



Edible Horticulture Skills 2020

Sub-Sector Report: Mushrooms

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.

The research presented in this dedicated sub-sector report is based on the responses of mushroom growing businesses during the course of the sector-wide Edible Horticulture Skills Survey 2020 which achieved total responses from 556 businesses.

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.

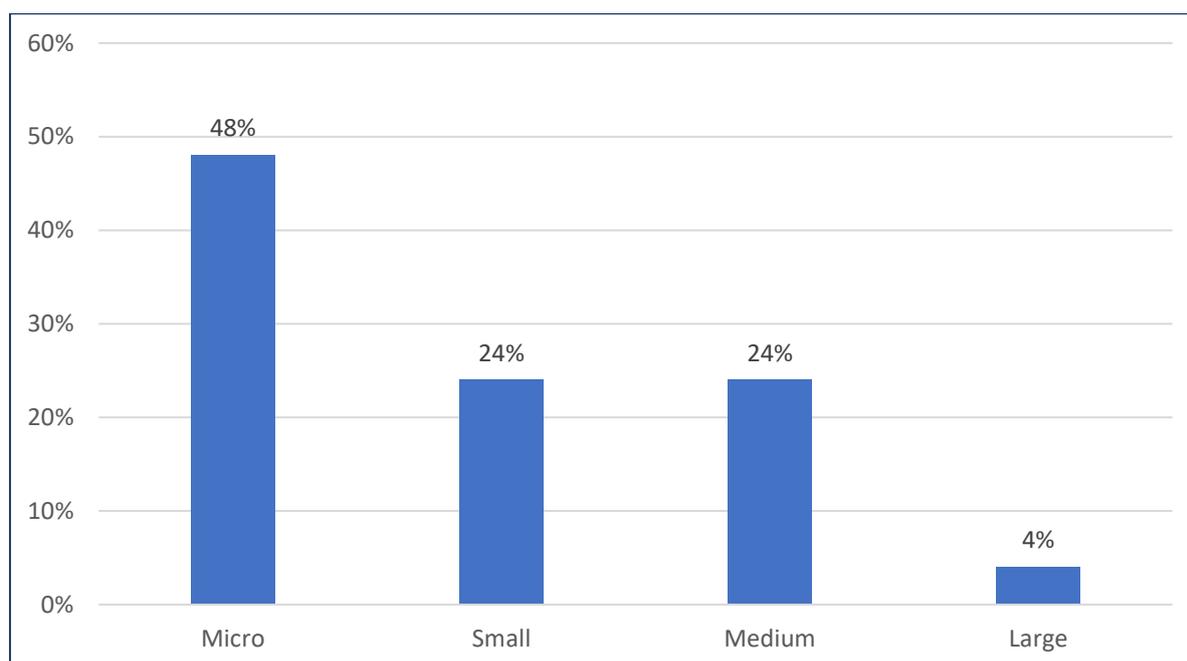
1.1 Response profile

Of the 556 businesses completing the main Edible Horticulture skills survey, 25 companies work primarily in the mushrooms sector (encompassing the range of common mushroom products but also including various exotic species). Of these, 5 firms (20%) undertake packhouse activities as a secondary activity. These 25 companies employ a total of 1,222 staff; equating to an average of 49 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 47 mushroom growers and 9 packhouses which handle mushrooms.

Of the 25 companies,¹ most (72%) 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 (24%) are medium-sized businesses (50-249 employees) and a minority (4%) are large businesses (250+ employees).

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

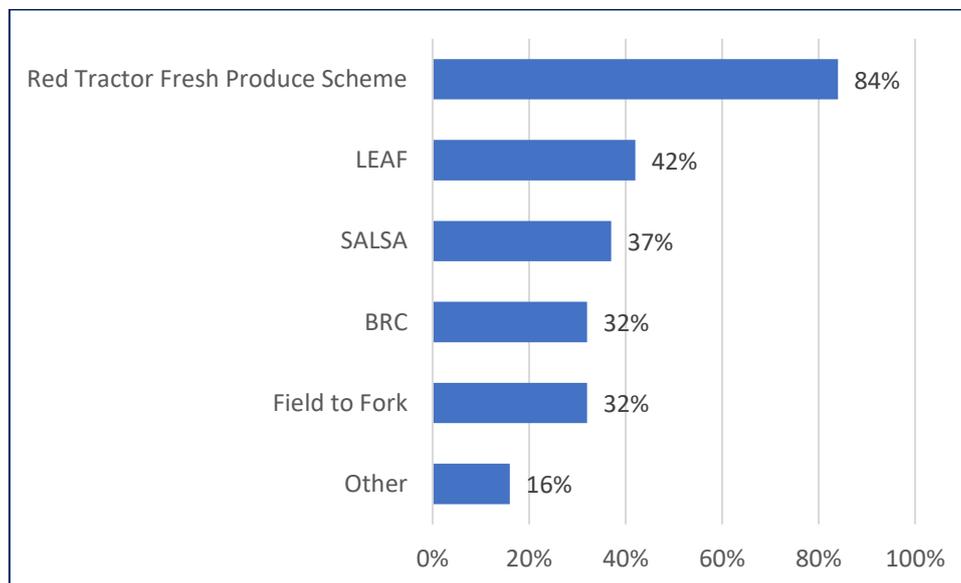


Base: 25 respondents, single choice question. Source: Pye Tait Consulting 2020.

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: Mushroom growers' affiliation to accreditation schemes



Base: 46 responses. Source: Pye Tait Consulting 2020.

