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THE ROLE OF FARMS IN RURAL BUSINESS DEVELOPMENT

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ABSTRACT

In recent years the rural enterprise has become a key theme in small business research. Despite an extensive and increasingly sophisticated literature analysing rural firms, the research effort has largely excluded agriculture. This exclusion reflects a wider separation of agriculture and industry which is apparent not only in scholarship, but in the political, social and economic institutions which surround the farm sector. Although there have been persuasive arguments for a more multi-disciplinary approach to the analysis of rurality and calls for comparisons to be drawn between farms and other small businesses, few such attempts have been made and the analysis of rural business development remains characterised by disciplinary polarity.

This thesis seeks to redress this by analysing farms using conventional small business paradigms and methodologies. Three specific issues were examined: the extent to which farms conform to small business norms; the engagement of farms in additional business activities; and the differences between farms undertaking additional business activities and those maintaining monoactive approaches. The results reveal similarities between farms and other rural enterprises and demonstrate the continued importance of farms as creators of employment and wealth in rural areas. Importantly, farms are shown to have a hitherto, unrecognized role in accommodating and fostering rural small firms in non-farm sectors.

The study supports the view that multiple business ownership activities may have been under reported in the small business research literature. This analysis suggests that additional business activities are best viewed as a continuum, from the diversification of existing assets to the establishment of independent and separately registered firms. Policy liberalization, demand side changes and shifts in the demographic profile of

farm owners are expected to increase the number of farms engaging in additional business activities. These factors are also expected to increase the similarities between farms and other rural enterprises.

The thesis concludes that there are benefits to be gained from the inclusion of the farm sector in small business analyses. The sector is dominated by family owned, small businesses that have largely survived the transition through generations. As such, the sector offers small business researchers a unique opportunity to analyse issues at the centre of small business debate. Moreover, it is argued that a small business approach to the analysis of the farm sector offers a particularly relevant, but hitherto absent, insight into the future development of rural areas.

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GLOSSARY OF TERMS AND ABBREVIATIONS

ADAS	Agricultural Development and Advisory Service
AWU	Annual Work Unit
CAP	Common Agricultural Policy
CCC	Cambridgeshire County Council
ESU	European Sized Unit
EU	European Union
FTE	Full time equivalent
GATT	General Agreement on Tariffs and Trade
HA (ha)	Hectare (1 ha = 2.47 acres)
 Holding	Single farm unit
IACS	Internal Audit and Control System
MAFF	Ministry of Agriculture, Fisheries and Food
MJHFH	Multiple job holding farm households
NFU	National Farmers Union
OECD	Organization for Economic Co-operation and Development
OGA	Other Gainful Activities
OPCS	Office of Population Census and Surveys
Pluriactivity	The combination of farming with other income generating activities
RDC	Rural Development Commission
SGM	Standard Gross Margin

CHAPTER ONE

INTRODUCTION

THE ROLE OF FARMS IN RURAL BUSINESS DEVELOPMENT

1.1 Introduction

This thesis is concerned with the relationship between the emergence of new businesses in rural areas and the dynamics of agricultural restructuring. Both of these factors have been identified as key components in the process of rural change (Urry, 1984) and have been the subject of extensive, albeit independent, study in recent years. Despite persuasive calls for a multi-disciplinary approach to the study of rural change (Newby, 1982; Cloke, 1985), they have developed as separate fields of enquiry, with distinctive origins, paradigms and methodologies. As a result, the connections between new and emerging rural businesses and the main indigenous rural industry remain unknown. The aim of this thesis is to link these two research fields which, although disparate, are both fundamentally concerned with understanding the development of rural enterprise.

1.2. The emergence of new businesses in rural areas

In recent years the rural enterprise has become a key theme in the small firms research literature. Various analyses of spatial variations in rates of new firm formation have demonstrated that, since the 1970s, rural areas have experienced higher rates of new firm formation than urban areas (Fothergill and Gudgin, 1982; Gould and Keeble, 1984). Research has also revealed that rural firms are outperforming those in urban areas in a number of ways, including profitability and

growth, employment generation and levels of innovation (Keeble, Tyler, Broom and Lewis, 1992; Keeble, 1993; Smallbone, North and Leigh, 1993; Keeble, 1996).

Early explanations for the growth of rural firms concentrated upon urban decline. These explanations emphasised the physical, production cost and labour constraints present in urban areas (Gould and Keeble, 1984; Gudgin and Fothergill, 1984; Keeble, 1993). More recently, there has been a growing consensus that environmentally influenced population migration is a key factor in the resurgence of rural areas (Williams and Jobes, 1990; Keeble, Tyler, Broom and Lewis, 1992). Keeble and Tyler (1995) expanded on their earlier work by advancing a theory of enterprising behaviour based on two factors. Firstly, rural settlements have attracted a relatively high proportion of entrepreneurs because of their desirable residential characteristics. Secondly, rural areas have economic, physical and institutional characteristics that enable enterprising behaviour to occur there more readily than elsewhere.

Implicit in this theory is an acknowledgement of the indirect contribution of agriculture in creating the physically attractive environment increasingly sought by in-migrants. Nevertheless, farm businesses have rarely been included in surveys of rural small firms. The justification for their exclusion has been based largely on sectoral decline (Keeble and Gould, 1985; Keeble et al, 1992, Blackburn and Curran, 1993; Curran and Storey, 1993; Townroe and Mallelieu, 1993). However, a more plausible explanation lies in the historical separation of agriculture from other other forms of production. This separation persists and is manifested not only in political, economic and institutional factors, but also in scholarly specialization. As a result, small business scholars know little about, and appear to have little interest in, the farm sector.

1.3 Agricultural restructuring

Despite this apparent disinterest, the farm sector may be of crucial importance to small business scholars. Agricultural restructuring has been accompanied by increases in efficiency, a growth in large scale agri-business, vertical integration within the food chain and the adoption of industrial style management practices in agriculture (Bouquet, 1985; Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988). The vast majority of farm holdings, however, remain small, family owned and operated businesses. The sector has a higher proportion of owner-operators than any other, and accounts for approximately ten per cent of the total small business stock (MAFF, 1994a; Storey, 1994). Despite a history of economic support, recent policy reforms and demand side changes have imposed new pressures on farm incomes, the result of which has been an increase in the strategic complexity and competitiveness of individual farms (OECD, 1994).

This thesis postulates that farms and their owners make a more direct contribution to the creation and development of rural businesses than has been hitherto recognised. Their contribution may be seen a number of ways. Firstly, despite the emphasis on sectoral decline within the small business literature, farms remain important rural businesses and continue to be major providers of jobs in rural England (Errington, 1990a, 1990b). Secondly, as an entrepreneurial group, farmers have often combined farming with the ownership of additional businesses (Hill, 1982). These additional businesses constitute an important source of indigenous economic activity in rural areas. Thirdly, as the major owners of rural land, farmers are an important source of premises and, to a lesser extent, business advice for non-farm businesses locating in rural areas.

1.4 The research project

The aim of this thesis was to examine the farm sector in the context of the rural small business research effort. The three main research objectives were:

1. To examine the norms established by previous rural small business research by investigating the characteristics of the farm sector.
2. To investigate the contribution of farms and farm owners to rural small business development concentrating, in particular, on additional business activities, employment generation and wealth creation.
3. To identify the differences between farm businesses which engage in additional business ownership activities and traditional, monoactive farm businesses.

Following a round of exploratory interviews, the main data collection stage used a quantitative methodology based on a single study area of Cambridgeshire. The advantage of using a single study area for farm based analysis is that it allows farm change to be examined in the context of the area in which the farms are located. The choice of study area was influenced by three factors. Firstly, some of the most influential small business research has been based on non-farm samples derived from the East Anglia region (cf. Keeble and Gould, 1985). Secondly, the region is characterised by markedly different socio-economic and demographic conditions than many other areas of the United Kingdom (CSO, 1993; OPCS, 1993). Indeed it is partly these conditions which have attracted previous small business researchers. Finally, East Anglia has the highest proportion of agricultural employment than any other region in Great Britain. Cambridgeshire was selected as a discrete county within the region, where farming patterns are more similar to the national norm

than are those of other parts of East Anglia. One thousand of the County's 3,500 farms (OPCS, 1993) were randomly selected for a postal survey administered in January 1996. A total of 296 usable responses were received, providing a survey response of 29.6 per cent which equated to 8.4 per cent of the total farm population in the County.

1.5 Structure of the thesis

Following this introduction, the thesis starts by reviewing recent small business research studies which have investigated the emergence of new firms in rural areas (Chapter Two). While this topic has attracted recent research attention, the farm sector has been largely omitted from this investigation. The separation of agriculture and industry is not, however, confined to scholarly specialization, but is manifested in the political, economic and social institutions which surround the sector. The origins of this separation are pursued in Chapter Three. Chapter Four presents an overview of the British farm sector, highlighting the continued importance of family ownership and the tradition of pluriactivity. This chapter also reviews some of the recent changes in the policy environment and the demand side factors which have brought about an increase in the strategic complexity of farm enterprises.

The philosophical foundations of the research, the research objectives and the methodological approach are described in Chapter Five. The results of each of the research objectives are presented in Chapters Six, Seven and Eight. The purpose of Chapter Six is to analyse and compare the sample of farm businesses with those of previous rural small business studies. Chapter Seven enumerates the proportion of farms with diversified interests and the consequent contribution in employment and wealth creation. While Chapters Six and Seven present results of the exploratory analysis, Chapter Eight uses a multivariate approach to analyse the distinctions

between farms with different degrees of diversification. The final chapter concludes the study and presents recommendations concerning future research

Three technical appendices are included. The first provides a brief description of the ten farms interviewed prior to the quantitative research. The second presents a description of the agricultural and business structures of the Cambridgeshire study area. The final appendix presents a copy of the questionnaire used in the study.

CHAPTER TWO

SMALL FIRMS IN RURAL LOCATIONS

2.1 Introduction

In recent years the rural firm has become a key theme in the small business research literature. The origins of this research effort lie in the spatial variations apparent in rates of new firm formation. Since the early 1980s it has been demonstrated that rural areas have outperformed urban areas both in rates of new firm formation and in the subsequent performance of firms (Gould and Keeble, 1984; Keeble, Tyler, Broom and Lewis, 1992, Smallbone, North and Leigh, 1993; Keeble and Tyler, 1995). Despite the volume and sophistication of research into the rural small business, the research effort has excluded the indigenous rural small firm sector. agriculture. The exclusion of agriculture in the rural small firms literature has been justified mainly on the basis of long term sectoral decline (Keeble and Gould, 1985, Keeble, Tyler, Broom and Lewis, 1992; Blackburn and Curran, 1993)

The farm sector has, however, been studied extensively by agricultural economists and rural sociologists. For these scholars, agriculture forms the central focus of research into rural areas. The decline of agriculture has not so much switched their focus to other industries, but ensured that more recent attention has been given to the restructuring of the sector (Gasson, Crow, Errington, Hutson, Marsden and Winter,

1988, Fuller, 1990, Bryden, Bell, Gilliat, Hawkins and MacKinnon, 1992, Hill, 1993)¹

The result has been the development of two separate disciplinary approaches, both of which are concerned with analysing the role of small businesses in rural economic restructuring. The first, a small business based approach, examines the role of non-farm businesses and the second, an agricultural approach, examines the farm sector to the exclusion of almost all other forms of industry. Importantly, these two approaches have developed as largely separate fields of enquiry, with distinctive origins, paradigms and methodologies. Despite persuasive calls for a multi-disciplinary approach to the study of rurality (Newby, 1982, Cloke, 1985, OECD, 1994), the analysis of rural economic restructuring remains characterised by disciplinary polarity.

This chapter presents an overview of British research into the rural small business.²

The chapter starts by introducing some of the changes which have brought turbulence to rural economies in recent decades. The industrialization of the countryside, the ruralization of industry and the counterurbanisation of the population have brought irreversible change to all rural areas and social and economic problems to many rural communities (DofE/MAFF, 1995). A common response has been to search for new forms of enterprise to replace employment lost in agriculture. This chapter presents a

¹ As Urry (1984: 48) explains "British rural sociology has failed to examine the changing economic and spatial structuring of manufacturing and service industry"

² It should be noted that, unlike much of the small business research literature (for example, that which concentrates on managerial aspects of small firms), the issue of the rural small business is not internationally transferable. Differences in economic, sociological and demographic factors between countries, coupled with international definitional differences (for example, of rurality) ensure that the issue of rural small firms tends to be highly specific to an individual country. This is accepted in much of the British research literature which, with the notable exception of Mason and Harrison (1993), refers only to the British experience. Nevertheless, the problems facing rural communities as a result of agricultural restructuring have been noted throughout the developed world. For a discussion of the American case of the rural small firm, see Ellis (1988, 1990).

review of the rural small business research effort and examines some of the reasons which may account for the exclusion of agriculture. The chapter concludes that, despite the maturity and depth of the research, this exclusion has distorted our understanding of rural enterprise.

2.2 The changing nature of rurality

The profound changes which have occurred in rural areas in recent decades have been well documented (cf. Newby, 1979, Cloke, 1985, Day, Rees and Murdoch, 1989, Cloke and Thrift, 1990). The rural areas of popular imagining, rooted in ideas of superior virtue and unchanging tradition (Taylor, 1970) and typified by the elegiac works of Thomas Hardy and Flora Thompson, have been transformed in recent years to the point where some commentators have disputed the basis for rural 'specificity' and even the actual existence of rurality (Urry, 1984, Hoggart, 1990). A number of competing factors have contributed to this transformation. The decline of agriculture, not only as a major employer but also as a guardian protector of rural tradition, was the first factor to become apparent. The widespread industrialization of agriculture commenced, in its modern manifestation, during the inter-war period of the 1930s (Bouquet, 1985). Since then, the continuous modernisation and commodification of agriculture has been assisted by technological developments and accompanied by a rise in capital inputs at the expense of labour (Newby, 1978, Whatmore, Lowe and Marsden, 1991). But changes have also occurred in the non-farm sectors. Broad moves towards a 'ruralization of industry' through the relocation of industrial plants outside of urban and suburban areas (Keeble and Tyler, 1995), have changed the economic base of rural areas and have also altered their physical properties (Hodge and Whitby, 1981; Marsden, Lowe and Whatmore, 1992). Changes have not, however, been restricted to the productive sphere. Population migration away from

metropolitan districts and towards rural areas, highlighted by the counterurbanization debates of the 1970s and 1980s (Champion, 1994), brought about an increase in the absolute numbers of people living in rural areas and also introduced new patterns of out-commuting

While some of these factors have now been present for many decades, issues of rurality still attract research and policy interest. The Government White Paper, 'Rural England: A Nation Committed to a Living Countryside', drew attention to the continuing economic and social problems facing many rural areas and also demonstrated the importance of these issues in contemporary British life (DofE/MAFF, 1995). The popular debate essentially stems from the conflicting ownership and usage of land with few exceptions rural land is privately owned and used for productive purposes, but the countryside is widely perceived as being a public resource. For academics and policy makers, interest centres on the economic base of rural areas and the provision of adequate and diversified employment which will both compensate for losses arising from agricultural restructuring and provide sufficient employment for the increasing numbers of people living in rural areas

2.3 The definition and measurement of rurality

One of the key assumptions in the rural small business literature is that there may be quantitative distinctions between rural and urban areas, in addition to the more qualitative ideological and social constructs popularly attributed to each (Newby, Bell, Rose and Saunders, 1978, Newby, 1979, Anderson, 1995). In this, small business researchers share common ground with rural sociologists. The definition and measurement of rurality has pre-occupied much of the rural sociology literature, but with very little consensus (Cloke, 1985). The two issues of debate are whether rurality

should be defined as a uni-dimensional or a multi-dimensional construct and whether it is best regarded as a dichotomy or a continuum (Errington, 1990a, 1990b). Assistance from government sources has proved to be equivocal. The Office of Population, Census and Surveys (OPCS) developed a dichotomous definition derived from the 1981 census (OPCS, 1984). Having initially defined urban areas, the remaining areas were assessed as rural.³ Researchers have pointed out, however, that this definition masks many of the complexities inherent in concepts of rurality (Cloke and Edwards, 1986, Whatmore, Munton, Marsden and Little, 1987).

More sophisticated definitions, however, have proven difficult to implement. Cloke and Edward's (1986) multivariate approach was:

"prompted by a widely acknowledged frustration that no simple quantitative statement of rurality was available to researchers .. for use as a basis for comparative studies in rural areas"

(Cloke and Edwards, 1986: 289)

³ The OPCS describe the definition of urban and rural areas as follows: "The starting point in the definition of urban areas is the identification of areas with land use which is irreversibly urban in character. The definition used to identify urban land use is modelled on the developed areas classification produced by the Department of the Environment which, in turn, is based on the National Land Use Classification. Land included as urban land comprises

- i) permanent structures and the land on which they are situated,
- ii) transportation corridors (roads, railways and canals) which have built up sites on one or both sides or which link built up sites which are less than 50 metres apart,
- iii) transportation features such as railway yards, motorway service areas and car parks (operational airfields and airports are also included),
- iv) mineral workings and quarries,
- v) any area completely surrounded by built up sites

Areas such as playing fields and golf courses are excluded unless they are completely surrounded by built up sites as at v) above. The pre-requisite for the recognition of an 'urban area' is a continuous area of urban land extending for 20 hectares or more. Separate areas of urban land are linked if less than 50 metres apart. The critical factor in the recognition of an 'urban area' is a minimum population of approximately 1,000 persons" (OPCS, 1984)

Their aim was to create one "concise statement of rural-urban differentials" (Cloke and Edwards, 1986: 290). Their efforts are instructive. Seventeen variables based mainly on population, occupation and distance from major settlement were subjected to Principal Components Analysis. After re-selection, the resulting eight variables accounted for only 50.6% of total variance. Although the research literature warns that the 'rural' should not be reduced simply to the 'agricultural' (Whatmore, Munton and Marsden, 1990), it is notable that the variables with the strongest predictive values were occupational structure (presence of farmers) and population density (distance from nearest 50,000 urban node).

A more recent attempt to define rurality has used spatial definitions developed by the OPCS, but concentrating on the single dimension of (agricultural) land use (Craig, 1987). Craig's application of the OPCS definition at Local Authority ward level resulted in a six category classification from wholly urban to wholly rural. While flaws in this schema have been pointed out, Errington (1990a: 54) provides notable support

"the very simplicity of Craig's approach makes it so transparent that it probably forms a safer starting point for analysis than some more complex definitions - it is immediately apparent what is being measured"

Without exception, small business researchers have noted that definitions of rurality are problematic and most accept guidance from the Rural Development Commission (RDC) that rural areas contain a population of less than 10,000.⁴ A further measure, peripherality, was used by Keeble, Tyler, Lewis and Broom (1992) to distinguish between urban, accessible rural and remote rural environments. While the use of

⁴ See, for example, Blackburn and Curran, 1993, Mason and Harrison, 1993, Smallbone et al, 1993, Townroe and Mallelieu, 1993, and Westhead, 1994b

population density and peripherality are pragmatic responses to definitional difficulties, this relatively narrow definition, in particular the omission of agricultural land use, has influenced the choice of sectors included in small business research samples and consequently the research output

2.4 The analysis of rural economies

Despite popular interest in broad issues of rurality and governmental concern at international and state levels with agricultural restructuring, some commentators have noted that analysis of rural economies has been scarce (Cloke, 1985, Harrison, 1993). Of the work that has been undertaken, the focus has been based on input-output analyses which have taken "a broad regional rather than a rural approach" (Harrison, 1993:81) More recent interest in documenting the composition of rural economies has been fuelled by a newer trend increasingly apparent in rural areas the disproportionately high growth of non-farm self-employment and small business ownership (Keeble, Tyler, Broom and Lewis, 1992, Keeble and Tyler, 1995) While this trend has provoked an upsurge in interest from small business researchers, the subsequent research effort has been subject to similar criticisms of methodology and approach:

"The analysis of regional variations in small enterprise start-ups and importance for local economies derived from these kinds of data sets are almost invariably top down"

(Blackburn and Curran, 1994:192)

In an effort to document the economic composition of rural areas, Errington (1990a, 1990b) analysed five English counties He argued that three factors should be considered in the definition and analysis of rural economies industry sector, spatial

aspects and occupational structure. Although there are few industries which are now perceived as being specifically rural, certain industries are more apparent in rural areas. Despite sectoral decline, agriculture and forestry remain significant employers in many rural areas, as does the service sector.

"The service sector as a whole, and particularly 'distribution and catering' and 'other services', accounts for a substantial proportion of rural employment, a proportion much greater than that of agriculture"

(Errington, 1990a:56).⁵

Within manufacturing, differences were found between rural and urban districts for individual counties, but there was no consistent pattern across all five counties (Errington, 1990b). The consideration of spatial characteristics of rural employment proved more elusive. Although sophisticated, quantitative measures of rurality have been developed (Cloke and Edwards, 1986, Craig, 1987), Errington found that rurality was

"not a good predictor of industrial structure. Indeed, it may be that the rural areas of these counties have more in common with their neighbouring towns than they do with rural areas in another part of the country"

(Errington, 1990a:58)

A more revealing factor in the analysis was occupational structure. Broad contrasts which demonstrated the continuing importance of agricultural employment and the

⁵ A sub-analysis of the service sector, however, also showed marked rural-urban differences

"Industries which tended to account for a higher proportion of the workforce in rural areas were 'hotels and catering', 'road transport', 'repair of consumer goods and vehicles' and 'domestic services'. Industries which tended to account for a lower proportion of the workforce in rural areas were 'wholesale distribution', 'retail distribution', 'banking and finance', 'business services', 'medical, health and veterinary services' and 'personal services'" (Errington, 1990a:59)

relative absence of manufacturing employment in rural areas remained, but were supplemented by additional occupational differences. The rural workforce was characterised by high levels of managerial occupations and the prevalence of self-employment (see Table 2.1). These two factors had a considerable effect on the rural-urban analysis.

"Taking into account the fact that many (perhaps one third) of those included in the 'farming' category will be self-employed farmers managing their own farm businesses (Errington, 1988), as much as a third of the entire rural workforce were involved in management"

(Errington, 1990a: 59)

The higher proportion of rural self-employment was seen by comparing the same industrial sectors in rural and urban areas. Although high levels of rural self-employment are traditionally accounted for by farm businesses, new rurally based industries also demonstrate high levels of self-employment. Errington (1990b: 81) attributed the high levels of management occupations to the smaller average size of rural firms, although lacked the data to test this hypothesis.

"By definition, all independent businesses have at least one manager and as average business size shrinks, so the ratio of managers to other workers will grow"

Table 2.1 Proportion of the urban and rural workforce in self-employment

Counties	All industries		Excluding Agriculture	
	Wholly or predominantly Urban	Rural	Wholly or predominantly Urban	Rural
Berkshire	4.3%	11.0%	4.2%	9.1%
Dorset	8.4%	21.7%	8.1%	10.5%
Northamptonshire	4.5%	21.5%	4.2%	10.7%
Northumberland	5.6%	16.9%	5.1%	6.1%
Shropshire	6.7%	24.7%	6.3%	8.3%

Source: Errington (1990a: 59)

Small business researchers will find sympathy with Errington's approach. Although the emphasis on levels of management rather than self-employment is a key difference, small business researchers have also found higher levels of self-employment within rural areas (Keeble, Tyler, Broom and Lewis, 1992) and some have also commented on the smaller average size of rural firms (Blackburn and Curran, 1993, Smallbone, North and Leigh, 1993, Westhead, 1995). The relationship between the two, however, has not been emphasized within the small business literature. There are, however, more fundamental differences between the research effort conducted by agricultural scholars and that by small business researchers. The research approach taken by agricultural economists and rural sociologists has its origins in the restructuring and industrialization of agriculture. By contrast, the origins of the small business approach to rural research lie in the spatial variations apparent in rates of new firm formation - a process which could be described as the 'ruralization of industry'.

2.5 Spatial variations in rates of new firm formation

In one of the earliest studies on this subject, Fothergill and Gudgin (1982) found a relationship between settlement size and patterns of growth and decline in manufacturing employment. This study found that all the areas which experienced major employment losses between 1959 and 1975 contained a major conurbation, while many of the areas that gained employment were rural. Decline was particularly marked in large settlements: the larger the settlement, the faster the decline in employment. By contrast, small settlements generally experienced manufacturing growth: smaller cities grew faster than large cities, smaller towns grew faster than large towns. Fothergill and Gudgin (1982) concluded that this apparent shift from the urban to the rural could be partly attributed to the difficulties experienced by firms in larger urban areas in physically expanding their plant. Smaller settlements and rural areas offered relative freedom from such 'constrained location' and thus attracted enterprise and employment growth.

Despite criticism of Fothergill and Gudgin's approach,⁶ researchers continued to investigate the regional variations apparent in rates of new firm formation and a special edition of Regional Studies in 1984 carried six articles by groups of researchers concerned with analysing and explaining these variations.

⁶ Although this study had a seminal influence, it was subject to early criticism from a number of disciplines, including rural sociology. Urry (1984: 49), in particular, cited Fothergill and Gudgin's approach as an example of the "misapplication of conceptions of urban and rural space" and identified two fundamental problems with the research:

"First, identifying a locality in terms of its rural/urban characteristics is far too simplistic. Second, they presume that the way to analyse industrial change is through identifying certain general processes which are then, to varying degrees, developed within any particular local economy. Neither of these positions can be justified."

In a study of new manufacturing firms in East Anglia, Gould and Keeble (1984) found marked differences in urban and rural rates of new firm formation, with the formation rate in rural areas nearly three times that of large towns. They concluded that

" for whatever reasons, entrepreneurs in East Anglia are selecting locations in the small settlements and rural areas in preference to urban locations"

(Gould and Keeble, 1984 194-5).

Four factors were identified as responsible for the move to rural locations: industrial structure, small average plant size, in-migration by small and medium sized manufacturing firms and, in particular, a favourable occupational structure of the resident workforce. Although the emphasis on occupational structure as an explanatory factor was criticised (Gudgin and Fothergill, 1984), the broad finding that rural areas were outperforming urban areas was upheld by other researchers. In an analysis of new firm formation in the Republic of Ireland, O'Farrell and Crouchley (1984) also found the highest rates in the most rural and least industrialized regions. The exception to this was in regions neighbouring Dublin. This was explained in terms of out-migration as a result of the constrained location present in the capital. New firm founders started enterprises in these areas "to take advantage of less congestion and cheaper sites" (O'Farrell and Crouchley, 1984 225)

Other studies provided more detail of the kind of environments which stimulate high rates of new firm formation. Lloyd and Mason (1984) compared rates of formation in three areas: Merseyside, Greater Manchester and South Hampshire. Their study demonstrated the similarities between these areas, although qualitative analysis showed a gradation of favourability from Merseyside, through Manchester to South Hampshire which offered marginally the most favourable environment. This was attributed, at

least in part, to the munificence of the rural environment. The theme of environmental munificence was taken up by Whittington (1984) who used VAT registrations to determine conditions which brought about new firm formation ⁷ It is now accepted that different environments offer varying degrees of resource richness, in terms of market growth, levels of competition, provision of adequate premises and the strength of local labour markets etc. In munificent environments new and small firms are relatively uninhibited by local resource constraints. By comparison, hostile environments offer lower levels of munificence which may lead to lower levels of new firm formation and may also constitute an impediment to small firms growth (Cooper, 1993, Westhead, 1994a) What has not been demonstrated, however, is that environmental 'munificence' can be consistently and equally applied to all rural areas. Moreover, despite the volume of rural research, neither the agricultural nor the small business literature can yet provide a precise definition as to what actually constitutes a rural area

2.6 Small firms in rural locations

To date, the rural small business research literature has concentrated on three particular issues. Firstly, the distinctive motivations of rural entrepreneurs, secondly, the specific features of rural environments which stimulate or attract new firm formation and finally, the effect of rural locations on small business performance.

An early study based in East Anglia provided some insight into the motivations and characteristics of new firm founders (Keeble and Gould, 1985) This study

⁷ More recently, the theme of enabling environments has been explored by Moyes and Westhead (1990) and a more thorough analysis of environments for business deregistration by Westhead and Birley (1994)

differentiated between founders in large towns, small towns and in rural areas ⁸ Large town founders had a bi-modal educational profile, being less skilled but more likely to be college educated than founders in other areas Rural founders contained the largest proportion of founders motivated by "ambition and financial betterment" and the lowest incidence of redundancy as pre-cursor to business start up Large town founders were more likely to have migrated to East Anglia in order to start up businesses, while rural founders were more likely to be resident prior to start up. The attraction of rural environments was also explored Small town founders were the most likely to be immigrants to the area and also rated environmental attractiveness as important in the migration decision

By the early 1990s, the rural small business research effort had culminated in the publication of two benchmark volumes The first, 'Business Success in the Countryside', was commissioned by the Department of Environment to investigate the

"actual experience, characteristics, success factors and constraints reported by a very large sample of individual enterprises currently operating in the rural areas of England"

(Keeble, Tyler, Broom, and Lewis, 1992 1).

The second, 'Small firms in urban and rural locations', drew together the results of five separate projects in a single volume of edited papers in 1993 (Curran and Storey, 1993). These two publications demonstrated the variety and depth of contemporary

⁸ The urban-rural classification used by Keeble and Gould (1985) was based on the 1971 population census The large towns, defined as those with a population between 50,000 - 120, 000, were Cambridge, Peterborough, Norwich, Great Yarmouth Ipswich and Lowestoft Small towns, defined as having a population over 12,000 included Huntingdon, March, St Neots, Wisbech, and Newmarket. Rural areas were defined as having a population of less than 10,000 (Gould and Keeble, 1985)

research into the rural dimension of small business activity and showed the importance and heterogeneity of rural small firms and types of rural location (see Figure 2 1)

In the largest single study of non-agricultural businesses in the countryside, Keeble, Tyler, Broom and Lewis (1992) used matched pairs of firms in urban and rural areas and further differentiated on the basis of peripherality between remote and accessible rural locations. Importantly, the study showed that employment in remote rural firms grew faster than that in equivalent accessible rural firms, while employment in urban firms was declining. Management differences were also found between urban and rural firms. Rural firms placed most emphasis on product quality, personal service, speed of service, professional skills and established reputation, although firms in remote rural areas placed less emphasis on client responsiveness and management and marketing skills than urban firms. Firms in accessible rural locations were found to be more innovative, produced more technologically advanced products and made greater use of production technology than either urban or remote rural firms. However, rural firms were found to be more dependent on non-local customers and suppliers than their urban counterparts. Differences were also found in market niche specialization. Remote rural firms served markets more vulnerable to trends affecting personal incomes and consumer preferences. By contrast accessible rural firms tended to specialize in "market niches created by increasing business and technological complexity", while urban firms specialized in more traditional sub-contracting and manufacturing markets (Keeble et al, 1992 xii).

Townroe and Mallelieu's (1993) study of new rural firms used a rather different approach, but provided some support for the findings of Keeble et al (1992). Two separate postal surveys were undertaken involving 559 firms located in the "rural parts of four English counties: Derbyshire, Devon, Norfolk and Northumberland" (Townroe

and Malleliu, 1993 22) This study used a broader sectoral base, including agriculture, although the sample was transformed for analysis on the basis of founder motivations 'Off-farm diversifiers',⁹ 'arts and crafts' and 'early retirement' types were less inclined towards future business growth, while 'mid-life switchers', 'spin-outs' and 'rebuids' were predicted to have a greater "business success orientation" (p 28)

The performance of mature firms was investigated by Smallbone, North and Leigh (1993). Using a sample of manufacturing firms which had traded for at least ten years, this study was based on interviews with 126 London firms and eighty firms in rural locations in the north of England Rural firms were found to compare favourably on the basis of performance, although the small size of rural firms led to fewer being categorised as "high growth" (Smallbone et al, 1993 87) Using adjustment analysis, this study demonstrated the similarities between urban and rural firms, although some differences were found Controlling for size and manufacturing sector, rural firms were found to be more active adjusters than the London based sample Nevertheless, Smallbone et al (1992 128) concluded that

"while local environments can present particular opportunities and constraints for the development of small and medium sized companies, it is clear that the underlying principles influencing growth and survival are not locationally specific".

⁹ No definition of this term was given in the publication It is inferred from the text, however, that this term actually refers to secondary businesses started on the farm premises In this case, *on-farm* diversification might have been a more appropriate definition, although agricultural scholars generally use the term *pluriactivity* An additional problem with the interpretation of this article lies in its analytical reduction Although the 'agriculture and marine' industry accounted for 11 per cent and 13 per cent of the two samples respectively, after transformation 'off-farm diversifiers' accounted for only 6 per cent of both samples No further information was given about the remaining farm enterprises

A later analysis of this data presented a greater emphasis on the strategic differences between urban and rural firms (North and Smallbone, 1995) Firms located in inner London were found to be specifically concerned with maximising labour productivity By contrast, remote rural firms were less concerned with this issue North and Smallbone (1995) attributed this differences to the relative cheapness of rural labour coupled with ease of recruitment in these areas They concluded that.

"Policy-makers need to take account of the fact that the employment implications of growth vary between geographical environments as a result of the differences in the way growth is achieved and that this has implications for the role which SMEs play in the development of local economies "

(North and Smallbone, 1995 1535)

While rural small business research has predominantly focused on *manufacturing* industries (Keeble and Tyler, 1995), Blackburn and Curran's (1993) study investigated the differences between urban and rural service sector businesses Blackburn and Curran's description of the growing importance of the service sectors in rural areas provides some support for Errington's earlier analysis of rural employment (Errington, 1990a, 1990b) Supplementing 350 base interviews with three further rounds of investigation, this study also found great similarities between rural and urban firms, although - as Errington had earlier noted, but lacked supporting data - rurally based firms were found on average to be smaller

Mason and Harrison's (1993) study investigated a more specific issue: the spatial variations in the role of equity investment in the financing of SMEs Interestingly, no evidence was found to suggest rural disadvantage in raising equity capital and there was some support for the view that rural firms were less averse to external capital

investment than those in urban areas Overall, Mason and Harrison's findings confirmed Urry's (1984: 53) earlier view that

"International capital is now so constituted that it is both relatively spatially-indifferent as to location, and can distribute different parts of its global operations into different labour markets, so taking advantage of variations in price, availability, skills and organisation of the local labour force. There is no reason why it should be regionally distributed".

A subsequent study by Westhead (1995) compared ninety matched pairs of manufacturing, service and construction companies in urban and rural areas throughout Great Britain This study summated many of the rural small business research findings in its conclusion that

"there are many more similarities than differences between the two groups in terms of attributes and attitudes than there are differences"

(Westhead, 1995: 375)

A key difference did, however, emerge between Westhead's (1995: 375) study and previous analyses:

"... new businesses in urban areas were larger in employment size both at startup and at the time of survey Moreover, urban firms had recorded the largest absolute and standardized employment increase since business startup Interestingly the latter finding is contrary to that recorded in two recent studies Differences are in part explained by the fact that the Smallbone et al, 1993, study of mature independent manufacturing firms did not use a matched-pairs methodology whilst the Keeble et al, 1992, matched sample (by industrial sector, region and employment size) study of manufacturing and business services firms explored employment growth in independent as well as subsidiary organizations"

2.7 Explaining rural resurgence

In total, four theories have been proposed to explain the economic resurgence of rural areas: constrained location theory, which highlights the role of urban space shortages, production cost theory, which stresses operating cost differences in urban and rural locations, capital restructuring theory, which emphasises large firm restructuring in search of greater profits through new forms of labour exploitation; and environmentally influenced population migration, which highlights the role of the in-migrants in the process of new firm formation (Keeble, 1993).

Of these four approaches, researchers have increasingly favoured the view that it is environmentally influenced population migration which has had the greatest effect on rates of new firm formation. To a large extent the rise in the rate of new firm formation in rural areas has coincided with the well documented population migration to these same areas

"For perhaps two centuries or more until the 1960s the United Kingdom experienced continuous urbanisation. Towns and cities provided a home for an increasing proportion of the British population, and the countryside experienced net out-migration. . . David Keeble (1976) was one of the first to point to the remarkable reversal of this trend which began some time in the 1960s"

(Curran and Storey, 1993 1) ¹⁰

¹⁰ Interestingly, the broad popular trend favouring the rural life does not appear to be new. The historical literature provides an interesting example of the early popularity of rural living and suggests that the urban-rural drift is not simply a recent phenomenon

"Another clear division was between the England of industrial towns and the rural England of traditional imagining. Twenty per cent of the population took up 33 million acres. Eighty per cent had to make do on the remaining 5 million acres - 49 per cent in towns with more than 50,000 inhabitants. This division was becoming less sharp than it had been. Fewer families now lived in the centres of towns, and many were moving into the adjacent country. Between the census of 1911 and that of 1951, the County of London (i.e. the inner built up area) was the only county in the country

2.7.1 Counterurbanisation

As Champion (1994:1501) points out, however, more recent analyses demonstrate that this process of counterurbanisation has not been as unambiguous as once thought

"Early observers of counterurbanisation and metropolitan migration reversal .. believed that these developments constituted a major turning point in the organisation of settlement systems, and Fielding (1982) envisaged the 1980s as seeing the completion of the switch from urbanisation to counterurbanisation in Western Europe. Since then, however, evidence of a revival of metropolitan growth, most notably for the USA (Frey, 1993), raises many questions over whether this means a return to the processes of the 1960s or even 1950s, as well as prompting a re-examination of the migration patterns of the 1970s"

Although the counterurbanisation process was not as widespread as expected, there has, nevertheless, been a remarkable revitalisation of rural areas. Champion (1994) notes that by the 1970s both the metropolitan subdominants and the freestanding urban areas were outpaced by the freestanding rural areas. Between the 1950s and the period 1971-1981, the performance of rural areas changed from 5.5 per cent below the national rate to 8.8 per cent above it. This pattern continued throughout the 1980s, although the growth was less steep. Champion (1994) disputes the census-based calculations which suggest that rural in-migration was most apparent in the 1970s, pointing out that the acceleration of rural in-migration was most marked in the period up to 1971. Rural areas continued to gain population in the 1980s, albeit more slowly

which showed an actual decline in population. At the same time Middlesex doubled its population, Kent, Essex and Sussex almost did so. The towns which declined in numbers between 1911 and 1951 were Blackburn, Bolton, Gateshead, Halifax, Manchester, Oldham, Salford, South Shields and Wigan. The towns which doubled their population were Blackpool, Bournemouth, Cambridge, Coventry, Luton and Southend-on-Sea. Watering places flourished. Industrial towns decayed. All England became suburban except for the slums at one extreme and the Pennine moors at the other" (Taylor, 1970:221)

than in the 1970s, though a period of accelerating growth came to an "abrupt halt" as a result of the recession (Champion, 1994:1517).

Keeble and Tyler's (1995) analysis of unpublished census data suggested that rural areas had performed equally strongly in employment terms. Their analysis demonstrated that the period since 1981 has been characterised by a "continuing and major urban-rural shift of employment" (Keeble and Tyler, 1995:975). Importantly, this shift has not been restricted to manufacturing industries, but is evident for total employment including services (Table 2.2)

Table 2.2 The urban-rural shift of total and manufacturing employment in Great Britain 1981-1991

	Manufacturing			Total employment *		
	1981 000s	Change 000s	81-91 %	1981 000s	Change 000s	81-91 %
London & principal cities	2422	-858	-35.4	8707	-612	-7.0
Non-metropolitan cities	709	-198	-27.9	2817	+39	+1.4
Industrial areas	968	-159	-16.4	2598	+7	+0.3
Districts with new towns	396	-67	-16.8	1025	+118	+11.6
Resort, port and retirement areas	218	-40	-18.5	1037	+106	+10.2
Urban and mixed urban-rural	903	-149	-16.4	3126	+403	+12.9
Remoter, mainly rural	434	-12	-2.7	1645	+280	+17.0
Great Britain	6051	-1482	-24.5	20956	+341	+1.6

Source: Keeble and Tyler (1995:976) based on unpublished NOMIS Census of Employment Data. Notes: * excludes agriculture

While several commentators have noted that rural in-migration has been influenced by environmental attractiveness (Williams and Jobes, 1990; Cloke, 1993, Curran and Storey, 1993), the connection between in-migration and high rates of new firm formation in rural areas has been made most strongly by Keeble et al (1992.x1), who found that

"Most rural entrepreneurs are in-migrants, whereas most urban entrepreneurs are locally-born"

The process of migration is not, however, confined to individuals wishing to start businesses in rural areas. Company relocations from urban to rural areas were found to be an important "secondary" influence on the growth of rural businesses (Keeble et al, 1992.x1)

Keeble and Tyler (1995.980) attempted to explain this urban-rural shift in terms of a theory of enterprising behaviour. This theory depended on two elements

"First, the environment of rural areas attracts a higher proportion of decision-takers who are likely to be good at demonstrating enterprising behaviour wherever they locate. Secondly, rural areas, and especially accessible rural areas, have economic, physical and institutional characteristics that enable enterprising behaviour to occur more readily there than elsewhere. In this sense, one can predict the relative success of an area in terms of its ability both to attract those who are enterprising, and to enable enterprising behaviour to occur. The approach has the advantage that it permits recognition, in a spatial sense, of the strong interrelationship between the desirability of an area to individuals - and companies - who have characteristics associated with enterprising behaviour everywhere, and the inherent flexibility of the resource base of the area to allow enterprising behaviour to be predicted."

The greater amount of enterprising behaviour found in rural firms, particularly those in accessible rural locations, was most notable in the targeting of new and emerging markets, the more frequent development of products and services; and exploiting competitive advantage resulting from a high amenity living and working environment (Keeble and Tyler, 1995)

2.8 The exclusion of agriculture

As the previous sections have demonstrated, the rural firm has become a key theme in small business research. This research effort has, however, largely excluded the farm sector. Of the major British studies investigating rural small businesses in the past decade, three make no reference to agriculture (Mason and Harrison, 1993, Smallbone, North and Leigh, 1993, Westhead, 1995), and three make reference to the sector in statements where description of agricultural decline is given as an argument for sectoral exclusion (Keeble and Gould, 1985, Keeble, Tyler, Broom and Lewis, 1992; Blackburn and Curran, 1993). The sectoral focus of rural small business research has generally been manufacturing, high technology and more recently, service industries (Gould and Keeble, 1984, Keeble et al, 1992, Blackburn and Curran, 1993, Keeble and Tyler, 1995). This focus can be easily justified to varying degrees these sectors demonstrate high rates of new firm formation and employment growth potential. By contrast, agriculture is characterised by decline in employment and establishment numbers, high barriers to business start-up and complex market regulatory mechanisms. Nevertheless, the exclusion of agriculture in rural small business research studies constitutes a serious omission which has, arguably, distorted our understanding of both rural economies and the process of rural business development.

The exclusion of agriculture in the small business literature is not, however, a new phenomenon. At first sight, the exclusion of agriculture from mainstream small business studies can be attributed, at least in part, to the 1971 Committee of Inquiry on Small Firms. It has been argued elsewhere that the Bolton Report, often viewed as the climacteric of contemporary interest in small firms, has continued to exert an influence on the perceptions and approach of researchers in the field (Curran, 1986a, Curran and Stanworth, 1982; Stanworth and Gray, 1991). Of particular interest to this review is the Committee's exclusion of agriculture from their assessment of the small firms sector. This deliberate omission was rationalised both on the basis that the exclusion of agriculture "simplified" the task of the Committee and that the problems of the sector were already overseen by a dedicated Ministry better able to cope with their specialised interests. Despite the exclusion of agriculture in both their description and analysis of the small firms sector, the Committee stated that

"The majority of enterprises [in agriculture] are, however, small in the sense of our terms of reference and most of our conclusions will apply to them"
(Bolton, 1971: 4)

2.8.1 The decline of agriculture

More recently, small business researchers have used arguments of sectoral decline as the basis for exclusion. Blackburn and Curran (1993: 193), for example, state that:

"agriculture is not an important industry in the UK in terms of contributions to employment or number of enterprises",

while Townroe and Mallelieu (1993 20) use sectoral employment statistics to describe the

"relative unimportance of agriculture as a source of employment, even in the rural areas of Britain".

