A Farm Business Assessment Framework: A Research Tool for Understanding Entrepreneurial Farming Contexts

Abstract

Purpose

This paper presents the Farm Business Assessment Framework (FBAF), a research tool designed for academic researchers to understand entrepreneurial farming contexts. It responds to the limitations of generic business and management models, which often fail to capture the nuances of farming and rural contexts, as well as the distinctive institutional, spatial, cultural, and temporal factors that shape them.

Design/methodology/approach

The FBAF advances McElwee and Smith's (2012) Farmer Segmentation Framework (FSF) by incorporating Bronfenbrenner's Ecological Systems Theory (EST) to capture wider contextual influences. It comprises five interrelated contextual layers—individual, microsystem, mesosystem, macrosystem, and chronosystem—linking personal, business, societal, and institutional dimensions. The framework is informed by the authors' insider positionalities within the agricultural industry, alongside prior ethnographic research that utilised the FSF.

Findings

The FBAF theorises the main influences on farming contexts across different levels, illustrating how they generate both opportunities and constraints that shape farm development strategies. It makes three contributions. First, it provides researchers with a unified framework while supporting the development of their own conceptualisations of farmers within their contexts. Second, it serves as a methodological aid, useful for empirical research into farmers' lived experiences, particularly for scholars unfamiliar with rural and farming environments. Third, it functions as an analytical tool, enabling the construction of farm based business and management cases.

Originality

The paper introduces a context-sensitive and multi-purpose tool for academic researchers studying farm entrepreneurship. It responds to calls for greater contextualisation in entrepreneurship research and contributes to the emerging body of work on constrained rural entrepreneurship, offering insight into the micro-, meso-, and macro-level constraints and opportunities shaping farm enterprises.

1. INTRODUCTION

This paper introduces the Farm Business Assessment Framework (FBAF), an interpretative, multipurpose tool designed to assist researchers in conceptualising, collecting data on, and analysing entrepreneurial farming contexts. We argue that farming contexts are often poorly understood by researchers lacking direct working or practical knowledge; our framework provides scholars with a conceptual structure for engaging with these contexts, highlighting the key dimensions that shape farm enterprises.

Scholars have long called for greater contextualisation in entrepreneurship research (Welter, 2011), noting that theories developed for large corporate enterprises often lack relevance to small-scale rural businesses (McElwee & Smith, 2012). Farming environments, in particular, are shaped by distinct spatial, institutional, and cultural forces. We contend that commonly used business and management frameworks are of limited value when applied to farm enterprises, as they are typically based on assumptions such as high growth ambitions, profit maximisation, ready market access, and strong social or professional networks—assumptions that do not always hold in agriculture.

In this paper we extend McElwee and Smith's (2012) Farmer Segmentation Framework (FSF). The FBAF adds further dimensions to the original model by incorporating industry and societal contextual elements that influence farm entrepreneurship (Low and MacMillan, 1988). Informed by Bronfenbrenner's (1979) Ecological Systems Theory (EST), originally developed in social psychology, the framework is organised across theoretical levels that influence or constrain entrepreneurial activity at the individual, micro, meso, macro, and chrono levels. Crucially, the framework is beneficial for researchers examining constrained entrepreneurship contexts (Gittins et al., 2022; Elkafrawi & Refai, 2022; Refai & McElwee, 2023)—an emerging area of scholarly inquiry.

The FBAF offers three contributions. First, it provides a conceptual foundation for understanding the heterogeneous nature of farmers, their businesses, activities, processes, and their positioning within the external agricultural landscape—something often overlooked by policymakers (McElwee, 2008). This is particularly valuable for scholars, as the framework not only supports the conceptualisation of what constitutes an entrepreneurial farmer—where no universal definition exists—but also situates that conceptualisation within the specific contexts in which farmers operate, recognising that these contexts vary significantly. Indeed, Fitz-Koch et al. (2018) note that a common weakness in agricultural and rural enterprise studies is the lack of strong theoretical underpinnings, with many contributions remaining largely atheoretical. Our FBAF directly responds to this critique by providing a theoretically grounded framework for

investigating rural contexts, helping scholars to understand farmers and their businesses in relation to a multi-layered context (Jørgensen and Mathisen, 2023). Much mainstream entrepreneurship research remains strongly urban-focused, with comparatively few studies offering rural-specific tools. The FBAF therefore offers rural entrepreneurship scholars a structured way to navigate, theorise and research these distinct farm-based contexts.

Second, beyond its theoretical contribution, the FBAF has significant methodological and analytical utility. Methodologically, it serves as a tool for scholars conducting research on farm enterprises. It functions as a fluid interpretative device to support primarily qualitative empirical inquiry into the lived experiences of farmers (McElwee, 2008; Riley, 2014; Kuehne, 2016). Indeed, prior research has called for greater attention to the 'present realities' of farmers through qualitative inquiry (Maye et al., 2020).

Third, it serves as an analytical tool: the layers of the FBAF can be used to construct single and multiple farm cases, aiding researchers in developing thick descriptions and laying the groundwork for further qualitative inquiry, such as case stories and vignettes. In doing so, the FBAF operationalises Smith and McElwee's (2015) call for narrative-driven approaches, offering a structured means to construct and develop these stories within rural enterprise research

The paper is structured as follows. Section Two outlines key contextual factors—theorising institutional, societal, temporal, and spatial influences—shaping the UK farming sector. Section Three provides a conceptualisation of the entrepreneurial farmer and farm business, critically assessing existing business segmentation frameworks and highlighting their limitations for rural contexts. Section Four introduces EST as the paper's theoretical foundation and presents the FBAF in detail, outlining its independent layers before illustrating it as a unified framework through an example. The final section summarises the framework's contributions and demonstrates its uses in conceptualisation, data collection, and analysis

2.0 THEORIZING THE MULTI-LAYERED RURAL CONTEXT

UK farming is shaped by deep-rooted institutional, societal, spatial, and temporal factors that influence structures, pressures, and individual agency. Recent research highlights the important role of context in shaping entrepreneurial behaviour (Müller & Korsgaard, 2018; Korsgaard et al., 2015; Fitz-Koch et al., 2018; Jørgensen & Mathisen, 2023). We argue that a context-specific perspective is essential, as business, social, temporal, historical, spatial, and institutional factors vary across settings (Welter, 2011). For example, enterprise practice in rural areas may differ significantly from that in urban contexts.

Recent work has reconceptualised rural entrepreneurship as engagement with a layered, dynamic and relational contexts, rather than simply being backdrop (Gaddefors and Anderson, 2019; Jørgensen and Mathisen, 2023). Entrepreneurs selectively engage in practices between different business, social, spatial and institutional layers. Understanding entrepreneurial farming, requires an unpacking of these theoretical layers. Our FBAF allows for this providing a structured basis for theorising farm entrepreneurship. From an institutional viewpoint, North's (1990) 'rules of the game' have substantial impact. Agriculture, unlike many other sectors, is directly tied to the health, wellbeing, and survival of the population. In Europe, for instance, farming is heavily reliant on state subsidies, particularly for upland farms located in less favourable areas. Farmers in these regions cannot achieve the economies of scale and production enjoyed by larger counterparts, and often depend on subsidies for up to 90% of their income (Abboud, 2018). Politically, the sector is volatile: policy shifts have led to farmer protests, and in the UK, the post-Brexit transition towards reduced direct support prompted the former Secretary of State for Environment, Food and Rural Affairs, Steve Reed, to insist that farmers must "learn to do more with less" (Greenfield, 2024). Such political uncertainties have contributed to unprecedented lows in farmer confidence in policymaking (National Farmers' Union, 2024). Declining profit margins, in turn, push farmers to consider intensification, land and livestock expansion, accessing new markets, or various forms of diversification. Despite its critical role, agriculture's direct contribution to UK GDP is often reported as just 0.5%. However, this narrow measure ignores agriculture's deep connections to wider food supply chains and its foundational role in rural economies and broader societal stability.

The farm sector is dominated by small, family-run micro-businesses, usually under 100 hectares and employing one or two full-time workers. While some farmers are highly entrepreneurial and actively seek economic opportunities, others prioritise survival or pursue non-economic goals (Gittins & McElwee, 2024). We argue that relatively few farmers in the UK can be considered entrepreneurial. However, as constraints intensify, many will need to develop entrepreneurial skills to survive or thrive in an increasingly volatile environment. These 'entrepreneurial' and 'traditionalist' farmers exhibit distinct behaviours (Gittins et al., 2022). Traditionalist farmers often provide social and cultural value beyond economic metrics such as GDP. In terms of social capital, entrepreneurial farmers frequently build "bridging" networks beyond their immediate family or local communities (Granovetter, 1973). In contrast, traditionalist farmers tend to focus on household bonds, limiting engagement with external actors and, consequently, their own strategic choices.

Spatial elements also play a central role in shaping the constraints and opportunities available to rural entrepreneurs. The UK's challenging topography—for instance, high-

altitude areas with poor soil and extreme weather—imposes significant barriers. In remote regions, weak broadband, digital exclusion, limited healthcare, and long distances to essential services hinder economic potential (Bowen & Morris, 2019). These conditions have proven too challenging for many, contributing to increased rural depopulation. Those who choose to remain and work in rural areas must attempt to utilise natural resources to their advantage, drawing on assets such as agricultural land, woodlands, wind, solar, and hydro power to create businesses that generate economic, social, and environmental value. In the UK and Europe, recent policy has increasingly incentivised so called environmental stewardship, promoting a model of multifunctional agriculture in which farming activity provides economic, environmental and social benefits.

