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CLASSIFYING THE STRATEGIC CAPABILITY OF FARMERS: A SEGEMENTATION FRAMEWORK

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Abstract

This paper examines the capability of farmers to diversify and outlines the barriers and challenges that confront farmers. It suggests that not all farmers have a high level of 'strategic awareness capability'.

The paper describes how a segmentation framework can be used to provide coherent understanding of the entrepreneurial farming business. A segmentation framework, will be presented.

The segmentation framework classifies farmers by their personal characteristics, the characteristics of the farm enterprise, activities and processes undertaken by the farmer and specific needs of the farm enterprise. Criteria from this framework are chosen to identify different types of entrepreneurial farmers. The resulting framework shows different types of entrepreneurial farmers reflecting the strategic orientation of the farm.

Different strategic orientations in farming may require different skills. The framework provides the opportunity for individual rural ventures to determine what these skills are.

Key Words

Rural Business, Farmer, Diversification Strategy, Entrepreneurship, Strategic Capability, Entrepreneurial Segmentation

1.0 Introduction

This paper deals with an important question for rural policy – the potential and implications for farm diversification for farmers, and to an extent to those businesses involved in the farm supply chain. Hussein and Nelson (1998) define farm diversification in terms of ‘livelihood’ and argue that it includes on-and-off-farm activities undertaken to generate extra income through creating additional agricultural or non-agricultural products – or by self employment or paid labour. The definition offered by McElwee (2006) articulates diversification as a strategically systematic planned movement away from core business activities as a consequence of external pressures. Note that this definition is not an attempt to exclude activities such as on-farm diversification but it does exclude off-farm work or employment. This paper is primarily concerned with an initial attempt to provide a segmentation framework for better understanding types of farm diversification, utilising an earlier segmentation framework initially devised and designed by Atherton and Lyon (2001) for the Small Business Sector. This concept was developed from earlier work conducted by Macfarlane (1996). In this paper we use the term segmentation framework to describe the completed framework we assembled from a reading of the original data building on work conducted in Rudmann (2008

This paper will be helpful to scholars of rural entrepreneurship, rural policy advisors and to consultants advising on farm diversification strategies as well as to farmers aware of the benefits of following current trends in academic thinking. Indeed, the segmentation framework could well be used by such farmers to plan their farm diversification strategies or in starting related businesses. This would greatly improve the “strategic capability of farmers” and an understanding of the classification in terms of how such typologies reflect the farmers’ personal characteristics, the characteristics of the farm, and specific needs of the

farm help practice? These are very practical applications. In addition the framework is an “iterative device” which can in itself be used as a predictive strategic tool.

The literature on business segmentation is largely positioned to deal with and explain corporate type businesses. There is however, an expanding generic literature in relation to issues surrounding segmentation (See Taylor, 1983; Jenkins and McDonald, 1997). Nevertheless, in terms of the small business sector in general and the agricultural and farm based sector in particular there are few studies which directly relate to segmentation frameworks or diversification. It is of note that Jenkins and McDonald (1997) identified a gap between theory and how organizations implement market segmentation. In developing this segmentation framework, Farmers’ personal and strategic capability to diversify from their core business when faced with threats to their existing way of being and the extent to which they have entrepreneurial ability are considered. Consequentially, the paper will define ‘farmers’, ‘diversification’, ‘entrepreneurship’, and ‘strategic capability’ and attempt to show how these terms are connected to a number of forces, which compel farmers to engage in an entrepreneurial process.

In respect of this, emphasis is placed on the pressures for diversification and the nature of that diversification. Barriers to diversification are then identified and discussed. The paper concludes by opening a discussion as to how theories of entrepreneurship may impact on this situation. The paper itself is a development of a qualitative case study of farmers in the county of Lincolnshire, (McElwee and Robson 2005) qualitative studies of farmers in regions of North Yorkshire and in the UK, (McElwee 2006) and a review of Business support to rural businesses in Cornwall England (McElwee and Annibal, 2010). These studies concluded that farmers in these regions of the UK are faced with a number of key barriers to their

entrepreneurial capacity. These barriers, which differ according to the size of farm, geographical location and the topography of the land for example, are outlined in this paper. The paper offers some preliminary questions regarding the entrepreneurial potential of farmers, and their ability to engage in diversification.

However, it is perhaps helpful here to briefly discuss the methodology relating to how the segmentation framework was constructed and why certain aspects such as topography were included in the segmentation model. As will be explained below the segmentation model was developed from primary data gathered from a large scale survey of farmers. The data gathered was analysed and as a result four themes and classifications emerged from which figures 1 to 4 presented below were developed.

The paper is organised into three discrete sections. First a preliminary discussion of what constitutes farm entrepreneurship in itself a widely contested term is provided. A discussion of what constitutes farm diversification and the barriers to that diversification is then provided. Finally, a segmentation framework is outlined and suggestions are offered on how it can be used by both researchers and those involved in the farming sector. The paper concludes by offering a number of key questions. A number of proposals for further research are included at the end of the paper. At this stage, the paper does not focus on policy issues at either a national or supranational level. The literature, for example, on implications of changes in the Common Agricultural Policy (CAP) is not addressed here. Although there is a need for some farmers to become more entrepreneurial in order to thrive, subsist and cope with the demands of exogenous pressures, e.g. increasing competition, reforms to the CAP, not all farmers are likely to have had a history of entrepreneurial activity

and consequently are unlikely to have a high level of what Hannon and Atherton have termed 'strategic awareness capability' (1998, 112). This is discussed in more detail below.

