



Edible Horticulture Skills 2020

Sub-Sector Report: Protected Edibles

A report for the Agriculture and Horticulture Development Board

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1. Introduction

Important Note

The bulk of the research for this study was conducted prior to the full impact of the Covid-19 epidemic in the UK. However, the final stages coincided with the “lockdown” and the researchers were able – in conjunction with AHDB – to adjust some of the questioning to gather important reactions and perceptions on the impacts. These are discussed in Section 7.

The research presented in this dedicated sub-sector report is based on the responses of Protected Edibles 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.

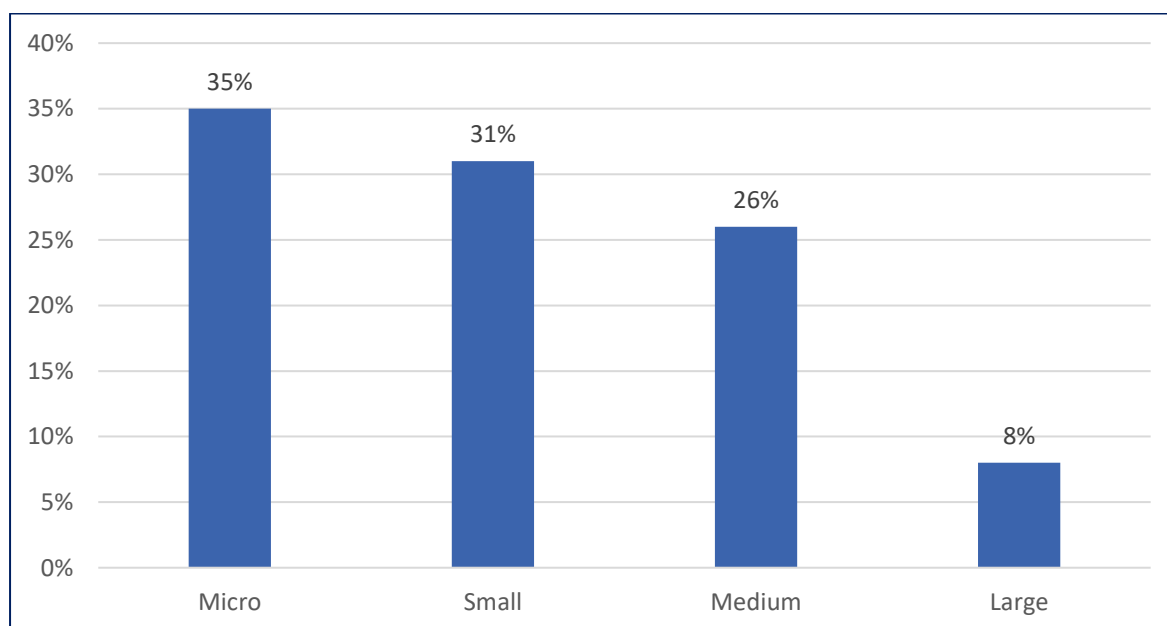
1.1 Response profile

Of the 556 businesses completing the main Edible Horticulture skills survey, 65 companies work primarily in the Protected Edibles sector (edibles grown under protection in greenhouses including salad crops like tomatoes, cucumbers, lettuce, peppers, herbs). Of these, 18 firms (28%) undertake packhouse activities as a secondary activity. These 65 companies employ a total of 3,753 staff; this equates to an average of 58 staff per business.

For context, Pye Tait's FAME Business Database (containing over 5m UK incorporated and unincorporated businesses and updated every quarter) contains details of around 440 businesses which produce protected edibles – almost half of which produce herbs - and 52 packhouses which handle such produce.

Of these 65 companies,¹ most (66%) 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 quarter (26%) are medium-sized businesses (50-249 employees) and a minority (8%) are large businesses (250+ employees).

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

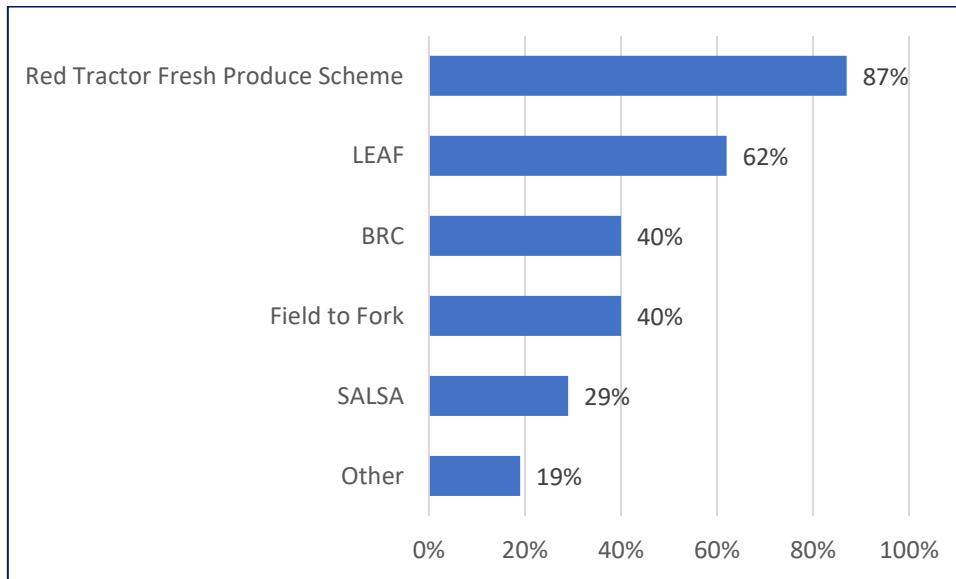


Base: 65 respondents, single choice question. Source: Pye Tait Consulting 2020.

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.

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



Base:144 responses. Source: Pye Tait Consulting 2020.

