0
Other	36	41
Total	100	100
Tenant's capital (£)	313,612	331,598

** 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>	
	2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Number of businesses	46	40	46	40	46	40
Productive cropping area (ha)	26.10	21.63	26.10	21.63		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	358,134	270,314	13,724	12,496	100.0	100.0
Variable costs						
Seed & young plants	34,240	22,398	1,312	1,035	9.6	8.3
Fertilisers & composts	10,689	7,946	410	367	3.0	2.9
Crop protection	11,691	7,464	448	345	3.3	2.8
Market charges	18,517	14,813	710	685	5.2	5.5
Packing materials	18,842	11,672	722	540	5.3	4.3
Horticultural sundries	12,130	8,360	465	386	3.4	3.1
Glasshouse fuel	750	563	29	26	0.2	0.2
Other variable costs	93	0	4	0	0.0	0.0
Total variable costs	106,952	73,216	4,098	3,385	29.9	27.1
Total gross margin	251,181	197,098	9,625	9,112	70.1	72.9
Fixed costs						
Labour:						
Regular paid	70,429	39,346	2,699	1,819	19.7	14.6
Regular unpaid	33,650	30,711	1,289	1,420	9.4	11.4
Casual labour	51,076	50,052	1,957	2,314	14.3	18.5
Power & machinery costs:						
Contract & hire	11,674	7,821	447	362	3.3	2.9
Fuel & electricity	14,773	10,814	566	500	4.1	4.0
Repairs	10,606	7,687	406	355	3.0	2.8
Machinery depreciation	14,645	11,825	561	547	4.1	4.4
Glasshouse depreciation	1,088	891	42	41	0.3	0.3
Rent (incl. imputed)	20,417	18,662	782	863	5.7	6.9
Other costs:						
Occupier's repairs	4,770	4,074	183	188	1.3	1.5
Permanent crop depreciation	1,778	2,147	68	99	0.5	0.8
Water	1,931	1,373	74	63	0.5	0.5
Sundries	15,596	14,242	598	658	4.4	5.3
Total fixed costs	252,431	199,647	9,673	9,229	70.5	73.9
Management & investment income	-1,250	-2,550	-48	-118	-0.3	-0.9
Minus: management salaries	349	70	13	3	0.1	0.0
Plus: farmer & spouse labour	25,594	24,843	981	1,148	7.1	9.2
Net farm income	23,995	22,223	920	1,027	6.7	8.2
Farm business income	26,273	27,536	1,007	1,273	7.3	10.2

Premium businesses	Per	Per £100	Crop output per cent of total crop output (%)		
	hectare	of gross	Average	Average	Premium
	2020/21	output	2019/20	2020/21	2020/21
		2020/21			
Number of businesses	16	16			
Productive cropping area (ha)	27.01				
	£ per hectare	average %			
Gross output	23,639	100.0			
Variable costs					
Seed & young plants	1,693	7.2	Glasshouse crops	11.6	13.7
Fertilisers & composts	673	2.8	Outdoor vegetables:		
Crop protection	579	2.5	Brassicas	3.8	5.9
			Legumes	0.3	0.3
Market charges	1,280	5.4	Salad crops	0.1	0.0
Packing materials	905	3.8	Other outdoor vegetables	16.1	4.5
Horticultural sundries	700	3.0	Flowers & nursery stock	9.6	12.1
Glasshouse fuel	30	0.1	Soft fruit	36.9	41.7
Other variable costs	0	0.0	Top fruit	0.1	0.1
			Other crops	21.6	21.5
Total variable costs	5,861	24.8	Total	100.0	100.0
					100.0
Total gross margin	17,778	75.2	Distribution of tenant's type capital (%)		
				Average	Average
				2019/20	2020/21
					Premium
					2020/21
Fixed costs					
Labour:			Crops & tillages	13	14
Regular paid	3,490	14.8	Stores	6	7
Regular unpaid	1,071	4.5	Glasshouses	4	4
Casual labour	4,865	20.6	Equipment	34	38
Power & machinery costs:			Livestock	0	0
Contract & hire	702	3.0	Other	43	37
Fuel & electricity	719	3.0	Total	100	100
Repairs	493	2.1			100
Machinery depreciation	861	3.6	Tenant's capital (£)	479,251	369,815
Glasshouse depreciation	67	0.3		666,035	
Rent (incl. imputed)	1,005	4.3			
Other costs:					
Occupier's repairs	312	1.3			
Permanent crop depreciation	261	1.1			
Water	87	0.4			
Sundries	731	3.1			
Total fixed costs	14,663	62.0			
Management & investment income	3,115	13.2			
Minus: management salaries	1	0.0			
Plus: farmer & spouse labour	864	3.7			
Net farm income	3,978	16.8			
Farm business income	4,050	17.1			