2.0 Farm diversification

Farm diversification is not a new phenomenon. As a mechanism for achieving fiscal 'pluriactivity' it has long been a feature of the farm sector (Hill, 1982; McInerney *et al*, 1989). A number of mainly economic studies were carried out as far back as 1952 (Heady, 1952) and later Greve *et al* (1960) as well as Johnson (1967). During the last decade there has been an upsurge in the literature on rural and farm based diversification strategies as indicated by the following citation tail (Gasson, 1988; Anosike and Coughenour, 1990; Ilbery, 1991; Ilbery, 1992; Evans and Ilberry, 1993; Reardon *et al*, 2000; Chaplin, 2000; Chaplin, Davidova and Gorton, 2000; McNally, 2001; and Meert *et al* 2005). Much of this literature dwells on the differentiation of strategies required between productive and marginal farms. Indeed, for Meert *et al* (2005) for many marginal farms diversification is a survival strategy linked to household incomes. There is talk of pluricativity, non-farm employment and part time working (Reardon *et al*, 2000). Thus diversification is seen mainly as an incremental value adding activity and not a growth opportunity. The focus on farm diversification from a management and entrepreneurship perspective are relatively recent.

Atterton and Affleck (2010) in a large scale empirical study of rural businesses in the North East of England and found that 44% of rural businesses reported conducting a secondary activity and 14% involved in a tertiary activity and that these primary and secondary tertiary activities were not always closely linked to their main business activity. Atterton and Affleck

argue that this activity has been stimulated by successive EU rural development programmes. Atterton and Affleck stress that the extent to which economic diversification strengthens rural economies. They stress that the positive impact of this multi layered activity on individuals, households, business supply chains and rural communities and the ways in which they are interrelated and mutually supported must be acknowledged.

The importance of small and medium enterprises (SMEs) to the economies of all member states of the EU, including the UK, in terms of employment is now widely accepted. The encouragement of entrepreneurship generally as a driver for economic growth receives equal recognition, although the language has altered in emphasis as the nature of the wider business environment has changed. The recent European Commissions' Green Paper on Entrepreneurship in Europe states that '*Europe needs to foster entrepreneurial drive more effectively*' (2003, 2). Furthermore, 'The challenge for the European Union is to identify the key factors for building a climate in which entrepreneurial initiative and business activities can thrive. Policy measures should seek to boost the Union's levels of entrepreneurship, adopting the most appropriate approach for producing more entrepreneurs and for getting more firms to grow.' (ibid,10). Diversification is obviously a key driving mechanism in farm and rural based business strategy formation.

Meert *et al* (2005) have recently provided a robust analysis of this type of activity. This paper specifically considers diversification opportunities in the UK context. With 60% of holdings in the UK engaged in diversification this definition may need refinement as the research progresses. Those farmers who do not have association with the farm enterprise and whose activities are outside of the sector could well be considered as no longer being farmers. In this respect we may wish to consider the diversification as the new business.

Paradoxically, a Centre for Rural Research study suggested that tenanted farms are *more* likely to diversify than wholly owned farms. Thus the suggestion is that tenant farmers in the UK as a whole are more likely to engage in diversification activities than those farmers who own their own farms/land. If this is the case it will be useful to discover if only specific types of diversification activities are open to exploitation. In other words to seek to determine what personal and business characteristics create diversification opportunity.

However, effective diversification does not specifically depend on the farms external environment and the threats and opportunities, which that environment offers. To diversify farmers need to be externally aware and have the strategic capability and capacity to engage with the diversification process. Engaging in diversification should improve the economic viability of the farm businesses and reduce dependence on the production of primary subsidized agricultural commodities. The latest figures produced by the Centre for Rural Research at the University of Exeter (2003) indicate that nearly 60% of all agricultural holdings in the UK have at least one form of diversified activity. From these figures, it might be concluded that entrepreneurial activity is common within the sector; however, we argue that this conclusion may well be premature. Different strategic orientations in farming may require different skills. The segmentation framework proposed in this paper, will seek to determine what these skills are. In this way a gap analysis of the core skills which farmers possess and the skills and support that they need in order to become more entrepreneurially successful, is necessary.

A cautionary note may be added at this point. The above arguments suggest that diversification is the normative strategy. However, it may well be the case that for some

rural ventures, high specialisation, may be the most appropriate strategy. An initial position would be that there might well be similar constraints, pressures and barriers placed on farmers who wish to embrace this business strategy as there are for those who engage in a diversification strategy. The paper will return to this point.

3.0 Developing a segmentation framework for classifying farm diversification

There are a number of generic strategic frameworks available to small businesses, such as the Porter (1980), Lentz (1980) and Miles and Snow's strategic framework (Miles and Snow, 1978) which set out various interrelationships with a number of theoretically relevant batteries of variables, including Small Business Unit strategic capabilities, environmental uncertainty, and performance (Desarbo *et al*, 2005). The model of Lentz (1980) measures organizational capability in respect of strategic implementation. Building on the Miles and Snow framework, Desarbo *et al* developed a multi-objective, classification methodology. However, the problem with such models is that none of them were specifically developed for the agricultural small business sector – hence the utility of the framework developed below. This is important because different strategic orientations in farming may require different skills. There are differences in the strategic capability of small businesses, depending on whether or not they adopt an entrepreneurial attitude (Garcia-Morales, Ruiz Moreno and Lloréns-Montes, 2006). Within the agricultural sector this entrepreneurial attitude is often missing. This is significant because many farmers do not develop the entrepreneurial skills or capabilities necessary for the personal mastery, transformational leadership, shared vision, absorptive capability, teamwork and organisational performance necessary for entrepreneurial growth. Indeed, farm based SME's could be described as problematic in this

respect. Furthermore, within the agricultural and farm based business sector there is an absence of what Rohloff (2005) refers to as '*enterprise architecture*'.

