

The Role and Contribution of Women in UK Farm Businesses

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Abstract

The global empowerment of women has, and remains to be, a continuing issue, especially within the workplace. The agribusiness industry is no exception where, due to the continuation of gender bias and stereotypes within the sector, women are under-represented. Despite this, the number of women entering careers in the industry is increasing. Historical data typically represents the role of women as wives or assistants to their male counterparts. Much of the remaining literature highlights the significance of women in farm businesses but yet continue to comment on their invisibility in the working environment. This qualitative study assesses the different roles women currently partake in modern United Kingdom (UK) farm businesses by interviewing individual participants from allocated job roles. These include a farmer, a farm manager, an off-farm income careerist and an entrepreneur of an on-farm diversified business. The research proposes a new conceptualisation from the findings, involving the identification of five prominent role characterisations that were generated from initial themes and in which women complete as part of their contribution to their associated farm business. These characterisations include the role of a woman as a mother, a decision-maker, an entrepreneur, a supporter and a labourer. The variance in disciplinary tasks across these role types indicates the extensive work and contributory efforts that women instinctively provide to the business.

Keywords: Agriculture, Farm, Employment, Roles, Women

Introduction

Globally the empowerment of women continues to be an issue, especially within the workplace. The agribusiness industry is no exception with women being underrepresented due to the continuation of gender bias and stereotypes within the sector. Despite this, the number of women entering careers in the industry is increasing. According to Nomis (2020), 28.5% of people employed in UK elementary agricultural operations are female, with the total number increasing by 40% since 2004. In addition to this, the number of female students studying in higher education in agriculture, food and related studies programmes in the UK during the academic year 2019/20 is almost double that of male (HESA, 2020). It is without a doubt that women are advancing in the UK agribusiness and farm business industries, but there are still challenges and barriers to be overcome. Smith, Manning and McElwee (2020) comment on how the farming environment is still heavily gendered in favour of the male sex. Statistics show that only 22.4% of managers or proprietors in UK agriculture and horticulture sectors are female (Nomis, 2020). This low percentage raises interest in the status of women within the industry, their job roles and their overall contribution to their family households and the industry.

The aim of this study is to investigate the different role types of women working in their farm businesses by gaining an understanding of their status and their level of involvement in their current workplace, their financial contribution to the farm household income, and their perceptions of the role of women in the industry. This paper also examines the challenges and barriers involved in a woman's agribusiness role and compare these with those that men face. The study focuses on four main job roles to get a broad understanding of the tasks that are undertaken. These four job roles are a farmer, a farm manager, an off-farm income careerist, and an entrepreneur of an on-farm diversified business.

A systematic data collection and analysis method was conducted for this study. It includes an abductive qualitative research process by interviewing eight participants, two from each of the role types identified. The data is analysed using thematic analysis (Braun and Clarke, 2006). Whilst the study is grounded in the literature the abductive approach did not require deductive reasoning to inform the research questions. As such this study is situated in the experiences of those interviewed and it is those experiences that drive the empirical research.

Whilst studies have examined the role of women in farm businesses, there is still many gaps in the literature. Research on the role of British women in the farm business industry is out-of-date, such as work by Gasson (1980; 1992). Current research on women within the farm business environment is not specific to their roles and contributions and lacks focus on the UK. The majority of research on women within agriculture and agribusiness has been conducted in other geographical areas around the world. For example, Keller (2014), Trauger (2004) and Carruth and Logan (2002) all conduct their research in the United States, and Sauger (2002), Pini (2005), Petterson and Cassel (2014) and Lehberger and Hirschauer (2015) base their research in France, Australia, Sweden and Germany respectively. Although all this research has been conducted in more economically developed countries, with similar farm business typology to that in the UK, cultural differences between countries still exist. These are framed in this research in terms of the related national policies and the outlook of women in the industry. Therefore, the gap for UK research allows for further investigation.

Alongside this, it is also apparent that there is a lack of research reflecting a woman's contribution to her associate farm business, i.e., an activity that may use assets associated with the farm, but is operated as a stand-alone enterprise. This contribution to the overall resilience of the farming business, includes the financial contribution she provides for the household income. The lack of empirical data to date on this topic provides an area to be explored in more detail in this research.

Background of Women in Farm Businesses

A farm business is simply a business that produces and sells agricultural products through the process of breeding an animal or growing a crop to produce a raw material, often termed, a commodity. This could involve a small family farm business, or a larger business that employs external employees. Adding value can also occur pre-farmgate and the range of farming enterprises could also involve an on-farm diversified business, such as a tourism facility, farm shop or a vineyard.

Historically, the role of women on a farm business has involved a typical 'house-wife' or an 'assistant farmer' (Gasson, 1980). This historic literature positions that very few women worked the land as a full-time role and this study aims to investigate how this differs to the current role of women. Wiser (1975; cited by Tanner, 1999) stated that "women make a more important contribution to agriculture than they do to any other single industry", but it must be noted that although many other authors have also identified a woman's significant role on a farm business (Tara-Satyavathi, Bharadwaj and Brahmanand, 2010), they also state that this contribution is unrecognised and that their work is essentially invisible (Brandth, 2002; Damisa and Yohanna, 2007; Nain and Kumar, 2010). Annes, Wright and Larkins (2021) also identify the previous invisibility of women in agriculture, and comment on how farming is still a widely male dominated industry across the globe.