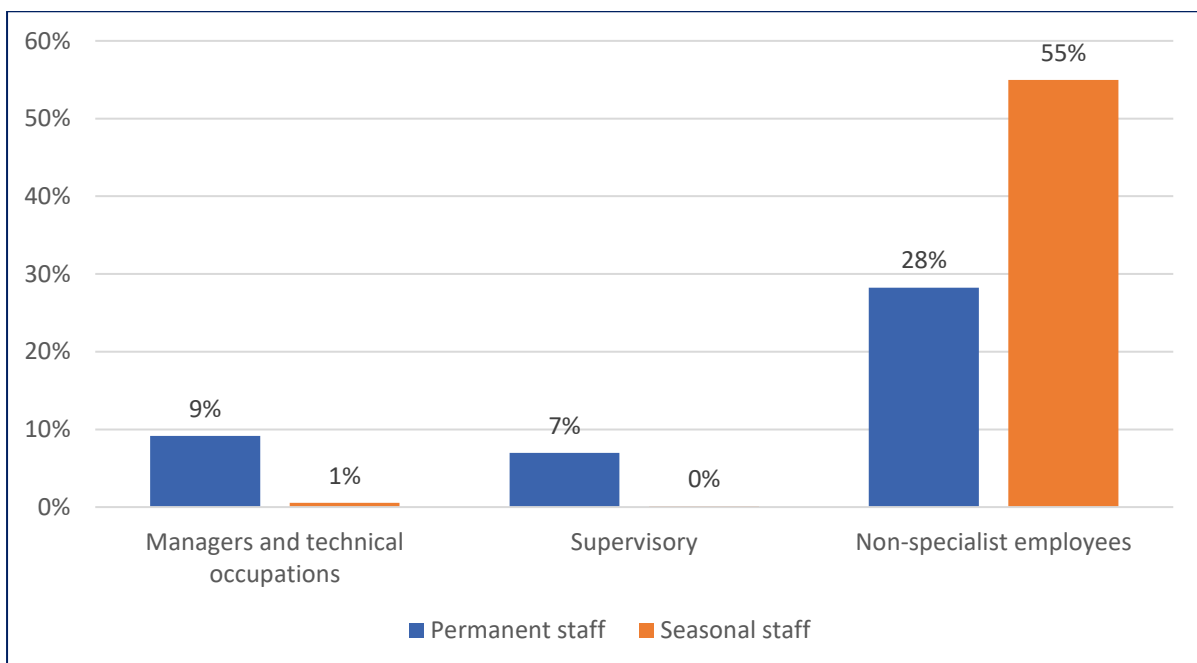
2. Workforce

2.1 Workforce overview

Of all staff employed, a large majority are non-specialist employees for both staff categories. Non-specialist employees are workers that may not have a technical occupation, but still have skills in food production. 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.

Almost all staff in managerial/technical occupations and supervisory roles are permanent staff.

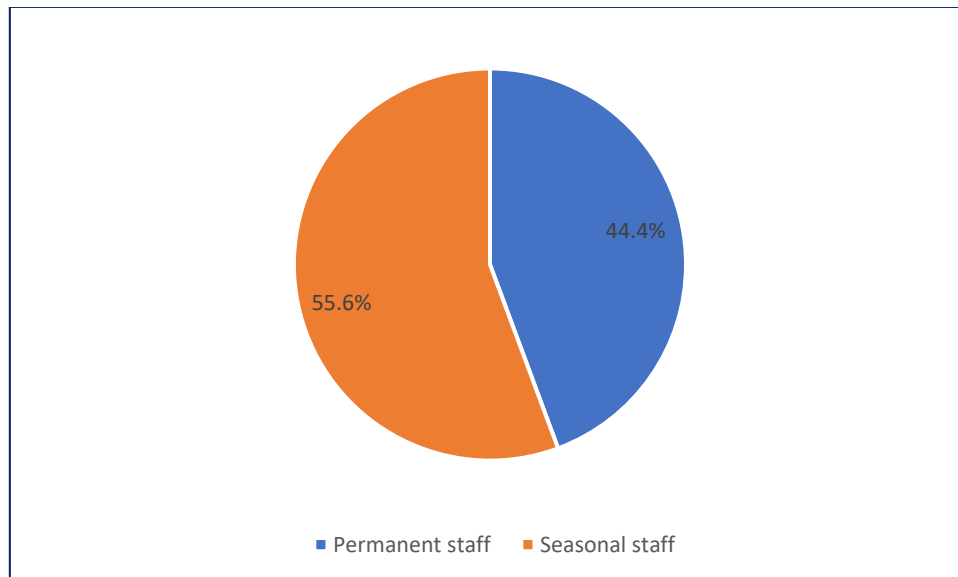
Figure 3: Working modes



Base: 65 respondents. Source: Pye Tait Consulting 2020.

Of seasonal workers, around 43% are typically returning staff, rather than new recruits.

Figure 4: Proportion of Permanent and Seasonal staff



Base: 65 respondents. Source: Pye Tait Consulting 2020.

2.2 Workforce residency, ethnicity, gender, age

Residency

Of the sub-sector's permanent employees, 57% are UK citizens, 42% are EU citizens (non-UK) and 0.5% are non-EU citizens.

Ethnicity

In terms of ethnic origin, the workforce is predominantly of other white (54%) backgrounds, of British origin (37%), or of 'any other mixed/multiple ethnic background' (9%). These figures include seasonal workers. Of those from outside the UK, most are from Bulgaria (29%), Romania (19%), Poland (17%), Lithuania (13%), or Latvia (12%).

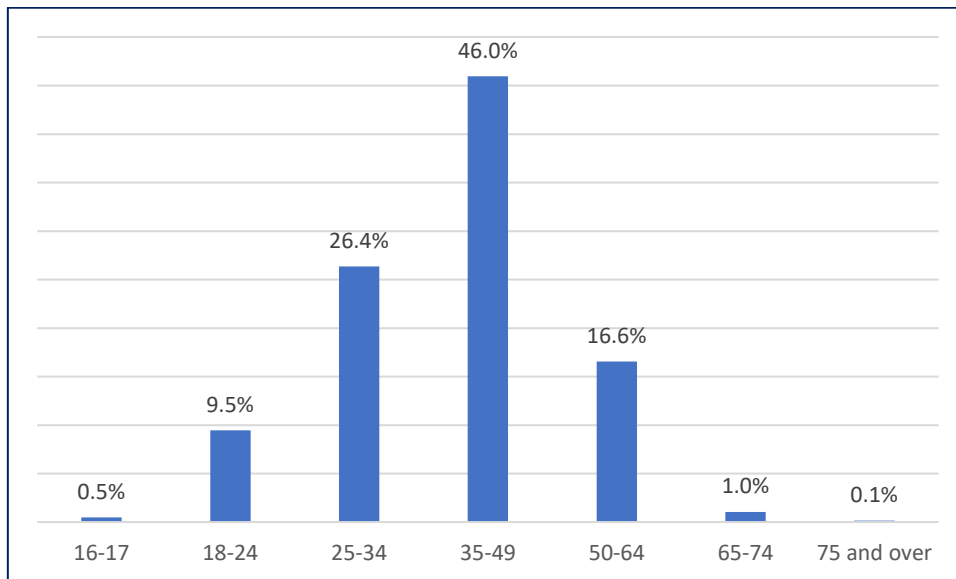
Gender

The sector's permanent workforce is 64% male and 36% female.