Temporal dimensions—the passage of time across past, present, and future—also resonate strongly within the farming context. Generational transfer is a key factor, with the majority of owned farms being passed on through succession (Lobley, 2010). For many farmers, this is the ultimate goal, as they view themselves as stewards of the land, striving to leave it in a better condition for the next generation. Within the family farm unit, perceptions of time often differ. The oldest generation (e.g., the grandfather) may own the farm, maintaining tradition and long-established practices. In contrast, children or grandchildren may have their own ideas about how the farm should be run, yet their entrepreneurial ambitions are frequently constrained by a lack of ultimate decision-making power (often thwarted by the farm owner, typically a parent with seniority) (Gittins & McElwee, 2024).

Farming operates within multi-layered contexts that shape the entrepreneurial environment, creating specific constraints and opportunities for farm businesses and their strategic and operational choices. Frameworks are therefore needed that go beyond descriptive accounts of context and organise how institutional, social, spatial and temporal layers interact in practice. The FBAF addresses this by structuring the rural context into different theoretical levels, from the individual and farm household to the farm business and wider sectoral and institutional influences. Our FBAF provides scholars with a context-sensitive lens for theorising this rural entrepreneurship context and offers a basis for scaffolding data collection and farm case study design.

3.0 CONCEPTUALIZING FARM ENTREPRENEURSHIP

Are farmer-specific frameworks necessary? This is a valid question given the extensive literature in general business and management studies. For instance, established strategic models such as Porter's (1985) Generic Strategies Model (GSM) or Ansoff's (1957) Matrix could (Table 1), in theory, be used to analyse farm business strategies. Critics might

contend that farmers adopt similar strategic approaches—such as cost leadership, differentiation, or niche specialisation—to those outlined in these models.

We conceptualise farm entrepreneurship as the proactive pursuit of innovative, value-adding activities in and around the farm business. Entrepreneurial farmers are alert to opportunities, adopt and adapt technologies, and reconfigure resources (ie., land, livestock, buildings and energy) to generate economic, social and environmental value. Their activities are often shaped by multiple income streams encompassing both pluriactivity and diversification, and economic models, including commodity markets, subsidies and payments for Public Goods. Social capital is often central: they rely on bonding ties within the household and local farming community and on bridging networks to advisers, customers and wider professional circles. These practices are also cultural, reflecting farmers' identities, traditions and place-based attachments as they balance innovation with stewardship and continuity.

Conversely, although such frameworks may appear valid to some, we argue that applying them to farm businesses is akin to forcing square pegs into round holes. While they may fit certain cases, they fail to account for the sector's specific nuances, rendering their application imprecise and often inadequate. These models were originally developed to analyse the growth strategies of large, successful, typically urban-based enterprises. The GSM approach, for example, focuses on competition, a factor largely irrelevant to most commercial-scale farmers in the UK. While some forms of diversification necessitate competing in local markets, most commercial farmers—representing the majority of the developed farming world—operate within price-taking rather than price-setting environments. Even if farmers can add value and marginally influence pricing, they generally lack the capacity to introduce a 'blue ocean' product that disrupts markets and reshapes industry norms (Kim & Mauborgne, 2014). This presents a significant challenge for farmers, as they operate in a highly distinctive competitive environment.

INSERT TABLE 1

These contextual differences pose challenges for scholars attempting to apply widely accepted business and management frameworks to farming. As a result, such models often offer limited analytical value. In response, researchers have pursued alternative approaches, including developing ideal types of farmers or, as we propose in this paper, designing a unified framework for wider adoption.

Extant literature documents numerous typologies that categorise farmers and their environments to make sense of sector structures, businesses, and entrepreneurial processes. Examples include contrasts between 'good' and 'bad' farmers (Burton, 2004; Cusworth, 2020); descriptors such as 'rogue' or 'criminal' farmers (Smith, 2004; Smith et

al., 2017); and distinctions between traditionalist and entrepreneurial farmers (Gittins et al., 2022). Beyond individual orientations, some typologies focus on the farm unit itself: for instance, an entrepreneurial farmer may view the farm primarily as a business, whereas others regard it as a way of life (Gittins et al., 2020). Strategy-oriented classifications identify avenues for growth through land or livestock expansion, specialisation, vertical integration, cooperation, and various forms of diversification, both on- and off-farm (Smith et al., 2017; Lokier et al., 2021). These ideal types are useful for understanding farming heterogeneity but must be recognised as simplified models of a complex reality (Swedberg & Agevall, 2016).

To move beyond Ideal Type analysis, scholars often adopt segmentation frameworks that categorise businesses by shared characteristics (Atherton & Lyon, 2001). Such frameworks help distinguish types of entrepreneurs, levels of innovation adoption, or business models by linking individual behaviour, farm strategy, and business processes with wider institutional and environmental constraints—areas often absent from generic business models. Few farm-specific segmentation models exist, with McElwee & Smith's (2012) FSF remaining a seminal reference for our approach.

3.1 Farmer Segmentation Framework

Developed as part of a broader inquiry into farm enterprise, McElwee and Smith's (2012) FSF builds on Atherton and Lyon's (2001) small business model. Drawing on quantitative and qualitative data from across the EU, the FSF categorises farmers using three sets of variables—personal characteristics, farm business attributes, and business activities and processes—and helps to evaluate the resources and skill sets where farmers may require support to become more entrepreneurial (McElwee, 2008). The framework has since been adopted in empirical studies to structure the analysis of entrepreneurial farming (e.g. De Rosa et al., 2019; Wilson et al., 2022).

INSERT TABLE 2

Exploring the personal characteristics of farmers helps scholars to conceptualise 'farmers as entrepreneurs' (McElwee, 2008), as shown in Table 2 above. These characteristics are useful for profiling and gauging the entrepreneurial alertness of farmers (McElwee and Smith, 2012, p.125), providing insights into *who* exactly is running the business.

INSERT TABLE 3

McElwee and Smith (2012) argue that understanding farm business characteristics (Table 3) is central to assessing the entrepreneurial nature of a farm business unit. This FSF layer highlights core structural and operational aspects of the farm enterprise, including farm size, sector, type of diversification activities, and stage in the business life cycle. It also considers broader contextual factors such as topography, performance levels,

entrepreneurial alertness, labour and technology intensity, and growth expectations. Together, these characteristics provide a detailed picture of the resources available to the farmer and offer insights into potential limitations and opportunities.

INSERT TABLE 4

The third FSF layer focuses on farm activities and processes (Table 4), highlighting what the farmer actually does and reflecting a more behavioural approach to entrepreneurship. This layer includes criteria such as the extent of market development (e.g. local, regional, international), the use of technology and innovation (high or low), reliance on support networks (family, friends, or professional services), and forms of collaboration (social capital). It also considers barriers to diversification, such as legal or financial constraints, and the level of strategic awareness demonstrated by the farmer—for example, whether they are proactive or reactive. Taken together, these aspects are useful in assessing whether a farmer engages primarily in traditional activities such as crop or livestock production, or whether they are inclined towards diversification, thereby helping to form reasonable judgements about their entrepreneurial orientation.

Positioning farm data within FSF categories enables researchers to compare cases across individual, business, and process levels and to assess entrepreneurial capacity. The FBAF builds on this foundation by integrating these elements into a unified, multi-layered context that links personal traits, business attributes, and strategic processes to wider institutional and temporal factors. The framework thus encourages researchers to reflect on the level of analysis and ensures that micro-level traits, business characteristics, and strategic processes are interpreted within the broader environment. It consolidates these influencing concepts into a single framework and organises them across relevant layers and units of analysis.

However, the FSF has limitations which should be acknowledged and adapted. While much remains relevant, the definition and function of the 'farmer' has shifted. McElwee (2008, p.467) defined farmers as "those occupied on a part- or full-time basis and engaged in a range of activities that are primarily dependent on the farm and agriculture in the practice of cultivating the soil, growing crops, and raising livestock as the main source of income." Yet in the UK and Europe, policy changes and redirected subsidies have driven a shift towards multifunctionality, with farmers increasingly engaged in conservation, education, and the provision of public goods rather than solely food production.

At the same time, diversification has drawn many towards more lucrative non-agricultural activities, further blurring the boundaries of who qualifies as a 'farmer.' Technology has also added to this redefinition: labour-intensive work is no longer the marker of a 'good' or productive farmer (Burton, 2004), as entrepreneurial farmers embrace tools such as drones, virtual fencing, and autonomous machinery. Urban food

production, synthetic foods, and virtual or remote farming challenge the rural–agricultural link entirely. These developments, driven by technological progress and creative destruction (Schumpeter, 2013), call into question whether existing Ideal Types and frameworks remain fit for purpose. Hence, it is necessary to revisit them.

We address two further limitations. First, describing the FBAF as a 'segmentation framework' understates its scope. While it can aid segmentation, it also supports the conceptualisation of farm contexts, guides research design, and facilitates the development of analytical cases—hence our use of 'Assessment Framework.' Second, although the FSF includes the individual, business, and activities, it overlooks the external environment—a key focus in recent entrepreneurship research. To address this, we incorporate broader industry and societal dimensions, which are essential for understanding context (Low and MacMillan, 1988). The FBAF extends the FSF by updating the concept of the farmer to reflect multifunctionality and diversification, reframing the tool as an assessment framework that can guide conceptualisation, research design and analysis, and embedding the original FSF dimensions across contextual layers that incorporate additional units of analysis beyond the farmer, farm business, and activities and processes.