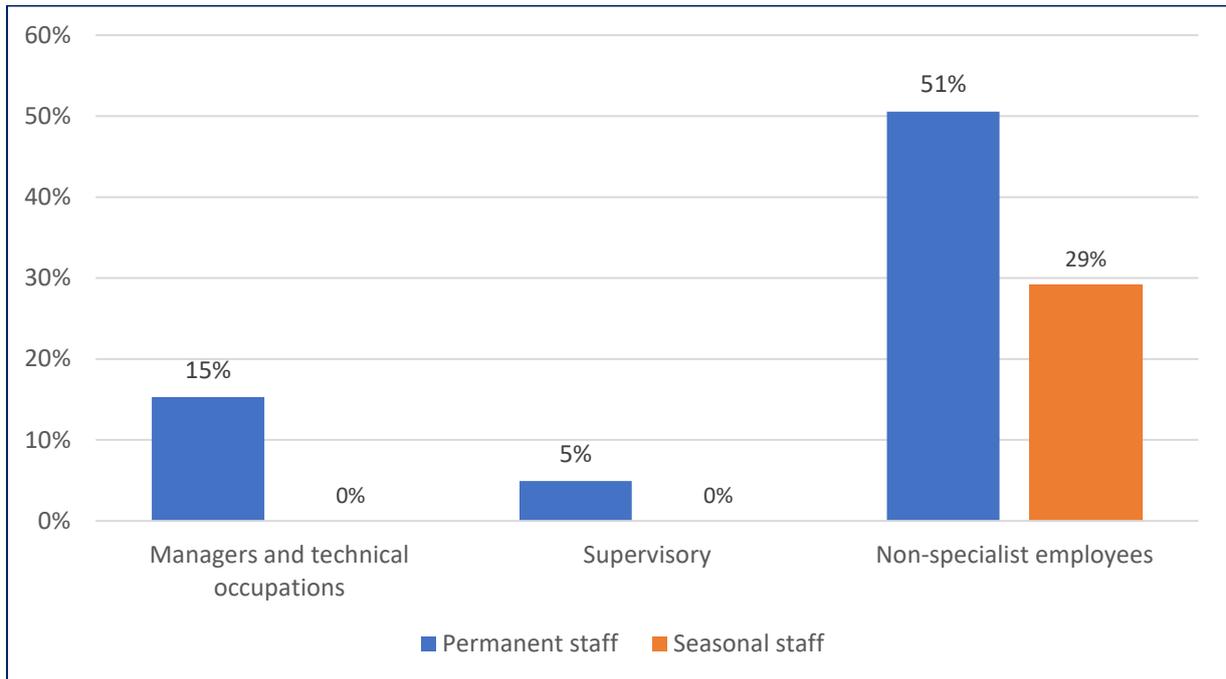
2. Workforce

2.1 Workforce overview

Of all staff employed, four in five are non-specialist employees (80%) across both permanent and seasonal staff categories. '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.

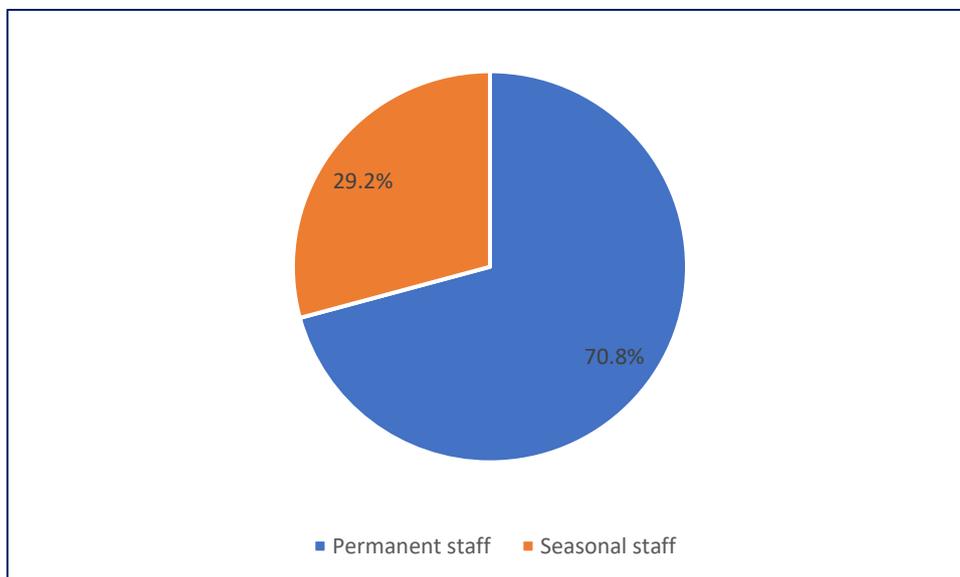
Managerial/technical occupations and supervisory staff holding permanent positions account for 20% of the sub-sector workforce.

Figure 3: Working modes (% of all staff)



Base: 25 respondents. Source: Pye Tait Consulting 2020.

Figure 4: Proportion permanent and seasonal staff



Base: 25 respondents. Source: Pye Tait Consulting 2020.

2.2 Workforce residency, ethnicity, gender, age

Residency

Of the sub-sector's permanent employees, 45% are UK citizens, 55% are EU citizens (non-UK).

Nationality/Ethnicity

In terms of ethnic origin, the workforce is predominantly of other white (57%) backgrounds, or of British origin (43%). These figures include seasonal workers. Of those from outside the UK, most are from Poland (38%), Bulgaria (22%), Latvia (18%) or Romania (16%).

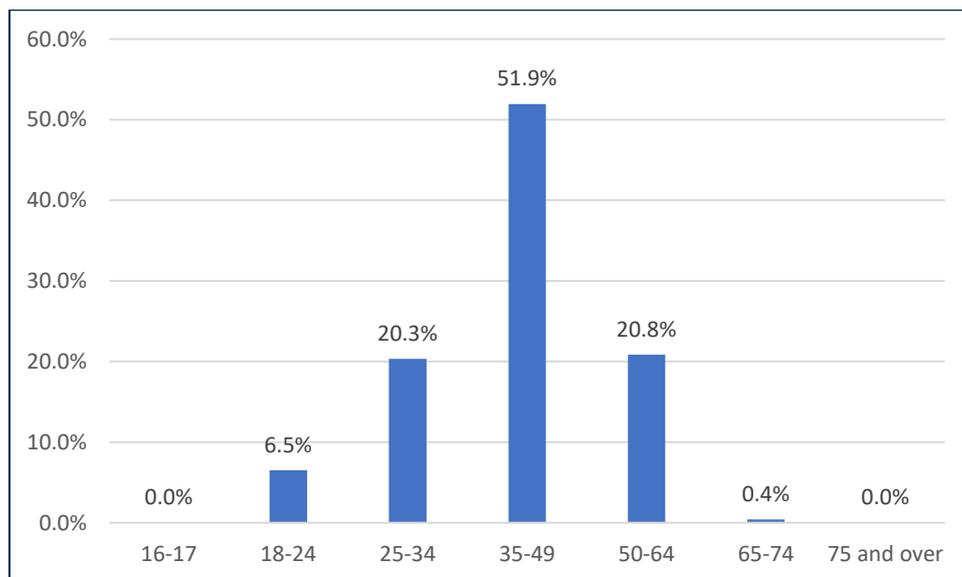
Gender

The sector's permanent workforce is 65% male and 35% female.

