Working Paper 1
The state of horticulture in the UK

The UK horticultural sector is vibrant and diverse, ranging from small market gardens to large, high-tech glasshouse systems. This briefing focuses on those growing fruit and vegetables – the edible or production sector. It summarises the most recent available data on the state of the sector, presenting a picture of its economic, social and environmental contributions.

Key points:

- Horticulture covers less than 1% of the UK's agricultural land but generates almost 12% of the economic value from national agricultural production.
- Information on the scale and shape of the sector is insufficiently detailed and robust, potentially under-representing its outputs.
- The UK relies on imported fruit and vegetables to meet consumption. The sector seems to have good growth prospects, particularly if diets shift towards recommended consumption of fresh produce.
- Horticulture is the most labour intensive part of UK agriculture, and employs the highest proportion of casual staff.
- Business investment may be hampered by uncertainty over future international trading relations and labour availability.

Land use

The area of land dedicated to fruit and vegetable crops in the UK in 2017 was 155,000Ha. This represents less than 1% of utilised agricultural land. Although there has been a steady increase in horticultural land over the last 15 years, the current coverage is 79% of that in 1985.[1] Of the land currently dedicated to edible horticulture a vast majority is used for field grown vegetables (75%).[1]

2017 Figures for the UK[1]	Total area of edible horticultural crops (000Ha)	% of horticultural crop area
Vegetables grown outdoors	117	75%
Orchard fruit	24	15%
Soft fruit (including wine grapes)	11	7%
Glasshouse crops	3	2%
TOTAL	155	

[1] DEFRA 2018 Horticultural Statistics - Metadata
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/762991/hort-dataset-10dec18.xlsx

UK level data does not reveal how many businesses or farms hold this land, or how holdings break down into size categories.[2] Figures for England only show that there are just less than 4000 horticultural businesses, of which almost 27% are less than 5Ha in size.[3]

Economic value

The latest UK data places the value of domestic fruit and vegetable production (including potatoes) at £3112 Million.[2] This is almost 12% of the economic value of all agricultural production. Vegetable production (excluding potatoes) was worth £1,456 million, an increase of £47 million (3.3%) on 2016 due to small increases in price and volume produced (up 4.9%). The value of fruit production also increased to £765 million, up more than 9% due largely to price increases. Contrary to overall increases in outputs, production of protected vegetables fell by 2.5% in 2017, the second successive annual decline. [4]

Production in the UK contributed just over half (57%) of the national supply of vegetables in 2017, a slight increase on the previous year (54%). The proportion of fruit domestically produced was much lower - 16%.[3] Less than 5% of vegetables grown in the UK (by weight, excluding potatoes) were exported, with the majority destined for other EU countries.[2] For fruit, almost 24% was exported. Together these exports were worth £266 million.[3]

Labour Force

Data available on employment within the sector does not typically distinguish type of production, meaning that the following figures do not wholly relate to fruit and vegetable production and include ornamental businesses. The UK Government's farm business survey shows that 40,614 people were employed in horticulture during 2017. This represents 13% of the total agricultural workforce. Of these 46% were employed on a casual basis, the highest proportion across all types of agricultural enterprise by a significant margin. Horticulture employs at least 40% of all those casually employed in agriculture.[3]

In 2018 the UK Government began surveying horticultural businesses in England to assess their need for seasonal labour.[5] Results show that between 25% and 36% of responding businesses needed seasonal labour depending on the time of year. Of those needing seasonal labour, the proportion reporting a shortfall varied between 26% and 34%. Shortfall peaked in July, with the shortfall ranging from 7 to 51 person days.

Horticulture in Wales

In 2018 1678Ha were dedicated to horticulture which equates to less than 0.1% of total farm area.[6] However, according to Food & Drink Wales, an estimated 70% of fruit and vegetable businesses'

---

[2] DEFRA 2018 Agriculture in the United Kingdom 2017
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741062/AUK-2017-18sep18.pdf

[3] DEFRA 2019, Structure of the agricultural industry in England and the UK at June Results by type of farm
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/764410/structure-june-eng-farmtypeseries-13dec18.xlsx

[4] DEFRA 2018 Latest Horticultural Statistics
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/712016/hort-report-31may18.pdf