We now set out our framework

4.0 CREATING THE FARM BUSINESS ASSESSMENT FRAMEWORK

4.1 The FSF as a base

Low and MacMillan (1988) identify five levels of analysis for understanding entrepreneurial phenomena: the individual, group, organisation, industry, and society. The original FSF focuses on just three elements—personal, business, and processes—omitting the wider industry and societal contexts. We argue that these are essential if we are to truly understand the entrepreneurial context in which farmers are embedded. The FBAF addresses this gap by incorporating two additional layers, thereby capturing industry and societal dimensions. This enables users to conceptualise the nature of external threats and opportunities and to consider how farm businesses can respond strategically.

To examine these 'contextual layers' (Jørgensen and Mathisen, 2023), which shape the wider rural ecosystem, we draw on what Nicholson et al. (2018) term 'theory borrowing.' Specifically, we adapt Bronfenbrenner's EST. Originally developed in developmental and social psychology, EST has also been applied in organisational studies to examine how

individuals are shaped by multi-layered environments; here, we extend its use to explore constrained farm entrepreneurship. This interpretative approach helps to theorise the interdependent links between individuals—in this case, farmers—and their surrounding contextual environments. Table 5 (below) briefly summarises our interpretation of these layers in the UK farming context.

INSERT TABLE 5

INSERT FIGURE 1

Arguably, Bronfenbrenner's EST (Figure 1) offers a valuable lens for exploring the complex relationship between individual farmers and their multi-layered contexts. Developing McElwee and Smith (2012), we apply EST to theorise farmers in relation to their contextual environments. Though rarely used in rural enterprise research, EST provides a comprehensive framework for understanding how internal and external factors shape farming. It offers particular value in examining how farmers navigate constrained settings, making it well suited to the studies focused on [constrained] rural entrepreneurship.

4.2 THE FARM BUSINESS ASSESSMENT FRAMEWORK

Individual- Farmer Holder Level

At the centre of our model, representing the individual layer of the system, is the *Farm Holder (Figure 2)*—the key decision-maker in the farm business who wields the most agency and authority. This individual holds the most power, overseeing both strategic and operational decisions. Major financial commitments, structural changes, and overall business direction are either set by or channelled through the farm holder. This applies equally to tenant farmers, although they may require additional authorisation from the landowner, introducing unique constraints.

A critical aspect of this layer is individual behaviour, particularly *personality traits* relevant to entrepreneurship, such as risk-taking, creativity, and problem-solving abilities. These characteristics shape how the farm holder navigates opportunities and challenges within a constrained environment.

Beyond behavioural and personality traits, *biological factors* also play a role. Attributes such as sex, age, and physiological factors may influence decision-making, levels of assertiveness, and broader business behaviour. *Experience* is another key factor, encompassing the number of years spent in farming and the learning methods acquired over time. Experience outside of farming is also particularly useful. This learning may occur formally, through higher *education*, or informally, through hands-on experience and intergenerational knowledge transfer, such as learning directly from parents.

Together, these individual-level factors shape how the farm holder interacts and responds with the broader farming system.

INSERT FIGURE 2

Microsystem- The Farm Business and Family Structure

At the micro system level (Figure 3), key *business characteristics*—such as farm size, location, commodities produced, and the attitudes and beliefs of the farm holder—are central. Larger farms often benefit from economies of scale, particularly under the Common Agricultural Policy (Gittins et al., 2020). The sector of operation—livestock, cropping, or environmentally focused—shapes business strategies and constraints. Diversification is also critical and can arise from either necessity or opportunity (Bosworth et al., 2015). It may be on- or off-farm, with farmers pulled by new opportunities or pushed by financial pressures. Location can be both enabling and constraining. Upland areas, for example, may support renewable energy ventures but often suffer from poor infrastructure, limiting connectivity and access to support—key barriers to diversification (Morris and Bowen, 2020; Gittins et al., 2022).

The *farm family* is another important influence within the micro system. Although absent from the original FSF, we place greater emphasis on it here. Family is often central to strategic decisions and entrepreneurial ambition (Jervell, 2011), especially when family members bring external skills from higher education or off-farm work in areas like technology, finance, or innovation. Involvement levels vary: spouses frequently play a key role, and research shows that women often initiate diversification (Kempster et al., 2023). Parents may step back into mentoring roles during succession, which is often a long-term goal focused on handing over the farm in better condition. Typically, one child—often the eldest son—takes over, while siblings stay loosely connected. Nevertheless, family ties remain central to continuity.

Peers also matter—often not as friends, but as other farmers in the local area. Farmers frequently talk through ideas before acting, compare timings (like when to cut grass), and discuss the merits or otherwise of machinery or suppliers. These peer interactions sit alongside a wider group of *connected businesses*—abattoirs, livestock markets, machinery dealers, feed suppliers, dry stone wallers—that are deeply woven into the farm's operational landscape (see McElwee and Gittins, 2024).

Together, these elements—business characteristics, family, peers, and connected businesses—form a micro system that both shapes and responds to the wider entrepreneurial and environmental constraints farmers face.

INSERT FIGURE 3

Meso system/exosystem

At the meso/exosystem level (Figure 4), four key factors shape business activities and processes within the farm: technology and innovation, farm strategy, strategic thinking, and support networks. These factors are central to how entrepreneurial farmers respond to constraints and exploit opportunities.

Technology and innovation adoption on farm play a vital role in improving efficiency, reducing costs, and boosting productivity. Farmers who adopt new tools—such as precision farming, mechanisation, or digital management systems—can strengthen business resilience. Gittins et al. (2020) note that technological capability is a key driver of growth, helping farmers to adapt and remain competitive.

Farm strategy is also crucial, especially when it comes to diversification, income generation, and managing risk. Bosworth et al. (2015) show how farmers use diversification to create new income streams and reduce vulnerability to market and environmental shocks. Entrepreneurial farmers often experiment with alternative markets, new business models, and income sources to support economic sustainability.

Strategic thinking enables farmers to recognise and act on new opportunities. McElwee and Smith (2012) argue that entrepreneurial success depends on being able to anticipate change, assess risk, and make informed decisions. This includes tapping into opportunities like agri-tourism, renewable energy, or niche products while managing limited resources effectively.

Finally, *support networks* provide access to knowledge, collaboration, and policy guidance. Arnott et al. (2021) stress the value of farmer networks, business partnerships, and agency support in helping farmers navigate regulation, secure funding, and access markets. These networks are often critical to innovation, strategic decisions, and longer-term business development.

INSERT FIGURE 4

Macrosystem

Outside of the inner three layers of the FBAF, there are the exogenous forces that impact farmer behaviours. The *macrosystem* (Figure 5) consists of the classic external factors that are relevant to all actors operating within any industry, drawing on the PESTLE[1]

[1] PESTLE is a strategic analysis framework used to categorise external forces shaping the business environment: Political, Economic, Social, Technological, Legal and Environmental factors.

framework. This may help understand how longer-term issues that are impacting farmers, and how certain actors might respond strategically via the farm business.

Similarly, *political* and *economic* changes, such as the formation of a Domestic Agricultural Policy focused on payments for environmental services might impact farmers. Other considerations about policy implications at different levels: local, regional, national, and international (Fitz-Koch et al, 2018).

Societal factors can be taken into consideration) around ageing workforces. *Technological* factors in the broader industry can be considered, such as the extent of agri-tech innovations changing the nature of farming (Bowen and Morris, 2019). As a result of political transformations, new *legislation* is being rolled out, impacting farmers in many ways.

Finally, *environmental* factors can be considered, such as thinking about farming practices in relation to broader sustainability initiatives, such as the decarbonisation of the agricultural sector or climate related impacts in the region, as examples.

INSERT FIGURE 5

Chronosystem

For farming businesses, each element of the chronosystem (Figure 6)—historical context, heritage, tradition, and culture—plays a crucial role in shaping business opportunities' and threats.

The *historical context* influences the resources available to farming businesses and shapes the strategies adopted over generations. Policy evolutions, market shifts, and structural changes in agricultural subsidies all contribute to the broader institutional landscape that farmers must navigate. Past agricultural policies, such as the CAP, and more recent transitions, such as post-Brexit reforms, demonstrate the temporal dimension of these historical influences.

Heritage also plays a critical role, particularly in multi-generational farming businesses where land and farming knowledge are passed down. A strong sense of family legacy can influence decision-making, shaping how farms adapt to change while maintaining traditional values and business continuity. This highlights the spatial element, as heritage is often tied to a specific place, reinforcing attachments to the land and influencing strategic choices regarding farm succession.

Tradition, encompassing farming practices, rural norms, and customs, further shapes how farming businesses operate. Many traditional farming methods remain socially and institutionally entrenched, influencing perceptions of what constitutes "proper" farming within rural communities. These traditions can serve as barriers to change,

particularly when new technologies or alternative business models challenge established practices.

Culture is equally significant, influencing consumer demand, societal perceptions of farming, and policy decisions. Cultural expectations around food production, sustainability, and ethical consumption create market pressures that drive shifts in farming strategies. Moreover, institutional influences, such as governmental policies and subsidies, are shaped by broader cultural and societal attitudes toward farming, climate change, and food security.