Despite this, the modern notion of the 'greying of farming' has encouraged the rise of females in the agriculture world (Smith, Manning and McElwee, 2020). This narrative simply explains how male farmers with no successors are forced to sell their farm business in retirement which creates the opportunity for start-up female farmers to take this over and manage their own farm business.

There have been many studies conducted in relation to women's roles within farming, agriculture and agribusiness environments. Many of these are investigated in countries outside of the UK and some explore further into similar sub-topics of women within the farm business environment. For example, Damisa and Yohanna (2007), and Nain and Kumar (2010) both investigate a woman's involvement in the decision-making process with respect to farm management in Nigeria and India, respectively. They both begin by stating that women have a key role within the agriculture industry but continue to outline that they are essentially 'invisible' as they are commonly overlooked by a dominance from the male gender. Alston (1990, cited by Lewis, 1998, p. 235) highlights "the lack of recognition traditionally given to the contribution of farm women" by identifying the value of work of women to be low, in comparison to that of men. This common theme of disregard of the contribution made by women to the farming sector is one that has space for further research. The key theoretical concepts that ground this paper are now considered in more depth.

Role

The term role can be described as the commitment of an individual to a specified job with the responsibility to carry it out with the highest degree of one's ability. In context to business and management, the expression 'role' can be defined as the "functional niche assigned to each member of a group, carrying the expectations of peers regarding individual contributions to that group" (Kurian, 2013, p. 263). In terms of women within farm businesses, this would link to the individual woman having her own job, either on or off the farm, and then contributing her efforts to the household income.

Gasson (1980) bases her evaluation of women's contribution to farm and rural life using three identified role types: *farm housewife*, *working farmwife* and *woman farmer*. Brasier et al. (2014) using work from Burton and Wilson (2006) and McGuire (2010) to develop a theoretical model for role identities of farming women highlight: *primary operator*, *farm wife-helper* and *off-farm income careerist*. Within these identities, role types, developed from Brandth (2002) and Barlett (1993), are ranked in order of salience to determine the main responsibilities for women given such an identity.

Contribution

The term contribution can be defined as "the action of contributing or giving as one's part to a common fund or stock... to bring about a result" (Oxford English Dictionary, 2021). It is the input and involvement that a person provides for a given role, and the impact that they have on their surrounding environment. In relation to a woman's contribution to a farm business, it could involve her physical work and skillset, the influence she has on decision-making or even the emotional support she offers. Contribution can also be regarded through a financial aspect, involving the monetary value that they provide to the farm household income, whether that income is generated within or outside of the farming business.

A Farm Business

A farm business involves the use of agricultural resources for the production and sale of conventional crops and livestock to raise a profit and generate income for the farm household (Hansson et al., 2013). Agri-entrepreneurship describes the formation of a separate business that is diversified from the original farm business involving new on-farm business activities (Bock, 2004, cited by Lans et al., 2013). 90% of the UK's 149,000 farm businesses are composed of family partnerships, making the agriculture industry still highly characterised by family farming businesses (Countryside, 2020). *Table 1* shows a summarised definition for each of the key theoretical concepts that are analysed in this study.

Table 1: Key concept definitions

Key Concept	Definition
Role	The “functional niche assigned to each member of a group, carrying the expectations of peers regarding individual contributions to that group” (Kurian, 2013, p. 263).
Contribution	“The action of contributing or giving as one's part to a common fund or stock... to bring about a result” (Oxford English Dictionary, 2021).
A Farm Business	The use of agricultural resources for the production and sale of conventional crops and livestock in order to raise a profit and generate income for the farm household (Hansson et al., 2013), including agri-entrepreneurship to support a farm-diversified business.

The four roles drawn from the literature: *a farmer, a farm manager, an off-farm income careerist* and *an entrepreneur of a diversified business* are now considered more closely.

Farmer

One role of women within the agribusiness industry involves being the farmer. The main job of a farmer is to grow produce to provide food and other assets and is therefore, the foundation of the food supply chain, making it a crucial role within society. Smith, Manning and McElwee (2020, p. 4.) define a farmer to be “a person who operates a farm or cultivates land,” and therefore their role typically involves the physical work needed to be completed within the farm environment. Farming is not just an occupation to most people, it is a “way of life with a deeper meaning than simply a form of employment” (Groth and Curtis, 2017). The number of women participating in it in the UK has risen extensively in recent years (Nomis, 2020). This increase is suggested by Smith, Manning and McElwee (2020) to be due to the greying of farming and developments in mechanisation which has made the tasks physically easier than decades or even centuries ago.

In her study forty years ago on farm women role types, Gasson (1980, p. 171) identifies the woman farmer to be “farm centred... regarding farming as their most time consuming, most important and most enjoyable activity.” They are not the assistant to another farmer and participate in tasks that are seen to be masculine. They value their work just as much as a man would by being satisfied from the independence and the pride that farming sustains (Gasson, 1980). Other sources, however, suggest different ideas, identifying the difficulties faced with being a female farmer including self-identity. Keller (2014, p. 2) found that this was particularly so in “communities where masculinity and femininity have been shaped over time by the gendered symbolic categories of farmer and farmwife.” This shaping of stereotypes has developed from the shift in the role of farming women as farms became mechanised and

women were not required on the farm and forced into the house (Trauger, 2004). This implies that the perceived capability of a woman did not extend beyond the requirements to carry out mechanised work. It is also important to note that with large numbers of workers on the farm the women traditionally had a role in feeding those workers. As mechanisation increased this role on the farm reduced in line with a reducing work force.