Age

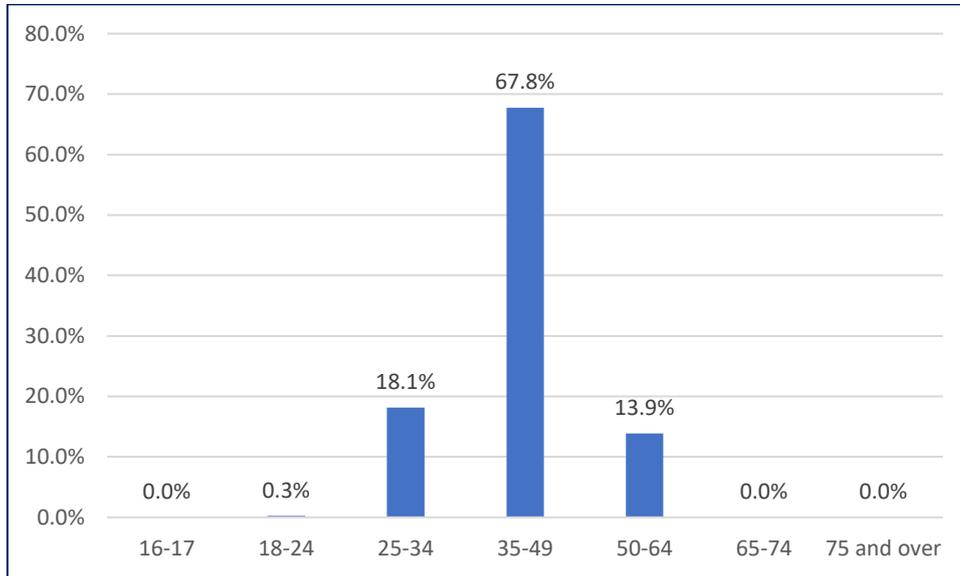
The figures below shows the workforce age profile of permanent and seasonal workers in the sector. The average age of permanent staff is 41.3, and the average age of seasonal staff is 41.7, compared to the UK national average of 41.5 years.

Figure 5: Workforce age profile – Permanent staff



Base: 25 respondents. Source: Pye Tait Consulting 2020.

Figure 6: Workforce age profile - Seasonal staff



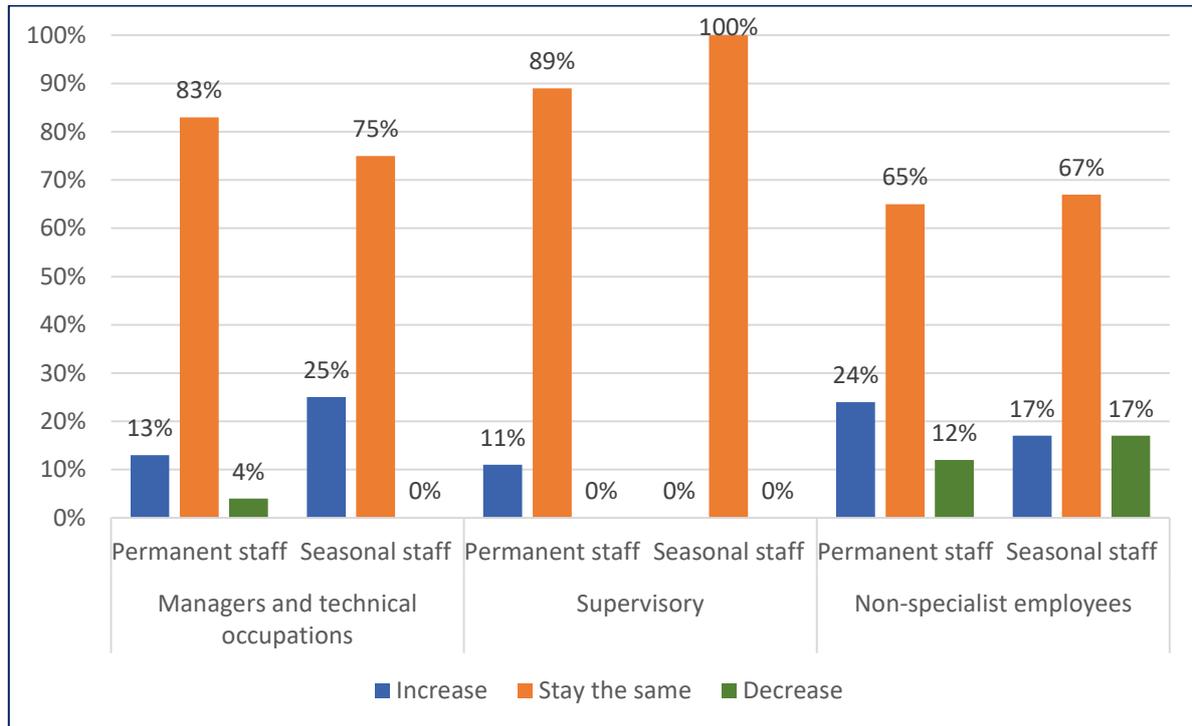
Base: 25 respondents. Source: Pye Tait Consulting 2020.

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 managerial/technical staff, and for non-specialist permanent staff.

The largest proportions of employers saying that they expected a decrease in staff numbers were for non-specialist staff.

Figure 7: Anticipated change in demand for roles



Base: 50 (permanent) and 19 (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 very slight leaning towards predicted increases in staff (over a decrease) is an indication that (at least prior to the Covid-19 crisis) the sector is growing or sees potential for growth.

3. Labour and skills challenge

3.1 Vacancies

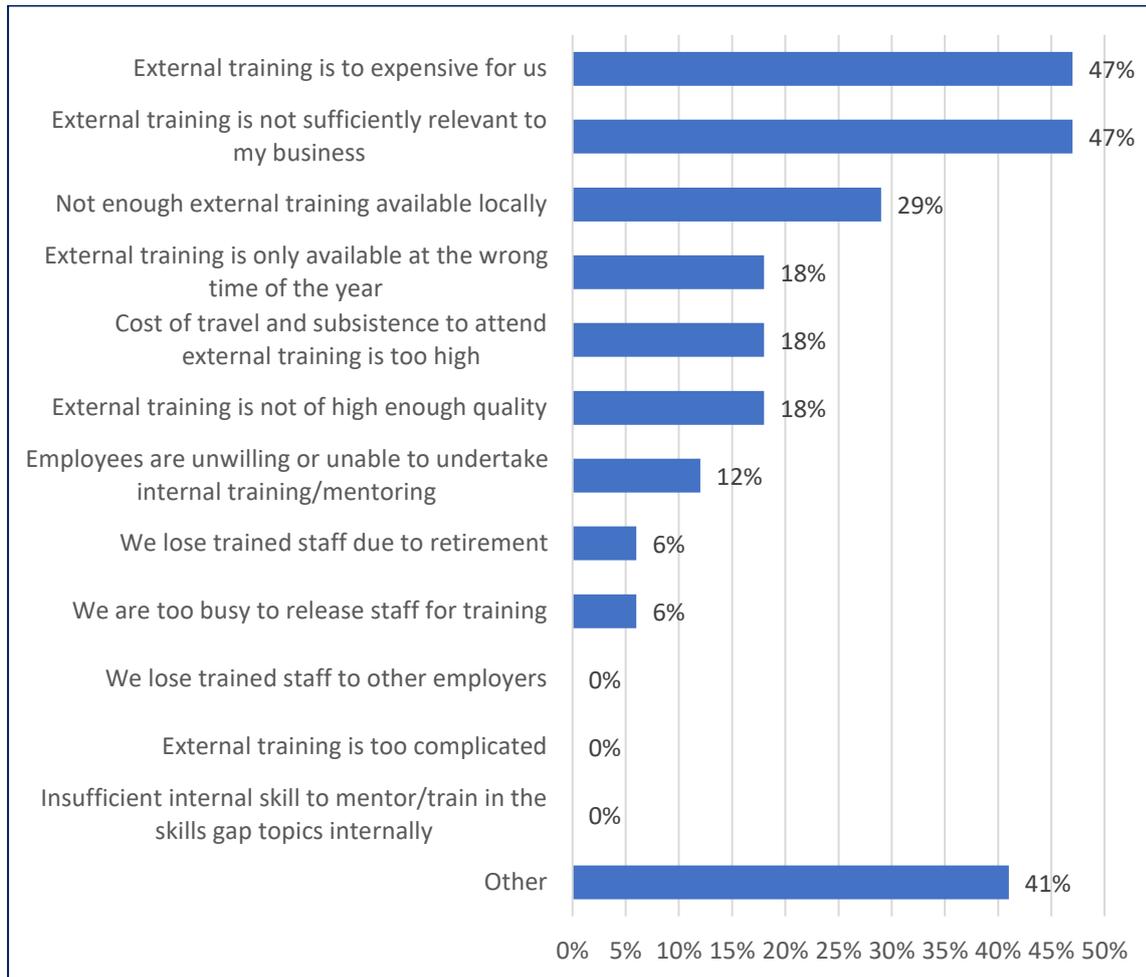
Respondents were asked how many vacancies they had had over the past year. Businesses report an average of three managerial and three supervisory vacancies on average per company, although only a third report managerial vacancies, and only three businesses report supervisory vacancies. In addition, three companies (around one in eight) reported vacancies for seasonal workers over the past year, with each of these companies reporting an average of nine seasonal vacancies.