Moreover, Winter (2003) differentiates between ordinary capabilities which allow a firm to make a living and dynamic capabilities which permit a firm to grow entrepreneurially. Indeed, Teece and Pisano (1994) developed this concept of dynamic capabilities to explain how small firms gain competitive advantage. Dynamic capabilities consists of two components - 1) The shifting character of the environment; and 2) the key role played by strategic management in appropriately adapting, integrating, and re-configuring internal and external organizational skills, resources, and functional competences toward changing environments. The dynamic capabilities of agricultural SBU's differ from those in other industries (Teece, Pisano and Shuen, 1998; Teece and Pisano, 1994). Thus farm based and agricultural entrepreneurs often do not have a working knowledge of the concept of strategic entrepreneurship (Eisenhardt and Schoonhoven, 1996; Hitt *et al*, 2001) and many have yet to develop what Hitt (2002) refers to as a strategically based entrepreneurial mindset. To help address this it is anticipated that the segmentation framework, will seek to identify and thus determine what these skills are. In this way a gap analysis of the core skills which farmers possess and the skills and support, which they may need in order to become more entrepreneurially aware, is provided.

Segmentation frameworks can be used to provide coherent understanding of the entrepreneurial farming business. A segmentation framework initially designed by Atherton and Lyon (2001) and here developed for the Farm sector will be presented. Atherton and Lyons' framework was designed to examine segmentation of Small and medium sizes enterprises (SMEs) and how Business Links and other support mechanisms could use

segmentation strategies to provide services to SMEs. This framework has been adopted for two reasons. Firstly, because it offers a comprehensive mechanism for analysis of a particular sector and secondly, the framework is a device which enables the classification of farmers by: their personal characteristics; the characteristics of the farm enterprise; activities and processes undertaken by the farmer and specific needs of the farm enterprise. Furthermore, the resulting segmentation framework helps identify different types of entrepreneurial farmers, reflecting the strategic orientation of the farm.

Setting up a business necessitates creativity and persistence, whereas developing a business requires more advanced managerial skills, such as efficiency, effectiveness and reliability. There are significant barriers to entrepreneurial activity in the UK. These can be classified as internal organisational difficulties, or a lack of access to external resources. It is well known (in Gray, 1997 for example) that owners and managers of SMEs are generally lacking in the fundamental skills of financial management, human resource management, quality management, marketing and planning (Bolton, 1971; Stanworth and Gray, 1991; Storey, 1994; North et al, 1998). Being responsible for all these functions in a small firm can very easily lead to managerial ineffectiveness and inefficiency. In seeking to access resources, SME owner/managers in various regions of the UK report difficulties in accessing skilled labour (particularly in information technology), finance, and advice concerning legislative or strategic issues (Lloyds TSB, 2000). Taking all these difficulties into account, it is hardly surprising that many owner/managers of SMEs and micro-organisations prioritise lifestyle considerations over growth (Gray, 1997). Recent research in the farm sector McElwee and Annibal (2010) suggests that farmers are similarly weak in these skills, particularly business and management skills, and farmers in the UK are experiencing great difficulty in accessing appropriate labour.

The recent interest in diversification in the farm sector has been generated by the context of the current economic climate which has resulted in huge pressures on the EU farming industry overall. In the UK, the value of sterling, the saturation of home markets by foreign imports, increasing regulation and the reluctance of the 'Big 4' supermarket chains to pursue a 'Buy British policy' has resulted in major threats to the industry and the potential for opportunity, growth and value creation. The impact of climate change, changes in weather patterns for example, is also becoming a significant driver for change for rural businesses. Whilst many farmers have been forced into redundancy or lost their tenancy agreements others have attempted to respond by diversification strategies involving the generation of income from non-agricultural sources, for example, farm accommodation, caravan parks or sporting facilities or from integration along the agricultural supply/value chain. It is therefore necessary to briefly discuss the farmer as entrepreneur.

4.0 Farmers as Entrepreneurs

Farmers are defined as those occupied on a part or full time basis on a range of activities, which are primarily dependent on the farm. By agriculture, is meant the practice of cultivating the soil, growing crops and raising livestock as the main source of income. The definition of entrepreneur subscribed to in this paper is that used by Gray - '*.... individuals who manage a business with the intention of expanding that business and with the leadership and managerial capabilities for achieving their goals*' (2002: 61). The definition used in the Green paper is as follows - '*Entrepreneurship is the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organization*' (ibid.7).

It might be argued that small Farmers are not entrepreneurial, using the above definitions, for two main reasons, both of which need to be the subject of further extensive research. First of all many farmers have not had a history of entrepreneurial activity having occupied an economic stratum, which has hitherto not necessitated competitive activity. Some sectors of the farming industry are of course competitive exhibiting inter-firm rivalry, however producers are often unable to influence prices, therefore they do not exist in a state of true competition. Secondly, they are unlikely, certainly in the case of small farms, to have leadership and managerial capability, formalised through structured employment hierarchies.

In the study of entrepreneurship the values of economic individualism have been assumed to be the significant driver in understanding the role of the entrepreneur. The focus has been more on specifying the demands or expectations, which emerge from the perspective of efficient and successful functioning of the business the emphasis on goal-directed, competitive activity.

In economic theories of entrepreneurship three dimensions seem to be prominent. The first of these is risk-taking. The assumption is that an entrepreneur takes calculated economic risk, but also maximises profit by bearing the state of uncertainty caused by the possibility of failure. The second dimension is growth orientation, i.e. the aim of maximizing the profit by expansion of business activities and growing the firm i.e. entrepreneurs are not be too satisfied with simply earning their own living, but are expected to aim for growth. The final dimension is innovativeness, i.e. searching, developing and trying new products, markets, methods and so on. Implicit in all of these dimensions there is an expectation that a 'proper' entrepreneur is engaged in active, dynamic and competitive economic striving, in a

continuing pursuit of opportunity (Stanford and Curran 1976; Carland et al, 1984; Stevenson and Jarillo 1991; Vesala 1996).

