

Effective leadership, management and development of people working in agriculture and agri-food: supporting new entrants from non-agricultural backgrounds

**The Farmers Club Charitable Trust
Agricultural Educator Awards 2021**

A review of the experiences of new entrants from non-agricultural backgrounds working in agriculture and agri-food, focusing on leadership, management and employee development. This report evaluates and establishes effective practice, in order to support sustainable staffing and retention in agriculture and agri-food.

Claire Toogood, Harper Adams University



Acknowledgements

Many thanks to The Farmers Club Charitable Trust for funding this work. Further thanks to all those who participated through responding to the survey, or by kindly giving me the benefit of their time and their experiences, as an interviewee. And finally, thanks to my colleagues and my family for their support as I completed this project.

Funded by: The Farmers Club Charitable Trust Agricultural Educator Award (2021).

Author: Claire Toogood ctoogood@harper-adams.ac.uk

Publication date: February 2023

Executive Summary

This research project focused on reviewing and building understanding of the experiences of new entrants from non-agricultural backgrounds working in agriculture and agri-food. It specifically considered how new entrants to agriculture and agri-food experienced leadership, management and employee development. The project evaluated practice in this area, and established effective approaches, in order to support sustainable staffing and retention in agriculture and agri-food.

Research and data on the existing agricultural and agri-food workforce and best practice in leadership, management and employee development was reviewed, and used to inform the research design. A survey was completed to collect data from a broad group of individuals from non-agricultural backgrounds, who either currently worked, have worked, or intended to work, in agriculture and agri-food. The survey data was assessed for statistically significant outcomes. It was demonstrated that managers who did not align their approach to their employee's experience and readiness reduced employee perception of how positively their manager affected their performance in their job. Length of induction and frequency of inclusion in team meetings and discussions also had significant impact on new entrants from non-agricultural backgrounds, in relation to professional development and performance in role.

A series of ten detailed individual interviews were completed to add depth and capture individual journeys and perspectives of new entrants from diverse non-agricultural backgrounds. It was found that those interviewed benefited from individualised approaches from managers, mentors and colleagues. Safe and supportive workplace environments and relationships were crucial to their experience and engagement. It was recognised that managers particularly needed to support informal communication, welcome questions, value and develop workplace learning, development and training, and provide mentoring. The research also identified that managers in agriculture and agri-food would benefit from further development and training to effectively support new entrants, and that throughout agriculture and agri-food there is a continued need to dispel myths, remove barriers, and build diversity and inclusion.

Alongside the main research project report, a project overview was developed. The project overview includes associated teaching resources and case studies created from six of the individual interviews. The overview was created to broaden the reach of this project, and is freely available to educators and those working in the sector, in order to support learning and teaching activities which will develop the people management and leadership skills of the next generation of agricultural, agri-food and land-based professionals. The teaching resources and case studies are designed to encourage and inspire those from more diverse backgrounds, and also to allow those who come from agricultural backgrounds to gain additional insight into the experiences of others.

The project overview and case studies can be found at:

<https://tfcct.co.uk/read-our-fcct-reports> and <http://harper.ac.uk/FCCTOverview>

Contents

Acknowledgements.....	1
Executive Summary.....	2
1 Introduction	5
2 The agricultural and agri-food workforce	6
2.1 Current agricultural and agri-food workforce.....	6
2.2 Existing opportunities and support for new entrants to agriculture and agri-food	8
2.3 Potential barriers to entry	11
3 Leadership, management and employee development.....	15
3.1 Leadership and management skills in UK businesses	15
3.2 Leadership and management skills in agriculture and agri-food.....	15
3.3 Leadership and management training and resources in agriculture and agri-food	16
3.4 Leadership and management principles.....	17
3.5 Evidence-based practice on employee support and development	19
4 Project aims and objectives	22
5 Project approach and design	23
5.1 Research philosophy	23
5.2 Research methods and design	23
5.3 Further design considerations	23
5.4 Research design challenges and changes	24
6 Survey findings.....	25
6.1 Survey respondents	25
6.2 Respondent perceptions of non-agricultural background.....	26
6.3 Career changers	27
6.4 What influenced the choice of a career in agriculture or agri-food	27
6.5 Source of first job in agriculture or agri-food	28
6.6 Education, training and support	28
6.7 Experiences in first role in agriculture or agri-food	29
7 Interview findings	35
7.1 Interview approach	35
7.2 Location of interviewees.....	36
7.3 Interview questions	36
7.4 Summary of themes emerging from interviews	36
8 Discussion.....	38
8.1 Initial interest in agriculture or agri-food	38
8.2 Impact of management and leadership.....	38

8.3	Impact of mentors	38
8.4	Workplace communication.....	39
8.5	Learning and development	40
8.6	Belonging, inclusion and diversity	41
8.7	Access and advancement.....	43
9	Conclusion and Recommendations.....	45
9.1	Provide individualised management and development for new entrants	45
9.2	Lead the creation of safe and supportive workplace environments and relationships	45
9.3	Develop managers in agriculture and agri-food to support new entrants.....	46
9.4	Welcome new entrants: dispel myths, remove barriers, build diversity and inclusion	47
10	References	48
11	Appendix A – Interview questions	56
12	Appendix B - Statistical analysis of survey responses.....	57
12.1	Manager’s leadership style	57
12.2	Induction	58
12.3	Team meetings.....	58
13	Appendix C – Original Project Plan Proposal	60

List of Tables

Table 1:	Calculation of thematic saturation.....	24
Table 2:	Profile of survey respondents	25
Table 3:	Profile of interviewees	35
Table 4:	Themes from interviews	37
Table 5:	Mean scores - manager and employee alignment.....	58

List of Figures

Figure 1:	Food: A Fact of Life – promotional materials.....	10
Figure 2:	Business & leadership courses for farmers and growers.....	16
Figure 3:	Research design	23
Figure 4:	Respondent perceptions of non-agricultural background.....	26
Figure 5:	Thematic analysis of reasons for being "non-agricultural".....	26
Figure 6:	Influencing factors for choice of a career in agriculture and/or agri-food	28
Figure 7:	Study locations cited by survey respondents	29
Figure 8:	Sector of first role in agriculture or agri-food.....	30
Figure 9:	Support received from employer.....	31
Figure 10:	Inclusion in team meetings and discussions.....	31
Figure 11:	Value of support to respondent and their professional development.....	32
Figure 12:	Impact of support to respondent and their performance in their job	32
Figure 13:	Location of interviewees.....	36

1 Introduction

As Nye and Lobley (2021) highlighted in their timely report on Farm Labour in the UK “The issue of worker and skills shortages in farming requires addressing urgently” (p.iii). People issues within agriculture are widely reported, with shortages of seasonal and skilled workers causing concern. The National Farmers Union (NFU, 2020), the Food and Drink Sector Council (FDSC, 2019), and the Association of Labour Providers (ALP, 2022) have called for this to be a government priority. Existing studies also call for further research within agriculture and agri-food (Nye and Lobley, 2021; Barbulescu and Vargas-Silva, 2020; Hasnain, Ingram and Zurek, 2020; Heasman and Morley, 2016). The House of Commons Environment, Food and Rural Affairs Committee acknowledged the scale of the issue, noting issues across the sector and key “pinch points” in crop picking and harvesting, meat production and processing, poultry, and food processing (2022). There is a recognised need to expand the pool of individuals with the desire, drive and ambition to enter the sector, and work is underway through projects such as the Defra New Entrant Support Scheme pilot (Defra, 2022) and Opening the Gate workshops from the Princes Countryside Fund and Aldi (PCF, 2022). Building on this, establishing resilient agricultural and agri-food employment practices for the future will be key considerations in ensuring future food security, a concern recognised by the ALP (2022) who highlighted “once these workers are recruited, they must be retained (2022, p.12). Rubenstein et al’s (2017) meta-analysis noted that leadership development could positively impact employee retention; effective leadership and management have a key role to play in supporting the sector through these challenges. However, at present, leadership and management development in agriculture and agri-food is limited (Swadling, 2018; FDSC, 2019; Nye, Wilkinson and Lobley, 2023).

The early 2020s saw unprecedented people management challenges, further exacerbating worker and skills shortages in agriculture and agri-food. The unexpected challenge of the pandemic highlighted both the importance of the people who work within the sector, and the need for further research to support effective practice. The after effects of Brexit continued to be felt across agricultural workplaces and communities; securing the right employees, and diversifying employment within the sector, is vital to the future security of the nation’s agricultural work and food production. The agricultural and agri-food industry is in a period of change, and this is potentially an exciting time for new entrants, but the sector needs to ensure these individuals are supported effectively.

This report will consider how to successfully support diversification of employment within the sector, by focusing on leadership, management and people development practices. It will review the experience of individuals who have pursued an agricultural career from a non-agricultural background, considering their routes into agriculture or agri-food, and what collective lessons can be learned from their educational and employment journeys so far. It will reflect on their experiences from a people perspective, to establish best practice for staff-related processes, such as recruitment, training and development, and day to day management, in the agricultural and agri-food workplace, for workers from a previously non-agricultural background. Both agriculture and agri-food will be considered throughout this project because many of the challenges and barriers discussed affect both the wider agri-food sector, and the smaller agricultural workforce. Furthermore, those from non-agricultural backgrounds may explore opportunities in both agriculture and agri-food whilst establishing their career; a broader focus will allow wider learning, understanding and sharing of best practice.

2 The agricultural and agri-food workforce

To establish the context and background of this work, a literature review has been completed. This considers the nature of current agricultural and agri-food workforces, and reviews challenges in these workforces, at the national level. Existing routes in agricultural and agri-food employment are reviewed, and potential barriers to entry discussed. Although limited, existing studies on those from non-agricultural backgrounds who move into employment in agriculture and agri-food are discussed.

When appearing in UK government statistics and reports, the term “Agri-food” includes agriculture, food manufacturing, food wholesaling, food retailing and food non-residential catering (Defra, 2022a). Christiansen, Rutledge and Taylor helpfully described the agri-food sector through its relationship to agriculture; agri-food encompasses agriculture itself along with “related up- and down-stream activities in input supply, food logistics, food processing, retail, and food services” (2020, p.1).

2.1 Current agricultural and agri-food workforce

2.1.1 Scale of agricultural and agri-food employment

Christiansen, Rutledge and Taylor noted that “As countries develop [...], agriculture’s role as domestic employer declines. But the broader agri-food system also expands, and the scope for agriculture-related job creation shifts beyond the farm.”. In 2021, 4 million UK jobs were attributed to the wider agri-food industry, which equates to just over 13% of all workforce employment in the UK (Defra, 2022a). Within this, the agricultural workforce numbered 467,000 individuals in 2021 (McKinney, Coe and Stewart, 2022).

Naturally, there are regional variations. The agricultural labour employed in Scotland, Wales and Northern Ireland is greater than England, in proportion, as a share of the whole population (Devlin, 2016). This reflects the greater relative importance of agriculture to those national economies. Similarly, in rural areas across the UK, agriculture is proportionately more significant to employment, both directly on farms and indirectly through supply chains (Development Economics, 2017).

2.1.2 Shortage areas

The NFU (2020) have called for shortages across agriculture and related work to be a government priority, and existing studies have called for further research (Hasnain, Ingram and Zurek, 2020; Nye and Lobley, 2021). In 2022, the House of Commons Environment, Food and Rural Affairs (EFRA) Committee highlighted that the shortages in the sector create concerns about the viability of UK food and farming in the longer term, as well as fears for the mental health and wellbeing of those currently working in the sector (2022). Almost half (49%) of UK food growers and manufacturers have rationalised or reduced their output due to labour shortages (ALP, 2022).

Demand for skilled agricultural workers was forecast to increase between 2015 and 2025 (Devlin, 2016). Shortages in meeting this demand have been noted across agriculture and agri-food (Development Economics, 2017; Nye and Lobley, 2021; Grant Thornton, 2021) and beyond broad shortages, specific challenge areas are coming to light, such as crop picking and harvesting, meat production and processing, poultry, and food processing (EFRA Committee, 2022) and agritech (Edge Foundation, 2021). Although demand for unskilled agricultural labour was previously set to fall over the same period (Devlin, 2016), Brexit and Covid-19 altered this outlook. In 2023, farmers did not foresee any reduction in their labour requirements over the coming five years (Nye, Wilkinson and Lobley).

2.1.3 National employment challenges in agriculture and agri-food

Nye and Lobley (2021) divided the challenges relating to securing the necessary agricultural workforce, into farm, local and national level issues. This project largely focuses on national level issues, however there are naturally trickle-down effects to both local and business level.

2.1.3.1 Recruitment

A 2022 survey of 10,000 working age people in the UK found only 22% would consider working in food production, agriculture or animal care (City and Guilds, 2022). A McDonalds UK and Ireland report (Ashworth, 2022) found that 60% of young people did not see farming as a viable career choice. Reasons for this included concern that they would not have job satisfaction, a lack of relatable role models, concern that they do not have the required skills, and negative perceptions about the industry. These factors are explored further in Potential barriers to entry (Section 2.3).

2.1.3.2 Brexit

The Defra Farm Structure Survey (2016) noted that between 2013 and 2016, the proportion of the workforce accounted for by non-family members decreased. It is unclear whether this is a trend, and potentially showed the initial impact of Brexit. The NFU reported a shortfall of over 1500 workers in May 2017, and an impact on quality of work due to a fall in seasonal staff returning (Migration Advisory Committee, 2018). By 2020, the Horticulture Seasonal Worker Survey reported a promising worker response, but this was still insufficient to sustain seasonal industry demands in the longer term (BBC, 2020). It has also been noted that vacancies took longer to fill (Nye and Lobley, 2021). The same concerns have been reported across the food industry, which has a systemic reliance on EU migrant workers (Heasman and Morley, 2016).

2.1.3.3 Covid-19

Phillipson et al (2020) identified that the impact of Covid-19 on agriculture and agri-food is variable. The designation of work as “essential” allowed businesses to continue to function, and even flourish where products and services aligned with customer need during the pandemic e.g. home delivery services. However, businesses dependent on seasonal/migrant labour or seasonal sales, such as fruit and vegetable production and horticulture, may have been more severely affected by the travel restrictions imposed (OECD, 2020), particularly given the Brexit changes previously described. Certain diversified agricultural and agri-food businesses e.g. agri-tourism and visitor attractions, may have also found themselves much more severely affected (ONS, 2021). Phillipson et al (2020) also noted divisions and “othering” between rural communities and visitors, which may have had an impact on how rural lifestyles and work are perceived.

2.1.3.4 Retention and ageing workforce

In 2022, City and Guilds found that 24% of employees in food production, agriculture and animal care were planning to leave their job within the next year. The ALP noted that worker retention must be a food production sector priority, to avoid the sector shrinking (2022). However, agriculture has an ageing workforce. Defra’s Farm Structure Survey (2016) showed Farm Holders and Farm Managers in England to be predominantly over retirement age. The average age of a Scottish farmer has risen to 58 (Agriculture and Rural Economy Directorate, 2022b), DAERA (2018) found the average age of a farmer in Northern Ireland to be 59, and in Wales the median age of a farmer was found to be 61, in 2016 (Welsh Government, 2021). However, the scale of this problem is not widely understood, 75% of people either think farmers have a younger average or do not know what the average age might be (The Prince’s Countryside Fund, 2017).

2.2 Existing opportunities and support for new entrants to agriculture and agri-food

This section captures the variety and nature of the activities and programmes offering opportunities and support in relation to employment in agriculture and agri-food, but is not exhaustive.

2.2.1 Work experience

Work experience can be accessed through informal routes i.e. individually approaching farmers or food businesses, or formal routes, such as arranged placements through an educational course or programme. Hybrid options also exist, such as Lantra Scotland's pre-apprenticeship programme, which gives participants experience, and an opportunity to "understand better where they might want to go in their career" (2022), outside of a formal course or programme.

Although work experience can provide an excellent route into agriculture and agri-food, there are difficulties with access, which are considered further in Potential barriers to entry (Section 2.3).

2.2.2 Training leading to practical qualifications

Individuals with an interest in agriculture and related sectors may consider practical training. Practical qualifications such as tractor driving, or health and safety on farm are available from many providers, and accredited by Lantra or City and Guilds. The cost of training can be prohibitive but there are schemes to support individuals with this e.g. Lantra's Women in Agriculture Practical Training Fund in Scotland and Farming Connect funded training in Wales (2019).

2.2.3 Educational qualifications

2.2.3.1 Agriculture

Those seeking a wider qualification can consider a BTEC e.g. Level 3 Diploma or Extended Diploma in Agriculture. Apprenticeships are also available at this level, such as the Level 3 Apprenticeship for Crop Technicians (Reaseheath College, 2022). Progression to study agriculture or a related subject at University can be achieved via a BTEC, or A-level qualifications and securing a place on a FdSc or BSc degree. Some providers also offer access routes, such as University Centre Myerscough's Access to HE Diploma, a year-long programme in Land-Based Science "designed to help students gain knowledge, skills and confidence to study for a degree and act as a stepping stone to a career in the land-based industries" (UC Myerscough, 2021). It is common for further work experience to be built into degree courses, although the length of placement may vary. Degree apprenticeships are also popular, with over 6,000 apprenticeship starts in Agriculture, Horticulture and Animal Care in 2019/20 (Foley, 2021). These options can be studied at a range of UK providers, many of whom are members of the Landex group (Landex, 2022).

2.2.3.2 Agri-food

Education related to food follows a similar structure, with both degree apprenticeship and degree programmes accredited by professional bodies such as the Institute of Food Science and Technology (IFST, 2022). Apprenticeships are available from Level 2 (equivalent to 5 GCSE passes) to level 7 (postgraduate) (Tasty Careers, 2022).

2.2.4 Retraining/Career Changers

Various independent organisations operate to support career changers into agriculture and agri-food. For example, Ruralink offer a Rural Business Career Transition Course which is "...specifically designed for individuals in the military community, who are considering developing a follow-on career in management within the agriculture, food and the wider land-based sector." (RAU, 2022a). In 2022, MDS Ltd launched a Leadership and Management scheme aimed at anyone with leadership and management experience looking to move into the food industry. Educational establishments may also focus on adult learners and career changers e.g. Writtle University College highlights that

their Agricultural, Sustainable Food and Horticulture degree courses are eligible for limited student finance funding (2022). Similarly, Scotland's Rural College offer a "Change your Path" bursary for adult learners (SRUC, 2022).

2.2.5 Focused development and outreach programmes

Focussed outreach programmes exist, targeted at a variety of audiences. For example, Agri Academy in Wales offers a Junior Programme "supporting young people aged between 16 and 19 years who hope to follow a career in the food, farming and forestry industries." (Business Wales, 2022).

Organisations such as the New Futures Network (NFN) work with ex-offenders to help them pursue careers in a range of sectors. Strong partnerships have formed with employers such as Bernard Matthews (working with HMP Norwich) and Redemption Roasters (working with HMP YOI Aylesbury) offering a route into food or agri-food (Ministry of Justice, 2020).

The charitable and education sectors also contribute to agricultural and agri-food outreach. Organisations like Farms for City Children offering residential farm visits to schools (FFCC, 2022), and various education providers offer outreach activities, trips and teaching resources direct to schools.

2.2.6 Support networks for new entrants

Support networks may arise naturally from peer groups formed through a development programme, training or qualification. Further to this a range of support networks exist for new entrants e.g. the Land Workers' Alliance (2022) offer regional groups and also a LGBTQIA+ working group, Out On The Land (OOTL), and a Black and People of Colour (BPOC) working group, Race, Equality and Liberation (REAL). Wider support networks and organisations, such as the FarmWell service offered by The Farming Community Network, are open to anyone in agriculture, providing practical business and farming advice, but also wellbeing support.

2.2.7 Professional development

Employers, training providers, colleges and universities offer a diverse range of professional development for those already employed in the agricultural and agri-food sectors. This includes formal Continuing Professional Development (CPD) activities, courses and qualifications, but also mentoring for both businesses and individuals. For example, Community Supported Agriculture (2022) offer mentoring to start up or existing farm businesses, and in the food sector, The Institute of Grocery Distribution (2022b) offer a supply chain mentoring and reverse mentoring programme.