Companies were also asked if any vacancies had been particularly difficult to fill. Of the eight companies who had experienced difficulties in recruitment, seven noted that managerial positions were hard to fill, four noted that supervisory positions were difficult to fill, and five 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 the most common being that external training is too expensive (47%), or is not sufficiently relevant to the business (47%). A lack of training available locally was also mentioned by 29% of the respondents.

Figure 8: Reasons for skills gaps



Base: 17 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

‘Other’ reasons provided included:

Candidates lacking experience and sufficient specialisation and one business claiming to be new in the sector and therefore still adjusting to supplier needs.

3.3 Skills scoring

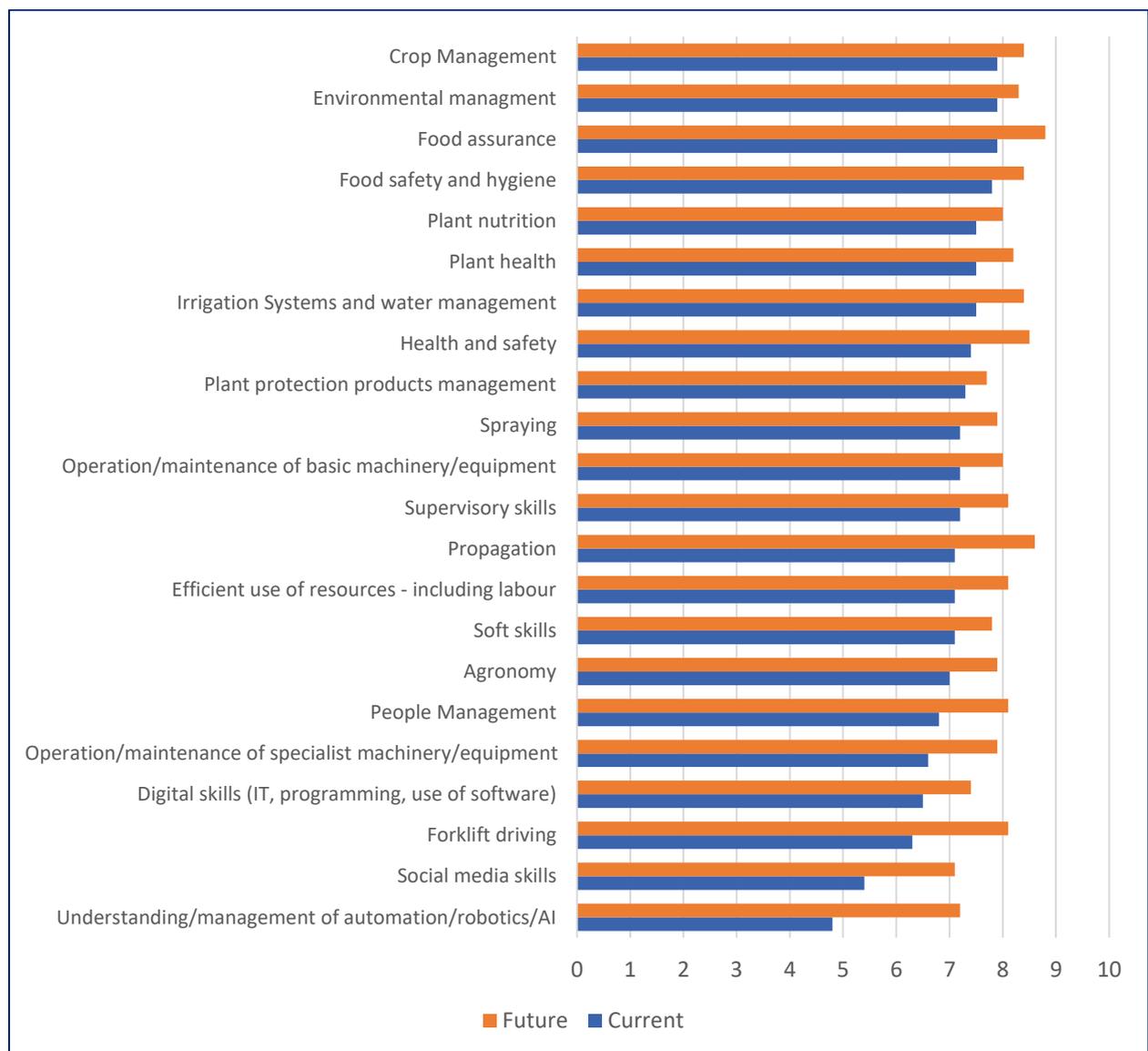
As a key component of the skills survey, respondents from all sub-sectors were asked to score the current level of skills for two job-role groups (managers, technical or specialist occupations, and seasonal and/or agency workers) on a scale from 1-10 – where one is the lowest score and ten the highest.

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, each soft and technical skill is set to increase in importance, sometimes significantly.