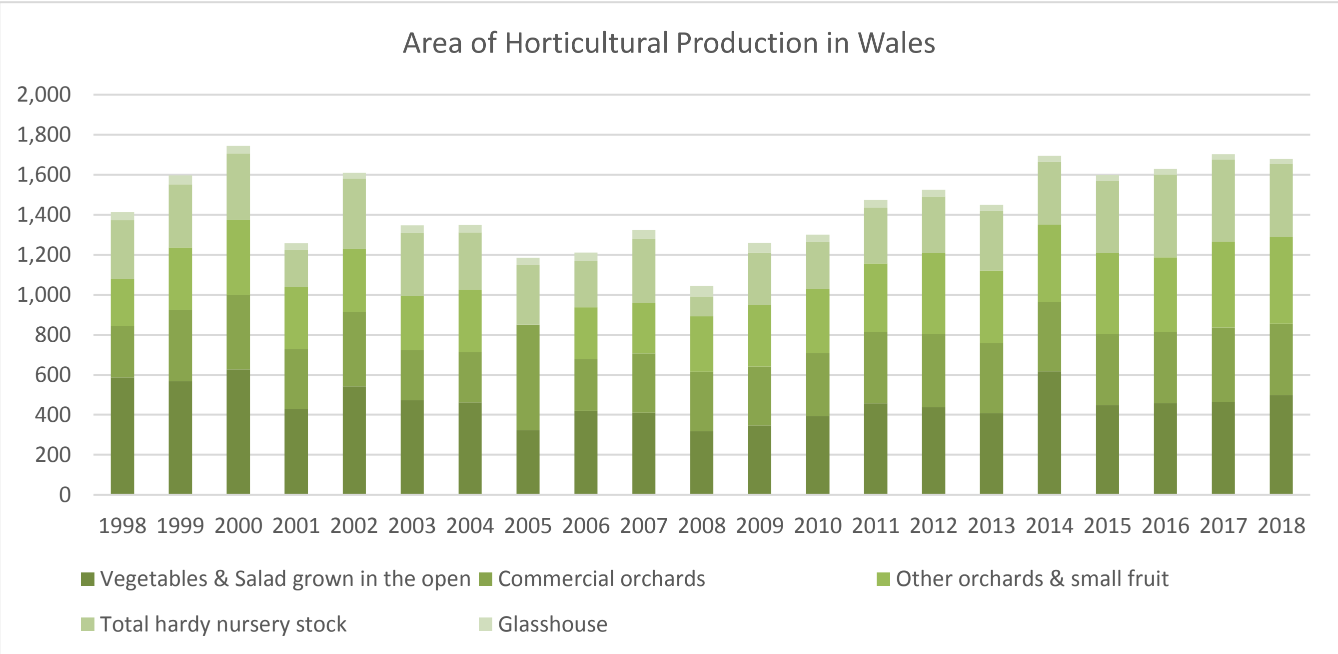
[5] DEFRA 2019 Results from the Seasonal Labour in Horticulture Survey 2018 for England
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785863/Labour_in_Horticulture_Quarterly_Survey_2018_Final_14mar19.pdf

[6] Welsh Government 2018, Key agricultural variables, 1998 to 2018
https://gov.wales/sites/default/files/statistics-and-research/2018-12/181127-key-agricultural-variables-june-1998-2018-en_1.ods

activity is not recorded.[7] A recent survey found that half of Welsh horticultural businesses operate on less than 5Ha.[8] This survey also found 20% of growers to be organic, with a clear majority of these operating on less than 25Ha. The number of horticultural holdings was 191 in 2017.[9] They produced outputs worth £51 million, approximately 3% of the country's agricultural value for the year.[10] Welsh Government has expressed ambitions for expansion of horticultural production in Wales, as part of its strategy for the food and drink sector. The trend over the last 10 years has been a steady increase in area under horticulture.

2018 Figures for Wales[6]	Total area of edible horticultural crops (Ha)	% of horticultural crop area
Vegetables & Salad grown outdoors	499	38%
Commercial orchards	357	27%
Other orchards & small fruit	433	33%
Glasshouse	23	2%
Total	1312	

Welsh data does not distinguish numbers employed by farm business type. A survey of 120 growers found that 70% or more have less than 5 full time staff.[8] It also suggests that Welsh horticultural businesses typically employ fewer seasonal staff than in other parts of the UK, but that labour supply was still a key concern.