The emphasis on the demand for active striving, and success in it, is evident also in the psychological literature on entrepreneurship (see Brockhaus and Horwitz 1986; Wärneryd 1988; Stevenson and Jarillo 1991). A number of models can be considered. Personal control is the central idea in the concept of locus of control, derived from Rotter's social learning theory (1966). Applied to the study of entrepreneurship, this theory asserts that belief in internal control is characteristic of entrepreneurs coupled with the entrepreneur's belief in his or her ability to personally affect or control the conditions and the outcomes of the venture. Secondly, borrowing from the social learning theory of Bandura (1986), the concept of self-efficacy has been suggested to be relevant in describing the role of entrepreneur. Self-efficacy refers to a person's belief in his or her capability of performing those actions and activities that are needed to achieve desired outcomes and goals (Boyd and Vozikis 1994).

The dimensions presented above do not cover all of those strategic and psychological elements that have been connected with entrepreneur's role in the research literature nor have controversial aspects in interpreting these dimensions been discussed. However, it may be that they represent the core of the discussions concerning the nature of the entrepreneurial role. It seems reasonable to suggest that entrepreneurs recognize these as relevant dimensions for viewing and characterizing oneself as an entrepreneur.

When interpreting these dimensions, the identity of the entrepreneur and how the entrepreneur evaluates both his or her enterprise skills and the strategic capability of the enterprise, needs to be taken into account. An entrepreneur needs to be confident enough,

and able to have a desire to determine the criteria, skill set and characteristics which will help develop the venture and the individual. As far as this ideal is accepted and socially valued, the criteria for a determining entrepreneurial success serves also as criteria for evaluating entrepreneurial self and venture capability.

5.0 Pressures and drivers on Farmers to engage entrepreneurially

The purpose of this section is to highlight the pressures and drivers on Farmers to engage entrepreneurially. All of these pressures provide a set of drivers, which necessitate change of strategic business direction e.g. diversification, specialisation or indeed other models such as merger. Indeed, MAFF suggested that smaller units are more vulnerable to the economic changes brought about by the market, Common Agricultural Policy (CAP) and World Trade Organisation (WTO) reforms in recent years. Larger units, particularly those over 100 hectares, benefit from economies of scale, being better able to spread their fixed costs, and are often better equipped as far as buildings and machinery are concerned. They are able to meet the increasingly demanding market specifications for farm products, and are generally less vulnerable to economic pressures.

Despite financial support it is clear that many farming businesses are making a loss. The impact of the current low and negative incomes on owner equity in some sectors, and especially for tenant farmers, is potentially critical for substantial numbers of businesses and families and is leading to uncertainty within these businesses and families. It is not surprising therefore, that the opportunities of diversification are a significant issue for farmers. To this we now turn. From a perusal of the literature it is possible to identify three main farm-based

groups of additional income sources for farm businesses: Agricultural Diversification, Farm-based Visitor Facilities and Other farm-based businesses.

1) Agricultural Diversification

- Diversification into alternative products in the form of novel crops (e.g. industrial non-food crops, such as short rotation coppice for energy production) and novel livestock (e.g. venison, ostriches, rabbits) and other types of production (e.g. organic production).
- Adding value to agricultural products through processing and packaging.
- Alternative marketing of agricultural products e.g. direct marketing, farmers' markets, farm shops, delivery rounds, Pick Your Own and quality assurance schemes (QAS).
- Supply of agricultural labour and/or machinery contracting services to other farms/businesses.

2) Farm-based Visitor Facilities

- Farm-based accommodation (bed and breakfast, Self-catering, camping, caravanning/bunkhouse/camping barns)
- Farm-based recreation/leisure/education/catering facilities (farm parks, sports, golf, tea rooms etc.)

3) Other farm-based businesses. In some cases farm businesses have multiple sources of additional income. In many cases these are well-established activities, which reflect a range of factors including: opportunism, entrepreneurial skills, and locational advantage; Workshop facilities; Storage facilities (furniture, warehousing, caravans etc.); Services

such as kennels, livery etc; Passive lets (letting buildings to other businesses); Consultancy and professional services. There are perhaps sixteen possible agricultural related activities, into which farmers could diversify into depicted in Figure 1 below. However, these are dependent on a range of variables: the geographical location of the farm, the topography of the land, the economic infrastructure of the region, and the entrepreneurial propensity of the farmer, to name but a few.

----- Insert Figure 1 about here -----

Figure 1 is a classic grid type framework for classifying SBU's by the types of activity engaged in by the owners / managers. It is of note that the three strategies discussed above do not take cognisance of informal, illicit or illegal "off the books" type diversification strategies. The propensity for farmers to engage in 'Illicit Rural Enterprise' [IRE] (Smith, 2009) is the subject of a separate study by the authors.

6.0 Barriers to acquiring an entrepreneurial mindset

It is accepted that there are barriers to diversification for any small business and that there are particular barriers for rural entrepreneurs who are rethinking their business strategy in order to take advantage of new opportunities is also well established. See Table 1 below for a summary of these barriers.

----- Insert Table 1 about here -----

It is of note that many of these barriers and uncertainties listed in columns one and two which are experienced by SBU owners and Farmers are all external factors which lie outwith the control of lone Farmers and entrepreneurs. These barriers are a mixture of financial, technological, legal, political and environmental. The notable exception is that of 'position on the experience curve' listed in column one, in that experience can be easily hired if finances permit. However, all the criteria favourable to entrepreneurship listed in column three in relation to strategic capacities can be operationalised by the individual SBU owners. It must be stressed that although the factors listed in column three all encourage entrepreneurship that growth orientation is a consequence of innovation rather than a prerequisite to it.