Age

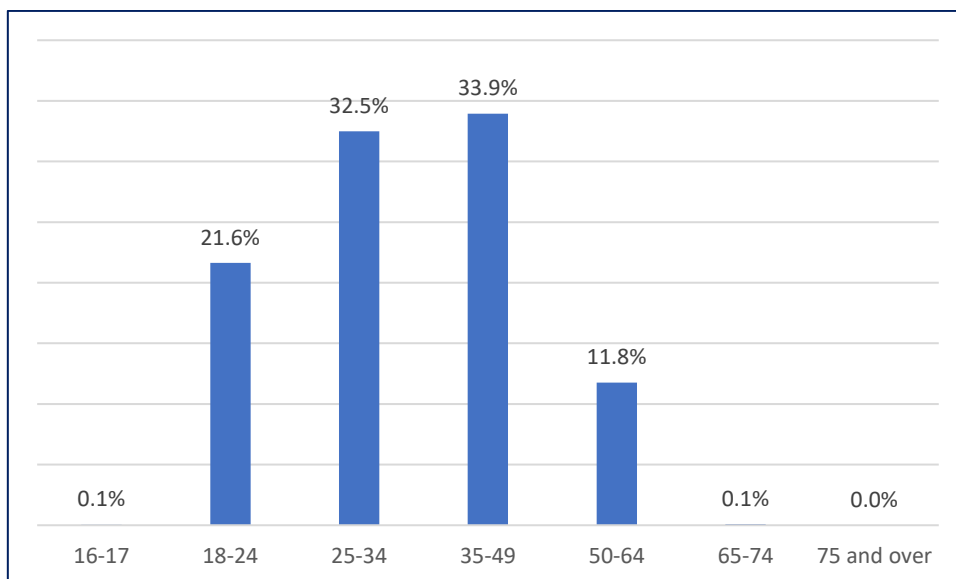
The figure below shows the workforce age profile of permanent and seasonal workers in the sector. The average age of permanent staff is 39.4, and the average age of seasonal staff is 35.2, compared to the UK national average of 41.5 years.

Figure 5: Workforce age profile - Permanent staff



Base: 65 respondents. Source: Pye Tait Consulting 2020.

Figure 6: Workforce age profile - Seasonal staff

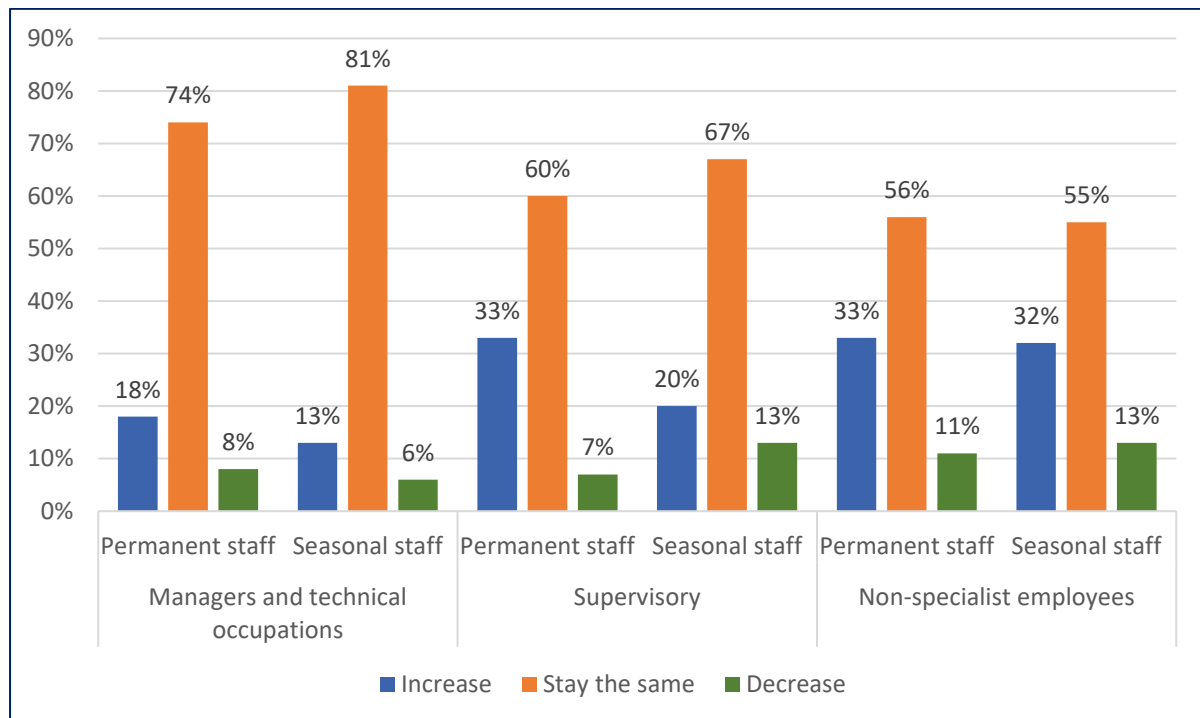


Base: 65 respondents. Source: Pye Tait Consulting 2020.

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 (permanent and seasonal) non-specialist roles by around a third of respondents, and similarly for permanent, supervisory employees.

Figure 7: Anticipated change in demand for roles



Base: 164 (permanent) and 69 (seasonal) responses, multiple options could be selected. Source: Pye Tait Consulting 2020.