Together, these chronosystem elements—historical, heritage, tradition, and culture—operate within temporal, spatial, societal, and institutional contexts. They evolve slowly yet exert lasting influence on how farming businesses function, adapt, and survive.

INSERT FIGURE 6

We now, present the FBAF in its entirety before demonstrating how it can be conceptually used via an example.

4.3 Applying the Farm Business Assessment Framework: Understanding Strategic Choices in Farming

We have chosen to visualise our FBAF using a metaphor drawn from an essential piece of farm equipment: the chain harrow (Photograph 1). Each aspect across the system levels (the "links") is interconnected with the next, such that any action—regardless of where it occurs—has potential knock-on effects elsewhere. Not every action is equally consequential, however; some choices create only minor ripples, while others trigger substantial shifts across multiple levels.

INSERT PHOTOGRAPH 1

By way of illustration, we use the decision to diversify via illegal farm entrepreneurship strategies to illustrate our framework.[2] Rather than an impulsive act, such a decision is shaped by an individual's traits, their immediate social and business environment, broader institutional conditions, and historical or economic pressures. The FBAF allows

[2] Note* We draw on illegal farm entrepreneurship simply as one illustrative example of how the FBAF can be applied conceptually. Equally, the framework could be used to analyse a wide range of farm development strategies, such as legal diversification, selling the business and exiting the industry, moving away from livestock farming, or entering an environmental scheme. The strength of the framework lies in its ability to allow researchers to move interpretively between layers, enabling them to understand both the farm context and the farmer within that context

us to examine how different layers of influence both constrain and create opportunities for strategic decision-making in farming enterprises.

Personality and circumstance may determine an individual's propensity to act illegally (Smith et al., 2017). Moreover, personal experience and education, whether formal or informal, play a role in shaping both the opportunities available and the constraints imposed on a farmer's strategic choices. If the activity involves rural crime, the individual may draw on sector-specific know-how—ranging from operating machinery to working dogs and navigating remote landscapes undetected (Smith, 2004)—which, though developed over years in the industry, can be repurposed to facilitate illicit operations. These skills may present opportunities for alternative income streams while simultaneously constraining legal business viability if regulatory compliance proves too costly or impractical.

At the microsystem level, social capital and peer influence function as engines of farmers' social action, with bonding ties within close-knit farming families and communities, bridging ties to wider networks (Granovetter, 1973), and linking relations with powerful institutional actors together shaping whether illegal farm entrepreneurship is enabled or constrained. Members of the farming community may lend direct or indirect support by actively participating or tacitly approving criminal activity, reducing risk perception and creating opportunities for illicit ventures to flourish. Conversely, strong social ties can also reinforce moral and legal constraints, discouraging engagement in unlawful activities. Depending on the scale of operations, a farmer can act alone, collaborate with a handful of trusted confidants, or even embed themselves in a more extensive organised crime network. The farm business itself may provide the necessary infrastructure or cover for illicit dealings. Some holdings serve as informal fronts, while others offer the isolation and facilities required for covert activities. Legitimate businesses can become unwittingly entangled, offering essential services or overlooking questionable practices—livestock markets, haulage firms, or machinery dealerships, for instance, can inadvertently facilitate the laundering of stolen goods into legitimate supply chains.

In the mesosystem and exosystem, illegal activities often become integral to the business's strategic thinking, as farmers navigate constraints while seeking out opportunities. For some, it represents a short-term coping strategy to mitigate financial constraints, while for others, it is part of a broader plan for wealth creation or social prestige. The extent of ambition varies: some use illegal income to offset immediate expenses or repay debts, while others aim for significant financial gains or status. Tools and tactics range from employing technological innovations—vehicle trackers, signal jammers, encrypted communication—to framing criminal activity as a logical extension of diversification. In these cases, the exosystem influences perceived risks and rewards,

prompting farmers to weigh potential legal repercussions against financial and reputational benefits.

At the macrosystem level, external pressures help explain why some farmers may feel constrained within the formal economy and therefore explore alternative, sometimes illegal, opportunities. Economic constraints—escalating input costs, dwindling subsidies, and tightening regulations—often create frustration and disillusionment (Gittins et al., 2022). Some farmers may feel that traditional business models are no longer viable within existing regulatory constraints and that government policies do not adequately support those abiding by the rules. Consequently, a sentiment can emerge that simply being a 'good farmer' is insufficient to secure survival, opening up opportunities for illicit diversification as a means of adaptation.

Political shifts—such as post-Brexit agricultural reforms—further amplify uncertainty and constrain traditional business models, as the erosion of established subsidies, market volatility, and evolving environmental regulations reshape the opportunities and risks within the farming sector. For some farmers, this shifting policy landscape reinforces constraints that force strategic adaptation, while others perceive it as an opportunity to bypass failing systems through informal or unlawful means.

Here, the boundary between right and wrong in a farmer's own moral compass can begin to shift.

The chronosystem adds a historical and temporal perspective to these decisions. Personal life experiences may mould an individual's propensity for risk and ethical boundaries, while broader industry developments—such as shifts in agricultural policy or market conditions—have reshaped the opportunities and constraints within the sector over time. Generational changes in farm succession, for example, might motivate younger farmers inheriting precarious enterprises to adopt revenue streams previous generations would not have considered. Similarly, historic economic downturns or earlier episodes of rural crime may normalise certain practices in specific communities, making illegal entrepreneurship appear less drastic and more like a continuation of existing norms within constrained environments.

Overall, this discussion of the FBAF highlights the interplay between opportunities and constraints across different contextual layers. No decision is made in isolation; rather, each one emerges from a complex network of influences that shape both entrepreneurial possibilities and limitations. Although we have used illegal farm entrepreneurship as an example here to think about the theoretical implications, the framework equally applies to other strategic choices such as intensifying production, leaving the sector, or turning to environmental land management.

The FBAF (Figure 7) thus provides a conceptual structure for examining these interdependencies, illustrating, in our example, how varied farming strategies can materialise in response to opportunities and constraints across multiple system tiers.

INSERT FIGURE 7

4.4 Contributions

We suggest that the FBAF makes three main contributions to rural entrepreneurship research. It advances the conceptualisation of farm entrepreneurship in context, serves as a design tool for qualitative inquiry, and supports multi-level, farm-based case study creation and analysis.

Conceptualisation

The FBAF provides a context-sensitive lens for theorising how [entrepreneurial] farmers can navigate opportunities and challenges across multiple contextual levels. Whereas Welter's (2011) multidimensional analysis offers a generic framework for thinking about context in entrepreneurship, the FBAF offers a sector-specific operationalisation of these ideas for farming. It brings together the business, social, spatial, institutional and temporal dimensions that Welter identifies, organising them into five concrete layers that give rural entrepreneurship scholars a context-sensitive lens and an alignment in thinking for theorising farm entrepreneurship. The tool can be used to develop a theoretical understanding of the 'entrepreneurial farmer' within their operating environment (McElwee, 2008). In the above discussion, we use an example to show how the framework can guide conceptual thinking in alignment with rural enterprise research phenomenon. By linking individual agency with micro-, meso-, macro- and chrono-level factors, the framework enables scholars to consider diverse strategic logics—whether expansion, diversification, intensification or exit—and to situate these choices within broader structural constraints. In doing so it highlights the heterogeneity of farmers, businesses, activities and processes and suggests a more nuanced engagement with the contexts that shape entrepreneurial farming systems. By integrating industry and societal dimensions, it extends the FSF and clarifies how unique constraints and opportunities within rural environments shape entrepreneurial agency, helping to understand the constrained rural entrepreneurship environment.

Indeed, one critique within rural enterprise research is the lack of a rigorous, context-based definition of what exactly constitutes an 'entrepreneurial farmer' and the environment in which they operate (McElwee, 2008; Fitz-Koch et al., 2018). It is, of course, not possible to arrive at a universally agreed definition of an entrepreneurial farmer—any more than it is to establish one for entrepreneurs more generally. What researchers can do, however, is employ a context-sensitive framework such as the FBAF to develop

their own working definition for a given study. Our framework provides the building blocks for this process: it enables scholars to conceptualise not only the farmer but also the layered context in which they work, drawing on relevant aspects to establish the type of farmer under study while identifying the specific constraints and opportunities present at each theoretical level. In doing so, the FBAF helps researchers to address a common limitation in rural enterprise papers, namely weak or inconsistent conceptualization.

The FBAF also provides a basis for mid-range theorising. By specifying how individual agency is embedded in, and interacts with, contextual layers, it encourages scholars to move beyond lists of factors towards theorising constraints that cut across intersecting theoretical levels. The FBAF thus offers a theoretically generative model for understanding constrained farm entrepreneurship.

Methodological Value–Interviewing farmers

Developed through extensive qualitative research—predominantly ethnographic work and our insider positionalities in the agricultural industry—the FBAF can be used in a methodological sense to assist researchers, particularly those unfamiliar with farm businesses, in collecting and interpreting data. By organising interview questions, for example, around the framework's contextual layers, it helps scholars gain an insider perspective and pay attention to factors often overlooked by outsiders, such as family dynamics, farm size, age and location.

Farmers are incredibly busy individuals, with many rarely participating in academic research. As such, their time must be respected, and researchers' time is equally important. To gain a true understanding of a farmer's 'present realities' and contexts one must understand the realities present at the various different theoretical levels (i.e., individual, business, societal, etc.). The FBAF provides a structure to quickly understand these important contextual details.