In addition, community changes in the rural economy are becoming more evident as the sector does not appear to regenerate its ageing population. Although, in-migration of new entrepreneurs may mitigate this in some areas other farmers continue to run their farm business whilst taking paid employment either within the sector, usually as agricultural sub-contractors or outside of the sector. The inevitable consequence is that the management of the farm suffers because of the reduced time spent on it, leading to negative perceptions from other actors who have a stake in the success of the enterprise which may or may not be financial e. g. rural pressure groups. Notwithstanding these barriers, the contention is that farmers do not systematically access Business Advice networks and that they are less likely to access opportunities because of limited social networks, which have experience of diversification into new business ventures. This contention has been developed in other business sectors. For example, Curran (2000) argues that despite claims that policies and support help develop a strong enterprise culture and promote economic prosperity, the precise outcomes of these policies have been difficult to determine. All these factors mitigate against

Farmers developing an entrepreneurial mindset and their strategic capabilities to engage in strategic entrepreneurial activity.

7.0 Presenting the Segmentation Frameworks

There has been relatively little research that attempts to systematically segment the farm industry. Following Atherton and Lyon (2001) a segmentation framework was devised to specifically address this gap. The framework segments three aspects of the farm and farmer.

- The Personal Characteristics of the farmer
- The Characteristics of the Farm Enterprise
- The Activities and Processes undertaken by the farm

In Atherton and Lyons's original framework the 'Personality' of the individual was designated as a key personal characteristic. The analysis and discussion which follows concentrates on the classification of the strategic capability of rural businesses and on the framework itself, because these are the main results of the study. In this iteration of the framework, the personality characteristic has been replaced with the concept of 'Entrepreneurial Alertness' derived from the theory of alertness (Kirzner, 1979), which in essence distinguishes between the decisions, which alert-and non- alert actors take in differering circumstances. Non-alert individuals are defined by Gaglio and Katz as individuals who - 'fail to identify or create entrepreneurial decisions because they misjudge their market environment and behaviour demanded by the moment (2003. 98). Whereas alert individuals - 'emphasise *objective accuracy* (italics added) apprehend the changing environment cues and realise that the appropriate behaviour at that moment requires reassessment of the situation and environment..... (ibid.98)

It is only the concept of objective accuracy that is problematic in this definition. The notion that entrepreneurs do make objective decisions routinely, assumes a level of rational decision-making has been effectively discredited. It is 'Personal Characteristics', the phenomena of 'entrepreneurial alertness' and 'motivation' to diversify which provide the more complex methodological issues. As these phenomena involve psychological underpinnings such as 'perception' and 'cognition' and the personal beliefs/value systems on the part of the actors involved, they are difficult phenomena to investigate. Atherton (2004: 56) in discussing entrepreneurial cognition articulates how complex it is to - *'determine the nature of interactions between internalised thinking and conceptualisation by the manager (farmer) and rhetoric and articulation within a business context on the other, I need to consider the relationship between voiceand cognition'*.

All of the other phenomena lend themselves to relatively easy data collection techniques. However, in the 'Business Segment' the phenomena of 'growth intention', is difficult to define, whereas in the Business Activities and Processes segment it is 'Strategic Awareness. The segments are depicted in the diagrams overleaf.

The segmentation framework is not designed to simply determine business characteristics, activities and processes. It is intended to be used as an iterative, data collection device, which can in itself be used as a predictive tool albeit that Shane and Venkataraman (2000) have indicated that entrepreneurial behaviour is not always stable. The framework will be

tested over time and where possible using methodological approaches which return to the original respondents.

----- Insert Figure 2 about here -----

Figure 2 is a useful framework for profiling and gauging the entrepreneurial alertness of the individual farmers and SBU owners.

----- Insert Figure 3 about here -----

Figure 3 is also a useful framework to profile and gauge the entrepreneurial nature of the business unit.

----- Insert Figure 4 about here -----

Figure 4 is useful framework for classifying the external business activities and processes engaged in by SBU owners. Collectively they enable researchers and consultants to build up a profile of the entrepreneurial nature of a rural SBU and more importantly to predict how the owners could re-orientate their attitude towards diversification and pluricativity.

8.0 Analysis and Discussion

This section begins by highlighting the barriers, then broadening the discussion to general attitudes towards entrepreneurialism. Specific potential barriers to diversification, identified by McElwee (2004), included the following at this stage illustrated in no particular order - Poor management skills of farmers; Lack of entrepreneurial spirit; Limited access to business support; Farm tenancy agreements and Regulation. It is also evident from an examination of figure 1 that many of the activities engaged in require a high level of capital investment

whether it be fiscal, or social capital. Indeed, in many Farm based enterprises the possession of '*inherited social capital*' (Walker, Kogut and Shan, 1997) features heavily. Thus as well as finance the entrepreneur usually has to possess the land, the skill sets and the networked contacts to be able to operate effectively. This places further restrictive barriers on what types of activities one can diversify into. This aspect is worthy of further study.

Moreover, whilst many farmers are participating in diversification activities, strategies towards diversification tended to be reactive, rather than proactive. This finding is in alignment with that of Aloulou and Fayolle (2005) in their study of entrepreneurial orientation in small business contexts. The reasons for this need to be further explored. One pertinent example of this is that many of the diversification activities are instigated and managed by the female partners and constitute activities, which have traditionally been associated with the role of the female on the farm e.g. Farm accommodation, or a Farm shops. However, the economic significance of these activities to the continual success of the farm enterprise is no longer a marginal activity.