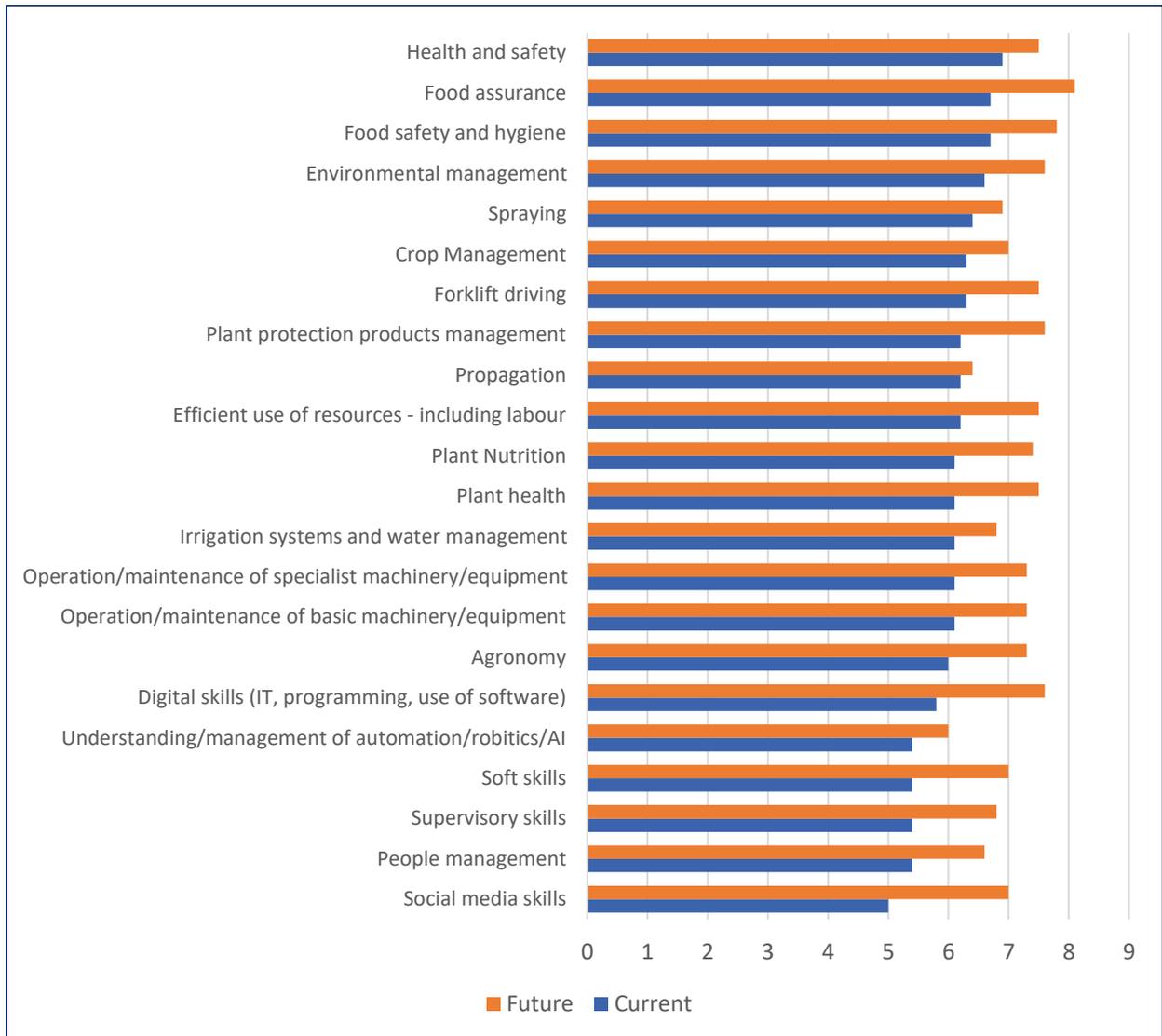
The scoring of the current importance of skills and predictions of future importance were entirely based on employers' perceptions of both.

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



Base: 14 to 23 respondents. Source: Pye Tait Consulting 2020.

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



Base: 3 to 8 respondents. Source: Pye Tait Consulting 2020.

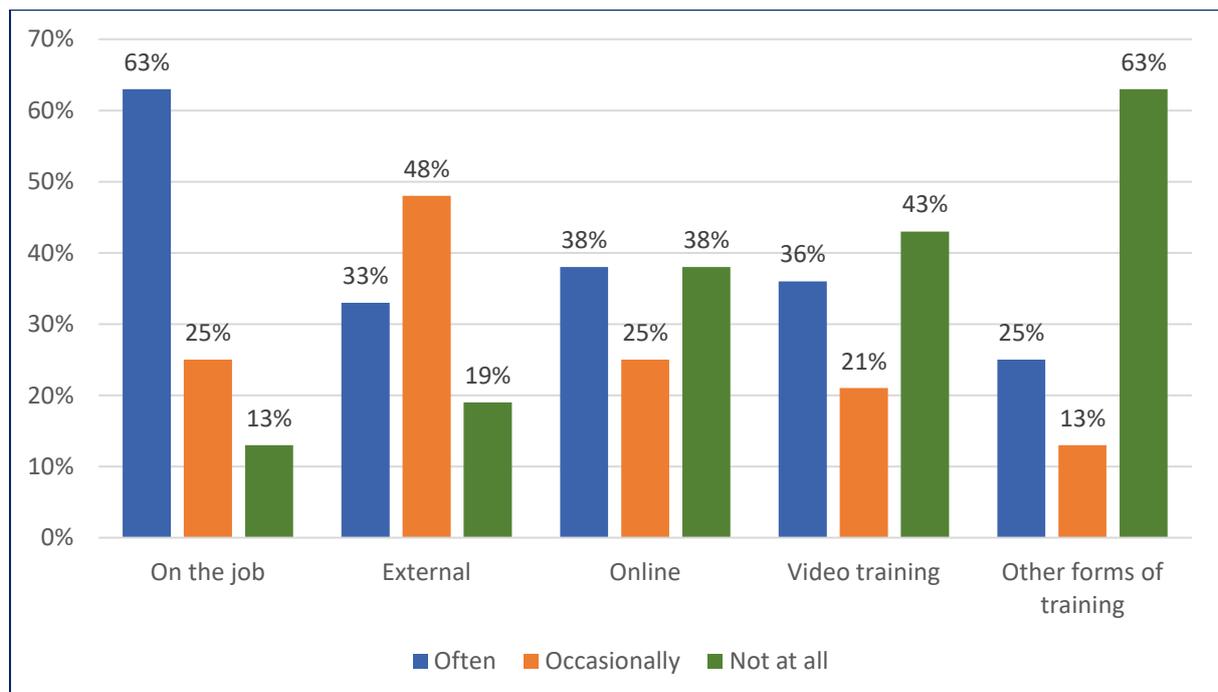
4. Workforce training, education, and staff development

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 around two thirds (63%) 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 a third of companies state that they never use online (38%) or video training (43%) for permanent staff.