Saugeres (2002) considered the differences between genders within a farming community in France. Results suggest that the perception of women to be physically weaker than men influenced their role on the farm to be secondary and complementary to the dominant male. Their responsibilities were only centred on the easier tasks such as handling and caring for small livestock that were kept indoors as this involves less demanding work. As a result, tasks perceived to be of importance on the farm are defined as masculine because a woman couldn't partake in a more significant role that required such physical strength. A common task that was mentioned to *be masculine* was the working of the land, including ploughing. The concept of single farm women is also a prominent topic throughout the paper with research showing that men perceive these types of working women to not be real farmers, and instead just assistants to their fathers, or to not be real women and in fact freaks of nature due to the lack of femininity they show. This is interpreted by Pini (2005) who suggests that women cross the traditional gender division of labour if they partake in physical on-farm work, especially if this includes the use of large farming machinery. She states that "women who undertake on-farm physical roles deemed to be men's work and engage in those tasks associated with the occupational role of [a] farmer represent a significant deviation from the norm" (Pini, 2005, p. 2). Smith, Manning and McElwee (2020, p. 2) discuss the stereotypes associated with farmers, identifying *him* to be a "strong, rugged man who stoically farms the land." The age of the sources and the mixture of findings associated with the role of the female farmer allows for further exploration of the current context in the UK.

Farm Manager

Nuthall (2010, p.6) summarises that a farm manager is "the key to combining resources appropriately to achieve the farm goals." The traditional resources utilised by the farm business and managed by the farm manager involve the land, the labour and the capital (Dexter and Barber, 1960). In terms of labour, a farm manager must be able to take control where necessary by directing orders and overseeing all the farming activities. An analysis of the role of the modern farm manager recognises that management is more complex than this and requires sufficient knowledge of the external industry environment as well. This involves factors such as the market, its economics and it's the dynamic changes that occur. Malcolm (2004) implies that by having awareness of the constantly changing environment, a farm manager can identify potential in their farm business and consequently make a suitable decision and then implement the required change. He also states that "the outstanding characteristic of the most successful [farm] managers... is their mastery of information" (Malcolm, 2004, p. 53).

With respect to women as managers of a farm business, Lehberger and Hirschauer (2015) identifies the issues that arise. They found that the societal presumption that the woman is the principal caretaker of the family interferes with the timely role as a farm manager. Although this can be overcome through the swapping of stereotypical gender roles, what cannot be avoided is the female as the reproducer of the family. Having to take time away from a farm

managerial career during maternity periods can be downgrading and create pressure or financial risks (Lehberger and Hirschauer, 2015).

The lack of theoretical data regarding women as farm managers and their roles of controlling, and directing employees, as well as the knowledge they obtain with respect to the external agribusiness industry and markets, presents a research gap and allows for further research in this area.

Off-farm Income Careerist

Generating income through off-farm activity is a “strategy adopted by farm-based households to absorb economic shocks” (Gasson, 1988; Shucksmith et al., 1989, cited by Morris, Henley and Dowell, 2017, p. 134). According to Gasson (1992, p. 74), the “largest group of women in the farm labour force” are those married to farmers and these “‘assisting spouses’ are in a different position from women farming independently or from female farm workers.” Price (2010) suggests that the role of women in a working farm household is often to support farm survival by aiding the male identity through the supplementation of household income from off-farm employment. This is also supported by Carruth and Logan (2002) who state that the economic status of the farm business can be significantly improved through the spouse working off-farm. Generating income with no relation to the farm business creates a sense of security for the family household associated with the farm business. Therefore, the role of a woman as an off-farm income careerist to a farm business is an important contribution and has a significant effect on the performance of the overall business. Having work available off-farm and earning their own money encourages women to have self-assurance and allows them to have more visibility and autonomy which in turn opposes any hegemony on the farm business (Brandth, 2002). The identification of pluriactive women, also by Brandth (2002), highlights the possibility for them to work both on- and off-farm. Although they provide additional income off-farm, many of the women at the same time are also actively involved in the farm business.

Entrepreneur of an On-Farm Diversified Business

Developing an on-farm business as diversification to the original farm business promotes the role of an entrepreneur. Diversification is “a strategically systemic planned movement away from core activities of the business, as a consequence of external pressures, in an effort to remain in and grow the business.” (McElwee, 2004; McElwee, 2006, p. 4) Further, it is the female partner of the farmer that generally instigates and manages the diversified activities (McElwee, 2006), indicating the entrepreneurial nature of women in a farm business. The ability of women to be innovative and to have transferrable skills enables them to recognise potential for a new diversified business (Smith, Manning and McElwee, 2020). They also highlight that farm women have more time and energy to put into the new business in comparison to their men counterparts who exert all their outputs into the farm business. Pettersson and Cassel (2014) identify those reasons to become an entrepreneur are from interconnected economic, social, and personal motives as financially, it is an alternative economic strategy to support and enable the farm business’ survival. Socially and personally, becoming an entrepreneur allowed for more desired independence for women as well as the ability to work from home, especially for those women with children (Pettersson and Caseel, 2014).