Notwithstanding these barriers, we contend that farmers do not systematically access Business Advice networks and that they are less likely to access opportunities because of limited social networks. This highlights the lack of an 'Enterprise Architecture' as identified by Rohloff (2005). As a consequence there is little professional interaction with other farmers who have experience of diversification into new business ventures. Recent research by Lowe and Talbot (2000) reinforce this contention. Their research indicates that farmers first and foremost access their accountants and bank managers who may be over cautious.

The second most popular point of contact is government agencies and Farmers Unions. Support is more likely to be sought from family and friend networks before public sector agencies. Poor and inconsistent advice prevents many farmers from attempting to expand their business. Farmers tend to utilise a very small group of trusted advisors and do not use social networks for financial advice. Moreover, whilst many small-scale farmers may not have the entrepreneurial skill to enable them to diversify, those that are able to employ innovative diversification tactics are constrained to a numbers of small options (either because of restrictive practice through Tenancy agreements or interventionist policies of non governmental organisations e.g. National Parks).

Inheritance is not of course an indicator that the inheritor is likely to be more market orientated and entrepreneurial than the previous generations. Indeed Newby *et al* (1978) argue that the opposite of this may be true, as second and third generation farmers are unlikely to be as entrepreneurial because of a better standard of living. The average age of farmers is increasing however, which may be a salient factor in assessing entrepreneurial behaviour. Furthermore, little is known about the extent of clustering and networking in the farm sector and requires further exploration.

The management of the small farm enterprise is of special interest. Farms of this size may have been owned or managed within the same family for generations. Some of the respondents, in the research conducted by McElwee and Robson (2005) are part of a family tradition, which goes back at least three generations. This ownership/management role has militated against farmers from being entrepreneurial as they have been 'locked into a way of being', and have enjoyed a relatively secure pattern of work. It is hypothesised that historically the motivators for farmers have not been overtly financial: owning a farm and

being solely responsible for the health of their own endeavour has been a major determinant of personal success. Furthermore an historical vacuum of strategic planning on the part of farmers compounds the pressures of the prevalent socio-economic factors: they have not needed to do. This relative safety has changed. The primary motivator for many farmers now is one of business and personal survival.

In the past farmers have not needed to raise capital from sources external to the family network. As Casson (1982) has cogently argued the family is the potential source of risk capital – capital, labour and information. As a consequence this provides advantages to the farm enterprise. Although this is not a simplistic analysis, it may be considered to ignore some of the more political nuances of family life. In more recent years the ‘natural inheritance’ of farms has been eroded as a consequence of farmer’s children becoming more mobile, less desirous of remaining in a declining industry. Property prices in villages and rural communities have escalated precluding ownership by indigenous community members. Of course the incentive to remain in a business where the annual returns decline year on year is minimal. These factors all point to a pressing need to reinvigorate the entrepreneurial spirit and strategic capabilities of Farmers and rural entrepreneurs and to encourage diversification.

The classification frameworks developed can help in addressing some of the issues highlighted above by providing a unifying framework for classifying the strategic capability of rural businesses using data which can be compared across examples and categories. We acknowledge that there are a lot of variables which influence the framework and that these result in difficulties with presentation and interpretation from an academic perspective. We also acknowledge that in such situations precise description of elements of the framework becomes hard. However, in using the framework as a predictive analytic tool in its own right

these difficulties of presentation and interpretation become less problematic as plans and decisions can be made based on the available data..

9.0 Conclusion

As Beaver and Ross (2000: 25) have argued 'the management of small firms is unique. It bears little or no resemblance to management processes found in large organisations'. Whilst this is not a comparison of the management of small firms to the management of the farm enterprise, it may be suggested that more detailed investigation is required because its characteristics are unusual. Farms may have been owned or managed within the same family for generations. Historically the motivators for farmers have not been overtly financial: owning a farm and being solely responsible for the health of their own endeavour has been a major determinant of personal success. It has been suggested that the Common Agricultural Policy (CAP) reform will benefit farmers by allowing them for the first time to take responsibility for their businesses and theoretically, have more freedom to farm as they wish (European Communities, 2004). However, it is also widely argued that whilst farmers who have spent years relying on CAP subsidies have the ability to detect changes in national policy, they may well have subsequently lost the ability to critically look into their own individual farm businesses in order to monitor and anticipate the downstream effects of reform. While some may argue that farmers have lost the ability to be proactive, a less pejorative interpretation may be that farmers have to adapt from being semi-reliant on quasi non-market to being attentive to market forces. As previously highlighted above, the primary motivator for many farmers now is one of business and personal survival and because this is ultimately related to issues of profit and/or loss there is an increasing need for farmers to be more strategic in their approach to entrepreneurship.

To conceive farmers as a homogeneous group is a mistake and hinders policy development. Whilst Beaver and Ross may be correct to suggest that in smaller enterprises management is a personalised process which is characterised by the prejudices and attitudes of the owner owner/manager and that the 'nature of managed activity depends on the characteristics of the person fulfilling the role' (ibid.26) it is perhaps more difficult to accept the thesis that expansion or contraction is dependent upon the needs and personality of the owner owner/manager at least in the small farms sector. In short the barriers preventing farmers needing to act and think strategically are multi-faceted; some of these have been explored here.

The support segmentation framework will be further developed to classify farmers by their personal characteristics, the characteristics of the farm enterprise, activities and processes undertaken by the farmer and specific needs of the farm enterprise. This paper has outlined a segmentation framework and criteria from this framework are chosen to identify different types of farmers. It might be suggested that different strategic orientations in farming may require different skills. In this way a gap analysis of the core skills which farmers have and the skills and support, which they need in order to become more entrepreneurially successful, is provided. Clearly, for farmers to be successful, they need to have both strategic awareness and the capacity and capability to develop.