On closer examination, however, this view of the sector is less easily justified. Despite rapid structural adjustment and decline in both the absolute levels of farm employment and in the relative importance of farm employment, agriculture remains an important, if minor, element of the British economy, with 250,000 holdings ¹¹ and a total labour force of 621,800 (MAFF, 1992, OECD, 1994) Employment decline has been most apparent among hired workers, largely displaced by family members, who now account for 63 per cent (in full-time equivalents) of the labour force (Dawson, 1984, Hill, 1993). Although employment losses have been "well-documented and much-discussed", recent analysts have pointed out that the rate of employment decline has been slowing down since the 1970s, and has averaged only 1 per cent in recent years (Errington, 1988 1) Land area devoted to agriculture has declined - although there has been a reduction in the net rate of loss in recent years - but still accounts for 77 per cent of land use in the United Kingdom (CSO, 1994a) ¹² Although land use has decreased, gross output has grown consistently and reached £14,395 million in 1992 (CSO, 1994b) The total contribution of agriculture to GDP was £9,309 million, or 1.3 per cent of the total, in the same year (CSO, 1994a) Increases in efficiency have been

¹¹ MAFF differentiate between 'main' holdings and 'minor' holdings A holding is classified as minor if *all* the following criteria apply the total area is less than 6 hectares, there is no regular whole time farmer, the estimated annual labour requirement is less than 100 days, the glasshouse is less than 100 square metres, and the occupier does not farm another holding (MAFF, 1992) Of the total number of holdings, approximately 242,000 are classified as 'main' holdings

¹² The CSO (1994a) give the following estimates of land use in the UK 77 per cent agriculture, 10 per cent forestry, 10 per cent urban, 3 per cent mountains and other

accompanied by a growth in large scale agri-business, vertical integration within the food-chain and the adoption of industrial style management practices in agriculture (Bouquet, 1985, Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988, Evans and Ilbery, 1992). The majority of farm holdings, however, remain small family owned and operated businesses (Gasson et al, 1988) and the sector accounts for more than ten per cent of the total stock of small firms in the UK (MAFF, 1994, Storey, 1994)

Not only do farm businesses have numerical importance, their mainly rural location ensures that these small firms have a symbolic importance, particularly in studies of rural enterprise. Yet, the broad exclusion of agriculture from rural small business studies is defended by Curran and Storey (1993: 3)

"On conventional views of rurality this might appear slightly odd. However, rural economic activities - food production, processing and associated activities and forestry - are now very much minority sources of employment even in some of what are called 'remote rural areas'. These activities have been in strong decline at least since the 1950s. Alternative types of economic activities in manufacturing and services have been replacing traditional economic activities and these newer activities are becoming the real base of economic support in rural areas as well as their hope for the future .."

Rural sociologists do not dispute agricultural decline, but they do dispute the relative centrality of agriculture in rural economic restructuring. Whatmore, Munton and Marsden (1990: 235) reflect the debate

"We ... agree with those who argue that the 'rural' cannot be equated with, or reduced to, the 'agricultural'. Nonetheless, in their attempt to shift the focus of rural research away from agriculture, these authors have tended to dismiss too quickly the continuing significance of property rights. Conflict between agriculture and other land uses remains an important geographical and political

feature of rural areas. Furthermore, the legacy of previously dominant landed capital in rural areas continues to have greater local effects on social and economic change than their contemporary national significance might otherwise imply".

2.8.2 Concepts of business growth

The emphasis on agricultural decline within the rural small firms literature has, in part, been informed by the focus on high growth firms as a major research theme. As Rosa and Scott (1995:11) point out, however, this focus may be inappropriate to much small business activity.

"By focusing interest on high growth firms, there is an implication that other firms tend to underachieve in realising their full growth potential "

A recognition that theoretical views of business growth may not adequately reflect the activities of small firms has led to an increase of research interest into multiple business ownership (cf Storey, Keasey, Watson and Wynarczyk, 1987, Kolvereid and Bullvag, 1992, Birley and Westhead, 1993, Rosa and Scott, 1995) Few micro-enterprises progress through the growth continuum to become large, managerially decentralised concerns (Storey, 1994). The majority of small firms have no plans for growth (Curran, 1986c, Hakim, 1989, Storey, 1994), while others pursue lateral growth through strategies of multiple business ownership

Analysed according to patterns of business ownership, three different 'types' of owner have been identified. 'Novice' owners who only ever own one business, 'serial' or 'habitual' owners who are distinguished by their propensity to own a number of firms consecutively and 'portfolio' owners, who own a number of firms concurrently (Hall,

1995).¹³ The importance of portfolio owners was explained by Storey (1994 112-3), citing the research findings of Storey et al (1987)

".. it is recognised that many small business owners may be owners of more than a single business. Concentration upon the single business may therefore be an under-estimate of the contribution to the economy since . virtually 80 per cent of the directors of fast-growth firms owned other businesses, compared with a figure of only 30 per cent in the case of directors of other firms. 'Portfolio' owners are therefore of key importance."

Westhead (1996) appears to dispute the number of portfolio owners identified by Storey et al (1987) In a sample of 621 businesses, 75 or 12.1 per cent were found to be portfolio owners and 157 or 25.3 per cent were described as serial founders.¹⁴ A higher proportion of portfolio owners was suggested by a survey of 600 British firms,

¹³ Hall attributes the dearth of research on this issue to a research bias towards analysing new firms and the time period required to elapse before multiple business owning strategies come about. In fact, multiple business ownership has been a feature of the small firms research literature, albeit a minor concern, for several decades. However, while recent research interest into multiple business ownership has emphasised its role as an alternative business growth strategy and has begun to differentiate between types of multiple business founders, early research interest viewed it only from the perspective of the enhanced experience it gave the start-up, 'serial' entrepreneur. Cross (1981 219), for example, cites the work of Oxenfeldt (1943 89-101) who found " a large percentage of new businesses are established by people who close up an old enterprise to try a new one. The large proportion of proprietors who had been business owners previously and the large number who had owned more than one business indicate a constant change and turnover in business ownership"

Cross (1981 220), however, refuted Oxenfeldt's findings. "These observations and conclusions, ones that have become popular 'truths' are neither borne out by the finding of the present study, nor those of other studies. The majority of new firms are thus founded by groups of individuals who have rarely had any direct experience of founding a new company"

¹⁴ Westhead's (1996) sample - a new analysis of the SARIE dataset - included 18 firms in SIC 0 agriculture, forestry and fishing, SIC 1 mineral and ore extraction and SIC 2 manufacture of metals, mineral products and chemicals. Because of the large average industry size of SIC 1 and SIC 2, it is assumed that most, if not all, of these firms were farm businesses. Of these 18 firms, 10 were identified as novice founders, 3 as portfolio founders and 5 as serial founders. Although the numbers are too small to be statistically significant, it is interesting to note that these figures are slightly higher than for the total sample. Although Westhead does not use sector as a main element of his analysis, there may well be sectoral variations in the rates of both serial and portfolio business ownership. See Rosa and Hamilton (1994) for a fuller discussion of these issues.

which found that 19.6 per cent of male owners and 8.6 per cent of female owners owned another business, and that 47 per cent of these portfolio owners owned two or more additional businesses (Rosa, Hamilton, Carter and Burns, 1994)

Research has revealed that multiple business (or portfolio) ownership is a complex process, bounded by both the personal decision-making of the owner and the structure and strategies of industry sectors. As Rosa and Scott (1995: 11) explain

" the efficient optimal size [of a firm] can often be small as determined by the limitations of the market niche being exploited and the sector specific forces that act upon the firm. Where a firm is running efficiently at a relatively small size, there could be more incentive to pursue further growth through entrepreneurial expansion by introducing new products or processes, rather than by pursuing further increases in managerial efficiency"

Although no previous small business study has specifically examined the farm sector, it is evident from the agronomy literature, presented in Chapter Four, that portfolio ownership is of direct relevance to the farm sector. That agriculture has remained the province of family ownership can be explained largely by sectoral forces. Economies of scale can be achieved at a relatively low level and those not feasible at the level of the firm can often be achieved through farmer co-operatives. This, coupled with low rates of return in agriculture have forced many farm owners to consider alternative business activities. Although estimates vary, researchers have suggested that about 60 per cent of farmers combine farm ownership with additional income generating activities (Bryden et al, 1992), and that up to 75 per cent of pluriactive farmers are self-employed in another capacity (Gasson et al, 1988)

2.9 Conclusion

Although research into the rural small business has matured in recent years, the exclusion of the farm sector constitutes a serious omission. Rural small business researchers have justified this exclusion on the basis of sectoral decline. Yet it is clear that the exclusion of agriculture from rural small business studies, and the disciplinary polarity in the investigation of rural economic restructuring, is a reflection of a much wider separation of agriculture from other forms of industry.

Figure 2.1 The rural small business research literature: recent major studies

Author(s)	Sample and Sector	Method	Aim of research	Definition of Rurality	Mention of Agriculture
Keeble and Gould (1985)	120 new manufacturing firms in East Anglia	Personal interview	"To examine in detail the nature of East Anglia's surviving new firms, their characteristics, process of formation and growth" p 203	Population density	Decline p.197.
Townroe and Malleleu (1993)	329 and 230 firms in various sectors (incl agriculture)	Postal survey	"To reach a deeper understanding of entrepreneurial behaviour as exhibited in the establishment of a new small business and as experienced in a rural environment" p 23.	' the rural parts of four English counties' p 22	Decline p 20-21 Potential p 21
Smallbone, North and Leigh (1993)	126 London/80 rural firms in eight manufacturing sectors	Personal interview	"Whether mature SMEs in remote rural locations differed significantly in their development during the 1980s from the London firms" p 79	RDC definition	No
Mason and Harrison (1993)	149 firms in various sectors (excl. agriculture)	Postal survey	"To examine whether there are spatial variations in equity financing in SMEs" p 142.	RDC definition	No

Figure 2.1 Continued.

Author(s)	Sample and Sector	Method	Aim of research	Definition of Rurality	Mention of Agriculture
Blackburn and Curran (1993)	350 firms in seven service sectors	Personal/ telephone interview	"To investigate spatial differences at the level of the firm in the rural and urban areas studies, in terms of small service sector businesses" p 166-7	RDC definition RDAs	Continued importance in some areas p 165 Decline p 166
Keeble, Tyle, Broom and Lewis (1992)	1128 postal responses 300 matched questionnaires 133 matched interviews Manuf /service	Postal survey Personal interview	"To investigate in depth the actual experience, characteristics, success factors and constraints reported by a very large sample of individual enterprises currently operating in rural areas of England" p1.	Dept. of Land Economy RDC definition	Decline p 1
Westhead (1995)	90 matched pairs Manufacturing/ services/ construction	Postal survey	"To add to this debate by exploring the particular characteristics of the firms created in a rural environment - the new independent locally owned businesses which were established in rural areas in Britain during the late 1980s" p 2.	RDC definition	No

CHAPTER THREE

THE SEPARATION OF AGRICULTURE AND INDUSTRY

3.1 Introduction

In Chapter Two it was argued that the rural small business research effort had excluded agriculture. Although this exclusion appears anomalous, an examination of other academic disciplines reveals a similar separation of agriculture from other forms of production. While it is tempting to view this apparent schism as resulting from scholarly specialization, contemplation of the wider economic, social and political environment reveals a widespread and historically rooted division between agriculture and industry. Despite this separation, the relationship between agriculture and industry is highly complex. This chapter explores the separation of agriculture, reflecting on its origins and contemporary manifestation. The chapter then considers the historical relationship between agriculture and the development of industry, prior to exploring the more recent theoretical links between the two forms of production. It is argued that theoretical similarities are at their greatest in the analysis of two key themes of the small business literature: firstly, the class location of the petite bourgeoisie and secondly, the persistence of small scale capitalism. The chapter concludes that the distinctiveness or 'specificity' of agriculture has been over emphasised, to the detriment of both agricultural and small business scholarship.

3.2 The separation of agriculture and industry

Although small firms researchers have explained the exclusion of agriculture in terms of recent sectoral decline (Keeble, Tyler, Broom and Lewis, 1992, Curran

and Storey, 1993, Townroe and Mallelieu, 1993), the peripherality of agriculture within small firms research reflects a much broader academic division between agriculture and industry, which goes well beyond the field of small firms research. The academic separation of agriculture from other forms of production can be seen in the development of scholarly specialization. This is most apparent in the fields of sociology, economics, history and geography, where agricultural production and the rural environment in which it takes place are considered, largely, separate subjects for research and teaching. While the small firms literature has concentrated on the industrial enterprise to the exclusion of agriculture, other disciplines have considered the agricultural sector in great depth, but as a separate and distinct field of enquiry from industrial forms of production.¹

3.2.1 Economic separation

The separation of agriculture is not only manifested in scholarly specialization, however, it also exists within the economic, social and political institutions that surround the sector. The over-riding need for food security as an issue of national importance, coupled with the ability of powerful interest groups to mobilise political support, ensure that agriculture is often seen as a 'special case' (Newby, Bell, Rose and Saunders, 1978). One manifestation of this is the support given to the sector in the form of production and price support and other market regulatory mechanisms. State support for agriculture differs markedly in both scope and scale from that given to other forms of production. The private and fragmented

¹ Perhaps more importantly, some critics have pointed out that even where agriculture forms a common focus between different subject disciplines, there have been few attempts to integrate approaches to form an holistic view of the sector.

"There can be few better illustrations of the divisive and ultimately counter productive nature of disciplinary boundaries in the social sciences than that which exists between agricultural economics and rural sociology. The temptation to retreat into the disciplinary bunker has not been resisted as strongly as it might have been with the result that the absence of a serious and sustained dialogue between agricultural economists and rural sociologists has now reached the stage where it is detrimental to both disciplines" (Newby, 1982: 125)

ownership of agriculture and the lack of separation between ownership and control (Newby et al, 1978) have ensured that moves towards economic liberalisation have largely omitted the agricultural sector, and the concept of the 'family-owned farm' has remained a central tenet of the Common Agricultural Policy (CAP) since 1958 (Hill, 1993) The orientation towards agricultural production, originally introduced as a means of creating European self-sufficiency of food products after the war-time shortages, is now deeply entrenched. The support measures provided through the CAP easily represent the largest single element in total European Union (EU) expenditure (CEC, 1993). The concern surrounding the futility of agricultural surpluses, growing public and political unease about the expense of subsidised production and the 1993 agreement of the General Agreement on Tariffs and Trade (GATT) Uruguay Round, have not so much diminished production and price support measures as replaced them with different subsidies for set-aside, extensification and diversification (Potter and Gasson, 1988, Bowler, 1989, Bryden, Bell, Gilliatt, Hawkins and MacKinnon, 1992; CEC, 1994).

3.2.2 Land tenure

A second manifestation of the differences between agriculture and industry lies in the issue of land tenure As Newby (1979 31) explains

"Land is often insignificant as a factor of production in most urban manufacturing employment, but its importance in agriculture means that how land is owned and controlled is fundamental to our understanding of rural society".

It has long been recognised that, largely because of this, agriculture has a unique sociological significance (Pahl, 1965, 1966, Newby, Bell, Rose and Saunders, 1978; Newby, 1979) Land is distinguished from other types of capital in as much as it is in fixed supply, is subject to topographical and climatic constraints and,

most importantly, is intricately connected to a kinship structure of ownership symbolised by an ideological commitment to 'keep one's name on the land' (Arensberg and Kimball, 1968, Williams, 1963; Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988, Newby, 1979, 1982) This view of land ownership is not confined to a specifically British view of class and land ownership structure ² Research conducted by rural sociologists initially in North America and more recently in Europe, and a series of rural community studies drawn from various parts of the world have confirmed that this is a global phenomenon (Savoie, 1989; Keane, 1990, Marsden, Lowe and Whatmore, 1990, Haney and Miller, 1991; Kaur and Sharma, 1991, Rennie, 1991)

"For subsistence or near-subsistence economies access to and control over land is, almost by definition, a crucial resource .. in those societies which cannot be described as underdeveloped, the importance of land as a factor of production in agriculture and as a major concentration of wealth and capital ensures that the structure of land holding remains decisive in shaping both the economic and social structure of rural society"

(Newby, 1982 139)

3.2.3 Political separation

If agriculture is made distinct by economic and sociological criteria, it is also characterised by a separation of political institutions The UK is no different to many other countries in providing separate Ministerial responsibility for agriculture and other industries The Ministry of Agriculture, Fisheries and Food (MAFF) is responsible for administering aid to, and overseeing the efficient functioning of, all

² Undoubtedly, however, this does have a bearing on how land ownership is viewed in Britain Newby (1979) gives some insight into how contemporary views have been shaped by the history of land holding in the UK, in particular, the connections between land ownership, wealth and power structures

agricultural and agriculture-related enterprises³ As Day, Rees and Murdoch (1989: 235) explain

"The institutional separation of agriculture from other branches of economic activity has fostered the illusion that there was no linkage between the two."

Of particular interest to small business scholars, the remit of MAFF also includes the provision of business support, training and consultancy. In the past, this was achieved largely through the work of the Agricultural Development Advisory Service (ADAS). The recent privatisation of ADAS may have changed the ownership of this organisation, but it has not changed the fact that business support for agriculture is still separate from that provided for other industries⁴

3.3 The origins of separation

While it is clear that a broad division exists between agriculture and other forms of production, the question arises as to how and why that division came into being. Although there is some debate about the origins of the schism, there is no doubt

³ Given the declining importance of the sector, the continued provision of this level of representation can only be seen as anomalous. For some, the provision of a separate Ministry and senior Cabinet level representation is interpreted as the continuing hegemony of the landed interest. In fact, the continued existence of MAFF may well prove a disadvantage for British farmers. In recent years frequent complaints have been targeted at the zealotry of Ministry officials in upholding EU and British legislation to the detriment of farmers and fishermen. Such zealotry appears at odds with the more relaxed interpretation believed to be offered in other EU states. It is unlikely that such diligence would occur if agricultural interests were subsumed into a Ministry which represented a broader cross-section of industry or which specialised in the small firms (farm and non-farm) sector.

⁴ It should be noted that the separation of agriculture also poses practical difficulties for small business scholars. Largely as a result of this 'institutional' separation, many government data sources such as the Census of Production, specifically exclude agriculture, while others such as the Census of Employment, do not collect data from agricultural or horticultural businesses (Errington, 1990a, 1990b). Data on farm enterprises is available from the MAFF June census. Small business scholars have often noted the problems inherent in using government data sources, particularly for sectoral comparisons (see Storey 1994, for a recent summary of the issues involved). It appears that the singular form of data collection for agriculture makes comparisons between this and other sectors even more problematic.

that the separation of agriculture is not a recent phenomenon. The division of agriculture and industry is often traced back to Marx's views on the uneven development of capitalism (Goodman and Redclift, 1986). Marx's concern with agriculture was a reflection of its continuing importance, despite rapid industrialisation, in the economic structures of Western Europe in the mid-nineteenth century and also an acknowledgement of the important role of the peasantry in (often hindering) worker's revolutions.⁵ Marx's belief in the inevitable destruction of transitional non-capitalist forms of production as a result of the capitalist accumulation process, was as much targeted at the rural small-holding peasantry as it was the urban petite bourgeoisie (Rosenfeld, 1989). According to Marx, the tendency towards concentration and centralisation would be seen as much in agriculture as it would be in industry, albeit at different rates.

3.3.1 The agrarian question

Although neither Marx nor Engels wrote extensively about agriculture,⁶ Marx's views on the separation of agriculture and industry as a result of capitalist production have preoccupied a number of later revisionists and critics (Goodman and Redclift, 1986). Indeed, it was Kautsky, an early Marxist revisionist, who provided a much clearer synthesis of how the capitalist process served to differentiate the rural peasantry from their urbanised and industrial counterparts. In Kautsky's analysis of 'The Agrarian Question', the integration of agriculture and industry was last seen in peasant families in the early medieval period. These

⁵ See The Eighteenth Brumaire of Louis Napoleon (1852)

⁶ Goodman and Redclift (1986) identify only four sources: an extensive discussion of ground rent in Capital (Volume 3) and three essays concerning the peasantry: The Eighteenth Brumaire of Louis Napoleon, The Peasant Question in France and Germany and The Critique of Gotha Programme. Goodman and Redclift also point out that interest in the subject is probably a *result* of the fact that Marx wrote so little about agriculture.

societies were self-sufficient, stable and composed almost entirely of peasant-craftsmen.

"A society that produced not only its own food, but built its own home, furniture and utensils, forged its own implements of production etc. Naturally the peasant went to the market, but he sold only his surplus produce, and bought only trivialities, except for iron, which he used only sparsely"

(Banaji, 1980 40).

The process of separation started with the appearance of small industries in the Middle Ages, although the products of these new industries were slow to penetrate the countryside. The process was hastened by the appearance of capitalist industry.

"It required the action of capitalist industry to bring about a rapid destruction of the peasant's domestic industry, and it required the growth of a communications system peculiar to capitalism to break down the insularity of the countryside. In dissolving the peasant's small industry, capitalism increases his need for cash, the peasant requires cash, in these new conditions, to purchase not only his luxuries but even those goods which are essential to his consumption. Parallel to this, the cash requirements of the peasant's overlords also increased, and led to the substitution of payment in kind by payment in cash and to a general rise in the level of payments (thus increasing the peasant's own requirements of cash even further). The only means available to the peasant of earning this cash was the sale of his products, not, of course, those which he produced in his backward home-based industry, but those which the industry of the towns did not itself produce. In this way the peasant was finally forced to become what we today understand by 'peasant' - a pure agriculturist. The further he was forced into this specialization, the wider the gulf separating industry and agriculture"

(Banaji, 1980 41)

3.3.2 The proletarianisation of the peasantry

Kautsky developed his thesis by describing how the ensuing commoditisation of agricultural products, through a process of spiraling specialization, further reinforced the separation of agriculture from industry. At the same time, the shortage of land available to meet their own consumption needs, coupled with seasonal unemployment following the dissolution of their domestic industry, forced peasants into seasonal employment, thus starting the process of peasant proletarianisation (Banaji, 1980)

More recent writers have argued that although it is convenient to describe the process of separation as a result of capitalism, it is not entirely accurate

"Proto-industry, often combined with agriculture, was a widespread and long-lived aspect of the formative period of capitalism. The idea that capitalism separated industry from agriculture describes the eventual, but probably not ultimate, specialization of industrial and agricultural activities in town and country"

(Friedmann, 1986: 43)

Thus it is important that a distinction is maintained between 'industrialization' and the development of capitalism. Nevertheless, it is widely recognised that Kautsky's analysis of the peasant-craftsman is of particular interest to contemporary business and agricultural scholars (Newby and Buttel, 1980, Friedmann, 1986, Bryden, Bell, Gilliatt, Hawkins and MacKinnon, 1992). Not only does Kautsky describe the process of separation between agriculture and industry, his description of the range of activities carried out by medieval peasants presents us with an early example of what is now known as diversification and his description of the process of proletarianisation, the combination of small scale agricultural production with off-

farm employment, is also of contemporary relevance - this is now described as pluriactivity (Fuller, 1990)

Although the orthodox Marxian view is that the origins of separation between agriculture and industry resulted from capitalist production, Marx did not believe that the separation would be permanent

"Eventually industry and agriculture are recombined under capitalism, on the basis of the characteristics they acquired through separation"

(Goodman and Redclift, 1986 22)

Later revisionists might have provided a clearer synthesis of the separation but, despite a debate stimulated by the refutation of the 'lack of specificity' of agriculture (Friedmann, 1986, Bryden et al, 1992), little has been written on the eventual integration. In part this is a reflection of twentieth century academic specialization, but it is also true that while agricultural and industrial enterprises have a great deal in common, the separation persists

3.4 The role of agriculture in industrialization

Although it is tempting to view agriculture and industry only from the perspective of separation, the polarity of this approach belies both the complexity of the relationship between the two forms of production and the historical links between rural and urban societies. Although agriculture may be perceived by contemporary business analysts as having only a marginal status in relation to industry, historically, agriculture was seen as central, not only in terms of employment and productivity but also by its role in the development of industry and urbanization. As Wrigley (1991 114) states

"The assertion that the productivity of agriculture, both per worker and in a more general sense, was the fundamental regulator of growth in all pre-industrial economies is not a contentious statement"

The importance of historical analysis in understanding the pattern of inter-relationships between "changes in the organisation of production, the local class structure, local civil society and state intervention" (Day, Rees and Murdoch, 1989:230) is recognised by rural scholars and is a recurrent theme in the major texts analysing contemporary rural society (Newby, 1979) It has been argued that the changes currently occurring in rural communities can only be fully understood by a multi-disciplinary approach (Cloke, 1985, 1993, Gasson et al, 1988) Historical studies, most importantly those undertaken by Wrigley (1987, 1991) and Chartres (1985, 1991), have contributed greatly to our understanding of the interaction between both agricultural and industrial production since the seventeenth century The linkage between agricultural surplus above subsistence needs and the development of industrialization is a common theme among economic historians The process has been described as follows.

"Every time a man put his hand into his pocket, or a women her hand into her purse, he or she is helping to determine both how people make a living and where they live If the composition of aggregate demand is overwhelmingly for food, the great bulk of the labour force will be engaged in agriculture and will live in a rural setting Consumer preferences follow a strict heirarchy with food always accorded first priority over other claims, and the other necessities, shelter, clothing and fuel, having the next strongest claims If real incomes are low, most spending power will be directed to the purchase of food and this will ensure that most of the labour force will live on the land It is persuasive in this regard that in England, the one country in western Europe in which there is clear evidence of rising agricultural productivity per head in the early modern period, there was also a rapid increase in the urban percentage In 1600 England was less urbanized than the average for Europe as a whole In 1800 she was more urbanized than anywhere else In the second half of the eighteenth century,

indeed, seventy per cent of the total of urban growth in Europe was taking place in England alone"

(Wrigley, 1991 113)

Recent historical research into the central role of agriculture in the development of industry has been conducted mainly through analyses of growth in agricultural productivity and shifts in population distribution over the past three centuries (Chartres, 1991) However, the theoretical connections made by historians between agricultural surplus and the process of industrialization are not new To support his view of the intricate relationship between agriculture and industry, Wrigley (1991:115) quotes Adam Smith on the specific linkage between agricultural output and the development of manufacturing industries

"The great commerce of every civilised society, is that carried on between the inhabitants of the town and those of the country It consists in the exchange of rude for manufactured produce The country supplies the town with the means of subsistence, and the materials of manufacture The town repays this by sending back a part of the manufactured produce to the inhabitants of the country The town, in which there neither is nor can be any reproduction of substances, may very properly be said to gain its whole wealth and subsistence from the country".

If, as many economic historians contend, surplus agricultural productivity had brought about the industrialization of the eighteenth and nineteenth centuries, it was also responsible for bringing about the increase in urban residency The expansion of industry during this period brought new requirements for urban based workers

"Villages were losing their agriculturalists as well as their tradesmen, craftsmen and professional people who were flocking to the expanding towns and cities to seek new employment opportunities The typical Englishman had become a city dweller in the course of the [nineteenth] century "

(Shpayer-Makov, 1991 186)

Historians have also noted that increased urbanization also brought about changes in the way the population perceived the countryside. As urban residence became the norm for the majority, popular concepts of rural life became increasingly bucolic (Newby, 1979; Shpayer-Makov, 1991).

3.5 The contribution of rural studies

Two centuries of rural-urban population shift and the increasingly romanticized view of rural life by urban residents underpin the dichotomised approach which characterised much of the early rural sociology literature. Tonnies' (1955) use of the terms *gemeinschaft* and *gesellschaft* as descriptors for 'rural' and 'urban' led many subsequent writers to view these distinctions as polar opposites, not only in spatial terms but in the essential character of each (Harper, 1989). Despite the profound influence of Pahl's (1966) assertion that the rural-urban dichotomy was largely unfounded and the growing popularity of the concept of 'rural-urban continuum', there has been continued debate within the discipline (Harper, 1989, Hoggart, 1990, Murdoch and Pratt, 1993). While agriculture remains an important rural occupation and sociologists, most notably Newby (1979, 1982), have highlighted its continued effect on rural society, others have questioned the emphasis still placed on agriculture in analysing rural changes (Day, Rees and Murdoch, 1989). The debate, however, is much wider than that of changing occupational structure. Harper's (1989) analysis of the development of rural studies does much to expose its reflexivity. It is, apparently, a discipline still grappling with definitional concepts. One of the main issues for rural researchers is the increasingly complex definition and measurement of rurality (Errington, 1990). Despite some robust attempts at definition and increasingly sophisticated measures of rurality (Cloke and Edwards, 1986, Craig, 1987) - some of which have been

used by small business scholars - many believe that "the typical 'rural area' is a chimera" (Errington, 1990b 83)

Within the rural studies literature, two research areas are of particular relevance. The first concerns the effect of changes in agriculture. The rise of large scale agribusiness, vertical integration within the food chain and the adoption of industrial-style management in agriculture have not only modernised traditional practices, they have diffused class positions and changed rural communities (Newby, 1979; Cumbers, Smallbone, Syrett and Leigh, 1994) The effect of these changes has not, however, been evenly spread throughout the sector and modern agriculture is as much characterised by its diversity as it is its complexity (Newby, 1979) Some writers have responded to these changes by debating whether agriculture still has any grounds for 'specificity' Rather than agriculture being distinguished by, for example, ground rent, issues surrounding land tenure and the use of natural resources, some writers, notably Friedmann (1986 44), have argued that

"The answer to the question, what is specific to agriculture under capitalism, is nothing It is not that agriculture has developed parallel to industry, but that links in complex chains connect production of specific plants and animals to equally specific manufacturing processes".

A second relevant area of investigation lies in the variations which exist within the farming community Some researchers investigating the attitudes and values of farmers have concluded that farm and non-farm differences have eroded

"as changes in the agricultural sector have bifurcated values (and social positions) within farming, and as off-farm work has become an increasingly important component of farmers' income "

(Hoggart, 1990 252)

Much of the research in this area has been based on revising and updating Marxian concepts of class location and persistence. Interestingly, it is this approach which most clearly demonstrates the theoretical connections which can be drawn between farming and other, more industrial, forms of private enterprise.

3.6 Small firms and small farms: the same class?

Although Marx's writing concentrated on the industrial mode of production, special reference to the agricultural sector was made in Marx's analysis of the landlord class,⁷ his analysis of the small-holding peasantry,⁸ and in his views on the proletarian tendencies of farm-labourers.⁹ This tri-partite view of rural society, considered a 'mainstay' of Victorian rural England (Newby, Bell, Rose and Saunders, 1978: 32), disguises much of the ambiguity apparent in Marx's analyses of the class location of the peasantry. His ambiguity on this issue has given rise to an intense debate which still pre-occupies American and European agricultural sociology (Buttel and Newby, 1980, Mottura and Pugliese, 1980, Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988, Rosenfeld, 1989).

While in the industrial context, the stratification between social classes was more obviously delineated, the small-holding peasant was characterised by a lack of class identity.

"In so far as millions of families live under economic conditions of existence that separate their mode of life, their interests and their culture from those

⁷ "[one of] the three great classes of modern society resting upon the capitalist mode of production" (McLellan, 1980: 190)

⁸ "The small-holding peasants form a vast mass, the members of which live in similar conditions but without entering into manifold relations with one another" (McLellan, 1980: 189)

⁹ "the real tiller of the soil is just as much a proletarian as is the urban worker" (McLellan, 1980: 179)

of the other classes, and put them in hostile opposition to the latter, they form a class. In so far as there is merely a local interconnection among these small-holding peasants, and the identity of their interests begets no community, no national bond and no political organisation among them, they do not form a class"

(McLellan, 1977 317)

Elsewhere, however, Marx suggests that the landowning peasantry

"belongs to the proletariat, though he is not conscious of it. The burden of mortgage on his land means that he does not really own it and is, in effect, working for someone else"

(McLellan, 1980 180)

Nevertheless, Marx also stated that the peasantry and the petite bourgeoisie occupy the same class location and share a common fundamental interest

"The lower middle classes, the small manufacturers, the shopkeepers, the artisan, the peasant, all these fight against the bourgeoisie, to save from extinction their existence as fractions of the middle class"

(Rosenfeld, 1989 49)

Rosa Luxemburg, an early critic of Marx's ambiguity on this issue, roundly condemned his confusion, while highlighting a further cause of the separation of industry and agriculture: the "economic peculiarity" of the simple commodity producer

"It is an empty abstraction [she wrote] to apply simultaneously all the categories of capitalistic production to the peasantry, to conceive of the peasant as his own entrepreneur, wage labourer and landlord all in the same person. The economic peculiarity of the peasantry, if we want to put them ... into one undifferentiated category, lies in the very fact that they belong neither to the class of capitalist entrepreneurs nor to that of wage

proletariat, that they do not represent capitalistic production but simple commodity production"

(Thorner, 1966 xx).

The current debate concerning the class location of the farm household draws strongly on Wright's (1980) theory of contradictory class locations and fundamental interests. On these criteria, family farms have been fragmented on the basis of land ownership, off-farm work, employment of non-family labour and presence of debt, and found to occupy a number of different class locations, from the petite bourgeoisie to proletariat and a contradictory class location somewhere between the two (Mooney, 1986, Rosenfeld, 1989) The major British analysts of agriculture are more certain of the class location of modern farmers They argue that most farmers are "firmly located" within the "the entrepreneurial section of the middle class" (Newby, Bell, Rose and Saunders, 1978 19-20) and, moreover, that

"agricultural landowners seem to differ little from other owners of productive capital in the ways they choose to represent the character of their property to non-owning groups "

(Newby et al, 1978 326)

The view that farmers belong to the same class as other small business owners is not contested by small business scholars Despite variations in the proportionate use of capital and labour, the type of capital assets employed and the size of the business, the entrepreneurial middle class share one common feature the ownership of capital assets

"A small shopkeeper not employing labour, a farmer with a thousand acres and five or six employees, and a manufacturer with fifty workers, all actively use their own capital assets for the purposes of personal profit and are, therefore, all members of the entrepreneurial middle class "

(Scase and Goffee, 1986:139-40)

If, according to sociological analysis, farmers are part of the same class as other small business owners, questions must again be raised as to why agriculture has not been a more prominent element in the mainstream analysis of small firms. It is likely that the separation of agriculture and industry in scholarship and in the wider society has played an important role in this. There may, however, be a further reason concerning the allocation of scarce research resources. As small business sociologists have noted, the middle class as a whole has been largely ignored in mainstream analysis and, where it has been studied, interest has until recently focused on employees rather than the self-employed (Newby et al, 1978, Bechhofer and Elliott, 1986, Curran, 1986a). It is possible that as scholarship develops and as small business remains an important and topical element in the British economic agenda, further research will explore this stratum further and expose the connections between small firms and small farms.

3.7 The survival of small scale capitalism

The separation of agriculture and industry is once again seen in the simultaneous and parallel debates being conducted by agricultural and small business sociologists concerning, respectively, the persistence of the peasantry and the survival of the petite bourgeoisie. Although each discipline has developed the debate separately, both have their roots in Marx's belief in the inevitable "dissolution of the entrepreneurial middle class within the bourgeoisie and the proletariat" (Scase and Goffee, 1986: 142). Post-Marx, the emphasis within each discipline has been the various attempts to explain the persistence of small scale capitalism.

Among agricultural sociologists, the views of the early revisionists, Kautsky and Chayanov, have been almost as enduring as those of Marx (Thorner, Kerblay and Smith, 1966). Where Marx predicted the ultimate demise of the peasantry as a

result of capitalist accumulation, Kautsky argued that the process of proletarianisation in agriculture was rather different from that of industry,

"not so much the dispossession of producers from their means of production but the differentiation of the peasant household "

(Bryden, Bell, Giliatt, Hawkins and MacKinnon, 1992 39)

This process of differentiation was seen most clearly in times of strife. During the periods when a peasant family could no longer support itself in existing market conditions, the peasant sold his labour rather than, or as well as, agricultural commodities. By doing so, he maintained his land tenancy and primary occupation, but became proletarianised. Rather than leading to the demise of the small-scale producer predicted by both Marx and Lenin (Rosenfeld, 1989), Kautsky believed that peasant proletarianisation was not incompatible with small scale non-capitalist production. Importantly, this view has been upheld by recent research which has demonstrated that pluriactive (part-time) farming remains both a prevalent and highly stable form of production and, in the majority of cases, is not a pre-cursor of business exit. Moreover, as successive generations inherit the farm land and occupation, so they also inherit the tradition of alternative activities (Bryden et al, 1992).

Small business sociologists also emphasise the 'differentiation' of the petite bourgeoisie (Bechhofer and Elliott, 1986, Curran, 1986a, Scase, 1982)

"Study after study has shown that both historically and currently, the petite bourgeoisie possesses a well-developed class ideology. The latter refers to the possession of a shared set of values, ideals and opinions which, in combination, set the petite bourgeoisie apart from other social strata."

(Curran, 1986a 208)

In their efforts to provide empirical support for this view, small business scholars have emphasised that self-employment is an important individual and family ideology which can be passed through successive generations (Litvak and Maule, 1974, Mancuso, 1984). The inheritance of a tradition of self-employment can be seen both in the succession of a business by a family member and in the creation of new firms by the off-spring of self-employed parents. In the analysis of inheritance, agricultural sociologists have an advantage in as much as land constitutes an obvious physical as well as financial resource. As such, the inheritance of farmland - coupled with the well documented values associated with stewardship (looking after the land) and kinship structure (keeping the name on the land) - is automatically equated with the inheritance of an occupational tradition. In the absence of land as a physical resource to be passed on through successive generations, small business sociologists have relied on the analyses of succession in family firms (Payne, 1984) and the inter-generational transfer of values and ideology (Curran, 1986a, Watkins and Watkins, 1986).

The views of Chayanov are also of relevance to small business analysts, in particular the emphasis he placed on the important role of the farm household as a largely invisible and usually free provider of labour.

"In conditions where capitalist farms would go bankrupt, peasant families could work longer hours, sell at lower prices, obtain no net surplus, and yet manage to carry on with their farming, year after year. For these reasons, Chayanov concluded that the competitive power of peasant family farms versus large scale capitalist farms was much greater than had been foreseen in the writings of Marx, Kautsky, Lenin and their successors "

(Thorner, 1966 xviii)

Within the small firms literature, Chayanov's views are most reminiscent of those studies which have stressed the importance of the family labour resource, particularly in marginal (and ethnic) firms, while pointing to the "diseconomies and 'dysfunctions' of large-scale bureaucratic organisations" (Scase and Goffee, 1986:141) Within the agriculture literature, Chayanov's views have regained popularity as the unit of analysis has switched from the farm holding, most commonly used in studies up to the late 1970s, to the farm household The use of the farm household as the main unit of analysis in agricultural sociology is a reflection of the widespread recognition of the important role of the family in providing an often free, hitherto invisible, but vital labour and management resource (Friedmann, 1986, Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988) By contrast, although small firms researchers have long known the importance of the family (usually unpaid wives) in enabling business survival (Kirkham, 1987), few studies have attempted to unravel the relationship between the family and the enterprise, and the unit of analysis remains, steadfastly, the entrepreneur and the firm

Given that farmers and entrepreneurs are both elements of the petite bourgeoisie, it is not surprising that both agricultural and small business scholars have attempted to explain their persistence in the same fashion The survival of small scale capitalism is most often approached in three ways

"First, as 'separate' and 'removed' from the two major classes of capitalist society. Secondly, as part and parcel of an emerging 'post-industrial' or 'service' society Finally, as a legacy of an earlier or pre-capitalist stage of production"

(Scase and Goffee, 1986 140)

Though the widespread perception of the 'backwardness'¹⁰ of agriculture (Banaji, 1980) has ensured greater contemplation of the latter approach by agricultural sociologists, both disciplines stress that survival is best explained by the view that the stratum is both separate and highly distinctive

While the theoretical reasons for the survival of the industrial petite bourgeoisie may be subject to debate, their numerical survival is in no doubt. As Curran has stated more recently

"At the empirical level, statistic after statistic supports the various restructuring theses in their emphasis on the resurgence of small scale economic activities and an increasingly idiosyncratic consumer "

(Curran, 1991 xiv)

If the industrial petite bourgeoisie has survived, what of their agricultural counterparts, normally characterised within the mainstream small business literature only by decline?

3.8 Farms as family businesses

Although as a sector agriculture is highly heterogeneous, it appears that, as a result of structural adjustment, British farming is becoming more family dominated, at least in terms of labour input Gasson et al (1988) argue that the tri-partite structure of agricultural relations has been eradicated with the decline of both landlords and labourers, leaving a residual mass of farms, as much as 90 per cent of

¹⁰ The term 'backwardness' as a descriptor for agriculture has its roots in Marxist analysis. The concept of backwardness has persisted largely as a result of the view that economic development and diversification is dependent on progressing beyond a predominantly agrarian economy

which are family owned or tenanted, and worked, mostly, by family labour. The structure of the farming sector is now usually defined in terms of dualism, and there is evidence to suggest increasing differences between the large, capital intensive units which produce the most food and which benefit disproportionately from CAP support and those that contain the majority of farm households (Bryden et al, 1992, Hill, 1993) ¹¹ Although there are dangers in assuming that 'small' farms and 'family' farms are synonymous (Hill, 1993), it is apparent that the small, family farm enterprise has much in common with the non-farming enterprise.

Although agriculture has generally been omitted from the small business literature, there have been some attempts by agricultural scholars to cross the disciplinary boundaries and analyse small farms in terms of family enterprises (Errington, 1986; Friedmann, 1986, Gasson et al, 1988) In a clear progression of Chayanovian ideas, Friedmann (1986) defines family farming in terms of Simple Commodity Production, and argues that this is distinguished by the relations of production at the level of the individual enterprise. She concludes that, while nothing is specific to agriculture under capitalism,

"two things are specific to family enterprises in capitalist economies: the labour process and property relations "

(Friedmann, 1986 45)

Thus, in order to understand the family enterprise, we must look to the labour process, the organisation of labour through kinship; property rights and relations,

¹¹ The dualism seen in modern agriculture is a dominant theme both within the academic literature and, most importantly, within policy circles. Bryden et al (1992 199) refer to the large, food producing units - those over 12 ESUs - as 'MacSharry' farms, after the 1981 MacSharry proposals for CAP reform. In brief, MacSharry's proposals were based on the fact that the largest 20% of farms produced 80% of food. These farms were the least likely to suffer the kinds of problems which the CAP was designed to reduce (for example, the use of professional management, access to external capital, market inefficiencies etc), however, they received the most support largely because of their intensive production.

and the role of gender and age, particularly their effect on the creation of unequal relations within the farm family household

In a broader review of the literature, Gasson et al (1988) identify a number of features which distinguish family farms from larger scale 'capitalistic' enterprises. These include: the lack of separation between management and control, profit maximisation objectives tempered by the need for independence and succession; decision processes involving a number of family members, the use of family as a source of labour and informal risk capital, and the presence of a powerful ideology of independence, self-sufficiency and tradition. Almost inevitably they conclude that further research is required, particularly in the consideration of the family life-cycle and gender relations, the processes of inheritance and succession, and the relationship between traditional farming and the development of pluriactive and multiple job-holding farm families.

3.9 Conclusion

From this review it can be concluded that the separation of agriculture from other forms of small scale capitalist activity has probably resulted in the differences between the two being over emphasised. The history of agriculture, its unique role in the development of industrialization and rural societies, and its sustained importance in the production of food, has certainly endowed the sector with a number of distinguishing features. But as 'industrial' practices have increasingly been transferred into the agricultural sector, these features may be best viewed as mere sectoral variations.

While some attempts have been made by agricultural scholars to make connections between family farms and other types of small scale enterprises, small firms scholars have, so far, continued to exclude the small, family-owned farm. Within

the small business literature, little is known about the sector. That they have commanded so little attention from small business researchers has much to do with the broad environment within which farmers operate. Economic development has reduced the relative importance of the sector, while widespread protection differentiates farms from other small businesses and adds complexity to sectoral analysis. Explanations for the exclusion of agriculture from mainstream analysis are usually attributed to sectoral decline. This argument should be rejected, not only because recent agricultural decline has been over emphasised, but also because of the difficulties inherent in linking sectoral decline with academic indifference. The two main characteristics of agriculture are its complexity and its diversity (Newby, 1979). These, together with scholarly specialization, are the reasons why small firms researchers have, hitherto, omitted the sector from their analyses.