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>	
	2019/20	2020/21[^]	2019/20	2020/21[^]	2019/20	2020/21[^]
Number of businesses	16	12	16	12	16	12
Productive cropping area (ha)	12.14	8.29	12.14	8.29		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	258,785	108,847	21,314	13,132	100.0	100.0
Variable costs						
Seed & young plants	22,337	7,235	1,840	873	8.6	6.6
Fertilisers & composts	4,836	1,189	398	143	1.9	1.1
Crop protection	4,391	950	362	115	1.7	0.9
Market charges	14,070	7,434	1,159	897	5.4	6.8
Packing materials	19,581	9,012	1,613	1,087	7.6	8.3
Horticultural sundries	3,441	757	283	91	1.3	0.7
Glasshouse fuel	234	55	19	7	0.1	0.1
Other variable costs	178	0	15	0	0.1	0.0
Total variable costs	69,066	26,632	5,688	3,213	26.7	24.5
Total gross margin	189,718	82,214	15,625	9,919	73.3	75.5
Fixed costs						
Labour:						
Regular paid	65,956	15,326	5,432	1,849	25.5	14.1
Regular unpaid	39,501	38,069	3,253	4,593	15.3	35.0
Casual labour	18,214	12,996	1,500	1,568	7.0	11.9
Power & machinery costs:						
Contract & hire	11,724	2,561	966	309	4.5	2.4
Fuel & electricity	10,929	5,723	900	690	4.2	5.3
Repairs	7,214	3,488	594	421	2.8	3.2
Machinery depreciation	7,956	4,534	655	547	3.1	4.2
Glasshouse depreciation	754	734	62	89	0.3	0.7
Rent (incl. imputed)	13,257	13,609	1,092	1,642	5.1	12.5
Other costs:						
Occupier's repairs	3,837	1,534	316	185	1.5	1.4
Permanent crop depreciation	1,074	1,030	88	124	0.4	0.9
Water	2,024	1,258	167	152	0.8	1.2
Sundries	15,259	8,292	1,257	1,000	5.9	7.6
Total fixed costs	197,700	109,155	16,283	13,169	76.4	100.3
Management & investment income	-7,981	-26,941	-657	-3,250	-3.1	-24.8
Minus: management salaries	722	21	59	3	0.3	0.0
Plus: farmer & spouse labour	31,235	30,755	2,573	3,710	12.1	28.3
Net farm income	22,532	3,793	1,856	458	8.7	3.5
Farm business income	19,586	10,237	1,613	1,235	7.6	9.4

[^] Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2019/20	Average 2020/21^
Glasshouse crops	8.8	10.3
Outdoor vegetables:		
Brassicas	13.3	33.9
Legumes	0.0	0.0
Salad crops	0.4	1.7
Other outdoor vegetables	60.6	27.0
Flowers & nursery stock	0.1	0.3
Soft fruit	2.6	0.0
Top fruit	0.3	0.6
Other crops	13.9	26.3
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2019/20	Average 2020/21^
Crops & tillages	2	1
Stores	4	7
Glasshouses	3	8
Equipment	24	36
Livestock	0	0
Other	67	47
Total	100	100
Tenant's capital (£)	370,707	149,055