It has been noted that the literature available provides research on women as entrepreneurs of on-farm diversified businesses, but is limited on their contributions within this role, and so consequently allows for further exploration.

Theoretical Framework

Figure 1 shows how the current literature theories analysed and how they may link in with each other.

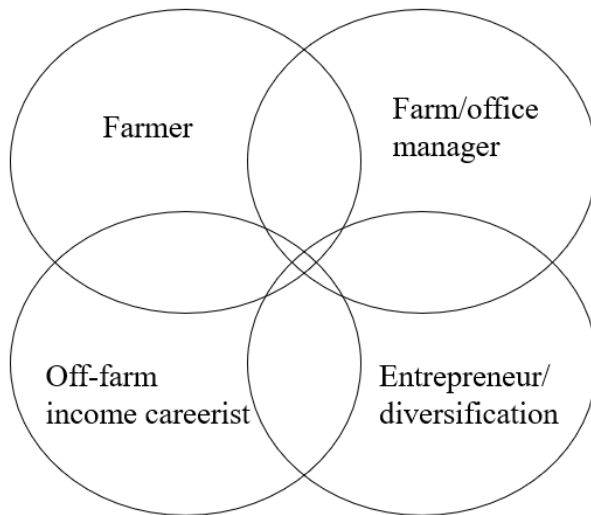


Figure 1: Theoretical framework of the current literature

This asserts that one role is not mutually exclusive of the others as an individual may fill more than one role or another role could be taken on by another individual. The role of the farming woman may also change in line with the business and family demands and their position in the family. Although the obligations associated with each role may differ, it is still possible that somebody could be responsible for one, two, three or even all four of the roles in congruence and at different times in their lives. This notion of pluriactivity is found in the current literature (Brandth, 2002; Pettersson and Cassel, 2014; McElwee, 2004), but there is also an aspect of fluidity and circularity as the women substitute one role for another.

This review shows a gap in contemporary literature allowing for this study to explore this theme, with a theoretical framework that highlights the pluriactivity and interconnections of the role types and provides a tool to map a woman's contribution to the farm business. The aim of this study is to investigate the different role types of women working in their farm businesses by gaining an understanding of their status and their level of involvement in their current workplace, their financial contribution to the farm household income, and their perceptions of the role of women in the industry. The methodology is now defined.

Methodology

Based on the research aim of investigating the role and contribution of women in UK farm businesses, the research adopts a qualitative methodology involving semi-structured interviews with representatives of the four roles outlined in Figure 1, namely a farmer, farm/office manager, off-farm income careerist, and enterprise entrepreneur. Five research questions were established to achieve this aim:

RQ1. What roles do women play in the farm business?

RQ2. To what extent do women significantly contribute to the farm business through these roles?

RQ3. What is a woman's status and involvement in the farm business?

RQ4. What degree of decision-making do women in farming businesses participate in?

RQ5. What are the perceptions of women themselves of their roles in the agribusiness industry?

The interview guide was designed to gather data to address these research questions, focussing on the role, contribution and experiences of female participants in farm businesses. These issues were developed from discussions outlined in the literature review. The UK was chosen as the setting for this research, as the role of women in UK farm businesses has seen little research in recent times. Notable research in this context was previously seen by Gasson (1980; 1992), however the present context of agriculture in the UK is considered to have advanced since these studies, such as through technology adoption and diversification (Morris et al., 2017). The use of interviews is a method that is consistent with related research on the role of women in agriculture (Keller, 2014; Petterson and Cassel, 2014).

Maximum variation sampling was used for participants to be purposively selected to ensure that each of the roles identified in the theoretical framework (Figure 1) were represented. This led to 8 semi-structured interviews with women in farm businesses across the UK conducted at the end of 2020 and the beginning of 2021. Table 2 displays demographic details for each participant, including their allocated job role, their age and their farm business type. Due to regulations at the time, interviews were conducted virtually using video calling technology. Interviews were recorded, and transcribed verbatim, with consent of the participant, to ensure that data obtained was a true representation of the interviews. Rigour was sought at all times through the research process, from the formulation of the interview guide based on the literature review, to the use of a structured analysis process. Interview data was analysed through the six-step Braun and Clarke (2006) process of thematic analysis. This included first and second cycle coding (Miles et al., 2014), which was used to code the interview transcripts, establishing initial codes, evaluating the codes and facilitating the formulation of themes. This led to establishment of 5 key themes from the data, which are discussed in the following section. NVivo 12 was used to ensure that data analysis was conducted in a structured and rigorous manner.

Findings and Discussion

Data from this research is based on interviews with 8 participants, representing the different roles of women in farm businesses outlined in Figure 1. A profile of the interview participants is shown in Table 2, distinguishing participants by allocated job role, age and farm business type.