CHAPTER FOUR

THE BRITISH FARM SECTOR: CHARACTERISTICS AND CHANGE

4.1 Introduction

This chapter presents an analysis of the British farm sector and some of the recent issues which have affected the nature of farm based activities. The chapter starts by reviewing the main characteristics of employment, structures and ownership. Although aggregate figures are used, the sector is notable for its sub-sectoral diversity (Newby, 1979). The production and marketing of cereals, for example, differs substantially from the conditions under which livestock producers operate. Similarly, the horticultural sectors can be differentiated from agriculture, but diversity also exists within these sub-sectors. Most farmers, however, operate in a number of different product markets and the analysis of agriculture as a unitary sector is a conventional focus. At an aggregate level, there are a number of distinctive features of farming. Three, in particular are of special interest to small business researchers. Firstly, agriculture is, almost exclusively, a small business activity (CEC, 1993). More than half the workforce are owner-operators and only two per cent of all farms employ more than ten people. The commitment to small business ownership is reinforced by voluntary systems of co-operation. By organizing numerical strength, farmers benefit from scale economies while retaining their independence and the private ownership of farm resources. Finally, the prevalence of pluriactivity, the combination of farming with other income earning activities, has enabled small scale production to persist, contrary to the predictions of theorists such as Marx and Lenin (Rosenfeld, 1989).

Following this review of the farm sector, the chapter considers changes which have affected the agricultural environment. It is argued that reductions in the extent of agricultural support coupled with changes in the British food industry and in consumer demands have profoundly altered the environment in which farmers operate. Policy reform has pushed some farmers into seeking alternative sources of business income, while demand side changes have pulled others into more typically entrepreneurial behaviour. The chapter concludes by describing some emerging farm strategies, implemented in response to changing market conditions

4.2 The farm sector: employment, structures and ownership

4.2.1 Agricultural employment

Since 1970, UK employment in agriculture has declined from 3.2 per cent of the total civilian workforce to 2.2 per cent in 1991 (Table 4.1). During the same period, employment in industry has declined from 44.7 per cent to 27.9 per cent, while the service sectors have increased and are now responsible for more than two thirds of all civilian employment (CEC, 1993). Decline in agricultural employment, an inevitable part of economic development and diversification (Gasson, 1974, Hodge and Whitby, 1981), is not confined to the UK but is an almost global phenomenon (Bacha, 1984). Relative to other EU countries, UK employment in the sector has shown slower rates of decline in recent decades (Table 4.2) and may, indeed, have reached a plateau of stability in absolute numbers employed (Midmore, Hughes and Bateman, 1994).

Table 4.1 Employment in agriculture, industry and services: selected years (1970 - 1991)

		1970	1980	1989	1990	1991
Total civilian employment (1000 persons)	UK	24390	25013	26376	26619	25752
	EU12	120678	124513	129972	132310	132585
Agriculture % of total civilian employment	UK	3.2	2.6	2.1	2.1	2.2
	EU12	13.5	9.6	6.9	6.5	6.3
Industry % of total civilian employment	UK	44.7	37.7	29.4	28.8	27.9
	EU12	41.6	37.7	32.4	32.4	31.9
Services % of total civilian employment	UK	51.1	58.6	66.7	67.4	68.6
	EU12	44.7	52.5	60.3	60.8	61.5

Source: CEC (1993)

Table 4.2 Volume of agricultural work in annual work units (AWU): comparisons with other European countries

Country	1980/81 average	1986/87 average	1990/91 average	Change 86-7/ 80-1 (%)	Change 90-1/ 86-7 (%)
EU12	11270.7	9488.4	8202.8	-15.8	-13.5
Germany	980.5	863.0	735.2	-12.0	-14.8
Greece	945.5	873.5	786.5	-7.6	-10.0
Spain	2218.8	1659.3	1350.6	-25.2	-18.6
France	1792.5	1482.0	1276.3	-17.3	-13.9
Ireland	286.7	260.3	233.7	-9.2	-10.2
Italy	2845.2	2448.2	2117.8	-14.0	-13.5
Netherlands	251.8	241.6	234.8	-4.1	-2.8
Portugal	1169.0	962.6	835.0	-17.7	-13.3
UK	523.4	479.6	441.2	-8.4	-8.0

Source: Bryden et al (1992: 87)

Historically, farmers have always been distinguished from other occupational groups by their commitment to independence and entrepreneurial ideals (Newby, 1979) These features still characterise the sector More than 53 per cent of all workers in the sector are owner-operators, compared with 14 per cent and 12 per cent respectively in industry and services (Table 4.3) ¹ As Table 4 4 demonstrates, employment decline has been most apparent within the employed 'other workers' category and least apparent among the largely self-employed category of 'farmers, partners and directors'. Within the latter group, overall decline in whole-time employment has been largely off-set by substantial increases in 'part-time' (pluriactive) employment.

¹ Although these levels of self-employment are remarkably high, the incidence of owner-operatives in British agriculture is lower than the EU average of 72 per cent and much lower than many OECD countries (CEC, 1993, OECD, 1994) This reflects the earlier commercialization of agriculture in Britain, the larger farm sizes and the consequent requirement for additional on-farm employment (Newby, 1979, Friedmann, 1986)

Table 4.3 Employment in agriculture, industry and services: some structural indicators

Sector	1990	Unit	UK	EU12
Agriculture	Numbers	1000	577	8923
	men	%	77.3	64.7
	women	%	22.7	35.3
Industry	Numbers	1000	8589	44295
	men	%	76.8	76.4
	women	%	23.2	23.6
Services	Numbers	1000	17430	80025
	men	%	46.1	51.6
	women	%	53.9	48.4
Agriculture	paid workers	%	46.1	28.0
	self-employed	%	53.2	71.9
Industry	paid workers	%	85.6	88.7
	self-employed	%	13.9	11.2
Services	paid workers	%	87.8	83.4
	self-employed	%	11.8	16.5
Agriculture	full-time	%	82.8	87.2
	part-time	%	17.2	12.8
Industry	full-time	%	92.5	94.4
	part-time	%	7.5	5.6
Services	full-time	%	71.1	82.1
	part-time	%	28.9	17.9
Agriculture	average age of workforce *	Yrs	41	44
All sectors	average age of workforce *	Yrs	40	40

Source: CEC (1993), OECD (1994)

Table 4.4 UK labour force on agricultural holdings: selected years (1983-1992)

(thousands)

	1983	1987	1990	1991	1992	change 92/87 %
TOTAL LABOUR FORCE	699 3	665.1	642 0	627 9	621 8	-6.5
Total farmers, partners, directors doing farm work	289 6	284 5	281.6	278 6	280 5	-1 4
Whole-time - total	202 8	194 3	183 5	177 7	176 8	-9 0
principal farmers and partners	159 9	153 2	144 4	140 1	139 6	-8 9
other partners and directors	42 8	41 2	39 1	37 6	37 2	-9 6
Part-time - total	86 8	90 1	98 1	100 9	103 7	+15 1
principal farmers and partners	64 1	67.4	73.7	76 5	79 3	+17 6
other farmers and partners	22 7	22 7	24 4	24 4	24 4	+7 7
Spouses of farmers, partners directors	75 7	77 1	77 1	76 5	76 0	-1 3
Salaried managers	7 8	7 9	8 1	7.9	7 8	-1 2
Total other workers	326 2	295 7	275 3	264 9	257 5	-12 9
Male	240 3	214 7	196 7	189 6	184 6	-14 0
Female	85 9	81 0	78 6	75 3	72 8	-10 0
Regular family workers - total	54 3	54 0	48 6	47 9	46 4	-14 1
whole-time total	35 0	33 9	28 9	27 9	27 0	-20 5
male	30 0	29 6	25 0	24 2	23 4	-21 0
female	5 0	4 3	3 9	3 7	3 6	-17 1
part-time total	19 3	20 1	19 7	19 9	19 4	-3 2
male	12 5	13 1	12 7	12 9	12 5	-4 4
female	6 8	7 0	6 9	7 1	6 9	-1 0
Regular hired workers - total	174 0	148 2	136 2	130 4	124 9	-15 7
whole-time total	132 7	108 0	96 3	91 6	87 5	-19 0
male	122 2	97 8	84 7	80 4	76 4	-21 9
female	10 5	10 2	11 6	11 2	11 1	+9 4
part-time total	41 3	40 1	39 9	38 8	37 4	-6 9
male	18 8	18 3	18 7	18 3	18 0	-1 8
female	22 5	21 8	21 2	20 5	19 3	-11 3
Seasonal/casual workers total	97 9	93 5	90 5	86 6	86 2	-7 9
male	56 9	55 9	55 6	53 8	54 3	-2 7
female	41 0	37 7	34 9	32 8	31 9	-15 5

Source: MAFF (1992)

Employment decline has been associated with three factors in particular. Firstly, there has been a shift away from mixed farming and towards specialized production which has reduced the need for whole-time workers (Bacha, 1984). Secondly, a large proportion of agricultural production has been transformed into an industrial process (Bouquet, 1985). Finally, widespread mechanization coupled with scientific and technological developments have replaced labour with other inputs (Errington, 1988). This trend towards a "capital-labour substitution" (OECD, 1994:20) has been partly off-set by seasonal production peaks which tend to have high labour requirements. Farms have reduced whole-time employment and increasingly rely on part-time, seasonal and casual workers often drawn from a family pool (Errington, 1988, Hill, 1993). The majority of UK farms employ only one worker, usually the farm-owner (Table 4.5). Most employment is concentrated in farms employing between two and ten workers and only two per cent of all holdings employ in excess of ten workers (MAFF, 1992).

Table 4.5 UK holdings by number of full-time family and hired workers 1992

Workers	Number holdings	%	Number workers	%
One	29749	56.6	29749	24.7
Two	11751	22.3	23502	19.5
Three	4660	8.9	13980	11.6
Four	2219	4.2	8876	7.4
5 - <10	3058	5.8	18924	15.7
10 - <15	593	1.1	6821	5.7
15 and over	572	1.1	18648	15.5
Total	52602	100.0	120500	100.0

Source: MAFF (1992)

Farm employment is dominated by males (72 per cent), although increasing numbers of women work in the sector and their importance has been recognised in a number of studies (Gasson, 1980, 1984, Sachs, 1983, Bouquet, 1985, Blanc and MacKinnon, 1990). Female whole-time employment increased by nearly ten per cent between 1987 and 1992, although their total presence in the workforce remains low (MAFF, 1992) Three further features of agricultural employment are worthy of note In comparison with the non-agricultural workforce, the average age of agricultural workers is slightly older and the age gap increases if farm owners rather than workers are compared with the total working population (OECD, 1994) ² Secondly, the agricultural workforce is poorly educated ³ Partly as a result of this lack of education, agriculturalists are believed to be occupationally immobile (Newby, 1979, Gasson, 1988) ⁴ Retirement and natural attrition account for the vast majority of workforce exits (OECD, 1994)

4.2.2 Establishment size

While the majority (65.8 per cent) of UK farm holdings are less than 50 hectares, these farms only account for 16.5 per cent of the total land area under agricultural production (Table 4.6) (MAFF, 1992) The skew towards large sized farms within the UK is amply demonstrated by a comparison of holdings in EU states At 68.9 hectares, the average UK holding is more than four times larger than the average

² This is notable for two reasons Firstly, a smaller proportion of young people enter the industry each year and secondly, because of their self-employed status farm-owners have a high average retirement age with a tendency to work until they are no longer physically able, rather than retiring at a pre-determined age Both factors shift the age distribution upwards

³ In the UK, 75 per cent of agricultural workers have completed less than 'upper secondary education', compared with 54 per cent in industry and 57 per cent in services In addition, only five per cent have undertaken any degree level education, compared with 11 per cent in industry and 21 per cent in services (OECD, 1994: 35)

⁴ Newby (1979) and Gasson (1988) both explain that a number of reasons account for the apparent occupational immobility of farmers Lack of education is one reason, but the ideological commitment to farming is believed to be a stronger force in keeping farmers on the land

for other EU states and more than double the average size of holdings in Denmark, Luxembourg and France, the countries with the next largest farms (CEC, 1993). Although decline in establishment numbers has been most apparent among the smaller sized holdings, those under 50 hectares still account for 66 per cent of the total, compared with 69 per cent in 1980 (Table 4 7)

Table 4.6 UK Holdings by total area size groups 1992

Size of Holding	Number	% of total	Area (Ha)	% of total
Under 2 hectares	13486	5.6	14564	0.1
2 - <5 hectares	20445	8.4	67102	0.4
5 - <10 hectares	28917	11.9	214390	1.3
10 - <20 hectares	36753	15.2	531959	3.1
20 - <30 hectares	25106	10.4	621462	3.6
30 - <40 hectares	19194	7.9	668404	3.9
40 - <50 hectares	15560	6.4	695121	4.1
50 - <100 hectares	42498	17.5	3018202	17.6
100 - <200 hectares	25461	10.5	3514519	20.5
200 - <300 hectares	7150	3.0	1719915	10.0
300 - <500 hectares	4450	1.8	1679315	9.8
500 - <700 hectares	1356	0.6	790619	4.6
700 and over	1918	0.8	3608161	21.0
Total	242294	100.0	17143729	100.0

Source MAFF (1992)

Table 4.7 Number and percentage of UK farm holdings: selected years (1980 - 1994)

Year	> 10ha	10-<50ha	50-<100	100-<300	300+ ha	Total
1980	72012	114592	43227	31340	7589	268760
%	26.7	42.6	16.0	11.6	2.8	99.7
1984	65788	110532	42509	31657	7642	258128
%	25.4	42.8	16.4	12.2	2.9	99.7
1989	69875	105406	41607	32090	7673	256651
%	27.2	41.0	16.2	12.5	2.9	99.8
1993	64791	96601	42374	32615	7824	244205
%	26.5	39.5	17.3	13.3	3.2	99.8
1994	66076	95692	41880	32730	7875	244253
%	27.0	39.1	17.1	13.4	3.2	99.8
Change 94/80	-5936	-18900	-1347	+1390	+286	-24507
Change % 94/80	-8.2%	-16.4%	-3.1%	+4.4%	+3.7	-9.1%

Source: MAFF (1984, 1989, 1993, 1994a)

Although physical area is an important indicator of size and scale, the diversity of agricultural production makes it unreliable as the sole indicator. Economic indicators of farm sizes are more robust at showing intensity of production and scale of output. Increasingly, Standard Gross Margins,⁵ which compare gross margins at enterprise level to an index of value output, are used as more accurate indicators of farm size. On the basis of this data, researchers have pointed to a growing dualism within farming between the numerically dominant small-scale holdings and the large, capital-intensive production units (Bryden, Bell, Gilliatt, Hawkins and MacKinnon, 1992)

⁵ 1 European Size Unit (ESU) = 1200 European Currency Units (ECUs) of Standard Gross Margins (SGMs). Small farms are defined as those between 8 and 40 ESUs, medium sized farms are those between 40-100 ESUs and large farms are those over 100 ESUs (MAFF, 1994a)

Such structural polarity disguises much of the heterogeneity which exists in farming As Friedmann (1986 42) explains:

"Agriculture takes various forms. the marginal (to capital) production of plants and animals, at least partly for direct consumption or local markets (peasants'), part-time farming by people who are waged workers, capitalists, professionals, managers etc. in the larger economy, simple commodity production, which is fully integrated into specialized product markets (the 'family farm'), capitalist production employing temporary, marginal, or seasonal labour; and capitalist production undertaken by multinational capitals and employing stable, often unionised, labour forces ('industrial agriculture') "

This diversity in structures and production approach is often viewed as a continuum from small, peasant holdings to large, capitalist units and as a tendential chronology where growth of *agricultural* output is the main indicator of business success

In an effort to differentiate types of farm businesses and articulate the complexity of the sector, Whatmore, Munton, Marsden and Little (1987) developed a typology based on relations of production Key internal relations were identified as ownership of business capital, ownership of land use rights, business and operational management control, and labour relations External relations were identified as technological dependence (on manufactured inputs and specialist advice), credit relations (farm indebtedness and involvement of finance capital), and marketing dependence (links with monopoly produce purchasers such as retailers and processors) Applied to a sample of 265 farm businesses, this study identified four categories of business marginal closed units, transitional dependent units, integrated units, and subsumed units Importantly, the authors concluded that there was no homogeneity about the process of capital penetration or farm business responses either chronologically or spatially The influence of both the farm family

and particular features of the locality are factors which cause deviation around the ideal types. In short, farm businesses are highly diverse and the factors which need to be considered prior to typological classification are so complex that the sector resists analytical reduction.

4.2.3 Land tenure

Despite the heterogeneity of the sector, further evidence of structural duality can be seen by an examination of farm ownership patterns. The number of holdings owned or mainly owned has now reached nearly 75 per cent (Table 4.8), a substantial increase since the beginning of the century.⁶ The trend towards ownership has been seen mainly within smaller farms, where comparatively few remain rented (Hill, 1982). Ownership of farm land can be seen to parallel the growth in home ownership in the wider British society. Certainly, one reason for the growth in farm purchases is to ensure family ownership of the family home. However, the notion of land stewardship and the frequently noted commitment to maintaining farmland in a family's name provide further incentives to ownership (Arensberg and Kimball, 1968, Newby, 1979). Nevertheless, land rental remains a strong feature of agriculture, with 37 per cent of all cultivated land being rented for productive purposes (MAFF, 1992). The majority of land rental occurs on large, mixed tenure farms where some land is owned and some rented (Bryden et al, 1992). Farmers use land rental in order to increase their agricultural capacity. In this respect land rental appears to demonstrate a specific strategy of business growth through agricultural production.

⁶ In 1900, ten per cent of agricultural land in England and Wales was owner-occupied. Between 1914 and 1927, a quarter of agricultural land passed from rental to ownership, with purchases made possible partly through profits made throughout the years of the first world war, partly through gratuities paid to servicemen and partly by the increased availability of mortgages (Bouquet, 1985, Newby, 1979). From this point onwards, ownership has increased steadily (Newby, 1979).

Table 4.8 British farm holdings by type of tenure 1992

Type of tenure	<2 ha.	2 - <20 ha.	20 - <200 ha.	200 and over	Total Ha.
Holdings owned or mainly owned					
Number	10785	60451	78552	8570	158358
%	5.1	28.4	36.8	4.0	74.3
Holdings rented or mainly rented					
Number	1824	13732	33222	6062	54840
%	0.9	6.4	15.6	2.8	25.7
Area owner occupied					
Hectares	12266	541338	5232337	4432713	10218654
%	0.1	3.4	32.5	27.5	63.4
Area rented					
Hectares	2189	141680	2537618	3221731	5903216
%	0.0	0.9	15.7	20.0	36.6
Total holdings					
Numbers	12609	74183	111774	14632	213198
Hectares	14455	683018	7769955	7654444	16121870

Source. MAFF (1992)

The increase in ownership has partly determined the nature of farming activities ⁷ Farm capital tied up in purchase arrangements is unavailable for other, more productive purposes. Capital is, therefore, both illiquid and vulnerable to changes in land values. One response to capital illiquidity is to raise money through share capital. Few farmers have, however, sought to do this. As Gasson et al (1988: 4) explain

"Perhaps as a result of the more ready access to loan capital using land as collateral and the relatively small size at which major economies of scale occur, few farms have sought to raise money by share capital. Indeed, one

⁷ Of particular interest to policy makers, it is recognized that ownership tends to increase both the resistance to, and the cost of, leaving the sector. Farm families which own land are less likely to exit voluntarily than non-owning families (OECD, 1994)

of the defining characteristics of the farm family business is that there is no such separation of management from control. It might be assumed that profit maximisation, if not the only objective, would be the *primus inter pares* in the objective function of the family business. Yet Hay and Morris (1984) discovered from a study of a large number of unquoted companies that 'the desire to maintain control and to pass on a secure and sound business to the next generation [was] the inevitable outcome of the management/ownership nexus'. The firm's assets are also the owner's assets and since so large a proportion of his personal wealth is at stake he naturally seeks to retain control over its use."

Not only is the use of share capital unpopular with farmers, few agricultural sectors demonstrate the levels of return on investment required to attract external lenders (Marsden, Munton, Whatmore and Little, 1986, Whatmore, Munton, Marsden and Little, 1987, MAFF, 1994). For these reasons, British farming remains almost exclusively a small business activity where capital is used primarily to reinforce family ownership.

4.2.4 Farm incomes

Partly as a result of ownership of capital assets and partly as a result of low prices for agricultural commodities, a notable feature of the farm sector is the "frequently found combination of low current incomes and great wealth" (Hill, 1982: 311)⁸. At

⁸ Farm earnings and incomes have proven difficult to measure. E. P. Thompson (1972: 235) provides an historical example of the difficulties: "Agricultural earnings, through much of the nineteenth century, stubbornly refuse to be reduced to a statistical form."

Of more contemporary relevance, Hill (1982: 312) points out four reasons why income calculations are problematic. These are: annual measurements of the global income of the farming sector give no indication of the distribution of income between farmers or of annual changes in distribution; total income from a farm household differs widely from their income from farming alone, views differ as to the particular items which should be included when calculating the residual sum which forms a farmer's net income, in particular the treatment of capital gains, and any measurement of current income which ignores assets is inadequate in reflecting a farmer's overall economic well-being.

Because few small business researchers have attempted to analyse incomes derived from business ownership, these difficulties may appear unimportant. Nevertheless, the importance of measuring

an aggregate level, comparisons of farm incomes with other sectors appear to be favourable, although disaggregated data reveals a bimodal profile of farm earnings. A study by Hearn (1977) found larger farms (2-14 person) to be within the top fifteen per cent of professional earnings in the non-farm sector, but smaller farms (1-2 person) earned only the equivalent of two thirds of the average remuneration of manual labour in other industries. Recent evidence from the Farm Business Survey found that

"Between 37 per cent and 44 per cent of farms made less than £10,000 in net farm income in 1992/93. Net farm income was above £30,000 on about one in six farms in both Wales and Scotland compared with one in four in England. In Northern Ireland net farm income was lower, with over a half of farms making less than £10,000 and only 9 per cent over £30,000."

(MAFF, 1994b 10-11)

Many researchers have pointed out that the analysis of earnings from agricultural production alone is an unreliable indicator of total farm household income (Hill, 1982; Gasson, 1988, McInerney and Turner, 1991). The majority of farms derive income from a variety of sources, of which agricultural production is only one

4.3 Farmer co-operation

An unusual feature of agriculture is the apparent willingness of farmers to collaborate, historically through agricultural co-operatives and more recently through a diversity of farmer controlled businesses (Plunkett Foundation, 1992a, 1992b). The aim of such co-operation is to overcome the problems caused by fragmentation of production by gaining numerical strength, while retaining the

farm income lies in the fact that farm incomes policy is an important element of the CAP. Thus, agricultural economists and policy makers have attempted increasingly sophisticated measures

essential feature of producer independence. Farmer co-operation takes a number of different forms, from the more primitive machinery rings, the aim of which is to spread the cost of capital equipment among a number of farmers within a particular locality, to sophisticated organizations involved in joint purchasing of farm supplies and the collaborative marketing of commodities. It is estimated that there are currently 568 farmer controlled businesses in the UK, the vast majority (560) of which are registered as co-operatives under the Industrial and Provident Societies Act (Plunkett Foundation, 1992a). These enterprises are independent of, but have similar aims to, the statutory Marketing Boards⁹ and benefit from some legislative exemptions, in particular certain clauses of the Restrictive Trade Practices Act. The scale of these organizations should not be underestimated. In 1992, the hundred largest farmer controlled businesses collectively had a turnover of £2,464 million, total net assets valued at £232 million, marketed output to the value of £1,498 million, had 174,955 members¹⁰ and employed 10,175 people (Plunkett Foundation, 1992a).

Because independence is a key element in the ideology of farming (Newby, Bell, Rose and Saunders, 1978, Newby, 1979) and because many scale economies can be achieved at relatively small sizes (Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988), collaboration has not resulted in a move to large scale agricultural production through mergers and acquisitions. Co-operation is one route to gaining scale economies in certain capital intensive areas of farming which might not be achieved at enterprise level. As a result, many farmers have been able

⁹ It should be noted that the Marketing Boards which currently exist for potatoes, wool and, in Northern Ireland, pigs, have come under increasing pressure to cease trading. Pressure has come from a number of sources. The government and producers alike have often complained about the monopolistic advantages of these organizations. In addition, there has been pressure from the EU on the grounds that their existence contravenes the Treaty of Rome (Article 17). The Milk Marketing Boards were dissolved in 1994.

¹⁰ Farmers who join co-operatives usually join several, thus there is an unusually high number of memberships.

to retain their independence and the sector remains characterised by large numbers of small producers. Farmer co-operation is of particular importance to small business researchers in so far as it can be viewed as a mechanism which has removed an incentive for business growth and has therefore enabled the continuation of small scale production. Co-operation demonstrates the importance farmers attribute to retaining their independence often at the apparent expense of business growth.

In the small business sector as a whole, co-operation between competing producers is unusual but not unknown. The hotel sector provides an obvious example of an industry where independent operators, often competing in the same geographical markets, collaborate through bookings syndicates and marketing consortia. Similar approaches have been observed in other sectors where 'structured networking' has enabled apparently competing small firms to benefit from collaboration (Chaston, 1995). Small firms researchers have frequently considered the role of networks and value-added partnership arrangements in the development of small firms (Curran, Jarvis, Blackburn and Black, 1993, Deakins and Philpott, 1995, Johannisson, Alexanderson, Nowicki and Senneseth, 1994). Reference has often been made to international experience, in particular, that of Northern Italy (Bellandi, 1991, Williams, 1985). Few, however, have noted the long existence, maturity and scale of agricultural co-operation and, within the small firms literature, there is an overriding assumption that collaboration in the form of 'networks' is both a comparatively modern phenomenon and one which is usually restricted to specific (mainly manufacturing) sectors.

4.3.1 Rates of co-operation

Rates of co-operation vary between agricultural sectors and by region, but at most, it is estimated that about twenty per cent of farmers are co-operative members (Foxall, 1982). Interestingly, the focus of the research literature has not been to explain why co-operation is so important to the sector, but on proposing reasons why so few British farmers co-operate, in comparison with farmers in other countries.¹¹ Explanations for low rates of co-operation are popularly attributed to the fierce independence of British farmers (Food From Britain, 1992), but are more rationally explained by structural factors. Farm sizes in the UK are large in comparison with other EU states and the benefits of co-operation are not as obvious. Moreover, the establishment of the statutory Marketing Boards in the 1930s (Bouquet, 1985) removed the need for voluntary action in many of the main commodity industries. Rates of co-operation are, however, increasing despite a decline in the total workforce (Plunkett Foundation, 1992a). One explanation for this lies in the growing need for reduced input costs, professional marketing expertise and sales negotiation skills as a result of policy reform and market changes (Thirkell, 1992, Plunkett Foundation, 1992b).

¹¹ In the Netherlands, it is estimated that at least sixty per cent of farmers' income is achieved through co-operatives and that the market shares of co-operatives range from 54 per cent in the supply sector, to 100 per cent for potato-starch (NCR, 1991). In the Netherlands, France and Germany, early credit unions organised by farmers have evolved to become, in recent years, major international banks (Rabobank, Credit Agricole, Raiffeisen Bank). Loans to farmers provided through these and other banks are often given on the basis of co-operative membership (Plunkett Foundation, 1992b). In America, the earliest forms of co-operation were seen in the 1780s when farmers organised societies to import pure-bred cattle. There are now 7,500 farmers' marketing and purchasing co-operatives and an additional 3,000 service associations operating in America (Abrahamsen, 1980).

4.4 Farm household pluriactivity

Recent interest in pluriactivity - the combination of farming with other income earning activities - has been fuelled by the assumption that it offers farmers a mechanism for adjusting to reductions in support (Fuller, 1990; Ilbery, 1991; Jussila, Lotvonen and Tykkylainen, 1992). As Shucksmith and Winter (1990:431) explain:

"For farmers and their representatives, the current political and economic imperative is to search for alternative enterprises whose returns are less susceptible to the price cuts implied by CAP reform."

As a result, a number of schemes have been introduced throughout the EU encouraging the diversification of farm incomes and productivity (Shucksmith and Winter, 1990). In the UK the MAFF Farm Diversification Grant Scheme has proven particularly popular with approximately 1000 grants approved annually (Gasson, 1988). Although estimates vary, researchers have suggested that between thirty and seventy per cent of farmers are pluriactive and that there may be distinct regional variations in both the numbers of farms engaging in additional business activities and the types of activities chosen (Beck, 1988; McInerney, Turner and Hollingham 1989; McInerney and Turner, 1991).

For small business researchers the importance of pluriactivity lies in two main areas. Firstly, it helps to explain the persistence of small scale production. On a theoretical level, pluriactivity is normally viewed as a contemporary manifestation of Kautsky's view of peasant differentiation (Bryden, Bell, Gilliatt, Hawkins and MacKinnon, 1992). Where Marx predicted the eventual demise of peasant production as part of the inexorable process of capitalism, Kautsky believed that peasant households were differentiated by their ability to retain their primary occupation by seeking additional income off-farm in times of need (Banaji, 1980). Kautsky identified this as proletarianisation, but recent research has demonstrated

that the process is more complex. While some farmers seek wage labour, others have reinforced their petit bourgeois position by starting other non-farm businesses or seeking alternative forms of self-employment. It has been estimated that seventy five per cent of pluriactive farmers derive income from self-employment in addition to ownership of the family farm (Gasson, Crow, Errington, Hutson, Marsden and Winter, 1988). Secondly, as pointed out in Chapter Two, pluriactive farmers can be equated to the 'portfolio' business owners identified in other sectors. In this respect, pluriactivity is less a process of proletarianisation and more a pursuit of strategic business growth through diversified business interests.

4.4.1 Defining pluriactivity

The relative immaturity of research into pluriactivity is reflected in the terms used to describe the phenomenon. Initially, pluriactive farms were conceptualised as 'part-time', although this term has been subject to great criticism (Fuller, 1983; Gasson, 1991; Lund, 1991). In contrast to common usage, part-time farming is not measured in hours spent on the activity, neither does the term necessarily imply that farming is subsidiary to another occupation or activity (Lund, 1991). These difficulties have resulted in debate, with some analysts calling for restricted use of the term and greater precision in definitions (Lund, 1991; Gasson, 1991). This debate is noteworthy for two reasons. Firstly, the term 'part-time' has influenced perceptions of the activity itself. Until recently, part-time farmers have been assumed, largely incorrectly, to be either transitional exits or 'hobby' farmers less committed to profitable and commercial agriculture (Fuller, 1983). Secondly, part-time farmers are often excluded from support (Shucksmith and Winter, 1990; Gasson, 1991; Bryden et al, 1992). As research has developed the process has been reconceptualized. 'Part-time farming' has been replaced by terms such as Multiple-Job-Holding Farm Households (MJHFH) and Other Gainful Activities (OGA), the latter term incorporating on and off farm diversification (Gasson et al, 1988;

Gasson, 1991) In the late 1980s the term 'pluriactivity' was introduced to encompass all non-agricultural income generating activities including wage labour and non-farm business ownership (Fuller, 1990 367).

Pluriactive farming is not, however, a new phenomenon ¹² Farmers are primarily businessmen who have always sought to respond to market opportunities If changing market demands present non-agricultural opportunities for which farm resources can be used to advantage, farmers will respond Pluriactivity must, therefore, be viewed as part of the evolution in the use farmers make of their rurally based resources, rather than as aberrant behaviour of 'hobby' farmers or an exit strategy resulting from policy reform

Within the rural small business literature the emphasis on agricultural decline has ensured that the growth in 'part-time' farming is normally viewed as an exit strategy, with farmers temporarily holding the land until their new occupation allows them to divest (Townroe and Mallelieu, 1993) But the view that pluriactivity is a form of transitional exit where the farmer is less committed to agricultural production has been dismissed by agronomists In a study undertaken between 1987 and 1991 in twelve Western European countries, only twenty per

¹² Hill (1982 314) provides additional historical evidence demonstrating the prevalence of pluriactivity in the nineteenth century

"Two Royal Commissions appointed to examine the great hardship caused to certain large sections of British agriculture in the depressions of the late 1870s to the late 1890s encountered part-time farming, supplementary occupations including fishing, retailing, road haulage, wholesale distribution, factory work, banking and agricultural work on other farms While some multiple-job activity was seen as a transitory stage into or out of full-time farming, much other was of a permanent nature, the symbiosis resulting in increased security and not uncommonly proving extremely profitable With the addition of a few other categories such as tourism, middle and upper management and the professions, the list would serve the situation described by Harrison a century later In 1969, on just over 30 per cent of English farms, at least one of the business principals had another source of earned income outside farming, predominantly as proprietors of other businesses, and fifty-five per cent of these part-time principals claimed to have full-time occupations outside farming Part-time farms were by no means restricted to the small size groups and an element of part-time could be found throughout the farm size spectrum"

cent of pluriactive farms were found to be 'disengaging' or exiting, 21 per cent were found to be 'engaging' or transitional entrants and 59 per cent were found to be stable (Bryden et al, 1992; Hawkins, Bryden, Gilliatt and MacKinnon, 1993). This study found pluriactivity prevalent in all farm sizes and in all areas, averaging 60 per cent, although manifested differently according to regional traditions and economies (Campagne, Carrere and Valceschini, 1990; de Vries, 1990; Reis, Hespanha, Pires and Jacinto, 1990). The level of activity was strongly related to the wider regional economy with farmers pushed or pulled into pluriactivity in particular socio-economic environments (Efstratoglou-Todoulou, 1990).

Recent research has shown that farmers are becoming more interested in diversifying their income base as a result of policy reform, but pluriactivity is unlikely either to increase or decrease significantly in response to policy changes (Shucksmith and Smith, 1991; Bryden et al, 1992). As small business researchers have noted in the non-farm sectors (Cooper, 1993; Westhead, 1994a), the munificence of the local environment is a more important influence on firm behaviour. Rates of pluriactivity are affected by local market conditions, in particular labour markets (for wage labour) and the proximity of prosperous population centres (for additional business activity). Where the environment is munificent pluriactivity increases. Hostile environments result in lower levels of additional business and employment activities (Bryden et al, 1992).

4.5 The policy environment

For many analysts the defining characteristic of farming is the high level of support given to the sector in the form of income and production subsidies, price support and other market regulatory mechanisms. One result of this has been to "reduce the strategic complexity of the sector" (OECD, 1994:59), as individual enterprises have become orientated towards production with little consideration of the market.

Subsidies which exist in some agricultural sectors have caused output in those sectors to expand as farmers have concentrated on producing commodities for which there are guaranteed prices and markets, relegating or neglecting unsupported activities. As a result of support, production and marketing of the main commodities has become so standardised that there appears to be little scope for strategic positioning by individual farmers. Competitive advantage is largely determined by low marginal costs in primary production with the result that production has tended to shift towards low-cost regions and producers. Support has, therefore, reduced both the need for, and the ability of, some farmers to develop more complex and competitive market behaviour. Despite being a group which has a long tradition of self-reliance and entrepreneurship, support has had the effect of transforming farmers into producers reliant on price, production and income support. As the OECD (1994: 62) conclude,

"Farmers have become locked into a dependency situation where the crucial factor for their success is not business acumen so much as their effectiveness as a political lobby" ¹⁴

There are signs, however, that this dependency is weakening. The main policy concerns of the Common Agricultural Policy (CAP) are effective food production,

¹⁴ Although in the modern context support for agriculture is provided mainly through membership of the Common Agricultural Policy (CAP), historical studies have demonstrated that agricultural support has been an almost constant feature of the sector since the advent of commercial production. In her study of nineteenth and twentieth century farming, Bouquet (1985), for example, recounts support for the sector from the 1815 Corn Laws, introduced to protect cereal growers following price falls at the end of the Napoleonic wars. Pre-CAP support was geared towards rejuvenating domestic output, controlling imports, and strengthening the marketing of agricultural products (Bouquet, 1985, Newby, 1979). Successive governments attempted to balance policies of effective food production and budgetary constraints, although as Taylor (1970: 423) explains

"Emotion played as much a part as economics. Antagonism to the landed interest had always been at the heart of the Free Trade movement, enthusiasm for it inspired the Protectionists"

While it is tempting to view the apparently uncontrollable subsidies and escalating output as a particular feature of the CAP, pre-CAP support for the sector demonstrated similar patterns relating to the extent and difficulties of dirigisme in agriculture.

rural population balance, a reduction in regional disparity, diversification of the rural economy and the need for a clean environment (Fuller, 1990). Implicit in these concerns is the more fundamental need to maintain a healthy stock of farm businesses with sufficient income as an incentive for continuation. Family owned farms, the vast majority of businesses in the sector, have always been central in achieving the aims of the CAP (Hill, 1993). The approach has been direct market intervention and the use of policies designed to influence the structure of the farm sector. The first three common structural policies were introduced in 1972. These aimed to: assist 'full-time' farmers with the potential to reach an income level comparable with that of other sectors of employment, encourage the retirement of farmers who could never reach this income level in order to provide additional land for others, and provide advisory services and training (Bryden et al, 1992)

Almost from the start of the CAP, there has been a policy conflict between effective food production and the maintenance of family farms. The conflict centres on the fact that the bulk of food production is undertaken in a small proportion of large farms, while the bulk of the workforce is concentrated in a large proportion of small, family-owned holdings. The 1981 proposals for CAP reform were notable for introducing the concept of 'MacSharry farms' - the small proportion of holdings which produce the vast bulk of food output (Bryden et al, 1992). The 1985 reforms introduced a new set of structural objectives in an attempt to restore market balance, maintain viable rural communities and conserve the environment (Fuller, 1990). These reforms were amended to take account of growing surpluses, but consolidated in 1991. Together the implementation of the main structural aids¹⁵ is estimated to cost in excess of 920 million Ecus in the UK alone (Bryden et al,

¹⁵ Bryden et al (1992) list the most important structural aids used in the UK as being the Agricultural Improvement Scheme, Milk Outgoers Scheme and quota compensation, compensatory allowances, Farm Diversification Grant Scheme, processing and marketing, set-aside and extensification, Farm Woodland Scheme, landscape conservation grants, and agricultural training support

1992). In total, the CAP budget for 1993 reached 36,657 M Ecus, the bulk (35,352 M.Ecus) of which was appropriated by the European Agricultural Guidance and Guarantee Fund (EAGGF) Guidance Section (CEC, 1994.116)

The realization that, despite escalating cost, the CAP has succeeded excessively in food production but signally failed to maintain farm incomes, has led to widespread criticism of the policy. While popular criticism of agricultural support has focused mostly on the expense and inefficiency of subsidies, agricultural economists have targeted their criticism at the distribution of support (Bryden et al, 1992; Fuller, 1990) These analysts have long noted that far from benefiting smaller producers, the CAP has been used most extensively by "large output/high income" producers, while the burden of support is provided by taxpayers "who are generally of lower income and wealth" (Hill, 1982 321) Further criticisms have been targeted at production incentives which have caused over-supply and market distortions Partly as a result of these criticisms and partly as a result of the pressures arising from world trade negotiations for the General Agreement on Tariffs and Trade (GATT), the CAP was again subject to reform in 1992

4.5.1 The 1992 CAP reforms

The 1992 reforms were predicted to be the most radical in the history of the Community The early negotiations of the GATT Uruguay Round initially offered a 'zero option' which would have entailed cutting all EU agricultural commodity prices to world market levels and dismantling all forms of support and subsidy to the sector As a response, the EU drew up a series of proposals for reform designed to 'modulate' ¹⁶ the effect of price-cuts on smaller holdings and shift "the burden of adjustment to the better-off" (Midmore, Hughes and Bateman, 1994 13).

¹⁶ Reduce or give exemption from

Although the final package omitted many aspects of modulation, the overall direction of reform was maintained.

"In broad terms the reform represented a fundamental change in that it marked a decisive move away from supporting farmers through guaranteed prices towards supporting them by direct payments accompanied by measures designed to influence their production methods"

(CEC, 1994:8).

In its effect on UK farmers, the final package had three main components: a reduction in support prices for the main commodities; full compensation for this reduction through schemes or premia not linked to quantities produced; and measures to limit the use of factors of production through, for example, set-aside of land and limitations on intensity (Moss and Wallace, 1994). Despite the continuation of broad protective measures, there is no doubt that there are strong demands for further reforms. Critics of support have come from all political persuasions. Free marketeers have launched vitriolic attacks on the "nonsensical protectionist race in world agriculture" (Tangermann, 1992:3), while the Left has been drawn by the inequities of supporting farmers literally at the expense of more deserving segments of society. Defenders of agricultural support have also used powerful arguments, primarily the need for national food security.¹⁷ Nevertheless, many factors are not on their side. The 1993 GATT agreement, the democratisation of Central and Eastern Europe, and technological progress have all

¹⁷ Although this argument is still frequently used by Protectionists, it has been dismissed by historians. As Taylor (1970:423-4) explains, most food is imported and: "Half the money spent on agricultural subsidies would have provided the much greater security of four aircraft carriers".

Taylor goes on to describe the deeper political and social motives behind such arguments: "Though few constituencies were exclusively agricultural, the agricultural vote was decisive in many, and both parties wooed it, the Conservatives more blatantly than Labour. Again, agricultural prosperity meant higher, or more secure, rents for landlords, the traditional core of the Conservative party, and for many cherished institutions, such as Oxford and Cambridge colleges. Deepest of all, though rarely avowed, was a belief in the superior virtue of country life. The rural communities were supposed to enshrine historic England."

reduced the perception of the need for food security at any expense. The likely expansion of the EU to include Central and Eastern European countries may provide the greatest incentive for CAP reform. The additional cost of supporting agriculture in these countries will probably be unsustainable.

Despite the maintenance of the most fundamental elements of support, farmers are becoming increasingly aware of the need for market-oriented production. In this respect, the real effect of recent reforms has not been found in the relatively minor adjustments necessary to meet budgetary restrictions, but in the widespread acceptance that the CAP cannot be sustained in its present form indefinitely. For large farms which benefit most from production and price support, further reform threatens their income and has forced them to investigate alternatives. For small farms, reform poses different challenges. Although they gain less, their reliance on support may be greater.¹⁸ In conditions of reform different regions and production sectors will adopt different approaches to adjustment (Shucksmith and Winter, 1990, Evans and Ilbery, 1992, Bryden et al, 1992). At an aggregate level, certain commodities will gravitate towards low-cost countries and regions, with a resulting decline in both output and employment in higher-cost regions (OECD, 1994). Farmers in those regions unable to compete on a low cost basis because of a variety of factor endowments, are likely to develop more complex strategies. This process has already been seen in New Zealand where agricultural liberalization started in 1984. There, farmers unable to compete on a cost-basis have responded by diversifying output and changing production techniques (OECD, 1994). Under EU policy reform, it is probable that a similar process will take place.

¹⁸ Despite this, support is not universally popular. Shucksmith and Smith (1991: 350) explain that a farmer's self-image is based on the two principles of "working the land, producing from the earth", and that they "should not be paid for doing nothing". As a result, both the ubiquity of support and specific schemes, in particular set-aside, are reviled by many farmers.

4.6 The market for farm products

Changes in the British food industry over the past twenty years have also had an important effect on the farm sector. The wholesale agricultural markets, traditionally the most important outlet for agricultural produce, have declined numerically and in relative importance (IGD, 1993). While still a substantial outlet for produce, these markets are expected to decline by a further 25 per cent by 2005, largely as a result of shorter distribution channels (Shaw, Gibbs and Gray, 1994). Within food retailing, the multiples have increased their market share of food products to 79.8 per cent in 1993, mostly at the expense of the consumer co-operative and independent sectors, whose market shares were 9.4 per cent and 10.8 per cent respectively in the same year (IGD, 1994). On the manufacturing side, there has been increased fragmentation as a result of corporate restructuring and a growth in the numbers of small and medium sized concerns (Cumbers, Smallbone, Syrett and Leigh, 1994). Finally, the catering sector has expanded and there has been an increase in central purchasing within the catering multiples (Gibbs and Shaw, 1994).