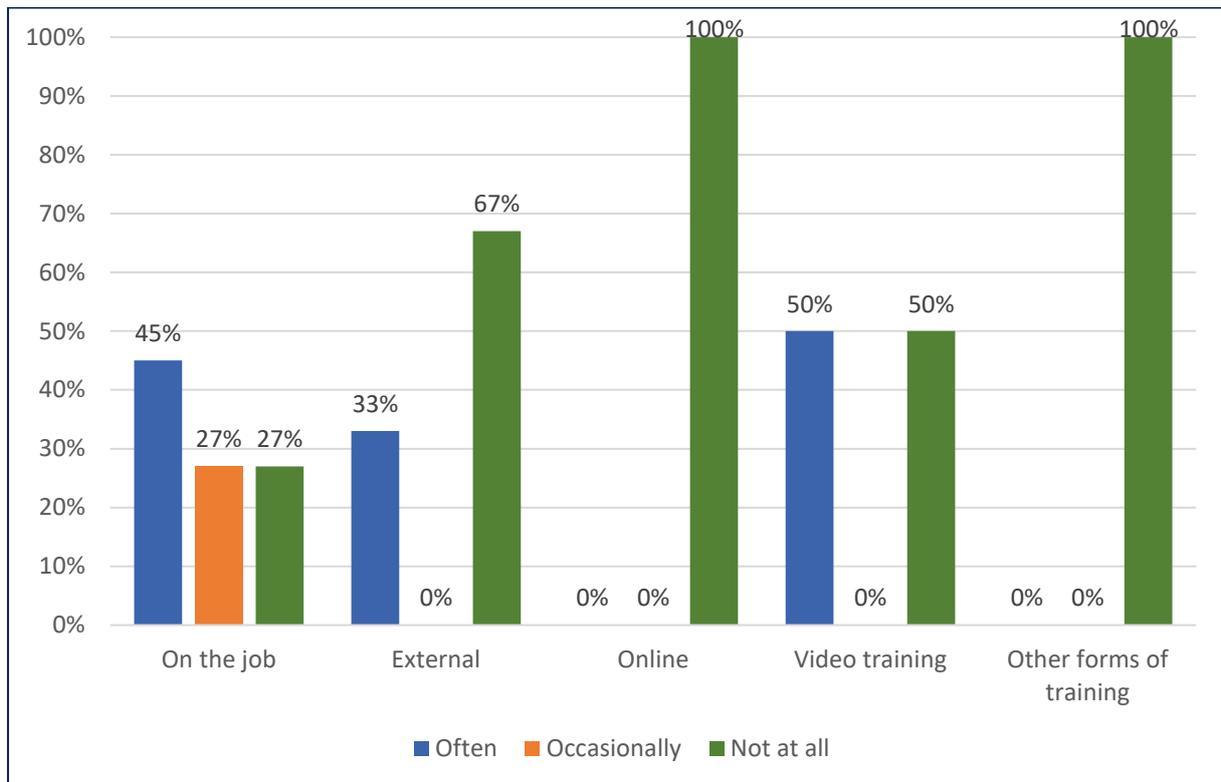
Figure 11: Types of training undertaken (permanent staff)



Base: 8 to 24 respondents. Source: Pye Tait Consulting 2020.

For seasonal staff, most responding companies use in-house training often or occasionally (73%). Alternative forms of training are less commonly used, with at least two in three companies stating they never use external training, or online training for seasonal staff.

Figure 12: Types of training undertaken (seasonal staff)



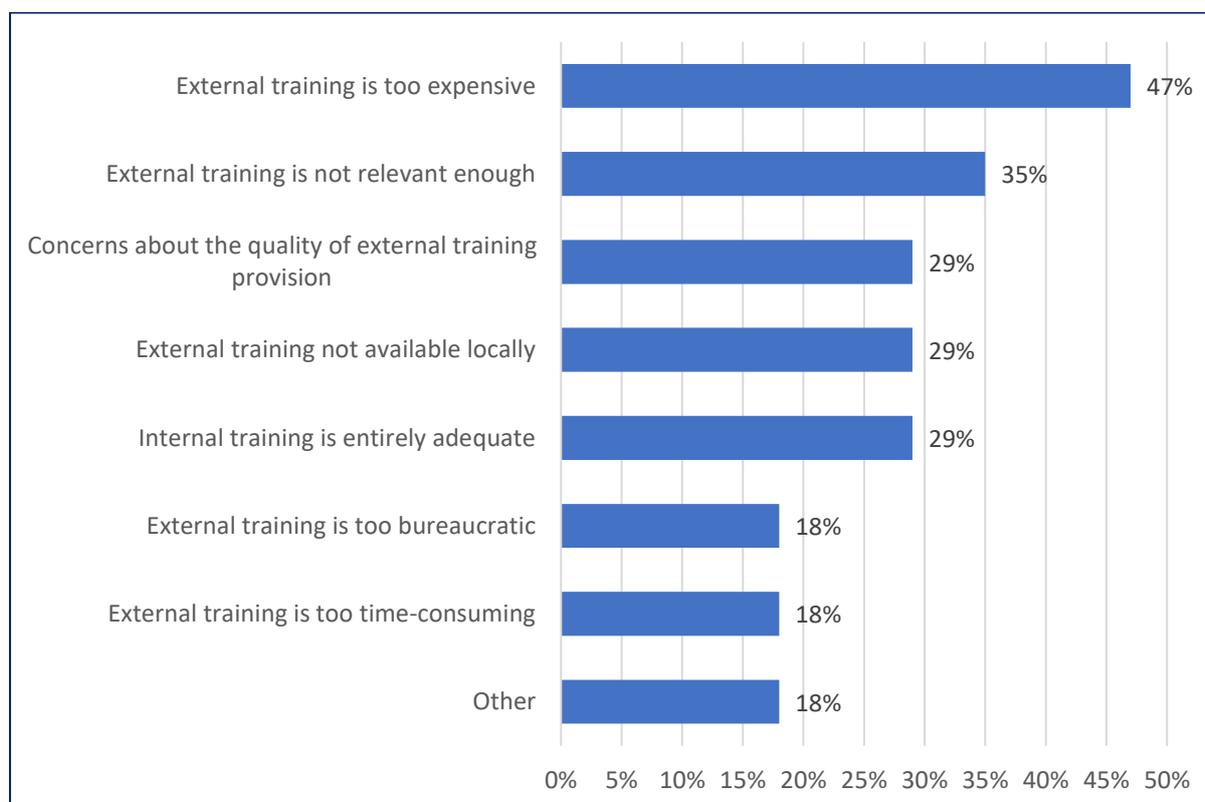
Base: 2 to 11 respondents. Source: Pye Tait Consulting 2020.