This paper has shown that this sector is a complex area. A framework has been provided which can be used as a basis for empirical research. It indicates that Farming is not a homogeneous sector operating in a complex and multi-faceted environment. The segmentation framework is not a model, as it does not have a predictive function.

The paper suggests that farm entrepreneurship is a special case in the entrepreneurship discipline. The paper generates many questions, which will be the subject of the larger research programme. These questions include: the effects of the changes in the Common Agricultural Policy; the debates surrounding specialisation versus diversification; the barriers and opportunities which face farmers and how those barriers may be ranked and determine how farmers use networks. The longer-term goal is to attempt to map the skills and competencies of farmers with a view to informing policy. A major challenge for the agricultural sector is to enable farmers to develop their entrepreneurial skills. This requires economic support and a greater emphasis on education and training via the development of a vibrant, enterprise architecture.

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Figures and tables

Table 1 – A summary of barriers and potential opportunities faced by Rural SBU’s and a list of criteria favourable to entrepreneurship.

Generic barriers to all SBU’s	Barriers to rural SBU’s / Farms	list of criteria favourable to entrepreneurship
Economies of scale	Uncertainties about appropriate business frameworks and a reduced networking opportunity	Risk-taking propensity
Capital requirements of entry	Concerns over total costs, equipment and training due to the burden of rural location	Growth orientation
Access to distribution channels	Interoperability of systems	Innovativeness
Position on the ‘Experience curve’;	Usability for more complex transactions	Creativity
Legal Issues Retaliation of existing businesses	Legal issues concerning land usage	Business opportunities

Changing technologies	Security and communications issues relating to poor provision of broadband coverage.	Organisational approaches
Legislation	Unpredictable seasonal climates changes	Access to Venture capital
Staffing Issues	Invasive pests and diseases	
Lack of enterprise infrastructure	CAP reform	
	Labour market changes (migrant labour)	

Source (Adapted from the findings of the European Commission Report (1996).