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

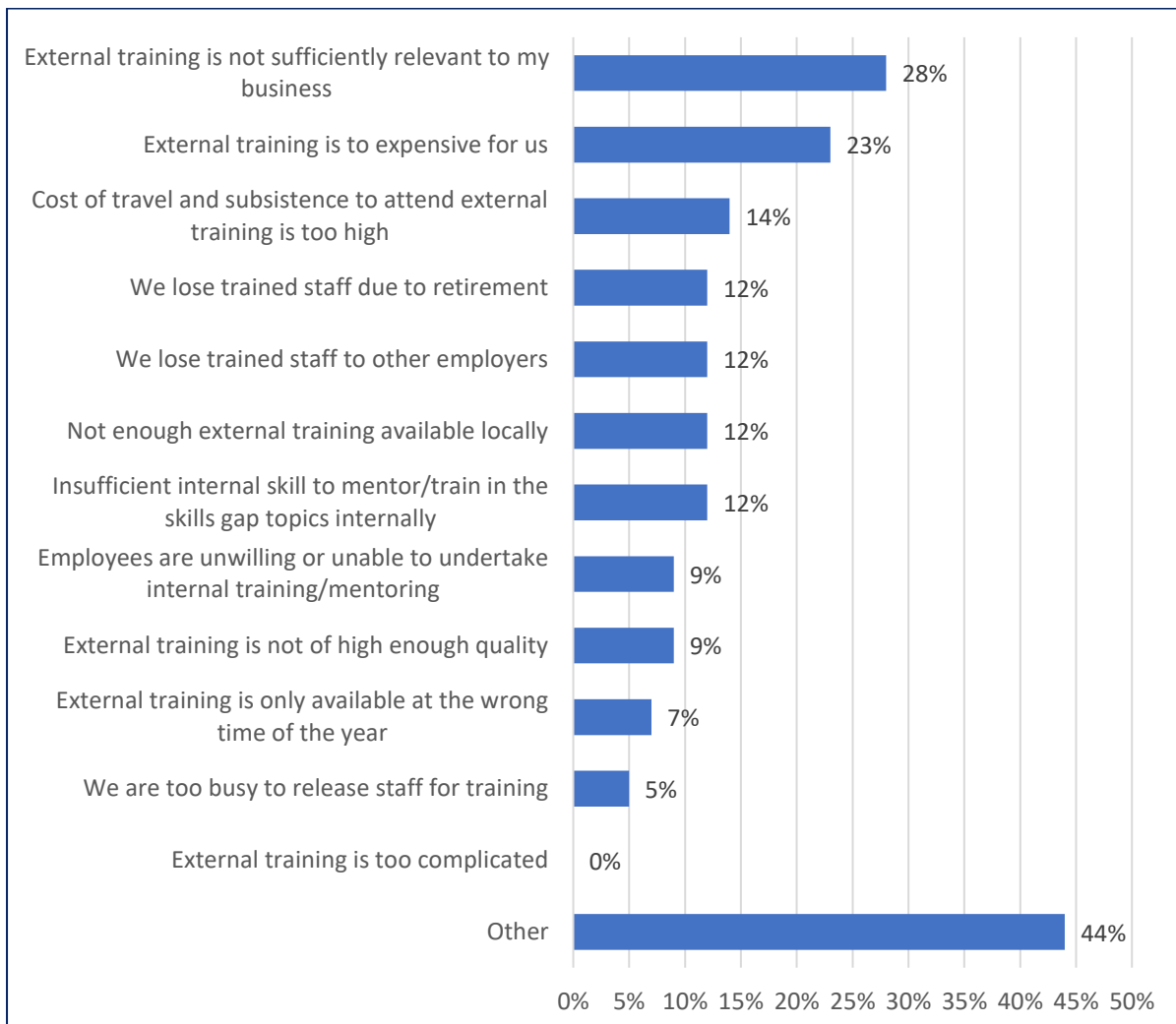
Respondents were asked how many vacancies they had had over the past year. A third of businesses report an average of five managerial and a quarter of companies report an average of four supervisory vacancies. In addition, 18 companies (28%) reported vacancies for seasonal workers over the past year, with each of these companies reporting an average of 50 seasonal vacancies.

Companies were also asked if any vacancies had been particularly difficult to fill. Of the 34 companies who had experienced difficulties in recruitment, 20 noted that managerial positions were hard to fill, 18 noted that supervisory positions were difficult to fill, and 27 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 (28%) or being too expensive (23%) as most commonly mentioned by around one in four respondents.

Figure 8: Reasons for skills gaps



Base: 43 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

‘Other’ reasons provided included:

A low rate of seasonal workers that return to work in the business, difficulty to find staff willing to take courses and take on new roles, language barriers and shortcomings in the education system for young people.

3.3 Skills scoring

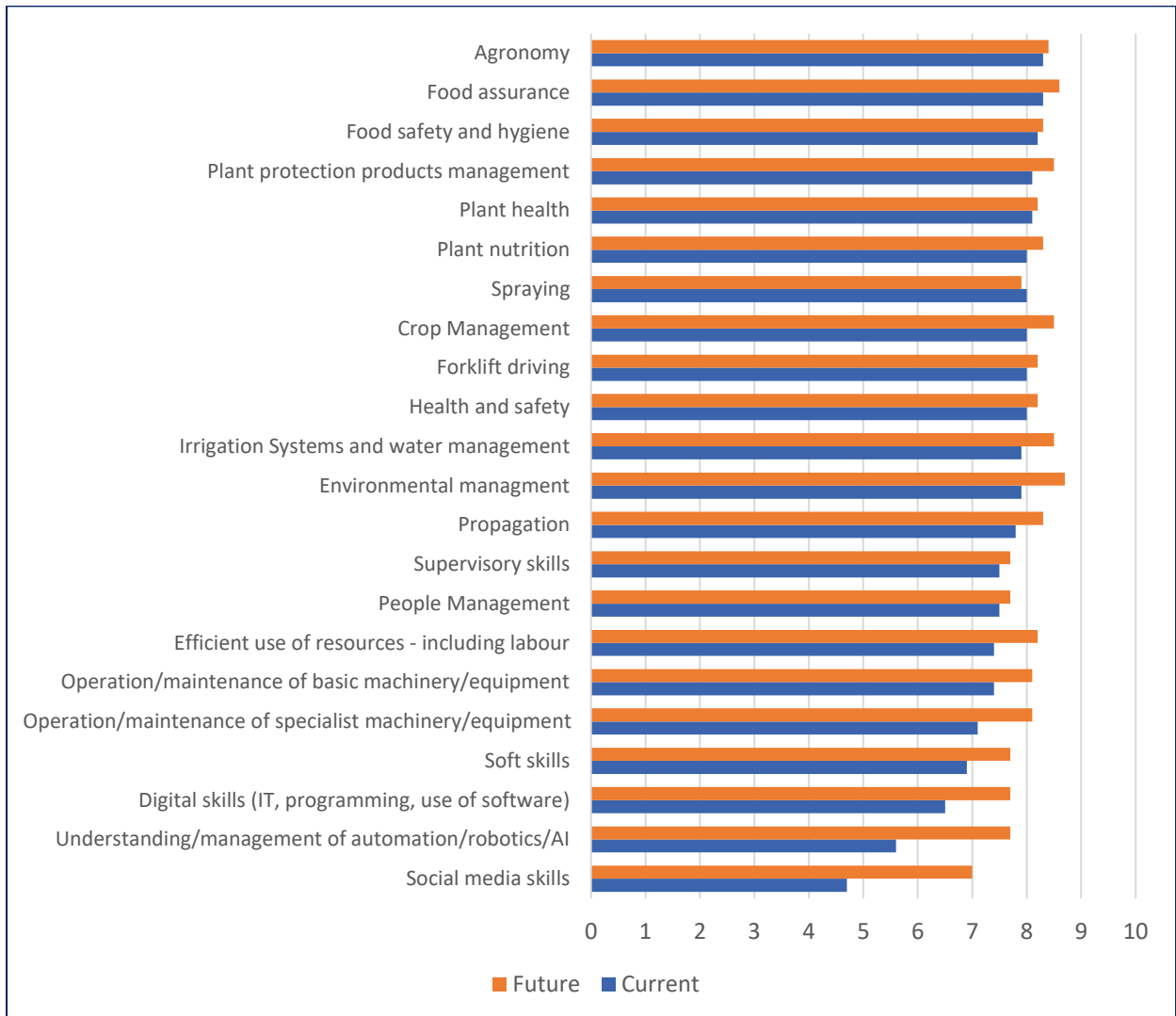
As a key component of the skills survey, respondents from all sub-sectors were asked to score the current level of skills for two job-role groups (managers, technical or specialist occupations, and seasonal and/or agency workers) on a scale from 1-10 – where one is the lowest score and ten the highest.