Around a third of employers (32%) in the sector told us that some of their staff are qualified as trainers. This means that there are on average 2.4 trainers per each of these companies. No companies told us they had any staff qualified either as verifiers or assessors.

Businesses were asked their reasons for choosing not to use any external training available to them. Almost half of responding firms comment that external training to be too costly (47%), while around a third believe external training is not relevant enough to their business (35%).

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 (88%) 'never' access such funding, while 4% do so 'sometimes' and the remaining 8% are unsure in this regard.

Figure 13: Reasons for not using external training



Base: 17 respondents, multiple options could be selected. Source: Pye Tait Consulting 2020.

4.2 Apprentices

Apprentices and trainees constitute a small part of the workforce. Around one in six companies (16%) reports having apprentices or trainees, with no company reporting more than two at their business. Overall, apprentices/trainees represent 0.3% of the total employment in the mushrooms sub-sector.

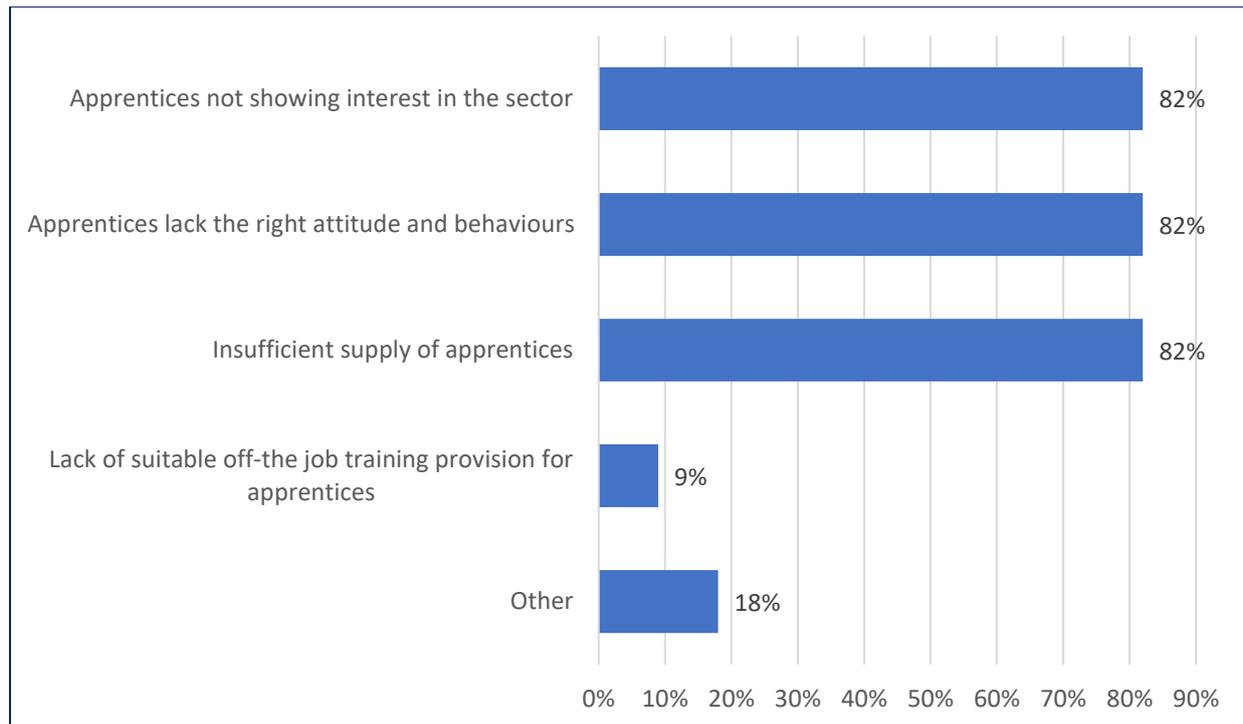
Companies were asked about the number of apprentices they had taken on, and expected to take on, each year in the period 2018-2022. Around a fifth of companies told us they would take on apprentices in any given year, with each of these companies taking on average of between 0.6 and 1.2 apprentices each year.

Table 1: Apprenticeship starts per year

	No. of responding companies	Total apprentices	Average
2018	5	3	0.6
2019	5	3	0.6
2020	6	7	1.2
2021	7	4	0.6
2022	5	6	1.2

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 over four in five respondents (82%) are that apprentices are not showing an interest in the sector, that there is an insufficient supply of apprentices, or that apprentices lack the right attitude and behaviours.

Figure 14: Barriers to recruiting apprentices



Base: 11 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 (96%) do not pay the apprenticeship levy.

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.

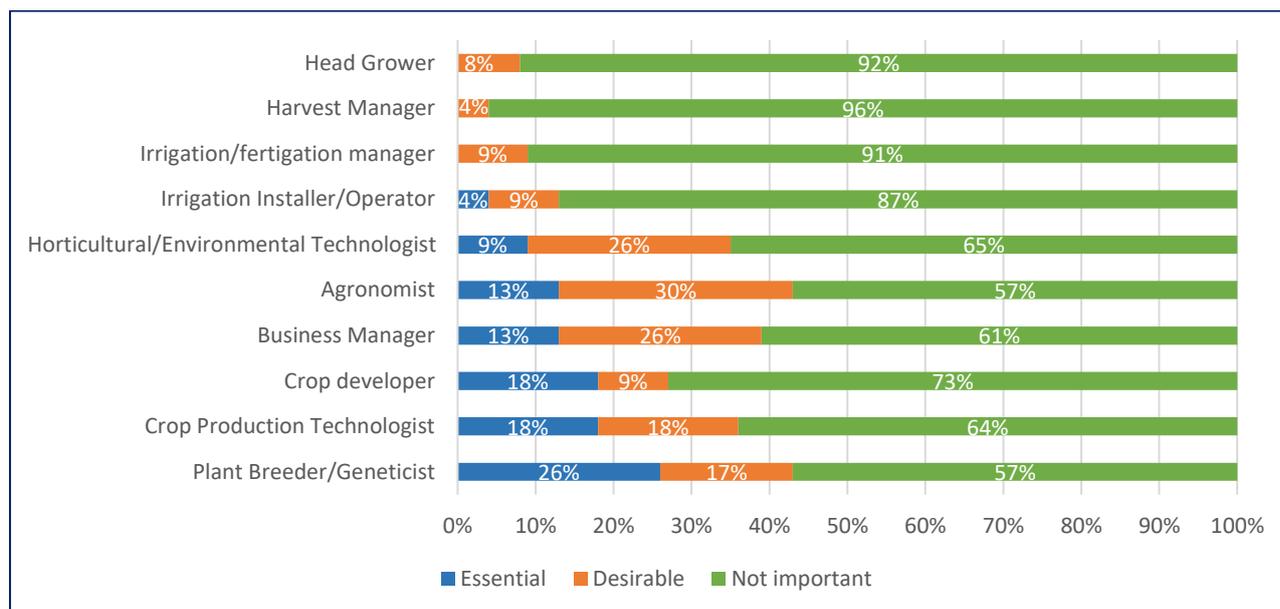
The vast majority of companies in the sector (88%) are unaware of this T Level qualification.

