Edible Horticulture Skills 2020

Sub-Sector Report: Tree Fruit

A report for the Agriculture and Horticulture Development Board

June 2020
A report prepared by:

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1. Introduction

The research presented in this dedicated sub-sector report is based on the responses of tree fruit businesses during the course of the Edible Horticulture Skills Survey 2020.

The skills survey was based on the following research objectives and this mini-report has been so structured:

1. Estimate current and anticipated future UK workforce numbers in the UK Edible Horticulture sector, including additional and replacement demand
2. Understand the drivers of change affecting Edible Horticulture (including opportunities and constraints to growth) and how these are influencing employers’ skills needs
3. Establish the profile of the Edible Horticulture workforce, including demographic information, ethnicity, qualifications attainment and working patterns
4. Quantify the prevalence of skills shortage and recruitment difficulties at all levels (including hard-to-fill vacancies) and reasons why these are being experienced
5. Quantify current skill levels and the future importance of those skills (using a skills-scoring approach), to determine future critical skills gaps and priority training needs
6. Identify the organisations that employers are using to provide training and highlight any gaps in training provision that can be identified by employers
7. Explore attitude, approaches and barriers to training.
1.1 Response profile

Of the 556 businesses completing the main edible horticulture skills survey, 87 companies work primarily in the Tree Fruit sector (growing apples, pears, plums, cherries, nuts and novel crops such as apricots). Of these, 11 firms (13%) undertake packhouse activities as a secondary activity. These 87 companies employ a total of 4,143 staff; this equates to an average of 48 staff per business.

Of these 87 companies,\(^1\) most (76%) are micro and small businesses, which is not unexpected given the overall Edible Horticulture (EH) report shows that approximately 68% of business are micro (0-9 employees) or small (10-49 employees). A minority (20%) are medium-sized businesses (50-249 employees) and only a handful (5%) are large businesses (250+ employees).

**Figure 1: Business size (large defined as 250+ employees)**

![Business size chart](chart.png)


Businesses tend to be affiliated to at least one, and sometimes more than one, accreditation scheme. The most popular schemes are the Red Tractor Fresh Produce Scheme and LEAF.

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\(^1\) It should be noted that not all businesses were able to answer each question or each in question in full detail. The base numbers for the survey responses and respondents may therefore vary from question to question.
Figure 2: Affiliation to accreditation schemes

2. Workforce

2.1 Workforce overview

Of all staff employed, a majority are seasonal, non-specialist employees (58%). Non-specialist employees are workers that may not have a technical occupation, but still have skills in food production and hold certified competences such as forklift driving or spraying.

Permanent managerial/technical occupation, and permanent supervisory roles each provide 6% of the sub-sector workforce.

Figure 3: Working modes


Of seasonal workers, around 37% are typically returning staff, rather than new recruits.
2.2 Workforce residency, ethnicity, gender, age

Residency

Of the sub-sector’s permanent employees, 59% are UK citizens, 40% are EU citizens (non-UK) and 0.9% are non-EU nationals.

Ethnicity

In terms of ethnic origin, the workforce is predominantly of British origin (57%) or from other white (41%) backgrounds. These figures include seasonal workers. Of those from outside the UK, most are from Poland (30%), Romania (28%), and Bulgaria (20%).

Gender

The sector’s permanent workforce is 62% male and 38% female.

Age

The figure below shows the workforce age profile of permanent and seasonal workers in the sector. The average age of permanent staff is 41.2, and the average age of seasonal staff is 35.1, compared to the UK national average of 41.5 years.
Figure 5: Workforce age profile – Permanent staff

![Workforce age profile – Permanent staff](image)


Figure 6: Workforce age profile - Seasonal staff

![Workforce age profile - Seasonal staff](image)

2.3 Workforce projections

In general, the majority of respondents foresee that demand for permanent and seasonal roles at all levels will stay the same. There is anticipated to be a slight increase in demand for non-specialist roles by just over a quarter of respondents, and by a fifth of respondents for supervisory employees, with no respondents predicting a decrease in demand for such positions.