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.

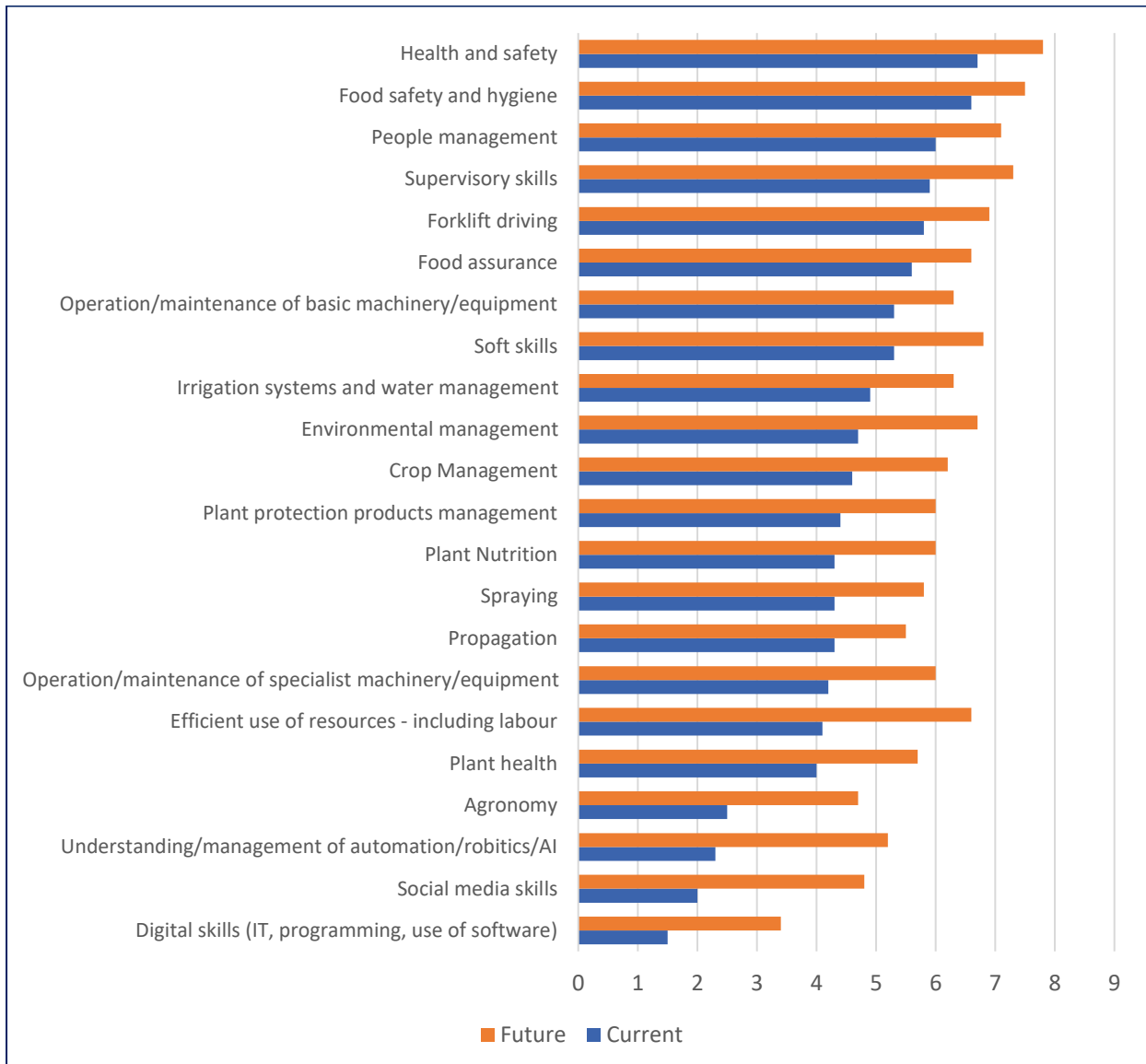
The scoring of the current importance of skills and predictions of future importance were entirely based on employers' perceptions of both.

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



Base: 30 to 62 respondents. Source: Pye Tait Consulting 2020.

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



Base: 10 to 30 respondents. Source: Pye Tait Consulting 2020.

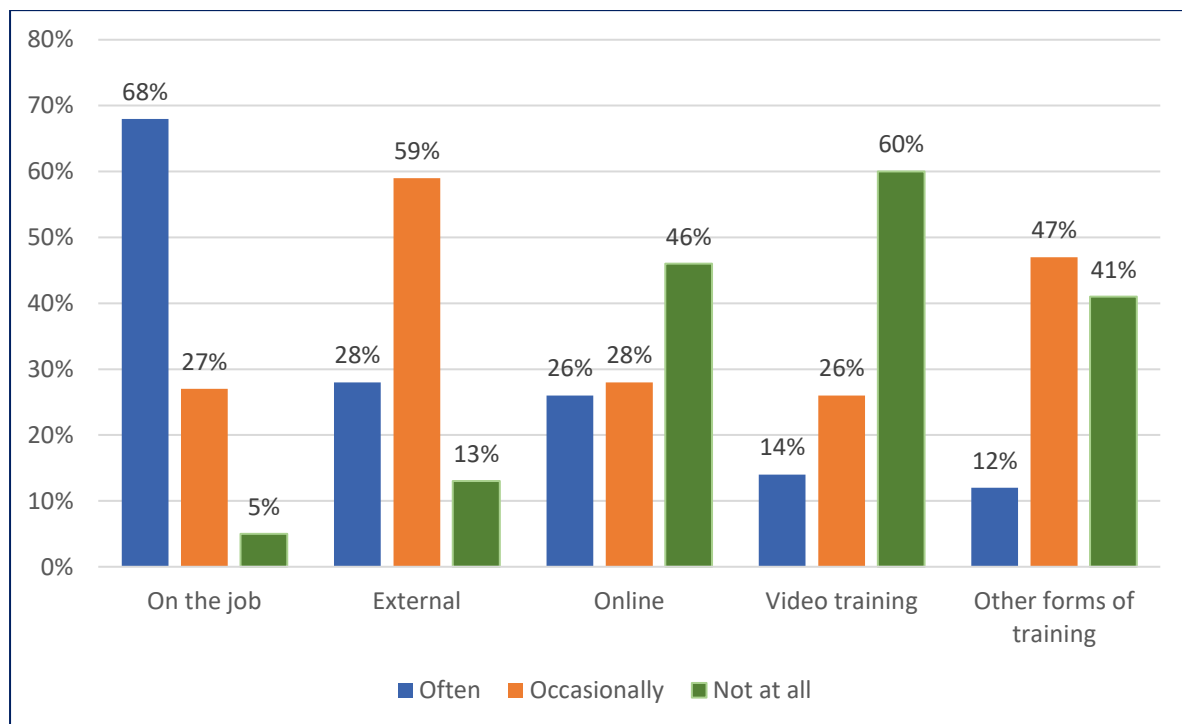
4. Workforce training, education, and staff development

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 over two thirds (68%) of firms stating this method is used often. External training (at colleges or other training providers) is used often or occasionally by over five sixths of businesses. Nearly half of companies state that they never use online training (46%), and more do not use video training (60%) for permanent staff.