Table 2: Profile of interview participants

Participant	Allocated job role	Age	Farm business type
P1	Farmer	20	Dairy
P2	Farmer	24	Dairy and beef
P3	Farm manager	52	Cereals and poultry
P4	Farm manager	51	Potatoes, carrots, cereals and maize
P5	Off-farm careerist	56	Chicken, beef and sheep
P6	Off-farm careerist	54	Cereals and maize
P7	Entrepreneur of a diversified business	51	Beef, sheep and pigs Diversified business: farm shop
P8	Entrepreneur of a diversified business	28	Beef and sheep Diversified business: vineyard

Following the six-step process of thematic analysis by Braun and Clarke (2006), the interview data was coded and evaluated, resulting in the formulation of 5 main themes, representing five dominant role characterisations. These roles portray how women contribute their efforts to their associative farm business environment. These have been identified in *Figure 2* and will be discussed further.

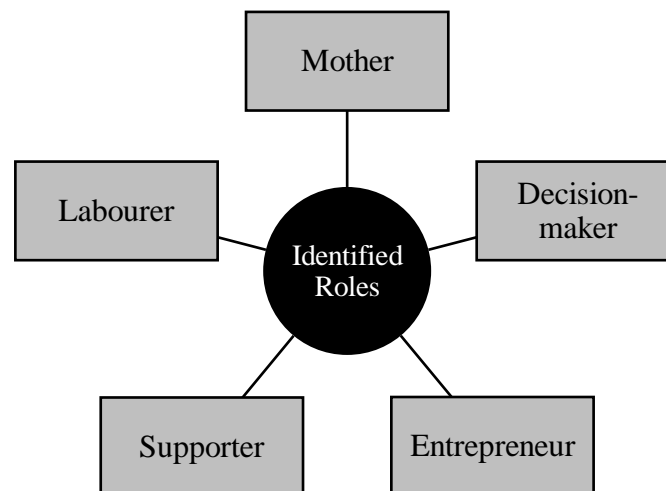


Figure 2: The main role characterisations of women on modern UK farm businesses

A Mother

A common theme across many participants was their role within the family as a mother, birthing and caring for the children. Findings suggest that the older participants (P3, P4, P5, P6, P7) have experienced the concept of the female being the main parent in the family and taking on the responsibility of caring for the children, whilst the husband continues to work.

“I made the difficult decision to stop working off-farm to look after the children and lose the additional household income. This [childcare] became my main responsibility” (P6).

The uncontrollable factor of a female being the only gender to become gravid means that if a couple wish to have a family, the woman has no choice but to take a pause from her career progression to support the maternity, birthing and initial childcare processes. After this, it is natural for the female of the partnership to continue the care and have their main responsibility as a mother: *“Women are expected to take a break from their careers to have children, and because of this, I believe women are overlooked in the industry”* (P1).

While a mother has not been acknowledged as an identified role of women in farm businesses in Figure 1, Gasson (1980, p. 166) identifies that the “role of [women] in producing and rearing successors, and in socialising them to accept that role, is crucial to the survival of most family farming businesses.” Morris and Evans (2001) also acknowledge a woman’s reproductive role in farm businesses as well as highlighting the lack of recognition and celebration for women as the reproducer whilst continuing to carry out duties. However, it is difficult for a woman to fully undertake the mother role whilst resuming to her job and maintaining her ability to fulfil the other roles identified in this study, such as a labourer and an entrepreneur: *“Farming is not part-time in any shape or form and it’s very difficult to maintain a high business level when you’re female and trying to bring up a family because it’s not easy”* (P4). All these factors highlight the issue with being a woman in a hardworking and physically demanding working environment. It makes women dependent on others during these periods within their life, for either the support with childcare, in the workplace, or both. A woman would be reluctant to ask for assistance on the working farm, but due to the demands of the work and the demands of being a mother not corresponding, she would unfortunately have no choice.

Gasson (1980) identifies that the size of a family and the stage of the family lifecycle will both influence the extent of a woman’s role as a mother. This suggests that a woman with more children and of a younger age will have a more saturated motherly role with respect to time, commitment and emotions, in comparison to a woman with less children who are older and independent. For the latter situation, a woman will have a surplus of time after she has carried out the role of the mother to contribute to the working farm. Research findings imply that the older participants have experienced the former, more concentrated mother role and now that the children have grown and have gained more independence, they have more time to focus on the work of the farm business. Brandth (2002) examines gender identities in farming families and highlights the responsibilities of a woman on a family farm to care for the remaining family members and carry out remaining household tasks. She continues to state that “this task allocation has been regarded as a ‘natural’ distribution of work on the basis of certain gender specific attributes,” suggesting that a female’s stereotypical motherly trait is one that should be immediately assigned to her.

A Decision-maker

When it comes to decision-making on a farm business, it could involve day-to-day tactical decisions or long-term financial decisions. For daily operational decisions, farmer and diversified entrepreneur participants had all the decision-making as it is them carrying out the day to day tasks on either the farm or the diversified farm business, respectively. Diversified entrepreneur participants also had control over the larger financial decisions, as well as farm manager participants. This corresponds to the high level of control they have in the farm business.