Of these changes, perhaps the most important is the growth of the retail multiples sector. In 1992, the top five retail multiples accounted for 32.5 per cent of all grocery sales and ten major buying decision points now account for 44.6 per cent of all food and drink sales in the UK (Carter and Shaw, 1993). One of the most important sources of competitive strength of the corporate food retailers has been the growth of central buying and the use of large volume buying discounts. By dealing directly with suppliers for the majority of their products, the retail multiples have internalized the wholesale distributive function, and wholesalers are now rarely used for business from domestic sources. Importantly, the growth of the multiple sector has also brought about an erosion in the seasonality of consumption of many food products. Retailers increasingly demand the permanent availability of specific food products, for which they are prepared to pay premium prices. Large

volumes, high quality standards and extended timing of sales have ensured that many farmers see the retail multiples as the premium market for their output.

There have also been changes in consumer demands for food products. Slow population growth within the UK has led to a largely static market for food at an aggregate level, although changes in the nature of demand have been fuelled by changing demographic, economic and technological trends (IGD, 1993). Declining family sizes; an increasing number of smaller households; an increasing proportion of older people; the increasing participation of women in the labour market; a growth in real incomes for those in employment; higher educational levels; and the diffusion of technological innovations (e.g. household freezers and microwave ovens), have all affected the market for food (Cumbers et al, 1994; Davies, 1994; IGD, 1994; Shaw, Burt and Dawson, 1989). Overall, the food market has become highly fragmented, and there has been a concomitant increase in new products. Retail superstores ¹⁹ now list approximately 20,000 product lines, a substantial increase since the mid-1980s. Of specific relevance to farming, a shift away from primary food products and towards processed and convenience food and a growth in awareness of healthier eating have affected the demand for particular products.

The market for non-food farm products has also developed in recent years. Higher disposable incomes and increased leisure time coupled with a growing interest in rurally based pursuits (McInerney and Turner, 1991), have improved the demand for non-food farm products and services. For farmers, these new demands present opportunities for tourism, leisure and recreation. Although the market for commercial farm based tourism in particular areas, has existed since the advent of rail travel (Bouquet, 1985), in recent years the market has grown and spread to new regions. New business opportunities are also being exploited by farmers who

¹⁹ Defined as those with a sales area in excess of 25,000 sq.feet (IGD, 1994).

have used their resources to offer leisure facilities and recreational services. Other farmers have exploited opportunities for contracting machinery and labour, and have even developed farm buildings into units for other small businesses (Evans and Ilbery, 1992, Dabinett and Lawless, 1993). In their innovative use of farm based resources for non-food production, farmers have demonstrated their ability to respond flexibly to changing market demands.

4.7 Emerging farm strategies

Farmers have responded to changes in policy and demand in different ways. For a number of reasons, including both structural and climatic factors, British farms are high cost commodity producers in many sub-sectors. A major strategic choice, therefore, lies in the decision to specialize in food production or to combine food with non-food activities. Farmers who have chosen to concentrate on food production, but are unable to compete on a cost-basis have a choice of strategies. Three appear to have immediate appeal and have been developed by many farmers: value-added production, the exploitation of quality and delivery advantages, and specialized production.

4.7.1 Food based strategies

The market for traditional high value-added regional products has expanded in recent years, stimulated by more discriminating consumers interested in a wider variety of food products. At the same time, technological developments have enabled retailers to make more sophisticated and regionally differentiated sourcing decisions (Shaw, Carter and Harris, 1993). For farmers, these developments may allow more to engage in strategies of on-farm, high value-added processing of traditional and regional products, sold directly into national markets through the corporate chains. On-farm processing has already increased in response to demand

for prepared produce. In horticultural sectors, on-farm cleaning and grading has increased in response to the demand for cleaner and more uniform produce. In livestock sectors, innovative farmers have developed partnership arrangements with the retail multiples in order to produce high quality, input-audited meat products.

Alternatively, farmers may choose strategies related to satisfying the increasingly rigorous quality and delivery standards demanded by the corporate retail sector. Again, the ability of retailers to source and sell on a regional basis offers farmers new opportunities, particularly in the production and marketing of highly perishable crops. Elsewhere, opportunities may arise where farmers can satisfy retail cost-reduction measures through exploiting freight, distribution or logistical advantages (Shaw, Carter and Harris, 1993).

Finally, some farmers have responded to change by moving into specialized production, where farmers concentrate on providing year-round supply of one commodity. This approach has been seen in some horticultural sectors, where growers can benefit from economies of scale in production and volume sales to the multiple sector. Specialized production has also enabled growers to consider alternative markets for their produce, in particular international sales.

4.7.2 Non-food strategies

Farmers who choose to combine food production with non-food activities have a much wider set of alternatives, influenced by the local environment and market and the resources available at enterprise level. For farmers using their resources for non-food production, broad choices involve developing new uses for farm resources and starting new businesses either on or off-farm.

The development of new uses for farm based resources has been the subject of much research. In a survey of 10,000 holdings, McInerney, Turner and Hollingham (1989) identified more than 250 types of additional farm activities which they classified into five categories: speciality products, services, contracting, processing and sales; and miscellaneous. Ilbery (1991) devised a typology of farm diversification based on structural and agricultural factors. Structural diversification included: tourism (accommodation and recreation); adding value to farm enterprises (direct marketing and processing), and passive diversification (leasing of land and buildings). Agricultural diversification included unconventional enterprises (crop products, animal products and organic farming), farm woodland projects (for energy, amenity, wildlife and timber), and agricultural contracting (for other farmers and non-agricultural organizations). For small farms, the exploitation of new business opportunities has been seen as part of a 'survival strategy', while large farms are motivated by an 'accumulation strategy' (Evans and Ilbery, 1992). Both, however, demonstrate farmers' responsiveness to market demands.

Although research has suggested that up to 75 per cent of pluriactive farmers are self-employed in another capacity (Gasson et al, 1988), the investigation of the types of additional businesses owned by farmers has been the subject of much less research attention. It has, however, been noted that farmers have a number of advantages in launching new enterprises in rural areas (Townroe and Mallelieu, 1993).

4.8 Conclusion

Irrespective of the type of activity chosen, there is no doubt that in order to maintain income levels, farmers have developed more entrepreneurial approaches to their resource use. Importantly, the type of competitive behaviour required to

service these new markets is very different from that required when output is sold to guaranteed markets at supported prices. Farmers are reacting by developing more complex strategies and relationships. The common factors are that markets are identified in advance, production is geared specifically for particular customers and farmers take responsibility for their output (products and services) up to the point of consumption. As the OECD (1994: 60) explain, increasingly

"farmers will be called upon to act more like other sectors' businessmen. they will have to be aware of market signals and opportunities, they will have to place a greater emphasis on managerial control (through accounting systems and financial plans), and they will have to organise their contractual and commercial relationships in an effective manner"

This is fundamentally different from the practice of mixed farming, where choice of production was based largely on tradition, output was sold to local wholesale markets and a farmer's responsibility ended at the farm-gate

CHAPTER FIVE

METHODOLOGY

5.1 Introduction

The aim of this thesis is to examine the role of farms in rural business development. The research approach combined both inductive and deductive methods, and consisted of two phases. In-depth interviews were conducted in order to clarify the research questions. These were then tested empirically in the second phase of the project. This chapter starts by outlining the methodological considerations in conducting such research and the broader philosophical framework on which this thesis is based. The chapter then describes the specific methods used in this research project.

5.2. Philosophical foundations

Traditionally there have been two approaches to the study of social phenomena, the positivist or 'naturalist' and the anti-positivist or 'humanist' (Hammersley, 1993, von Wright, 1993). Although the term 'positive philosophy' was coined by Auguste Comte, the intellectual tradition of positivism can be traced to Aristotelian logic. It is based on an assumption that the social world exists externally (or objectively) and can be measured through explanation (and, consequently, deduction). Crucially, the positivist approach also assumes that it is not the role of science to determine mechanisms behind observable relationships, as there may be no logical or necessary connections in nature. Positivism limits its conception of valid knowledge, science, to what is observable. It is concerned with the testing of theories in what Gill and Johnson (1991) refer to as a hypothetico-deductive fashion.

The positivist approach attempts to arrive at a set of generalized statements or laws to explain and predict the relationship between events in the natural world. In short, this approach specifies that the world is a collection of individual and observable facts. It is the role of science to bring order to these facts and, based on such ordering, it becomes possible to predict certain events on the basis of others. The positivist tradition within the social sciences maintains that humanistic studies should adopt the same methods as those used in the natural sciences (von Wright, 1993). In its most general terms, positivism has been defined as

"a collection of prohibitions concerning human knowledge, intended to confine the name 'knowledge' or 'science' to the results of those operations that are observable in the evolution of the modern sciences of nature."

(Kolakowski, 1993: 7)

The most fundamental of these 'prohibitions' are the rules of phenomenalism, nominalism, a denial of the possibility of knowledge of values, and a commitment to the unity of the scientific method. The rule of phenomenalism dictates that there is no real difference between 'essence' and 'phenomenon' and thus science is only entitled to record that which is actually manifested in experience. The rule of nominalism builds on that of phenomenalism, stating that insight formulated in general terms cannot be assumed to have any real referent other than individual concrete objects. A consequence of the phenomenalist, nominalist view of science is the rule that refuses to call value judgements and normative statements knowledge. While value judgements on the human world may be expressed, it cannot be assumed that they are made on scientific grounds. Finally, methodological monism or the unity of the scientific method expresses the belief that the methods for acquiring valid knowledge

and the means of elaborating experience through theoretical reflection are essentially the same in all subject disciplines (Kolakowski, 1993)

The anti-positivist philosophy of science, which became prominent towards the end of the nineteenth century, is a more diversified and heterogeneous trend than positivism. This approach counters the view that reality and the social world are objective and exterior. Rather than being objectively determined, reality is socially constructed and given meaning by people through interpretation. Von Wright (1993) compared the advances made in the systematic study of man in the nineteenth century to the 'revolution' in the natural sciences during the late Renaissance period. He concluded that:

"Since natural science was already established on the intellectual stage, and the humanistic studies with a scientific claim were newcomers, it was but natural that one of the chief issues of nineteenth-century methodology and philosophy of science concerned the relationship between these two branches of empirical inquiry".

(von Wright, 1993 9-10)

Many have pointed out, however, that while philosophical advances in the anti-positivist tradition were made in the nineteenth century, most notably by the German Historical School (Hennis, 1987, Kruger, 1987), it is incorrect to view this approach as being of relatively recent origin (Keat and Urry, 1975, Gill and Johnson, 1991). Indeed, the 'humanist', 'interpretivist' or 'phenomenological' approach, sometimes also referred to as the Galilean tradition, can be traced to the methods used by Plato, predating Aristotle. The development of opposition to positivism is, however, comparatively recent. Droysen, Dilthey, Simmel and Weber were, perhaps, the foremost of those rejecting both methodological monism and the view that the methods set by the natural sciences were the sole or even the best methods for a

rational understanding of reality (von Wright, 1993) The anti-positivists also criticised the positivist view of explanation. Droysen (1858) used the terms *erklären* (explanation) and *verstehen* (understanding) to distinguish between the approach taken to the natural sciences and the requirements of other disciplines to understand the phenomena which fall within its domain (Mommson, 1987) Dilthey developed the approach of the 'understanding method', using the term *Geisteswissenschaften*, a term normally translated as 'moral science' (Oakes, 1987) ¹

5.2.1 Deductive and inductive research

This philosophical dialectic is important because it dictates the research approach adopted and whether the approach is deductive or inductive. Deductive research methods, normally associated with the positivist approach, entail the development of a conceptual and theoretical structure prior to testing through empirical observation (Gill and Johnson, 1991) Unlike Kaplan (1964) who identified the original observation as the fundamentally creative act of the scientist, Popper (1967) stated that the source of the theory is insignificant More important are the logic of deduction and the process of operationalization, i e , the testing of the theory The deductive process follows a number of clearly defined stages Firstly, concepts are identified which are deemed important enough to warrant investigation Two or more concepts are then linked in a causal chain in order to be tested However, as these concepts and the relationship between them are abstract, they first have to be translated into observable indicators, i e , they have to be operationalized Clear rules must be followed in

¹Frisby (1987) states that the methodological approach used in Simmel's *Philosophy of money* (1900) was an important influence on Weber's own analysis of capitalism *The Protestant ethic and the spirit of capitalism* Although many parallels have been made between the work of Simmel and Weber, Weber later criticised Simmel, on the basis of the "crucial aspects of his methodology which are unacceptable" (Frisby, 1987 427)

creating the indicators or measures which represent the empirically observable instances of the concepts under investigation. Priority is given to directly observable phenomena and behaviour in order to enable corroboration and hence agreement by other observers. The outcome of this process of testing is the development of facts or laws to explain those phenomena associated with the theory, which explain not only past relationships between the variables, but also predict future observations. In practice, it is the statistical version of the covering-law being replicated that is adopted, as it is possible that in future circumstances the theory will not hold (Gill and Johnson, 1991). Popper (1967) suggested that no theory can ever be proved by a finite number of observations, but theories can, however, be disproved or falsified since only one contradictory observation is required. For Popper, scientific advances are made as falsified propositions and theories fall away leaving a core of theory yet to be disproved.

Inductive research, generally associated with the non-positivist paradigm, is the obverse of deduction. Theory is the outcome of observation not the starting point. Glaser and Strauss (1967) provided notable support for this perspective in their grounded theory approach to research. They argued that explanations of social phenomena are worthless unless grounded in observation and experience. The inductive approach rejects the causal model of deduction as inappropriate for social sciences, due to the fundamental differences between the subject matter of social sciences and natural sciences (Gill and Johnson, 1991). Laing (1967) defended the use of the inductive approach, drawing attention to the internal logic of human action which distinguishes human beings from "it-beings". The aim of social science is to understand this internal logic. Relationships between concepts are mediated by the individuals (subjective) interpretation of events. Social scientists must access this subjectivity, minimising distortion through the use of unstructured techniques. To fully

explain human behaviour requires an sympathetic understanding of the frames of reference out of which such behaviour arises, referred to (after Droysen) as *verstehen*. This concept was adapted by both Glaser and Strauss (1967) and Gummesson (1991) who stressed the importance of theoretical sensitivity prior to investigation. The freedom to "transcend the existing theory" is, they argued, a pre-requisite in removing prejudice that blocks understanding (Gummesson, 1991:85). Pre-understanding, a fundamental element of theory development and investigation, is traditionally gained by academics from secondary sources - either literature or the experience of others. Gummesson (1991: 71), however, argued that a "balance is required between knowledge from firsthand experience and secondhand knowledge via intermediaries"

Although the epistemological foundations and subsequent approach taken to research studies appear to indicate a dichotomous choice between positivist and anti-positivist approaches, Gill and Johnson (1991: 127) point out that such a view is "fundamentally flawed". Rather, it is possible to construct a continuum of research methods and their underlying philosophies. Burrell and Morgan (1979), for example, differentiate between nomothetic and ideographic methods which lie at each extreme of the continuum. Nomothetic methodologies emphasize the positivist requirement of systematic protocol and technique, ideographic methodologies emphasize the analysis of subjective accounts. Gill and Johnson (1991: 36) assert that "any method adopts a position on a continuum" according to its relative emphasis upon the characteristics demonstrated in Figure 5.1. McGrath (1982) suggested that the choice (or "dilemmatic") for the researcher, however, is to adopt a methodology which fits with the way he or she regards the nature of human action. Burrell and Morgan (1979), similarly, suggest that the set of philosophical assumptions adopted, explicitly or implicitly, is a matter of personal belief and not necessarily a choice between incommensurable alternatives. Indeed, the combination of inductive and deductive

techniques within the same methodological approach is recommended by a number of researchers (Denzin, 1970, Jick, 1979, Hammersley and Atkinson, 1983) This implies not competing methodologies, but a multi-method approach, described by Trow (1957) as methodological pluralism

Figure 5.1 A comparison of nomothetic and ideographic methods

Nomothetic methods emphasize:	Ideographic methods emphasize:
1 Deduction	vs Induction
2. Explanation via analysis of causal relationships and explanation by covering laws (etc)	vs Explanation of subjective meaning systems and explanation by understanding (emic)
3 Generation and use of quantitative data	vs generation and use of qualitative data
4. Use of various controls, physical or statistical, so as to allow the testing of hypotheses	vs Commitment to research in everyday settings, to allow access to, and minimize reactivity among the subjects of research
5. Highly structured research methodology to ensure replicability of 1,2,3 and 4	vs Minimum structure to ensure 2,3 and 4 (and as a result of 1)
Laboratory experiments--quasi-experiments--surveys--action research--ethnography	

Source Gill and Johnson (1991 36)

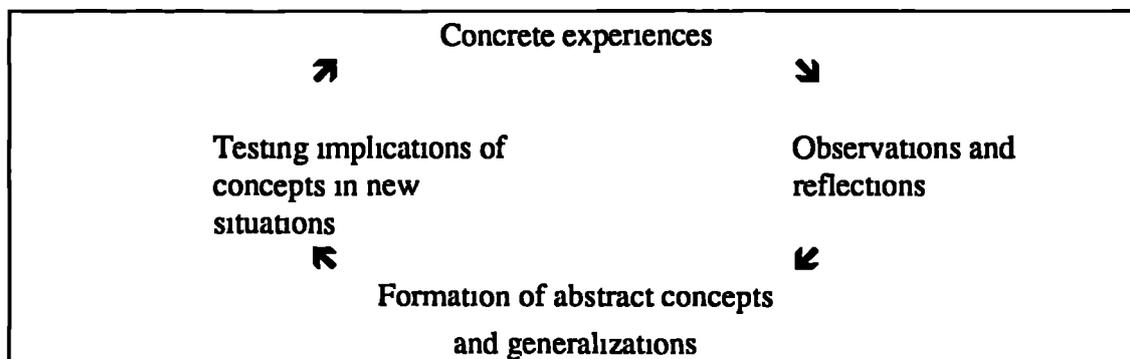
5.2.2. Methodological pluralism

Gill and Johnson (1991 127) assert that a methodologically pluralist position "implies the possibility of rapprochement between ideographic and nomothetic research methodologies " Such a stance is based on the belief that different kinds of complementary information may be generated by using different research techniques in the same empirical study Each method is adopted according to its reliability, internal and external validity and appropriateness to the research question The main benefit of this multi-method approach is that it allows the strengths and weaknesses of each

technique to be addressed and produces more convincing research findings. At the same time, a multi-method approach enables an element of triangulation or convergent validity to be built into the research design (Kaplan, 1964, Jick, 1979)

A multi-method approach may also be better suited to the processes of cognitive development. Kolb, Rubin and McIntyre (1979) suggest a research design based on how individuals learn (Figure 5.2). On the right hand side of this cycle is the observation of a stimulus which will be influenced by previous knowledge, events and theories. Through induction, the individual will then formulate hypotheses which may explain past or future events. Thereafter, these hypotheses are tested and applied and become the basis of concrete experiences. These experiences are then used in the observations and reflections of the future.

Figure 5.2 Kolb's experiential learning cycle



Source: Kolb, Rubin and McIntyre (1979: 38)

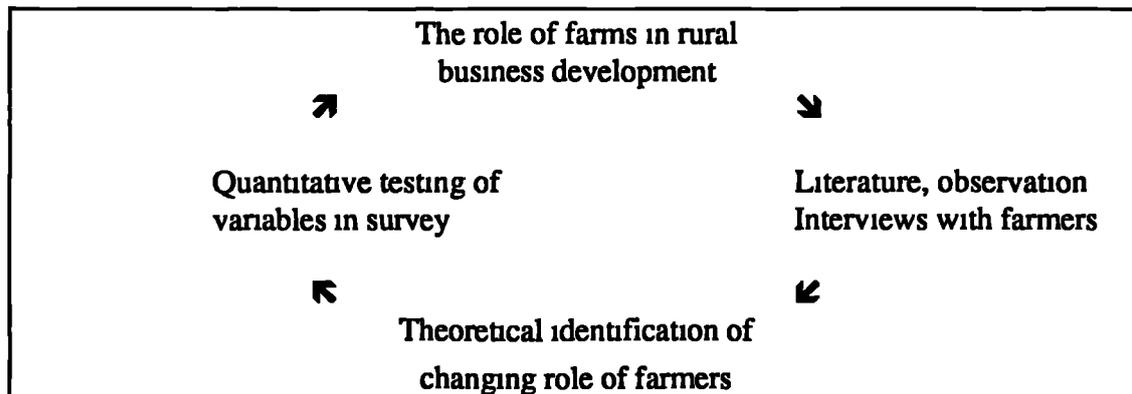
Gill and Johnson (1991: 130) argue that the main criticism of methodological pluralism is that it implicitly accepts a positivist approach through "the operationalization of theoretical concepts, the measurement of those concepts and the assignment of

explanatory or independent variables". Such criticisms can, however, be countered. By including a deductive phase in the research design it becomes possible to generalize the research results and give a wider applicability to the study. Moreover, the results can also be verified by replication. A two stage research design provides an element of triangulation which, in turn, enhances the internal and external validity of the study and the reliability of the findings.

5.3 Research approach

This research study took a methodologically pluralist approach, in an effort to capitalise on the advantages of both inductive and deductive methods, while avoiding the disadvantages of each. An initially non-positivist perspective was combined with a requirement to provide empirical support to enhance validity, reliability and applicability. The research methodology was based on Kolb's experiential learning cycle: observation, reflection and in-depth interviews led, inductively, to the formulation of research hypotheses. An empirical approach was then used to test these hypotheses (Figure 5.3).

Figure 5.3 The research design



The first phase of the project entailed in-depth interviews with ten farm owners. These 'grounded' interviews enabled some insight into issues currently affecting farmers and were also used as a basis for designing the research objectives and methodology. The second phase was a postal survey of one thousand farm businesses. This phase concentrated on the collection of data which could address the research objectives.

The choice of this research approach was also influenced by other factors. Firstly, only limited resources were available for the data collection process. No external funding either from the Research Councils or other potential sponsors was used. Expenses were paid by the researcher with a small grant (£400) from the University of Strathclyde. Secondly, studies of rural small business have generally used empirical approaches, normally postal surveys which have sometimes been supplemented with personal interviews (cf Keeble et al, 1992, Mason and Harrison, 1993, Townroe and Malleheu, 1993, Westhead, 1995). The direct comparison of results with previous research projects was an important factor in the choice of methodology. Thus, in planning the research approach there was also a need for cost-effective methods which were compatible with those adopted by earlier researchers.

5.4 The research objectives

That no previous small business analysis of the sector existed inevitably affected the scope of the project. In formulating the research objectives, there was firstly, a clear need to take an exploratory perspective and secondly, it was necessary to steer the investigation towards issues of central concern to the rural small business research agenda. The three main research objectives were:

1. To examine the norms established by previous rural small business research by investigating the characteristics of the farm sector
2. To investigate the total contribution of farms and farm owners to rural small business development, concentrating in particular on their additional business activities and their role in fostering external businesses
3. To analyse which farms are more likely to engage in additional business ownership activity and the reasons for this

5.4.1 The conceptual framework

Having defined the research objectives, the next stage was concerned with the process of operationalization, i.e. converting the concepts into observable indicators prior to empirical testing. The previous literature normally provides some guidance in determining the broad conceptual framework and the specific variables for analysis. In this study, the bi-disciplinary scope enabled guidance from both the rural enterprise and the agronomy literature.

The three research objectives required different approaches and progressively more sophisticated levels of analysis. The first objective required a predominantly descriptive approach which entailed identifying the characteristics of the sample. In deciding which characteristics should be included guidance was taken from the small firms research literature which emphasises three particular elements: the background and starting resources of the owner, the firm, and the firm's management strategy (Storey, 1994). The small firms research literature also provided a descriptive profile of many of the characteristics of rural, non-farm, small business owners. Addressing the first objective entailed a replication of previously established descriptive variables among a farm owning population. The level at which the characteristics of the farm owners and their businesses converged with those established by previous research would determine the similarities and differences between farm businesses and other rural small firms.

The second objective also required a descriptive element in mapping the incidence and type of business activities present in the sample. However, this objective also required a more analytical approach which drew on existing theory. Thus, the operationalization process was more complex and undertaken in discrete stages. Firstly, there was a need to distinguish between types of business activity. The agronomy literature draws distinctions between mainstream agricultural activities and farm diversification projects. But a more sensitive approach was required in order to differentiate between types of diversification projects and other additional business activities. Secondly, there was a need to recognize why these activities have an importance. In this, there was clear guidance from the small firms research literature which emphasises the role of new and small firms in employment generation and wealth creation. Thirdly, it was recognized that the total contribution of farmers to rural business development might go beyond personal business ownership to

encompass their assistance to external businesses. In determining the indicators which could measure this contribution, guidance was taken from the rural small firms research literature which has emphasised the importance of the natural environment and access to business premises in attracting business migrants to rural areas. Thus, this element of the study was operationalized by measuring the presence of external businesses located on farm premises, the numbers employed in external businesses and whether the farmers perceived that they had provided any managerial assistance to them.

While the first two objectives depended on description and mapping, the third objective required a more sophisticated and analytical approach. The first part of the final objective entailed determining which farms were more likely to engage in additional business activities. Using the exploratory analysis conducted for the first two objectives, a taxonomy of farm businesses was constructed based on their level of additional business activities and relative contribution to rural business development. This taxonomy formed a dependent concept against which factors were correlated in order to establish relationships. The second part of the final objective built on this to establish the reasons why some farms engage in these activities. A recent development of the small firms research literature has been the recognition of the scale and importance of multiple business ownership as an important strategy for growth. By analysing the relative importance of and the relationship between variables, the strategic intent of the farm owners becomes clear.

5.5 Research methodology

5.5.1 Phase one: qualitative research

The first phase in the research design was inductive, entailing the use of qualitative research methods. Qualitative data arises as words, statements or commentary about attitudes, opinions or beliefs based on open-ended questions. In this study, qualitative data was collected through the use of in-depth interviews. Fielding (1993) highlights a number of issues that require consideration for successful interviews, the most important of which is structure. A structured interview format enables a degree of consistency across respondents, however the imposition of a structure may restrict its utility as a means of understanding how individuals construct meaning and significance. Conversely, an unstructured approach enables greater flexibility, but impedes comparability and may, similarly, result in no clear understanding. Moreover, when interviews are requested in a business context, there is an expectation that the interviewer has a specific remit, beyond that of *verstehen*: a concept lay people may find difficult. To address these problems, a semi-structured approach was taken: an interview prompt sheet incorporating the main issues for discussion was developed as a broad guide, but free flowing discussion was encouraged. As the interviews all took place in the farm households at a time convenient for the interviewee, there were few time constraints imposed and as a result, flexibility was not sacrificed.

The broad content of the interviews, and the topics included in the interview prompt sheet, concerned: issues of ownership (when they had started or taken over the business, family involvement, inheritance, succession); the agricultural activities of the farm (established activities, recent changes, future opportunities); their perception of the current farming environment (the impact of CAP reform and GATT, and the effect these will have on their farm); other business activities related to the farm or the

owners (additional farm income sources, off-farm employment, leasing of land and buildings); and their perceptions of business opportunities (agricultural and non-agricultural and their reasons for considering additional businesses). In addition to these main issues, the interviews also provided an opportunity to gain some insight into methodological considerations and the receptiveness of the farming community to subsequent enquiry.

As this phase of the research was concerned with understanding and exploring issues associated with farm businesses, it was not necessary for the sample to be representative of a larger population. However, an effort was made to interview owners of a diversity of farm types. Similarly, although the ten interviews took place in Scotland, an effort was made to ensure that the farms were located over a wide geographical area to ensure a diversity of farm environments. The ten farms approached for interview all agreed to participate, although requested that the interviews took place in May 1995 to avoid the lambing season. The farms included in this research phase ranged from small-scale production supported by off-farm employment, family farms utilising household labour, to capitalist agriculture employing a number of non-household farm workers. In several respects the farms conformed to descriptions of the sector found in the agronomy literature (see Chapter Four). Many farms were currently in the third generation of family ownership, reflecting the growth in farm ownership in the wake of the 1914-1918 War (Bouquet, 1985). Most employed only household labour, sometimes supplemented by one or two general workers. The rate and type of pluriactivity also conformed to that established by earlier research (Bryden et al, 1992). Of the ten, only three were mono-active producers, two combined agricultural activities with off-farm employment and five had started additional businesses, using mostly farm-based resources. A brief description of participating farms is given in Appendix One.

The five farms which had started additional businesses posed a greater theoretical and practical challenge. The additional businesses included a farm zoo, holiday complex; ice-cream factory; bed and breakfast, and agricultural contracting. A common theme was that the additional businesses depended on farm resources, either land, buildings, machinery or output. Ilbery's (1991) typology of farm diversification emphasised the distinction between structural (for example, tourism, added-value enterprises) and agricultural (for example, contracting) diversification. Although the five farms with additional businesses fit these broad categories, the obvious distinctions between bed and breakfast activities utilising only household labour and ice-cream manufacturing employing forty, demanded a more sophisticated theoretical framework.

A key distinction between the enterprises appeared to be that of visibility. Additional business activity, particularly when dependent on farm resources, can be hidden, largely because only farm resources have been used. In two cases (agricultural contracting and bed and breakfast) the distinctions between additional businesses and the originating farm were not recognized by the owners. The three remaining businesses were highly visible, largely because they had all grown to a scale where additional employment was used and actually exceeded employment on the farm. One implication for the second stage of the research, therefore, was to design a research instrument sensitive enough to measure all business activity, even where the distinctions between businesses were not recognized by the owners.

5.5.2 Phase two: quantitative research

On the basis of these interviews, the second phase of the fieldwork was designed. In order to gather the large number of cases necessary to address the research objectives

within the resource constraints, a postal questionnaire method was chosen (Gill and Johnson, 1991, Newell, 1993) Having selected this method, decisions were then made concerning instrument design, sampling frame, and survey location

5.5.3 The questionnaire

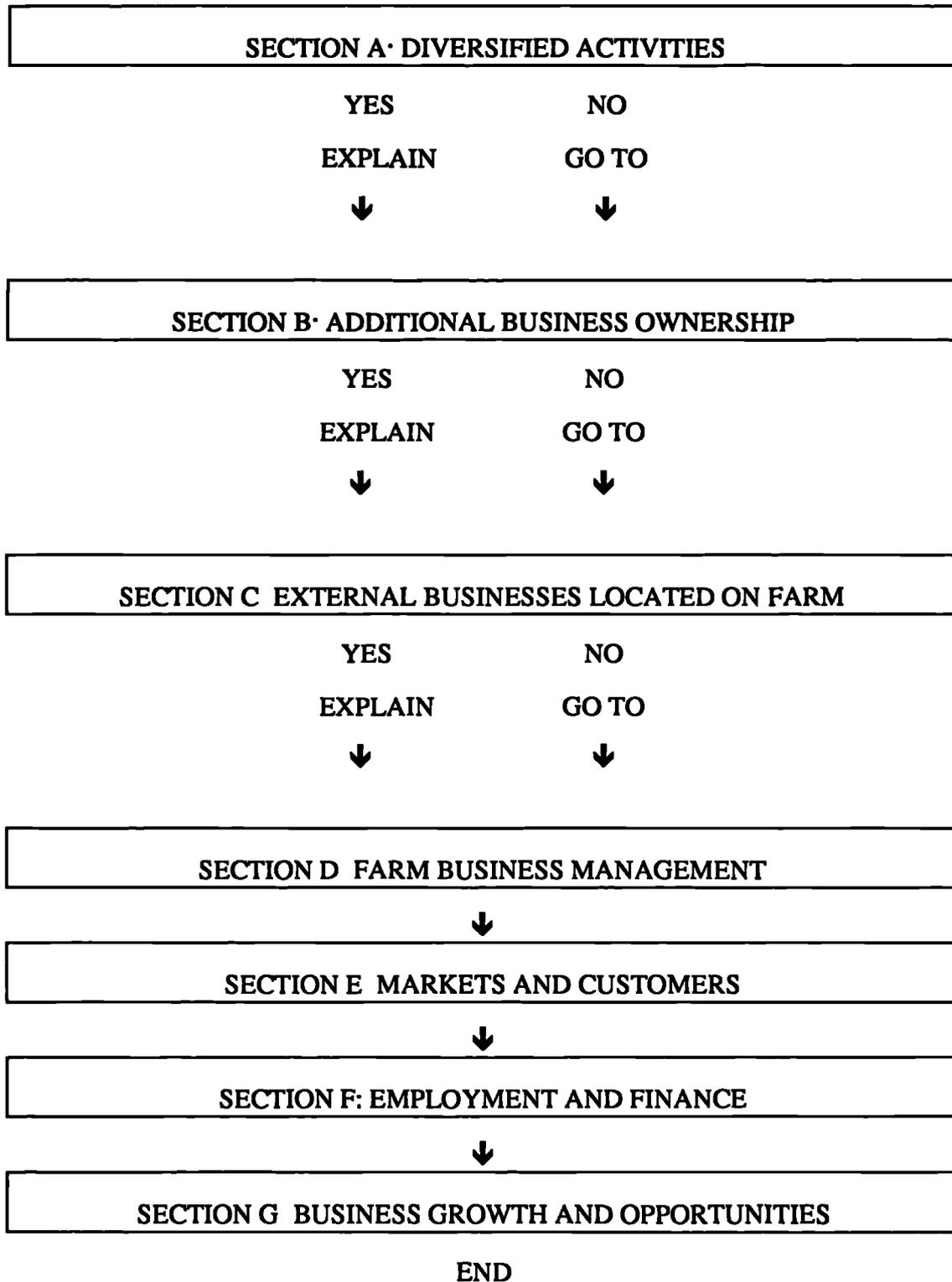
The questionnaire was designed over a five month period between June and October 1995. A frequent problem in questionnaire design is that of reducing highly complex concepts into a simple and easy to complete, self-administered questionnaire (Gill and Johnson, 1991). This problem was compounded in this study by the multiple, and sometimes competing, objectives which the questionnaire had to address. The questionnaire was required to enumerate and map the incidence of additional business ownership, while also collecting information capable of describing the characteristics of the farms and the management behaviour of farmers. The objective of enumeration ensured that the questionnaire needed to be completed by all farmers, but the mapping of additional business activities ensured a special interest for those farmers with additional business interests. A balance needed to be found between the two competing objectives and a research instrument designed that could accommodate both analytical and descriptive objectives.

Four further issues were confronted in the design of the questionnaire. Firstly, the farming population is often characterised as being unsophisticated. Concerns about literacy standards were, however, offset by the fact that - as a group - they are quite used to form-filling. The annual Agricultural Census is sent to every farm holding and many farms also return an IACS (Internal Audit and Control System) form on an annual basis. A related concern was that, while they may be used to specifying agricultural information, they may not be familiar with concepts used routinely in small

business research This was resolved by pre-testing the questionnaire on a small group of farmers who were asked for their opinions on the familiarity of the language and management concepts used A third and more fundamental issue was that if farmers did not recognize the distinctions between agricultural output and additional farm-based businesses, the questionnaire would have to unambiguous and precise in specifying requests for information Finally, the overlap between the farmer, the farm business, the farm household and other farm based business activities brought confusion to the most basic of research needs. identifying the unit of analysis. Much of the time spent on designing the questionnaire was spent trying to resolve these latter two issues

The final draft of the questionnaire contained seven sections, 49 questions and 140 variables. The first section sought basic descriptive information about the farm business and the incidence of diversified farm-based activities The second section sought information about additional off-farm business ownership The third section asked for information regarding businesses trading from the farm premises but not owned by the farm principal The four final sections sought information regarding farm management, markets, employment and growth prospects which could be completed by all farmers, including those without diversified interests (Figure 5 4) With one exception, all the questions were closed A mix of simple dichotomous and forced choice questions were used for factual responses Likert scales were used for attitudinal responses (Procter, 1993)

Figure 5.4 Farm business activities: questionnaire structure



After the process of designing the questionnaire was substantially complete, the draft questionnaire was discussed with academic colleagues at Stirling, Strathclyde and Warwick Universities ² In addition, a small group of farmers were also asked for their comments. On the basis of these expert comments, the questionnaire was modified and printed as a 12 page, A4 size booklet. Reply paid envelopes were printed simultaneously and sent with the questionnaire to the pilot sample.

5.5.3.1 Piloting the questionnaire

The questionnaire was piloted in November 1995 in West Central Scotland. One hundred farm businesses were selected at random from the Glasgow North Yellow Pages. This directory covers a large geographical area stretching from Glasgow in the south to Strathyre in the north, and bounded by the Ochil Hills and the Hillfoot villages in the east and the Isle of Bute in the west. The choice of site for the pilot was based on two factors. Firstly, the location offered convenience in so far as the farms being surveyed were physically nearby, and any necessary follow-up contact, such as personal or telephone interviews, would be less expensive to conduct. Secondly, by siting the pilot at a physical remove from Cambridgeshire there was no risk of contamination of the main survey area. Randomness was ensured by selecting every fourth business until the target of 100 had been reached.

The number of farm businesses included in the pilot was decided after a consideration of both previous research into rural business and the size of the main sample. Poor response rates for postal surveys are a common feature of the rural small business.

² Dr Peter Rosa, Dept of Management and Organization, University of Stirling, Dr William Donaldson and Professor Stephen Young, both of Dept of Marketing, University of Strathclyde and Dr Paul Westhead, SME Centre, University of Warwick, all provided valuable comments on the draft of the pilot questionnaire.

research literature. Keeble et al (1992) achieved seven per cent and Mason and Harrison (1993) achieved ten per cent, although response rates of 27 per cent and 23 per cent were achieved in the two surveys conducted by Townroe and Mallelieu (1993). Given the anticipated poor response, a smaller number of pilot cases might not have proven effective in determining the range of variables expected within the farm business population. Moreover, as the size of the main sample had been set at 1000, a pilot of less than 10 per cent would have provided too great a step between the pilot stage and the main survey stage (Gill and Johnson, 1991, Newell, 1993).

The timing of the pilot was imperative. Although most textbooks advise against surveys in December and January (Herbelein and Baumgartner, 1978, Newell, 1993), farmers are an exceptional population. The workload of farm businesses tends to be unevenly distributed throughout the year. Generally, the workload increases during months with long daylight and decreases during the winter, when inclement weather and short days prevent outside work. A pilot in November, soon after the switch from British Summer Time (BST) to Greenwich Mean Time (GMT), was considered important as the window for surveying farmers is relatively short. A November pilot was planned as the month which might attract the greatest number of responses coupled with the time flexibility to amend the questionnaire prior to the main survey planned for January 1996. The timing of the main survey was also critical. In early spring arable and horticultural farmers become occupied with soil preparation and sowing, while livestock farmers are at their busiest peak with birthing. The initial response rate for the main survey was important as the time allowance for follow-ups would be affected by the start of busy work peaks, as well as the diminishing returns normally associated with postal surveys.

In total 30 responses were received from the pilot sample, of which 25 were usable. No follow-up mailing was used. The need to gather a large absolute number of responses rather than necessarily increase the rate of response prompted a small pilot using registered post. The purpose of this was to investigate whether registered mail would increase the initial response rate of the first mail-out. In the event only two responses were received from the ten questionnaires sent in mid-December 1995 using this method. The poor response was attributed to the timing of the mail-out, but nevertheless this approach was rejected as excessively expensive and probably unnecessary for the main survey.

An anticipated problem was that of respondent bias towards pluriactive farms. However, the incidence of pluriactivity found among pilot respondents mirrored that found by Bryden et al (1992) who reported pluriactivity rates of 60 per cent. Of the usable responses, eleven were monoactive producers and fourteen had diversified interests. Additional business activities of the pilot sample ranged from machinery contracting, holiday accommodation, farm shops and milk distribution. As an issue of central importance to small business research, particular attention was paid to employment patterns in the pilot sample. In total the eleven monoactive farms employed 37 people. The fourteen pluriactive farms employed 53 people in agricultural activities and an additional 36 in off-farm activities. Following a review of the pilot responses, the questionnaire was amended and printed in preparation for the main survey.

5.5.4 The study area

A single study area of Cambridgeshire was chosen for the site of the main fieldwork stage. The advantage of using a single study area for farm based analysis is that it

allows farm change to be examined in the context of the area in which the farm is located. Within the agronomy literature, there is a commonly held assumption that there is a relationship between farms and their surrounding area (Bryden et al, 1992). Rural areas have a range of conditions which collectively exert an influence on farm life. These include: physical conditions (topography, climate and environment conditions such as soil quality and availability of water); social conditions (demographic indicators); economic conditions (indicators of economic vitality, in particular labour markets and the strength of agricultural structures); and political conditions (the presence of agencies and policies which influence farming). Bryden et al (1992:35) defend the use of study areas for agricultural research arguing that

"the economic, social and geographical context within which farm households are spatially located affects both the real and perceived choices of farm household members, whether with respect to agriculture, or other activities. This context will also determine the policies which farm households can gain access to, and the conditions associated with that access"

The choice of Cambridgeshire as the study area for this survey was influenced by three factors. Firstly, some of the most influential rural small business research has been based on non-farm samples derived from the East Anglia region (Keeble and Gould, 1985, Keeble et al, 1992). An anticipated utility of the present study is based on the premise that the results can be compared with those of earlier studies investigating non-farm enterprises. The replication of the research area was considered an important element in minimising bias in such a comparison. Secondly, East Anglia is characterised by markedly different socio-economic and demographic conditions than many other areas of the United Kingdom (UK). East Anglia has the fastest growing population of any region of the UK, the lowest levels of unemployment and (together with Wales) the highest levels of self-employment (CSO, 1993). Indeed, it is partly

these conditions which have attracted previous small business researchers. Finally, East Anglia has the highest proportion of agricultural employment than any other region in Great Britain ³

The choice of Cambridgeshire was made after an examination of patterns of farming within East Anglia (Eurostat, 1990, MAFF, 1993, CSO, 1993, OPCS, 1993). The presence of large scale cereal producers in many parts of East Anglia is atypical of farming in the rest of the UK. Cambridgeshire, however, offered a discrete county within the region of East Anglia, where farm patterns are more typical, in terms of size, output, family ownership and capital input, with farms in other parts of the country (MAFF, 1993, CSO, 1993). As a result, findings derived from farms in Cambridgeshire, although influenced by local conditions, would not be subject to the serious distortions created by examining farms in other parts of the region.

Importantly, the study area was selected to coincide with county boundaries as both agricultural and population (10 per cent sample) census information is disaggregated to this level. By selecting a county level administrative area as the study area, the profile of respondents could be compared against the known activities of the total population of farmers for Cambridgeshire. A full description of the study area is given in Appendix Two.

The main problem associated with the use of such a clustered sample drawn from a single study area as opposed to a simple random sample drawn from a wider geographical base, is that this approach may result in a higher Standard Error (Moser and Kalton, 1979, Arber, 1993). However, a study by Errington (1985: 254) which

³ Northern Ireland has a higher level of agricultural employment (see Table A1)

compared the design effects of cluster and simple random sampling on a farm based survey found that

"In general, the proportionate increase in variance is fairly small and, indeed, where the personal characteristics of the farmer are concerned, the cluster sample is actually more efficient than a simple random sample".

Errington (1985) points out three further advantages of a cluster approach for agricultural research. Firstly, lists of sampling units are readily available through national databases which distinguish on the basis of location, secondly, fieldwork costs can be minimised, and finally, descriptive information for study areas is available from the annual Agricultural Census which can be used to assess representativeness.