Specific management related training is discussed separately in Leadership and management training and resources in agriculture and agri-food (Section 3.3).

2.2.8 Promotion of career opportunities in agriculture and agri-food

To encourage individuals to consider careers in agriculture and agri-food, a range of promotional activities take place. While not necessarily providing a route into the sector, these activities and information sources may encourage individuals to consider whether agriculture or agri-food could be right for them, and give them the information and contacts needed to take their first steps.

2.2.8.1 Agriculture

Agricultural bodies work to promote wider awareness of their purpose, and the opportunities they can offer. LEAF offers events like Open Farm Sunday which in 2022 welcomed over 175,000 visitors to farms, 20% of whom had never visited a farm before, as well as schemes like Farmer Time, to "demonstrate the skills, technology and passion that goes into producing nutritious food and managing the countryside." (LEAF, 2022). The NFU frequently link their work to national agendas, for example, their project to inspire STEM learning through agriculture, hopes that "By engaging children with agriculture at an early age, and showing them that science, technology, engineering

and maths play crucial roles in the sector, we can inspire future generations of STEM professionals.” (2021, p.2). NFU campaigns such as Back British Farming all help to raise awareness and understanding of UK agriculture. Individual businesses, training providers and educational institutions working in the sector also promote agricultural courses and careers in a variety of ways e.g. open days, press articles, radio adverts and events. An example of this is the “New Faces for farming” campaign developed by The Black Farmer in conjunction with Writtle University College, offering a residential opportunity where 16-18 year olds can explore farming (The Black Farmer, 2022).

2.2.8.2 Agri-food

Figure 1 shows an example of agri-food career promotion from “Food: A Fact of Life”, a programme communicating up-to-date messages on food to those working in education, managed by the British Nutrition Foundation in partnership with the Agriculture & Horticulture Development Board (AHDB). Resources on the “Food: A Fact of Life” website include profiles of individuals in roles such as a Technical Manager – Horticulture, Technical Manager - Red Meat, Group Food Safety Audit Manager and Research Scientist, helping to highlight how agri-food careers intersect and combine agricultural and food skills and knowledge (2021).



Source: British Nutrition Foundation and AHDB (2021)

Figure 1: Food: A Fact of Life – promotional materials

2.2.8.3 Promotion of the experience of employees from previously non-agricultural backgrounds

For those who find their way into careers in agriculture and agri-food from non-agricultural backgrounds, a rewarding and challenging career awaits. Individual examples of the experiences of those from non-agricultural backgrounds can be found in farming press, and training and educational websites, to promote the sector, and inspire new entrants. These articles give anecdotal

information about individual journeys, but they do not capture the bigger picture across agriculture and agri-food, nor the factors affecting longer term employee retention.

2.3 Potential barriers to entry

As previously identified, worker shortages and national level workforce challenges mean agriculture and agri-food employers are seeking to expand and diversify their workforces. However, recognised barriers to entry can limit successful recruitment, and workforce expansion and diversification.

Given the focus of this research, these issues are primarily considered in relation to new entrants from a non-agricultural background. However, it is recognised that some of these factors can affect those from agricultural background too, particularly when considering access to land and finance.

2.3.1 Lack of awareness of agricultural and agri-food work

Public perception of work in agriculture and agri-food suffers from a lack of awareness and limited public understanding of the roles, career progression, and opportunities available. It is also symptomatic of a wider lack of understanding about agriculture and food production amongst the UK population; a 2012 survey showed 72% of people in the UK feeling that they do not know much, or know nothing, about agriculture (University of Cambridge, 2012). Research by McDonald's UK and Ireland in 2022 showed no improvement in a decade; 75% of respondents said they do not know enough about the industry to consider it as a potential career path (Ashworth, 2022). However, an international YouGov survey showed that respondents from the UK respect farmers more than respondents from other countries (Smith, 2021), so there is potential goodwill, perhaps enhanced by the efforts of the agricultural and agri-food workforces during Covid-19.

2.3.2 Public perceptions of agricultural and agri-food work

The lack of awareness is exacerbated by a range of sometimes harmful and dated misconceptions about work in agriculture and agri-food, including that this is an exclusively low skill, low pay sector (Nye and Lobley, 2021; Heasman and Morley, 2016), which is demonstrably untrue. Farmers are conscious of these misconceptions, McDonald's UK and Ireland research showed that 41% of farmers believe that demonstrating farming comes with a good salary and benefits would encourage more young people into the sector (Ashworth, 2022). An average salary figure across both agriculture and agri-food for all employees would not be meaningful, however a specific example demonstrates broader comparability with other sectors. For example, the mean UK graduate salary as reported in the HESA Graduate Outcomes Survey was £24,979 per annum (Smith, 2022), and trainees employed on the MDS graduate scheme working across the food, fresh produce, horticulture and agriculture supply chain are initially recruited on a salary of £24,000 per annum, rising to £25,000 in year two (MDS, 2022).

However, there are some genuine shortcomings in the sector. For example, Heasman and Morley (2016) identified low levels of training in non-managerial roles across UK food manufacturing. Nye and Lobley (2021) note the same across farm work at all levels, limiting the skills and development of staff, and ultimately, their progression. Swadling's 2018 report for AHDB notes under-investment in skills and training across the UK in agriculture and agri-food, and makes the case for an agricultural and horticultural skills strategy.

There are also some serious concerns about working conditions in the sector, with deception, unpaid or underpaid wages, psychologically damaging treatment, and inhumane living conditions identified and reported (Heasman and Morley, 2016; Devlin, 2016). The economic imperative for keeping running costs low is understood (Nye and Lobley, 2021; Devlin, 2016), but clearly this kind of workplace environment and treatment is indefensible and unacceptable. These cases, although in

the minority, have contributed to the poor reputation of agricultural and agri-food employment that is sometimes propagated by the media (Nye and Lobley, 2021).

2.3.3 Perception that you have to be from an agricultural background.

Research in 2022 by Family Kids and Youth (FK&Y) on behalf of The Institute of Agriculture and Horticulture (TIAH) found that the idea persists of farming and growing being passed down through generations, which would support the perception that the sector is inaccessible to outsiders. Research by McDonald's UK and Ireland in 2022 found that 64% of respondents felt there was a lack of relatable role models i.e. those working in the industry do not look like me or have my background (Ashworth, 2022). Those trying to recruit in agriculture identify their own shortcomings, noting the expense of advertisements in the farming press causes reliance on word of mouth (Nye and Lobley, 2021), which may limit wider access.

2.3.4 Diversity and inclusion

Perceptions relating to suitable and traditional backgrounds also link to issues around diversity and inclusion. Agriculture, in particular, is noted as lacking in diversity e.g. farmers topped the "least diverse occupations" in a Policy Exchange report, with 0.03% ethnic diversity (Norrie, 2017). Work to explore the experiences of UK black farmers, and farmers of colour is vital, through projects such as Jumping Fences, which reported the structural racism that BPOC individuals had experienced in agriculture, and also the isolation they had experienced (Terry, 2023). The heteronormative family farm model has shaped both gender and sexual dynamics in farming; Leslie, Mypler and Bell note that leaving this model uninterrogated in US farming allows it to perpetuate, which can harm both women and queer farmers, but also sustainability and innovation in the sector (2019). Organisations such as Agrespect work to "stand against prejudice and support rural diversity, inclusion and enablement" (2021); this is just one example of excellent work happening around diversity and inclusion in agriculture and agri-food.

While there is a primary moral and societal obligation for organisations to be diverse, inclusive and equitable, and a legal requirement in the UK, there are demonstrable business benefits too. A 2021 review of literature related to diversity and inclusion across UK workplaces found that although inclusion is not well measured, there are signs that it correlates positively with business performance outcomes, and that a lack of inclusion is potentially linked to a reduction in employees' sense of safety at work and faith in management (Whiting, p.6-7). This report also found that gender-diverse leadership correlated with positive business performance outcomes, and that diverse teams are more innovative and better at solving problems creatively (Whiting, 2021, p. 4-6). The Food and Drink Federation (2021) highlighted that diverse and inclusive workplaces bring multiple benefits, including better decision-making and innovation, increased profits, and enhancements to reputation, talent pool and retention. These benefits would be valuable for any business, but are particularly significant in the context of the present agricultural and agri-food recruitment market.

Structural inequalities mean that the educational routes into agriculture outlined in Access to work experience and education (Section 2.3.5) are also not accessed equally by all demographic groups, and do not necessarily create a more level playing field for those who do access them. Research from the Sutton Trust showed inequality in apprenticeship take up by area, socio-economic status, age, gender and ethnicity (Cavaglia, McNally and Ventura, 2022). The OFS identified that access, participation and outcomes in relation to Higher Education in England, are unequal across gender and ethnicity, and also disability and socioeconomic status (Hubble, Bolton and Lewis, 2021).

2.3.5 Access to work experience and education

While it is possible to enter training without an agricultural background, employers, education and training providers ask applicants to demonstrate their interest in, and understanding of, agriculture and related sectors. Whether an informal chat, an application or UCAS form, or a formal interview, this is likely to be important to any potential applicant's success. If access to work experience is limited to those already within agricultural families and communities, this can present a barrier to employment for a candidate with no, or limited, experience. In 2023, 42% of farmers still demonstrated some reluctance around employing staff without prior agricultural experience (Nye, Wilkinson and Lobley), creating a catch 22 for those who want to gain this experience.

This can also limit access to agricultural education as several weeks of practical experience can be a prerequisite for degree programme entry (CAFRE, 2021; HAU, 2022a). Courses at level 2 and 3, and apprenticeships, may be less prescriptive about the level of experience required, but applicants still need to demonstrate their interest and understanding of the sector to secure their place. (If otherwise excellent candidates are unable to meet the requirements of the employer or course, this could limit their future in agriculture or agri-food. Educational institutions have recognised that the requirement for work experience could present a barrier to those without existing connections in agriculture or a related field, and therefore offer access programmes e.g. the HAU "Access to Agriculture" programme that allows students to complete their work experience during their first year, utilising contacts and the University Farm (2022a), whilst also offering further free or subsidised training and bespoke support. Many providers also offer part time programmes and routes e.g. University Centre Myerscough's Foundation Certificate in Agriculture can be completed part time (2022). Part time provision is proven to bring social and personal benefits, and to support the upskilling of the UK population to meet fast changing skills needs (UUK, 2013). It may allow more flexibility and convenience, supporting access for the widest possible range of potential students.

2.3.6 Rurality

There is a dated public perception that opportunities to work in agricultural and agri-food roles are limited to rural areas (FKY&Y, 2022). Where agricultural and related work is in rural locations, this can cause difficulties for workers who do not have access to suitable transport (Nye and Lobley, 2021). Transport issues affect the ability of workers to both enter and leave rural areas (Grant Thornton, 2021; Chatterjee et al, 2019), and the anti-social hours of some agricultural and agri-food work only exacerbates this problem. Furthermore, the cost of accommodation in rural areas has long been an issue (Shucksmith, 2000; Nye, Wilkinson and Lobley, 2023). A range of factors, including Covid-19 and greater abilities in some roles to work from home due to technology, means that demand for rural living continues to increase, but not necessarily amongst those who wish to also work locally. In predominantly rural areas, in 2018, the average lower quartile house price was 8.8 times the average lower quartile earnings, showing how unaffordable rural living can be (Defra, 2021). A 2018 Rural Youth Project survey highlighted the linked nature of the difficulties of rural living for young people, when those already living rurally were surveyed, noting that the "inter-related issues of limited job opportunities, poor transport links and insufficient or expensive housing make living in rural places challenging" (p.5). Ethnic diversity in rural areas is limited, and factors related to rural living may be more challenging for many BPOC communities (Ware, 2015; Terry, 2023). The rurality of many agricultural opportunities may therefore be unattractive, or form a barrier, to a range of potential workers.

2.3.7 Cost of training and qualifications

It can be expensive to access the training and qualifications required to progress a career in agriculture or agri-food. Practical qualifications such as tractor driving cost hundreds of pounds, and

for those looking at taking a degree level qualification, the costs will be thousands of pounds per year for tuition fees alone. However, although cost is a consideration for many courses, some are available for free or reduced cost, the Food Standards Agency offers food safety training for free (FSA, 2022), The Institute of Grocery Distribution offers a range of free courses (2022a), and UK government training schemes offer free training to certain learners, in subject areas such as agriculture, horticulture and forestry, and hospitality and catering (Department for Education, 2022).

Scholarships and bursaries may also help to make training and qualifications more accessible. These may be through institutions, employers, charitable trusts, or other bodies. Harper Adams University lists over 120 internal and external scholarships that may be open to their agriculture and agri-food students (HAU, 2022b). The Royal Agricultural Benevolent Institution offer training grants to support individuals in the farming community. The Worshipful Company of Farmers guide course participants to their own funding but also request that they consider all other potential avenues for funding, such as employers, trade companies, professional advisors and charitable trusts (WCF, 2022). Although cost is undoubtedly a potential barrier to entry, the numerous potential sources of support are encouraging, and may allow access to those who would otherwise struggle.

2.3.8 Access to land, and associated finance and knowledge

Defra (2020) explain that “For a successful long-term future the industry relies on attracting new talent, and providing opportunities for new entrants to farm.”, while noting that there are barriers and difficulties. The Scottish Government’s Agriculture and Rural Economy Directorate specifically identify that “Access to finance, land, advice, training and skills are all potential barriers.” (2022a). These problems have persisted for many years, Cook et al (2008) identified the same barriers, in 2022, the Rock Review noted stagnation in the amount of let land entering the market since 2003 (Rock et al, p.28).

In 2016, Defra reported that there were “...176 thousand people working on agricultural holdings in England, in addition to holders and/or managers. Of these, 55% were family members. In the UK as a whole, 60% of the workforce were family members.”. A family involvement in agricultural businesses is common, and often crucial to business success and longevity. However, this is a finite pool of resource, which may be a factor in the sector’s identified labour deficit (NFU, 2018). This helps illustrate how some barriers to entry perpetuate. There may be no intentional exclusion of those from non-agricultural backgrounds, but when finance, land, advice and training are all potentially handed down generations, it can create a challenge for those not currently within the sector. This challenge is particularly stark for groups which have less likelihood of inheriting land due to structural inequalities (Terry, 2023).

Jack et al (2019) identified similar issues in Northern Irish agriculture, with new farming entrants perceiving finance, the lack of profitability in existing farming enterprises and the availability of land as key barriers. The Welsh Government (2019) also cited the price of land as a key limitation, showing that the same broad issues affect potential new entrants across the UK.

There are a range of national schemes and approaches to support new entrants ready to establish their own enterprise. Defra (2020) offer funding to “councils with County Farm estates, landowners and other organisations who want to invest in creating new opportunities for new-entrant farmers”, and are currently establishing a “New Entrants” support pilot scheme (Defra, 2022). The Scottish Government offers Farming Opportunities for New Entrants (FONE) (Agriculture and Rural Economy Directorate, 2022b) to support the creation and development of business opportunities for new entrants. In Wales, Farming Connect’s Venture programme was created to match farmers and landowners with new entrants looking for a way into the sector (2019).

3 Leadership, management and employee development

This section considers management, leadership and development principles, and their application in agricultural and agri-food workplaces, as well as the availability and take up of training and development for those in management and leadership roles.

3.1 Leadership and management skills in UK businesses

The importance of effective management and leadership skills is widely recognised across UK businesses; the CMI calculate that poor people management costs the UK economy £84 billion per year (2017). Deficiencies in this area have previously been identified as a particular issue in small and medium size enterprises (Hayton, 2015). A report from the Edge Foundation showed 39% of employers identifying the need for leadership skills, and 38% highlighting their requirement for managerial skills, over the coming 12 months (2021, p.11). Prospects Luminate (2019) identify skills shortages at managerial level, with 43% of businesses reporting a low number of applicants with the required skills (p.15). Agricultural and agri-food businesses concur with this requirement; a lack of management and leadership skills is noted by the FDSC (2019), Defra (2020) identify the need for continuing professional development and improved business skills, and similar issues are self-reported by farmers (Nye and Lobley, 2021, p.23; Nye, Wilkinson and Lobley, 2023, p.7). AHDB (2021a) justify a focus on leadership and management development in farm businesses due to the expected increase in individual wellbeing and in business performance. The CIPD's 2015 report on productivity found over half of respondents identifying improving leadership and management capability as an approach they intended to take to achieve their business priorities.

3.2 Leadership and management skills in agriculture and agri-food

3.2.1 Current levels of training

A minority of employers in agriculture have any formal management training; Nye, Wilkinson and Lobley (2023, p.7) found almost three quarters had not carried out any formal management or leadership training in the last three years, and only 10% intended to in the next three years. Similarly, in 2018, Swadling identified that less than 35% of farmers have formal management training. These limited management skills among senior staff affect staff satisfaction and retention in agriculture (Nye and Lobley 2021). In contrast, Heasman and Morley (2016) identify that managerial roles have better access to training than the rest of the food workforce, but the FDSC still identify management and leadership as a key skills gap, leading to "difficult to fill" roles (2019, p.6). Shortall et al (2017) found younger staff in Scotland were more interested in leadership training than older staff, whether they had come from a farming, or non-farming background.

3.2.2 The "accidental" manager

An AHDB case study of a PMDS participant shows a typical "accidental manager" (CMI, 2017) whose career progressed well, and who managed staff, but with very little training or knowledge of the area beyond a short module at college covering the legal essentials (AHDB, 2021b). Similarly, the FDSC also note progression into management roles is often "accidental", and therefore is not accompanied by the right training or support (2019). AHDB found that less than 35% of farmers have any formal management training, due to a lack of options, lack of awareness of benefits of such training and industry inertia in this area, and a lack of funding that would support development (Swadling, 2018). One of Nye and Lobley's respondents reports similar experiences of lacking "formal education or the management experience and training" (2021, p.23). Although anecdotal, these reports help to demonstrate the current levels of development commonly found in managerial and leadership staff. This is not solely an agricultural issue, a 2021 survey found 26 per cent of those who manage or supervise people at work have never had management training (Churchill, 2021).

A combination of lack of management training, farm succession decisions based around tradition rather than fitness for role, and financial concerns (Nye and Lobley, 2021) mean those running farm enterprises and associated businesses may feel they are under-qualified and unprepared for the challenges of people management. This could lead to sub-optimal or dangerous workplace practices that contribute to negative perceptions of agricultural and agri-food work (see Section 2.3.2).

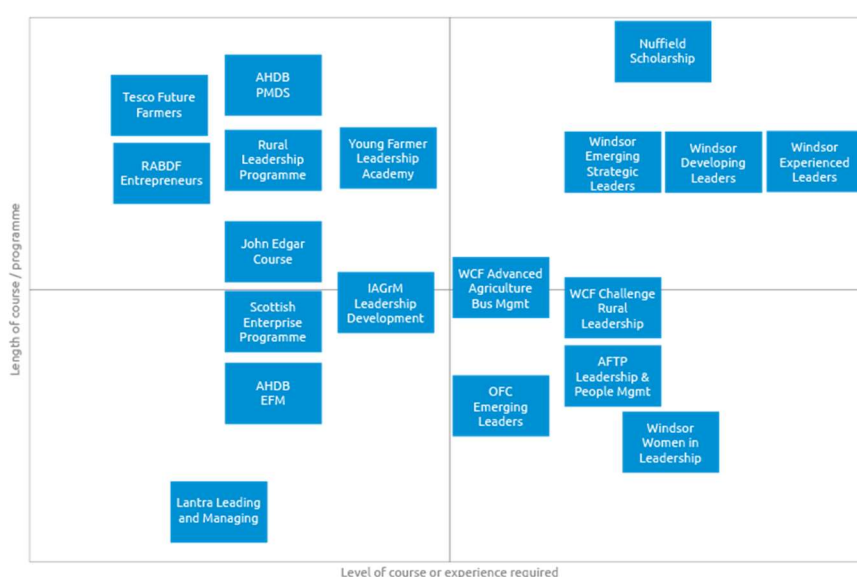
3.3 Leadership and management training and resources in agriculture and agri-food

Those working in the sector can access general leadership and management training from professional bodies e.g. Chartered Management Institute or the Institute of Leadership and Management, or support services such as the Advisory, Conciliation and Arbitration Service (ACAS). However, they may find this more generalised provision does not meet their specific needs, nor tackle the issues and challenges they encounter in the workplace.