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.

A third of responding companies believe that it is ‘essential’ for soil scientists to be qualified to this level (35%). At least half of businesses believe it is ‘not important’ to hold a degree level (or equivalent) qualification for any given role.

Figure 15: Perceptions about occupations requiring degree level skills/knowledge²



Base: 22 to 25 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

² No respondents perceived degree level skills as essential for Head Grower, Harvest Manager and Irrigation/fertigation manager

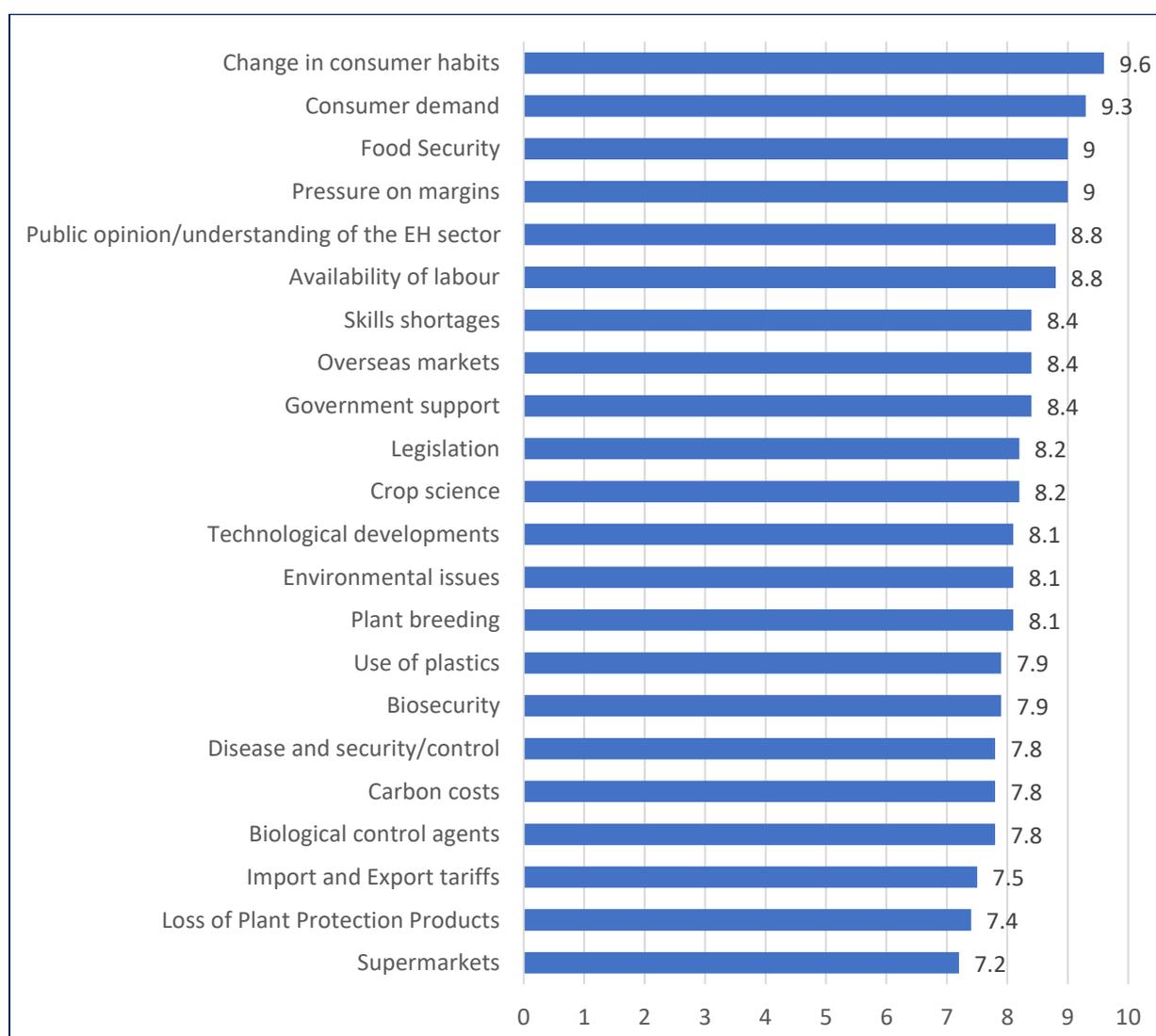
may be less relevant for the Mushroom and Protected Edibles sectors and this role may be known as “crop nutritionist” in other sectors.

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 change in consumer habits (9.6), and consumer demand (9.3). Food security and pressure on margins were also both rated highly (9.0).

Figure 16: Drivers of change



Base: 17 to 24 respondents. Source: Pye Tait Consulting 2020.

6. Summary

Workforce demographics

- The sector is largely made up of micro and small businesses (72%).
- Most workers in the sector (80%) are non-specialist employees, either permanent or seasonal. The average age of permanent workers in the sector is 41.3 compared to 41.7 for seasonal workers.
- Most workers are of 'other white' ethnic background, with most of these workers predominantly from Poland, Bulgaria, Latvia 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.
- Around a fifth of companies take on apprentices/trainees in any given year. Companies with apprentices/trainees have no more than two such staff and take on between 0.6 and 1.2 per year. Apprentices/trainees comprise 0.3% of the sector workforce. The most commonly mentioned barriers to recruiting apprentices, by 82% of businesses, are apprentices not showing an interest in the sector, that there is an insufficient supply of apprentices, or that apprentices lack the right attitude and behaviours.

Skills

- Skills scoring reveals that each soft or technical skill is set to increase in importance in the future, sometimes significantly.
- Skills gaps in the workforce are believed to exist for a variety of factors. Most commonly mentioned was the cost of external training, and that external training is not relevant to the business (both by 47%).

Training

- On-the-job training is the most popular method of training both permanent and seasonal staff. Businesses not using external training do so as it is perceived to be too expensive (47%) or not relevant to the business (35%). Where businesses do use external training for upskilling, the majority never access funding (88%).

Education

- Most companies in the sector (96%) do not pay the apprenticeship levy.
- Most companies in the sector (88%) are unaware of the T Level qualification being introduced by 2023.
- Degree level qualifications or higher (level 6+) are believed to be not important for any given role by at least half of all respondents. Around one in three (35%) perceives a level 6 qualification to be 'essential' for soil scientists.

Future drivers

- Businesses in the sector foresee that the most important drivers of change in the future are changes in consumer habit, and consumer demand.