One should, of course, urge caution here: when following the FBAF in a methodological sense, one should remember that it is constructed at an academic level. Terminology should be adjusted to suit the audience, removing jargon; for example, asking about concrete experiences instead of abstract 'temporal' or 'institutional' issues. Examples of how this might translate during interview settings are provided in Table 6.

INSERT TABLE 6

Following fieldwork, the framework can be used to organise and reflect on collected data, creating a visualisation based on its layers- Figure 8 illustrates this.

Our FBAF may be especially of use to those pursuing qualitative research techniques, with an ambition that it may encourage more scholars to engage directly with farm entrepreneurs, as it provides them with a structured and clearer means of doing so.

Analysis: Making sense of the data

Following data collection, researchers can map case data onto the FBAF to evaluate whether sufficient contextual information has been captured or whether more needs to be collected. Once enough data has been gathered, researchers can then use the FBAF in a more analytical manner, seeking to identify patterns and, in turn, create more detailed case studies. Table 7 suggests how case profiles can be compared and analysed.

INSERT TABLE 7

A focal point in qualitative research is a researchers own ability to build thick descriptions of participants' lived experiences. The FBAF is a solid starting point for constructing detailed case profiles; it allows researchers to compare one farmer's lived reality with another and to explore why experiences diverge across different contexts. Such comparative profiles can be used to form of the foundations of more advanced qualitative inquiry, including case stories and vignettes.

By providing an overview of each of multiple respondents through its layered structure, the FBAF helps readers to grasp the nuanced constraints and opportunities each farmer faces, deepening their understanding of the sector.

Methodologically, the FBAF does more than structure interview guides: it acts as a sampling and case-selection heuristic, prompting researchers to seek variation across contextual layers rather than only farm size, sector or performance. It sensitises investigators to under-examined dimensions such as temporal change and institutional relations, and offers a theoretically informed scaffold that can strengthen the rigour of qualitative inquiry into farm entrepreneurship phenomena.

5.0 Conclusion

This paper contributes to the rural entrepreneurship literature by offering a context-sensitive framework for understanding farmers in relation to their entrepreneurial contexts. It responds to calls for greater contextualisation in entrepreneurship research (Welter, 2011; Fitz-Koch et al., 2018) and addresses the limitations of existing business segmentation literature, which is arguably ill-equipped for analysing the nuanced realities of rural farm contexts.

Through this paper, we develop a research tool with both theoretical and methodological value for scholars examining the complex rural contexts that shape farm

entrepreneurship. We outline the key contributions of the FBAF and demonstrate how it can be applied in an iterative and fluid manner by researchers.

The FBAF is multi-functional: it supports conceptual development, research design through empirical inquiry, and analytical work. Building on McElwee and Smith's (2012) FSF, it introduces additional contextual layers—including wider industry and societal forces (Low and MacMillan, 1988)—that influence the options available to farmers. By theoretically underpinning our framework with Bronfenbrenner's EST, we offer a means of understanding how structure, environment, and constraint interact with individual- and business-level factors, thereby contributing to emerging discussions on constrained rural entrepreneurship (Gittins and McElwee, 2024; Elkafrawi and Refai, 2022).

Although developed in the UK farming context, we argue that the framework is broadly applicable to farming in other developed agricultural settings. However, further refinement would be needed for the model's components to hold validity in developing country contexts—an avenue for future research. One limitation of the present study is that positivist scholars may critique the interpretative design of the framework, calling for explicit articulation of mechanisms, causal linkages, and testable propositions that connect its elements to specific outcomes.

Looking ahead, the FBAF could also be adapted for more practitioner-facing audiences. Reconfigured with farmer- and stakeholder-friendly terminology, the framework could serve as a reflective tool to help farmers themselves assess the challenges and opportunities within their individual contexts. This might be achieved through practitioner-facing reports or the development of a digital toolkit. This study does not offer specific policy prescriptions but shows how the FBAF highlights the heterogeneity of farmers and the need to attend to the contextual layers that shape their realities. Rural policymakers can use the framework to understand how micro, meso and macro factors influence the often constrained farm context.

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Tables

Strategic Management Model	Core focus	Key limitations when applied to farm contexts
Porter's Generic Strategies Model (GSM)	Achieving competitive advantage through cost leadership, differentiation or focus strategies.	Assumes firms can choose and sustain clear competitive positions; most farmers are price takers in commodity markets with limited scope to shape prices or industry structure.
Ansoff Matrix	Identifying growth pathways through market penetration, market development, product development and diversification	Presumes multiple growth options and relatively unconstrained strategic choice; in farming, land quality, regulation, subsidy regimes and family goals often severely restrict feasible pathways.

Table 1 Overview of Generic Frameworks and Key Limitations

Length of Time Farming	Entrepreneurial Alertness	Motivations to Diversify	Status	Gender	Age	Educational Skillset
0-5 Years 5-10 Years 10 Years+	Alert Non-Alert	Push Factors (Unemployment, Job Satisfaction and Redundancy) Pull Factors (Freedom, Security, Satisfaction)	Owner Tennant Manager	Male Female	<30 <45 45+	Unskilled Technical Training Higher education
			Sole Trader/Self Employed/Independent trader			

	Family Business Management Team Subsidiary	

Table 2 Personal Characteristics

Farm Size	Primary Sector	Diversification	Stages of Life Cycle	Topography	Performance	Environment
Small <40 ESU[3] Medium<100 ESU Large <200 ESU Very Large >200 ESU	Crops Arable Livestock Intensive Livestock Extensive	Agriculture Aquaculture Animal Care Conservation Countryside Attraction Equine Engineering Horticulture Tourism	Nascent Newly Diversified Growth Survival/Decline	Lowland Upland Highland	Low Medium High	Labour Intensive Machine Intensive Material Intensive Knowledge Intensive
	Pig Sheep Cattle Other				Growth Intention/Expectation High Medium Low No Growth	

[3] **European size unit**, abbreviated as **ESU**, is a standard gross margin of EUR 1 200 that is used to express the economic size of an agricultural holding or farm.

Table 3 Business Characteristics

Market Development	Technology and Innovation	Support Networks	Forms of Collaboration	Barriers to Diversification	Strategic Awareness
Geographical Expansion Regional National International	Advanced High Low None	Grants Networks Professional Services Family/Friends	Clusters Networks Alliances Informal	Business Model Uncertainty Cost Concerns Security Legal Issues Economies of Scale Legislation Experience Curve	None Some Aware Planned Stages
Markets Imports Exports					

Table 4 Activities and processes

Contextual Layer of system	Description
Individual	Farmers' personal environment, including their experience, education, biological factors (sex, age, physiological aspects, appearance), and personality traits (risk-taking, creativity, problem-solving). These attributes shape their strategic approach and decision-making.
Microsystem	The immediate and direct interactions that influence farm operations. This includes family (spouse, parents, children, succession), business

	characteristics (size, location, commodities, diversification), relationships with peers (other farmers, local networks), and connected businesses (markets, machinery dealers, livestock auctions).
Mesoystem/exosystem[4]	Considers both internal business strategies and external influences that shape farm operations. It includes farm strategy (diversification, risk reduction, income streams), technology & innovation (efficiency, cost reduction, productivity), strategic thinking (opportunity identification, decision-making), and support networks (farmer networks, business partners, agencies). These processes determine how a farm adapts to challenges and opportunities.
Macrosystem-	The broader political, economic, and societal environment in which farms operate. This includes political factors (government policies, trade, global relations), economic trends (market prices, inflation, interest rates), legislation (regulations, compliance, taxation), technological developments (digitalisation, automation, innovation), societal changes (ageing workforce, labour trends, demographics), and environmental factors (climate change, biodiversity, sustainability). These factors create the conditions within which farm businesses function.

[4] The author(s) have deliberately chosen to combine elements within the mesosystem and exosystem. We found there to be too much overlap and caused an unnecessary amount of complexity trying to add in a separate layer.

Chronosystem	The historical and temporal influences on farming practices. This includes heritage (family legacy, multi-generational farms), historical context (resources, policy evolution, market shifts), tradition (farming practices, rural norms, customs), and culture (consumer demand, societal perceptions, policy influence). These elements shape how farms evolve over time in response to external pressures.