Therefore, bespoke schemes have been devised for the sector. AHDB deliver a fourteen month Professional Manager Development Scheme (PMDS) and a shorter, four day, Effective Manager programme, as well as offering the Agrileader programme (AHDB, 2021a). Similarly, the WCF offers an intensive eighteen day Advanced Course in Agricultural Business Management (ACABM), which seeks to develop internal and external strategic focus, and the ability of delegates to manage teams, motivate and empower staff (RAU, 2022b). Programmes such as Cultivate, delivered to agri-tech businesses by Harper Adams University and Barclays Eagle Labs include training on leadership, governance and structure (Cultivate, 2022). Similarly, The Institute of Agricultural Management’s Farm Management skills programme includes a module on motivating others (IAgrM, 2021).

Lantra also offer a range of courses through various providers, from shorter one day events such as “Managing Casual and Seasonal Teams”, “Developing People to Perform” and Leading and Managing” to a Level 5 Diploma in Principles of Leadership and Management in Land-based Settings (Lantra, 2021). For self-led learning and development, bespoke sector advice on managing and leading can also be found on sites such as Farmwell and the AHDB website, and in publications such as Farmers Guardian and Farmers Weekly.

Figure 2 summarises a range of potential courses and development opportunities with consideration of programme length and level.



Source: AHDB, 2022

Figure 2: Business & leadership courses for farmers and growers

With regard to agri-food, the FDSC suggest the industry should partner with a third party for professional accreditation, to transform the imagine and skills of the sector (2019, p.6). High level training and CPD is already available e.g. through arrangements such as the Agri-food Training Partnership which brings together leading universities to deliver professional training on topics including Leadership and People Management (AFTP, 2021). As in agriculture, a range of Lantra courses are available to support learning and development e.g. Food Team Leading; Team Leading; Team Management; People and Project Management; and Coaching and Mentoring (Lantra Wales, 2021).

The burgeoning number of courses and approaches demonstrates increasing levels of interest within the sector in leadership and management training, and a recognition of the difference this can make to those working within the sector. Resources are also freely available outside of formal or informal training programmes, through sector bodies such as Lantra who offer an employer's toolkit and FDF and AHDB who have a range of management and leadership resources on their respective websites.

Given the availability of management and leadership training and resources, through a range of routes and providers, and the consensus that better management and leadership would have beneficial impact on the sector, there is clearly a question to be asked about why the leadership and management skills gap persists in agriculture and agri-food. It may be connected to size of business; BIS highlight that "smaller and closely held firms (i.e., those owned by just one or a few individuals, and including family firms) lag behind in terms of the management 'best practices' employed in large organisations" (Hayton, 2015, p.11). It may link to the lack of evidence for impact, that would support greater investment in provision (Adams, O'Leary and Dawson, 2021, p.59). However, this question is outside the scope of this research project, and therefore is noted as an area that would benefit from further research.

3.4 Leadership and management principles

This section outlines a number of key principles, theories and approaches relevant to agricultural and agri-food workplaces. Although specific research on leadership and management practices in agriculture and agri-food is limited, existing studies (Jankelová et al, 2020a; Mäkinen, 2013) appear to indicate that good practice in agriculture and agri-food is not distinct from good practice in other sectors. Furthermore, agricultural and agri-food leaders and managers cannot operate in isolation, they are inextricably bound to the macro-environment, like all other businesses (Adams, O'Leary and Dawson, 2021). It is therefore appropriate to apply wider leadership and management theory, research and practice to agricultural and agri-food settings in this report.

3.4.1 Leadership or management?

Common themes emerge in discussion around leadership and management, and what each entail. It is recognised that the concepts intersect, but that a leader would tend to set direction and drive change, while a manager implements processes, systems and structures to underpin this. Leadership is also seen as a quality, albeit one that can be learned and developed, you can act as a leader from any position in an organisation. Management, can simply be a position, a set of responsibilities allocated to an individual.

This report therefore utilises Adams, O'Leary and Dawson's pragmatic approach to defining leadership and management; "in order to be an effective leader or manager, improvement in both is necessary and unavoidable." (2021, p.7). The terms are therefore largely used synonymously in this report, but in line with widely acknowledged practice, more hands on elements will be considered broadly as "management", and more strategic and motivational components as "leadership".

3.4.2 Leadership and management in SMEs

Leadership and management are recognised as distinct with areas of overlap. However, in many organisations one individual may fulfil both roles, and this is particularly likely in SMEs (Hayton, 2015; CIPD, 2014). In 2020, 99.8% of UK businesses were SMEs (with fewer than 250 employees), and 99.2% were small businesses (with fewer than 50 employees). 18.4% of all UK employment is in micro businesses (fewer than 10 employees) but in the agricultural sector micro businesses are common, for example, animal production has 72.3% employment in micro business, and mixed farming has 67.4% (BEIS, 2020).

Hayton suggested that recognising the value of entrepreneurial skills in leadership and management is particularly valuable in the context of SMEs, and specifically highlighted “the identification and development of opportunities, the communication of entrepreneurial vision, and the acquisition and orchestration of the necessary resources” as key (2015, p.14-15). Given the composition of agriculture and agri-food, inclusion and consideration of the entrepreneurial element of leadership and management is highly relevant. This is further supported by research on Finnish dairy farmers (Mäkinen, 2013), which found that entrepreneurial and strategic thinking linked to farm success.

3.4.3 Leadership and management of new or inexperienced employees

It is particularly important in the context of this project to consider leadership and management of new or inexperienced employees. Hersey and Blanchard’s work on Situational Leadership, later developed by Blanchard into the SLII model, acknowledged that no one style or approach would be best in every situation, but rather that, effective leaders adapt their style to the situation and their followers to ensure the best outcome (The Ken Blanchard Companies, 2021). The development level of the followers, in this case employees, is key to the approach taken. Clegg, Pitsis and Mount describe this model as a “training and consulting tool” (2022, p. 106); it can be functional for assessing alignment, as it utilises statements which can assess leader and follower behaviour and readiness.

The requirement for an individualised approach for new entrants means Bass and Avolio’s full-range leadership model (cited in Clegg, Pitsis and Mount, 2022) is highly relevant. This model utilises concepts of transformational, transactional and more passive-avoidant forms of management, to create an overview of leadership styles. The model recognises that individual leaders can combine elements of different approaches, and proposes that an approach high in transformational and transactional behaviours, and low in passive-avoidant behaviours, is the most desirable. It also incorporated individualised consideration, which as a component of transformational leadership, has the same element of alignment and support at an individual level as Blanchard’s approach. However, the transactional elements of this model also recognise that leaders may recognise how others are motivated, and be required to monitor and manage performance, as part of their role, aspects that are frequently seen as more “managerial” in nature. This aligns effectively to Adams, O’Leary and Dawson’s approach (2021, p.61), which, when focusing on leading others for effective farm management stressed the importance of inspirational leadership which embraces diversity and includes giving and receiving feedback, and decision making which is strategic and grounded in an evaluation of the facts. In further sector specific considerations, Jankelová et al (2020b) verified a positive association between transformational leadership and business performance in agribusinesses in Slovakia. Furthermore, Sahai, Ciby and Kahwaji’s (2020) systematic review of workplace isolation found that transformational leadership and high trust environments can reduce perceived workplace isolation, a highly relevant consideration in agriculture and agri-food.

Woodrow and Guest (2020) noted the potential impact of kept or broken promises on new employees, in connection with the employee’s psychological contract. Again, an individualised

approach is key; they recommend that managers establish what was promised to new employees during recruitment and which elements were of particular importance to the individual, so that these can be prioritised. Managers should also explain reasons for any broken promises, and attempt to rectify this wherever possible.

3.5 Evidence-based practice on employee support and development

This section considers the environmental and developmental practices that support employees and their development. Wherever possible, this section is based on systematic reviews, meta-analyses, or evidence assessments, in line with principles produced by the Center for Evidence-Based Management (Barends and Rousseau, 2018). However, some more specific agricultural or agri-food studies are used to corroborate the applicability of larger reviews in the context of agriculture and agri-food. Other sources are also incorporated where a relevant evidence review is not available.

3.5.1 Induction

Antonacopoulou and Güttel's (2010) systematic review of induction and workplace socialisation noted that induction processes allow staff to become functional in their role, and sustain the organisation. There is no one approach to induction that works for all people in all settings. Rather, to be most effective, induction needs to focus on both socialisation and alignment of the employee with organisational objectives, to create "fit". Induction should also be seen as the starting point for continuous learning and development, rather than as a one-off activity, and the potential for existing staff to learn from newcomers should not be overlooked. Similarly, Johnson and Burden's (2003) work focusing on young people, employability and induction, found that a one size fits all approach did not necessarily work for younger, and potentially more inexperienced recruits.

3.5.2 Leadership, management and supervisory support and recognition

Rubenstein et al (2017) completed a meta-analysis of the factors influencing employee turnover. They found that leadership and other aspects of organisational climate did affect employee retention, and that the simplistic management view that employees leave for better pay elsewhere did not realistically reflect the numerous elements that influence employee decision-making.

Wietrak, Rousseau and Barends (2021), found that supervisory support benefits both employee motivation and the organisation as a whole, by enhancing employee commitment and actions in line with social exchange theory. Recognition was also noted as a motivating factor in this review; employees are motivated by the opportunity to receive recognition for their work. This can be provided directly by a leader or manager, or leadership and management can create an environment that supports regular recognition practices. Sahai, Ciby and Kahwaji's (2020) systematic review of workplace isolation, noted that the behaviours and actions of supervisors can also mediate and reduce workplace isolation. Nielsen et al's (2017) systematic review and meta-analysis of workplace resources that improve employee wellbeing and performance concluded that the relationship between leaders and employees is a factor that affects wellbeing and performance, although it could not isolate the impact of this one element from the combined impact of other workplace resources. Similarly, Woodrow and Guest (2020) highlighted that ongoing managerial support can help employees to navigate difficulties in the initial period after joining a new organisation.

3.5.3 Peer support and workplace communication

Although there is a lack of a definitive wider evidence review, research indicates a challenge in this area, with 29% of new employees finding it hard to connect with colleagues (CMI, 2021). A lack of support and communication has detrimental impacts; Sahai, Ciby and Kahwaji (2020) found a lack of co-worker interaction can lead to employee isolation and Rubenstein et al (2017) noted the impact

of feeling unsupported on employee turnover. Further to this, Antonacopoulou and Güttel (2010). noted that co-worker influence demonstrably affected integration and establishment for newcomers

Where peer support and communication is strong, positive impacts are seen. Kolstrup's work on agricultural students, employees and employers in Sweden (2012) found that good team spirit and having fun at work were among the most important attraction and motivation factors. Nielsen et al's (2017) systematic review and meta-analysis of workplace resources that improve employee wellbeing and performance concluded that social support is a factor that affects wellbeing and performance, although it could not isolate the impact of this one element from other workplace factors. Crowley and Overton's that effective peer communication and support creates wider benefits, by supporting peer to peer workplace learning (2021).

The CIPD's 2021 evidence review on work motivation explained the importance of psychological safety in the workplace. Psychological safety enhances employees' ability to accept and act on feedback from peers, and suggestions for improvement. Creating an environment which supports interpersonal risk taking "motivates employees to actively seek and share information and knowledge, ask critical questions, speak up with suggestions for organisational improvements, and take initiative to develop new products and services." (Wietrak, Rousseau and Barends, 2021, p.12).

3.5.4 Learning, development and training

The agri-food sector in particular has noted the need for better training both within roles and prior to employment (Defra, 2022). However, Crowley and Overton surveyed over 1,200 respondents on learning and skills at work, and found that the majority of employers do not use evidence to inform the design of learning and development (2021, p.4). Adams, O'Leary and Dawson (2021) noted the complexity of measuring the impact of learning and development, which may explain the relatively limited data available in this area. Almost 60% of employees in agriculture and horticulture reported that they provided on the job or off the job training and development to their staff, but recognised that a range of barriers exist around training provision most commonly sparing the time for staff to train or to organise this. Other barriers included the cost of training and finding suitable training providers (Nye, Wilkinson and Loble, 2023).

In 2016, What Works Centre for Local Economic Growth noted that on the job programmes are more effective than classroom programmes in relation to participant employability, although this study was more focused on people looking to move into employment, than those already in roles. Felstead and Unwin's (2016) evidence review on learning outside formal systems noted consensus in workplace learning research on the pivotal role of line managers, in creating a culture which centres mutual support and learning. This also requires the manager to use experienced workers to further support and develop this learning culture, and to enable teams and work arrangements that allow learning through discussion, consultation and feedback. Their review also noted the risk in attempting to accredit and formalise informal learning, which can artificially remove learning from the context in which it happens, and unhelpfully implies that formal learning is of higher value. Rohlman, TePoel and Campo (2021) also found that focused online training of supervisors led to demonstrable benefits in relation to occupational safety, health promotion and worker well-being.

Rubenstein et al's (2017) meta-analysis of employee turnover highlighted that reward other than pay, such as training, has a demonstrable impact on retention, and should be the focus of managerial attention. Other relevant benefits have also been associated with skills development; McDonald (2017) found that improving Australian cotton workers confidence in their skills had a positive impact on engagement, and improved their connection to farming values.

3.5.5 Performance Management, Appraisals, Feedback and Goalsetting

The CIPD's 2016 rapid evidence assessments on goalsetting and performance appraisal offered an evidence-based overview of key considerations in this area. Of particular relevance to this project is the requirement for goal setting to be adapted to the individual and their circumstances. While specific and challenging goals are recognised to be strong motivators, where an individual is learning new skills, it is more effective to set goals that focus on learning and behaviour or on performing to the best of one's ability. The CIPD also noted that need for progress monitoring and feedback, to create a continuous chain of performance management activities. However, this feedback must be fit for purpose and context is key, there is no universal approach, it depends on the individual and the role. This approach is further supported by the subsequent work motivation evidence review (Wietrak, Rousseau and Barends, 2021), and also recognised in work studying agricultural students, employees and employers in Sweden (Kolstrup, 2012) and in analysis of agri-leaders (Adams, O'Leary and Dawson, 2021). Finally, the CIPD recommends separating out the potentially administrative functions of appraisal e.g. setting pay, from the staff developmental elements, to make a clearer, less contentious process for all concerned (2016).

3.5.6 Mentoring

Allen et al's 2004 meta-analysis on mentoring at work, incorporated 43 separate studies and found mentoring led to positive measurable consequences for compensation, promotion and career satisfaction although overall effects were modest. The analysis cautiously noted that potentially the presence of a mentor may be more significant than the actual degree of mentoring received, and also highlighted that existing measures of mentoring activity may be insufficient. Johnson and Burden's (2003) work with younger employees noted that having a mentor may support understanding of the "social and cultural aspects of the workplace".

3.5.7 Additional factors which support employee motivation

Wietrak, Rousseau and Barends evidence review on work motivation encompassed 13 literature reviews, 48 meta-analyses, and 13 primary studies (2021). It identified the key motivational factors that were supported by a large number of high-quality meta-analytic studies. Some of these factors have been considered elsewhere in this review i.e. goal setting and feedback (Section 3.5.5), and supervisory support and recognition (Section 3.5.2). The review also identified monetary reward as a key factor, but this is not considered further here, as it may not be within the control of the individual leader or manager. Although financial rewards are not the only relevant factor (Rubenstein et al, 2017) their significance should not be overlooked in relation to agricultural work (Maican et al, 2021; Jankelová et al, 2020a).

The remaining factors are as follows:

- Perceived work meaningfulness – Employees are intrinsically motivated by work that they perceive as meaningful. Research in the dairy sector in Sweden refers to the motivational impact of feeling pride in your work (Kolstrup, 2012), another way to characterise this factor.
- Empowerment/autonomy – Employees are motivated by the freedom to decide how to do their job (to the degree that is realistic in their role), in line with self-determination theory.
- Psychological safety – The sense that it is safe to speak up, and that you will not be embarrassed, rejected or punished for doing so is crucial. It supports employee learning, communication and engagement, and benefits employee motivation.
- Perceived fairness/justice – Employees desire fairness in their workplace, and this affects their motivation. Their perception of fairness is affected by the distribution of tasks and resources, the consistency and approach to decision-making, and the communication of decisions and outcomes.

4 Project aims and objectives

This research aimed to capture the experiences of those who have moved from a non-agricultural background to agricultural or agri-food employment, evaluating the leadership, management and development they experienced, and establishing good practice.

The objectives of this work were as follows:

- Review current approaches to attract those from non-agricultural backgrounds to education and employment in agriculture and agri-food.
- Review the employment experiences of those from non-agricultural backgrounds when working in agriculture and agri-food, focusing on the leadership, management and development they experienced.
- Establish what collective lessons can be learned from the employment experiences of those entering agriculture and agri-food employment from non-agricultural backgrounds.

The project deliverables were a report identifying effective leadership, people management and development practices and approaches within agriculture and agri-food for those entering the sector from non-agricultural backgrounds, and associated case study and teaching resources.

There is work already underway which focuses on attracting people into agriculture and agri-food; the review of current research and practice in Section 2.2 identified a range of activity in this area. This project focused on improving the new entrant's overall experience of leadership, management and development in agriculture and agri-food, so when new entrants are attracted and recruited, they are retained.

It is recognised there are wider issues around under-represented groups, and diversity and inclusion in agriculture and agri-food. This research specifically focused on individuals from non-agricultural backgrounds, but where potential intersectionality arose this was noted, and linked to the need for further research in this area.

5 Project approach and design

5.1 Research philosophy

This research was underpinned by a broadly subjectivist epistemology. The focus on individuals, their stories, and the meaning they attributed to this was key to the data collection, interpretation of that data, and meeting the research objectives. While some quantitative data was collected, and was highly valuable, the qualitative data collected through the interview process was key to creating deeper understanding, leading to meaningful conclusions and recommendations. An interpretive paradigm and research philosophy applied throughout; the intention of this research was to gain understanding and inform future action (Saunders et al, 2019).

5.2 Research methods and design

In line with the research philosophy, inductive research methods were used. The research design is shown in figure 3.



Figure 3: Research design

5.3 Further design considerations

Participants were asked to self-identify whether they felt their background was non-agricultural. This approach was taken because there is no universal definition of non-agricultural, and respondents may have different perceptions of what the term means, and how it affects them. The survey and research were therefore promoted broadly across multiple platforms and organisations, so that anyone who felt themselves to be a new entrant to the sector could participate.

Because of the potential breadth of employment experience, survey questions and interviews were designed to focus on respondents' first job in agriculture or agri-food, held for 3 months or more. This included permanent positions, work placements or experience, or seasonal or temporary work. This was to allow meaningful reflection on one experience, early in their career.

129 people responded to the survey. 74 survey respondents indicated that they would be willing to participate in an interview. 16 individuals were invited to interview, selected both on the basis of their original response, and in order to achieve a broad and representative demographic. Ten

individuals responded positively to the invite. Interviews were captured and transcribed using Otter AI software, to support efficient and accurate collection.

The thematic saturation point was reached after four interviews, partly due to a highly detailed and in depth first interview. Guest, Namey and Chen’s (2020) methodology for calculating thematic saturation was used, with a base of 2 and a run size of 2. The calculation is displayed in table 1.

Table 1: Calculation of thematic saturation

Interview number	1	2	3	4	5	6	7	8	9	10
Themes emerging	14	10	9	9	10	9	9	11	11	13
New themes	14	0	3	1	0	0	0	0	0	0
New themes in run		14		4		0		0		0
% change over base		78%		22%		0%		0%		0%

Because thematic saturation was reached after a low number of interviews, interviews continued to ensure this saturation point was genuine and representative. As no new themes emerged after six further interviews, this is a reliable indicator of genuine saturation.

5.4 Research design challenges and changes

It had been hoped that there would be data available on the number of people from non-agricultural backgrounds in agricultural or agri-food education, and employment. However, this was not the case. Therefore, survey promotion was adjusted, and a request was made that information be shared with all students on agriculture or agri-food courses. Similarly, survey promotion was as broad as possible, to capture any potential respondents.