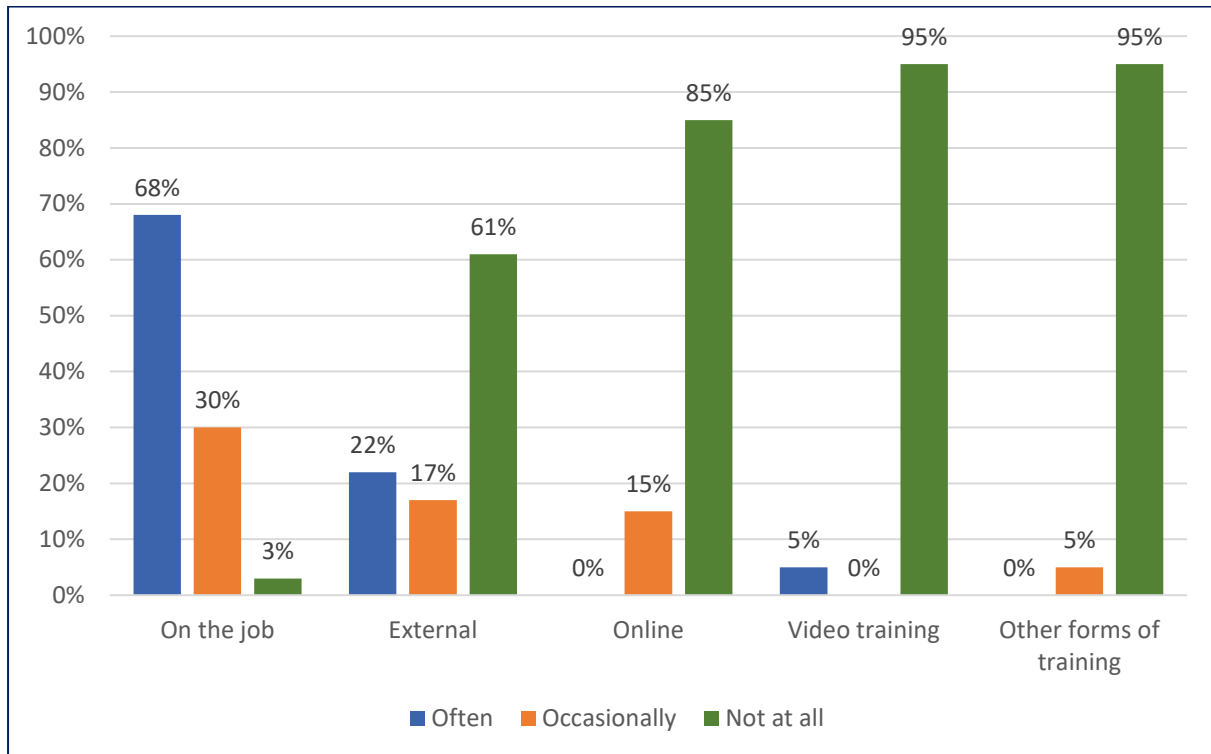
Figure 11: Types of training undertaken (permanent staff)



Base: 34 to 63 respondents. Source: Pye Tait Consulting 2020.

For seasonal staff, almost all responding companies use in-house training with the majority (68%) stating they use this often. Alternative forms of training are much less commonly used, with 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)



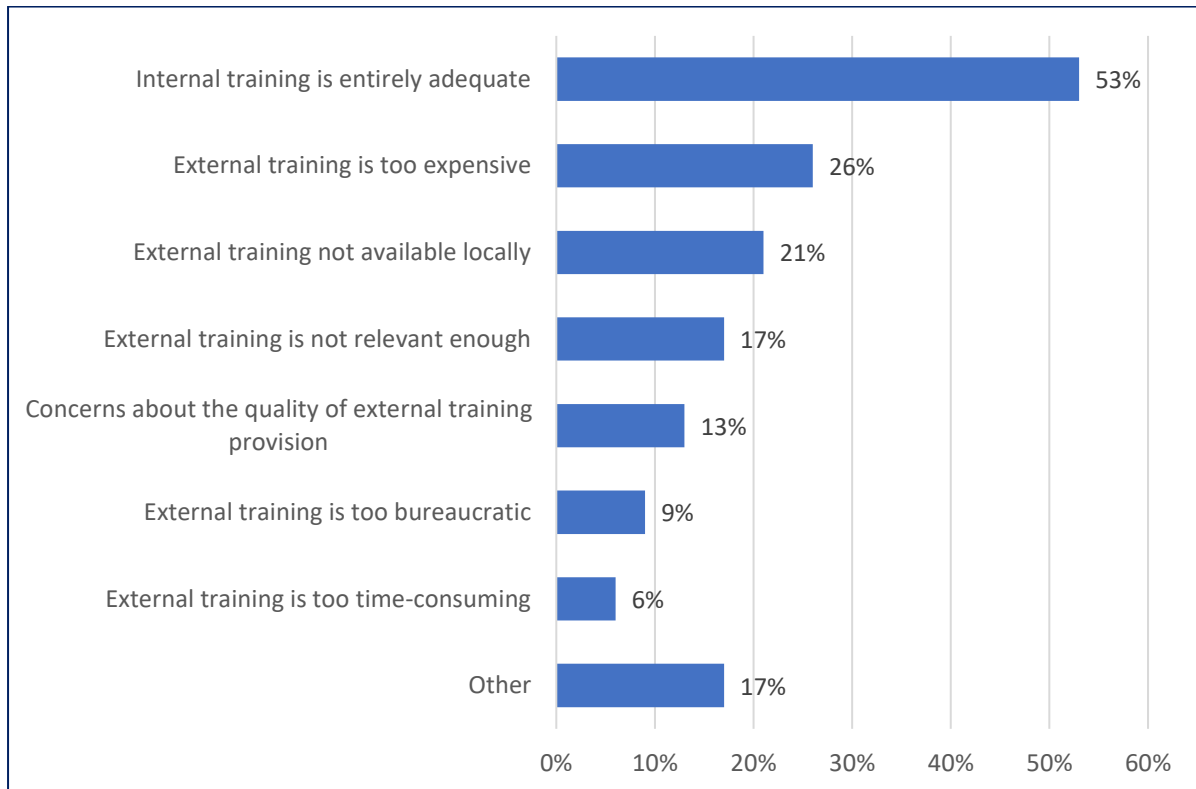
Base: 19 to 40 respondents. Source: Pye Tait Consulting 2020.