Figure 7: Anticipated change in demand for roles

It should be reiterated that the majority of businesses in this sub-sector are micro and small-sized. In practice, this means that the owner/manager of the business manages a small, highly skilled team. The slight leaning towards a predicted increase in staff (over a decrease) is an indication that the sector is growing or sees potential for growth.
3. Labour and skills challenge

3.1 Vacancies

Respondents were asked how many vacancies they had had over the past year. A third of businesses report an average of two managerial and a fifth report two supervisory vacancies on average per company. In addition, 33 companies (just over one in three) reported vacancies for seasonal workers over the past year, with each of these companies reporting an average of 49 seasonal vacancies.

Companies were also asked if any vacancies had been particularly difficult to fill. Of the 49 companies who had experienced difficulties in recruitment, 15 noted that managerial positions were hard to fill, 18 noted that supervisory positions were difficult to fill, and 37 that seasonal worker positions had been hard to fill.

3.2 Reasons for skills gaps

Companies were asked for reasons why they perceive that skills gaps exist among their workforce. A broad range of reasons were provided, with external training not being sufficiently relevant to the business being most commonly mentioned by over one in four respondents (27%). Training being too expensive, or a lack of training available locally, were both also mentioned by at least one in five respondents.
Figure 8: Reasons for skills gaps

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>External training is not sufficiently relevant to my business</td>
<td>27%</td>
</tr>
<tr>
<td>External training is too expensive for us</td>
<td>22%</td>
</tr>
<tr>
<td>Not enough external training available locally</td>
<td>20%</td>
</tr>
<tr>
<td>Insufficient internal skill to mentor/train in the skills gap topics internally</td>
<td>18%</td>
</tr>
<tr>
<td>We lose trained staff due to retirement</td>
<td>17%</td>
</tr>
<tr>
<td>We are too busy to release staff for training</td>
<td>17%</td>
</tr>
<tr>
<td>We lose trained staff to other employers</td>
<td>13%</td>
</tr>
<tr>
<td>Employees are unwilling or unable to undertake internal training/mentoring</td>
<td>13%</td>
</tr>
<tr>
<td>Cost of travel and subsistence to attend external training is too high</td>
<td>13%</td>
</tr>
<tr>
<td>External training is only available at the wrong time of the year</td>
<td>12%</td>
</tr>
<tr>
<td>External training is not of high enough quality</td>
<td>10%</td>
</tr>
<tr>
<td>External training is too complicated</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>27%</td>
</tr>
</tbody>
</table>

Base: 60 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

‘Other’ reasons provided included:

Low interest in working in the sector, negative perceptions about the sector, language barriers and insufficient education of young people.

3.3 Skills scoring

As a key component of the skills survey, respondents from all sub-sectors were asked to score the current level of skills for two job-role groups (managers, technical or specialist occupations, and seasonal and/or agency workers) on a scale from 1-10 – where one is the lowest score and ten the highest.

Respondents were also asked to assess the future need for such skills from 1-10, with 5 meaning that the importance of the skill will stay the same.
These rankings were then analysed for this report using a skills scoring method and the following figures show the results of the skills scoring exercise. Overall, almost all soft and technical skills are set to increase in importance, sometimes significantly, and particularly so for seasonal workers.

The scoring of the current importance of skills and predictions of future importance were entirely based on employers’ perceptions of both.

**Figure 9: Current skill level, and predicted future importance (managerial, technical, specialist occupations)**

![Bar chart showing current and future skill levels for various skills in the tree fruit sub-sector.](chart.png)

Figure 10: Current skill level, and predicted future importance (seasonal/agency workers)

4. Workforce training, education, and staff development

4.1 Training

We asked employers what they typically do when it comes to training, both for their permanent and for their seasonal staff.

For permanent staff, in-house training (such as internal training courses, mentoring, etc.) is commonly used, with three quarters (75%) of firms stating this method is used often. External training (at colleges or other training providers) is used often or occasionally by over three quarters of businesses. Over half of companies state that they never use online (52%) or video training (70%) for permanent staff.

![Figure 11: Types of training undertaken (permanent staff)](image)


For seasonal staff, almost all responding companies use in-house training with the majority (83%) stating they use this often. Alternative forms of training are much less commonly used, with well over half of companies stating they never use external training, online, or video training for seasonal staff.
Figure 12: Types of training undertaken (seasonal staff)

![Bar chart showing types of training](chart)


Around on in six employers (16%) in the sector told us that some of their staff are qualified as trainers, while just three companies (3%) told us that some staff are qualified either as verifiers or assessors. Of these organisations which have such staff, there is on average 2.4 trainers, 5.0 verifiers, or 5.0 assessors per company.