“I have all control of the business, so I make all of the larger long-term decisions which include most of the financial decisions and then I manage who makes small day-to-day decisions, which tend to be more tactical.” (P4)

A common theme that arose with respect to the long-term decisions was the involvement in discussions with their family. Seven out of eight participants work on or contribute to their own family farm business and six of these mentioned the discussion of decisions between family members. Farmer and off-farm careerist participants are included in long-term financial discussions initiated by their dominant male family members who run the business, but do not finalise the decision: *“I am involved in discussions with relation to major financial decisions and have an input into these” (P6)*. On the other hand, it is identifiable that farm manager and diversified entrepreneur participants, whose roles consist of having more control in the business, discuss their thoughts with their male family members, but then proceed to make the final decision themselves: *“I have full control on decision-making... but I always run all decisions through my dad and brother, so we work together to figure out a solution for any problems” (P8)*. Similar to these findings, Bokemeier and Garkovich (1987) determined that a woman’s role of decision-making varies depending on their defined roles in the farm business. Those participants actively involved in the farm’s operations had more control in decision-making, compared to those who are not. Despite this and the data collected for this study, they also conclude that few women have authority with respect to decision-making on the working farm (Bokemeier and Garkovich, 1987, cited by Braiser et al., 2014).

Entrepreneur

One of the job roles researched for this study was an on-farm diversified entrepreneur. The frequent theme of entrepreneurship in this study implies the endless capabilities that women have in the agribusiness industry. The data indicates that if women are creative, determined, hard-working and resilient, they can prove themselves in the industry and be successful. It also suggests that they are forward-thinking and if they have a positive attitude, there are endless possibilities and opportunities to progress in the sector. Findings show that it was more common for off-farm careerist and diversified entrepreneur participants to comment on this theme which could be because the former are looking from the outside of physical farming and the latter have been through the entrepreneurial process and have experienced a successful outcome: *“Women have definitely proved themselves as being equal in farming. Anything is possible, which I think is wonderful” (P7)*. Farmer and farm manager participants take part in the physical on-farm work and so may not self-identify to be successful as much as those observing identify them to be.

Braiser et al. (2014) found that a woman can conduct multiple roles on the farm, including working on and off the farm, bookkeeping, and most importantly, developing entrepreneurial opportunities. This implies a woman’s ability to partake in a variety of farm work jobs as well as her having innovative traits as an entrepreneur. On the other hand, a study on depressive symptoms in farm women by Carruth and Logan (2002), summarises those women who engage in farming for an extensive period as likely to develop emotional, risk and mental health symptoms. This indicates that the results of being an entrepreneur is most likely to be the endurance of lots of failures for the duration. Even a determined and hardworking entrepreneur will face difficulties and challenges, but it is a woman’s resilience that will ensure she continues

to work diligently. However, after a long time, these failures would become straining on the mental health of a woman, causing these depressive symptoms (Daghagh Yazd, Wheeler and Zuo, 2019).

A Supporter

The role of women as drivers and supporters in the farm business has been identified. Participants highlighted vocabulary such as inspiring, encouraging, teamwork, positive, initiative and valuable to describe a woman's role in a supportive manner to her family and colleagues. Off-farm careerist and diversified entrepreneur participants are much more likely to show a sense of support to the family business as they are not immediately involved in the day-to-day operations of the farm itself as much as farmer and farm manager participants. This could be done through off-farm work, through bookkeeping, or alternatively as a driving force by supporting and encouraging the other working family members to succeed by having a positive attitude. Findings suggest that the implementation of the entrepreneur role corresponds in this supporter role as the woman brings new and initiative ideas to the farm business by looking forward, rather than having tunnel-vision: *"All of the [local] farms that are moving [forward] are the ones that have got strong women who are interested in the farm and continually driving from behind. I think that's where the woman makes it a team"* (P7).

Comparing with Gasson's (1980) three role types, it can be identified that the carrying out of the farm accounts paperwork historically was usually the sole responsibility of the 'farm housewife' and that this is her main contribution to the farm business. It should be noted that the age of this source is distant, and that many social factors have changed since. A modern aspect of this concept is identified by Smith, Manning and McElwee (2020) who also investigate the role of farm women as a 'farmer's wife' and suggest that to allow the husband to carry out the farm work, a woman supports him by "doing necessary logistical, organisational and office work such as attending to paperwork and book-keeping chores". For the 'working farmwife,' Gasson (1980) highlights the good teamwork that the husband and wife pursue on the farm, as well as their contribution to helping with administration work. Emphasising on the emotional support that a woman contributes, Pini (2005) recognises that a successful farm business has a partnership between husband and wife where they both work together and provide joint efforts. Similarly, the family community surrounding females in the farm business plays an important role in developing women in the industry. Findings have shown that having inclusive, encouraging and supporting females in a family environment is crucial to success: *"In a family business with women, there is a real social fabric of networks supporting each other and it's really important"* (P6).

Smith, Manning and McElwee (2020) review the role of the farmer's mother and highlight her exertion of influence on other family members, but also her figure as a mentor and an advisor, especially to the other women in her family community. The local agriculture and rural community can also impact a woman's experience, which in turn will affect her level of presence in the industry. This can be in the form of a supporter, supporting other men and women within the community, or as the beneficiary of such support: *"In rural communities, there is still a 'village' feeling and there is a lot of support across generations, even if there is not necessarily any relation between the women"* (P5).