Around a third of employers (29%) in the sector told us that some of their staff are qualified as trainers, while around a minority told us that some staff are qualified either as verifiers (8%) or assessors (5%). Of these organisations which such staff, there are on average 3.6 trainers, 1.6 verifiers, or 1.3 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 (53%), while around a quarter perceive external training to be too costly (26%) or note that it is not available locally (21%).

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 (69%) ‘never’ access such funding, while 19% do so ‘sometimes’; 9% are unsure, while 3% ‘always’ access funding.

Figure 13: Reasons for not using external training



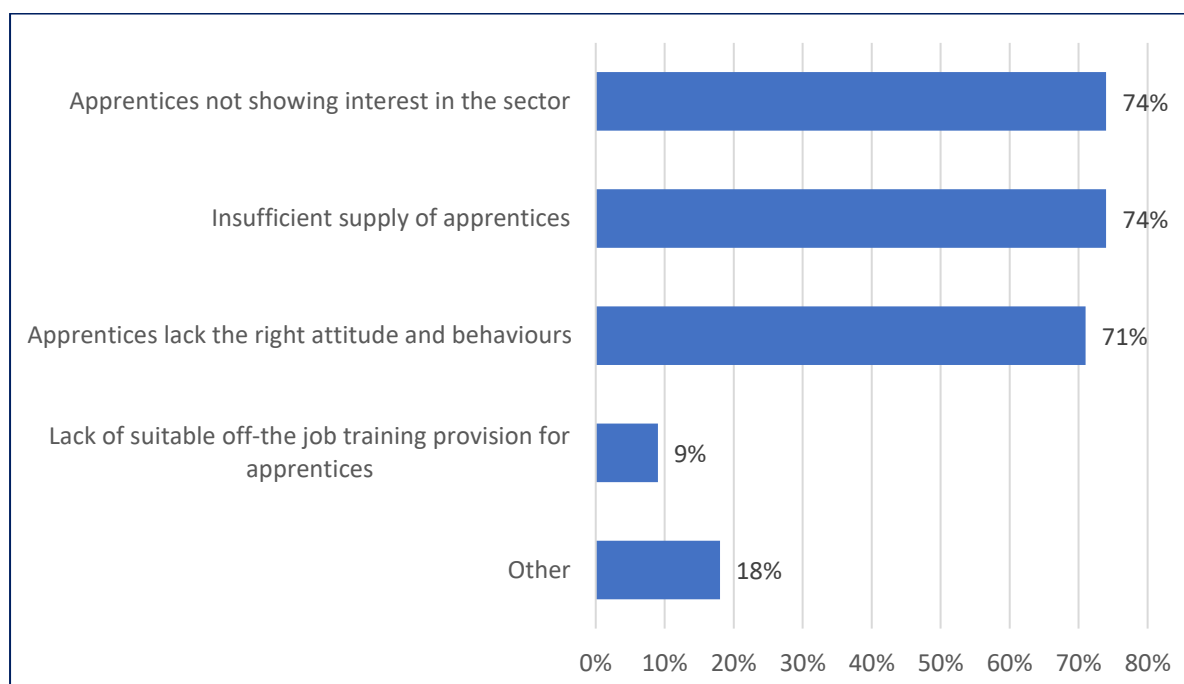
Base: 47 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

4.2 Apprentices

Apprentices and trainees constitute a small part of the workforce. Just over a quarter of companies (28%) report having apprentices or trainees, and the average number of apprentices/trainees within each of these businesses is 1.4. Overall, apprentices/trainees represent 0.7% of the total employment in the Protected Edibles sub-sector.

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 barriers mentioned by nearly three quarters of respondents are that apprentices are not showing an interest in the sector, or that there is an insufficient supply of apprentices (both 74%). Over two thirds also believe that apprentices lack the right attitude and behaviours (71%).

Figure 14: Barriers to recruiting apprentices



Base: 34 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

Companies were asked about the number of apprentices they had taken on, and expected to take on, each year in the period 2018-2022. Around 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 1.0 and 1.9 apprentices each year.

Table 1: Apprenticeship starts per year

	No. of responding companies	Total apprentices	Average
2018	15	23	1.5
2019	15	22	1.5
2020	15	29	1.9
2021	17	17	1.0
2022	14	20	1.4

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 (83%) 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 (45%) while a minority believe it has had a negative impact (18%) and the remainder (36%) 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.

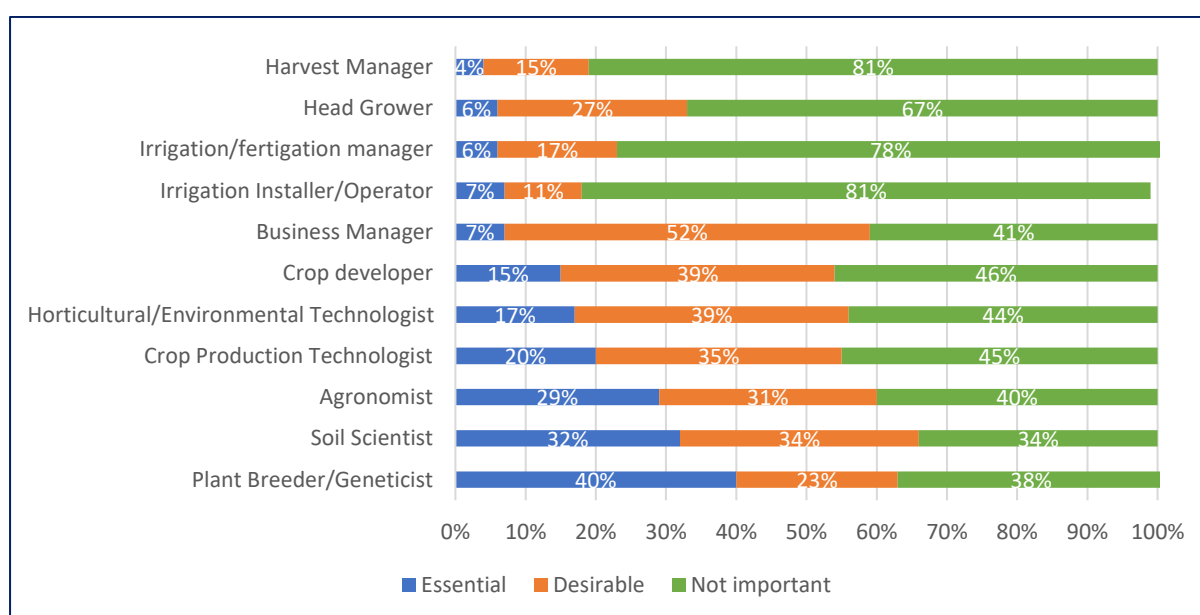
The vast majority of companies in the sector (92%) are unaware of this T Level qualification which is to be introduced by the Department for Education in 2023.