Businesses were asked their reasons for choosing not to use any external training available to them. Over half of responding firms comment that their own internal training is entirely adequate (54%), while around a fifth perceive external training to be too costly (22%) or note that it is not available locally (19%).

In instances where businesses do use external training providers to upskill their workforces, these employers were asked whether they or their employees access funding to help pay for this training. The vast majority (80%) ‘never’ access such funding, while 15% do so ‘sometimes’.
4.2 Apprentices

Apprentices and trainees constitute a small part of the workforce. Just over a third of companies (36%) report having apprentices or trainees, and the average number of apprentices/trainees within each of these businesses is 0.7. Overall, apprentices/trainees represent 0.5% of the total employment in the Tree Fruit sub-sector.

Companies were asked about the number of apprentices they had taken on, and expected to take on, each year in the period 2018-2022. Under a quarter of companies told us they would take on apprentices in any given year, with each of these companies taking on average of between 0.9 and 1.2 apprentices each year.

<table>
<thead>
<tr>
<th>Table 1: Apprenticeship starts per year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of responding companies</strong></td>
</tr>
<tr>
<td>Year before last (2018)</td>
</tr>
<tr>
<td>Last year (2019)</td>
</tr>
<tr>
<td>This year (2020)</td>
</tr>
<tr>
<td>Next year (2021)</td>
</tr>
<tr>
<td>Year after next (2022)</td>
</tr>
</tbody>
</table>
Given the number of apprenticeship starts per company in the sector, it is worth assessing relevant barriers for employers in recruiting apprentices. The most common barrier mentioned by just over three quarters of respondents (76%) is that apprentices are not showing an interest in the sector. Over two thirds of companies note that apprentices lack the right attitude and behaviours (70%) and over half that there is an insufficient supply of apprentices (57%).

Figure 14: Barriers to recruiting apprentices

Base: 37 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

4.3 Apprenticeship levy

The apprenticeship levy was introduced in 2016 and came into law in April 2017. The apprenticeship levy obliges employers with a payroll over £3 million each year to pay a set proportion into a government fund specifically designed to pay for apprenticeships. Levy-payers are then entitled to receive funds paid into the levy in order to fund apprenticeship training at their company.

The majority of companies in this sector (89%) do not pay the apprenticeship levy. Of the small number of companies which told us that they do pay the levy, most believe it has had a positive impact on their business (50%) while a minority believe it has had a negative impact (38%) and the remainder are unsure of the levy’s impact.
4.4 T Levels

T Levels are new qualifications which are being introduced from September 2020. These are technical courses intended to be equivalent academic A level qualifications. T Levels are two-year courses which will offer students a mix of classroom learning and on-the-job training during an industry placement of 45 days. The first three T Levels will be available in September 2020 in construction, digital, and education, with seven more courses beginning the following year. A T Level in agriculture, land management and production is set to start in September 2023.

The vast majority of companies in the sector (90%) are unaware of this T Level qualification which is to be introduced by the Department for Education in 2023.

4.5 Qualification requirements

Businesses were also asked their thoughts on whether they consider a degree level qualification (level 6 or higher) is necessary for various occupational areas.

Half of responding companies believe that it is ‘essential’ for plant breeders/geneticists to be qualified at this level (50%), with just under half (41%) believing it is essential for soil scientists to hold a level 6 qualification or higher. Over half of businesses believe it is ‘not important’ for harvest managers (75%), irrigation installers/operators (72%), irrigation/fertigation managers (62%), or head growers (54%) to be qualified to degree level.

Figure 15: Need for degree level qualification by occupational area

It should be noted that this question sought to understand business perceptions regarding occupations requiring degree levels. The responses reflect individual company views on related degree requirements in general. The responses do not reflect the extent to which the listed occupations are relevant to the respective edible horticulture sub-sector. For instance, soil scientists may be less relevant for the Mushroom and Protected Edibles sectors and this role may be known as “crop nutritionist” in other sectors.