5.5.5 The sampling frame

A number of sampling frames were considered prior to the selection of the Yellow Pages as the source which presented the least number of problems and the greatest number of advantages.⁴ The benefits of this sampling frame for farm based research were reinforced by Errington (1985: 254) who argued that the Yellow Pages "give the most readily-available lists of names and addresses of farmers". Errington argues that

⁴ It was initially envisaged that the sample would be drawn from a national database such as those held by Dun and Bradstreet, the National Farmers Union (NFU), the Ministry of Agriculture, Fisheries and Food (MAFF), or "Farmers Weekly". The Dun and Bradstreet database was rejected on the basis of cost, the well documented difficulties of using this database for small firms research (Storey, 1994) and also because the representativeness of its agricultural component was unknown. The NFU database was similarly rejected on the basis of cost and representativeness. The MAFF database is unavailable for researchers, unless engaged in research directly funded by that organization. The trade publication "Farmers Weekly" does not sell lists to researchers but will direct mail questionnaires to its subscribers, who can be stratified on the basis of a number of variables including region and agricultural sector. This too was rejected on the basis of both cost and, more importantly, ownership of the mailing list. Subscribers included in the survey could not be easily identified in order to send reminders or duplicate questionnaires.

the four main problems associated with sampling frames identified by Kish (1965), are minimised in practice by using the Yellow Pages. Firstly, there may be a problem of missing elements whereby the sampling frame is either inadequate in that it does not claim to cover the whole population or incomplete in that units which should be included are not. The coverage of the Yellow Pages is generally good. In a study comparing farms in a particular area listed and unlisted in the Yellow Pages, Errington (1985) found only 13 per cent of cases missing. Moreover, as Errington (1985: 256) points out, missing cases are only important when a researcher is attempting to estimate absolute numbers,⁵ and do not invalidate a sampling frame when a researcher is trying to establish "relationships between various characteristics of the members of the population". The second problem associated with sampling frames is that of clusters of elements

"a single entry in the sampling frame may refer not to the unit of study, e.g. individual people but to clusters of such units, e.g. households which may contain varying numbers of the unit of study. Where the unit of study is the farm business rather than the agricultural holding, this problem is unlikely to arise when 'Yellow Pages' are used"

(Errington, 1985: 254)

As the present study uses the farm business as the main unit of analysis, this problem was also minimised. Thirdly, the presence of foreign elements, units irrelevant for study, may waste a small proportion of valuable resources but does not present any substantial difficulty for a researcher. The final problem identified by Kish (1965) is that of duplicate listings. These, however, can be identified in advance when

⁵ Absolute numbers can, in any case, be estimated using either the 1991 Population Census 10% Sample of occupations at County level (OPCS, 1993), or the annual Agricultural Census (MAFF, 1993)

assembling an individual database using the Yellow Pages as a source of names and addresses, and similarly this issue does not present a major difficulty

5.5.1 The sample

One of the most influential studies of farm household activities used historical records of one parish in Devon (Bouquet, 1985). It was initially envisaged that a similar single parish or single district census would be appropriate for this study. This strategy was rejected, however, as time consuming, difficult to implement and most importantly, unsuited to the study objectives. One frequent problem stemmed from cases of farms whose administrative offices were in one district or parish, while the farmland was mainly located in another. The precision required to separate farms which overlapped administrative boundaries was unnecessary for the study. The economic and political environment which affects farms, for example in the implementation of agricultural policy, changes at county and regional level, rather than district or parish level. Moreover, census information used to verify the reliability of the sample could not be disaggregated beyond county level. The sampling strategy, therefore, changed from being a census of particular parishes to a random selection of farms drawn from the County of Cambridgeshire.

As the research literature is equivocal about the types of farms most likely to participate in additional business activities, one objective of the study was to establish whether pluriactivity is influenced by a particular factor or combination of factors. A further objective was to establish management behaviour within a total farm population. As a consequence, sample stratification on the basis of hectareage, output, speciality or employment size was rejected in favour of a randomised approach using probability sampling (Arber, 1993).

The final sample of 1,000 farms was randomly selected from the two volumes of the Yellow Pages covering, respectively, Cambridgeshire and Peterborough. The number of farms included in the survey was determined by the need for a reasonable number of respondents, tempered by parsimony. Randomness was ensured by selecting every third business listed until the target of 1,000 was reached. ⁶

5.5.6 Response rate and representativeness

Questionnaires were sent to 1,000 Cambridgeshire farmers in the second week of January 1996. A duplicate questionnaire was sent as a follow up to non-respondents in the second week of February. In total, 331 responses were received by the cut-off date, 15th March 1996, of which 296 (29.6 per cent) were usable. The remaining 35 were mainly farmers who had retired from farming. Only ten usable responses were received from the follow-up mailing, confirming the importance of timing in surveying this population.

An inherent problem in survey research is that of non response bias. In this survey, the 296 usable responses equated to just 8.4 per cent of the total farm population in Cambridgeshire. One of the first tasks in the analysis of responses was to ascertain whether non-respondents differed substantially from respondents either in the type of farms that they owned or in their propensity to establish additional businesses. One of the advantages of a study area approach is the availability of official data which provides farm information at the County level. Government information derived from the 1991 Census County Report for Cambridgeshire Part Two (OPCS, 1993), the

⁶ There are 3,500 farm holdings in Cambridgeshire (MAFF, 1993). Thus, between a third and a quarter of the County's farms were surveyed.

Digest of Agricultural Census Statistics (MAFF, 1993), Regional Trends 28 (CSO, 1993) and Cambridgeshire County Council's survey of Agricultural Employment in Cambridgeshire 1980-1988 (Cambridgeshire County Council, 1991) provided detailed information on farming within the County against which the respondents could be compared. The two main measures of sample representativeness were farm size (hectarage) and agricultural activities.

In comparison with the UK average, farms in Cambridgeshire are disproportionately large (see Appendix Two). A bias towards larger hectarage (ha) farm holdings was also seen in the sample. Only 15 per cent of the sample farms were in the smallest size of holding (under 50ha), compared with 66 per cent across the UK, and only 35 per cent of the sample were under 100ha, compared with 76 per cent in Cambridgeshire and 83 per cent across the UK (Table 5.1). The farm size reported by the largest proportion of the sample (35 per cent) was between 101-250 ha. Larger farm sizes, in particular those between 251-500ha and over 501ha were disproportionately over represented in the sample.

This bias is partly accounted for by the high incidence (27 per cent) of respondents farming more than one holding. The national average hectarage of farm holdings is calculated on the basis of individual holdings, even when two or more adjacent properties are owned by the same firm. By contrast, respondents farming a number of holdings would have given the total hectarage of their farmed land, rather than the hectarage of individual units. Not surprisingly, there was a significant relationship between hectarage and the number of farms owned or managed (chi squared 81.5536, 28df, $p < 0.000$). When respondents farming more than one holding are removed from the analysis, the hectarage of the sample is closer to County and national levels, although is still high.

Table 5.1 Hectarage of sample compared with County and UK farms

Hectarage	Total Sample %	Single farm holding only %	County average %	UK average %
0-50	14.5	20.7) 75.6	65.8
51-100	20.1	24.9)	17.5
101-250	34.9	32.6	<300 18.3) 15.3
251-500	17.6	15.5)>300 5.9)
501+	12.8	6.2)	1.4

Source: MAFF (1992, 1993)

The agricultural activities of the sample were dominated by the production of cereals and other arable crops, notably sugar-beet. Almost 95 per cent of the sample engaged in cereals production and more than two-thirds produced other arable crops (Table 5.2). The next most frequently cited activities were beef cattle (19 per cent) and horticulture (14 per cent). A large proportion of the sample engaged in more than one activity, usually combining the production of cereals with other crops or livestock. The production of livestock, such as sheep, pigs, dairy cattle and fowls was, however, undertaken by only a small proportion of the sample.

In comparison with farming activities undertaken in Cambridgeshire and in England as a whole, the agricultural activities of the sample are biased towards cereals. Other arable crops, however, are under-represented in comparison with the County, but over-represented in comparison with England. It is possible that a simple explanation for the differences between the sample and County norms lies in the definition of certain crops, with respondents allocating some arable crops to the cereals category.⁷

⁷ Although MAFF are exact in allocating crops to particular categories, these categories are by no means universally applied or even understood by farmers themselves. In this survey alone, for example, several respondents allocated sugar-beet production to the "other" category, although MAFF

In comparison with the County, the percentage of the sample engaging in horticulture was low, and closer to the England total. The percentage of the sample engaging in livestock activities was, more or less, on a par with the County. Compared with England as a whole, however, the agricultural activities of the County are skewed away from livestock and towards cropping activities, reflecting the region's topographical, climatic and soil conditions. Production of fowls was low both in comparison with the norms for the County and England. Fowl production is normally undertaken on smaller sized holdings. In this sample, half of the farms engaging in fowl production were in the smallest size category (less than 50ha). The low proportion of sample farms engaged in this activity may, therefore, be a function of the bias towards larger farm sizes in the sample. On the two measures of hectareage and agricultural activities, therefore, the sample was considered broadly representative of the total farm population within Cambridgeshire.

Table 5.2 Farming activities of the sample compared with County and English activities: percentage of holdings engaged in activity

Activity	Sample %	County %	England %
Cereals	94.6	71.4	35.1
Other arable	67.3	95.6	29.4
Horticulture	13.9	31.2	15.9
Dairy cattle	3.4) 16.4) 49.6
Beef cattle	19.0))
Pigs	6.8	5.4	7.8
Sheep	7.8	7.5	32.1
Fowls	3.1	7.6	15.5
Other	5.1	-	-

Source: MAFF (1993)

treat this crop as "other arable". Where possible, "other" activities were reclassified into the correct categories prior to analysis.

While official sources provided a useful guide to agricultural land area and activities, official data is not available for rates of pluriactivity. Indeed, one of the objectives of the study was to establish rates and types of additional business activity. Thus, issues of non-response bias in rates of pluriactivity are more problematic. The issue was partially resolved by using previous studies as a broad guide for pluriactivity rates and consequently determining response bias. This is not entirely satisfactory as different studies have used different definitions of pluriactivity and consequently have reported widely differing rates. The previous study considered to be the most robust and used by this study as a broad guide to non-response bias was Bryden, Bell, Gilliatt, Hawkins and MacKinnon's (1992) report on Farm Household Adjustment in Western Europe 1987-1991, (Vols.1 and 2). One of the advantages of using this study is that their definition of pluriactivity is very clearly outlined and, moreover, they report on levels of different types of pluriactivity. Importantly, beyond reporting rates, they made no further investigation of additional business ownership by farmers.

The usable responses were analysed using SPSS for Windows (version 6.0). The analysis was undertaken in two stages, firstly using exploratory methods and secondly, subjecting the data to more formal statistical testing. The resulting analysis is presented in Chapters Six, Seven and Eight.

5.5.7 Limitations of the quantitative research

McGrath (1982) points out that research in practice requires the researcher to make decisions regarding approach, methodological technique and sampling strategy. Each decision reduces the options available to the researcher and consequently, a number of

compromises are made which, while offering some advantages, may also act as limitations to the study. Two particular decisions are considered below.

Firstly, the use of a study area approach was chosen in order to control for the environment in which the respondents operated. It is widely appreciated in the small business literature that the local environments in which firms operate demonstrate different levels of resource richness (usually seen in terms of munificence or hostility) and that this has an effect on firm behaviour (Cooper, 1993; Westhead, 1994a). Similarly, it has been noted in the agronomy literature that farming conditions (seen, for example, in the strength of local agricultural structures and markets) vary between areas (Bryden, Bell, Gilliat, Hawkins and MacKinnon, 1992). Drawing all the respondents from Cambridgeshire allowed issues of business and managerial behaviour to be studied without the need to control for the effect of different operating environments. While this offered convenience and an ability to restrict the fieldwork to the study's own resource constraints, it nevertheless may have a limiting effect on the applicability of the results. If the local environment is considered sufficiently important to need to control, it follows that farms operating in different local environments may be subject to quite different pressures and therefore manifest different managerial responses.

Secondly, this study is multi-disciplinary (in fact bi-disciplinary). Critics of this type of approach point out that superficiality can occur when subject specialization is breached. Kaplan (1964: 4), however, robustly defends this approach:

".. the domain of truth has no fixed boundaries within it. In the world of ideas there are no barriers to trade or to travel. Each discipline may take from the others techniques, concepts, laws, data, models, theories or explanations - in short, whatever it finds useful in its own inquiries. And it is a measure of its

success in these inquiries that it is asked in turn to give of its riches to other disciplines "

The study's need to merge small business and agricultural concepts did, however, pose practical problems in designing the questionnaire. Firstly, the sample population, used to defining itself in agricultural terms, has rarely been probed about subjective, behavioural and personal concepts associated with small business. While extensive pre-testing was undertaken, inevitably some wording or phrasing was open to (mis)interpretation. A second limitation of the questionnaire concerned question structure. With one exception, all of the questions on the questionnaire were closed. This deliberate strategy was to ensure ease and speed of completion and thus a higher response. This may, however, be at the expense of obtaining both unanticipated perspectives and greater detail of particular issues. Efforts were made to minimise this effect by using a qualitative phase prior to the survey research, attempting to design the questionnaire to be as sensitive as possible, and extensive pre-testing. Inevitably, however, the richness and depth of insight gleaned from, in particular, ethnographic approaches are unavailable in survey research.

5.6 Project timetable

The study was undertaken between September 1994 and May 1997. Key dates in the research process are given in Figure 5.5.

Figure 5.5 Research Timetable

Task	Completion date	
Identification of research topic	September	1994
Completion of main literature review	January - June	1995
Phase one: qualitative interviews	May- June	1995
Phase two: questionnaire design	June - October	1995
Pilot questionnaire	November	1995
Sample preparation	December	1995
Questionnaire mail out	January	1996
Questionnaire follow-up	February	1996
Cleaning, coding, data input	February - March	1996
Data analysis	March - October	1996
Writing up	June - December	1996
Re-drafting	January - May	1997

CHAPTER SIX

RESULTS: FARMS AS RURAL SMALL BUSINESSES

6.1 Introduction

It could be inferred from the rural small firm literature's exclusion of agriculture that farms differ substantially from other rural enterprises. Similarly it may be inferred that differences which exist between farms and other enterprises are manifested at the level of the individual enterprise and can be measured by empirical investigation. Thus, the first research objective was to examine the norms established by previous rural small business research by investigating the characteristics of the farm sector. Within the small business research literature there is an assumption that a comprehensive analysis of small firms depends on analysing three inter-relating elements: the background and starting resources of the owner, the firm, and the firm's management strategy (Storey, 1994). These factors form the first three sub-objectives of the research project:

1. To compare the personal characteristics of farm owners with those of non-farm business owners
2. To compare the characteristics of farm businesses with those of non-farm businesses
3. To compare the management strategies of farm businesses with those of non-farm businesses.

6.2 Characteristics of the farm owners

In this section some of the personal characteristics of the farm owners are examined. These include gender, age, mode of business entry and training. This section also considers the origin of the farm owners and the role of migration in relation to the farm owning population.

6.2.1 Gender

The vast majority (96 per cent) of respondents were male. Although there are no national figures identifying the gender of farm owners, it is likely that the dominance of male respondents seen in this sample reflects national patterns of ownership. The inheritance of farm land, at least until recently, has been traditionally through the male line (Gasson et al, 1988).

6.2.2 Age

It was established in Chapter Four that the age profile of farmers is higher than the non-farm workforce for a number of reasons. Consequently, it was anticipated that the age of farm owners would be markedly higher than that of owners of other rural firms. Initial results appeared to support this expectation. None of the respondents were aged under 25 and more than 40 per cent of the sample were aged over 56. Moreover, the mean age of 48 is higher than the mean of 41 found in a survey of the farm workforce undertaken by the OECD (1994).¹ A comparison with previous small business research, however, revealed a more complex picture.

¹ Largely reflecting sampling differences. In this survey only farm owners were included, unlike the OECD study which included the total agricultural workforce.

Table 6.1 Comparison of ages: non-farm and farm business owners

Cambridge SBRC Age Bands	Cambridge Survey %	Farm Survey Age Bands	Farm Survey %
		under 25	0.0
20-29	1.5	25-35	6.3
30-39	15.5	36-45	19.4
40-49	42.2	46-55	33.3
50-59	28.7	56-65	26.7
60 and over	12.1		
		66-	14.2

Source: Cambridge Small Business Research Centre (1992·9)

Table 6.1 presents a comparison of the ages of business owners reported in the Cambridge Small Business Research Centre survey (1992) and the current farm survey. Although the age bands are not directly comparable, the similarities are evident and it is notable that the mean age of the farm sample is only one year older than the median age of business owners reported in the Cambridge survey (Cambridge Small Business Research Centre, 1992·9)

6.2.3 Training

It was noted in Chapter Four that farmers tend to be poorly educated, and that this is a main factor in their apparent occupational immobility (Newby, 1979, Gasson, 1988). Results of the farm survey support those of previous agricultural studies in finding a poorly trained population (Table 6.2). Although training in agriculture was the most frequently reported training received, less than 60 per cent had undertaken training in this subject and only 19 per cent had a degree-level qualification in agriculture. Only 26 per cent had undertaken training in general management, of which half had received

vocational training. Only 4 per cent of the sample had a management degree. The proportion of the sample who had received any training in finance or marketing was even lower: 15 per cent of the sample had trained in finance and 13 per cent had trained in marketing. Eleven per cent had received training in other, unrelated subjects.

Table 6.2 Training undertaken by sample

Type of training	None		Vocation-al		Degree level		Profess-ional		Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Agriculture	126	43	74	25	56	19	40	14	296	100
Management	219	74	37	13	13	4	27	9	296	100
Finance	251	85	22	7	5	2	18	6	296	100
Marketing	260	88	25	8	2	1	9	3	296	100
Other	262	89	18	6	8	3	8	3	296	100

Notes * Rounded

As expected, younger respondents were more likely to have received formal training, reflecting the wider availability in recent years of training programmes and the growing expectation of attainment of qualifications. Of the five training areas analysed, younger respondents were significantly more likely to have received training in agriculture (chi squared 43.2089, 4df, $p < 0.000$), management (chi squared 19.1435, 4df, $p < 0.000$), finance (chi squared 26.0094, 4df, $p < 0.000$), and other subjects (chi squared 11.6034, 4df, $p < 0.02$). In total, 52 per cent of respondents aged 25-35 had some form of training, most of which was vocational, although 22 per cent had degree level or professional training. In the 36-45 age group only 32 per cent had undertaken any training, and for 46-55 year olds the figure was 26 per cent. Within the two oldest age groups less than 20 per cent had undertaken training (Table 6.3).

Table 6.3 Training (all subjects) by age of respondent

Level of training	25-35 %	36-45 %	46-55 %	56-65 %	over 66 %
Vocational	30	14	13	9	6
Degree level	12	9	6	2	4
Professional	10	9	7	6	4
None	48	68	74	83	86
Total	100	100	100	100	100

Within the small business literature there is a variety of evidence regarding the educational qualifications of the self-employed and small business owners. An analysis of the General Household Survey (Curran and Burrows, 1988) found that both small business owners and the self-employed had lower levels of educational qualifications than the overall workforce. A more recent survey of British enterprise (Cambridge Small Business Research Centre, 1992: 8), however, reported that

"the typical company board consisted of three directors of whom one had a degree and/or professional qualification. Around half of the companies had at least one director with a degree while two-thirds had at least one director with a professional qualification. In each of these respects the proportion of companies so endowed was higher than for partnerships and sole proprietorships"

Although direct comparisons cannot be drawn with the Cambridge survey, it is clear that the farm sample is less well qualified. This may also be related to the relatively low proportion of limited companies and the high proportion (78 per cent) of partnerships and sole proprietorships found in the sample.

6.2.4 Business entry

An analysis of the previous occupation of the sample revealed careers predominantly in farming. More than 85 per cent of respondents had worked on a farm prior to farm ownership. The remainder identified their previous occupation as employment in a large, non-farm business (5 per cent of the total sample), employment in a small, non-farm business (4 per cent), non-farm self-employment (2 per cent) and "other" (4 per cent) None reported themselves as unemployed prior to owning their farm business. The low proportion entering farming from a non-farm occupational background appears to conflict with notions of "hobby" farmers, entering the sector after successful non-farm careers. It may be assumed that for many respondents, their previous experience of farming was gained by working on the farm owned by their family. Nearly two-thirds of respondents inherited their farm business from their family² and a further 9 per cent bought the farm business from their family (Table 6.4). Over a quarter of respondents, however, either started the farm business themselves or bought a farm as a going concern. Those in the older age groups (over 46) were significantly more likely to have started the business themselves than those in younger age groups ($\chi^2 = 37.1956, 16df, p < 0.001$)

It would appear that method of business entry for farmers differs from that in non-farm sectors. Keeble's (1993) survey reported that 67 per cent started themselves, 13 per cent purchased an ongoing concern and a further 20 per cent resulted from spin-outs. Differences between farm and non-farm sectors appear to result from the tradition of land and occupational inheritance, still an important feature of the farm sector.

² As noted earlier in this chapter, agricultural tenancies can be transferred through generations and, as such, inheritance includes both those owning their land freehold and those who rent their land.

Table 6.4 Entry into farming

Entry into farming	No.	%
Inherited farm from family	181	64
Started farm by self	66	23
Bought farm from family	26	9
Bought farm as going concern	8	3
Other	1	-
TOTAL	282	100

Descriptions of current occupations also reveal an occupational attachment to farming. Over 86 per cent of respondents identified the farm business as their sole current occupation. The remaining respondents, however, gave an insight into the types of occupational combinations used by farmers. Only ten respondents (4 per cent) combined farming with employment in other firms. A further thirty respondents (10 per cent), however, combined farming with other business activities: eighteen were self-employed in another, non-farm, capacity and twelve stated that they had "wide and varied business interests".

6.2.5 Birthplace and migration

One of the most important findings of previous studies of non-farm rural businesses is the influence of migration in rural business formation (Keeble and Gould, 1985, Keeble et al, 1992, Keeble and Tyler, 1995). Keeble et al (1992: 14) summarised their findings:

".. the survey clearly identifies a major difference in the origins of entrepreneurs establishing locally-founded businesses (i.e. excluding company relocations) as between urban and rural areas. Most rural new firm founders are in-migrants from elsewhere ("not born in this county"). The proportion of migrants amongst the population of entrepreneurs thus ranges from 66% in

accessible and 58% in remote rural areas to only 35% in urban areas This is a statistically very significant difference "

In order to assess the patterns of migration in the farm sample, two questions were posed asking respondents to identify whether they were born in the County and whether they had migrated to the County in order to start or inherit their business Because farming is characterised by both the occupational and the residential immobility of farmers - demonstrated in this sample by the high proportion with previous experience of working on the family farm and their subsequent inheritance of farmland - it was expected that farm owners would differ substantially from non-farm business owners on the issue of migration The responses showed some surprising similarities with non-farm rural business owners, however More than 60 per cent of the sample were born outside of Cambridgeshire and are thus, using Keeble et al's (1992) definition, "in-migrants"

Two conflicting reasons can be proposed to account for this finding Firstly, contrary to the prevailing orthodoxy which characterises farmers as residentially immobile, farm owners demonstrate the same migration trends as other entrepreneurial groups The convergence between farm owners and other rural business owners on this measure is of crucial importance Although normally characterised by immobility, farm owners appear to be as mobile as other entrepreneurs in seeking business opportunities. Consequently, the view that farm sectors are typified by a lack of entrepreneurialism can be dismissed, at least on this basis

A second, contrary explanation may be more plausible, however Rather than being a feature of specifically entrepreneurial groups, migration trends may be present in the total population Changing demographic and socio-economic trends in the UK have

led to an increasingly mobile population. It is now increasingly unlikely that a person will reside in the county of birth for life. Such relocation may even be the norm and life residency in the county of birth the exception. Given such a trend, it is questionable as to whether relocated individuals should be termed migrants. It is also questionable as to whether birthplace alone is an appropriate measure of migration.³

Table 6.5 **Origins of founders: a comparison of non-farm and farm business owners**

Birthplace and Migration	Remote rural	Accessible rural	Urban	Farm survey
	%	%	%	%
Born in county	42.4	34.2	65.6	39.9
Moved to county before setting up firm	36.5	52.5	25.9	n/a
Moved to set up firm	21.1	13.3	8.6	11.4

Source: Keeble, Tyler, Broom and Lewis (1992: 14)

³ The broad parity in the findings between the farm sample and the rural firms surveyed by Keeble et al (1992) suggests that there may be broad distinctions between the birthplace of rural and urban dwellers and that these distinctions are not confined to a specifically entrepreneurial population. Rather, two other explanations are likely. Firstly, Local Authority boundary changes have brought more change to rural and non-metropolitan areas than to the "free-standing towns and cities" included in the survey by Keeble et al (1992: 50). In the farm survey, several respondents stated that they were not born in Cambridgeshire, but in the Soke of Ely or in Huntingdonshire. Both these areas, once counties in their own right, have now been subsumed into Cambridgeshire. Urban areas, and especially free-standing county towns, such as Cambridge, have been less affected by such boundary changes. As a result, rural residents - particularly the mature adult population - are less likely to have been born in their county of residence than are urban residents.

Secondly, one of the defining characteristics of rural areas is the lack of many of the basic infrastructure services found in urban areas. The lack of health services and, in particular, maternity provision in rural areas forces many rural residents to travel to urban areas to receive medical care. It is possible that the lower proportion of rural residents born within their county may simply be a function of the relatively poorer rural infrastructure and a reflection of the distances travelled to receive healthcare. Both these factors will affect the entire population of rural and urban areas, not simply those starting businesses.

A more precise measure of migration is generated by self-reporting of respondents. Using this measure Keeble et al (1992:14) again found differences between rural and urban founders, although these were less distinct than those found using birthplace as the primary measure:

".. while most migrant entrepreneurs - and especially those settling in accessible rural areas - moved to the countryside prior to setting up their firm, one fifth (21%) of all remote rural founders actually moved there in order to establish their enterprise".

This investigation was replicated in the farm survey by asking respondents whether they moved or returned to Cambridgeshire "in order to start or inherit" their business. In total, 33 (11.4 per cent) respondents had migrated for this purpose, compared with 8.6 per cent of Keeble et al's urban founders and 13.3 per cent accessible rural founders (Table 6.5). Importantly, an analysis of business entry shows that the majority of those who had migrated for business purposes had inherited their farms (Table 6.6). Compared with the total sample, however, migrants were slightly less likely to inherit or buy the family farm and more likely (but not significantly) to start the farm business themselves (chi squared 1.6116, 1df, p < 0.204).

Table 6.6 Entry into farming by decision to migrate

Entry into farm business ownership	Migrated to county to start or inherit the farm business		Total sample
	Non-migrant %	Migrant %	%
Inherited family business	66	58	65
Bought family business	10	3	9
Bought going concern	2	6	3
Started business by self	21	32	23
TOTAL	100	100	100

Given the importance of migration in the rural small firm literature, some further analysis was undertaken in order to identify differences between those who had migrated for business purposes and the rest of the sample. If this group conformed to the characteristics of entrepreneurial migrants, some differences would have been expected, for example, in their previous training and occupations, the size and subsequent performance of the firm, and their propensity to start additional businesses. None, however, were found.⁴

6.3 Characteristics of the farm businesses

In this section some of the characteristics of the farm businesses are examined. An analysis of the sample's hectareage and agricultural activities was presented in Chapter Five. This section considers issues of tenure, legal status of ownership and agricultural sales revenue and profitability.

6.3.1 Tenure of farm premises

Within the agriculture literature it has frequently been stressed that ownership and control over land is one of the distinguishing features of the agriculture sector (Pahl, 1965, 1966, Newby et al, 1978, Newby, 1979, 1982). Within the small business research literature there has been little emphasis given to tenure patterns of business premises. Rather, the emphasis has been the general availability of small business property. A notable exception was Keeble et al's (1992) study which reported patterns of property tenure in remote rural, accessible rural and urban firms. Freehold

⁴ Given the importance of this issue, further analysis will be undertaken using matched samples of migrants and non-migrants in order to tease out in more detail any distinctions that may exist, and explain those that do not.

ownership was most likely to occur in remote rural locations and least likely in urban locations. Conversely, leasehold was prevalent in urban locations Keeble et al's (1992) results were upheld by Blackburn and Curran (1993) who found freehold ownership in rural businesses to be significantly higher and leasehold/rental to be significantly lower than in urban firms. ⁵ On the basis of the previous literature, it was anticipated that the tenure of farm premises would differ markedly from other rural firms

Table 6.7 Farm tenure

Type of tenure	No.	%
Wholly owned	82	28
Mainly owned	99	34
Mainly tenanted	62	21
Wholly tenanted	49	17
TOTAL	292	100

Nearly two thirds (62 per cent) of the sample owned all or most of their property (Table 6.7) Compared with agricultural tenure patterns in Great Britain, in which 74 per cent of farmers own or mainly own their land (MAFF, 1992), the sample is skewed away from ownership and towards, in particular, mixed tenure The difference found between the sample and national norms is most probably explained by the larger sized farms found in the sample ⁶ As Table 6.8 demonstrates, land rental in the sample

⁵ Interestingly, Blackburn and Curran (1993:175) interpreted these results as demonstrating the strength of rural enterprises "The findings go against any rudimentary notion that smaller businesses located in a rural area are less substantial than their urban counterparts a business may be small measured conventionally in terms of turnover or employment but this may not be the whole story"

⁶ Although no County figures are available to compare levels of ownership, as a result of larger farm sizes in Cambridgeshire, it is likely that ownership in the County is above the national average Thus, the 62 per cent of the sample who own or mainly own their land is probably on a par with County norms, but below the national rate of 74 per cent

farms occurred mainly on the larger sized, mixed tenure farms (although no statistically significant relationship was found between hectarage and ownership). Mixed tenure normally occurs when a family owned farm has the opportunity of taking up the tenancy of a neighbouring holding. In a sector where growth is restricted by land availability, such opportunities are unusual and tend to be keenly sought as the ability to spread fixed costs over a greater land area offers financial advantages to farmers. This mechanism for moving towards large scale production was found among the sample farms: 49 (17 per cent) had bought or tenanted an additional farm business and 118 (40 per cent) had bought or tenanted additional farm land in the previous five years. Nearly three quarters (72 per cent) of the sample owner-managed only one farm business. Of the remainder, 16 per cent operated two farm businesses and a further 12 per cent operated between three and five farms. Owner-managers of multiple farm businesses normally farmed them as one unit in order to retain economies of scale, but registered them as separate businesses for tax purposes.

Table 6.8 Farm ownership by size (hectarage) bands of holdings

Owner-ship	0-50ha	51-100 ha	101-250ha	251-500ha	over 500ha	Total
Wholly owned	18 6.3%	14 4.9%	28 9.7%	15 5.2%	6 2.1%	81 28.2%
Mainly owned	10 3.5%	16 5.6%	34 11.8%	20 6.9%	17 5.9%	97 33.7%
Mainly tenanted	8 2.8%	16 5.6%	21 7.3%	7 2.4%	10 3.5%	62 21.6%
Wholly tenanted	6 2.1%	12 4.2%	17 5.9%	9 3.1%	4 1.4%	48 16.7%
TOTAL	42	58	100	51	37	288
%	14.7%	20.3%	34.7%	17.6%	12.9%	100.2%

As Table 6.9 shows, contrary to expectation the tenure patterns of the farm sample were almost identical to those non-farm businesses operating in the "accessible" rural locations identified by Keeble et al (1992).^{7 8} That the farm businesses conformed to the non-farm, "accessible" rural sample on the issue of property tenure is of interest for a number of reasons. Firstly, it demonstrates that farm enterprises, rather than differing from other businesses, conform to the rural business norm. Secondly, as Blackburn and Curran (1993:174) note in their study of service businesses, freehold ownership indicates a business "which has achieved stability". Rather than supporting views of sectoral decline, the prevalence of freehold ownership among the farm businesses can be interpreted as an indicator of the strength of the sector. At the same time, this finding supports the view suggested by the rural small business literature that variations in type of rurality may be a more powerful and important influence on the individual firm than sectoral variations (Keeble and Tyler, 1995). Finally, the finding negates the importance of land tenure as a distinguishing feature of agriculture. In the ownership of land, farms are no different to any other rural enterprise.

⁷ It was noted in Appendix Two that Cambridgeshire, although not included in Keeble et al's (1992) study, could be described as an "accessible" rural location, lacking the key distinction of peripherality present in those areas described as "remote" rural.

⁸ Although there are legal differences between leasehold property and agricultural tenancy, there are many practical similarities. The most important similarity is the ability to inherit the lease/tenancy through successive generations, depending on the terms of the agreement.

Table 6.9 A comparison of tenure patterns of non-farm and farm businesses

Ownership	Tenure of small business premises			Tenure of farmland	
	Remote Rural %	Accessible rural %	Urban %	Ownership	%
Freehold	70.8	60.3	44.0	All/ Mostly Owned	62.0
Leasehold	29.2	39.7	56.0	All/ Mostly Tenanted	38.0
TOTAL	100	100	100	TOTAL	100

Source: Keeble, Tyler, Lewis and Broom (1992:29).

6.3.2 Legal status of ownership

Statistical profiles of the small firm sector demonstrate that the legal status of firm ownership is influenced by both sector of activity and the size of the firm (CSO, 1994). Evidence concerning the influence of rurality on the legal status of ownership is more ambiguous, although previous studies have commented on the smaller average size and thus the differing legal forms of ownership of rural firms (Blackburn and Curran, 1993, Westhead, 1995). More than half (53 per cent) of the farm businesses were partnerships, with the remainder made up of sole traders (25 per cent) and limited companies (21 per cent). This pattern of ownership clearly reflects the dominance of small, owner-operated businesses within the farming sector. In comparison with total manufacturing and business services enterprises, the sample under-represents incorporated businesses and over-represents partnerships and sole proprietorships.⁹ Townroe and Mallelieu (1993) found an equally low proportion of incorporated firms (25 per cent) in their sample of rural businesses, but fewer partnerships (31 per cent) and a greater proportion of sole traders (44 per cent). The apparent bias towards

⁹ VAT registered legal units in manufacturing and business services are as follows: sole proprietorships 30.5 per cent, partnerships 16.4 per cent, companies 53.1 per cent (Cambridge Small Business Research Centre, 1992).

partnerships within the farm sample is most probably a reflection of their small size and the high level of family involvement in farm businesses

6.3.3 Sales revenue and profitability

Evidence from the Farm Business Survey suggests that farm incomes are generally low. In the latest survey, between 37 per cent and 44 per cent of farms throughout the UK had a net farm income of less than £10,000, while a quarter of English farms had a net farm income in excess of £30,000 (MAFF, 1994). Within the agronomy literature declining farm incomes have been associated with the fall in establishment numbers (Hill, 1982; Jaitly, 1993). As a result, it was anticipated that both agricultural sales revenue and farm profitability would be lower than that of other rural firms.

Agricultural sales revenue of the sample farms varied between less than £50,000 (16 per cent) and more than £5 million (1 per cent). Almost half of the sample, however, had a farm sales revenue of between £100,000 and £500,000. Not surprisingly, agricultural sales revenue was significantly associated with hectareage (chi squared 332.9801, 20df, $p < 0.000$). The greater the hectareage, the higher the agricultural sales revenue. Although the figures cannot be directly compared with those of the Farm Business Survey (MAFF, 1994b),¹⁰ the sample farms appear to perform favourably, probably reflecting the larger farm sizes found in the sample and also the comparatively lucrative cropping activities which predominate in Cambridgeshire. All the farms in the current survey were registered for value added tax (VAT).

¹⁰ See Chapter Four for a fuller discussion of the difficulties experienced in the measurement of farm incomes

Comparisons with small firms in other sectors are also problematic, however, levels of sales revenue reported in Blackburn and Curran's (1993) survey of service firms bear a similarity to those of the farm survey (Table 6.10). While fewer farms reported levels of sales revenue below £50,000 than rural service firms, the number of farms with sales revenues of between £50,000 and £500,000 were similar to both rural and urban service businesses. An equal number of farms and rural service firms (16 per cent) reported sales revenues in excess of £500,000, although both were outperformed by urban service firms. Blackburn and Curran (1993: 173) attributed the performance of rural firms to the low population density and the consequent small market size of rural areas, but also pointed out that firms in urban areas often require a "higher level of minimum efficient scale".

Table 6.10 Farm (agricultural) sales revenue compared with service sector firms

Sales revenue	Farm survey No.	Farm survey %*	Service sector Urban %*	Service sector Rural %*
Less than £50,000	45	16	12	24
£50,000 - £100,000	58	21	21	20
£100,000 - £500,000	125	45	44	40
£500,000 - £1 million	30	11	24	16
£1 million - £5 million	15	5))
More than £5 million	3	1))

Source. Blackburn and Curran (1993: 174) Notes * Rounded

The similarity between farms and service firms on the issue of sales revenue is of interest for two reasons. Firstly, it is a further characteristic which demonstrates the convergence of farm enterprises with those in non-farm sectors. Secondly, the rural enterprise literature has stressed the importance of service firms in rural areas, often as

a replacement for agriculture Curran and Storey (1993 3), for example, describe the service sector as becoming

"the real base of economic support in rural areas as well as their hope for the future "

Although agricultural decline has been marked by an aggregate fall in establishment and employment numbers, it appears that the residual farm businesses still compare favourably with newer forms of rural enterprise, at least on the basis of sales revenue.

It was similarly anticipated that levels of farm profitability on agricultural activities would also be lower than for other rural enterprises. This was rejected by the findings Following Smallbone, North and Leigh (1993 89), measurement of profitability was defined as "pre-tax profit as a percentage of turnover" More than 93 per cent of the sample farms reported a pre-tax profit on their agricultural activities, with 82 per cent reporting pre-tax profits of 5 per cent or more Interestingly, while agricultural sales revenue was significantly associated with hectarage, farm profitability was not (chi squared 12.4945, 8df, $p < 0.13$) Compared with findings drawn from a survey of mature manufacturing firms, the sample performed well on this criteria (Table 6.11) Smallbone, North and Leigh (1993) found that manufacturing firms in rural areas reported higher pre-tax profits than those based in London The farm sample, however, outperformed even rural manufacturing firms in reported pre-tax profits

Table 6.11 A comparison of non-farm and farm profitability

Pre-tax profit or loss as % of T/O	London based manufacturing firms 1989 %	Rurally based manufacturing firms 1989 %	Farm sample 1996 %
Profit 5% or more	22	70	82
Profit less than 5%	57	14	12
Break-even	7	6	4
Loss less than 5%	14	8	2
Loss more than 5%	3	3	1
TOTAL	100 (n=126)	100 (n=80)	100 (n=275)

Source: Smallbone, North and Leigh (1993.90)

This finding is noteworthy for two reasons. Firstly, while many small business studies have examined newer firms, Smallbone et al 's sample was composed of firms founded at least ten years earlier. As such, their sample provides a particularly relevant comparison with the farm businesses, the majority of which had been inherited from predecessors. It is clear from the comparison that the high levels of farm profitability are not a result of the relative maturity of farms, rather they are indicative of the overall strength of the farm sector. Secondly, that farms outperformed other types of rural enterprise on levels of profitability may have implications for agricultural policy. Undoubtedly, all the farms in the sample benefited from agricultural support, although the extent to which this contributed to profit levels in individual enterprises was not investigated. One of the main aims of the CAP is to provide an income to farmers on a par with their equivalents in other sectors. That few previous studies have examined farms in the context of other small firms has hindered evaluation of this policy. However, on the basis of this crude comparison, it appears that the policy may have succeeded to excess.

6.4 Farm management strategy

In this section some of the management strategies of the farm owners are examined. These include recent management changes, formalised growth objectives, the use of external assistance, markets and customers and finally, business constraints and opportunities

6.4.1 Recent managerial adjustments

Within the small firms literature, it is an orthodoxy that small business growth and development entails a move towards professional management. Although Storey (1994: 122) warns against the uncritical use of stage models as the most appropriate theoretical framework, there is a consensus within the literature that organizational adjustment is a pre-requisite for small business growth. Smallbone et al (1993: 123) describe the process

"An important threshold for owners and managers of small manufacturing companies is to make the transition from being in effect a factory manager to managing the assets of the company so as to maximise the profit potential of the business. To pass over this barrier requires time to be created for management tasks beyond those associated with day-to-day operational matters"

In comparison with Smallbone et al 's (1993) findings from mature manufacturing firms, few farm businesses had made significant managerial adjustments in the previous five years (Table 6.12). The two changes most frequently cited by respondents entailed increasing their own time on management issues and business planning. It is likely that the emphasis on increasing their own managerial time is a result of the increasing complexity and competitiveness now associated with farm business management.

Table 6.12 Management changes in the past five years

Management Change	Yes		No	
	No.	%	No.	%
Increased number of managers	16	6	267	94
Decreased number of managers	11	4	272	96
Employed a professional manager	6	2	277	98
Increased personal time spent on management	103	36	180	64
Increased personal time spent on business planning	102	36	181	64

Other managerial changes were cited by much fewer respondents. Six per cent had increased the number of managers, four per cent had decreased the number of managers and only two per cent had recruited an external manager in the previous five years. Management changes were significantly associated with both the size of the farm businesses (hectarage and sales revenue) and the previous training of the farm owners. Farms with larger hectarage were more likely to have both increased and decreased the number of managers (chi squared 23.0211, 4df, $p < 0.000$ and chi squared 19.4295, 4df, $p < 0.000$ respectively) and to have increased their own time in managing and planning (chi squared 22.5779, 4df, $p < 0.000$ and chi squared 30.1026, 4df, $p < 0.000$ respectively). Similarly, farms with high agricultural sales revenues were also more likely to have instituted management changes: increasing the number of managers (chi squared 44.9151, 5df, $p < 0.000$), decreasing the number of managers (chi squared 21.7507, 5df, $p < 0.000$) and employing a professional manager (chi squared 19.0818, 5df, $p < 0.001$). Farms with lower levels of agricultural sales revenue were more likely to increase their own time in management (chi squared 15.0705, 5df, $p < 0.01$) and business planning (chi squared 23.1849, 5df, $p < 0.000$). Interestingly, no

significant relationship was found between management changes in the previous five years and levels of profitability

The relationship between the type of training undertaken and subsequent management changes gave a slightly different insight into the data. Those with degree level training in agriculture and management were more likely to have reduced the numbers of managers in the farms (chi squared 10.2482, 2df, $p < 0.005$ and chi squared 8.9120, 2df, $p < 0.01$ respectively), while those who had received some training in marketing and in other, unspecified subjects were more likely to have employed an external farm manager (chi squared 9.0909, 2df, $p < 0.01$ and chi squared 6.9062, 2df, $p < 0.03$ respectively)

The continuing importance of the family in managing the business was seen in the responses to the issue of management delegation. Nearly half (48 per cent) of the respondents delegated management tasks to a family member, who - in many cases - was also an employee. A further 16 per cent delegated to a non-family farm employee. Professional managers were used by only 8 per cent of the sample and a further 28% did not delegate at all.

6.4.2 Business growth

Because the rural small firms literature has stressed agricultural decline, it was expected that farm owners would be less likely to have a growth objective than owners of other small firms. In total, 43 per cent of the companies in the survey stated that they had a specified growth objective. Although this proportion appears low, comparisons with previous studies of small firms reveal that this proportion is the norm. Hakim's (1989) analysis of 747,970 small firms found that a similar proportion

(45 per cent) had plans for expansion. Moreover, a description of the remaining 55 per cent is noteworthy.

"[The] typical no-growth firms were unincorporated businesses that were home-based and which employed only one or two people, including the owner-manager. Conversely, she found the faster growth firms were much more likely to be limited companies."

(Storey, 1994: 119-120)

In the context of this description, the growth aspirations of the farm sample, dominated by unincorporated, home-based firms, appear ambitious. Distinctions could, however, be drawn within the sample. Those with a specified growth objective were more likely to have received training either in agriculture (chi squared 9.2773, 1df, $p < 0.002$), management (chi squared 5.5123, 1df, $p < 0.018$), or finance (chi squared 4.0700, 1df, $p < 0.043$). They were also more likely to have made managerial adjustments, including increasing the number of managers (chi squared 4.6456, 1df, $p < 0.03$), decreasing the number of managers (chi squared 7.0969, 1df, $p < 0.007$), and increasing their own time spent on management (chi squared 8.8170, 1df, $p < 0.002$) and on business planning (chi squared 13.6923, 1df, $p < 0.000$). Those who had migrated to the County to start or inherit firms were no more likely to have a specified growth objective than the rest of the sample.