Gasson (1980, p. 166) recognises the contribution that women make through the provision of support “to maintain the stability and enhance the quality of life” of other men and women’s lives within their local rural community. It is highlighted that in the most remote locations across the UK, a lack of support would create a deterioration of the quality of life. Women are more likely to contribute their attention to the community due to the natural instinct to present characteristics of nurture (Morris and Evans, 2001). The importance of support provided to women farmers is indicated in work by Trauger (2004). She found that many female farmers in the USA sustainable agriculture sector believed that they would not be able to farm if they did not receive community support. She argued that “public spaces of recognition and support are crucial not only for women to maintain their identities as farmers, but also for legitimating and valuing the work of women farmers and providing a space of public representation and resistance to traditional constructions of farm women femininity” (Trauger, 2004, p. 301). Therefore, the role of a woman as a supporter providing support for other females is proven to be vital for the development of women as valued labourers. Recent developments in social media have also helped to support women in the wider UK farm business community and further increase the concept of women supporting each other on a national level.

“The support online nowadays is incredible and for women to have that network and be able to interact with people of similar backgrounds to them really encourages them to continue their work in the industry.” (P6)

There is little investigation into the impacts of social media on UK female farmers, however, Daigle and Heiss (2021) study this topic in the United States. They find that the power of social media creates information to become more accessible, supporting the ease of solving farm issues and the development of effective marketing strategies. An important finding is that the concept of social gratification was created through social media platforms through the “exchange of emotional support among farmers... [by] sharing celebration, sharing struggles or sharing the commonality of being a woman farmer” (Daigle and Heiss, 2021, p. 15). This network of people connecting provides a sense of motivation to the individual women farmers, therefore indicating that their physical work and business benefits from such practices. It also indicates that a woman’s involvement in supporting other women on social media is important for the national agriculture community, continuing to influence positivity throughout the industry, which in turn is reflected into individual farm businesses.

A Labourer

The role of a labourer on the farm business is one that most of the participants have, whether it be full-time, part-time, permanent or temporary. There are many aspects involved with being a woman as a labourer on the farm business. Firstly, their capability and passion to work hard and to a high standard is prominent throughout the data: *“I’m a workaholic. I work seven days a week: but that’s just farming. And I love what I do” (P7)*. This is also proven in the contribution that women provide to the farm household income. Most participants who could comment on their economic status stated that their financial contribution was equal to their male partner. One farm manager participant even contributes two thirds with her husband contributing the remaining third from his separate business: *“We put the same amount into a joint account which we use on household bills, pets [and] food, so it’s even” (P2)*.

It should be noted that the traditional perception of working farm women can still influence the way that they work. Men are naturally stronger than women, but this shouldn't degrade a woman's ability to fulfil demanding daily work. The study found that women, particularly younger participants (P1, P2, P8), believed that they needed to prove themselves because of the interpretation given by older male farmers: *"It's wrong to think that women can physically do the same things as men because we are built different... I feel I have to prove myself more than the men, so I always put extra effort in and work harder"* (P1). There is contradiction to this belief from younger participants. Although there is an agreement regarding negative perceptions and the need to prove oneself, younger participants who have had time and experience to gain respect from others show a sense of assumption that this is the same for all female farmers: *"To begin with there may be hesitancy with regards to females in agribusiness, but if they prove themselves, then that soon goes away"* (P4).

Tara-Satyavathi, Bharadwaj and Brahmanand (2010) comment on a comparison of work ethics between males and females. They state that women work harder on more tasks and for longer hours, which supports the ideology of women as labourers. Baxter, Stephens and Thayer-Bacon (2011) identified that female agricultural educators had to prove their qualifications and their ability to teach the subject. It was to fellow colleagues, students, parents and even the community that they believed they had to prove themselves to. The women indicated that they had to do this to gain respect from these groups of people. The emotional strength women have was explored on the conversations. This along with their motherly traits highlights how women's femininity allows for the caring of livestock and crops: *"We have a female touch when it comes to handling livestock. You've got to be quieter, gentler and understand things, which I think women are better at because they've got the patience for it, and men don't have that much patience"* (P2).

Morris and Evans (2001) comment on the traditional gender role of women to be a carer and a nurturer and that this is associated with emphasised femininity. Translating this into a woman's role with respect to their involvement in particular areas of farm businesses, the evidence outlines that certain industries embrace and empower women more than others due to the nature of such businesses.

"Entry into arable farms and the red meat sector, where they are not family businesses and have a masculine culture, is a challenge. It's hard for women to get into these sectors, not impossible, but you have to be resilient... Horticulture, poultry and pigs have a strong presence of women." (P5)

Smith, Manning and McElwee (2020) recognised the higher number of women connected to industries including equestrian, horticulture and dairy than men. The difficulties faced for women wanting to work within the industries perceived to have a masculine culture, such as arable and red meat as demonstrated, can damage their reputation, confidence, involvement and ability to work hard and prove themselves. This can impact a woman's presence and outlook in the overall agribusiness industry. A study conducted by Heggem (2014) found that there is a perception of females being more drawn to animal care and males to be more competent with driving tractors and handling machinery, and that this perception has been developed from the belief that these gender differences are innate. He labelled this belief of males having a natural instinct to machinery as the 'tractor-gene' (Heggem, 2014). Despite this, the development of modern mechanisation has proven to be an important concept

throughout this study with respect to its use by women and their ability to develop into their desired farm business role. The advancements in technology and machinery for physically demanding day-to-day operations means that women can carry out the same nature of jobs as men with ease: *“Because of modern farming, you don’t have to be as physical because so much of it now is equipment”* (P7).