Table 5 Applying EST to rural contextual dimensions

Potential Interview Questions	**FBAF Key Themes**	**How This Question Helps Understand the Broader Farming Context**
How have your personal experiences, education, or upbringing influenced how you run your farm?	*(Personality Traits, Education, Experience – Individual Level)*	Explores how background, learning, and experience shape entrepreneurial decision-making and adaptation.
Do you see yourself as a risk-taker in business, and how does this shape your decision-making?	*(Risk-taking, Problem-solving – Individual Level)*	Helps identify whether the farmer is innovation-driven or risk-averse, influencing their strategic approach.
How has your farming approach evolved as you've gained more experience?	*(Years in Farming, Learning Methods – Individual Level)*	Reveals adaptive capacity over time and the influence of past challenges and successes.
How does your farm's location, size, and type of commodities shape your business opportunities and constraints?	*(Business Characteristics – Microsystem Level)*	Highlights the role of geography, scale, and sectoral focus in determining market access, resilience, and competitiveness.
What role does your family play in decision-	*(Farm Family, Succession – Microsystem Level)*	Examines family influence on farm strategy,

making, and how does succession influence long-term planning?		succession challenges, and generational shifts in business vision.
How do your relationships with other farmers and agricultural suppliers impact your business strategy?	*(Peers, Connected Businesses – Microsystem Level)*	Identifies how social capital, knowledge exchange, and local networks impact farm business sustainability.
What role does technology (e.g., precision farming, automation) play in your farm, and do you see it as a challenge or an opportunity?	*(Technology & Innovation – Mesosystem Level)*	Assesses adoption of innovation, access to digital infrastructure, and barriers to technology uptake.
How do you balance risk and diversification when planning your farm's financial sustainability?	*(Farm Strategy, Diversification – Mesosystem Level)*	Explores the farmer's strategic thinking, resilience planning, and ability to adapt to market shifts.
Which external business support networks (e.g., NFU, accountants, co-ops) do you engage with, and how useful are they?	*(Support Networks, Strategic Thinking – Mesosystem Level)*	Identifies availability and effectiveness of external support, and how farmers navigate regulatory and financial challenges.
How have government policies and regulations impacted the way you manage your farm?	*(Political, Legislative – Macrosystem Level)*	Examines how external policy landscapes shape farm business strategy, compliance burden, and financial sustainability.
What market or economic trends (e.g., price fluctuations, inflation) are currently most affecting your profitability?	*(Economic, Market Prices – Macrosystem Level)*	Helps understand economic pressures on farm enterprises, influencing pricing strategies and investment decisions.
How is climate change influencing the way you farm, and what	*(Environmental, Sustainability – Macrosystem Level)*	Highlights environmental pressures, climate adaptation strategies, and

sustainability measures are you considering?		sustainability measures in farming.
How has your farm changed over time, and what major historical or policy shifts have shaped its evolution?	*(Historical Context, Policy Evolution – Chronosystem Level)*	Provides insight into long-term structural shifts in farming, showing how policy and markets have evolved.
What farming traditions have you maintained, and what have you adapted to meet modern challenges?	*(Tradition, Rural Norms – Chronosystem Level)*	Identifies continuity vs. change in farm practices, reflecting on how traditions shape business resilience.
How do consumer trends influence your business decisions, particularly regarding eating less meat?	*(Culture, Societal Perceptions – Chronosystem Level)*	Explores market and cultural shifts, showing how farmers respond to changing consumer preferences and ethical concerns.

Table 6 Using the FBAF to design an effective interview schedule

Case	**Individual (Farmer Characteristics)**	**Microsystem (Farm Business Characteristics)**	**Mesosystem (Business Activities & Processes)**	**Macrosystem (External Business Environment)**	**Chronosystem (Historical & Temporal Factors)**
John	55 years old, tenant farmer, 30 years' experience in farming, college-educated.	Sheep-only enterprise, located in an Area of Outstanding Natural Beauty (AONB), 350 hectares. Wants to pursue farm	Uses formal business advice networks (NFU/NSA member), pursuing efficiency strategies, utilising farm	Impacted by policy restrictions on diversification, subject to regulations on land use due to AONB status.	Farming family background, limited succession planning, potential transition to new policies affecting

		shop diversification but is restricted by landlord.	management software, focused on farm succession.		upland farming.
Sarah	29 years old, tenant farmer, 2 years' experience, degree-level educated.	Beef and sheep enterprise, diversification-focused (tourism), located in a National Park, 50 hectares. Pursuing environmental strategies.	Uses formal business advice networks, prioritising environmental sustainability, leveraging technology, and focusing on growth through land acquisition and diversification.	Subject to National Park planning regulations, benefits from environmental subsidies and eco-tourism trends.	Engaging in modern farming approaches, benefiting from newer environmental and tourism-based funding schemes.
Gordon	70 years old, farm owner, 50+ years' experience, limited formal education.	Traditional beef and sheep enterprise, uninterested in diversification or tourism, 100 hectares.	Relies on personal family and friend network, lacks formal business strategy, no technology adoption.	Affected by shifts in agricultural subsidy reforms, resistant to change, potentially vulnerable to economic pressures.	Long-standing reliance on traditional farming practices, less adaptable to policy and technological advancements.

Table 7 Developing Qualitative Case Studies

Figures

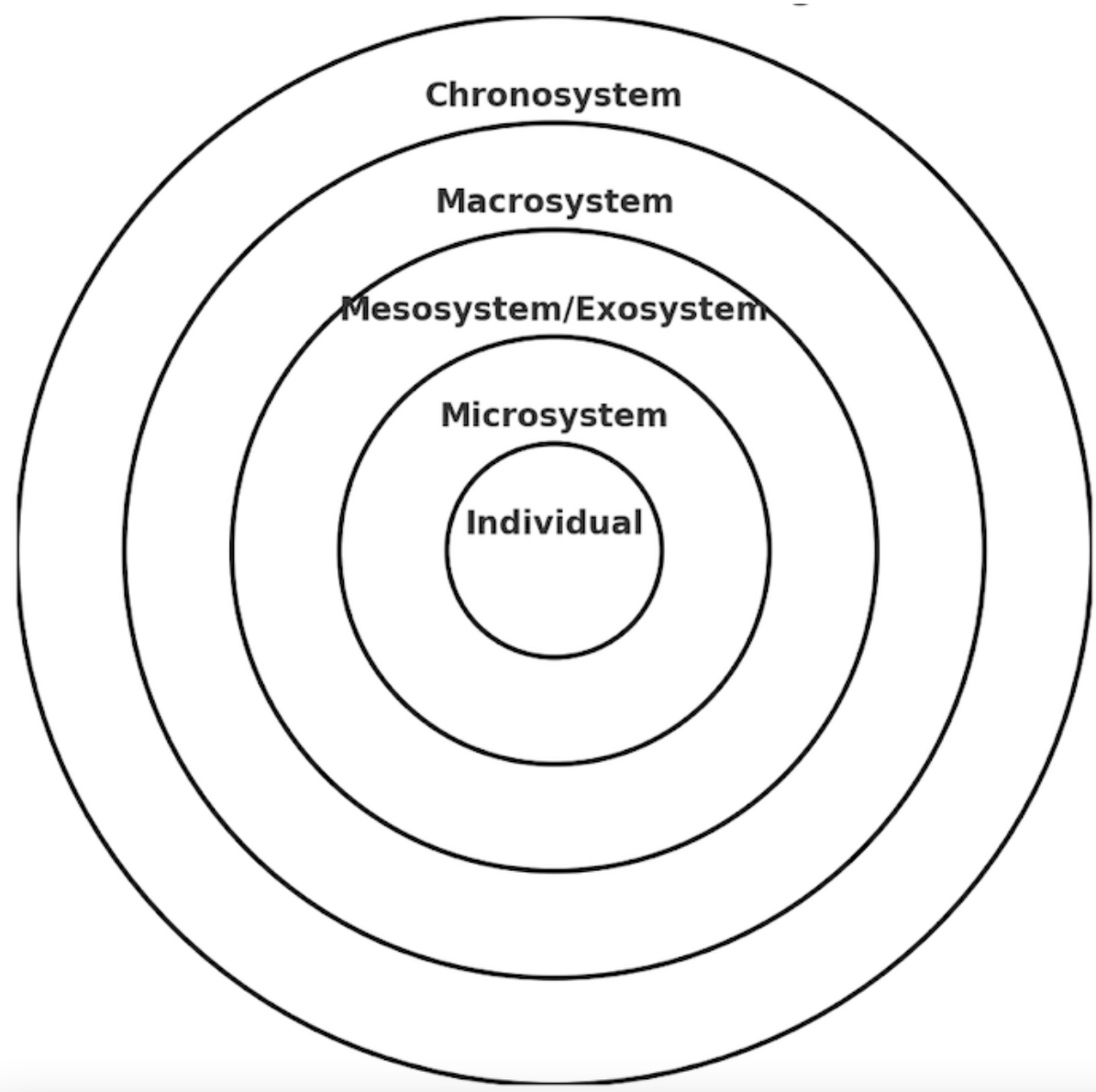

Figure 1 Ecological Systems Theory Conceptualization (Author Created)

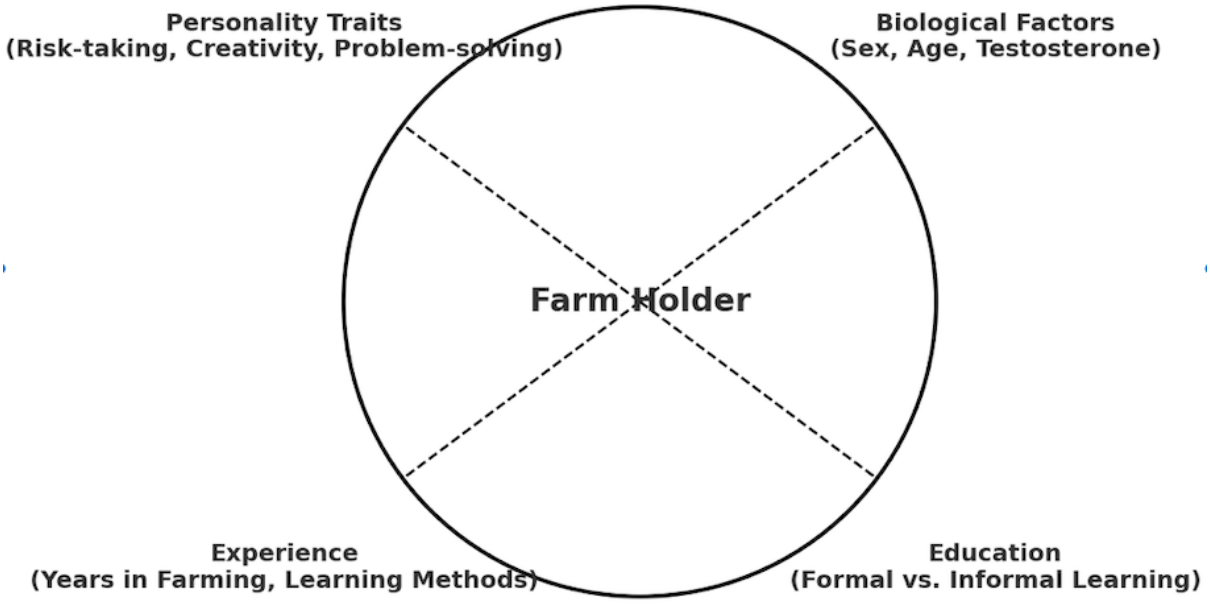

Figure 2 Individual Level (Author Created)