6.4.3 External advice and assistance

The use of external business advisory services by the farm owners was similar to that reported in the small business literature. Most used private sector management advice for specialist information and little use was made of the public sector advisory services. The Cambridge Small Business Research Centre survey found that 69 per

cent of fast-growth firms and 59 per cent of stable or declining firms sought taxation and financial advice. The Cambridge survey also found that the use of public sector agencies such as the Small Firms Service and Local Enterprise Agencies was restricted to a small minority (7 per cent) of firms (Cambridge Small Business Research Centre, 1992: 30-31). A similar pattern emerged from the farm survey (Table 6.13). In total, 68 per cent of respondents had sought advice from accountants and a quarter used this source on a regular basis. Other private sector sources such as banks, suppliers, customers and other business owners were also used for management advice and information. A relationship emerged between usage of external advisory agencies and the size of the farms. Farms in the larger hectare groups were more likely to use accountants ($\chi^2 = 18.2599$, 4df, $p < 0.001$), and other business owners ($\chi^2 = 12.9866$, 4df, $p < 0.01$) as a source of management advice.

The use of public sector assistance was minimal. Only six per cent had ever used a Training and Enterprise Council (TEC) and only four respondents had used a Local Enterprise Agency. In part, this pattern of usage reflects the maturity of the businesses and the recognition that many Enterprise Agencies specialise in start-up assistance. However, it may also reflect the historical separation of agriculture from other forms of industry, even the provision of management assistance for farmers is removed from the mainstream help given to industry. The most frequently cited source of external advice was the Agricultural Development and Advisory Service (ADAS), a recently privatised organization specialising in technical and managerial information for farmers. Although the use of this agency was seen throughout the farm size spectrum, greater use was made by the larger hectare farms ($\chi^2 = 28.8407$, 4df, $p < 0.000$). The popularity of ADAS as a provider of external assistance may have important implications for the non-farm sectors. Specialist, sectorally-specific advice

may be the most appropriate mechanism in diffusing external assistance into other sectors, besides farming

Table 6.13 Sources of Management Advice and Assistance (n=291)

Source of management advice and assistance	Never Used		Have Used		Regularly Used (4xpa)	
	No.	%	No.	%	No.	%
ADAS	76	26	127	43	88	30
Accountant	92	31	123	42	76	26
Bank	184	62	90	30	17	6
Suppliers	169	57	67	23	55	19
Customers	248	84	32	11	11	4
Other business owners	257	87	22	7	12	4
TEC	274	93	14	5	3	1
Other	277	94	8	3	6	2
Local Enterprise Agency	286	97	4	1	1	-

6.4.4 Markets and customers

It is evident that the type of marketing activities undertaken by farms is influenced by both market structures and the degree of regulation present in commodity sub-sectors. Importantly, however, farm owners have the ability to control the marketing function through variations in products, prices, customers and distribution strategies. Although marketing was not the main focus of this thesis, three specific areas were considered in the evaluation of marketing activities. type of customers, location of markets and overall attitudes to marketing strategies.

6 4 4 1 Type of customers

The type of customer used by the farms was influenced both by the type of commodities produced and the hectareage of the farm. The most important customers

were wholesalers and processors used by 62 per cent and 51 per cent of the sample respectively (Table 6.14). The importance of wholesalers has declined in recent years as the retail multiples have internalised the purchasing and distributive function (Shaw, Gibbs and Grey, 1994). Nevertheless, they emerged as the customer group served by the largest proportion of the sample. Importantly, however, no analysis was undertaken examining the proportion or value of sales going to each customer group. Processors were also used extensively and were significantly more likely to be used by larger (251+ha) hectare farms (chi squared 11 5857, 4df, $p < 0.02$), those producing other arable crops (chi squared 11 3386, 1df, $p < 0.000$) and younger owners (chi squared 9 6633, 4df, $p < 0.04$). Auction markets were significantly associated with the production of livestock, irrespective of the hectare of the farm. Fewer respondents used other types of customers, although it is notable that farm shops, and restaurants and caterers were significantly associated with the production of horticulture and, to a lesser extent, fowls.

Table 6.14 Customers served by the farm businesses: number of farms

Customer	No.	%
Wholesalers	183	62
Processors	149	51
Auction markets	49	17
Independent retailers	37	13
Multiple retailers	26	9
Farm shops	13	4
Restaurants and caterers	6	2
Other	54	18

Notes. Multiple response, $n=294$

Comparatively few farms (9 per cent) supplied the retail multiples sector. Those that did were more likely to be in the larger hectare (251+ ha) categories (chi squared

12.5714, 4df, $p.<0.013$), have a greater sales revenue (chi squared 47.9030, 5df, $p.<0.000$) and be horticulture producers (chi squared 18.8942, 1df, $p.<0.000$). Within the farming community there is some ambivalence about the retail multiple sector. Many farmers view their market domination as threatening and the investment normally required as a pre-requisite to supply, financially burdensome.¹¹ Others, however, recognise this sector as a premium market and strive to satisfy the rigorous quality and consistency criteria demanded. Perhaps as a result of the difficulties associated with supplying this sector, a significant relationship emerged between this customer group and the training of farm owners. Those who supplied this sector were more likely to have training in agriculture (chi squared 14.1807, 1df, $p.<0.000$), management (chi squared 32.8032, 1df, $p.<0.000$) and finance (chi squared 11.9611, 1df, $p.<0.000$).

6.4.4.2 Location of markets

Within the rural small business literature, there is some evidence to suggest that rural firms are more likely to serve distant, non-local markets (Keeble et al, 1992; Smallbone et al, 1993). However, it is also recognized that sector is an important factor in determining the location of sales (Blackburn and Curran, 1993). Within agriculture, sectoral forces are pronounced: agricultural commodities tend to be bulky, perishable and low-value. It was as expected, therefore, that the majority (71 per cent) of farms served local or regional markets. The extensive use of processors, however, contributed to the relatively high proportion (61 per cent) serving national markets.

¹¹ The survey found some support for this view: although a significant relationship was found between retail multiples and farm sales revenue, none was found between retail multiples and level of profitability (chi squared .8012, 2df, $p.<0.669$).

In comparison with Keeble et al's (1992) survey of rural and urban firms, the farms appear to perform favourably in serving national and overseas markets (Table 6 15) No differentiation was made in the value of sales destined for each market and consequently no direct comparisons are possible However, in comparison with an earlier survey which measured the numbers of exporting firms as opposed to the percentage of overseas sales, the proportion of farms serving export markets (16 per cent) is low

"Although the typical SME does not export, around 38 per cent do, and the .. likelihood of exporting rises substantially beyond the micro size band and with age. Where new and small firms do export, their relatively high export intensity suggest an early degree of export specialisation in their strategies "

(Cambridge Small Business Research Centre, 1992 13)

Within the farming sector, export markets are most commonly served during domestic gluts as a short-term measure to dispose of excess supplies Examples of farmers operating a systematic exporting strategy are unusual and tend to be associated with a product specialisation Although no significant relationship was found between exporting and product base, there was a significant relationship between exporting and hectarage (chi squared 30 1808, 4df, $p < 0.000$) and also between exporting and age of owner Those in the age group 36-45 were more likely to export (chi squared 4 8171, 1df, $p < 0.028$) and those aged over 66 less likely to export (chi squared 4 7392, 1df, $p < 0.029$) Interestingly, those who had migrated for business purposes were no more likely to export than the rest of the sample

Table 6.15 Location of markets: farm survey (percentage of firms) compared with rural and urban firms (percentage of sales)

Location of sales	Urban firms	Accessible rural firms	Remote rural firms	Agriculture markets *
Local and regional	46.3	36 0	40 5	71
Rest of UK	39 8	47 3	50.3	61
Exports	12 2	16 7	11 0	16

Source: Keeble et al (1992: 12). Notes: *multiple response

6 4 4 3 Marketing strategy

The questionnaire presented respondents with eight statements relating to marketing strategy. The results, measured by Likert scales, demonstrate a broad lack of market orientation and reflect the paucity of marketing training among the sample (Table 6 16). In total, 30 per cent of farm owners believed that new markets existed for their products if they chose to exploit them. That so many farmers could identify new market opportunities without necessarily exploiting them, is a reflection of the market protection enjoyed by many farmers. Importantly, however, over a third (37%) had changed their product range in the previous three years, specifically to take advantage of new opportunities. Confidence in their market orientation was not strong, however. Only half the businesses (50%) agreed that they could compete favourably with their closest rivals. Like many small firms, the majority of the farms (75%) were dependent on a few key customers for a large proportion of their sales. Perhaps because of the relative importance of a few main customers, most (77 per cent) stated that they were sensitive to the needs of their customers and only a fifth (21%) had made any changes to their customer service in the previous three years. Farmers were more equivocal about levels of competition in farming. A third of respondents (34%) believed that competition in farming was more intense than in other rural industries, but only 13 per

cent believed that business opportunities in farming were more readily available than in other rural industries.

Table 6.16 Farm marketing strategy: a comparison of means

Statements of marketing strategy	Mean 0 (-2 - +2)	Std. dev.
There are new market opportunities for my agricultural products, if I wish to exploit them	+0 03	1 10
We have a strong market orientation and can compete favourably with our closest competitors	+0.44	1 05
We have changed our product range in the past three years to take advantage of market opportunities	-0 06	1 26
We have changed our customer service in the past 3 years to increase our competitive edge	-0 28	1 15
We are sensitive to our customer's needs	+1 05	0 98
We rely heavily on a few key customers for a large proportion of our sales	+1.02	1 09
Competition in farming is more intense than in other rural industries	+0 05	1 22
Business opportunities in farming are more readily available than in other rural industries	-0 71	1 11

6.4.5 Business constraints and opportunities

Although previous studies have identified factors which constrain rural firms, it has been recognised that the severity of such constraints is "relatively low" and that comparatively few firms are affected (Keeble et al 1992 26) Results from the farm survey support these broad findings The most cited constraint experienced by farms was a shortage of available land (Table 6 17). More than 70 per cent of the sample identified this as a constraint on growth, although those in the younger age groups were more likely to identify land shortage as a growth constraint (chi squared 16 8082, 4df, p <0 002)

Table 6.17 Barriers to business growth

Barrier	Yes		No		Total	
	No.	%	No.	%	n	%
Shortage of available land	202	70	85	30	287	100
High cost of machinery/equipment	126	44	160	56	286	100
Lack - long term capital investment	56	20	230	80	286	100
Shortage of available buildings	39	14	247	86	286	100
Lack of market demand	34	12	252	88	286	100
Local skills shortage	21	7	266	93	287	100
Local labour shortage	17	6	271	94	288	100

Similarities between the Keeble et al (1993) study and the farm survey were also apparent on the issue of financial constraints. Less than half of the respondents cited the cost of capital equipment and the lack of long term capital investment as a growth constraint. A divergence between the farm survey and the Keeble et al (1993) did, however, emerge on the issue of market demand. A lack of market demand was cited as a constraint by only 12 per cent of farms compared to 35 per cent of rural non-farm businesses (Keeble et al, 1993: 27). Labour market constraints, in the form of labour and skills shortages, were cited by few respondents, although younger farm owners were more likely to cite skills shortages as a growth constraint ($\chi^2 = 15.3517$, 4df, $p < 0.004$).

The identification of business opportunities serves as an interesting counterpoint to growth constraints. Table 6.18 presents a comparison of means for six statements relating to the identification of business opportunities in farming. Most farmers (57 per cent) believed that greater growth will accrue from a continued specialization in farming, rather than diversification into other sectors or industries (27 per cent). Although 37 per cent agreed that they actively sought business ideas, fewer were

motivated by declining farm incomes (31 per cent). Although there was a greater polarization of responses, less than a third (32 per cent) agreed that they were entrepreneurs and only 20 per cent agreed that there was a family history of business start-up.

Table 6.18 Business opportunities: a comparison of means

Statement	Mean - 0 (-2 - +2)	Std. dev.
I can achieve greater business growth by specialising in specific farming sectors	+0 61	1 09
I can achieve greater business growth by introducing diversified activities	-0 21	1 10
I must initiate other business ventures in order to cope with declining farm incomes	-0 17	1 22
I actively seek out new business ideas for development	+0 02	1 25
I am an entrepreneur and will start a new business if I have the opportunity and resources	-0 14	1 31
There is a tradition in my family of starting new businesses	-0 54	1 22

6.5 Conclusion

Although the rural small firms literature has excluded the agriculture sector, it is clear from this analysis that farms conform to many of the norms established in studies of rural firms. The convergence of farms with other small, rural firms is evident in the analysis of the characteristics of both the farm businesses and the farm owners. The differences which exist between farms and non farm enterprises appear to be at their greatest in the area of the management strategies adopted. Perhaps as a result of the broad protective measures awarded to the sector, few farmers have yet developed complex strategies of differentiation. Despite differences in strategic complexity, it is clear that both farms and non-farm enterprises share many common features.

CHAPTER SEVEN

RESULTS: THE ADDITIONAL BUSINESS ACTIVITIES OF FARMS

7.1 Introduction

The second research objective was to investigate the contribution of farms and farm owners to rural small business development, concentrating in particular on additional business activities, employment generation and wealth creation. This objective was refined into the following sub-objectives.

1. To distinguish between the types of business activities undertaken by farm principals.
2. To estimate the proportion of farms engaging in the various types of additional business activities.
3. To enumerate the numbers of additional businesses connected to farm principals.
4. To investigate the number of businesses operating from farms, but not owned by farm principals.
5. To examine whether additional business activity is an important component of employment on farms, i.e. does it create jobs
6. To examine whether additional business activity is an important component of farm income, i.e. does it contribute to personal wealth creation.

This chapter reports the findings of this element of the study. The chapter starts by outlining some of the issues relating to the identification of additional business activities, prior to reporting the incidence of pluriactivity. Thereafter, the contribution in terms of employment and wealth creation is reported.

7.2 Measuring additional business activities

One of the main methodological implications arising from the interviews was the lack of visibility of much additional business activity. Few owner-managers differentiated between the originating farm and the additional businesses which had been created. This lack of differentiation appeared to result from two factors. Firstly, additional business activity often depends on the resources of the original firm and as a result, owners tended to make little distinction between the two. Secondly, the process of starting additional businesses tends to be evolutionary. New businesses can take a relatively long time to establish, particularly when the originating farm is capable of generating sufficient household and business income at least in the short to medium term.

Similar problems concerning the visibility of additional firms were described by Rosa and Scott (1995: 12) who also explained how additional business ownership may have been missed by earlier small business studies:

"Growth potential is .. not the province of firms, but of the entrepreneurs who create and run them. A 'firm' is merely a legal unit which can be manipulated by discerning entrepreneurs to maximise their advantage. When an entrepreneur is operating several products, services or in different markets, he or she must decide how to legally 'ring fence' these activities. When the decision is to ring fence them in one organisational unit, and performance is strong, it comes to be viewed as a high growth firm. If the decision is to organise the same products/services into more than one legally independent organisational units, the performance would be the

same and largely undetectable to conventional analyses where the unit of analysis is focused on the firm rather than the entrepreneur "

In order to accommodate these factors, two distinctions had to be drawn. Firstly, for the purpose of measurement there was a need to differentiate between the types of business activities in which farmers engage. Ultimately, three different types of activity were identified: the diversification of the originating farm into non-traditional agricultural or quasi-agricultural activities, the ownership of additional businesses located on-farm and off-farm; and the presence of external firms located on farm premises, but not owned by the farm principals. Secondly, clarification was required concerning the unit of analysis. While the farm owner was the main focus for gathering information regarding personal business interests, the farm business was used as the unit of analysis for gathering information about external firms located in farm premises.

7.2.1 The diversification continuum

One approach to the analysis of additional business ownership activities is to view the process as a continuum, from the diversification of existing business activities to the establishment of independent concerns. Diversification offers business owners a relatively easy, inexpensive and safe mechanism for converting existing resources into new businesses. For farmers interested in extending their business activities, the process may start through the re-utilisation of existing assets and resources either for their own business activities or, by assuming a landlord function, the leasing of assets to external businesses. Farm diversification activities can, therefore, be seen as the first stage of a process of extending business interests. The second stage of the continuum is the ownership of additional businesses. These businesses can arise either from the establishment of new firms

or the registration of diversified interests as separate businesses once they have reached maturity and scale

An important feature of farm businesses is the availability of physical assets in the form of farmland and buildings. This resource is crucial in extending strategic growth options. For those farmers who wish to pursue additional business ownership activities, land ownership offers them the choice of siting additional businesses on the farm premises or seeking external business locations. Irrespective of location, however, additional business activities are likely to have links with the originating farm, either through market focus, product choice or shareholding.

7.3 Additional business activities

This section reports the incidence and nature of additional business activities of the sample. The three identified areas – diversification activities, additional business ownership; and external businesses located on-farm, are considered in turn.

7.3.1 Diversification activities

As Chapter Five outlined, an important element in determining respondent bias was the broad comparability of diversification rates in the sample with those found by Bryden, Bell, Gilliatt, Hawkins and MacKinnon (1992). In total, 59 per cent (175) of the farms which responded engaged in diversification activities of some kind. This proportion closely replicates the 60 per cent average found by Bryden et al (1992), indicating that the response was not biased towards pluriactive farmers.

In total, the 175 diversified farms engaged in 216 diversified activities. The most popular forms of diversified activities were contracting machinery for agricultural purposes (28 per cent of the total sample), leasing of farm buildings (11 per cent)

and leasing of farm land (9 per cent) Although the farms undertook a broad range of diversified activities, other activities were much less common (Table 7.1) Surprisingly few farms (3 per cent) reported engagement in food related added-value activities such as preparation, packaging and processing, reflecting both the type of commodities produced and the relatively minor level of direct links with retailers. It is possible that these activities, in particular cleaning and grading, are seen as a mainstream agricultural activity rather than a diversification activity, especially by those farmers selling directly to the retail multiple sector. Accommodation was only engaged in by seven farms (2 per cent), a lower proportion even than those engaging in recreation activities (4 per cent)

Table 7.1 Number of farms with diversified activities

Type of Diversified Activity	No. of diversified farms	Diversified farms % (n=175)	Total sample % (n=296)
Agricultural contracting	83	47.4	28.0
Leasing of farm buildings	34	19.4	11.4
Leasing of farm land	26	14.8	8.7
Unconventional crops	18	10.2	6.0
Direct retailing	15	8.5	5.0
Non-agricultural contracting	13	7.4	4.3
Recreation activities	11	6.2	3.7
Food preparation/ packaging	8	4.5	2.7
Accommodation	7	4.0	2.3
Food processing	1	0.5	0.3

Notes: Multiple response

The types of diversification activity in which the farms engaged were related to both the size of the farm and certain characteristics of the owners. Those farms with a larger hectareage (251+ha) were more likely than smaller hectareage farms to engage in unconventional crops or livestock (χ^2 squared 11.7424, 4df, $p < 0.01$),

agricultural contracting (chi squared 11 4785, 4df, $p < 0.02$), and leasing of buildings to external businesses (chi squared 11 8090, 4df, $p < 0.01$). This suggests that those farms with physical resources surplus to the requirements of agricultural production are more likely to extend their business interests, either by experimenting with new types of agricultural output or by leasing machinery or buildings to external farm and non-farm businesses

Farm owners in the 36-45 age category were also more likely to engage in unconventional crops or livestock (chi squared 12 4428, 4df, $p < 0.01$), agricultural contracting (chi squared 13 2644, 4df, $p < 0.01$) and leasing of land to external businesses (chi squared 11 6008, 4df, $p < 0.02$). Although this age group had received less training than the 25-35 group, their greater experience of farm management and business ownership coupled with their relative youth might indicate that there is an optimum age at which farmers introduce business growth activities

Interestingly, those who had migrated to Cambridgeshire in order to start or inherit their business were more likely than the rest of the sample to engage in recreation activities (chi squared 6 9923, 1df, $p < 0.008$). This finding offers some support for the view that farm migrants, in common with migrants operating in non-farm sectors, had relocated in order to improve their quality of life. Distinctions were also found on the basis of method of business entry. Those who had purchased an on-going farm business were more likely to engage in accommodation activities (chi squared 43.2366, 4df, $p < 0.000$). That farm accommodation activities are normally the domain of the farm wife (Bouquet, 1985) suggests that the purchase of specific farms can also involve new business activities for other members of the farm household. Those who had bought an on-going farm business were also more likely to engage in the leasing of land to external businesses (chi squared 13.1029, 4df, $p < 0.01$), while the leasing of buildings to external businesses was associated

with those who had started the business themselves (chi squared 10 3319, 4df, $p < 0.03$)

Only 11 per cent (24) of diversified activities had been registered as separate businesses (Table 7.2) The low level of separate registration appears to indicate both the complementarity of diversified activities with mainstream agricultural productivity and the broad lack of distinction by farm owners between the two, originally noted in the interviews conducted prior to the survey. This interpretation is supported by the case of agricultural contracting, the activity least likely to result in separate business registration Agricultural contracting is not only an historically traditional element of farming, which essentially replicates the activities of machinery rings albeit on a private basis, it also draws directly from farm based resources in supplying a service to the agricultural activities of other farms By contrast, non-agricultural contracting, which is a relatively recent innovation for many farms and involves the supply of agricultural machinery to non-agricultural customers, was more likely to result in separate business registration. Although the numbers are too small to be conclusive, it appears that the newer the activity is to farmers and the greater the distinction between the diversified activity and traditional agricultural activities, the greater the likelihood of separate business registration

These findings suggest only limited support for Ilbery's (1991) typology of farm diversification,¹ which distinguished between agricultural and structural activities Of the 114 "agricultural diversification" activities reported by the sample, six were registered separately. By contrast, the 102 "structural diversification" activities had resulted in 18 separately registered businesses Although structural diversification

¹ Ilbery's (1991) typology of farm diversification divided activities on the basis of structural and agricultural factors Agricultural diversification included unconventional crops and livestock, farm woodland projects, and contracting activities Structural diversification included tourism, adding value to farm products, and 'passive diversification' leasing of land and buildings

activities resulted overall in a greater proportion of separately registered businesses, as Table 7.2 demonstrates, there was no statistical support for this typology. Of the three categories of agricultural diversification, two (unconventional crops or livestock and non-agricultural contracting) were just as likely as structural diversification activities to result in separate business registration

Nevertheless, the correlations between separate business registration and sample characteristics were weak and, at this level of analysis, provided no alternative explanatory typology. The leasing of farm buildings to external businesses was more likely to be registered as a separate business by farms in the 251-500ha category (chi squared 11.2523, 4df, $p < 0.02$), while those who had bought their farm as an on-going concern were more likely to register accommodation activities as separate businesses (chi squared 16.3992, 4df, $p < 0.002$).

Table 7.2 Registration of diversification activities as separate businesses, listed by Ilbery's (1991) typology of farm diversification.

Ilbery's typology of farm diversification	Activities No.	Register separately No.	Likelihood of separate registration (1df)	
			Chi squared	P.<
Agricultural Diversification				
Agricultural contracting	83	1	2.5508	0.110
Unconventional crops	18	4	62.1793	0.000
Non-agricultural contracting	13	1	21.6891	0.000
Structural Diversification				
Leasing of farm buildings	34	6	46.8382	0.000
Leasing of farm land	26	5	52.4301	0.000
Direct retailing	15	2	37.4547	0.000
Recreation activities	11	2	51.8069	0.000
Food preparation/packaging	8	1	35.7470	0.000
Accommodation	7	2	82.5616	0.000
Food processing	1	0	-	-

7.3.2 Additional business ownership

Additional business ownership was much less prevalent than diversification activities. As Table 7.3 shows, 39 respondents (13 per cent) owned a total of 48 businesses operating from farm premises and 23 respondents (8 per cent) owned a total of 31 businesses operating from off-farm premises.

Table 7.3 Number of additional businesses owned by respondents

No. of additional businesses	No. respondents with on-farm businesses	No. respondents with off-farm businesses
1	32	19
2	6	2
3	-	1
4	1	-
5	-	1
TOTAL respondents	39	23
TOTAL no of businesses	48	31

Analysed by size of originating farm, it is clear that most additional business ownership occurs on the larger sized farms (Table 7.4). It is interesting to note that only two of the additional businesses originated from the smallest sized farms (0-50ha) and that both were located on-farm, compared with three out of five in the second sized category (51-100ha), fifteen out of 27 in the medium category (101-250ha), thirteen out of fifteen in the 251-500ha category, and fourteen out of thirty in the largest farm size. Although additional business ownership occurs throughout the farm size spectrum, both on-farm and off-farm additional business ownership is most apparent in the largest sized farms (χ^2 squared 14.4117, 4df, $p < 0.006$ and χ^2 squared 24.8683, 4df, $p < 0.000$ respectively).

Table 7.4 Total on-farm and off-farm additional business ownership by size (hectarage) of originating farm

No. of additional businesses	Farm size 0-50ha	51-100ha	101-250ha	251-500ha	500+ ha	Total addit. busin.
1	2	3	21	7	18	51
2	-	1	3	2	2	16
3	-	-	-	-	1	3
4	-	-	-	1	-	4
5	-	-	-	-	1	5
Total no. of additional businesses	2	5	27	15	30	79

The distinction between on-farm and off-farm additional business ownership was based on the assumption that those located on-farm would be more likely to be associated with farm activities and depend, at least partially, on farm based resources for their survival. Conversely, additional businesses located off-farm were assumed to be relatively independent of farm based resources. Although no further data was collected which could specifically differentiate the characteristics of on-farm and off-farm businesses, distinctions could be seen in the characteristics of those starting additional businesses. Those starting further businesses located on-farm were more likely to have migrated in order to start or inherit their farm (chi squared 8.0800, 1df, $p < 0.004$), and to have entered farm ownership by purchasing an on-going concern (chi squared 11.8393, 4df, $p < 0.018$). There was also a significant relationship between training and additional business ownership. Those starting on-farm additional businesses were more likely to have received training in agriculture (chi squared 8.2673, 1df, $p < 0.004$) and marketing (chi squared 4.1138, 1df, $p < 0.04$). By contrast those starting additional businesses off-farm were more likely to have received training in management (chi squared 3.9521, 1df, $p < 0.04$) and in other subjects (chi squared 8.8064, 1df, $p < 0.003$).

Although on-farm additional business ownership was significantly associated with those in the 36-45 age group (chi squared 17.5005, 4df, $p < 0.001$), no statistically significant relationship was observed between age and off-farm additional business ownership

An analysis of additional businesses located off-farm suggests that connections with the originating farm are close, even when new businesses are physical removed from the farm premises. Half of the off-farm additional businesses benefited at start-up by the assistance of the farm in providing start-up capital, equipment, staffing and management. The maintenance of close connections between off-farm businesses and the originating farm was also seen in administrative arrangements. The administration of half of the new off-farm businesses was undertaken on the farm premises

The close connection to farming was also demonstrated in the motivations which led to the creation of new off-farm businesses (Table 7.5). The main reason cited for starting a new off-farm business was the exploitation of a market demand. There was also some agreement that off-farm businesses were started to provide sufficient income to allow the owner to remain in farming. Few respondents agreed that new businesses were started in order to provide increased employment or self-employment opportunities for themselves or their families. Interestingly, the commitment to farming was seen again, in the rejection of the idea that new off-farm businesses were a mechanism for moving out of the farm sector

Table 7.5 Motivations for starting off-farm businesses: a comparison of means

Motivation for starting off-farm business	Mean = 0 (-2 - +2)	Std. Dev.
To exploit a market demand	+ 0 74	1 24
To provide financial assistance to allow you to stay in farming	+ 0 26	1 52
To provide increased employment for yourself	- 0 37	1 26
To assist a family member to become self-employed	- 0 56	1 38
To provide increased employment for your family	- 0 56	1 42
To help you to move out of farming and into a non-farm business	- 1 44	0 86

7.3.3 External businesses located on farms

Because of their extensive ownership of land and buildings, farmers can be an important provider of premises for non-farm rural businesses. This was borne out by the analysis of diversification activities which revealed that the second highest reported activity was the leasing of farm buildings to external businesses.

In total, 42 farms (14 per cent) provided premises for external businesses which were not owned by the farm principal. Ninety external firms were located on the farms, of which only 16 were owned by members of the farm household. More than two thirds (69 per cent) of these external businesses engaged in activities unrelated to farming. As Table 7 6 shows, the rental of premises to external businesses occurs throughout the farm size (ha) spectrum, although is more apparent on the larger farms (100+ ha). It was also apparent that farms renting premises to more than one external business are also more likely to be the larger sized farms. No statistically significant relationship was found, however, between hectareage of originating farm and presence of external businesses.

Table 7.6 Number of external businesses located on farm premises by farm size (hectarage) category

No. of external businesses	Farm size					Total*
	0-50ha	51-100ha	101-250ha	251-500ha	500+ha	
1	3	3	8	5	5	24
2	-	1	3	3	1	16
3	-	-	1	1	1	9
4	-	-	1	1	-	8
5	-	-	-	-	-	-
6	-	-	2	-	-	12
15	-	-	-	-	1	15

*Notes: n=40, two missing cases

Few distinctions were observed between those that rented premises to external businesses and those that did not, however, those renting to external businesses were more likely to have entered farm ownership by started in business for themselves (chi squared 10.7245, 4df, $p < 0.02$) and to have received training in agriculture (chi squared 5.3696, 1df, $p < 0.02$).

The relationship between the originating farm and the external businesses located on their property, appears to go beyond that of the traditional landlord function. Of the 42 farms renting to external businesses, seventeen had provided some form of assistance to enable the firms to start-up and survive. The provision of assistance was more apparent in larger hectarage farms, although no statistically significant relationship was found between the two.

7.4 Employment creation

In order to distinguish the differing types of employment created by farmers, the investigation of this issue was undertaken in four separate questions concerning, respectively, employment in agricultural production, employment in farm diversified activities; employment in additional businesses owned by the farmer;

and employment in additional businesses located on the farm. Employment in each group was divided into regular full-time, regular part-time (less than 30 hours per week), casual, and seasonal labour.

7.4.1 Employment in agricultural production

Of the four categories of employment, that used for agricultural production was the most important in terms of absolute numbers employed. In comparison with national norms, full-time agricultural employment among the sample was high, particularly on farms employing between four and fifteen full-time employees (Table 7.7). In part, this skew can be explained by County norms. Employment on Cambridgeshire farms is slightly higher than the English average. Mean full-time employment on farms in England is 3.1, while in Cambridgeshire the mean rises to 3.4 (MAFF, 1993). Mean agricultural employment for the sample was 3.6. The higher employment mean found in the sample compared with that of Cambridgeshire is most probably a result of the relatively high incidence of multiple farm ownership found in the sample.²

Full-time agricultural employment varied between 0 and 85 (st dev = 7.18). Just under ten per cent of the sample had no full-time employees and 26 per cent employed only one full-time person (including partners and shareholders). The largest proportion of farms employed between two and five full-time employees. Only two farms employed in excess of 50 full-time agricultural employees. In total, the 296 sample farms employed 1065 full-time agricultural employees, including business principals.

² As explained in Chapter Five, MAFF use individual farm holdings as the unit of analysis in calculating farm hectareage and employment. In this survey, the farm owners were used as the unit of analysis in calculating hectareage and employment. Where farm owners operate more than one holding, as occurred in 27 per cent of the sample, there will be a concomitant increase in both mean employment and hectareage. See Chapter Five for a discussion of how multiple farm ownership shifts the hectareage distribution upwards.

Table 7.7 Full-time employment: the sample compared to UK figures

Full-time employees	Sample: % of holdings	UK: % of holdings
1	36*	57
2	24	22
3	13	9
4	9	4
5-10	13	6
10-15	4	1
more than 15	2	1
TOTAL	100**	100

Source: MAFF (1992). Notes * includes 9.8% of sample farms with no full-time employees.** rounded

Table 7.8 presents a summary of total employment in agricultural production, including part-time, casual and seasonal employment. Nearly 40 per cent of farms employed regular part-time labour (defined as less than 30 hours per week), mostly concentrated in farms with between two and ten full-time workers. The proportion of part-time labour was lower in those farms which employed a greater proportion of full-time staff. Casual employment was used by fewer (15 per cent) farms and tended to be concentrated on farms with between one and five full-time workers. Seasonal employment was used more extensively by the sample farms (40 per cent) and was concentrated in farms employing between two and five full-time employees. The role of seasonal labour as an increasingly important element of farm employment practices has been well documented (Errington, 1988, Hill, 1993). Indeed, the decline of full-time employment in the farm sector has been partly off-set by the use of seasonal and casual workers. Perhaps as a result of the agricultural activities of the sample, in particular the dominance of cereal and arable cropping, farms in this survey made greater use of seasonal, rather than casual, labour.

Table 7.8 Employment in agricultural production: number and percentage of respondents by full-time agricultural employment size bands.

Employees	Full-time		Part-time		Casual		Seasonal	
	No.	% *	No.	%*	No.	%*	No.	%*
0	29	9.8	181	61.1	250	84.5	177	59.8
1	76	25.7	71	24.0	28	9.5	25	8.4
2-5	149	50.3	41	13.9	15	5.1	63	21.3
6-10	26	8.8	2	0.6	2	0.6	11	3.6
11-50	14	4.6	1	0.3	1	0.3	17	5.7
51-100	2	0.6	-	-	-	-	1	0.3
100+	-	-	-	-	-	-	2	0.6
TOTAL respondents	296	100	296	100	296	100	296	100
TOTAL employees	1065	100	207	100	112	100	1089	100

Notes: * rounded

Not surprisingly, the largest employers of full-time agricultural labour were those farms in the largest categories of hectareage (Table 7.9). The largest hectareage farms were also responsible for the bulk of agricultural labour in all four employment categories (chi squared 146.7719, 24df, $p < 0.000$).

Table 7.9 Full-time agricultural employment by hectareage of farm holding: number of respondents by employment size bands

Employees	0-50ha	51-100ha	101-250ha	251-500ha	501ha
0	12	7	6	3	-
1	22	28	22	3	-
2-5	8	23	70	34	9
6-10	-	-	3	8	15
11-50	-	-	-	3	11
50-100	-	-	-	-	2
101+	-	-	-	-	-

The importance of a few, high growth small firms in generating a disproportionately large amount of employment has been consistently noted in the small firms literature. Storey (1994: 113), for example, asserts that:

"out of every 100 small firms, the fastest growing four firms will create half the jobs in the group over a decade".

Because the current study neither attempted to measure employment change nor collected historical data, it is not possible to report on employment *growth* within the sample. Nevertheless, the contribution of a few farms to *total* agricultural employment among the sample was clear. In total, the top five per cent of farms³ employed 35 per cent (373) of the full-time employees, 38 per cent (78) of the part-time employees, 75 per cent (84) of the casual workers and 67 per cent (732) of the seasonal workers. A conversion of full-time, part-time, casual and seasonal employment into full-time equivalents (FTEs) at ratios of 1.0, 0.5, 0.25 and 0.25 respectively, demonstrates that the total sample created 1469 agricultural FTEs. Of these, the top five per cent of farms employed 616 FTEs (42 per cent). Although previous studies investigating the employment patterns of small firms has not included the farm sector, it is clear that on this dimension farms conform to the characteristics of small non-farm businesses.

7.4.2 Employment in diversification activities

In comparison with employment in agricultural production, diversification activities yielded low levels of additional employment. In total, diversification activities generated 56 full-time, 22 part-time, 4 casual and 78 seasonal jobs (Table 7.10). This total, which converts into 87.50 FTEs, ensured that diversification was the

³ Defined as those farms with the largest number of full-time agricultural employees. 16 firms (5 per cent) employed in excess of ten full-time employees.

least important of the four categories in creating employment. Distributed over the 175 farms engaging in diversification activities, the mean number of diversification FTEs per farm is 0.5. Distributed over the 216 diversification projects, the mean number of diversification FTEs is reduced to 0.4

Table 7.10 Employment in diversification activities: number and percentage of respondents by full-time diversification employment size bands

Employees	Full-time		Part-time		Casual		Seasonal	
	No.	%*	No.	%*	No.	%*	No.	%*
0	270	91.2	280	94.6	293	99.0	284	95.9
1	11	3.7	13	4.4	2	0.7	3	1.0
2-5	14	4.7	3	0.9	1	0.3	6	2.0
6-10	1	0.3	-	-	-	-	1	0.3
11-50	-	-	-	-	-	-	2	0.7
51-100	-	-	-	-	-	-	-	-
100+	-	-	-	-	-	-	-	-
TOTAL respondents	296	100	296	100	296	100	296	100
TOTAL employees	56		22		4		78	

Notes. * rounded

Not only was diversification employment low in comparison with that used for agricultural production, it was also low in comparison with the proportion of farms (59%) engaged in diversification activities. Two possible explanations can be proposed to explain the low level of diversification employment reported by respondents. Firstly, because of the similarities between agricultural production and the subsequent diversification activities, it is likely that there is a doubling up of agricultural labour. Staff employed in agricultural production are most probably also used to provide labour for farm based diversification projects when necessary. Secondly, it is also likely that some diversification projects, in particular those that concerned the provision of household resources such as accommodation and

recreation activities, were the domain of members of the farm household. The contribution of family members and, in particular, wives to the successful operation of small farm and non-farm enterprises has been frequently discussed in the literature (cf Bouquet, 1985; Kirkham, 1987). It is now recognized that the labour provided by the household is a hidden and largely unpaid business resource. It is possible that the quantity of labour provided by the farm household to diversification activities is similarly 'invisible', probably lacks formal remuneration and, as a result, tends to be under-reported.

Both explanations for the low level of diversification employment support the view of diversification as a preliminary step towards business growth and expansion. At such an early stage of the diversification continuum, farmers are unlikely to invest in employing additional labour and are more likely to use the existing labour resources of the farm and the farm household to service projects. As Table 7.10 shows, when external labour is required to assist with diversification activities, it is in employment categories which are both numerically and functionally flexible.

Interestingly, there was no statistically significant relationship between diversification employment and the hectareage of the originating farm (χ^2 squared 14.4514, 12df, $p < 0.27$). One possible explanation for this is that when diversification projects reach a point of scale and maturity that requires a formalised labour commitment, a choice has to be made to either reduce the scale of the activity in order that it may continue to function as an ad hoc farm diversification activity or to register the activity as a separate business.

7.4.3 Employment in additional businesses

In total, the 62 farm principals who owned additional businesses, either on or off-farm, employed a further 114 full-time, 27 part-time, 7 casual, and 41 seasonal

workers (Table 7 11) These numbers, which converted into 140 FTEs, yielded a mean of 1.77 FTEs in each of the 79 additional businesses, or 2 25 FTEs in each of the 62 originating farms.

Table 7.11 Employment in additional businesses: number and percentage of respondents by full-time additional business employment size bands

Employees	Full-time		Part-time		Casual		Seasonal	
	No.	%*	No.	%*	No.	%*	No.	%*
0	282	95 3	284	95 9	292	98 6	292	98 6
1	1	0 3	7	2 4	2	0 7	-	-
2-5	10	3 4	4	1 3	2	0 7	2	0 7
6-10	1	0 3	1	0 3	-	-	1	0 3
11-50	2	0 7	-	-	-	-	1	0 3
51-100	-	-	-	-	-	-	-	-
100+	-	-	-	-	-	-	-	-
TOTAL respondents	296	100	296	100	296	100	296	100
TOTAL employees	114		27		7		41	

Notes * rounded.

As Table 7 11 indicates, total employment created by additional business ownership was much greater than that created by farm diversification activities. Importantly, the type of employment created by additional businesses was also more likely to be both full-time and permanent. Full-time employment constituted 81 per cent of total additional business employment, but only 64 per cent of total diversification employment. By contrast, part-time, casual and seasonal employment constituted 9 6 per cent, 1 2 per cent and 7 3 per cent respectively of total additional business employment, but 12 5 per cent, 1 1 per cent and 22 2 per cent respectively of total diversification employment. The contrast in both scale and type of employment between diversification and additional businesses suggests support for the diversification continuum. Diversification is a preliminary step into

business expansion, while additional business ownership occurs when less formal activities reach a point of maturity and scale which require a formalised labour commitment.

Additional business employment was significantly associated with the hectareage of the originating farm (chi squared 31.0112, 16 df, $p < 0.013$). The greater the hectareage, and consequently the physical and capital assets of the farm, the greater the likelihood of both additional businesses being created and employment being generated. No distinctions were made between additional businesses located on-farm and off-farm in the analysis of employment.

7.4.4 Employment in external businesses

The final category of employment concerned that generated by external businesses located on farm premises. In total, the 90 external businesses generated 174 full-time, 35 part-time, 7 casual and 14 seasonal jobs (Table 7.12). The total of 198 FTEs made this the most important source of farm based employment after agricultural production. The mean employment of the 90 external businesses located on farm premises was 2.20 FTEs. For the 42 farms providing premises for them, the external businesses increased their on-farm employment total by a mean of 4.71 FTEs.

Table 7.12 Employment in external businesses: numbers and percentages of respondents by full-time external business employment size bands

Employees	Full-time		Part-time		Casual		Seasonal	
	No.	%*	No.	%*	No.	%*	No.	%*
0	263	88.9	284	95.9	294	99.3	292	98.6
1	5	1.7	8	2.7	-	-	1	0.3
2-5	20	6.7	3	1.0	2	0.7	3	1.0
6-10	4	1.3	-	-	-	-	-	-
11-50	4	1.3	1	0.3	-	-	-	-
51-100	-	-	-	-	-	-	-	-
100+	-	-	-	-	-	-	-	-
TOTAL respondents	296	100	296	100	296	100	296	100
TOTAL employees	174		35		7		14	

Notes * rounded

The bulk (87.8 per cent) of employment in external businesses was full-time. Of the remaining employment categories, most (8.8 per cent) was part-time. Very little use was made of either casual or seasonal labour by the external businesses. These two categories of employment constituted just 0.8 per cent and 1.7 per cent respectively of total employment in external businesses. In this respect, employment in external businesses has a similar profile to that of additional businesses and is unlike employment in both agricultural production and diversification activities. It could be inferred from this that sectoral forces affect the employment profile of firms. Seasonal and casual labour have always been important components of agricultural employment. In this survey, it has been seen that the use of seasonal and casual workers also extends to farm diversification activities. Employment in both additional businesses owned by farmers and external businesses located on farm premises demonstrate a rather different employment profile, with greater use made of full-time and permanent staff.

As noted earlier in this chapter, external businesses located on farm premises occurred throughout the farm size (hectarage) spectrum, although were more apparent on larger hectarage farms. No statistically significant relationship was observed, however, between the presence of external businesses and the hectarage of the originating farms. An analysis of employment in external businesses and the hectarage of originating farms also revealed no statistically significant relationship between the two (chi squared 17.5325, 16df, $p < 0.351$).

7.4.5 Total employment

In order to identify the total employment contribution of farms, an analysis was undertaken which combined agriculture, diversification, additional business and external business employment in all labour categories (full-time, part-time, casual and seasonal) as full-time equivalents. As Table 7.13 shows, a clear relationship emerged between combined total employment and the hectarage of farms.

Although a large majority of all farms employed between one and nine total FTEs, larger hectarage farms were more likely to employ a greater number of total FTEs (chi squared 75.9886, 16df, $p < 0.000$).

Table 7.13 Total combined FTE employment by hectarage: number of respondents in FTE employment size bands*

Hectarage	Total FTEs 0	Total FTEs 1 - 9	Total FTEs 10 - 49	Total FTEs 50 - 99	Total FTEs 100+	Total Respondents
0 - 50	4	32	-	-	-	36
51 - 100	2	47	5	-	-	54
101 - 250	-	91	7	-	-	98
251 - 500	2	38	11	-	-	51
500+	-	18	15	3	1	37
TOTAL respondents	8	226	38	3	1	276

*Note n=276

This aggregated data, while demonstrating the link between total employment and hectarage, masks some of the complexities of the relationship. Table 7.14 shows the total FTEs in each employment category by hectarage, while Table 7 15 shows the mean total of FTEs in the different categories by hectarage. It can be clearly seen that, although the largest hectarage farms are responsible for the greatest proportion of both agricultural and total employment, the relationship between hectarage and employment in diversification, additional businesses and external businesses is not linear.