Although the survey was widely circulated, some groups proved particularly difficult to reach:

- There were few responses from individuals who had moved into a career in agriculture and/or agri-food, and subsequently moved to a different sector.
- Despite extensive promotion across all home nations, a significant majority of survey respondents and interviewees were from England.
- Although survey respondents were well-balanced across age and gender, respondent sexuality and ethnicity were less diverse.

To counter-balance this, those invited to interview were selected both on the basis of their original response, but also to allow deeper examination of experiences across a range of demographics

6 Survey findings

6.1 Survey respondents

The survey was promoted extensively on social media and publicised by a range of agricultural and food publications, organisations and individuals. This produced a pool of 129 respondents.

Table 2: Profile of survey respondents

Age of respondents	Count	Percentage
18-24	52	40.3%
25-34	34	26.4%
35-44	15	11.6%
45-54	13	10.1%
55-64	6	4.7%
65+	9	7.0%
Gender identity of respondents	Count	Percentage
Man	54	41.9%
Woman	75	58.1%
Sexual orientation of respondents	Count	Percentage
Bisexual	5	3.9%
Don't know	1	0.8%
Gay or lesbian	3	2.3%
Heterosexual or straight	115	89.1%
Queer	2	1.6%
Prefer not to say	3	2.3%
Ethnicity of respondents	Count	Percentage
White	121	93.8%
Mixed or Multiple Ethnic Groups	4	3.1%
Asian or Asian British	2	1.6%
Black, African, Caribbean or Black British	1	0.8%
Prefer not to say	1	0.8%
Location of respondents	Count	Percentage
England	106	82.2%
Northern Ireland	4	3.1%
Scotland	9	7.0%
Wales	5	3.9%
Other	5	3.9%
Current employment status of respondents	Count	Percentage
Employed in agriculture and/or agri-food	57	44.5%
Unemployed but not looking for work e.g. full time student, career break, caring for family, travelling, retired etc.	27	21.1%
Employed in another sector	17	13.3%
Self-employed in agriculture and/or agri-food	10	7.8%
Other	9	7.0%
Currently unemployed and looking for work	4	3.1%
Self-employed in another sector	4	3.1%

Please note that one respondent did not provide their age, and that rounding causes percentage totals of 100.1% and 99.9%, for certain categories.

6.2 Respondent perceptions of non-agricultural background

Respondents were asked why they would describe themselves as being from a non-agricultural background, and to select all options that applied to them. Figure 4 shows that a lack of family background in agriculture, through parents and/or grandparents, was the most common scenario.

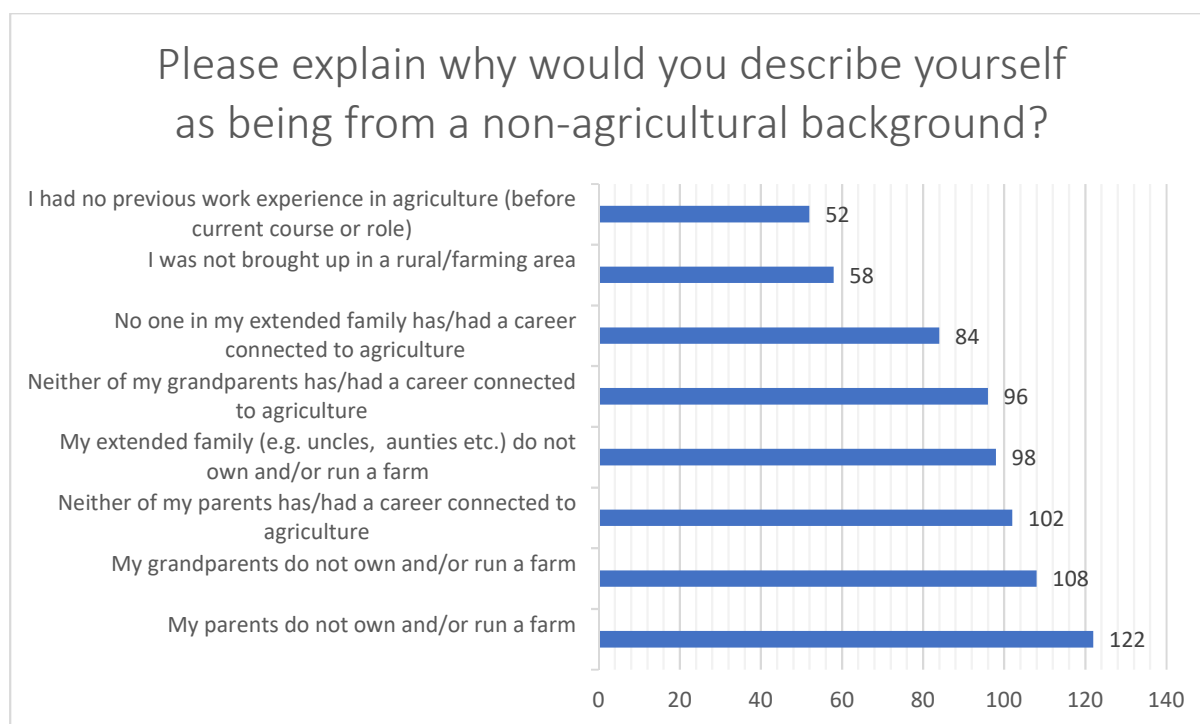


Figure 4: Respondent perceptions of non-agricultural background

In a follow up question, respondents were asked to add comments on what "non-agricultural" meant to them. Most respondents chose to speak about their own experience, as shown in figure 5.

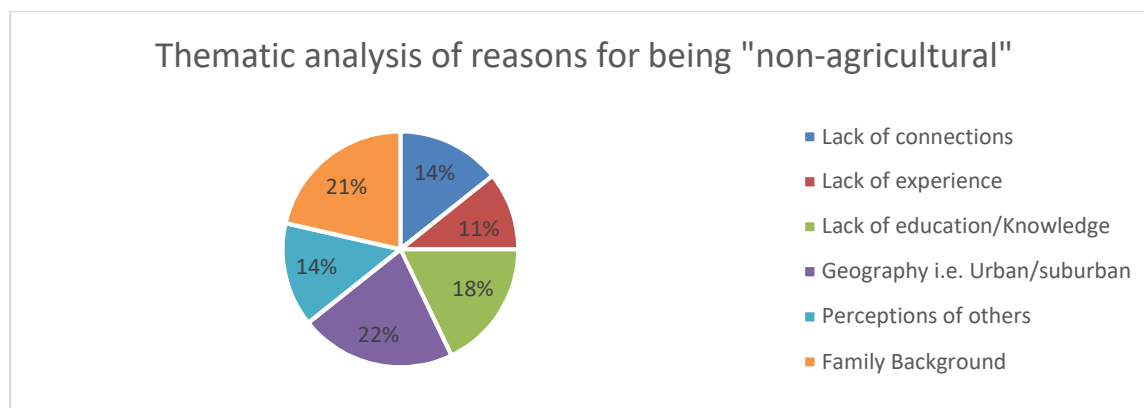


Figure 5: Thematic analysis of reasons for being "non-agricultural"

Perceptions of others merited further consideration, as this topic was not captured in the earlier question on the respondents' perception of themselves as being non-agricultural. Examples of responses are below.

"My grandfather and father were farm workers so I always felt [I] had an agricultural background but have always found farmers children and farmers class me as non farming."

"I thought I was agricultural ish, having had grandparents own a farm and it went to my uncle, but I was told by numerous interviewers that "everyone's grandparents had a farm at one point that's not anything helpful...""

"My father worked on farms as a child and we always had animals as I grew up but because it was more of a 'smallholding' I've never been considered as from a farming background by friends or employers"

"Agriculture was also never presented to me as a viable career option - in school I was actively discouraged from going in to it"

The first three comments show experiences of 'gate-keeping', around who is allowed to be agricultural, and who is not. All three respondents show that they have taken on board attitudes from others in relation to their own status. The final comment indicates different issue of perception, in terms of the validity and value of agriculture as a career choice.

6.3 Career changers

Survey respondents were also asked whether they considered themselves to be career changers i.e. they moved into work in agriculture or agri-food after establishing a career in a different sector. 46 respondents (35.7%) answered yes to this question. A range of previous roles and experiences were cited, with no common themes emerging around respondents' prior career paths.

6.4 What influenced the choice of a career in agriculture or agri-food

Respondents were asked what influenced their choice of a career in agriculture and/or agri-food. Figure 6 shows that generalist sources of information, advice, guidance or support were noticeably less common than specialist sources. It is worth noting that school, college or university advice, and influence and advice from family and friends could be specialist or generalist. However, "other" was the most common answer, and these answers captured a range of informal routes that outside the scope of the question. Of the 54 people who answered "other", 22 of those specifically mentioned seeing or working on farms as a key influence; 13 commented on a passion for the topic; and, 11 were influenced by climate change, conservation and environmental factors. The following comment captures the enthusiasm and passion that ran through many answers.

"I had always been interested in working outdoors, with livestock and interested in land management. A local farmer asked me if I wanted to help with harvest when was 14 and that was it. I knew at that point agriculture was for me. My parents then supported me to find more work and suitable educational courses."

Other reasons mentioned in this section included the desire for an outdoor career, rural living, mental health, and being head-hunted for a role.

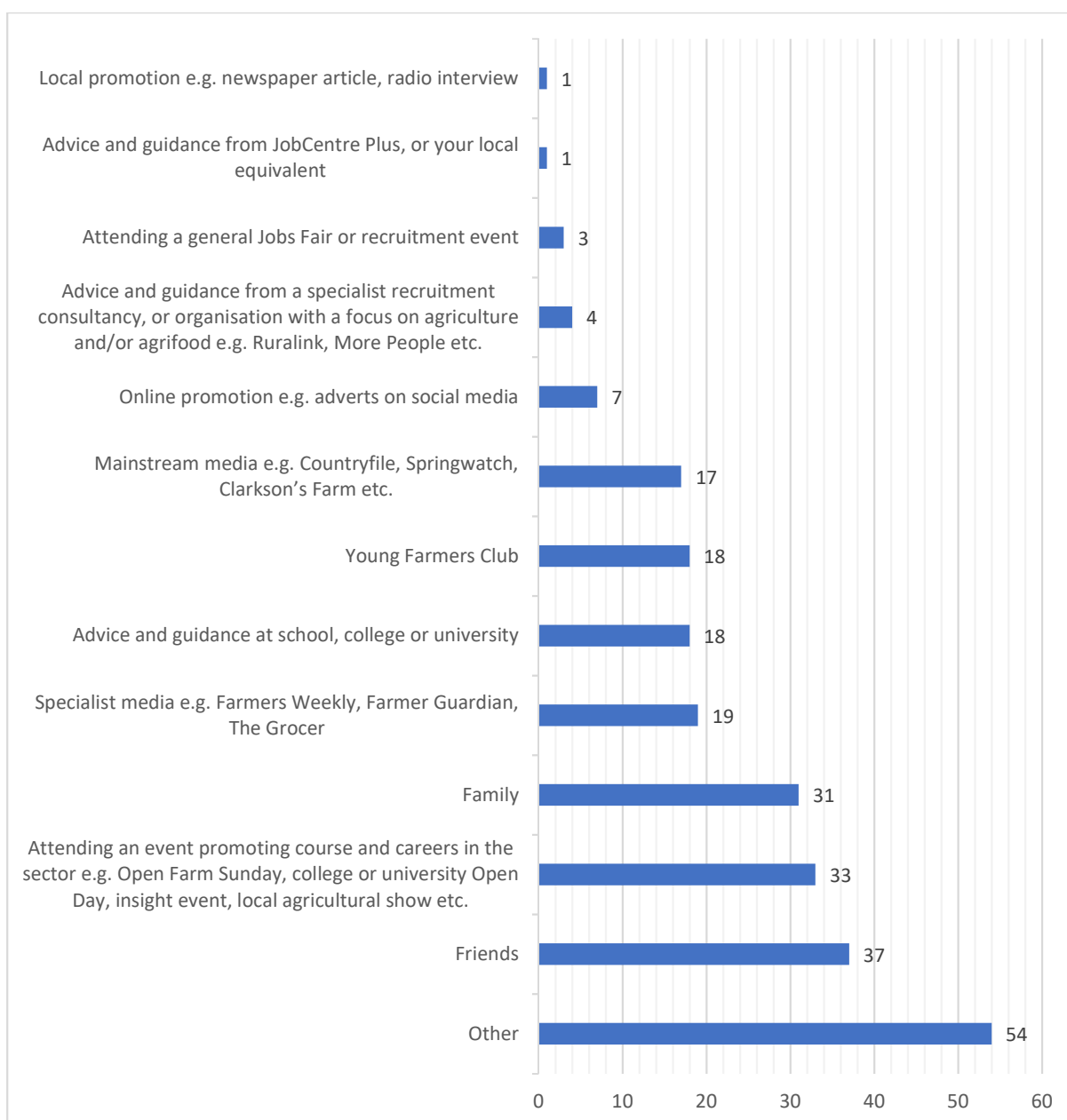


Figure 6: Influencing factors for choice of a career in agriculture and/or agri-food

6.5 Source of first job in agriculture or agri-food

The respondents were asked how they found their first job in agriculture or agri-food. The most common method was an independent application to an advert or opportunity (42.5% of respondents) followed by just under a third (31.1% of respondents) accessing the job as a placement linked to a university or college course. 20.8% of respondents said they found the opportunity through word of mouth. All other routes e.g. careers advisors, jobs fairs and recruitment consultancies, were less common.

6.6 Education, training and support

Respondents were asked whether they had taken or were taking any formal education or training to begin or develop their career. Four out of five respondents (80.6%) confirmed that they had, with the majority of those respondents (68%) taking a degree level qualification. The majority of respondents had completed their training or education (70.2%) at the time of completing the survey. Where UK colleges and universities were specifically mentioned (27 separate education

establishments were named by respondents), these have been plotted in Figure 7 to show the range of study locations. Further qualifications and bodies specifically mentioned by respondents included: HACCP, BASIS and FACTS, CMI management qualifications, short courses such as foot trimming and AI, driving courses, Lantra awards and training, and AHDB Stockmanship training.



Figure 7: Study locations cited by survey respondents (created using <https://www.mapcustomizer.com/>)

19 individuals (14.7%) had accessed a formal support scheme which provided guidance, placements and/or free or subsidised training. This group were asked whether they would have been able to access their career without this support. Only 3 respondents (15.8%) felt they would still have been able to access their career without any difficulty if they had not received that support. The sources of support varied by respondents, but included funding from the Worshipful Company of Butchers, MDS, Young Farmers Clubs, Harper Adams University's Access to Agriculture scheme, Lantra's Women In Agriculture Practical training fund, Velcourt scholarships, and Ruralink.

6.7 Experiences in first role in agriculture or agri-food

6.7.1 Duration

Respondents were asked to focus on their first job in agriculture during the survey. 49% of respondents reported staying in this role for less than a year, but the majority stayed for more than one year in their first post. At the time of the survey 20 individuals (18.9%) of respondents were still in their first post.

6.7.2 Sector

The agricultural and agri-food sectors where respondents undertook their first role in agriculture or agri-food are shown in figure 8.

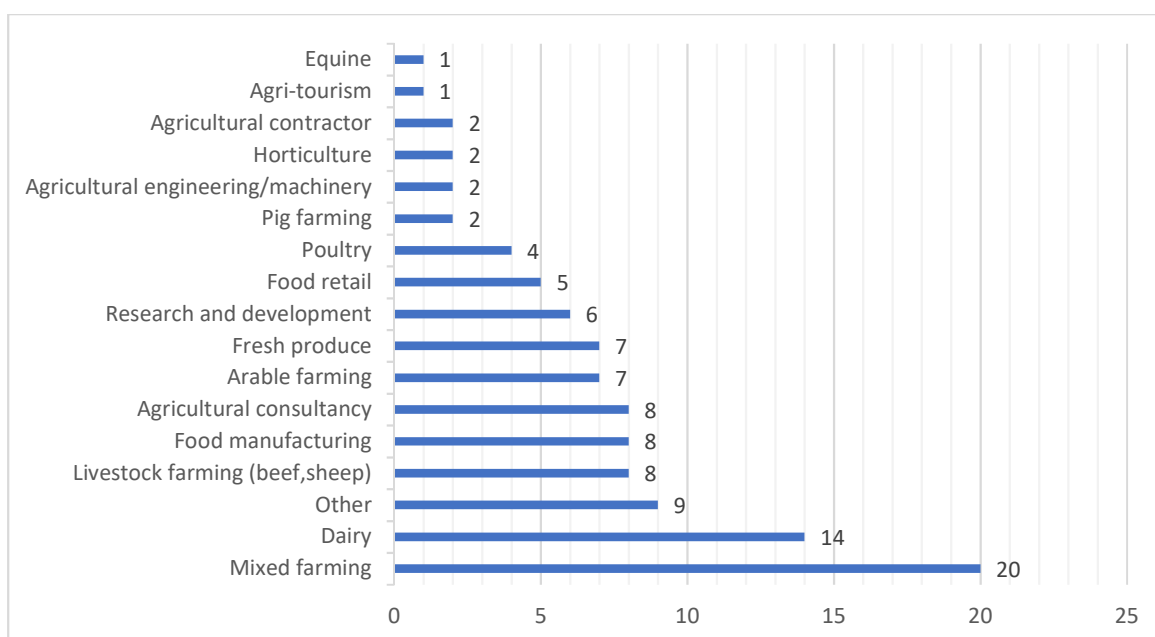


Figure 8: Sector of first role in agriculture or agri-food

6.7.3 Business size

In terms of employing business size, 23.6% of respondents were employed in large businesses (over 250 employees), 13.2% were employed in SMEs (with fewer than 250 employees), and 16.1% were employed in small businesses (with fewer than 50 employees). The majority, 47.1%, were employed in micro businesses (fewer than 10 employees).

6.7.4 Impact and effect of leadership style and management

Respondents were asked to describe their development level, and their manager's leadership style at both the start of their first job in agriculture or agri-food, and after a year (or when they left, if sooner) in their first job in agriculture or agri-food. Respondents were also asked to assess the overall effect of the manager, and their approach, on their own performance at work.

These responses were then reviewed to consider whether the manager's behaviour aligned with the employee's development level, and how this affected performance at work. Statistical testing was completed to consider the significance of the responses to these questions (see Appendix B - Statistical analysis of survey responses). No alignment between manager leadership style and employee development level at any point in the first year had a significant effect; it reduced the employee's perception of how positively their manager affected their performance in their job (from a positive effect to a slightly positive effect), when compared to the perception of employees who experienced alignment at the start and end of the period.

Further statistical testing was used to determine whether alignment between manager leadership style and employee development level affected professional development, or whether the formal allocation of a manager was relevant, but no statistically significant association was found.

Although information was collected on management skills, the variety of responses and a relatively small respondent pool meant no further statistical analysis was possible on these elements.

6.7.5 Support received

All respondents were asked about the support they received in their first role, 106 respondents answered this section, and the results are displayed as percentages for comparability, in figure 9.