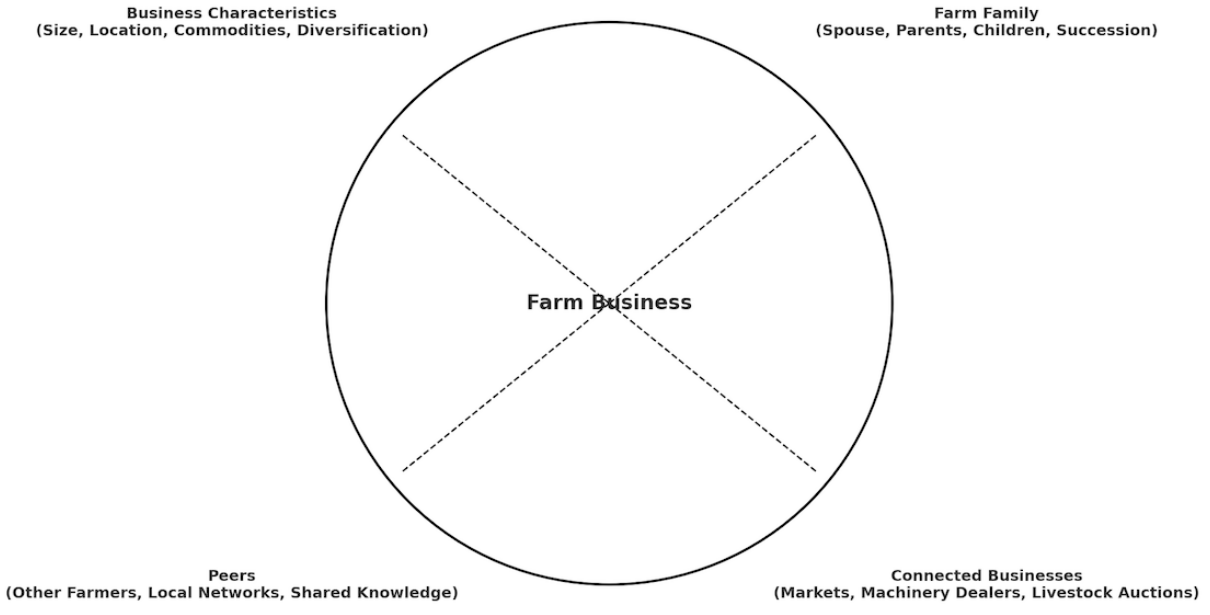

Figure 3 Business Level (Author Created)

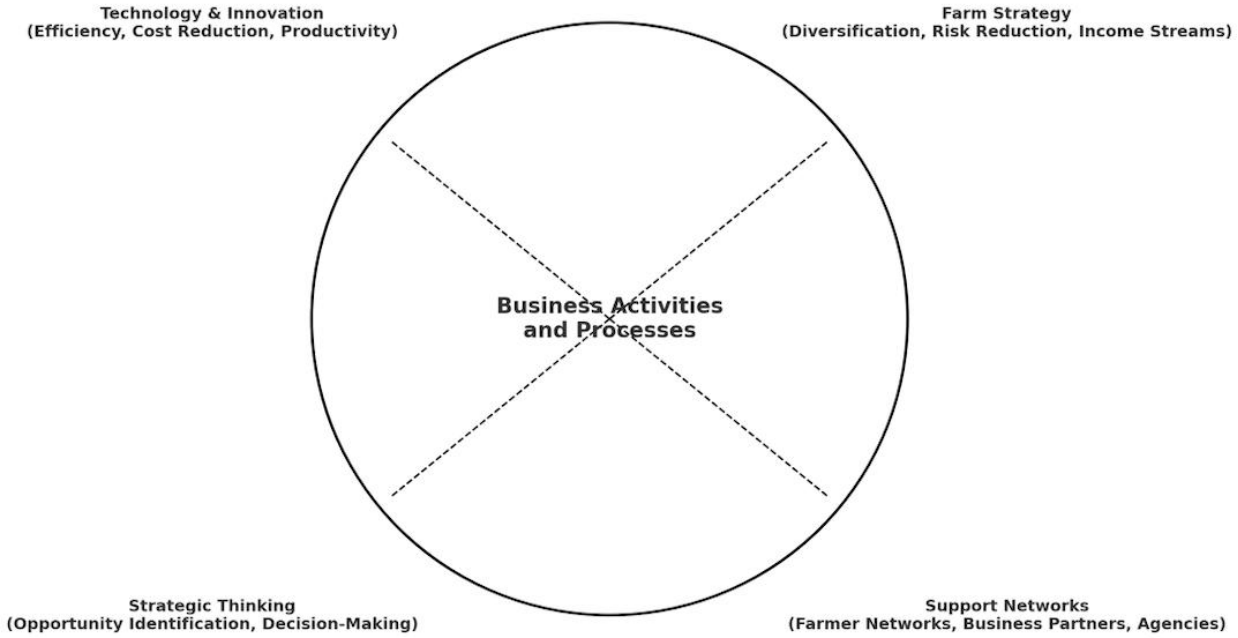

Figure 4 Meso system/ ecosystem business activities and processes (Author Created)

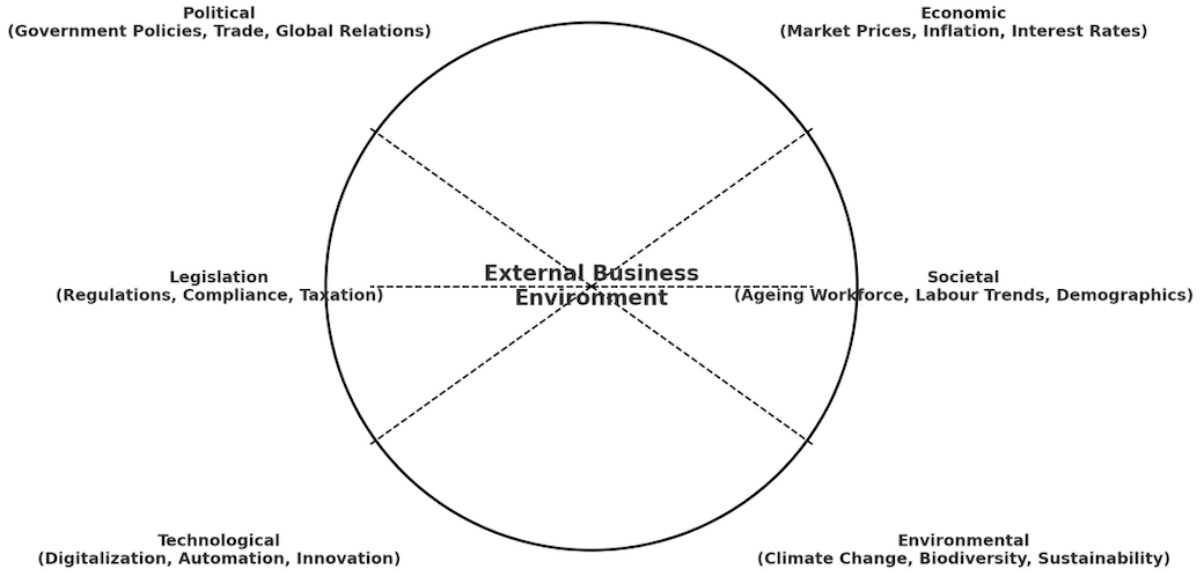

Figure 5 External Business Environment (Author Created)