5. Future drivers of change

To provide information on their future outlook of the sector, businesses were asked to rate the most important drivers of future change from their perspective on a scale from 1 (not important) to 10 (very important).

The drivers of change perceived to be most important are pressure on margins (9.5), availability of labour (9.3) and consumer demand (9.1). These top three reasons are the same across most EH sub-sectors, with some variation in order.
### Figure 16: Drivers of change

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure on margins</td>
<td>9.5</td>
</tr>
<tr>
<td>Availability of labour</td>
<td>9.3</td>
</tr>
<tr>
<td>Consumer demand</td>
<td>9.1</td>
</tr>
<tr>
<td>Legislation</td>
<td>8.8</td>
</tr>
<tr>
<td>Change in consumer habits</td>
<td>8.7</td>
</tr>
<tr>
<td>Skills shortages</td>
<td>8.6</td>
</tr>
<tr>
<td>Loss of Plant Protection Products</td>
<td>8.6</td>
</tr>
<tr>
<td>Environmental issues</td>
<td>8.6</td>
</tr>
<tr>
<td>Crop science</td>
<td>8.6</td>
</tr>
<tr>
<td>Disease and security/control</td>
<td>8.5</td>
</tr>
<tr>
<td>Plant breeding</td>
<td>8.3</td>
</tr>
<tr>
<td>Biosecurity</td>
<td>8.3</td>
</tr>
<tr>
<td>Biological control agents</td>
<td>8.2</td>
</tr>
<tr>
<td>Public opinion/understanding of the EH sector</td>
<td>8.1</td>
</tr>
<tr>
<td>Carbon costs</td>
<td>7.9</td>
</tr>
<tr>
<td>Use of plastics</td>
<td>7.7</td>
</tr>
<tr>
<td>Technological developments</td>
<td>7.7</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>7.7</td>
</tr>
<tr>
<td>Food Security</td>
<td>7.6</td>
</tr>
<tr>
<td>Government support</td>
<td>7.5</td>
</tr>
<tr>
<td>Import and Export tariffs</td>
<td>7.4</td>
</tr>
<tr>
<td>Overseas markets</td>
<td>6.4</td>
</tr>
</tbody>
</table>

6. Summary

Workforce demographics
- The sector is largely made up of micro and small businesses (76%).
- Most workers in the sector (58%) are seasonal, non-specialist employees. The average age of permanent workers in the sector is 41.2 compared to 35.1 for seasonal workers.
- Most workers are of British origin, or of ‘other white’ ethnic background, with most of these workers predominantly from Poland, Bulgaria or Romania.

Workforce projections
- Demand for occupations is anticipated to remain largely the same in the coming years, with a slight leaning towards a predicted increase in staff over a predicted decrease in demand.
- Just over a third of companies take on apprentices/trainees in any given year. Companies with apprentices/trainees have, on average, 0.7 such staff and take on around 0.9-1.2 per year with little change foreseen. Apprentices/trainees comprise 0.5% of the sector workforce. The most commonly mentioned barrier to recruiting apprentices, by 76% of businesses, is a lack of interest in the apprenticeships.

Skills
- Skills scoring reveals that almost all soft or technical skills are set to increase in importance in the future, sometimes significantly, particularly for seasonal workers.
- Skills gaps in the workforce are believed to exist for a variety of factors. Most commonly mentioned was external training not meeting business needs (by 27% of businesses), the cost of external training (22%), and the lack of training available locally (20%).

Training
- On-the-job training is the most popular method of training both permanent and seasonal staff; video and online training are little utilised. Businesses not using external training do so as internal training meets their needs (mentioned by half of companies), or it is perceived to be too expensive (22%). Where businesses do use external training, the majority never access funding (80%) for upskilling.

Education
- Most companies in the sector (89%) do not pay the apprenticeship levy.
- Most companies in the sector (90%) are unaware of the T Level qualification being introduced in 2023.
- Degree level qualifications or higher (level 6+) are believed to be essential for plant breeder/geneticist roles by half of employers (50%). A degree is believed to be not important for harvest managers (75%), irrigation installers/operators (72%), irrigation/fertigation managers (62%), or head growers (54%).
Future drivers

- Businesses in the sector foresee that the most important drivers of change in the future are pressure on margins, availability of labour, and consumer demand.