Table 7.14 Total FTE employment in each employment category by hectarage of originating farm*

Hectarage	FTEs Agriculture	FTEs Diversification	FTEs Additional businesses	FTEs External businesses	TOTAL FTEs
0-50	61 00	0 50	0 75	6 50	68 75
51-100	132 00	16 75	2 75	34 50	186 00
101-250	350 00	34 50	22 25	55 00	461 75
251-500	276 50	23 25	10 50	30 75	341 00
Over 501	626 75	7 50	103 25	62 50	800 00
Total FTEs	1446 25	82 50	139 50	189 25	1857 50

*Note. n=289

Table 7.15 Mean total FTEs per farm in each employment category by hectarage*

Farm size (ha)	No. of farms	Mean FTEs Agriculture	Mean FTEs Diversification	Mean FTEs Addit. Busin.	Mean FTEs Externl Busin.	Mean Total FTEs	Mean Total less agri FTEs
0-50	42	1 45	0 01	0 01	0 15	1 62	0 17
51-100	58	2 27	0 28	0 04	0 59	3 18	0 91
101-250	101	3 46	0 34	0 22	0 54	4 56	1 10
251-500	51	5 42	0 45	0 20	0 60	6 67	1 25
501 +	37	16 93	0 20	2 79	1 68	21 60	4 67
TOTAL mean	289	5 90	0.25	0 65	0 71	7 52	1 62

*Note: n=289

As Table 7 15 shows, mean agricultural employment on the smallest hectarage farms (0-50 ha) was 1 45 FTEs rising to 16 93FTEs on the largest hectarage (501+ ha) farms It is clear that employment in agricultural production increases with hectarage Interestingly, there is a large jump between agricultural employment on farms of between 251-500 ha and on those over 501 ha One explanation for this, otherwise inexplicable jump, is the occurrence of multiple farm ownership Just over half (52 per cent) of the farm businesses in the largest hectarage category were made up of multiple farm holdings (see Table 5 1), while only 12 per cent of those in the 251-500 ha category were made up of multiple holdings ⁴

Employment in diversified activities shows a more complex pattern Mean diversified employment increases with hectarage up to the largest farm size category. For this size group (501+ ha), mean diversified employment drops to 0 20 FTEs Given that diversification activities occurred throughout the farm size spectrum, some further consideration is necessary There appear to be two possible

⁴ Multiple farm ownership did not occur in the two smallest hectarage categories (0-50ha and 51-100ha) In the 101-250 ha category, multiple farm holdings comprised just 6 5 per cent of farm businesses

explanations for the drop in mean diversification FTEs on the largest sized farms. Firstly, farms in the largest hectare category may have a greater surplus of agricultural labour which can be deployed for diversification activities as the need arises. Thus, they are unlikely to need to employ further labour specifically for diversification activities. Secondly, as more substantial enterprises, they are more likely to have the resources necessary to invest fully in creating additional businesses. Farms with the greatest resources progress rapidly through the developmental stage of diversification, and use diversification only as a means of testing the market. This explanation provides further support for the concept of the diversification continuum, which views additional business ownership as an evolutionary process of which diversification is the first stage.

An analysis of mean employment in additional businesses by hectare provides further support for this explanation. Mean employment in additional businesses was equal to or lower than for diversification in all the hectare categories apart from the largest. Not only is the occurrence of additional business ownership significantly related to hectare, employment in additional businesses is also related to hectare. Table 7.16 gives details of the number of additional businesses present in each hectare category, together with the total number of FTEs created and the mean number of FTEs in each hectare category. The mean employment in additional businesses created by the smallest sized farms (0-50 ha) was 0.37 FTEs. Mean employment for additional businesses remains under 1 FTE in all the farm size categories, with the exception of the largest hectare farms, where mean employment rises to 3.44 FTEs per additional business.

Table 7.16 Mean employment (FTEs) per additional business by hectarage

Farm size (ha)	No. of additional businesses	Total FTEs in additional businesses	Mean FTEs in additional businesses
0-50	2	0 75	0 37
51-100	5	2.75	0 55
101-250	27	22 25	0 82
251-500	15	10 50	0 70
501+	30	103 25	3 44
Total	79	139 50	1 76

The final component of total combined farm based employment was that created by external businesses located on-farm. Distributed across all the farms by hectarage (Table 7.14), it is evident that external businesses are responsible for creating more FTEs than either diversification activities or additional businesses in all hectarage categories, with the exception of additional businesses in farms over 501 ha. An analysis of mean employment in external businesses in all farms by hectarage (Table 7.15) shows that the smallest hectarage farms had the lowest mean for external business FTEs (0 15) and the largest hectarage farms had the highest (1 68).

An analysis of mean employment in external businesses which included only those farms with external businesses shows a rather different picture, however. Table 7 17 presents details of the number of external businesses in each hectarage category, together with the total number of external business FTEs created and the mean number of external business FTEs in each hectarage category. It can be seen that mean employment in external businesses in the smallest hectarage category (0-50 ha) is greater than that of farms of 101-250 ha and 251-500 ha. Interestingly, it is farms in the 101-250 ha category which provided premises to the largest number of external businesses, but farms in the 51-100 ha category which created the highest mean employment in external businesses.

Table 7.17 Mean employment (FTEs) per external business by hectarage

Farm size (ha)	No. of external businesses*	Total FTEs in external businesses	Mean FTEs in external business
0-50	3	6 50	2 16
51-100	5	34 50	6 90
101-250	33	55 00	1 66
251-500	18	30 75	1 70
501+	25	62 50	2 50
Total	84	189 25	2 25

* Note Two missing cases, accounting for six external businesses

As this analysis shows, the four types of farm related employment demonstrate rather different patterns. As expected, employment in agricultural production was the largest component of total farm related employment. Because of the type of agricultural commodities produced by the sample, it is not surprising that employment in agricultural production increased with farm size (hectarage). Interestingly, external businesses located on-farm, which were apparent throughout the farm size spectrum were the second most important component of total farm related employment. This suggests that farms may play a, hitherto unrecognized, role in the process of encouraging rural business start-up and in the re-location of small non-farm firms to rural areas. Employment in diversification activities increased with hectarage up to the largest sized farms. A lower proportion of employment in diversification activities on farms in the largest hectarage category was, however, off-set by the significantly larger proportion of employment created by these farms in additional businesses. This suggests that diversification activities should not be viewed simply in relation to agricultural production, but as part of a continuum which starts with diversification and progresses to the establishment of independent additional businesses.

7.5 Additional income generation

Because of the obvious difficulties associated with investigating income levels derived from business activities, questions were designed to elicit broad responses rather than specific amounts. The first element of this investigation was concerned with income derived from diversification activities. The second concerned the sales revenue and profitability of total additional business activities.

7.5.1 Income from diversified activities

Just over 40 per cent of farms reported that they currently received an income from their diversified activities. For half of these farms, the income received was less than ten per cent of their total earnings (Table 7.18). A further 11 per cent of the sample received between ten and 25 per cent of their total income from diversified activities and only six per cent of the sample received more than fifty per cent of their total earnings from diversification activities.

Table 7.18 Current and future income from diversified activities

Diversified income as a % of total income	Current income		Future income	
	No.	%	No.	%
0	127	42.9	128	43.2
01 - 9.9	60	20.1	51	17.2
10 - 24.9	32	10.8	33	11.1
25 - 49.9	16	5.4	16	5.4
50 - 74.9	12	4.0	13	4.3
75 - 100	5	1.6	7	2.3
Missing	44	14.9	48	16.2
Total	296	99.7	296	99.7

Income from diversification activities was significantly related to hectareage (chi squared 41 4578, 20df, $p < 0.003$) Farms in the smallest hectareage categories were more likely to gain the largest proportion of their total income from diversification activities. Conversely, farms in the largest hectareage categories gained the smallest proportion of their total income from diversification.

No relationship could be observed between the type of diversification undertaken and the proportion of income derived from the activity. It is interesting, however, that farms engaging in accommodation and food processing were less likely to report income from diversification, although this might simply be a function of the small numbers of farms which engaged in these activities. A significant relationship did emerge between income from diversification and the training received by the farm owners. Those who had trained in agriculture and in management were more likely to report higher levels of diversification income (chi squared 32 6496, 5df, $p < 0.000$ and chi squared 16 7443, 5df, $p < 0.005$ respectively).

Interestingly, very little change in the proportion of income derived from diversification activities was anticipated within the next three years. One possible explanation is that farms had already diversified to their full capacity and that no further expansion was expected. However, this fails to consider that market demands change over time and that new opportunities are constantly evolving for farm based resources. An alternative explanation is that diversification income is related to the strength of local agricultural structures and markets. Compared with the rest of the UK, agricultural structures and markets in Cambridgeshire are particularly strong. Moreover, the main agricultural commodities produced in the County, in particular the production of cereals and notably lucrative and restricted crops such as sugar-beet, serve to protect these farmers from the shorter term effects of policy reform. As a result of this cushioning, farmers within the County may not perceive a need to reduce their dependence on agricultural activities by

substituting diversification. Supporting this view is the finding that, although some farmers engage in additional business activities to support their farm income, none engage in it with the intention of moving out of farming.

7.5.2 Sales revenue and profitability of additional business activity

Only 37 respondents chose to give details of sales revenue and profitability out of 62 with additional business activities.⁵ As Table 7.19 shows, sixteen respondents achieved a sales revenue of less than £50,000 from their additional business activities. By contrast, 21 achieved a sales revenue in excess of this figure, of which six achieved a sales revenue of over £1 million per annum. Sales revenue achieved by additional business activities was, overall, considerably lower than that achieved by agricultural activities. Interestingly, however, a higher percentage of additional business activities (16 per cent) than agricultural activities (6 per cent) achieved sales in excess of £1 million per annum.

Table 7.19 Sales revenue from additional business activities compared with agricultural production

Sales Revenue	Addit. Bus. No.	Addit. Bus. %	Agricul -tural No.	Agricul -tural %
Less than £50,000	16	43	45	16
£50,000 - £100,000	7	19	58	21
£100,000 - £500,000	5	14	125	45
£500,000 - £1 million	3	8	30	11
£1 million - £5 million	3	8	15	5
More than £5 million	3	8	3	1
TOTAL	37	100	276	100

⁵ By comparison, 93 per cent (275) gave the same details for their agricultural output. While some respondents may simply be unaware of their additional income, others may have seen these questions as intrusive. The comparatively and, perhaps surprisingly, high response to these questions for agricultural activities may reflect the annual financial disclosure required by farmers.

No significant relationships were observed between either sales revenue or profitability of additional businesses and hectareage, marketing strategies or the existence of a specified growth objective for the farm business.

Although sales revenue of additional business activity was generally lower than that of agricultural activities, it was just as profitable. Table 7.20 compares profitability of additional business activity with both the agricultural activities of the sample and also the sample of rural manufacturing firms surveyed by Smallbone, North and Leigh (1993).

Table 7.20 Profitability of additional business activities compared with the sample's agricultural activities and rural manufacturing firms

Profit or less as % of turnover	Additional businesses n=37 %	Agriculture activities n=275 %	Rural manufacturing firms n=80 % *
Profit of 5% or more	75	82	70
Profit of less than 5%	17	12	14
Breakeven	6	4	6
Loss of less than 5%	3	2	8
Loss of more than 5%	0	1	3
Total	100	100	100

* Source Smallbone, North and Leigh (1993 90)

In total, 92 per cent of respondents reported profits on their additional business activities, compared with 94 per cent reporting profits on their agricultural activities. Only 3 per cent of additional businesses and agricultural activities were reported to be loss making compared with 11 per cent of rural manufacturing firms (Smallbone et al, 1993). It was noted in Chapter Six that reported profit levels were higher for agricultural activities than those of rural manufacturing firms. That profit levels for additional business activities were also reportedly higher than for

other rural non-farm businesses is of interest. There may be a number of explanations for this. Firstly, the results may have been skewed towards those farmers making a profit on additional business activities, with loss-making activities being under reported. Secondly, it is assumed that for most farmers, additional businesses were not their main source of income. Thus, it is unlikely that additional business activities would be maintained if profit levels were to fall. Finally, the degree of complementarity between the originating farm and additional business activity, in particular the sharing of human and physical resources, reduces the fixed and variable overhead costs of additional businesses. In this respect, farmers starting additional non-farm businesses have a demonstrable advantage over their non-farm owning competitors.

7.6 Conclusion

It has been seen in this chapter that the activities of farms go beyond that of agricultural production. A majority of farms had diversified, while others had started additional businesses on and off-farm, and had leased property to external businesses. The employment contribution of farms also goes beyond that used for agricultural production and encompasses diversification, additional business activities and external firms. Although the contribution of diversified activities to wealth creation was limited, smaller hectare farms appear to benefit the most. Larger hectare farms with greater resources, convert diversification activities into additional businesses. For many, these additional businesses are as profitable as the originating farm.

CHAPTER EIGHT

RESULTS: THE DIFFERENTIATION OF FARMS BY ADDITIONAL BUSINESS ACTIVITIES

8.1 Introduction

The third research objective was concerned with identifying the differences between farm businesses which engage in additional business ownership activities and those that do not. This objective was refined into the following six sub-objectives

1. To investigate differences in the personal characteristics of owners of farms which engage in additional business activities and those that do not.
2. To investigate differences in the business characteristics of farms which engage in additional business activities and those that do not.
3. To investigate differences in the marketing and management strategies of farms which engage in additional business activities and those that do not.
4. To investigate differences in perceived business constraints and opportunities in farms which engage in additional business activities and those that do not.
5. To investigate which combination of variables best summarises the differences between farms on the basis of their engagement in additional business activities

6. To investigate whether this combination of variables can be used to accurately predict group membership.

Using the exploratory analysis conducted for the first two objectives (see Chapters Six and Seven), a taxonomy of farm businesses was constructed based on their level of additional business activities and relative contribution to rural business development. This taxonomy formed the dependent concept against which factors were correlated in order to establish relationships

8.2 Differentiating type of ownership

The exploratory analysis indicated that clear distinctions existed between farms which restricted their activities to agricultural production and those which engaged in additional business activities. The diversification continuum, proposed in Chapter Seven, suggests a spectrum of additional business activities ranging from purely agricultural production, through structural diversification, to the ownership of a portfolio of business interests. However, three clear points exist on the continuum separating monoactive farmers, those that have diversified, and those with a portfolio of business interests. Because certain types of diversification are an established and traditional feature of farming, Ilbery's (1991) distinction between agricultural and structural diversification was maintained in differentiating between types of farm. Ilbery (1991) considered that agricultural diversification, which includes the production of unusual crops or livestock and agricultural and non-agricultural contracting, was a traditional feature of farming. Thus, the first group, monoactive production, also included these three types of agricultural diversification activities

Structural diversification activities, which are typified by their non-agricultural focus, were used to distinguish monoactive producers from those engaging in diversification.

Table 8.1 Sample groups by type of ownership

Group	No	%
Monoactive producers	121	40.9
Structural diversifiers	66	22.3
Portfolio owners	109	36.6
TOTAL	296	100.00

Just over 40 per cent (121) of the sample farms were defined as monoactive producers, engaging in traditional agricultural production (Table 8.1). Few monoactive producers engaged in agricultural diversification activities. Those that did only engaged in agricultural contracting and none engaged in either non-agricultural contracting nor unusual crops or livestock. This suggests that while agricultural contracting is a diversification activity fully complementary to farming, other types of agricultural diversification activities tend to occur on farms which also engage in other, structural diversification activities or have a portfolio of business interests.¹ The second group, structural diversifiers, contained 22.3 per cent (66) of the sample. This group included farms which had extended their business activities by engaging in some form of structural diversification, either singly or in combination. The defining characteristic of this group is that although they combined farming with some form of

¹ In Chapter Seven it was also noted that of all the types of diversification activity in which farms could engage, agricultural contracting was distinctive in as much as it was unlikely to result in a separate business registration. Although Ilbery (1991) identified both non-agricultural contracting and the production of unusual crops or livestock as an agricultural diversification activity, they were as likely to be separately registered businesses as those activities identified as structural diversification.

structural diversification activity, this marked the extent of their business interests. Thus, on the diversification continuum, this group lay between monoactive producers and portfolio owners. The final group, portfolio owners, contained 36.6 per cent (109) of the sample. This group had a portfolio of business interests which, in addition to agricultural production and any agricultural or structural diversification activities, also included the ownership of additional businesses located on-farm or off-farm, and/or the leasing of land or buildings to external businesses, and/or the ownership of multiple farm businesses.

As Chapter Two described, previous small business studies investigating patterns of business ownership have generally focused on distinctions between three groups: 'novice' owners who only ever own one business; 'serial' founders who start a succession of small firms, and 'portfolio' owners who own a number of enterprises simultaneously (Hall, 1995, Westhead, 1996). The groups developed from the current survey have clear similarities with those of earlier, non-agricultural studies, although the lack of historical data collected from the farms precludes the identification of 'serial' founders. Nevertheless, the key feature of monoactive producers, the ownership of a single enterprise, replicates that of 'novice' founders, while portfolio owners similarly replicate those originating from non-farm businesses.²

² Although much of the research which focuses on small business ownership types makes distinctions between these three groups, not all previous studies have been concerned with the collection of historical data which allows the identification of 'serial' owners. Rosa, Hamilton, Carter and Burns (1994) for example, dichotomised only between novice, (which they termed single business owners) and portfolio owners. Similarly, some previous studies have distinguished 'serial' from 'novice' owners, with no investigation of owners with a portfolio of interests (cf. Cross, 1981).

8.3 Univariate analysis

Chi square and one way analysis of variance (ANOVA) tests were conducted to identify significant differences between founders and firms in the three ownership type groups. Prior to the analysis, continuous and discrete variables were recategorized into dichotomous form using dummy variable recoding (Howell, 1982) The exclusion of all variables used to calculate group membership (mainly Sections B and C of the questionnaire) left 110 dependent variables for analysis. Of these, 44 (40 per cent) were found to show statistically significant differences between the groups of owners These are presented below

8.3.1 Differences in personal characteristics

Table 8 2 presents details of the differences between the three groups on the basis of their personal characteristics Portfolio owners were significantly more likely to be in the younger (36 - 45) age group, while monoactive producers were more likely to be in the older (56 - 65 and 66+) age categories The groups also diverged in the training which they had received Both diversifiers and portfolio owners had a significantly higher mean score on the issue of training in agriculture and management While the training undertaken by these two groups may reflect their relative youth, it is notable that only those with a portfolio of business interests were significantly differentiated by having undertaken formal training in marketing Portfolio owners were also differentiated by their employment situation immediately prior to starting or inheriting their farm business Significantly more of this group had started their farms from careers in large, non-farm firms Descriptions of their current employment situation also revealed differences between the groups Monoactive producers tended to describe their farm as their only current occupation, while portfolio owners tended to describe themselves both as being self-employed in another capacity and as having wide and

varied business interests³ Interestingly, some diversifiers and, to a lesser extent, portfolio owners also described the farm as being their only current occupation This suggests that even those farm owners who have extended their business interests still viewed the farm as the central hub of all income generating activities. Portfolio owners were, however, more likely to agree that they were entrepreneurs and would start a new business given the opportunity and resources, than either the diversifiers or the monoactive groups. Both diversifiers and portfolio owners tended to concur that they came from families with a tradition of starting new businesses.

³ Notably, these descriptions, although related to ownership groups, were not used in the calculation of group membership The purpose of this question was to determine whether the farm remained the central focus of their business activities

Table 8.2 Chi square test differences: personal characteristics of owner by type of ownership

		Monoactive		Diversified		Portfolio		X ²	d.f.	Signif	
		No	%	No	%	No	%				
Age											
	Age 25-35	Yes	6	5.0	5	7.6	7	6.4	0.54	2	0.7606
		No	115	95.0	61	92.4	102	93.6			
Age 36-45	Yes	16	13.2	9	13.6	31	28.4	10.20	2	0.0060	
	No	105	86.8	57	86.4	78	71.6				
Age 46-55	Yes	34	28.1	21	31.8	41	37.6	2.38	2	0.3036	
	No	87	71.9	45	68.2	68	62.4				
Age 56-65	Yes	38	31.4	20	30.3	19	17.4	6.62	2	0.0363	
	No	83	68.6	46	69.7	90	82.6				
Age: over 66	Yes	23	19.0	9	13.6	9	8.3	5.55	2	0.0621	
	No	98	81.0	57	86.4	100	91.7				
Training											
Agriculture	Yes	51	42.1	41	62.1	78	71.6	21.05	2	0.0000	
	No	70	57.9	25	37.9	31	28.4				
Management	Yes	17	14.0	20	30.3	40	36.7	16.09	2	0.0003	
	No	104	86.0	46	69.7	69	63.3				
Finance	Yes	13	10.7	10	15.2	22	20.2	3.96	2	0.1378	
	No	108	89.3	56	84.9	87	79.8				
Marketing	Yes	8	6.6	7	10.6	21	19.3	8.78	2	0.0123	
	No	113	93.4	59	89.4	88	80.7				
Other subjects	Yes	9	7.4	8	12.1	17	15.6	3.78	2	0.1505	
	No	112	92.6	58	87.9	92	84.4				

Table 8.2 Chi square test differences: personal characteristics of owner by type of ownership cont'd

		Monoactive		Diversified		Portfolio		X ²	d.f.	Signif
		No	%	No	%	No	%			
Previous occupation										
Farm employment	Yes	90	74.4	50	75.8	84	77.1	0.22	2	0.8937
	No	31	25.6	16	24.2	25	22.9			
Small non-farm firm	Yes	4	3.3	2	3.0	4	3.7	0.05	2	0.9729
	No	117	96.7	64	97.0	105	96.3			
Large non-farm firm	Yes	2	1.7	3	4.5	9	8.3	5.55	2	0.0621
	No	119	98.3	63	95.5	100	91.7			
Other self-employment	Yes	1	0.8	0	0.0	3	2.8	2.75	2	0.2517
	No	120	99.2	66	100	106	97.2			
Current Occupation										
Farm is my only occup	Yes	117	96.7	54	81.8	81	74.3	23.43	2	0.0000
	No	4	3.3	12	18.2	28	25.7			
Work for small firm too	Yes	1	0.8	3	4.5	4	3.7	2.85	2	0.2393
	No	120	99.2	63	95.5	105	96.3			
Work for large firm too	Yes	0	0.0	0	0.0	2	1.8	3.45	2	0.1777
	No	121	100	66	100	107	98.2			
Self-employed (other)	Yes	1	0.8	6	9.1	11	10.1	9.96	2	0.0068
	No	120	99.2	60	90.9	98	89.9			
Wide business interests	Yes	0	0.0	1	1.5	11	10.1	16.42	2	0.0002
	No	121	100	65	98.5	98	89.9			
Entry into farming										
Inherited from family	Yes	72	59.5	34	51.5	75	68.8	5.40	2	0.0669
	No	49	40.5	32	48.5	34	31.2			
Bought from family	Yes	15	12.4	5	7.6	6	5.5	3.55	2	0.1691
	No	106	87.6	61	92.4	103	94.5			
Bought going concern	Yes	4	3.3	2	3.0	2	1.8	0.50	2	0.7762
	No	117	96.7	64	97.0	107	98.2			
Started farm by self	Yes	26	21.5	21	31.8	19	17.4	4.98	2	0.0825
	No	95	78.5	45	68.2	90	82.6			
Born in county	Yes	52	43.0	29	43.9	36	33.0	3.06	2	0.2159
	No	69	57.0	37	56.1	73	67.0			
Moved to start/inherent	Yes	10	8.3	7	10.6	16	14.7	2.40	2	0.3001

8.3.2 Differences in business characteristics

Tests also revealed significant differences in the characteristics of the businesses owned by the three groups (Table 8.3). Monoactive producers were more likely to operate from smaller hectareage farms (0 - 50ha and 51 - 100ha), while portfolio owners were more likely to operate farms in the 101 - 250ha category and in farms over 500ha. Interestingly, no differences were found between the groups in the ownership of medium sized (hectareage) farms (251 - 500ha). The complexity of the relationship between farm size, company structure and ownership group was also seen in the difference observed in tenure patterns. Although the initial interviews revealed that some tenants are barred from diversification activities (see Appendix One), the survey revealed that diversifiers were more likely to operate from wholly tenanted premises. Distinctions were also seen in the company structure utilised by owners, with the portfolio group more likely to have formed limited companies and monoactive producers favouring sole trader status. These findings seem to imply broad differences in the resource base between the groups. Monoactive producers operate smaller businesses, defined in terms of hectareage and company structure, and portfolio owners larger, more established concerns. The diversification group share many of the characteristics of portfolio owners, but their lack of resources, highlighted by tenure patterns, seems to indicate an inability to extend their business interests further. These broad differences were reiterated in questions regarding the growth of the farm business through the purchase of additional farmland and farm businesses. Although all three groups had extended their farms in this way, portfolio owners were significantly more likely to have done so.

Table 8.3 Chi square test differences: farm business characteristics by type of ownership (dichotomous variables: 0 - no, 1 - yes)

Agric Activity		Monoactive		Diversified		Portfolio		X ²	d.f.	Sign.
		No	%	No	%	No	%			
Cereals	Yes	112	92.6	65	98.5	103	94.5	2.93	2	0.2307
	No	9	7.4	1	1.5	6	5.5			
Other Arable	Yes	68	56.2	46	30.3	86	78.9	13.66	2	0.0010
	No	53	43.8	20	69.7	23	21.1			
Horticulture	Yes	14	11.6	12	18.2	15	13.8	1.56	2	0.4571
	No	107	88.4	54	81.8	94	86.2			
Dairy cattle	Yes	4	3.3	2	3.0	4	3.7	0.05	2	0.9729
	No	117	96.7	64	97.0	105	96.3			
Beef cattle	Yes	27	22.3	13	19.7	16	14.7	2.21	2	0.3307
	No	94	77.7	53	80.3	93	85.3			
Pigs	Yes	12	9.9	1	1.5	7	6.4	4.81	2	0.0899
	No	109	90.1	65	98.5	102	93.6			
Sheep	Yes	11	9.1	3	4.5	9	8.3	1.91	2	0.7516
	No	110	90.9	63	95.5	100	91.7			
Fowls	Yes	4	3.3	2	3.0	3	2.8	0.05	2	0.9706
	No	117	96.7	64	97.0	106	97.2			
Other	Yes	3	2.5	3	4.5	9	8.3	4.02	2	0.1335
	No	118	97.5	63	95.5	100	91.7			
Hectarage 0-50 ha	Yes	25	20.7	12	18.2	5	4.6	13.28	2	0.0013
	No	96	79.3	54	81.8	104	95.4			
51-100 ha	Yes	33	27.3	17	25.8	8	7.3	16.50	2	0.0002
	No	88	72.7	49	74.2	101	92.7			
101-250 ha	Yes	33	27.3	22	33.3	46	42.2	5.70	2	0.0575
	No	88	72.7	44	66.7	63	57.8			
251-500 ha	Yes	19	15.7	8	12.1	24	22.0	3.15	2	0.2061
	No	102	84.3	58	87.9	85	78.0			
500+ha	Yes	7	5.8	7	10.6	23	21.1	12.57	2	0.0018
	No	114	94.2	59	89.4	86	78.9			

**Table 8.3 Chi square test differences: farm business characteristics
cont'd by type of ownership (dichotomous variables: 0 - no, 1 - yes)**

		Monoactive		Diversified		Portfolio		X ²	d.f.	Sign.	
		No	%	No	%	No	%				
Tenure											
	Wholly owned	Yes	40	33.1	12	18.2	30	27.5	4.72	2	0.0943
		No	81	66.9	54	81.8	79	72.5			
Mainly owned	Yes	40	33.1	19	28.8	40	36.7	1.16	2	0.5573	
	No	81	66.9	47	71.2	69	63.3				
Mainly tenanted	Yes	20	16.5	16	24.2	26	23.9	2.41	2	0.2989	
	No	101	83.5	50	75.8	83	76.1				
Wholly tenanted	Yes	18	14.9	19	28.8	12	11.0	9.82	2	0.0073	
	No	103	85.1	47	71.2	97	89.0				
Structure											
Ltd Co	Yes	18	14.9	13	19.7	30	27.5	5.64	2	0.0593	
	No	103	85.1	53	80.3	79	72.5				
Sole trader	Yes	37	30.6	19	28.8	18	16.5	6.69	2	0.0350	
	No	84	69.4	47	71.2	91	83.5				
Partnership	Yes	62	51.2	34	51.5	60	55.0	0.38	2	0.8264	
	No	59	48.8	32	48.5	49	45.0				
Co-operative	Yes	1	0.8	0	0.0	0	0.0	1.45	2	0.4840	
	No	120	99.2	66	100	109	100				
New Activities											
Additional farms	Yes	12	9.9	11	16.7	26	23.9	8.06	2	0.0177	
	No	109	90.1	55	83.3	83	76.1				
Additional land	Yes	35	28.9	29	43.9	54	49.5	10.75	2	0.0046	
	No	86	71.1	37	56.1	55	50.5				
Unconvent crop	Yes	0	0.0	3	4.5	15	13.8	19.36	2	0.0000	
	No	121	100	63	95.5	94	86.2				
Agri contract	Yes	2	1.7	38	57.6	43	39.8	76.99	2	0.0000	
	No	118	98.3	28	42.4	65	60.2				
Non-agri contr	Yes	0	0.0	5	7.6	8	7.3	9.40	2	0.0090	
	No	121	100	61	92.4	101	92.7				
Ag sales reven.											
Up to 50,000	Yes	26	21.5	14	21.2	5	4.6	15.08	2	0.0005	
	No	95	78.5	52	78.8	104	95.4				
50,001-100,000	Yes	26	21.5	16	24.2	16	14.7	2.85	2	0.2402	
	No	95	78.5	50	75.8	93	85.3				
100k -500k	Yes	60	49.6	26	39.4	59	45.9	3.60	2	0.1652	
	No	61	50.4	40	60.6	50	54.1				
500k -1million	Yes	4	3.3	8	12.1	18	16.5	11.35	2	0.0034	
	No	117	96.7	58	87.9	91	83.5				
1 mill - 5 mill	Yes	5	4.1	1	1.5	9	8.3	4.25	2	0.1190	
	No	116	95.9	65	98.5	100	91.7				
Over 5 mill	Yes	0	0.0	1	1.5	2	1.8	2.13	2	0.3434	
	No	121	100	65	98.5	107	98.2				

Although there was broad comparability in the commodity production of the three groups, portfolio owners were more likely to engage in 'other arable' crops, a category which includes sugar-beet and oil-seed rape. Both of these crops are restricted by quotas which have to be bought prior to production, but have produced notably lucrative returns in recent years. A significantly higher proportion of portfolio owners also engaged in the production of 'unusual crops or livestock', an agricultural diversification activity which also requires a high level of start-up investment. Together with diversifiers, this group were also more likely to engage in agricultural and non-agricultural contracting. Because both types of contracting activities re-utilise existing farm resources, relatively lower levels of start-up investment are required. These results appear to indicate that farmers engage only in the agricultural diversification activities that they can afford, given their business and personal resource base. This interpretation is supported by differences found in levels of farm sales revenue between the groups. Both monoactive producers and diversifiers were significantly more likely to report low levels of farm sales revenue (up to £50,000), while portfolio owners tended to report farm sales revenues between £500,000 and £1 million. Importantly, however, no differences between the groups were found on the basis of overall farm profitability.

The analysis of employment differences between the groups was undertaken using both parametric and non-parametric data. Variables containing information on employment in agricultural production were totalled across employment categories (full-time, part-time, seasonal and casual), converted into FTEs,⁴ and allocated into size band categories, in a dichotomous (dummy variable) form. In this parametric

⁴ Full-time, part-time, casual and seasonal employment converted into FTEs at ratios of 1.0, 0.5, 0.25 and 0.25 respectively (see Chapter Seven)

format, significant differences were found between monoactive producers, who were more likely to employ up to one full-time equivalent, and portfolio owners, more likely to report agricultural employment of between 11 - 50 FTEs

Greater insight into the agricultural employment differences of the groups was gained by using the data in a disaggregated, non-parametric, form. Converted into FTEs and subjected to Kruskal-Wallis one-way ANOVA, the non-parametric analogue of ANOVA (Howell, 1982), significant differences were found between the groups in three out of the four agricultural employment categories and for total agricultural employment (Tables 8.4 and 8.5). Mean employment in all categories (full-time, part-time, casual and seasonal) and mean total employment increased by group.

Monoactive producers had the lowest mean in all employment categories, diversifiers the next lowest and portfolio owners the highest. These results appear to provide some support for the concept of the diversification continuum, while also pointing to a gradation of resources between the groups. Not surprisingly, significant between group differences were also observed for total FTE employment of all types (agricultural production, diversification, additional businesses and external businesses). Interestingly, the distribution of total employment in the "all employment" category replicates the distribution of agricultural employment, with monoactive producers having the lowest mean and portfolio owners the highest. In all categories, however, the mean rank of the diversifier group is closer to the monoactive mean than to the portfolio mean.

Table 8.4 Kruskal-Wallis One Way ANOVA test differences: full-time agricultural and total employment by type of ownership

Employment Type		Mono-active	Diversified	Portfolio	Total All	X ² statistic	Signif. level
Agricultural Full-time	Mean	2.51	3.81	4.66	3.59	25.3793	0.0000
	St. Dev	4.42	10.41	7.15	7.18		
Agricultural Total FTEs	Mean	3.31	4.80	6.88	4.96	32.8218	0.0000
	St. Dev	5.27	11.30	12.67	10.03		
TOTAL ALL Employment	Mean	3.33	5.13	10.54	6.39	74.1067	0.0000
	St. Dev	5.27	11.28	19.11	13.55		

Notes: 1. Total employment includes regular full-time, regular part-time (less than 30 hours per week), regular casual and seasonal labour, as full-time equivalents Labour converted into FTEs at ratios of 1.0, 0.5, 0.25 and 0.25 respectively. 2 Chi-square statistic corrected for ties

Table 8.5 Kruskal-Wallis One Way ANOVA test differences: agricultural employment in all categories by type of ownership

Employment Type	Monoactive Mean rank	Diversified Mean rank	Portfolio Mean rank	Corrected X ² statistic	Significance level
Fulltime FTEs	123.91	142.56	179.39	25.3793	0.0000
Parttime FTEs	131.09	141.03	172.35	18.4649	0.0001
Casual FTEs	144.58	145.05	154.94	2.4697	0.2909
Seasonal FTEs	133.17	148.58	165.47	10.4071	0.0055
Total FTEs agricultural employment	120.52	140.49	184.41	32.8218	0.0000
Total FTEs all categories employment	107.25	134.30	202.89	74.1067	0.0000

Notes: Chi-squared statistic corrected for ties Df = 2

8.3.3 Differences in marketing and management

Four statistically significant differences were found in the marketing characteristics of the groups (Table 8 6). Portfolio owners were more likely to identify wholesalers as their major customer, probably reflecting their greater engagement in other arable and unusual crops, and were also more likely to export a proportion of their agricultural output. While both factors may reflect a more professional and innovative approach to the marketing function, they also reflect the comparatively greater resource base of the portfolio owning group. Both diversifiers and portfolio owners were more likely to agree with the statement that 'there are new markets for my agricultural products if I wish to exploit them', although only the diversifiers were more likely to state that they were sensitive to the needs of their customers

A similar divergence between groups was observed on the issue of management strategies (Table 8 7) Of the statistically significant differences relating to management, all separated the portfolio owners from the other two groups Portfolio owners were the only group to have employed professional managers within the past five years, and were also more likely to have increased their own time spent on management and business planning The more proficient approach to management apparent among the portfolio group was reinforced by their greater likelihood of having both a formalised business growth objective and a formalised mechanism of delegation in the owner's absence Significant between group differences were also apparent in the sources used for management advice Both diversifiers and portfolio owners were more likely to use ADAS, although only portfolio owners were differentiated by their propensity to use accountants, other business owners and other sources.

Table 8.6 Chi square test differences: marketing characteristics and strategies by type of ownership (dichotomous variable 0 - no, 1 - yes)

		Monoactive		Diversified		Portfolio		X ²	d.f.	Signif	
		No	%	No	%	No	%				
Customers											
	Wholesalers	Yes	66	54.5	40	60.6	77	70.6	6.34	2	0.0418
		No	55	45.5	26	39.4	32	29.4			
Processors	Yes	53	43.8	36	54.5	60	55.0	3.50	2	0.1736	
	No	68	56.2	30	45.5	49	45.0				
Auction markets	Yes	23	19.0	11	16.7	15	13.8	1.14	2	0.5645	
	No	98	81.0	55	83.3	94	86.2				
Multiple retailers	Yes	7	5.8	8	12.1	11	10.1	2.50	2	0.2853	
	No	114	94.2	58	87.9	98	89.9				
Independent retailers	Yes	15	12.4	11	16.7	11	10.1	1.62	2	0.4433	
	No	106	87.6	55	83.3	98	89.9				
Farm shops	Yes	4	3.3	5	7.6	4	3.7	2.06	2	0.3554	
	No	117	96.7	61	92.4	105	96.3				
Restaurants/caterers	Yes	2	1.7	1	1.5	3	2.8	0.46	2	0.7941	
	No	119	98.3	65	98.5	106	97.2				
Local/Regional markets	Yes	99	81.8	49	74.2	81	74.3	2.31	2	0.3138	
	No	22	18.2	17	25.8	28	25.7				
National UK markets	Yes	76	62.8	50	75.8	81	74.3	4.97	2	0.0829	
	No	45	37.2	16	24.2	28	25.7				
International markets	Yes	8	6.6	9	13.6	20	18.3	7.32	2	0.0257	
	No	113	93.4	57	86.4	89	81.7				
Strategy											
There are new market opportunities	Yes	20	16.5	22	33.3	33	30.3	8.59	2	0.0135	
	No	101	83.5	44	66.7	76	69.7				
We have strong market orientation	Yes	44	36.4	34	51.5	47	43.1	4.07	2	0.1303	
	No	77	63.6	32	48.5	62	56.9				
We have changed product range	Yes	35	28.9	21	31.8	34	37.8	0.21	2	0.8961	
	No	86	71.1	45	68.2	75	68.8				
We have changed customer service	Yes	15	12.4	12	18.2	22	20.2	2.67	2	0.2618	
	No	106	87.6	54	81.8	87	79.8				
We are sensitive to customer needs	Yes	63	52.1	50	75.8	76	69.7	12.96	2	0.0015	
	No	58	47.9	16	24.2	33	30.3				
We rely heavily on a few key customers	Yes	72	59.5	44	66.7	73	67.0	1.67	2	0.4322	
	No	49	40.5	22	33.3	36	33.0				
Competition in farming is more intense	Yes	33	27.3	24	36.4	30	27.5	1.99	2	0.3695	
	No	88	72.7	42	63.6	79	72.5				
Bus. opportunities in farming more available	Yes	9	7.4	11	16.7	14	12.8	3.89	2	0.1429	
	No	112	92.6	55	83.3	95	87.2				

Table 8.7 Chi square test differences: management characteristics by type of ownership (dichotomous variable 0 - no, 1 - yes)

		Monoactive		Diversified		Portfolio		X ²	d.f.	Signif
		No	%	No	%	No	%			
Management change										
Increased managers	Yes	2	1.7	4	6.1	8	7.3	4.44	2	0.1081
	No	119	98.3	62	93.9	101	92.7			
Decreased managers	Yes	3	2.5	1	1.5	7	6.4	3.64	2	0.1619
	No	118	97.5	65	98.5	102	93.6			
Employed prof. man.	Yes	0	0.0	0	0.0	5	4.6	8.72	2	0.0127
	No	121	100	66	100	104	95.4			
Increased time manage.	Yes	28	23.1	25	37.9	50	45.9	13.41	2	0.0012
	No	93	76.9	41	62.1	59	54.1			
Increased time planng	Yes	22	18.2	24	36.4	56	51.4	28.11	2	0.0000
	No	99	81.8	42	63.6	53	48.6			
Delegate - manager	Yes	5	4.1	4	6.1	15	13.8	21.00	6	0.0018
	No	116	95.9	62	93.9	94	86.2			
Delegate - employee	Yes	12	9.9	8	12.1	26	23.9	21.00	6	0.0018
	No	109	90.1	58	87.9	83	76.1			
Delegate - family	Yes	65	53.7	31	47.0	47	43.1	21.00	6	0.0018
	No	56	46.3	35	53.0	62	56.9			
Do not delegate	Yes	39	32.2	23	34.8	21	19.3	21.00	6	0.0018
	No	82	67.8	43	65.2	88	80.7			
Growth objective	Yes	40	33.1	27	40.9	57	52.3	8.75	2	0.0125
	No	81	66.9	39	59.1	52	47.7			
Management Advice										
ADAS	Yes	76	62.8	52	78.8	92	84.4	14.89	2	0.0005
	No	45	37.2	14	21.2	17	15.6			
Local Ent. Agency	Yes	1	0.8	1	1.5	3	2.8	1.29	2	0.5230
	No	120	99.2	65	98.5	106	97.2			
TEC	Yes	4	3.3	3	4.5	10	9.2	3.87	2	0.1441
	No	117	96.7	63	95.5	99	90.8			
Bank manager	Yes	36	29.8	24	36.4	47	43.1	4.44	2	0.1085
	No	85	70.2	42	63.6	62	56.9			
Accountant	Yes	72	59.5	45	68.2	87	79.8	11.06	2	0.0039
	No	49	40.5	21	31.8	22	20.2			
Customers	Yes	15	12.4	6	9.1	22	20.2	4.82	2	0.0897
	No	106	87.6	60	90.9	87	79.8			
Suppliers	Yes	46	38.0	26	39.4	50	45.9	1.57	2	0.4545
	No	75	62.0	40	60.6	59	54.1			
Other business owners	Yes	8	6.6	6	9.1	20	18.3	8.24	2	0.0161
	No	113	93.4	60	90.9	89	81.7			
Other sources	Yes	3	2.5	0	0.0	11	10.1	11.59	2	0.0030
	No	118	97.5	66	100	98	89.9			

8.3.4 Differences in perceptions of business constraints and opportunities

Of the constraints identified in the questionnaire, two produced statistically significant differences between the groups. Portfolio owners were more likely to identify both shortage of available land and a lack of market demand as having a constraining effect on their farm business growth (Table 8.8). It could be inferred that the more aspirational portfolio group, constrained by a lack of land with which they could increase their agricultural production, turn to alternative non-farm enterprises as a mechanism for business growth

The issue of market demand requires a more complex interpretation. It is possible that portfolio owners, as younger and better trained business owners, are more aware of demand side effects than other types of owner, who tend to be older and less skillful managers. Thus, while all three groups may be equally subject to demand side changes, portfolio owners are more aware of the growth constraints imposed by the lack of market demand. It is also possible that the perception of a lack of market demand is a function of both the commodities produced (although the 'other arable' crops more favoured by portfolio owners are as regulated as any other main commodity, 'unusual crops' are not) and the marketing channels selected. The portfolio group's emphasis on using wholesalers may ensure closer proximity to the market place and a greater awareness of the links between demand, volume and prices.

Four scaled questions were included in the questionnaire in order to investigate perceptions of business opportunities and all yielded statistically significant differences between the groups. Interestingly, it was the portfolio owners and not the monoactive producers who agreed more that they could "achieve greater business growth by specialising in specific farm sectors". This suggests that portfolio owners are attempting to pursue a niche, specialization strategy in their agricultural activities and

are moving away from the traditional practice of mixed farming. Not surprisingly, both diversifiers and portfolio owners were more likely to agree that they could "achieve greater business growth by introducing diversified activities". Portfolio owners alone, however, tended to show awareness of agricultural policy liberalization in their agreement that they "must initiate other business ventures in order to cope with declining farm incomes" and that they "actively seek out new ideas for development".