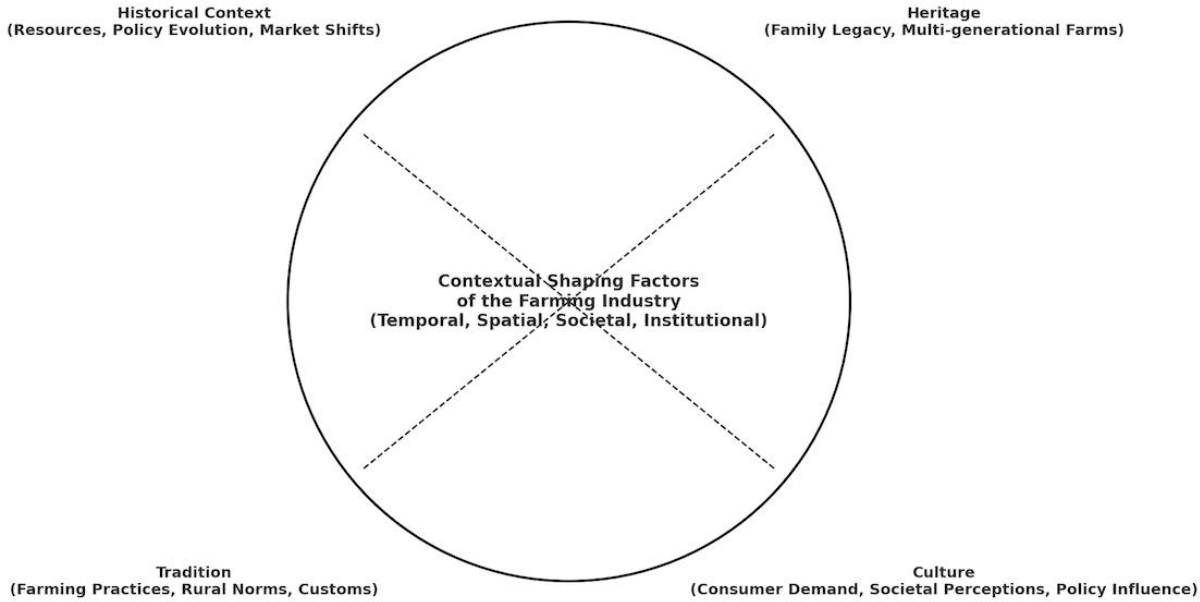

Figure 6 Contextual Shaping Factors (Author Created)

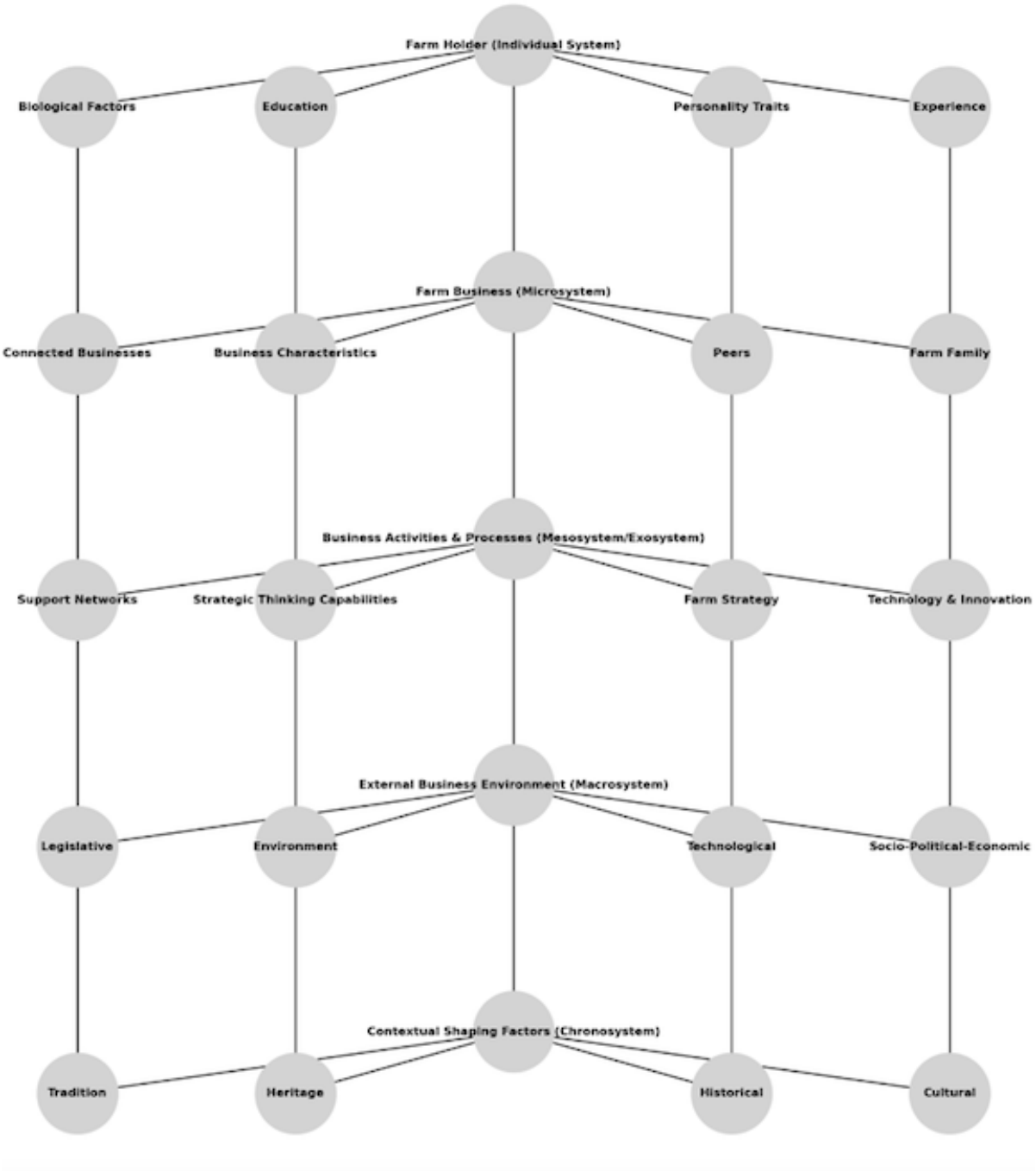

Figure 7 Visualising the FBAF (Author Generated)

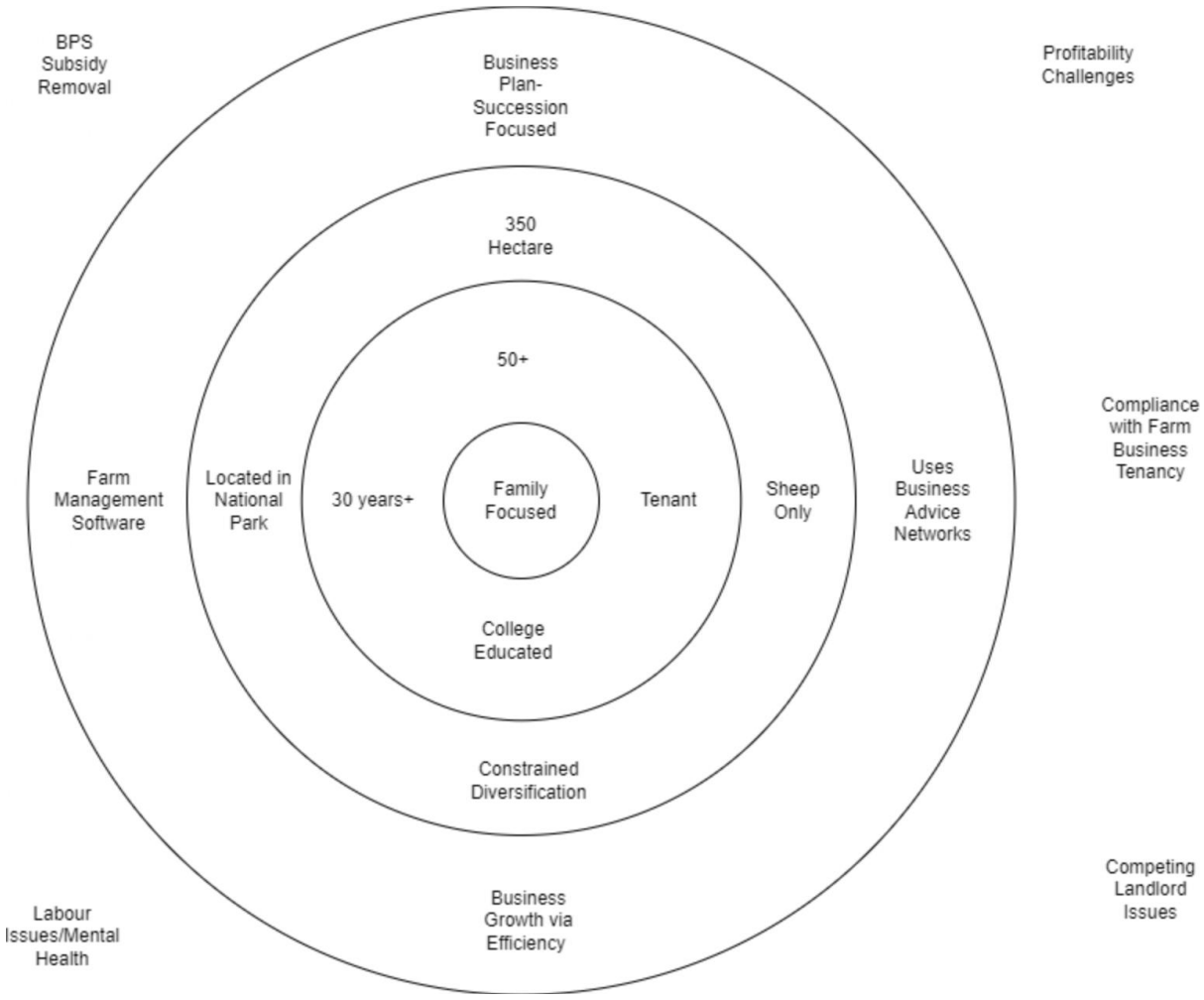

Figure 8 A Plotted FSF following an interview (Author Created)

Chain Harrows- Inspiration for our Framework Visualisation (Photo taken by Author)

PHOTOGRAPH 1