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.

Two in five responding companies believe that it is ‘essential’ for plant breeders/geneticists to be qualified this level (40%), with just under a third (32%) believing it is essential for soil scientists to hold a level 6 qualification or higher. Over two thirds of businesses believe it is ‘not important’ for harvest managers (81%), irrigation installers/operators (81%), irrigation/fertigation managers (78%), or head growers (67%) to be qualified to degree level.

Figure 15: Need for degree level qualification by occupational area



Base: 51 to 63 respondents. Source: Pye Tait Consulting 2020.

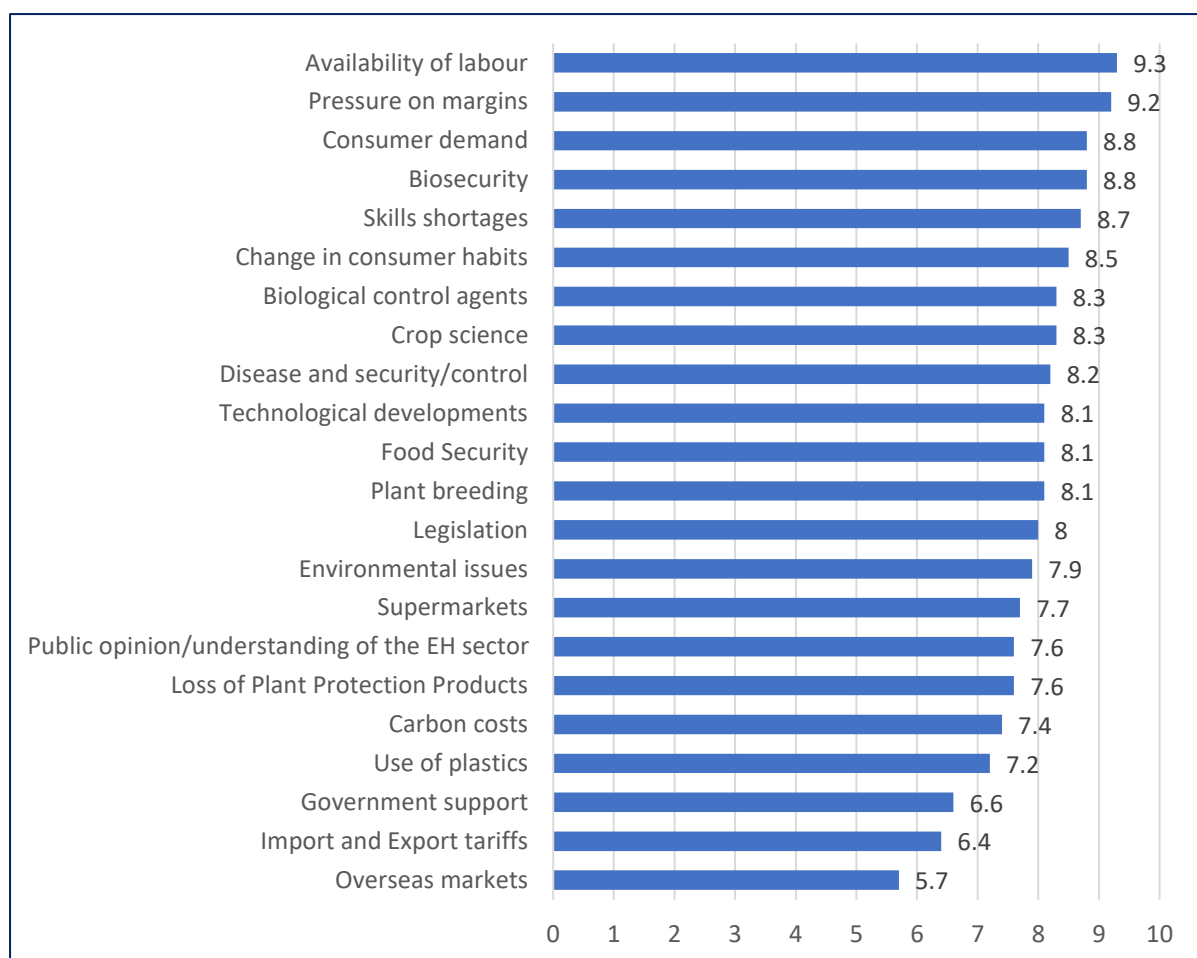
It should be noted that this question sought to understand business perceptions regarding occupations requiring degree levels. The responses reflect individual company views on related degree requirements in general. The responses do not reflect the extent to which the listed occupations are relevant 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 availability of labour (9.3), pressure on margins (9.2), and consumer demand and biosecurity (both 8.8). The top three reasons are the same across most EH sub-sectors, with some variation in order.

Figure 16: Drivers of change



Base: 41 to 55 respondents. Source: Pye Tait Consulting 2020.

6. Summary

Workforce demographics

- The sector is largely made up of micro and small businesses (66%).
- Most workers in the sector (83%) are non-specialist employees. The average age of permanent workers in the sector is 39.4 compared to 35.2 for seasonal workers.
- Most workers are of 'other white' ethnic background, with most of these workers predominantly from Bulgaria, Romania, or Poland.

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.
- Around a quarter of companies take on apprentices/trainees in any given year. Companies with apprentices/trainees have, on average, 1.4 such staff and taking on between 1.0 and 1.9 per year with little change foreseen. Apprentices/trainees comprise 0.7% of the sector workforce. The most commonly mentioned barriers to recruiting apprentices, by 74% of businesses, are a lack of interest in the apprenticeships, and an insufficient supply of apprentices.

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 (28%), and the cost of external training (23%).

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 over half of companies), or it is perceived to be too expensive (26%). Where businesses do use external training, the majority never access funding (69%) for upskilling.

Education

- Most companies in the sector (83%) do not pay the apprenticeship levy.
- Most companies in the sector (92%) 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 two in five employers (40%). A degree is believed to be not important for harvest manager, irrigation installer/operator (both 81%), irrigation/fertigation manager (78%), or head grower roles (67%).

Future drivers

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