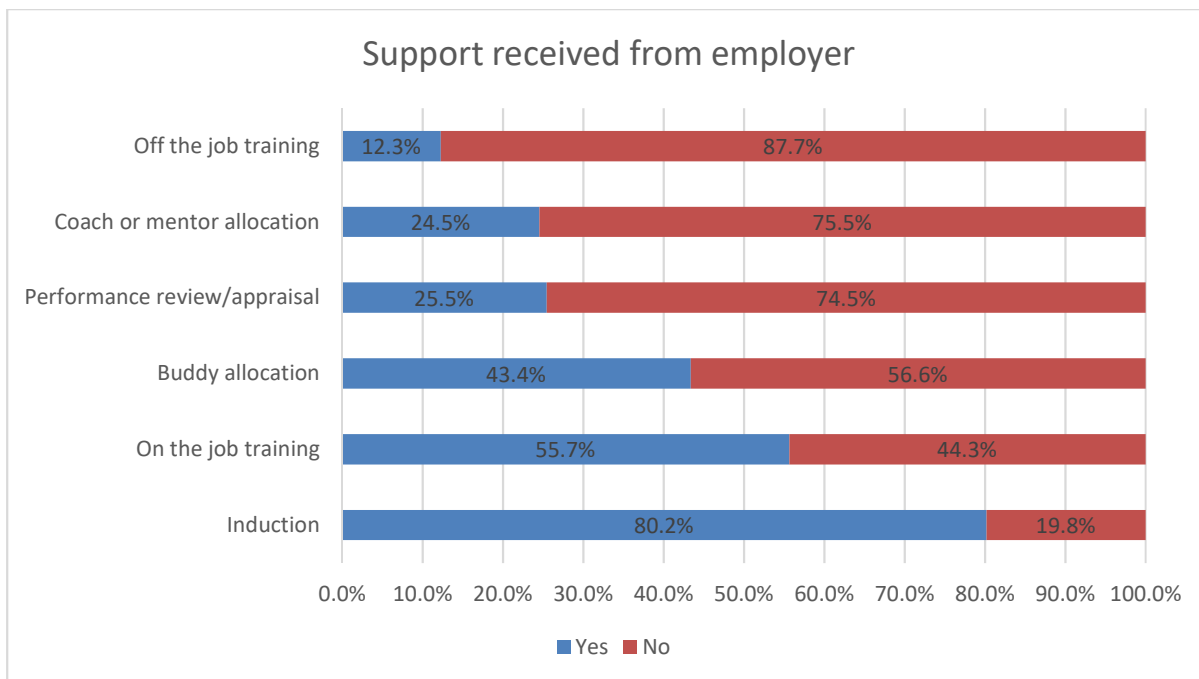


Figure 9: Support received from employer

Respondents were also asked about team meetings and discussions, with a wider range of possible responses, as shown in figure 10.

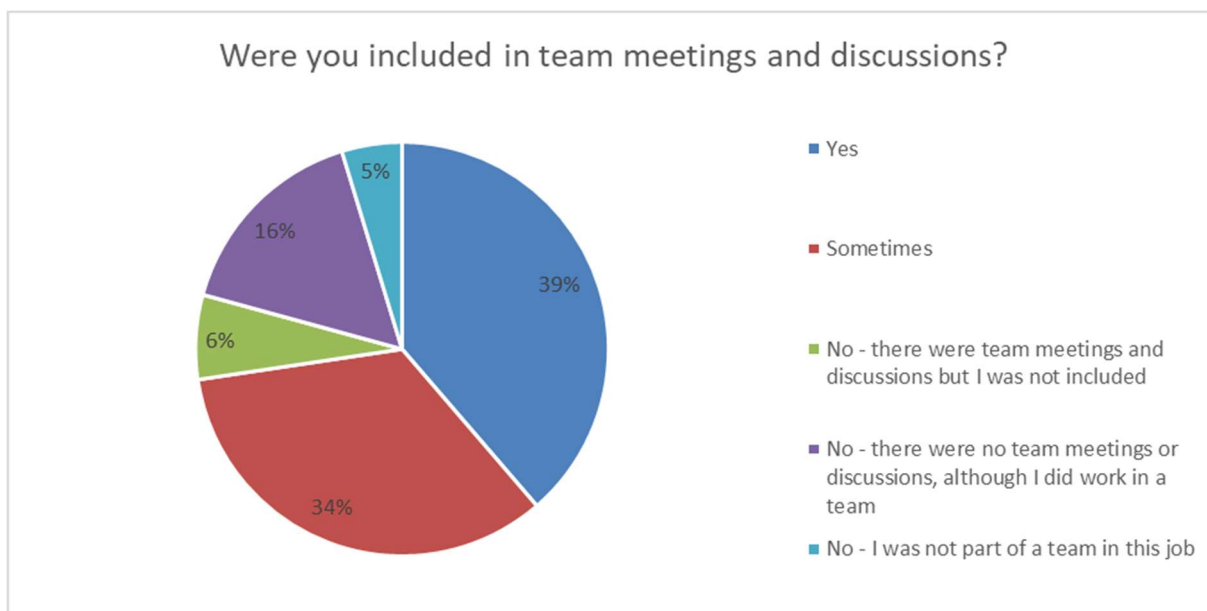


Figure 10: Inclusion in team meetings and discussions

Those who had experienced each type of support in their first role were also asked about the value to them and their professional development, and to their performance in the job.

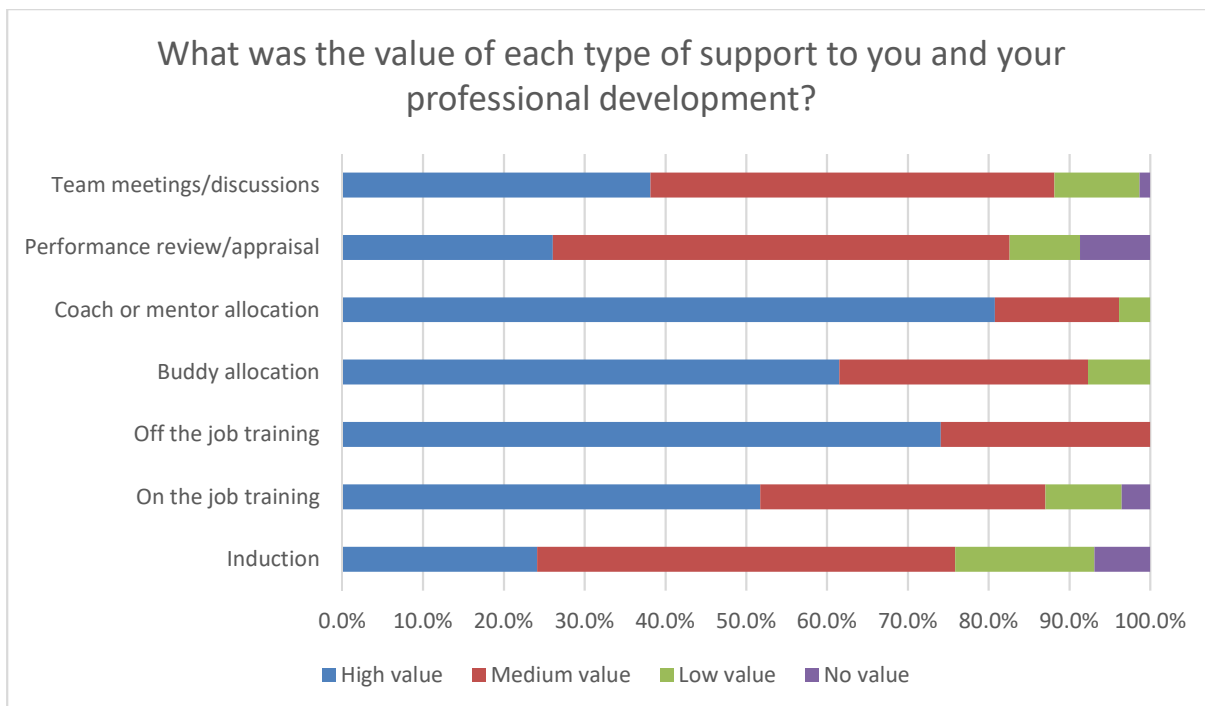


Figure 11: Value of support to respondent and their professional development

Figure 11 illustrates that each type of support was overwhelmingly considered to be of medium or high value by the individual respondents, in relation to their personal development. However, differences arose between on and off the job training, with off the job training being perceived as more valuable. Coaches and Mentors were perceived as more valuable than Buddies. Induction and performance reviews were the least valued activities overall.

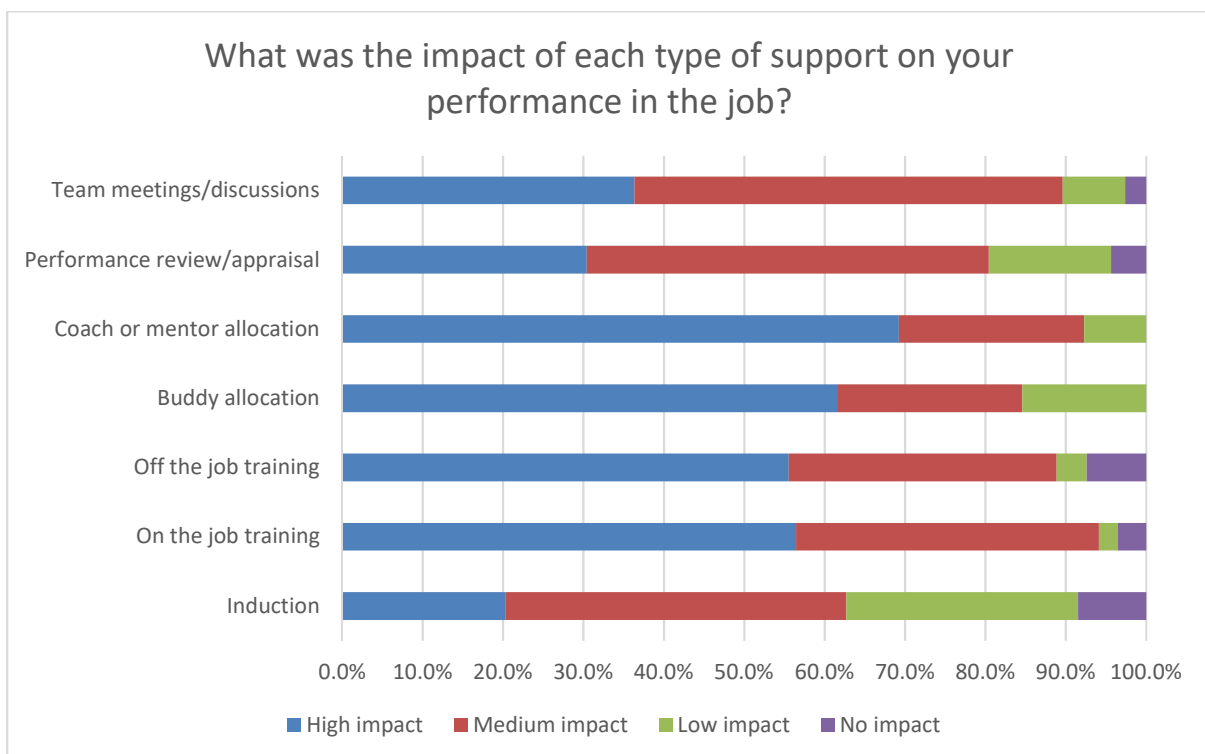


Figure 12: Impact of support to respondent and their performance in their job

Figure 12 shows that a very similar pattern emerged in relation to the impact on performance from each type of support. Respondents overwhelmingly perceived medium or high impact on performance from these activities.

6.7.5.1 Training

In relation to impact on performance in the job, on the job training is perceived as having a slightly higher impact. In relation to professional development, off the job training is perceived as having higher impact. This difference may relate to transferability between employers. Respondents were asked who paid for training; where there was a cost all but three respondents reported that the employer paid for the training (two where the employee paid, one where costs were shared).

6.7.5.2 Performance reviews

Induction and performance reviews were considered to have the least impact. Where respondents chose to comment on performance reviews, of the eight meaningful comments, one praised their employer, but the remainder criticised, with comments about the experience being demotivating, reviews being focused on employer requirements rather than employee needs, and an overt focus on performance metrics. Although anecdotal, these comments highlight potential issues that merit further exploration.

6.7.5.3 Induction

Induction had the lowest perceived impact and value. The data collected on length of induction was therefore evaluated to see if this affected the respondents' views on the value or impact of induction. Statistical testing was carried out (see Appendix B - Statistical analysis of survey responses), which proved that those with two days or more were significantly more likely to report that induction had a high value for their professional development, than respondents with an induction period of one day or less. Similarly, those with an induction period of two days or more were significantly more likely to report that induction had a high impact on their performance in the role, than respondents with an induction period of one day or less.

Those with very short inductions did not include many further comments. Where these were included they tended to be a list of jobs. One respondent who had noted both low impact and low value, with an induction of less than one day commented:

"Here are chickens, here is feed. Give them a bag. If have eggs, collect, take to farm shop."

One respondent who had noted both high impact and high value, with an induction of more than two days, made the following comment:

"A 4 day residential course to understand [the employer]'s goals and company ethos. Compared with others this was a 'world class/industry leading' experience."

The potential gap between the experiences of those surveyed is clear.

6.7.5.4 Team meetings

Low numbers reported that they did not attend team meetings due to not being invited, there being no meetings, or not working in part of a team (Figure 10). Therefore, the difference between sometimes being included, or regularly being included, in team meetings and discussions was statistically tested for significance (see Appendix B - Statistical analysis of survey responses). This testing proved that those who were regularly included in team meetings and discussions were significantly more likely to report that inclusion had a high value for their professional development, than those who were only sometimes included. The same comparison was made with reference to performance, and found that those who were regularly included were significantly more likely to

report that inclusion in team meetings and discussions had a high impact on their performance in the role, than those who were only sometimes included.

Where high value was reported, comments included:

“Day to day meetings on what was to be done on the day, I benefited just listening.”

“It made me feel included and welcomed to be part of team meetings and I gained confidence when I would have to present.”

“Allowed me to feel more included and part of the team.”

6.7.5.5 Buddies, coaches and mentors

Smaller numbers were reporting that they had a buddy, coach and/or mentor limited potential analysis of significance of their value and impact. These types of support performed very well in the survey, particularly in relation to impact, where over 60% of respondents perceived having a buddy, or having a coach or mentor, to be of high value. Only 13 respondents reported that they had a buddy (12.3%) and 26 respondents reported that they had a coach or mentor (24.5%).

6.7.5.6 Final reflections from respondents

19 respondents (17.9%) said they were completely satisfied with their career path to date, 31 respondents (29.2%) were satisfied and 47 (44.3%) were mostly satisfied. A minority were unsatisfied, with 7 respondents (6.6%) mostly unsatisfied, and 2 respondents (1.9%) very unsatisfied. No respondents were completely unsatisfied. These levels of satisfaction are broadly mirrored in the response to the question “If you were starting your working life again, would you still choose a career in agriculture and/or agri-food?”; 95 respondents (90.5%) said yes, and 10 respondents (9.5%) said no.

The free text comments also reflected this, with a positive outlook, but also recognition of challenges. This voice stood out as representing everything that a new entrant to agriculture might be looking for, but also recognising what they can bring and share:

“I feel agriculture is brimming with opportunity right now. An exciting and vital industry to be a part of. I hope that by learning practically from the bottom up, hearing and connecting with people's stories and visions throughout the industry that I will be able to contribute to the diverse positive developments that farming and agriculture can bring. As I develop my own career, I hope to be able to inspire and assist other new entrants into ag too. Grateful and excited to be building a career in Ag in 2021 - here's to the future!”

7 Interview findings

7.1 Interview approach
















Individual interviews took place from June to September 2022. Interviewee profiles are shown in table 3, and interviewee locations in figure 13; six of the interviewees met with the researcher in person, and four met with the researcher online.

Six of the interviews were used to create an individual case study for teaching and wider dissemination, as explained in the Executive Summary.

Table 3: Profile of interviewees

Age of interviewees	Count	Percentage
18-24	3	30%
25-34	4	40%
35-44	3	30%
Gender identity of interviewees	Count	Percentage
Man	4	40%
Woman	6	60%
Sexual orientation of interviewees	Count	Percentage
Gay or lesbian	1	10%
Heterosexual or straight	8	80%
Queer	1	10%
Ethnicity of interviewees	Count	Percentage
White	8	80%
Asian or Asian British	1	10%
Black, African, Caribbean or Black British	1	10%
Location of interviewees	Count	Percentage
England	9	90%
Wales	1	10%
Current employment status of interviewees	Count	Percentage
Employed in agriculture and/or agri-food	3	30%
Unemployed but not looking for work e.g. full time student, career break, caring for family, travelling, retired etc.	4	40%
Employed in another sector	1	10%
Self-employed in agriculture and/or agri-food	1	10%
Self-employed in another sector	1	10%
Career changer status (Interviewee self-evaluation)	Count	Percentage
Career changer	4	40%
Not career changer	6	60%
Education status (Interviewee self-evaluation)	Count	Percentage
No formal education at level 5 or above	1	10%
Formal education at level 5 or above in agriculture	7	70%
Formal education at level 5 or above in agri-food	1	10%
Formal education at level 5 or above in another subject	1	10%

Table 4: Themes from interviews

Emerging theme	Number of interviewees (of 10) mentioning this theme
Initial interest	
First agricultural or agri-food experience or interest coming from a chance encounter or activity	 6
First agricultural or agri-food experience or interest coming from a conscious decision	 4
Impact of management	
Importance of manager offering support at right level	 7
Influence of others in the workplace	
Importance and role of network(s)	 6
Importance and role of mentor(s)	 8
Learning and development	
Learning through questions and workplace communication	 9
Learning through induction	 4
Learning through demonstration and/or shadowing	 7
Learning through informal training	 8
Learning through formal training	 7
Belonging and integration	
Feeling a sense of isolation or not belonging	 5
Feeling a sense of belonging	 4
Assumptions made about the interviewee, due to being from a non-agricultural background	 6
Access to agriculture/agri-food careers	
Importance of holding relevant qualification(s)	 6
Financial accessibility of agriculture and/or agri-food	 3
Personal qualities of interviewee	 5
Diversity	
Interviewee perceiving diversity as an advantage in the longer term	 6
Interviewee encountered stereotypes and/or lack of awareness of diversity, unrelated to their non-agricultural background.	 4

8 Discussion

8.1 Initial interest in agriculture or agri-food

Interviewees were asked about their journey into agriculture or agri-food. Six interviewees described a chance encounter, in contrast with four interviewees who made a conscious decision to pursue agriculture or agri-food as a career or educational path. This diversity of experience mirrors the wide range of influencing factors observed in responses from the wider survey population. It also highlights the importance of offering both formal and informal entry routes, and the need to reduce potential barriers to entry wherever possible, to allow those chance encounters to be built upon.

8.2 Impact of management and leadership

Seven interviewees commented specifically on whether their manager offered support at the right level for their development stage. Three different perspectives on this are captured below:

"You think you need to spend 10 minutes showing me how to drive a tractor, but I need you to spend 30 [minutes]."

[I was] "supported in building up that foundational knowledge."

"[He was] good at managing my problems, basically, but he did not micromanage me or sort of try and get into my day to day work. He did give me a lot of autonomy to do stuff that I wanted to do."

The first interviewee quoted found that the manager was not able to adapt their expectations and style sufficiently, whereas the second and third found their manager met them at their development level, in different ways. When the impact of this type of alignment between manager and employee was considered with the larger survey respondent group, the responses showed that employees perceived managerial support as having a greater positive effect on employee performance, when the manager's behaviour was aligned with their employee's development level. This connects to the principles of individualised consideration and also highlights that interviewees experienced leadership and management that was pragmatic, and both transformational and transactional (Clegg, Pitsis and Mount, 2022; Adams, O'Leary and Dawson, 2021).

Interviewees tended focused on behaviours and activities that would usually be perceived as management, rather than leadership; the hands on and the day to day, rather than the strategic. However, it is also important to recognise the impact of the individual's manager on the other themes that emerged from the interviews. Both, leadership and management contribute to creating a work environment that facilitates peer support and learning and development (Felstead and Unwin, 2016), belonging and integration (Sahai, Ciby and Kahwaji, 2020), and diversity (Adams, O'Leary and Dawson, 2021). Managers may also have strategically led the development of the environment for the new entrant.

8.3 Impact of mentors

Eight interviewees spoke specifically of individuals who acted as mentors to them in agriculture or agri-food. These were sometimes a manager, or former manager, but not always. These experiences were universally positive:

"I really like the fact that I've got these people that are mentors. That's been so useful to me. So, if a manager is in a position to be that kind of mentor-type person, that's definitely very helpful."

"Put them with a mentor, that one person to ask everything to, or go to for advice."

"They had a retired employee who still wanted to be involved in the company. So, he was basically employed to train any new entrants, especially the scholarship students. So, I would have a weekly session with him just for a catch up and it was nice because he understood the company but he wasn't personally linked to the company so I could, if something bad was happening, or whatever, I could talk to him and it wouldn't go anywhere, but he would understand."

"Find mentors, if you can. Find people that you can connect with."

"He must have had a lot of influence on me because I still I still rely on his advice now and he's 80!"