Data issues

Publicly available information on the sector is not always complete or comprehensive. Government reporting and surveys do not all distinguish horticultural enterprises from other agricultural

---

[7] Food & Drink Wales, no date, Key Facts Fruit and Vegetable Industry in Wales https://businesswales.gov.wales/foodanddrink/food-sectors/horticulture
[8] Tyfu Cymru Grower Survey 2017
[9] Welsh Government 2018 Farming Facts and Figures, Wales 2018 https://gov.wales/sites/default/files/statistics-and-research/2018-12/180620-farming-facts-figures-2018-en.pdf
[10] Welsh Government 2018 Aggregate agricultural output and income, 2017 https://gov.wales/sites/default/files/statistics-and-research/2018-12/180322-aggregate-agricultural-output-income-2017-en.pdf

businesses. Other data combines edible and ornamental horticulture. Many horticultural producers do not receive agricultural subsidies, or are smaller than the typical threshold for returning farm business data, meaning they may not be counted in national reporting. Under-reporting of horticulturally related business activity is therefore likely. There are particular complexities tracking numbers employed in the sector, particularly in relation to seasonal labour, meaning levels of recent shortfalls are disputed.[11] Government data is only supplied on a national level, and cannot be broken down to regional or local authority level. Some data is aggregated at the level of devolved nations, and Welsh Government reports on the state of the sector. However, the scale of the sector in Wales and likely under-reporting makes it difficult to identify trends or detail in business structures. Data on horticultural businesses in Wales is likely to be less reliable than that of other parts of agriculture.[12] The grower survey initiated by Tyfu Cymru in 2017 should enhance the accuracy of profiles of the sector.

Prospects

Some suggest that the UK could and should increase its production of fruit and vegetables to support diets in line with recommended intake levels.[13] The Fruit & Vegetable Alliance suggests domestic production could be increased by 2 million tonnes, putting a further 100,000Ha into horticultural production, with a value of £3.1 billion.[14]

The implications of the UK exiting the EU are unclear and will depend on the nature of future international trading relationships. Historically, horticulture has received a relatively low amount of investment through the Common Agricultural Policy so may be less affected than other agricultural businesses by changes to the subsidy regime. Labour availability is a priority issue for the sector, particularly in light of changes to migration rules following the UK's exit from the EU.[15] The UK Government has introduced a pilot scheme for temporary migrant seasonal labour on farms for 2019-20,[16] but farming unions suggest it will not allow immigration sufficient for demand.[13]

Another labour related issue - given the sector's relatively high labour intensity – is wage costs which can be up to 60% of business turnover. It has been estimated that paying workers the National Living Wage could increase the cost of seasonal labour by 35% between 2016–2021, with potential to make some businesses unprofitable.[17] Although automation and digital technology may in the medium to longer term reduce the sector's need for staff, this is some years from being commercially viable and presents a range of other challenges for businesses.[18]

This research is supported by the Ser Cymru II programme which is part-funded by Cardiff University and the European Regional Development Fund through the Welsh Government.

---

11 EFRA Committee 2017 Feeding the nation: labour constraints
https://publications.parliament.uk/pa/cm201617/cmselect/cmenvfru/1009/100902.htm

12 Agricultural small area statistics, 2002 to 2017 https://gov.wales/sites/default/files/statistics-and-research/2018-12/180711-agricultural-small-area-statistics-2002-2017-en.pdf

13 Food Research Collaboration Horticulture in the UK: potential for meeting dietary guideline demands 2016 https://foodresearch.org.uk/download/11861

14 Fruit & Vegetable Alliance, no date, Infographic https://foodfoundation.org.uk/wp-content/uploads/2018/11/Fruit-Vegetable-Alliance-infographic.pdf

15 See for example the NFU Conference 2019 https://www.nfuonline.com/sectors/horticulture-and-potatoes/hort-and-pots-news/horticulture-issues-given-focus-at-nfu-conference/

16 https://www.gov.uk/tier-5-seasonal-worker-visa

17 NFU 2016 Assessing the impact of the National Living Wage on horticultural businesses
https://www.nfuonline.com/executive-summary-nfu-report-on-the-impacts-of-nlw-v2-feb-2016/

18 See presentations and discussion from SmartHort 2019 https://ahdb.org.uk/smarthort-conference-2019