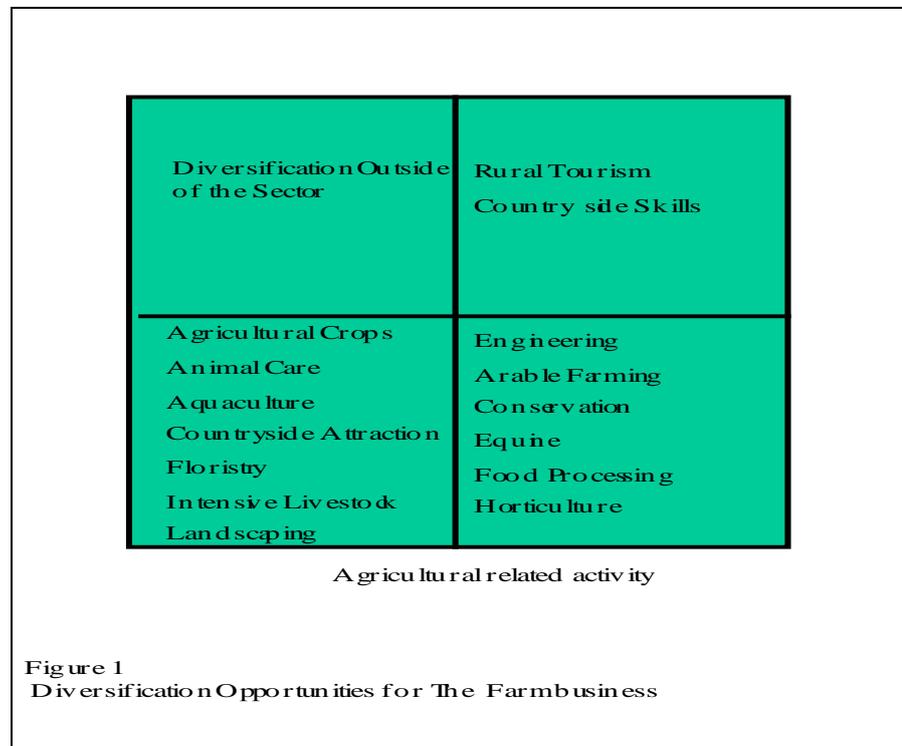


Fig 2. Personal Characteristics of Farmers

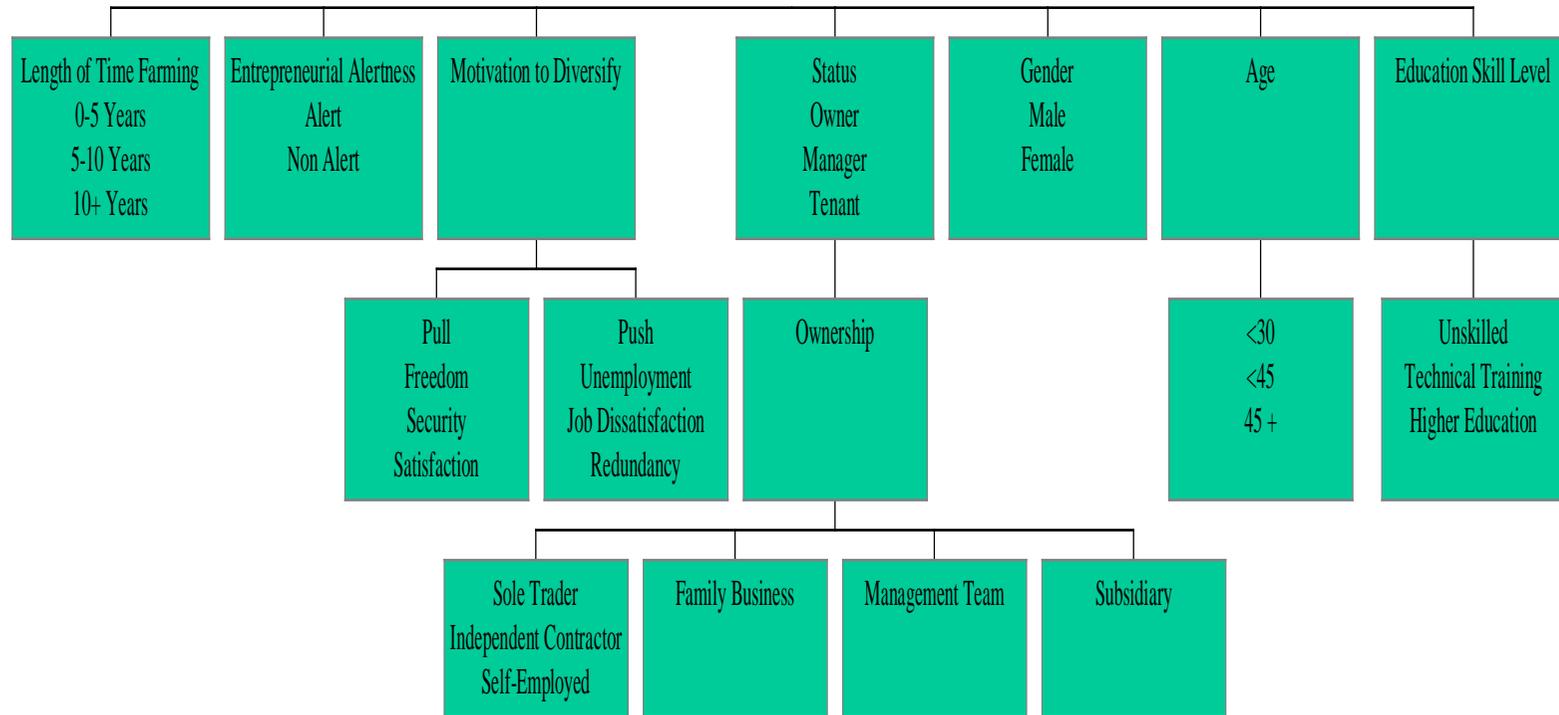


Fig 3. Business Characteristics

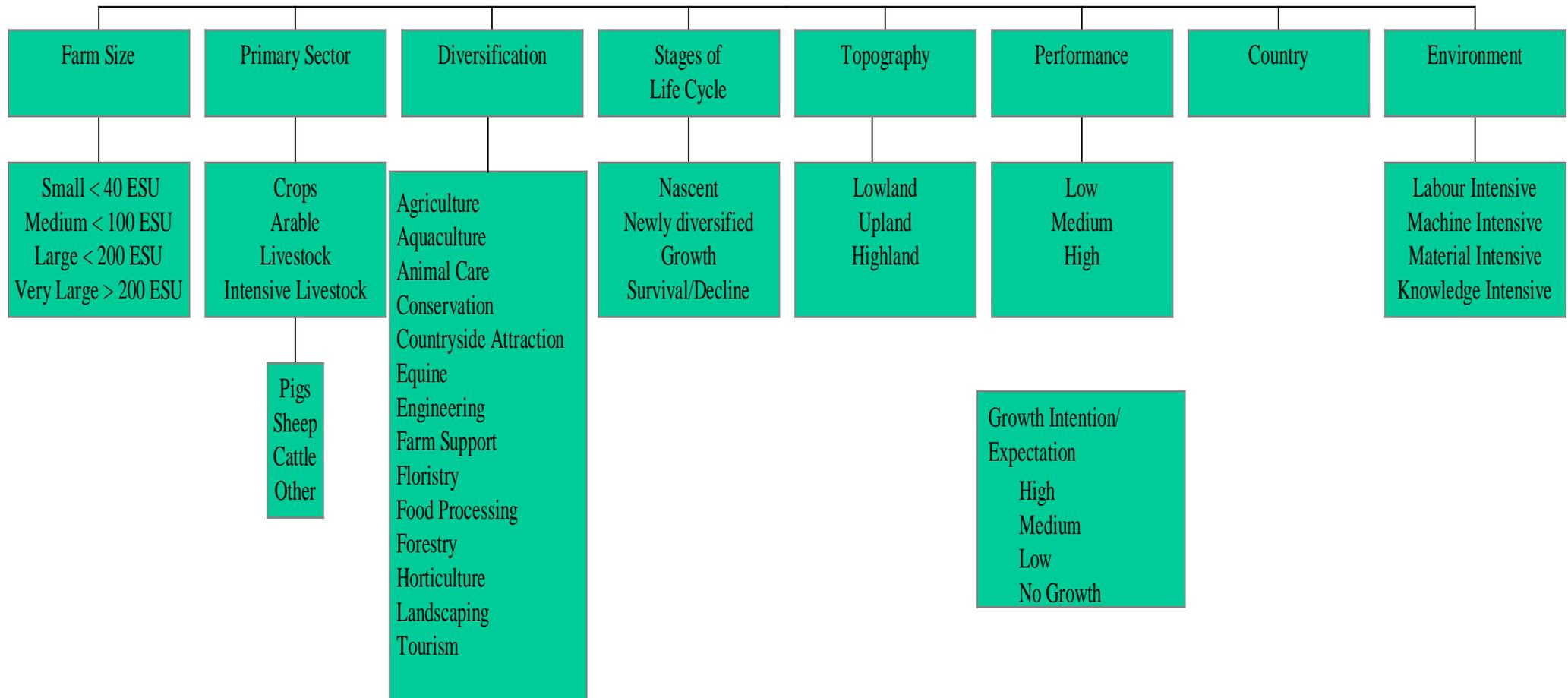


Fig 4. Business Activities and Processes