"They will see things that I don't necessarily see."

In the interviewees' experience, mentors supported their wellbeing, inclusion, role and sector understanding, and job performance. Research has suggested that the presence of a mentor may be more influential than the specific activity or level of engagement (Allen et al, 2004); the variety of mentoring experiences shared by the interviewees suggested that mentoring is very individual, driven by the mentor and the mentee themselves, and the context of their relationship. The first two quotes illustrate the interviewee seeing the establishment of mentoring as a managerial duty, either by the manager themselves being the mentor, or the manager being able to "put them with a mentor". The third quote describes an organisational approach to mentoring, utilising a retired employee. Other interviewees spoke about establishing mentoring relationships outside of their employment, through chance encounters, mutual interests, meeting people at events etc. All were valuable, and praised by the interviewees, as the mentoring relationship allowed them to ask questions, seek advice, and build understanding.

8.4 Workplace communication

Nine interviewees discussed workplace communication and their comments focused on two key areas, the importance of informal communication (4 interviewees), and being able to ask questions (8 interviewees). It was recognised that communication is a key skill to effectiveness.

"To be a good person on farm, you just have to have the skills to communicate and listen and understand people and get along with them and a bit of knowledge about the industry. You can work on that, regardless of where you come from."

8.4.1 Informal communication

Formal communication was not specifically raised by interviewees, despite statistical testing on survey results showing that regular inclusion in team meetings and discussions was of high value to both professional development and performance in the role. However, the importance of informal communication arose multiple times, with four interviewees. The following comments were all made in reference to how informal communication helped them to establish themselves and learn about the sector and their role:

"we might sit around the kitchen table and have a little chat"

"having a chat, while you're scraping out the inside of the machines".

"the farmhouse is a great meeting area"

This links to the research findings which showed that peer support, communication and social support networks led to positive workplace impacts and learning (Kolstrup, 2012; Felstead and Unwin; 2016; Nielsen et al, 2017; Crowley and Overton, 2021).

8.4.2 Questions

Eight interviewees discussed questions, and it was a topic which led to rich reflection. This links to the concept of psychological safety, and the beneficial impact on both employees and organisations (CIPD, 2021), and also to the potential for managers to develop work arrangements that allow learning through discussion, consultation and feedback (Felstead and Unwin, 2016).

One interviewee highlighted that questions are part of communication, and must work in both directions. They felt it was vitally important for the employer to *“Make sure new entrants can ask questions and feel like they're not going to be laughed at or judged.”*. However, they also said the employee should *“Ask questions but also try and prove that you're genuinely interested. You might ask about something specific on farm one day and then go home and look it up to find out more. I think that that pays off, if you can show ‘I don't know, but I'm trying to learn’”*. Another interviewee supported this idea of questions as a way to show commitment and interest, advising new entrants to *“Go for it and ask loads of questions.”*.

However, one interviewee wondered if there was a limit to this, saying *“I feel like sometimes I've asked way too many questions because I want to know a lot about everything.”*. A further interviewee focused on quantity of questions as part of their advice for employers: *“I'd say be prepared for a lot of questions. Get used to new entrants asking things a couple of times, because they're taking so much in.”*.

The first point from the original interviewee, that employees must feel they can ask what they need without fear of judgement or mockery resonated with multiple interviewees:

“Questions should be encouraged - I've always appreciated managers taking the time to explain something to me. Patience is important, and not laughing at questions.”

“Asking questions was a big thing for me because obviously I asked a lot of questions. Having that sort of non-judgmental space to be like, okay, no question is a silly question.”

“Ask what might be perceived as a stupid question. But, don't be afraid to, you know, nobody knows all of the answers. And even if somebody laughs, they'll still give you a straight answer afterwards.”

8.5 Learning and development

8.5.1 Induction

Four interviewees specifically commented on induction, but there was little further reflection on its purpose or impact. This was in keeping with the wider survey findings, where induction had the lowest perceived impact and value of the different forms of employer support. Only two interviewees had inductions that exceeded the two day minimum that led to high value and impact for survey respondents. This may explain the lack of any further interviewee discussion on this topic.

Research on induction (Johnson and Burden, 2003; Antonacopoulou and Güttel, 2010) focuses on the need for induction to be bespoke, not “one size fits all”, it is therefore difficult, and perhaps unhelpful, to discuss induction in broad terms, given the range of experiences and roles represented by the interviewees.

8.5.2 Informal training, demonstration and work shadowing

Informal training was discussed by eight interviewees respectively. Discussion around this frequently led into other areas though, specifically work demonstrations and work shadowing.

Seven interviewees specifically commented on shadowing others. Who they observed varied, it could be their manager, another worker, or another professional. The majority of interviewees perceived shadowing as being valuable to them:

"I found it good to shadow someone for a day or two."

"There were two consultants there that sort of took me under their wing and I would follow them around quite a lot and see their clients."

However, demonstration was not always seen as a positive. One interviewee noted that once demonstration had occurred, they did not receive any further support.

"They showed me what I needed to do and then the onus was on me"

In this case, it left the interviewee feeling under-supported and under-prepared. This reinforces the principle of individualised consideration for positive outcomes. Managers play a crucial role in creating a learning environment, often using experienced workers to support newcomers, and informal learning need not be formalised to be of significant value (Felstead and Unwin, 2016).

8.5.3 Formal training

Specific incidences of formal training were mentioned by seven interviewees, so slightly less frequently than informal training. Most of the discussion in this area was very specific to the individual and their circumstances, interests and ambitions. In some cases, the discussion directly connected to the requirement for specific qualifications to access agriculture, agri-food, or a specific role, and this topic is therefore considered further in Qualifications (Section 8.7.2).

8.6 Belonging, inclusion and diversity

8.6.1 Belonging

Five interviewees commented on feeling of isolation or not belonging, and four interviewees discussed feeling that they belonged. However, these were not mutually exclusive, one interviewee discussed both, when reflecting on different parts of their experience in agriculture. However, interviewees did not reflect on their sense of belonging or otherwise specifically in connection with their manager, it was part of their wider experience of a whole farm or organisation

The experiences of interviewees ranged from being explicitly told they were an outsider, as shown in the first quote, to more generalised feelings of otherness in the second quote, and reflections on the wider industry in the third.

"They said that I had no chance because I wasn't from a farming background and I had no relationship to the industry whatsoever."

"It's a very strong community of people that know the same thing, do the same thing. And I just straightaway felt like I didn't fit into that."

"Farming can be a very closed-off industry"

However, where interviewees felt they had integrated and now belonged, this was expressed strongly:

"I love the community."

"...it resonates in your blood..."

"They're the warmest people on the planet."

“So, we're always talking about the weather, how the season's gone, how farmers are feeling, what the yields are like, and there's a lot of like emotional investment in the outcomes of the work that we're doing. So, I think you tend to form quite strong relationships with people because you're all working towards similar collective goals.”

The interviewees' experiences mirrored those of survey respondents, a degree of gatekeeping initially made some feel uncomfortable or like an outsider. However, once settled and established, the interviewees made the same transition that survey respondents did, becoming passionately involved in agriculture and agri-food, and happy with the career path they had chosen.

8.6.2 Assumptions

Half of the interviewees felt that assumptions had initially been made about them due to their non-agricultural background, with comments such as *“he was sceptical at first”* about their initial reception. One interviewee noted outdated attitudes to those from urban backgrounds still prevailed, and suggested *“I feel the farming press needs to catch up a bit, and be more helpful.”* Two interviewees spoke about assumptions that related both to their level of interest in the sector, but also about the way in which they now worked in agri-food.

“...don't assume that just because they're from that [non-agricultural] background that they don't want to talk to farmers or they don't know how to talk to farmers or they're not interested in going on farm.”

“Just because I'm on my laptop all day and you're out in the tractor. We both work hard. We just work hard differently.”

Interviewees recognised that assumptions worked in both directions though, with one interviewee commenting: *“I don't think there's any industry as misinterpreted as the agriculture industry.”* This aligns with research about misconceptions around agricultural and agri-food employment (Nye and Lolley, 2021; Heasman and Morley, 2016).

8.6.3 Inclusion and diversity

Interviewees also reflected on wider issues of inclusion and diversity across agriculture and agri-food. One interviewee reflected on the feeling of *“holding myself back a little bit”*, in context of being gay but not always feeling comfortable or willing to correct assumptions, or challenge certain jokes and behaviours in the workplace. This links to Leslie, Mypler and Bell's (2019) point that solely heteronormative models in farming can limit sustainability and innovation. Two female interviewees commented that they had come across outdated gendered expectation from employers. None of the interviewees reflected on ethnic diversity in any detail. One interviewee noted very limited support or adjustment for anyone affected by physical health issues or disabilities.

While not directly workplace linked, these wider sector issues affected the attitudes interviewees experienced at work. As noted in the project aims and objectives, this research and report does not explicitly explore intersectionality, but in raising these thoughts, the interviewees highlighted the need for further work in this area.

8.6.4 Longer term advantages of diversity

The majority of interviewees were confident that, thanks to their non-agricultural background, they offered agriculture and agri-food something new and valuable. Six interviewees commented specifically on this, with four of those focusing on their ability to be exactly what their employer needed them to be, with no bad habits or preconceptions.

“I came in with no preconceived ideas of how things should be done.”

"I could be taught exactly how they wanted me to drive tractors and manage the machinery."

"...as I'm new entrant, I hadn't any bad farming habits that I'd have to drop, or wean myself off."

"I've got nobody on my shoulder or in my ear, telling me 'this, that, the other', 'because we always have' or 'because your granddad or your dad did it'. None of that."

One further interviewee noted that *"Diversity is important because it enables change."*; beyond being able to be trained and develop by the employer in existing processes and practices, they can also help to support wider change. However, there was a note of caution from one interviewee who commented *"I think it's an asset, only if the industry is open to the fact that it's an asset."* Research has identified the business benefits of inclusivity and diversity (FDF, 2021; Whiting, 2021), but diversity, and the fresh outlook and approach these can bring are only valuable if newcomers and new ideas are welcomed.

8.7 Access and advancement

8.7.1 Networks

Six interviewees discussed networks; one said *"I think you tend to form quite strong relationships with people because you're all working towards similar collective goals."*, articulating the positive environment and connections facilitated by social support in the workplace (Nielsen et al, 2017).

However, interviewees highlighted that networks can also be necessary for career advancement, with the importance of word of mouth and connections from agricultural universities specifically mentioned, and the resulting difficulties for those without those networks. Whilst interviewees had overcome barriers to gain initial entry into agriculture and agri-food, potential barriers to subsequent progression persisted.

8.7.2 Qualifications

Over 80% of survey respondents had taken a relevant qualification, the majority at degree level. Six interviewees subsequently referred to qualifications, perceiving them as a necessary for access:

"I just need that piece of paper to get my foot in the door"

"I think, if you have it on your CV people think okay, well, this is why we should consider her."

"...by doing a degree, I open myself up to higher level management"

The tone of the first quote illustrates the content of the qualification could sometimes be less significant to the individual, than the access it provided, but this was not universal. Interviewees also recognised the value of formal training and learning, when relevant and genuinely developmental, supporting Defra's call for better training both within roles and prior to employment (2022).

8.7.3 Finance

Three interviewees alluded to the financial challenges they had considered or experienced on their journey into agriculture or agri-food. One interviewee specifically noted the inherent contradiction that a role in agriculture would not allow them to save enough money to buy their own land in the future: *"If I want to do this on my own and set up by myself, this pay just doesn't scale to the right sort of level to allow you to save, invest and live."* Financial issues have been widely identified in government and independent research (Cook et al, 2008; Jack et al, 2019; Welsh Government; 2019;

Scottish Government's Agriculture and Rural Economy Directorate, 2022a), and the interviewees experiences aligned with this.

8.7.4 Personal qualities

Interviewees also recognised how their own nature, qualities and preferences had affected their career to date. Three interviewees focused on their own resilience and approach.

"Be tenacious, be enthusiastic, be determined. Be focused and you can achieve it."

"I always felt like I had quite a lot to prove"

"I speak my mind quite a lot, which I think people do appreciate. And, it helps you to be noticed."

Other interviewees reflected on how their qualities aligned with the area of agriculture or agri-food they had pursued, for example: *"I think I'm a bit nosy. I like to be in the know and supply chain keeps you in the know."*

9 Conclusion and Recommendations

The combined responses from the survey and interviews created a rich picture of the experiences of new entrants to 21st century agriculture and agri-food, who are from non-agricultural backgrounds. The key concluding themes, and related recommendations, are explored below.

9.1 Provide individualised management and development for new entrants

Survey respondents and interviewees overwhelmingly benefited from managers, mentors and colleagues who took an individual and personal approach to leading, managing and developing. In other words, new entrants needed managers and other staff who made sure to support them in line with their level of knowledge, understanding or experience at that time. This did not limit performance or learning for new entrants, it enhanced it, by supporting and developing the employee at an appropriate, personalised pace. In line with best practice around transformational leadership, and the importance of individualised consideration towards employees, employees perceived that managerial support had a greater positive effect on performance, when the manager's behaviour was aligned with their employee's development level.

Respondent experiences around this differed. Some benefitted from a workplace connection with a mentor for reflection and discussion, while others needed adjusted managerial expectations of what somebody might know about agriculture to give them time to build their foundations in a new field or role, and opportunities to learn from practical demonstrations and work shadowing. Ultimately, new entrants to agriculture and agri-food benefitted when their managers challenged stereotypes and assumptions, and treated each new entrant as an individual; Managers needed to recognise that the needs of those from non-agricultural backgrounds might differ from the needs of those with an agricultural background, but potentially also differed from the needs of other new entrants they had encountered.

9.2 Lead the creation of safe and supportive workplace environments and relationships

In traditional models, setting direction for workplace culture and environment tended to be more closely associated with leadership than management. However, the experiences of respondents in this study showed that in agriculture and agri-food safe environments and a supportive culture were created by managers, and reinforced by colleagues at all levels. Offering an environment where new entrants from non-agricultural backgrounds can learn, engage and develop was crucial to their experience and engagement. Key elements within this are explained further in the following sections.

9.2.1 Support informal communication

Informal communication was valued by new entrants from non-agricultural backgrounds, whether in team meetings and discussion, learning through 'osmosis' from the conversations of others, or when chatting with colleagues while completing mundane tasks. It was also found that regular inclusion in team meetings and discussions created high value for professional development, and high impact on employee performance in role. Managers and leaders need to create opportunities for peer to peer communication, and support other staff in their organisation to do the same, although it is recognised that this can be difficult where work is solitary. Beyond the findings of this research, further studies showed that co-worker influence, peer support and communication benefit integration and establishment for newcomers, and therefore creating environments that support peer communication should be prioritised by managers and leaders.

9.2.2 Welcome questions

This research showed that when managers and supervisors recognised that those from non-agricultural backgrounds would need to ask questions, and welcomed them doing so, this was instrumental in helping new entrants to learn and establish themselves in a safe environment. Psychological safety is a long-established principle in workplace and employer best practice, and the findings of this research demonstrated that feeling able to ask questions supported feelings of safety, new entrant learning, and performance in agriculture and agri-food. This finding also aligns with existing research around employee motivation and engagement.

9.2.3 Value and create opportunities for workplace learning, development and training

Survey respondents and interviewees valued informal and workplace learning and training processes, such as work demonstrations and work shadowing, above formal processes such as induction and appraisal. Existing research has showed that informal learning need not be formalised to be of significant value, and the responses and reflections of survey respondents and interviewees demonstrated this to be the case in agriculture and agri-food for new entrants from non-agricultural backgrounds. It should be noted that although formal processes had less impact than informal, they were still perceived as being of medium or high value and impact by the majority of research participants. Where more formal processes did occur the content and timing of these affected impact. For example, where induction lasted for two or more days survey respondents were significantly more likely to report that induction was of high value for their professional development and had a high impact on their performance in the role. Interviewees also reflected on the need for formal training or education which led to qualifications, sometimes as a way to 'prove' their interest, commitment and aptitude for agriculture or agri-food.

Managers and leaders can use these findings in two ways. Firstly, by considering the full portfolio of learning, development and training activity that they can offer, to maximise availability and impact for new entrants, remembering that this does not need to be formalised to be effective. Secondly, where formal processes need to be in place, align them with research findings, such as delivering multi-day inductions.

9.2.4 Provide mentoring

Mentors supported new entrant wellbeing and inclusion, and their development of role and sector understanding, and ultimately, job performance. This research found mentoring to be very individual, driven by the mentor and the mentee themselves, and the context of their relationship. It was also highly valued by new entrants to agriculture and agri-food. Managers themselves may potentially act as a mentor, but they can also support those from non-agricultural backgrounds by helping them identify possible mentors to support them in their career.

9.3 Develop managers in agriculture and agri-food to support new entrants

Comparisons of leadership and management research within agriculture and agri-food, with research in other sectors, showed that good practice shares common features, regardless of sector. Pragmatically, in agriculture and agri-food, management and leadership may be difficult to distinguish from each other; most survey respondents and interviewees focused on hands on management, rather than strategic leadership, in their survey and interview responses, and not all experiences were positive. It is possible that the composition of the sector played a part in this, given the proliferation of micro-businesses in agriculture in particular, the same individual or small team may both manage and lead. However, it has also been noted that smaller businesses are more likely to have deficits in their leadership and management. Sector evidence supports this, the "accidental manager" is common in both agriculture and agri-food. The experience of new entrants

from non-agricultural backgrounds varied in accordance with the skillset of the manager they encountered.

However, there is no need for this to be case. There are numerous options and opportunities for management and leadership development, through a range of routes, providers and resources. Specific opportunities have been developed within agriculture and agri-food as well as more widely, and although some of these may bear a cost or time implication, given the current issues in the sector, and the need for staff recruitment and retention, it is a wise investment. It is recognised that better management and leadership would have beneficial impact on agriculture and agri-food organisations and workers, but that the leadership and management skills gap persisted. Further research is recommended to establish the barriers, and how these can be overcome.

9.4 Welcome new entrants: dispel myths, remove barriers, build diversity and inclusion

Gatekeeping existed around who is, or is not, agricultural, which created a sense of alienation among survey respondents. Interviews captured personal experiences of feeling excluded in agricultural and agri-food settings, sometimes due to non-agricultural backgrounds, but also in relation to being part of other demographic groups underrepresented in this sector. However, those who participated in this research recognised the positive challenge and change that diversity can bring. Existing research showed that more diverse and inclusive workplaces lead to positive business outcomes, notably enhancing the talent pool and retention, but also improving innovation and decision-making, and increasing profits. Given the many challenges that agricultural and agri-food businesses are currently experiencing in relation to recruitment and retention, this offers an opportunity to enhance sector sustainability.

Existing research shows that misconceptions and myths also exist in relation to the nature of agricultural and agri-food work, and whether the sector is open to new entrants; survey respondents and interviewees showed awareness of this. The factors and influences that successfully brought new entrants into agriculture and agri-food varied, but included family and friends, event attendance and farm visits, time in rural settings, and conservation and environmental factors. Building on these contact points and working to remove misunderstanding between non-agricultural and agricultural groups is vital; the stories told in the case studies and through this research are intended to support this, by starting discussion and raise awareness.