** no premium figures, sample too small*

Table 2.22 Balance sheet data for horticultural businesses

Group	All horticulture		Specialist glass		Specialist fruit	
Number of businesses	147		39		46	
Harvest year	2020/21 Opening	2020/21 Closing	2020/21 Opening	2020/21 Closing	2020/21 Opening	2020/21 Closing
Assets						
Fixed assets						
Land,buildings & SPS entitlement	656,508	665,883	530,961	557,175	1,153,295	1,168,791
Breeding livestock	442	428	0	0	1,664	1,613
Machinery & glasshouses	70,902	77,343	124,063	125,058	65,423	67,198
Permanent crops	15,559	15,925	0	0	47,953	47,670
Miscellaneous business assets	235	376	100	100	201	728
Total fixed assets	743,647	759,956	655,124	682,334	1,268,536	1,286,001
Current assets						
Crops & trading livestock	49,821	42,501	22,459	28,014	20,013	14,028
Goods in store	21,827	21,928	53,945	56,634	13,803	12,246
Liquid assets	88,934	118,101	234,248	278,411	97,809	101,202
Total current assets	160,582	182,530	310,652	363,059	131,625	127,477
Total assets	904,229	942,486	965,776	1,045,392	1,400,161	1,413,477
Liabilities						
Bank term loan	49,944	67,223	93,482	152,622	68,876	74,370
Other loans	34,363	33,288	60,015	58,171	54,031	54,117
Bank overdraft	26,524	22,580	11,764	12,664	11,735	7,964
Other short term loans	52,456	56,612	123,039	121,370	49,940	53,786
Total external liabilities	163,286	179,702	288,301	344,827	184,582	190,237
Net worth	740,943	762,784	677,475	700,566	1,215,579	1,223,240
Percentage equity (%)	81.9%	80.9%	70.1%	67.0%	86.8%	86.5%

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

	Average Assets 2020/21	Average Liabilities 2020/21	Average Net Worth 2020/21	Average % Equity 2020/21
Defra main farm type				
Cereals	3,326,286	240,747	3,085,539	92.8%
Lowland cattle & sheep	1,221,797	97,512	1,124,285	92.0%
Mixed	2,292,364	244,193	2,048,171	89.3%
General cropping	3,307,974	388,417	2,919,557	88.3%
Horticulture	923,358	171,494	751,864	81.4%
Dairy	2,500,947	479,782	2,021,165	80.8%
Pigs	1,507,323	450,763	1,056,560	70.1%
Poultry	2,165,113	764,914	1,400,199	64.7%
All businesses	2,187,824	246,315	1,941,510	88.7%

Group	Specialist HNS		Other horticulture	
	2020/21 Opening	2020/21 Closing	2020/21 Opening	2020/21 Closing
Number of businesses	22		40	
Harvest year	2020/21 Opening	2020/21 Closing	2020/21 Opening	2020/21 Closing
Assets				
Fixed assets				
Land,buildings & SPS entitlement	290,747	300,405	587,853	588,267
Breeding livestock	0	0	0	0
Machinery & glasshouses	61,385	72,170	66,995	75,234
Permanent crops	0	0	7,469	8,633
Miscellaneous business assets	674	675	1	1
Total fixed assets	352,806	373,250	662,317	672,134
Current assets				
Crops & trading livestock	124,913	105,350	27,483	24,035
Goods in store	33,901	30,317	10,781	13,835
Liquid assets	81,904	159,692	48,775	59,307
Total current assets	240,718	295,359	87,039	97,177
Total assets	593,524	668,609	749,356	769,311
Liabilities				
Bank term loan	23,274	57,241	43,032	46,204
Other loans	30,627	20,187	16,268	20,884
Bank overdraft	47,193	31,995	26,913	29,126
Other short term loans	49,478	63,879	37,437	36,471
Total external liabilities	150,572	173,300	123,650	132,684
Net worth	442,952	495,309	625,706	636,626
Percentage equity (%)	74.6%	74.1%	83.5%	82.8%

References

1. Agriculture in the United Kingdom, 2020, DEFRA 2021
<https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2020>
2. Horticultural Statistics 2020, DEFRA 2021
<https://www.gov.uk/government/statistics/latest-horticulture-statistics>
3. National Average Weekly Wholesale Prices of Selected Home Grown-Horticultural Produce in England and Wales, DEFRA August 2021
<https://www.gov.uk/government/statistical-data-sets/wholesale-fruit-and-vegetable-prices-weekly-average>
4. Agricultural Price Indices, DEFRA October 2021
<https://www.gov.uk/government/statistics/agricultural-price-indices>
5. Weekly pay (excluding overtime), ONS 2021 provisional
<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digitsoc2010asetable14>
6. Bank of England, Statistical Interactive Database - official Bank Rate history, December 2021
<http://www.bankofengland.co.uk/boeapps/iadb/Repo.asp?Travel=NIXIRx>

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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