Although initial mechanisation was the cause of the changing role of women in the post-war era and beyond due to the unnecessary need for extra assistance on the working farm (Riley, 2009), recent modern advancements has meant that women are now able to progress back onto the farm as sole farmers. Cele et al. (2020) discuss the role of mechanisation in empowering women in Ghana and found that by broadening occupations and creating new possibilities for women, gender equality can be progressed in the workplace. They say that involving women in mechanisation can shift the mindsets of all of society by altering the economic and social status of women in rural communities (Cele et al., 2020).

The themes outlined from this research underline the augmented and diversified roles of women in farm businesses. While the roles presented in Figure 1, previously discussed by Gasson (1980; 1992), represent roles that women undertake as part of the farm business, this research argues that they do not fully capture the multi-faceted contributions of women within the farm business. The findings of this research echo the notion that women conduct multiple roles on the farm (Braiser et al., 2014), which includes working on the farm, managing the business, providing off-farm income, and developing entrepreneurial opportunities. Additionally, this research underlines the key role of women as a mother, as discussed by Smith, Manning and McElwee (2020), as well as emphasizing the multi-dimensional contributions of women to the farm business, acknowledging that their contributions are not confined to a singular role. Rather than defining roles within the farm, this research aims to define the contributions of women to the farm business, since multiple contributions are made by women at different times to the business.

Conclusion

Our research study investigated the current role and contribution of women in UK farm businesses adopting a qualitative semi-structured methodology. Whilst previous studies have examined the role of women in farm businesses, there are still many gaps in the research literature. We argue that our understanding of the role of women in agricultural businesses is outdated. Furthermore, there are a lack of studies associated with UK agriculture and the contribution of women be it financial and non-financial. Five research questions were developed that this research addresses.

investigation, which were a farmer, a farm manager, an off-farm income careerist and an entrepreneur of an on-farm diversified business. Firstly, the research proposes a theoretical framework to display the current literature theories and analyses how these roles may link in with each other and the congruence between these roles. The findings suggest that these roles are outdated and where the role of women in agriculture has evolved to one which is multi-skilled. Therefore, the research establishes a new conceptualisation, providing a theoretical contribution.

The way in which a woman performs these characterisations is dependent on their status and job role that they are involved in. The significance of their contribution is also dependent on

the job role as well as their age and experience. A woman will often be required to take on the role of each characterisation at some point within her working life and her contributions from these are important to the success of her associative farm business. This multi-skilled/multi-characterisation role can be associated with the changing nature of farming which has been required to adopt a multifunctional and pluriactive role. This is an important contribution and consideration to the subject areas where in previous dated studies the farm was a clearly defined single economic unit.

The research suggests that a woman's status, involvement and decision-making participation levels within the farm business is highly dependent on the job role in which they are associated with. It was found that a woman's degree of participation differed between job roles, especially when looking at the different decisions being made. Tactical day-to-day decisions are made by farmers, farm managers and entrepreneurs of diversified businesses. Often the farm managers may delegate this role of operational decision-making to an employee if they have several staff. This differs with the long-term financial decisions made on the farm business. Farm managers and entrepreneurs have most of the control of these types of decisions, often with the input from their significant male counterparts. Farmers and off-farm income careerists were only involved through discussions. For the farmer who works on her family farm business, she is involved more than the farmer who works for a larger commercial farm business. So, it should be noted that the type of farm business can also affect a woman's status and decision involvement. In addition, the off-farm income careerist often takes on the role of conducting paperwork duties and so their association with large financial decisions is valuable.

Whilst the main aim of the research was to investigate the role of women in agricultural businesses, the data provided insights into the challenges faced by women in agriculture. The interviews provided evidence from participant experience that there is a variation of perceptions of women in farm businesses. Most of the participants have received positive outlooks from the external community, with some experiencing praise for their efforts. On the other hand, many of the participants have also experienced aggressive, both passive and assertive, remarks and behaviours from individuals including actions presenting distrust in a woman's capability and concerns regarding their physicality. It can be identified that a common demographic for these individuals is males of the elder age, highlighting the generational perception and discernment of women working on farm businesses. These perceptions may be seen as barriers to entry for women. Despite this, barriers that currently exist are beginning to be broken as evidenced by the participants within this study and their hopes that future generations will change these perceptions.

Whilst the study provides evidence on the role and contribution of women on UK farm businesses the findings allow for further exploration. This could be continued within the UK borders, or it could be expanded globally and compare roles of women within different countries. The findings could also be compared with past data to identify how women's roles have changed.

The work informs both industry and policy of the multifaceted contribution of women on farms. For those who contribute financially through off-farm income this income stream provides stability and security to a potentially sporadic and fluctuating farm business income. For policy makers, consideration must be giving to the increasing number of female farmers and the increased and evolving and fluid role of women in agricultural businesses. As such,

policies should consider farm household structure and dynamics in a more holistic approach where previously they have focused on the principal farmer.

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