10 References

- Adams, N., O'Leary, N. and Dawson, C. (2021) *Leadership and Management Development*. Available at: <https://projectblue.blob.core.windows.net/media/Default/AgriLeader/AHDB%20AgriLeader%20Bridging%20the%20Gap%20PDF%20Final%2005.07.21.pdf> (Accessed: 07/11/22).
- AFTP (2021) *AgriFood Training Partnership: Homepage*. Available at: <https://aftp.co.uk/> (Accessed: 25/06/21).
- Agrespect (2021) *Agrespect: Promoting and supporting diversity in the countryside*. Available at: <https://agrespect.com/> (Accessed: 25/06/21).
- Agriculture and Rural Economy Directorate (2022a) *Agricultural Careers: New Entrants to Farming*. Available at: <https://www.gov.scot/policies/agriculture-careers/new-entrants-to-farming/> (Accessed: 12/11/22).
- Agriculture and Rural Economy Directorate (2022b) *Farming opportunities for new entrants (FONE): information pack*. Scottish Government. Available at: <https://www.gov.scot/publications/farming-opportunities-for-new-entrants-fone-information-pack/> (Accessed: 12/11/2022).
- AHDB (2022) *Business leadership courses for farmers and growers*. Available at: <https://ahdb.org.uk/business-leadership-courses-for-farmers-and-growers> (Accessed: 29/06/22).
- AHDB (2021a) *Agriculture and Horticulture Development Board: Management and Leadership Courses*. Available at: <https://ahdb.org.uk/pmids> (Accessed: 25/06/21).
- AHDB (2021b) *Professional Managers' Development Scheme Case Study*. Available at: https://projectblue.blob.core.windows.net/media/Default/Skills/PMDS_Case_Study.pdf (Accessed: 25/06/21).
- Allen, T.D., Eby, L.T., Poteet, M.L., Lentz, E. and Lima, L. (2004) 'Career Benefits Associated With Mentoring for Protégés', *Journal of applied psychology*, 89(1), pp. 127-136. doi: 10.1037/0021-9010.89.1.127.
- Antonacopoulou, E.P. and Güttel, W.H. (2010) 'Staff induction practices and organizational socialization: A review and extension of the debate', *Society and business review*, 5(1), pp. 22-47. doi: 10.1108/17465681011017246.
- Ashworth, E. (2022) *McDonald's focus on increasing diversity and encouraging agricultural careers*. Available at: <https://www.fginsight.com/news/news/mcdonalds-focus-on-increasing-diversity-and-encouraging-agricultural-careers-128864> (Accessed: 07/11/22).
- Association of Labour Providers (2022) *Addressing UK food industry labour shortages: ALP policy position paper*. Available at: <https://labourproviders.org.uk/resources/addressing-uk-food-industry-labour-shortages/> (Accessed: 08/11/22).
- Barbulescu, R. and Vargas-Silva, C. (2020) *Seasonal Harvest Workers during Covid-19*. Available at: <https://ukandeu.ac.uk/seasonal-harvest-workers-during-covid-19/> (Accessed: 16/03/21).
- Barends, E. and Rousseau, D.M. (2018) 'Evidence-based management: the basic principles (with Rob Briner)' *Evidence-Based Management* United Kingdom: Kogan Page, Limited.
- BBC (2020) *UK farmers to need 'thousands of foreign workers' next summer*. Available at: <https://www.bbc.co.uk/news/business-54712374> (Accessed: 10/06/21).
- British Nutrition Foundation in partnership with the Agriculture & Horticulture Development Board (2021) *Food: A Fact of Life homepage*. Available at: <https://www.foodfactoflife.org.uk/> (Accessed: 04/07/21).
- Business Wales (2022) *Farming Connect: Agri Academy*. Available at: <https://businesswales.gov.wales/farmingconnect/business/skills-and-training/agri-academy> (Accessed: 29/06/22).
- Cavaglia, C., McNally, S. and Ventura, G. (2022) *The Recent Evolution of Apprenticeships*. The Sutton Trust. Available at: <https://www.suttontrust.com/wp-content/uploads/2022/12/The-recent-evolution-of-apprenticeships.pdf> (Accessed: 10/01/2023).

Chartered Institute of Personnel and Development (2016) *Could do better? Assessing what works in performance management*. Chartered Institute of Personnel and Development. Available at: https://www.cipd.co.uk/Images/could-do-better_2016-assessing-what-works-in-performance-management_tcm18-16874.pdf (Accessed: 25/06/21).

Chartered Institute of Personnel and Development (2015) *Productivity: Getting the best out of people*. Chartered Institute of Personnel and Development. Available at: https://www.cipd.co.uk/Images/productivity_2015-getting-best-out-of-people_tcm18-10313.pdf (Accessed: 08/11/22).

Chartered Institute of Personnel and Development (2014) *Hands-on or hands-off: effective leadership and management in SMEs*. Chartered Institute of Personnel and Development. Available at: https://www.cipd.co.uk/Images/hands-on-or-hands-off_2014-effective-leadership_tcm18-8961.PDF (Accessed: 28/06/21).

Chartered Management Institute (2017) *Leadership for change: CMI's Management Manifesto*. Available at: https://www.managers.org.uk/~/_media/Files/PDF/CMI-Management-Manifesto.pdf (Accessed: 25/06/21).

Chartered Management Institute and Learning and Work Institute (2021) *Building Strong Foundations: Supporting low-skilled employees and new starters to succeed in the workforce*. Available at: <https://www.managers.org.uk/wp-content/uploads/2021/05/Building-Strong-Foundations-Report-May-2021-CMI.pdf> (Accessed: 08/11/22).

Chatterjee, K., Clark, B., Nguyen, A., Wishart, R., Gallop, K., Smith, N. and Tipping, S. (2019) *Access to transport and life opportunities*. Department for Transport. Available at: <https://uwe-repository.worktribe.com/output/4274794> (Accessed: 24/06/21).

Christiaensen, L., Rutledge, Z. and Taylor, J.E. (2020) *The Future of Work in Agriculture*. Available at: <http://elibrary.worldbank.org/doi/book/10.1596/33704> (Accessed: 25/06/21).

Churchill, F. (2021) *One in four managers have never had management training, survey finds*. Available at: <https://www.peoplemanagement.co.uk/article/1747318/one-in-four-managers-have-never-management-training-survey-finds> (Accessed: 12/10/22).

City & Guilds and Emsi Burning Glass (2022) *Great Jobs | Recognising the essential jobs that keep the UK working*. City & Guilds. Available at: https://www.cityandguilds.com/~/_media/cityandguilds-site/documents/news/2022/great-jobs-research-feb-2022-pdf (Accessed: 30/06/22).

Clegg, S., Pitsis, T.S. and Mount, M. (2022) *Managing and organizations: An Introduction to Theory and Practice*. Sixth edition edn. London: Sage.

College of Agriculture, Food and Rural Enterprise (2021) *Foundation Degree in Agriculture and Technology*. Available at: <https://www.cafre.ac.uk/student-courses/foundation-degree-in-agriculture-and-technology/> (Accessed: 10/06/21).

Community Supported Agriculture (2022) *Community Supported Agriculture: Mentoring*. Available at: <https://communitysupportedagriculture.org.uk/mentoring-2/> (Accessed: 12/10/22).

Cook, P., Grieve, J., Slee, B. and Williams, F. (2008) *Barriers to New Entrants to Scottish Farming An Industry Consultation for the Tenant Farming Forum*. Tenant Farmers Forum. Available at: http://www.tenantfarmingforum.org.uk/eblock/services/resources.ashx/000/244/597/58_final_report_from_contractors.pdf (Accessed: 18/05/21).

Crowley, E. and Overton, L. (2021) *Learning and skills at work survey 2021*. London: Chartered Institute of Personnel and Development. Available at: https://www.cipd.co.uk/Images/learning-skills-work-report-2021-1_tcm18-95433.pdf (Accessed: 08/11/22).

Cultivate (2022) *Cultivate Programme*. Available at: <https://cultivateprogramme.com/programme-details-2/> (Accessed: 29/06/22).

Department for Business, Energy and Industrial Strategy (BEIS) (2020) *National statistics: Business population estimates 2020*. Available at: <https://www.gov.uk/government/statistics/business-population-estimates-2020> (Accessed: 11/11/22).

Department for Education (2022) *Free course for jobs*. Available at: <https://www.gov.uk/guidance/free-courses-for-jobs#get-advice-and-support> (Accessed: 12/11/22).

Department for Environment, Food and Rural Affairs (2022a) *National statistics Chapter 14: The food chain*. Available at: <https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2021/chapter-14-the-food-chain#agri-food-sector-employees-and-self-employed-farmers> (Accessed: 09/01/2023).

Department for Environment, Food and Rural Affairs (2022b) *Official Statistics: Rural Economic Bulletin for England, April 2021*. Available at: <https://www.gov.uk/government/statistics/quarterly-rural-economic-bulletin/rural-economic-bulletin-for-england-april-2021> (Accessed: 24/06/21).

Department for Environment, Food and Rural Affairs (2016) *Agricultural labour in England and the UK Farm Structure Survey 2016*. Department for Environment, Food and Rural Affairs. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/771494/FSS2013-labour-statsnotice-17jan19.pdf (Accessed: 18/05/21).

Department for Environment, Food and Rural Affairs (2020) *Farming for the future: Policy and progress update February 2020*. Department for Environment, Food and Rural Affairs. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/868041/future-farming-policy-update1.pdf (Accessed: 18/05/21).

Department for Environment, Food and Rural Affairs (2022) *Future Farming: A fresh start for new entrants*. Available at: <https://defrafarming.blog.gov.uk/2022/06/01/a-fresh-start-for-new-entrants/> (Accessed: 04/07/22).

Department of Agriculture, Environment and Rural Affairs (2018) *Update of Equality (Section 75) Indicators for Farmers*. Available at: <https://www.daera-ni.gov.uk/news/update-equality-section-75-indicators-farmers> (Accessed: 18/01/21).

Development Economics (2017) *Contributions of UK Agriculture*. Available at: <https://www.nfuonline.com/archive?treeid=93419> (Accessed: 18/05/21).

Devlin, S. (2016) *Agricultural labour in the UK*. Food Research Collaboration. Available at: <https://foodresearch.org.uk/publications/agricultural-labour-in-the-uk/> (Accessed: 18/05/21).

Ecological Land Cooperative (2022) *Social Impact Report: June 2021 - June 2022*. Available at: <https://ecologicaland.coop/wp-content/uploads/2022/07/web-Final-Social-Impact-Report-2021-22.pdf> (Accessed: 07/01/23).

Edge Foundation (2021) *Skills shortages in the UK economy*. Available at: https://www.edge.co.uk/documents/82/Edge_SSB-8_web-1c.pdf (Accessed: 10/06/21).

Environment Food and Rural Affairs Committee (2022) *Labour shortages in the food and farming sector*. Available at: <https://publications.parliament.uk/pa/cm5802/cmselect/cmenvfru/713/report.html> (Accessed: 07/11/22).

Family Kids & Youth (2022) *Careers in Agriculture and Horticulture: Summary research report*. Available at: <https://tiah.org/research/fky-2022/> (Accessed: 07/11/22).

Farming Connect (2019) *Venture Handbook: Supporting Joint Ventures in Wales*. Available at: https://businesswales.gov.wales/farmingconnect/sites/farmingconnect/files/documents/cff_venturebooklet.pdf (Accessed: 18/05/21).

Farms for City Children (2022) *Welcome to our Farms!*. Available at: <https://farmsforcitychildren.org/farm-visits/> (Accessed: 11/11/22).

- FDSC (2019) *Preparing for a changing workforce: A food and drink supply chain approach to skills*. The Food and Drink Sector Council. Available at: <https://www.fdf.org.uk/globalassets/resources/publications/fdsc-workforce-skills-report.pdf> (Accessed: 25/06/21).
- Felstead, A. and Unwin, L. (2017) *Learning outside the formal system: what learning happens in the workplace, and how is it recognised?* Future of Skills & Lifelong Learning evidence review. Available at: <https://dera.ioe.ac.uk//29185/> (Accessed: 08/11/22).
- Foley, N. (2021) *Apprenticeship Statistics (Briefing Paper Number 06113)*. House of Commons Library. Available at: <https://researchbriefings.files.parliament.uk/documents/SN06113/SN06113.pdf> (Accessed: 10/06/21).
- Food and Drink Federation *Food and Drink Inclusion and Diversity Report 2021*. Food and Drink Federation. Available at: <https://www.fdf.org.uk/globalassets/resources/publications/reports/fdf-inclusion-diversity-report-2021.pdf> (Accessed: 11/11/22).
- FSA (2022) *Online Food Safety Training*. Available at: <https://www.food.gov.uk/business-guidance/online-food-safety-training> (Accessed: 30/06/22).
- Grant Thornton, U.L. (2021) *Establishing the labour availability issues of the UK Food and Drink Sector*. Available at: <https://www.nfuonline.com/archive?treeid=152097> (Accessed: 12/11/22).
- Guest, G., Namey, E. and Chen, M. (2020) 'A simple method to assess and report thematic saturation in qualitative research', *PLoS ONE*, 15(5), pp. e0232076. doi: 10.1371/journal.pone.0232076.
- Harper Adams University (2022a) *BSc (Hons) Agriculture*. Available at: <https://www.harper-adams.ac.uk/courses/undergraduate/1/agriculture> (Accessed: 11/11/22).
- Harper Adams University (2022b) *Scholarships*. Available at: <https://www.harper-adams.ac.uk/apply/finance/scholarships/> (Accessed: 11/11/22).
- Hasnain, S., Ingram, J. and Zurek, M. (2020) *Mapping the UK Food System – a report for the UKRI Transforming UK Food Systems Programme*. Oxford: Environmental Change Institute, University of Oxford. Available at: <https://www.eci.ox.ac.uk/research/food/downloads/Mapping-the-UK-food-system-digital.pdf> (Accessed: 25/06/21).
- Hayton, J. (2015) *Leadership and management skills in SMEs: Measuring Associations with Management Practices and Performance*. London: Dep. for Business Innovation & Skills. Available at: <https://www.gov.uk/government/publications/leadership-and-management-skills-in-small-and-medium-sized-businesses> (Accessed: 25/06/21).
- Heasman, M. and Morley, A. (2017) *Earning a Crust? A review of labour trends in UK food manufacturing*. Food Research Collaboration Policy Brief. Available at: <https://foodresearch.org.uk/publications/review-of-labour-trends-uk-food-manufacturing/> (Accessed: 25/06/21)
- Hubble, S., Bolton, P. and Lewis, J. (2021) *Equality of access and outcomes in higher education in England (Briefing paper number 9195)*. House of Commons Library. Available at: <https://researchbriefings.files.parliament.uk/documents/CBP-9195/CBP-9195.pdf> (Accessed: 10/01/2023).
- Institute of Agricultural Management (2021) *Farm Management Skills Programme 2021*. Available at: https://www.iagrm.com/content/large/events/farmmanagementskillsprog_a5_fillable_1.pdf (Accessed: 29/11/21).
- Institute of Food Science and Technology (2022) *IFST Accredited Degree Programmes*. Available at: <https://www.ifst.org/organisations/accreditation-schemes/accreditation-degree-courses/accredited-degree-programmes> (Accessed: 04/07/22).
- Jack, C., Miller, A.C., Ashfield, A. and Anderson, D. (2005) 'Barriers to new entrants to farming: a Northern Ireland perspective' *Book of Abstracts of the 67th Annual Meeting of the European Federation of Animal Science* The Netherlands: Wageningen Academic Publishers, pp. 56-64.

- Jankelová, N., Joniaková, Z., Némethová, I. and Blštáková, J. (2020a) 'How to Support the Effect of Transformational Leadership on Performance in Agricultural Enterprises', *Sustainability (Basel, Switzerland)*, 12(18), pp. 7510. doi: 10.3390/su12187510.
- Jankelová, N., Joniaková, Z., Romanová, A. and Remeňová, K. (2020b) 'Motivational factors and job satisfaction of employees in agriculture in the context of performance of agricultural companies in Slovakia', *Agricultural economics (Praha)*, 66(No. 9), pp. 402-412. doi: 10.17221/220/2020-AGRICECON.
- Johnson, S. and Burden, T. (2003) *Young people, employability and the induction process*. York: Joseph Rowntree Foundation. Available at: <https://www.jrf.org.uk/file/36863/download?token=SHRMf2sa&filetype=full-report> (Accessed: 8/11/22).
- Kolstrup, C.L. (2012) 'What factors attract and motivate dairy farm employees in their daily work?', *Work (Reading, Mass.)*, 41 Suppl 1, pp. 5311-5316. doi: 10.3233/WOR-2012-0049-5311.
- Land Workers' Alliance (2022) *New Entrant Support*. Available at: <https://landworkersalliance.org.uk/new-entrant-support/> (Accessed: 11/11/22).
- Landex (2022) *Membership*. Available at: <https://landex.org.uk/membership/> (Accessed: 11/11/22).
- Lantra (2021) *Leadership and Business Management Courses*. Available at: <https://www.lantra.co.uk/our-courses> (Accessed: 25/06/21).
- Lantra Scotland (2022) *Pre-apprenticeship programme information*. Available at: <https://www.scotland.lantra.co.uk/news/getting-started-agriculture-pre-apprenticeship> (Accessed: 29/06/22).
- Lantra Wales (2021) *Food Skills Cymru: Supported Courses*. Available at: <https://www.foodskills.cymru/supported-courses/> (Accessed: 25/06/21).
- LEAF (2022) *Open your Farm*. Available at: <https://farmsunday.org/open-my-farm> (Accessed: 11/11/22).
- Leslie, I.S., Wypler, J. and Bell, M.M. (2019) 'Relational Agriculture: Gender, Sexuality, and Sustainability in U.S. Farming', *Society & natural resources*, 32(8), pp. 853-874. doi: 10.1080/08941920.2019.1610626.
- Maican, S.Ş., Muntean, A.C., Paştiu, C.A., Stępień, S., Polcyn, J., Dobra, I.B., Dârja, M. and Moisă, C.O. (2021) 'Motivational Factors, Job Satisfaction, and Economic Performance in Romanian Small Farms', *Sustainability (Basel, Switzerland)*, 13(11), pp. 5832. doi: 10.3390/su13115832.
- Mäkinen, H. (2013) 'Farmers' managerial thinking and management process effectiveness as factors of financial success on Finnish dairy farms', *Agricultural and Food Science*.
- Management Development Scheme, (. (2023) *MDS Graduate Scheme*. Available at: <https://www.mds-ltd.co.uk/careers/graduate-scheme/> (Accessed: 07/01/23).
- McDonald, N. (2017) *Final report 2017: Investigating Cotton Farm Workers' Experiences of Job Satisfaction Using Social Cognitive Career Theory*. Australian Government: Cotton Research and Development Corporation. Available at: <http://insidecotton.com/xmlui/bitstream/handle/1/4493/USQ1403%20Final%20Report.pdf?sequence=1&isAllowed=y> (Accessed: 11/11/22).
- McKinney, C.J., Coe, S. and Stewart, I. (2022) *Seasonal Worker visas and UK agriculture*. Available at: <https://researchbriefings.files.parliament.uk/documents/CBP-9665/CBP-9665.pdf> (Accessed: 12/11/22).
- MDS (2022) *Careers With MDS: Leadership and Management*. Available at: <https://www.mds-ltd.co.uk/careers/leadership-and-management/> (Accessed: 29/06/22).
- Migration Advisory Committee (27/03/18) *EEA workers in the UK labour market: interim update*. Available at: <https://www.gov.uk/government/publications/eea-workers-in-the-uk-labour-market-interim-update> (Accessed: 18/05/21).

- Ministry of Justice (2020) *Employing prisoners and ex-offenders*. Available at: <https://www.gov.uk/government/publications/unlock-opportunity-employer-information-pack-and-case-studies> (Accessed: 04/07/22).
- National Farmers Union (2021) *Inspiring STEM learning through agriculture*. Available at: <https://www.nfuonline.com/archive?treeid=150799> (Accessed: 10/06/21).
- National Farmers Union (2020) *NFU calls on government to prioritise food security and address UK self-sufficiency*. Available at: <https://www.nfuonline.com/archive?treeid=145596> (Accessed: 18/05/21).
- National Farmers Union (2018) *Summary response to the government consultation "Health and Harmony: the future for food, farming and the environment in a Green Brexit"*. Available at: <https://www.nfuonline.com/archive?treeid=107139> (Accessed: 18/05/21).
- Nielsen, K., Nielsen, M.B., Ogbonnaya, C., Käsälä, M., Saari, E. and Isaksson, K. (2017) 'Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis', *Work and stress*, 31(2), pp. 101-120. doi: 10.1080/02678373.2017.1304463.
- Norrie, R. (2017) *The Two Sides of Diversity: Which are the most ethnically diverse occupations?* Policy Exchange. Available at: <https://policyexchange.org.uk/wp-content/uploads/2017/03/The-two-sides-of-diversity-2.pdf> (Accessed: 03/01/23).
- Nye, C. and Lobley, M. (01/05/21) *Farm labour in the UK Accessing the workforce the industry needs*. Available at: [http://socialsciences.exeter.ac.uk/media/universityofexeter/research/microsites/centreforruralpolicyresearch/pdfs/researchreports/Farm labour in the UK. Accessing the workforce the industry needs .pdf](http://socialsciences.exeter.ac.uk/media/universityofexeter/research/microsites/centreforruralpolicyresearch/pdfs/researchreports/Farm%20labour%20in%20the%20UK.%20Accessing%20the%20workforce%20the%20industry%20needs.pdf) (Accessed: 18/05/21).
- Nye, C., Wilkinson, T. and Lobley, M. (2023) *Labour and skills in the horticulture and agriculture sectors in England, 2023: Summary report*. TIAH.
- OECD (2020) *COVID-19 and the food and agriculture sector: Issues and policy responses*. Available at: <https://www.oecd.org/coronavirus/policy-responses/covid-19-and-the-food-and-agriculture-sector-issues-and-policy-responses-a23f764b/> (Accessed: 10/06/21).
- Office for National Statistics (2021) *Coronavirus and the impact on the UK travel and tourism industry*. Available at: <https://www.ons.gov.uk/businessindustryandtrade/tourismindustry/articles/coronavirusandtheimpactonthektravelandtourismindustry/2021-02-15> (Accessed: 24/06/21).
- Peterson, T.O. and Van Fleet, D.D. (2004) 'The ongoing legacy of R.L. Katz', *Management decision*, 42(10), pp. 1297-1308. doi: 10.1108/00251740410568980.
- Phillipson, J., Gorton, M., Turner, R., Shucksmith, M., Aitken-McDermott, K., Areal, F., Cowie, P., Hubbard, C., Maioli, S., McAreavey, R., Souza-Monteiro, D., Newbery, R., Panzone, L., Rowe, F. and Shortall, S. (2020) 'The COVID-19 Pandemic and Its Implications for Rural Economies', *Sustainability (Basel, Switzerland)*, 12(10), pp. 3973. doi: 10.3390/su12103973.
- Prospects Luminate (2019) *Skills Shortages in the UK 2019/20*. ACGAS. Available at: https://graduatemarkettrends.cdn.prismic.io/graduatemarkettrends/f90f52ec-a7ed-45bc-a9b8-1873c0da2c41_skills-shortages-in-the-uk-201920.pdf (Accessed: 10/06/21).
- Reaseheath College (2022) *Apprenticeships in Horticulture*. Available at: <https://www.reaseheath.ac.uk/further-education/courses/horticulture/horticulture-apprenticeships/#tab-id-2> (Accessed: 30/06/22).
- Rock, K., Clark, A., Cowap, C., Dixon Smith, S., Dunn, G., Martin, A., Morris, M. and Norton, E. (2022) *The Rock Review: Working together for a thriving agricultural tenanted sector*. Department for Environment, Food and Rural Affairs. Available at: https://tfa.org.uk/wp-content/uploads/2022/10/The_Rock_Review_-_Working_together_for_a_thriving_agricultural_tenanted_sector.pdf (Accessed: 09/01/2023).

Rohlman, D.S., TePoel, M. and Campo, S. (2021) 'Evaluation of an Online Training for Supervisors of Young Agricultural Workers', *International journal of environmental research and public health*, 18(19), pp. 10395. doi: 10.3390/ijerph181910395.

Royal Agricultural University (2022a) *Rural Business Career Transition Course*. Available at: <https://www.rau.ac.uk/rural-business-career-transition-course> (Accessed: 12/11/22).

Royal Agricultural University (2022b) *The Worshipful Company of Farmers' Advanced Course in Agricultural Business Management (ACABM)*. Available at: <https://www.rau.ac.uk/study/wcf> (Accessed: 12/11/22).

Rubenstein, A.L., Eberly, M.B., Lee, T.W. and Mitchell, T.R. (2017) 'Surveying the forest: A meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover', *Personnel psychology*, 71(1), pp. 23-65. doi: 10.1111/peps.12226.

Rural Youth Project (2018) *Rural Youth Project: 2018 Survey Report*. Available at: <https://www.scotland.lantra.co.uk/sites/default/files/2018-08/RYP-Report-2018.pdf> (Accessed: 28/06/21).

Sahai, S., Ciby, M.A. and Kahwaji, A.T. (2020) 'Workplace Isolation: A Systematic Review and Synthesis', *International Journal of Management*, 11(12). doi: 10.34218/IJM.11.12.2020.257.

Saunders, M., Lewis, P. and Thornhill, A. (2019) *Research Methods for Business Students*. Harlow: Pearson Education, Limited.

Shortall, S., Sutherland, L., McKee, A. and Hopkins, J. (2017) *Women in Farming and the Agriculture Sector*. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2017/06/women-farming-agriculture-sector/documents/00521489-pdf/00521489-pdf/govscot%3Adocument/00521489.pdf> (Accessed: 18/05/21).

Shucksmith, M. (2000) *Exclusive countryside? Social inclusion and regeneration in rural areas*. Joseph Rowntree Foundation. Available at: <https://www.irf.org.uk/report/exclusive-countryside-social-inclusion-and-regeneration-rural-areas> (Accessed: 24/06/21).

Smith, M. (2022) *Graduate salaries in the UK*. Available at: <https://luminare.prospects.ac.uk/graduate-salaries-in-the-uk> (Accessed: 07/01/2023).

SRUC (2022) *Change your path bursary*. Available at: <https://www.sruc.ac.uk/courses-training/useful-information/fees-funding/student-bursaries/change-your-path-bursary/> (Accessed: 30/06/22).

Swadling, J. (2018) *Agri-Food Industry Workforce Skills and Development Strategy*. AHDB. Available at: <https://projectblue.blob.core.windows.net/media/Default/What%20we%20do/Skills%20and%20training/Skills%20Strategy%20Full.pdf> (Accessed: 24/06/21).

Tasty Careers (2021) *Apprenticeships in the Food Industry*. Available at: <https://tastycareers.org.uk/apprenticeships-for-teachers> (Accessed: 04/07/21).

Terry, N. (2023) *Jumping Fences: Land, food and racial justice in British farming*. Available at: <https://static1.squarespace.com/static/5eece00ee6780d38b9fb012f/t/63b599ddb28c5936edc62c62/1672845804758/Jumping+Fences+2023+Web.pdf> (Accessed: 07/01/2023).

The Black Farmer (2022) *Are you the new face of farming?* Available at: <https://www.theblackfarmer.com/new-face-of-farming/> (Accessed: 07/11/22).

The Farming Community Network, (2023) *Welcome to FarmWell*. Available at: <https://farmwell.org.uk/> (Accessed: 07/01/2023).

The Institute of Grocery Distribution (2022a) *IGD: Free learning*. Available at: <https://www.igd.com/learning> (Accessed: 12/10/22).

The Institute of Grocery Distribution (2022b) *Reverse Mentoring Programme*. Available at: <https://www.igd.com/social-impact/people/inclusion-and-diversity/reverse-mentoring-programme> (Accessed: 12/10/22).

The Ken Blanchard Companies (2021) *SLII®. Powering Inspired Leaders™*. Available at: <https://www.kenblanchard.com/Solutions/SLII> (Accessed: 28/06/21).

The Prince's Countryside Fund (2022) *Opening the Gate*. Available at: <https://www.princescountrysidefund.org.uk/how-we-help/young-people/opening-the-gate/> (Accessed: 07/11/22).

The Prince's Countryside Fund (2017) *Who'd be a farmer today?* Available at: <https://www.princescountrysidefund.org.uk/our-impact/our-research/whod-be-a-farmer-today/> (Accessed: 12/11/22).

The Royal Agricultural Benevolent Institution (2022) *Training Grants - RABI*. Available at: <https://rabi.org.uk/training-grants/> (Accessed: 30/06/22).

University of Cambridge (2012) *Farming loved but misunderstood, survey shows*. Available at: <https://www.cam.ac.uk/research/news/farming-loved-but-misunderstood-survey-shows> (Accessed: 24/06/21).

What Works Centre for Local Economic Growth (2016) *Evidence Review 1 Employment Training*. Available at: https://whatworksgrowth.org/public/files/Policy_Reviews/16-06-15_Employment_Training_Update.pdf (Accessed: 08/11/2022).

Wietrak, E., Rousseau, D. and Barends, E. (2021) *Work Motivation: an evidence review*. London: Chartered Institute of Personnel and Development. Available at: https://www.cipd.co.uk/Images/work-motivation-scientific-summary_tcm18-89562.pdf (Accessed: 29/06/22).

Whiting, V. (2021) *Review of research literature that provides evidence of the impact of diversity and inclusion in the workplace*. Financial Conduct Authority. Available at: <https://www.fca.org.uk/publication/research/review-research-literature-evidence-impact-diversity-inclusion-workplace.pdf> (Accessed: 07/11/22).

Woodrow, C. and Guest, D.E. (2020) 'Pathways through organizational socialization: A longitudinal qualitative study based on the psychological contract', *Journal of Occupational and Organizational Psychology*, 93(1), pp. 110-133. doi: 10.1111/joop.12285.

11 Appendix A – Interview questions

These questions were used to guide the interview, although flexibility was employed to follow up on interesting elements and responses, as required.

- | | |
|--|---|
| Background questions | <ul style="list-style-type: none">• Please explain why would you describe yourself as being from a non-agricultural background?• What motivated you towards a career in agriculture and/or agri-food? |
| First job in agriculture/agri-food questions | <ul style="list-style-type: none">• What was your first job in agriculture/agri-food?• How did you get that job?• Did you have a manager?• If so, how would you describe their approach to managing you?• If not, did anyone help to oversee or manage you? How would you describe their approach?• What did your manager (or other individual) do to help you settle in and become effective?• Were there any other individuals in your workplace who helped you to become effective in your first agricultural/agri-food role?• Were there any other workplace practices or processes that you found helpful to your development in your first role?• Do you think being from a non-agricultural background meant you were treated differently by your manager? If so, how?• Do you think being from a non-agricultural background meant you were treated differently by colleagues? If so, how?• Do you think being from a non-agricultural background made any difference to your effectiveness in the workplace? If so, how? |
| Advice questions | <ul style="list-style-type: none">• What advice would you give to any manager about managing employees from a non-agricultural background?• What advice would you give to any team about working with people from a non-agricultural background?• What advice would you give to anyone from a non-agricultural background, considering pursuing a career in agriculture and/or agri-food? |
| Reflection question | <ul style="list-style-type: none">• Would you do anything differently if you had to make your education and career path decisions again? |
| Clarification questions (if required) | <ul style="list-style-type: none">• What is your current employment situation?• What is your career background?• What is your educational background?• Have you had any specific support to access your education or career in agriculture/agri-food? |

Interviewees were also asked to recommend a resource (e.g. podcast, book, film, website etc.) that they felt might be of value to other people from a non-agricultural background, to potentially be used in their case study.

12 Appendix B - Statistical analysis of survey responses

12.1 Manager's leadership style

Respondents were asked to describe their development level, and their manager's leadership style. If respondents had not been allocated a manager they were asked to answer these questions in relation to the person who oversaw or supervised their day to day work most of the time. If respondents had no management or supervision at all they were excluded from these questions.

Respondents were asked to provide their development level, and their manager's leadership style for both the start of their first job in agriculture or agri-food, and after a year (or when they left, if sooner) in their first job in agriculture or agri-food. Blanchard's SLII model was used to phrase the questions around leadership style and development level. Responses were then reviewed to consider whether the manager's behaviour aligned with the employee's development level. This created three groups, those who had no matches between their manager's leadership style and their development level, those who had one match (at either start or end of year), and those who had two matches at both start and end of year.

All three groups were asked "In your perception, what was the overall effect of your manager, and their approach, on your performance in the job?", on a Likert scale from 1 (very negative effect) to 7 (very positive effect). A Kruskal-Wallis H test was then performed to test whether alignment between manager leadership style and employee development level affected performance in job, for all respondents (98 individuals) who answered all relevant questions for this analysis.

The Kruskal-Wallis H test indicated that there was a significant difference in the dependent variable (effect on performance in job) between the different groups, $\chi^2(2) = 8.96$, $p = .011$, with a mean rank score of 40.9 for No matches, 52.1 for One match, 64.19 for Two matches. The median value for no matches was 5 (Slightly positive effect on my performance), where the median value for two matches was 6 (Positive effect on my performance).

The Post-Hoc Dunn's test using a Bonferroni corrected alpha of 0.017 indicated that the mean rank of the following pair is significantly different: "No matches" and "Two matches". Therefore, no alignment between manager leadership style and employee development level at any point in the first year had a significant effect; it reduced the employee's perception of how positively their manager affected their performance in their job (from a positive effect to a slightly positive effect), when compared to the perception of employees who experienced alignment at the start and end of the period. Alignment at these two key points might suggest continuous alignment through the year, although this was not specifically tested in this survey.

Respondents were also asked "What was the overall effect of your manager, and their approach, on your professional development?", with responses grouped by alignment as described above. In this analysis, the Kruskal-Wallis H test indicated that there is a non-significant difference in the dependent variable between the different groups, $\chi^2(2) = 5.03$, $p = .081$, with a mean rank score of 42.8 for No matches, 51.81 for One match, 60.19 for Two matches. The median value for no matches was 5 (Slightly positive effect on my professional development), where the median value for two matches was 6 (Positive effect on my professional development). However, the difference was not statistically significant.

Mean scores for both groups, in relation to both questions, are presented in table 5. In both questions, 4 was "No effect", 5 was "Slightly positive effect on my performance" and 6 was "Positive effect on my performance".

Table 5: Mean scores - manager and employee alignment

Alignment between manager leadership style and employee development level	Mean response - In your perception, what was the overall effect of your manager, and their approach, on your performance in the job?	Mean response - What was the overall effect of your manager, and their approach, on your professional development?	Respondent count
No matches	4.6	4.8	40
One match	5.5	5.5	42
Two matches	6	5.8	16
Mean score	5.2	5.3	98

Fisher's exact test was used to determine if there was a significant association between whether a manager had been formally allocated and the alignment between manager leadership style and employee development level. There was no statistically significant association between these variables ($p = 0.264$). Although information was collected on management skills, the variety of responses and a relatively small respondent pool meant no further statistical analysis was possible on these elements. Experiences of management were therefore considered further in the case study interviews, to collect additional qualitative data.

12.2 Induction

Induction had the lowest perceived impact and value. The data collected on length of induction was therefore evaluated to see if this affected the respondents' views on the value or impact of induction.

A chi-square test of independence was performed to examine the participants' responses on the value of induction in relation to their professional development. Those with an induction period of one day or less were compared to those with an induction period of two days or more. The relation between these variables was significant, $X^2 (1, N = 58) = 11.519, p = .001$. Those with two days or more were significantly more likely to report that induction had a high value for their professional development.

The same comparison was made with reference to impact on performance, again using a chi-square test of independence. The relation between these variables was also significant, $X^2 (1, N = 59) = 8.503, p = .004$. Those with an induction period of two days or more were significantly more likely to report that induction had a high impact on their performance in the role.

12.3 Team meetings

With regard to team meetings, low numbers reported that they did not attend team meetings due to not being invited, there being no meetings, or not working in part of a team. Therefore, the difference between being regularly included in team meetings and discussions (response = yes), and sometimes being included in team meetings and discussion (response = sometimes), was evaluated.

A chi-square test of independence was performed to examine the participants' responses on the value of inclusion in team meetings in relation to their professional development. Those who were regularly included in team meetings and discussions were compared to those who were sometimes included, in terms of reported value to professional development. The relation between these variables was significant, $X^2 (1, N = 76) = 12.142, p = .0005$. Those who were regularly included were significantly more likely to report that inclusion in team meetings and discussions had a high value for their professional development, than those who were only sometimes included. The same

comparison was made with reference to performance, again using a chi-square test of independence. The relationship between these variables was also significant, $X^2 (1, N = 77) = 14.578$, $p = .0001$. Those who were regularly included were significantly more likely to report that inclusion in team meetings and discussions had a high impact on their performance in the role, than those who were only sometimes included.

13 Appendix C – Original Project Plan Proposal

Effective leadership, management and development of people working in agriculture and agri-food: supporting new entrants from non-agricultural backgrounds.

Research Objectives

- Review current approaches to attracting those from non-agricultural backgrounds to education and employment in agriculture and agri-food. Participants will self-identify whether they feel their background is non-agricultural.
- Establish what collective lessons can be learned from the employment experiences of those entering agriculture and agri-food employment from non-agricultural backgrounds. The research will focus on two key early periods of employment:
 - employment before and during the course (work experience, placements, seasonal etc.); and
 - employment immediately after the course (the first year after leaving training, college or university).
- Produce a report identifying effective leadership, people management and development practices and approaches within agriculture and agri-food. The report will focus on those entering the sector from non-agricultural backgrounds, and the two types/periods of employment specified above.
- Produce associated case study resources to facilitate future support and teaching.

Outline plan

I will conduct a brief desk-based survey of schemes or programmes in place to encourage students into agricultural courses and employment from non-agricultural backgrounds, reviewing approach, duration and success to date. This will include schemes from educational and training providers, and sector-wide initiatives.

I will then contact agricultural educators in the UK, speaking to staff, students and alumni at my own institution and a wide range of other UK FE and HE institutions and training providers. If travel restrictions are in place, elements of this research could be conducted remotely, but there will be a focus on travelling to institutions and training providers to promote and complete my research in person wherever possible.

Initially, the following information will be established with each institution or provider:

- The number or proportion of students at each institution or provider from a non-agricultural background (if known).
- Any promotional schemes or activities, and any specific support available to these students.

I will ask each institution or provider to help me to contact students who fit the requirements of this project (non-agricultural with work or work experience in agriculture/agri-food) to collect the following information:

- Their experiences as “non-agricultural” students, including:
 - How and why they decided to pursue a course in agriculture or a related subject;
 - Any support or participation schemes accessed;
 - Their experience of leadership, management and development in the agricultural workplace through employment before and during the course; and
 - Current career goals.

I will also ask each institution to reach out to recent alumni and request that they complete a similar survey, where those from a previously non-agricultural background reflect on:

- How and why they decided to pursue a course in agriculture or a related subject;
- Any support and participation schemes accessed;
- Their experience of leadership, management and development in the agricultural workplace. This will be focused on the research objectives by looking at two specific periods:
 - employment before and during the course (work experience, placements, seasonal etc.); and
 - employment immediately after the course (the first year after leaving training/college/university).
- Their career journey so far;
- The value of any support and interventions in their education and career; and
- Their own recommendations for others following a similar path.

I will build on this quantitative dataset with qualitative research, in focus groups and/or individual interviews. This will add detail and context to the data, allowing responses to be explored. Where good educational provider and/or employer practice is identified I would also try to speak to those providers and employers to add their perspective to the report and resources.

The combined datasets and the project funding will facilitate the development of an overarching report on strategies for effective leadership, people management and development within agriculture and agri-food, and associated case study teaching resources. These will be designed to help develop good practice and approaches across the sector, in education and employment. I have deliberately selected an approach that considers this as a sector-wide concern. All the institutions and providers mentioned have a collective interest in making the agricultural sector as inclusive and diverse as it can be, to deliver future sustainability and food security. I intend to share my findings with those who participated and other interested organisations, to support the project's research objectives.

Timescales

I will carry out the research during 2021-22, in line with the flexible timeframe offered by The Farmers Club. This would allow my report and case studies to be ready in late 2022/early 2023.

Establishments to be visited and financial commitment

As explained above, I will contact a range of UK agricultural institutions and training providers and ask them to participate in this research, and encourage their staff, students and alumni to participate. I intend to engage with a wide range of UK higher and further education institutions, and work-based training providers. There will be costs of up to £2,500.

Potential benefit to students

By contributing to the discussion about how the agricultural and agri-food sector can support more diverse entrants from non-agricultural backgrounds, and how this supports UK food security, students will benefit from research into the longer-term sustainability of the sector. There is also the direct benefit of being able to use my findings, report, and case studies in my own teaching. Also, through the shared resources that will be created as part of this project, other educators and students will benefit. Sharing the knowledge developed during this project as widely as possible will be vital. As previously explained, I will disseminate my findings widely to those who participated in the research and other interested organisations, to support the project's research objectives.