Table 8.8 Chi square test differences: perceptions of business constraints and opportunities by type of ownership (dichotomous variable 0 - no, 1 - yes)

Constraint		Monoactive		Diversified		Portfolio		X²	d.f.	Signif
		No	%	No	%	No	%			
Local labour shortage	Yes	9	7.4	3	4.5	5	4.6	1.08	2	0.5809
	No	112	92.6	63	95.5	104	95.4			
Local skills shortage	Yes	5	4.1	4	6.1	12	11.0	4.25	2	0.1193
	No	116	95.9	62	93.9	97	89.0			
Land shortage	Yes	75	62.0	51	77.3	85	78.0	8.65	2	0.0131
	No	46	38.0	15	22.7	24	22.0			
Buildings shortage	Yes	19	15.7	9	13.6	11	10.1	1.59	2	0.4507
	No	102	84.3	57	86.4	98	89.9			
Lack long term capital	Yes	24	19.8	16	24.2	16	14.7	2.56	2	0.2776
	No	97	80.2	50	75.8	93	85.3			
High cost machinery	Yes	51	42.1	31	47.0	44	40.4	0.74	2	0.6880
	No	70	57.9	35	53.0	65	59.6			
Lack of market demand	Yes	11	9.1	3	4.5	20	18.3	8.85	2	0.0119
	No	110	90.9	63	95.5	89	81.7			
Opportunity										
Higher growth thro' specialising farm sector	Yes	52	43.0	33	50.0	64	58.7	5.68	2	0.0582
	No	69	57.0	33	50.0	45	41.3			
Higher growth thro' diversification	Yes	11	9.1	21	31.8	37	33.9	23.25	2	0.0000
	No	110	90.9	45	68.2	72	66.1			
Must initiate business ventures - declining farm income	Yes	19	15.7	16	24.2	46	42.2	20.67	2	0.0000
	No	102	84.3	50	75.8	63	57.8			
Actively seek new business ideas	Yes	21	17.4	20	30.3	53	48.6	25.95	2	0.0000
	No	100	82.6	46	69.7	56	51.4			
I am an entrepreneur	Yes	15	12.4	18	27.3	49	45.0	30.35	2	0.0000
	No	106	87.6	48	72.7	60	55.0			
Family tradition of starting new businesses	Yes	11	9.1	15	22.7	25	22.9	9.50	2	0.0086
	No	110	90.9	51	77.3	84	77.1			

8.4 Multivariate analysis

Results of the univariate analysis revealed *prima facie* evidence of dissimilarities between monoactive producers, structural diversifiers and portfolio owners. An exploratory discriminant analysis was undertaken in order to identify the best combination of variables which best summarised and distinguished between the three types of owners. The two main aims of discriminant analysis are to identify the dimensions along which groups are maximally different ("interpretation") and to predict group membership on the basis of those predictor variables used to create the dimensions ("classification") (Klecka, 1980: 63)

8.4.1 Preparing the data set

The basic prerequisites of discriminant analysis are that two or more groups exist which differ on several variables and, because the technique requires the computation of means, variances and covariances, that variables are measured at the interval or ratio level. Three practical concerns of discriminant analysis are small sample sizes, unequal sample sizes and the treatment of missing values. The two main mathematical assumptions of discriminant analysis require firstly, that the data demonstrate a multivariate normal distribution on the discriminating variables and secondly, homogeneity of variance-covariance matrices. In addition, checks were made for linearity and multicollinearity (Klecka, 1980, Tabachnik and Fidell, 1983). Prior to the analysis, the data set was checked and cleaned in order that these elements would not pose a threat to the analysis. Amendments to the data set are reported below.

Although statistical texts do not prescribe the minimum number of cases above which discriminant analysis is viable, it is generally argued that the larger the sample the more robust the technique is with regard to violation of practical and mathematical

assumptions (Lachenbruch, 1975, Klecka, 1980, Tabachnik and Fidell, 1983) Klecka (1980) states that the most important issue with regard to sample size is that the size of the smallest group should exceed the number of predictor variables by at least two This assumption was clearly satisfied: the size of the smallest group, structural diversifiers (66), notably exceeded the number of variables (48) statistically significant at the univariate level and thus, initially entered into the analysis

Inequality of group sizes (which varied between 66 structural diversifiers, 109 portfolio owners and 121 monoactive producers) posed no threat to the discriminant analysis (Tabachnik and Fidell, 1983), but required a choice of prior probabilities in determining classification The final model was run twice, firstly assuming that all groups were equal (prior probability of classification = 0.33) and then on the basis of actual groups sizes (prior probability of classification monoactive producers, 0.41, structural diversifiers, 0.22, and portfolio owners, 0.37) A slight improvement in classification was gained by calculating classification on the basis of actual group sizes and was thus selected as the appropriate choice for the final model

Exploratory analysis revealed small quantities of missing values which appeared to be randomly distributed throughout the data set (see Chapters Six and Seven)

Randomness of missing values was assured by using *t* tests to examine means The results revealed no significant differences. As the deletion of cases or variables with missing values would have led to a substantial loss of data, and in order to maximise the number of cases used in the multivariate analysis, missing values were treated by filling empty slots Tabachnik and Fidell (1983) recommend two schemes for this Firstly, where possible, values were filled on the basis of prior knowledge For the cases in which this more liberal approach was neither possible nor suitable, missing values were filled by substituting the mean value of the total sample The attraction of

this procedure is that, because the mean for the distribution as a whole remains the same, it is a more conservative approach. The main disadvantage is that correlations between a variable with the mean inserted in several slots and other variables will be lowered (Jackson, 1968). However, as the proportion of missing values was low (generally 1 per cent), the amount of reduction was minimal. An alternative procedure would have been to use the respective group means as a substitute for missing values. This strategy was rejected, however, as having the potential to artificially inflate the between-group differences.

For discriminant analysis, multivariate normality assumes that the predictor variables are independently and randomly sampled from a population of scores and that the sampling distribution of any linear combination of predictor variables is normally distributed (Tabachnik and Fidell, 1983). Lachenbruch (1975) demonstrated that discriminant analysis is a robust technique, not particularly sensitive to minor violations of the normality assumption. However, the greater the difference between groups in sample size, the larger the overall sample size necessary to assure robustness. Tabachnik and Fidell (1983) suggest that as a conservative recommendation, robustness can be assured with 20 cases in the smallest group. Lachenbruch (1975) and McLachlan (1992) also state that discriminant analysis is robust with respect to violation of the assumption of equal variance-covariance, providing samples are either large or equally sized. Homogeneity of variance-covariance matrices was assessed by running scatterplots of scores for each group on the first two canonical discriminant functions (Tabachnik and Fidell, 1983). The broad equality found in the scatterplots provided evidence of homogeneity of variance-covariance matrices.

Discriminant analysis also assumes a linear relationship among all predictor variables within each group. This assumption is less serious than others as violation simply leads to a reduction in power. By minimising the ability of covariates to reduce error, violation "produces error in the conservative direction" (Tabachnik and Fidell, 1983: 182). Multicollinearity, which occurs when highly redundant discriminating variables are included in the analysis, is normally protected against by the tolerance value pre-set in the programme. Despite this, evidence of multicollinearity was found in the first models which included all discriminating variables significant at a univariate level. A correlation matrix revealed a small number of variables with correlations over 0.65. Successive versions of the model were run until the offending variable (A2B hectare = 51-100ha) was identified and excluded from the analysis. After the data had been cleaned and checked, the total sample of 296 cases was accepted into the analysis.

8.4.2 Stepwise discriminant function analysis

Because this analysis was an exploratory investigation and also because the univariate results indicated a number of potential discriminating variables, a stepwise discriminant function analysis was chosen. The purpose of stepwise selection is to identify a more parsimonious subset of variables which can discriminate "nearly as well as, if not better than, the full set" (Klecka, 1980: 60). Stepwise procedures produce an optimal set of discriminating variables which, although they may not be the best (maximal) combination, are the best combination capable of being generated in an efficient and logical manner.⁵ Wilks's lambda was used as the measure of discrimination for

⁵ To secure a maximal solution, all possible combinations (all possible pairs, all possible triplets etc.) would have to be tested. Such an approach is both costly and time-consuming and unnecessary given the statistical robustness of the stepwise method.

selection of variables. This statistic takes into consideration both the differences between groups and the homogeneity within groups. Because Wilks's lambda is an inverse statistic, the variable which produces the smallest lambda is included at each step. The significance of the change in lambda when a variable is entered or removed is obtained from an F test. At each step of adding a variable to the analysis, the variable with the largest F (F-to enter)⁶ is included. This process is repeated until there are no further variables with an F value greater than the critical minimum threshold value (F-to-enter = 3.84). As SPSS discriminant analysis combines both forward and backward stepwise selection, variables which have been selected but no longer make a sufficient contribution to the discrimination, i.e. when its F value drops below the critical maximum threshold value (F-to-remove = 2.71), are removed. The minimum conditions for selection of a variable include both the partial F statistic and a tolerance test to assure computational accuracy.⁷

8.4.3 The final discriminant analysis model

The final discriminant analysis model is presented in Table 8.9. This parsimonious model includes seven variables. Standardised canonical discriminant function coefficients indicate the relative importance of the variables included in the model and are used to describe the significant differences between the groups of owners. The pooled within-groups correlations demonstrate how closely a variable and a

⁶ F-to-enter is a partial multivariate F statistic which tests the additional discrimination introduced by the variable being considered, after taking into account the discrimination achieved by the other variables already entered. F-to-remove is also a partial multivariate F statistic, but it tests the significance of the decrease in discrimination should that variable be removed from the list of variables already selected (Norusis, 1979, Klecka, 1980).

⁷ The tolerance for a variable not yet selected is 1 minus the squared multiple correlation between that variable and all the variables already entered, when the correlations are based on the within groups correlation matrix.

discriminating function are related. The discriminant analysis revealed that the first discriminant function had an eigenvalue of 0.51 accounting for 73.34 per cent of the variance, with a canonical correlation of 0.58. The second discriminant function had an eigenvalue of 0.18, accounting for 26.66 per cent of the variance, with a canonical correlation of 0.39. Wilks's lambda values for functions 1 and 2 were 0.55 and 0.84 respectively. Both lambdas were significant at the 0.001 level or less. A further indicator of the effectiveness of the discriminant model is the degree of predictive accuracy measured by the percentage of cases correctly classified. Overall, 67.9 per cent of the owners were correctly classified, considerably greater than could have been achieved by chance alone. The final model correctly classified 91.7 per cent of monoactive producers (prior probability, 0.41), but fewer (51.5 per cent) structural diversifiers (prior probability, 0.22) and (51.4 per cent) portfolio owners (prior probability 0.37).

The first function, which explained most of the variance, differentiated monoactive producers from the other two types of owners. Monoactive producers were differentiated from the other two groups of owners on the basis of business size (hectarage), the activities they chose to undertake on their farms and, perhaps most importantly, on various aspects of the management function. This group were more likely to operate farms with a hectarage of less than 100ha, suggesting that their initial resource base is lower than for the other two groups. They were also less likely to engage in agricultural diversification activities such as agricultural contracting and unconventional crops or livestock. The lack of participation in unconventional agricultural activities also suggests that this group have a lower level of resources than other farm owners. However, their lack of participation in agricultural contracting suggests a group less willing to engage in activities beyond the farm gate, rather than a group which merely lacks the resources to do so.

Monoactive producers were also differentiated by a relatively unsophisticated approach to the management function. Fewer monoactive producers had developed a system of managerial delegation to be imposed in their absence. Although, *prima facie*, this may be interpreted as a reflection of the smaller hectareage of their farm businesses, it is notable that hectareage is neither a strong indicator of scale of output nor a measure of technological and managerial sophistication and should not be used as a proxy. Rather, it is more likely that the lack of management delegation is a reflection of their narrow business interests and a retention of a strongly traditional approach to farming. Monoactive producers were also less likely to have increased their time spent on business planning in the previous five years and were also less likely to seek managerial advice from other sources. These findings provide further support for the view that this group is distinguished by a less sophisticated, and perhaps outdated, approach to the management function. Importantly, although this group was composed of well-established business owners, they were less likely than the other two groups of owners to describe themselves as being entrepreneurs.

The second function differentiated structural diversifiers from monoactive producers and portfolio owners. Structural diversifiers were more likely to engage in both agricultural contracting and in unconventional crops or livestock than the monoactive group, and were also likely to operate larger hectareage farms. Structural diversifiers demonstrated signs of a relatively sophisticated management function, being more likely than monoactive producers to have a formal delegation procedures and to have increased their time spent on business planning. Interestingly, unlike portfolio owners, this group did not use other sources for management advice. Although structural diversifiers were more likely than monoactive producers to identify themselves as entrepreneurs, they were not as likely as the portfolio group to do so.

These findings suggest support for the diversification continuum, ranging from monoactive producers at one extreme, portfolio owners at the other extreme and structural diversifiers somewhere in the middle. The continuum can be seen, not only in the relative business resources at their disposal and the activities in which they engage, but also (perhaps, most importantly) in the relative sophistication of the management function

Table 8.9 Discriminant analysis: types of farm business owners

Variable	Function 1 Standardised canonical discriminant function coefficients	Pooled within groups correlations (structure matrix)	Function 2 Standardised canonical discriminant function coefficients	Pooled within groups correlations (structure matrix)
1 <u>Farm Activity</u> Agricultural contracting	0 72584	0 76579	-0 71660	-0 53270
2 <u>Career description</u> I am an entrepreneur and will start a new business given the opportunity and resources	0 29013	0 43855	0 15838	0 28988
3. <u>Farm Activity</u> Unconventional crops or livestock	0 31824	0 32459	0 25741	0 29281
4 <u>Management Advice</u> Other sources	0 11623	0 14980	0 58886	0 39613
5 <u>Management Practice</u> Management in absence formalised	0 19515	0 26930	0 39221	0 39509
6 <u>Size</u> Hectarage between 101-250ha	0 31395	0 17824	0 16696	0 13462
7 <u>Management Change</u> Increased time spent on business planning	0 20252	0 43307	0 39753	0 21705

Func- tion	Eigen- value	Pct of variance	Cum percent	Canon correlatin	After function	Wilks Lambda	Chi- square	df	Signif level
1*	0 5127	73 34	73 34	0 5822	0	0 55719	169 60	14	0 0000
2*	0 1864	26 66	100 00	0 3964	1	0 84288	49 56	6	0 0000

* Marks the 2 canonical discriminant functions remaining in the analysis

Canonical discriminant functions evaluated at group means (group centroids)

Group	Function 1	Function 2
1 Monoactive producers	-0 85261	0 05079
2 Diversifiers	0 47244	-0 74957
3 Portfolio owners	0 66040	0 39748

Percentage of cases correctly classified

1 Monoactive producers	111 cases (91 7%)
2 Diversifiers	34 cases (51 5%)
3 Portfolio owners	56 cases (51 4%)
TOTAL CORRECTLY CLASSIFIED	201 cases (67 9%)

Further interpretation of the discriminant functions can be gained from an examination of the loadings of predictor variables. Loading matrices contain correlations between predictor variables and each of the discriminant functions (canonical variates)

Although statistical texts advise caution in interpreting the loading matrices (Tabachnik and Fidell, 1983),⁸ by convention correlations in excess of 0.30 (9 per cent of variance) are considered eligible for interpretation while lower correlations are not.

The loading matrix, partially reproduced in Table 8.10, suggests that the primary variable in distinguishing between monoactive producers and other types of owner (function 1) is engagement in agricultural contracting activities. As the previous discussion highlighted, monoactive producers were less likely to participate in this activity (group mean 0.02) than either structural diversifiers (group mean 0.58) or portfolio owners (group mean 0.39). A further five variables also exhibited correlations over 0.30 on function 1. These include a career descriptor, "I am an entrepreneur"; two management change variables, increased time spent on business planning and management, previous training in management, and engagement in unconventional crops or livestock. The remaining variables correlated at less than 0.30.

Only two predictor variables had loadings in excess of 0.30 in the second discriminant function which distinguished structural diversifiers from the other two groups. These were management advice from other sources and a formalized mechanism for delegation in the owner's absence.

⁸ This is because loadings do not necessarily indicate which variables contribute most heavily to discrimination among groups, after adjustment for remaining variables.

Table 8.10 Structure matrix: pooled within-groups correlations between discriminating variables and canonical discriminant functions. Variables ordered by size of correlation within function (correlations above 0.30)

Variable	Function 1	Function 2
<u>Farm activity:</u> Agricultural contracting	0.77*	-0.53
<u>Career description:</u> I am an entrepreneur	0.44*	0.29
<u>Management change:</u> Increase time spent on business planning	0.43*	0.22
<u>Management change:</u> Increase time spent on management	0.40*	0.15
<u>Personal background:</u> Training in management	0.33*	0.02
<u>Farm activity:</u> Unconventional crops or livestock	0.32*	0.29
<u>Management advice:</u> Other sources	0.15	0.40*
<u>Management practice:</u> formalized delegation in owner's absence	0.27	0.40*

Notes: * denotes largest absolute correlation between each variable and any discriminant function

8.4.4 Split-sample validation

As classification is based on the same cases used to derive the classification functions, the percent correct procedure of discriminant analysis tends to over-estimate the power of the classification function. As Klecka (1980: 51) explains

"The equations utilize idiosyncratic sampling error to create classification functions which are more accurate for that particular sample than they would be for the full population."

Although the predictive accuracy of the final model was not the paramount objective for utilising this multivariate technique, the stability of the classification procedure was checked by the use of a cross-validation sample. In large samples the classification procedure can be validated by randomly splitting the sample into two subsets. The first subset is used to derive the functions and the second subset is used to test classification. Because each subset will tend to have different sampling errors, the test subset gives a better estimate of the ability to correctly predict the total population. Statistical texts differ on the appropriate sizes for the two subsets (cf. Lachenbruch, 1975, McLachlan, 1992), although Tabachnik and Fidell (1983) suggest a pragmatic split of 75/25. The most important consideration, however, is that the subset used to derive the functions is sufficiently large to insure stability of the coefficients (Klecka, 1980).

The cross-validation sample was assembled by randomly selecting out approximately 25 per cent of the sample. By using the grouping variable as the filter, the proportion of cases in each group remained constant and the prior probabilities of classification replicated those of the full sample. For the selected out subset, information about group membership was "hidden" from the programme (Tabachnik and Fidell, 1983: 327). Thus, the discriminant analysis excluded these cases in the derivation of classification functions, but included them in the classification phase.

The resulting correct classification rate for the 75 per cent (214) of cases selected for use in "interpretation" was 65.4 per cent, compared with 67.9 per cent for the full sample, indicating little loss of classification accuracy with the use of a smaller sample. The correct classification rate for the 25 per cent (82) of cases used for cross-validation was lower, 62.2 per cent, but still indicated a high degree of consistency in the classification scheme. Importantly, however, the pattern of percent of cases

correctly classified in the cross-validation sample replicated the pattern found in the total sample, with greater predictive accuracy for the monoactive group and lesser accuracy for both structural diversifiers and portfolio owners. As a consequence, the cross-validation, or 'hold-out', sample confirmed both the strengths and weaknesses of the model.

8.5 Conclusion

Results of the univariate and multivariate analysis demonstrate that statistically significant differences exist between farmers on the basis of their propensity to participate in additional business activities. At a univariate level, these differences are observable with regard to their personal background, the characteristics of the farm business, the relative sophistication of the management and marketing function of their farm businesses and in their perception of business constraints and opportunities. Multivariate analysis indicated a combination of variables which summarised the differences between the groups. This combination of variables included not only the size and resource base of the originating farm, but also managerial differences between the owners. Used as a basis for the prediction of group membership, the multivariate model was able to accurately predict 68 per cent of cases, considerably greater than chance alone.

CHAPTER NINE

CONCLUSIONS

9.1 Introduction

This chapter concludes the thesis and draws together the different issues raised by the research. The chapter starts by summarising the conceptual approach of the study and the main findings. The initial impetus for the study was the exclusion of agriculture from the small business research effort. This exclusion is reappraised in the light of the research findings. The chapter then discusses some of the implications of the findings in terms of both small business theory and methodology. Finally, some future possible research directions are highlighted.

9.2 The role of farms in rural business development

This study was concerned with documenting the role of farms in rural business development. The study was undertaken in three principal areas: an analysis of farms as small businesses, an investigation of the additional business activities of farm owners; and an analysis of the differences between farms with extended business interests compared with monoactive producers. Together, these three research themes served as indicators of the total role and contribution of farms to rural business development.

The first objective used a predominantly descriptive approach which entailed identifying the characteristics of the sample. Previous small firm theory stresses the importance of three inter-relating elements: the background and starting resources of

the entrepreneur; the firm, and the firm's management strategy (Storey, 1994). The small firms research literature also provided a descriptive profile of many of the characteristics of rural, non-farm, enterprises. Addressing the first objective entailed a replication of previously established descriptive variables among a farm owning population, using small business theory as the main conceptual approach.

The second objective required a more analytical approach. Firstly, types of business activity had to be differentiated. While the agronomy literature draws distinctions between mainstream agricultural production and diversification projects, a more sensitive approach was required in order to differentiate between types of diversification projects and other, additional business activities. Secondly, the importance of these activities had to be established. Small business theory emphasises the role of new and small firms in employment generation and wealth creation, and this served as the main conceptual approach. Thirdly, the total contribution of farms goes beyond personal business ownership to encompass their assistance to external businesses. In determining the indicators which could measure this contribution, guidance was again taken from previous rural small firms theory which emphasises the importance of the natural environment and access to business premises in attracting business migrants to rural areas (Keeble and Tyler, 1995).

The third objective drew on the findings of the first two elements of the study. Using the exploratory analysis conducted for the first two objectives, a taxonomy of farm businesses was constructed based on their level of additional business activities and relative contribution to rural business development. This taxonomy formed the dependent concept against which factors were correlated in order to establish the precise nature of relationships. In analysing the reasons why certain businesses engage in additional business activities, the study drew on recent small business theory which

recognises the scale and importance of multiple business ownership as a growth strategy. By analysing the relative importance of and the relationships between variables, the strategic intent of the farm owners becomes clear.

The main results from these three areas are summarised below.

9.2.1 Farms as small businesses

A consideration of owner characteristics revealed a predominantly male population, which was both poorly trained and occupationally rooted in farming. In this respect the sample reflected many of the characteristics highlighted by the agronomy literature. Disaggregation of results, however, demonstrated that younger farm owners had benefited from a significantly higher proportion of education and training than their older counterparts. As previous research has attributed the occupational immobility of farmers to their broad lack of education (Newby, 1979, Gasson et al, 1988, OECD, 1994), this finding has important implications both for agricultural policy and the future of the agriculture sector. From a small business perspective, however, perhaps the most important finding of the analysis of owners was the similarity found on the issue of economic migration between the farm owners and non-farm entrepreneurs operating businesses in similar types of rural location (cf Keeble et al, 1992). That farm owners demonstrate the same migration patterns as non-farm entrepreneurs suggests that further analysis of this issue is required before firm conclusions are drawn regarding the precise nature of the relationship between counterurbanisation and rural economic resurgence.

Analysis of the farm businesses also revealed important similarities between farms and non-farm rural enterprises. Despite the increasing emphasis on large scale agri-business

within the agronomy literature (cf Bouquet, 1985, Gasson et al , 1988, Evans and Ilbery, 1992), the dominance of partnerships and sole traders, which made up 88 per cent of the sample, suggests that small scale and family dominated agricultural production is still the structural norm. Similarly, although rural sociologists have been keen to point to property rights as a distinguishing feature of the agriculture sector (Whatmore, Munton and Marsden, 1990), the tenure patterns of the farm sample were identical to those of non-farm businesses operating in the same type of rural environment (cf. Keeble et al., 1992). Comparisons between farms and other small enterprises on the issue of sales revenue also revealed broad similarities, although an important difference was found in levels of profitability, where the farms outperformed even rural manufacturing firms (cf Smallbone et al , 1993). It is improbable that this difference results solely from higher efficiency levels in agriculture, rather it is likely to be a function of the broad maintenance of agricultural policy. That no previous comparisons have been made between farm businesses and other types of rurally based private enterprises has clearly prevented adequate monitoring of farm income levels.

An analysis of the management strategies employed by the farm owners suggests that the sector has yet to achieve the strategic complexity likely to be required to survive policy liberalization. Nevertheless, there were signs that some farms were clearly developing a growth orientation and were becoming more aware of market signals. The proportion of farms with a specified growth objective mirrored that found in non-farm small businesses (Hakim, 1989), and nearly 40 per cent had changed their product range to take advantage of new market opportunities. In comparison with rural manufacturing enterprises (Smallbone et al , 1993), however, few farms had made significant managerial adjustments in the previous five years, perhaps reflecting the small size of the farm businesses and the continued importance of family labour.

In common with non-farm enterprises (Cambridge Small Business Research Centre, 1992), farms were unlikely to use public sector advisory services, preferring instead accountants, banks and suppliers. Interestingly, the most commonly used source of management advice was ADAS, which had been used by 74 per cent of the sample. Although sector specific business advice is rarely provided for non-farm enterprises, it is clear from the level of usage found in this study that sector specialization may be an important mechanism for the diffusion of management advice, assistance and information for all small enterprises.

Similarities between farms and other types of rural enterprises were also seen in the levels of reported growth constraints. Few farms concurred that business growth had been constrained by local labour and skills shortages or a lack of market demand. Rather, a shortage of land was identified as the main constraint on (agricultural) growth.

9.2.2 Additional business activities

Recent studies have suggested that multiple business ownership may have been under-reported in previous small business analyses as a result of both a lack of visibility of additional business activities and the use of the firm as the main unit of analysis (Scott and Rosa, 1996; Westhead and Wright, 1997). In order to accommodate these factors, distinctions were drawn firstly in the identification of additional business activities and secondly, in the unit of analysis used. Three different types of additional activities were identified: the diversification of the originating farm into non-traditional activities; the ownership of additional businesses either on or off the farm; and the presence of external firms located on-farm, but not owned by the farm principals. These activities

formed the basis of the diversification continuum, which reflects the evolutionary aspect inherent in the process of extending business interests.

In total, 175 of the sample (59 per cent) engaged in some kind of agricultural or structural diversification activity. Of the 216 diversification activities, only 24 (11 per cent) were registered as separate businesses. That so many, hitherto 'invisible', additional business activities co-exist under the umbrella of one main enterprise, reinforces the view that multiple business ownership activities have probably been under-reported by previous small business studies. Fewer respondents engaged in more formalised business ownership activities. Overall, 62 respondents (21 per cent) owned a total of 79 additional businesses located either on-farm or off-farm. These findings offer support for the use of the diversification continuum as a means of accommodating the evolutionary nature of additional business activities.

In addition to their own business activities, farms have a role in providing premises for external firms. In this study, 42 farms (14 per cent) had leased land or buildings to a total of 90 external firms. The majority of these external firms were non-agricultural in focus and owned by non-family members. That farms act as hosts to external firms in this manner suggests that they play a more specific and, hitherto unrecognized, role in the provision of small, industrial premises. Moreover, by providing industrial accommodation, farms may also have an unrecognized role in the process of attracting both new starts and small firm relocations to rural areas.

The analysis of employment generation by farm businesses was undertaken in the same four identified categories of business ownership activities. Agricultural production yielded the highest proportion of employment. In total, the 296 farm businesses employed 1469 agricultural FTEs, of which 1065 were full-time positions. The largest

5 per cent of farms employed 42 per cent of agricultural FTEs. Employment in diversified activities yielded an additional 87 50 FTEs. This was the lowest category of employment and demonstrates the reliance on both family labour and the use of existing agricultural labour in diversification activities. Employment generated by additional business ownership both on-farm and off-farm yielded a higher employment total. The 79 additional businesses owned by respondents employed a total of 140 FTEs. Together these findings suggest broad support for the concept of the diversification continuum. While diversification activities can be seen as a first step into additional business activities and a period of experimentation, as businesses reach a point of scale and become separately registered concerns, a formalised labour commitment is required.

External businesses located on farm premises yielded a total of 198 FTEs, the second largest employment category. The extent of non-farm employment generated by farm based, non-agricultural businesses, adds support to the finding that farms may have an important role in providing premises for new forms of rural businesses.

Forty per cent of the sample received an income from diversification activities. In relation to income received from agricultural production, smaller hectare farms gained the most from diversification. From a perspective of agricultural policy, it is pertinent that those farmers with training in agriculture and marketing were the most likely to receive an income from diversification activities. Nevertheless, respondents anticipated little change in future income derived from these projects. Sales revenue achieved in additional businesses located on-farm or off-farm was generally lower than that achieved by agricultural production. Nevertheless, of the 37 respondents who disclosed financial information for additional businesses, nine achieved a sales revenue in excess of £500,000 and 75% achieved profits in excess of 5 per cent of turnover in

their additional businesses. Importantly, the proportion of respondents reporting profitability in additional businesses was higher than that found in previous studies of rural manufacturing businesses (cf Smallbone, et al , 1993)

9.2.3 The differentiation of farms

Previous agronomy theory suggest that a major strategic choice for farmers is the decision to specialize in the production of food or to combine food production with other business interests (OECD, 1994). This choice influences how business growth is achieved. For farmers specializing in food production, the focus is their husbandry skills and the availability of land. Once the maximum utilisation of their land has been achieved, farmers can achieve business growth only through variations in products or markets or by increasing capacity through the purchase or rental of further farm land or farm businesses. For those farmers who choose to combine food production with non-food activities, decisions must be made regarding which business resource or combination of resources are used in the diversification process. Resources available to farmers include their personal skills, resources and assets. Importantly, those farmers who chose to diversify their business interests also retain control over the originating farm and may also choose to maximise capacity in that business as well.

Rather than being a dichotomous choice, however, the exploratory analysis identified three different groups of farm owners, based on their relative engagement in additional business ownership activities and their subsequent contribution to rural business development: monoactive producers, structural diversifiers, and portfolio owners.

Monoactive producers were differentiated both by their agricultural activities and their relatively unsophisticated approach to the management function. The farms owned by

the monoactive group were more likely to be smaller in hectareage and few undertook even agricultural contracting, an activity fully compatible with and recognised as an integral aspect of modern farm practices. Although they had fewer resources than other groups, their approach appeared to indicate a group less willing to engage in a variety of business activities, rather than a group which merely lacked the resources to do so. In comparison with the other two groups, monoactive producers lacked strategies for growth both in their agricultural and non-agricultural business activities. Few had a specified growth objective, few had a formalised system of delegation and few had increased even their own time spent on management and business planning. Importantly, although the group was made up of well established business owners, few described themselves as being entrepreneurs.

By contrast, the second group, structural diversifiers, were more likely to engage in a variety of agriculturally based activities, including contracting and the production of unconventional crops and livestock. Although their farmland was more substantial in hectareage than the monoactive group, they were more likely to tenant land. Their approach to management activities was more sophisticated than that of the monoactive group. Moreover, this group were differentiated by evidence of emerging strategies for growth. Many had introduced formalised procedures for delegation and had increased their personal time spent on business planning. Their managerial approach may be a reflection of the greater amount of training which had been undertaken by this group. Despite this training, many of the farm businesses owned by this group were still small in terms of both sales revenue and number of employees. Diversification activities were seen as a lateral growth strategy to supplement agricultural income.

Portfolio owners were differentiated by their relative youth, their greater proportion of training undertaken, a wider experience of working in other industry sectors and the

identification of themselves as being entrepreneurs. Their resource base was also distinctive. Farms owned by this group were larger both in terms of hectareage and sales revenue. As a consequence, they also tended to employ larger numbers of agricultural employees and professional farm managers. There was evidence of dual strategies being operated by this group. Firstly, rather than pursuing the traditional practice of mixed farming found in the other two groups, portfolio owners adopted a strategy of niche specialization in agricultural commodity subsectors. Secondly, they identified non-agricultural market opportunities and diversified their business interests into other sectors.

A summary of the main between group differences is presented in the diversification continuum in Figure 9.1. It is clear from this analysis that participation in additional business activities can be seen in evolutionary terms, with the groups demonstrating a gradation of training and experience, available resources and managerial, entrepreneurial and strategic sophistication.

Figure 9.1 The diversification continuum: summary of key group differences

	Monoactive Producers	Structural Diversifiers	Portfolio Owners
The owner	Older (56+), lacking in training, experienced only in agriculture	Trained in agriculture, some limited training in management. Experienced only in agriculture Family tradition of starting businesses	Trained in agriculture, some limited training in management Experience of other sectors Family tradition of starting businesses
The firm	Sole trader, small hectareage (up to 100ha), low sales revenue, employ mainly selves and few others	Sole traders and partnerships, tendency to wholly tenant land, low sales revenue, employ few other than selves Initial attempts to diversify production base	Limited company, larger hectareage (101-250 and 500+ha), high sales revenue Employ comparatively large number of agricultural employees, including professional managers
The strategy	Maintain traditional agricultural practice of mixed farming, no new marketing or management practices introduced, continue to serve traditional (diminishing) markets	Moving away from traditional agriculture New markets identified, if not fully exploited, awareness of customer needs and marketing function. Use external agencies as source of new information (ADAS), engagement in diversification seen as lateral growth strategy	Dual strategy of niche specialization in agricultural sub-sectors and diversification of other business interests New markets identified. Use variety of external agencies for assistance Well developed management strategy includes objective setting, delegation, and professionalization.

9.3 The exclusion of agriculture

These results demonstrate not only the connections between farms and other small businesses, but also the resilience of the agriculture sector. However, within the small business literature, little is known about the sector. That they have commanded so little attention from small business researchers has much to do with the broad environment within which farmers operate. Economic development has reduced the relative importance of the sector, while widespread protection differentiates farms from other small businesses and adds complexity to sectoral analysis. Explanations for the exclusion of agriculture from mainstream analysis are usually attributed to sectoral decline (Keeble and Gould, 1985, Keeble et al , 1992, Blackburn and Curran, 1993). This argument should be rejected, not only because recent agricultural decline has been over emphasized, but also because of the difficulties inherent in linking sectoral decline with academic indifference. The two main characteristics of agriculture are its complexity and diversity (Newby, 1979). These, together with scholarly specialization are the main reasons why small firms researchers have, hitherto, omitted the sector from their analyses.

Elsewhere, rural small business researchers have justified the exclusion of agriculture on the grounds that "a good deal has been written on the small farm" (Blackburn and Curran, 1993 164). This is undoubtedly true, but none has come from a small business perspective. While agricultural economists and rural sociologists have contributed a wealth of information about farms, their research agendas are rather different from that of small business studies. If the maturity, capability and range of a discipline lie in the development of specific paradigms and research approaches distinct from those used in other subjects, then small business research has a very specific contribution to make to the analysis of the farm sector. In the non-farm sectors, small business research has

consistently demonstrated that small firms are not homogenous and that different types of entrepreneurs and firms are associated with:

"a wide range of factors which influence contrasting patterns of business survival and performance."

(Westhead, 1994:2)

Unlike the approach taken by agricultural economics and rural sociology, a small business approach emphasises the relationship between three different factors in business performance: the starting resources and background of the entrepreneur, the firm itself and the strategic decisions taken by the firm (Storey, 1994). This small business approach could greatly assist in analysing the changes currently occurring in the farm sector. It is also, arguably, this approach that could contribute the greatest insight into the under-researched area of additional business ownership by farmers.

While, hitherto, the exclusion of agriculture from the small business research literature has gone relatively unquestioned, a number of recent publications have highlighted this anomaly. Scott and Rosa (1996:87), for example, describe the sector as being "curiously omitted", while Wheelock and Baines (1996:92) call for a greater integration of work conducted in the areas of agricultural economics and rural sociology within small business research. Smallbone, Cumbers and Leigh (1996) also raise the possibility of further interest in agricultural production by drawing attention to the changes apparent within the food industry. In addition, it has also been recently argued that agricultural decline has been over-stated within the small business research literature (Carter, 1996) and that recent policy reform and demand side changes have had a profound influence both on the nature of farm enterprises and the broad environment in which they operate (Cumbers, Smallbone, Syrett and Leigh, 1994;

OECD, 1994) Yet, beyond the widespread recognition that farmers have much higher rates of self-employment than any other occupational group, the small business research literature has little knowledge of the sector, the individuals who own farm businesses, nor the extent to which farms conform to the characteristics of other rural firms.

9.4 The survival of the farm sector

Small business researchers are not alone in pointing to the eventual dissipation of the agriculture sector. Yet, despite predictions to the contrary, restructuring and the growth of vertical integration within the food and agri-business industries have not led to the demise of the small farm. Small agricultural enterprises have shown the same persistence as their industrial counterparts (Gasson, et al , 1988, Rosenfeld, 1989). Although few recent writers would be as positive as Newby (1979 76) when he wrote

"The history of the English farmer in the twentieth century is, whatever the vicissitudes, a spectacular success story",

the farm sector is more robust than much of the small business literature implies

In this study, the differences between farms and other rural firms appeared to be at their greatest in the area of the management strategies adopted (cf. Smallbone et al , 1993). As a result of the widespread protection given to the agriculture sector, few farmers to date have needed to develop complex strategies of differentiation. This is clearly reflected in the limited numbers of managerial and marketing adjustments made by the farms in recent years. A key question for policy makers is whether farmers would be able to develop the necessary strategies under conditions of agricultural

reform. Although this study does not directly address this question it can provide some clues. The characteristics of farm businesses and farm owners are essentially the same as those found in other small firms. The differentiation of agriculture does not arise from the characteristics of its practitioners or their businesses, it is imposed on the sector by the extent and nature of support. It is likely that, under conditions of reform, the managerial strategies developed by farmers would be as equally complex and successful as those employed in other small firms operating in non-farm sectors without the benefit of support.

2.5 The inclusion of agriculture

For small business researchers there are benefits to be gained from the inclusion of the farm sector in their analyses. The sector is dominated by family owned, small businesses that have largely survived the transition through generations. As a result of structural adjustment, British farming is becoming more family dominated. The decline of the tri-partite structure of agricultural relations (Newby, 1979) has left a residual mass of farms, of which up to 90 per cent are family owned and worked mostly, by family labour (Gasson, et al, 1988). It is increasingly apparent that the small family farm enterprise has much in common with the non-farm enterprise. It is likely that these similarities will increase over time - a result of policy reform, the erosion of traditional markets, the growing cost-price squeeze, and the escalating technology treadmill in farming and quality treadmill in diversification (Hill, 1982, Ilbery, 1991, McInerney and Turner, 1991). As such, the sector offers small business researchers a unique opportunity to analyse issues, for example the family-business nexus and family business ownership over multiple generations, at the centre of mainstream small business debate.

For researchers interested in rural change, the addition of a small business analysis of the farm sector to supplement existing approaches will also bring benefits. Although there are differences in the scale of capital assets and the use to which they are put, the vast majority of farms remain independent, small and privately owned enterprises. Policy reform has increased the need to seek alternative income sources, but this has generally been undertaken through variations in the use of capital assets, and independence has been largely maintained. The entrepreneurial abilities of farmers have been demonstrated by their response to market demands. Although policy makers have only recently become interested in non-food activities, the majority of farmers have combined food production with the provision of other products and services, whenever and wherever the demand has existed. In this respect, farms have always been, and remain, an important seed bed for rural development. A small business analysis of farm change, pluriactivity and the potential for new firm creation by farm owners offers a particularly relevant, but hitherto absent, insight into the future development of rural areas.

2.6 Small business theory

There appear to be two main implications for small business theory arising from this study. The first concerns the theory of enterprising behaviour outlined by Keeble and Tyler (1995). This theory attempts to explain the resurgence of new firms in rural areas in two main ways. Firstly, that as a result of a number of factors including quality of life considerations, rural environments attract a higher proportion of enterprising individuals. Secondly, largely as a result of institutional factors, rural areas have characteristics that enable enterprising behaviour to occur there more readily than in other areas.

Hitherto, this theory has not accommodated the presence of the main indigenous rural industry of farming. The findings of this study question the assumption that counterurbanisation is a relatively recent phenomena and also suggest that rather than being a specifically urban-rural drift, migration occurs within specific rural areas and includes, hitherto, unconsidered occupational groups. More detailed analysis of this issue is required before definite statements can be made regarding the role of population migration in the rural business formation process. While the findings of this study broadly support the second part of this theory, the omission of farms and farm owners as integral elements of rural areas needs to be addressed. This study found that farms not only provided business accommodation for non-farm small firms, but farm owners often contributed managerial assistance in the establishment of these external firms. Moreover, the role of farmers in maintaining farmland and as the main protectors of rural tradition adds considerably to the perceived attractiveness of rural areas, an integral aspect in the migration decision.

A second implication for small business theory concerns the role of location and type of environment in both the formation and characteristics of small firms. The convergence of the characteristics of the farm businesses and their owners with the findings of previous studies of small firms operating in "accessible" rural environments provides tentative support for the view that location may have a more powerful influence over firm characteristics than has yet been appreciated. The similarities between the farm sample and rural, non-farm, businesses operating in the same type of environment suggests that location may be a more powerful influence on small firms than even sectoral considerations. This view, which is a relatively recent feature of the rural small firms literature, has been explored but not yet fully examined.

9.7 Small business methodology

Because the farm sector has been excluded from previous small business analyses, the small business literature has yet to demonstrate an understanding and appreciation of agriculture. For this reason, this study took a descriptive and exploratory approach to the investigation. In so doing, it revealed an uncharted small business owning population which not only conform to many small business norms, but can illuminate specific issues at the centre of mainstream small business debate. That this population has been ignored from mainstream analysis at a time when rural enterprise was developing as a key theme in the research agenda, suggests that methods be re-examined. The propensity of rural researchers to pre-judge the composition of rural areas was noted and criticised by Blackburn and Curran (1993). This study finds support for their view. A more grounded initial research approach which charted the actual business composition of rural areas, would have exposed the continuing importance of agriculture several years ago. That so many studies have been undertaken analysing small firms in rural areas, yet excluding the main indigenous industry, exposes a serious conceptual weakness in previous studies.

9.8 Future research directions

This study, as an exploratory investigation, should be seen as the initial stages of a detailed analysis of small business ownership in the farm sector. A number of different research directions could be considered, however, the three outlined below offer an immediate appeal.

Firstly, the findings of this study suggest that farms may be a unique small business owning population in so far as businesses have survived succession through generations and have remained, largely, family owned. As such, they may be of

profound importance in analysing issues such as the family-business nexus and business ownership over multiple generations. Moreover, the use of agricultural co-operatives as a mechanism for overcoming a lack of scale economies, suggests that researchers concerned with structured networks may greatly benefit from analysing the farm sector

Secondly, there is scope to analyse further the effect of location on small businesses. While this study and others have hinted at the potential importance of location on both the formation of new firms and the characteristics of established firms, no study has yet systematically analysed location, while controlling for sectoral variables. It is suggested that a future study compares matched samples of firms in manufacturing, service and agricultural sectors over two or three study areas. In so doing, the precise effects of location can be examined. At the same time, a study of this kind could also establish the relative contribution of the three sectors in providing employment and wealth in rural areas. The findings of such a study have clear implications for the development of rural policy.

Finally, as has been suggested earlier in this chapter, the study has highlighted the potential benefits of the inclusion of agriculture in mainstream small business analysis. It is hoped that the farm sector will be included in future comparative small business research studies.

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APPENDIX ONE

PHASE ONE: QUALITATIVE RESEARCH BRIEF PROFILES OF PARTICIPATING FARMS

Farm One: Lanarkshire

This 22 acre upland steading is now owned and run by a husband and wife team who inherited the land from his family. This is the third and probably last generation of the family to run the business. The area is renowned for soft fruit production and the first generation of owners started as strawberry producers. This crop was wiped out by disease and for the past few decades the land has been used for grazing beef, with eight acres reserved for silage.

The current owners have invested in polytunnels and, like many farmers in the area, have moved into the production of bedding plants. The business is currently worked mainly by the farmer's wife who works full-time on the farm, with her husband working full-time as a self-employed joiner. Nevertheless, the husband's contribution is still significant. In addition to his day-time activity, he spends all hours of lightness working manually on the farm. The bedding plant business has expanded to the point where the husband is required to assist further on the farm. He intends to continue working as a joiner from September - December and will remain on the farm for the remaining period. The farm has a herd of ten beef cattle (supported by a 9.9 quota), but the owners believe the profitability of cattle to be poor in comparison with the

bedding plant business This they intend to expand by the addition of a further polytunnel

Their two daughters have been encouraged to leave the farm and are both studying non-farm subjects at university. The current owners expect to sell the holding to finance their retirement.

Farm Two: Ayrshire

This 234 acre dairy farm is in its third generation of family management. Initially tenanted, the farm was sold to the tenants in 1994, after the estate owners had experienced losses in Lloyds The farm is made up of two steadings and employs the husband and wife owners (who live on one stading), the farmers parents (who live on the second stading) and one full-time general worker shared between them. The farm is largely self-sufficient, with silage production used for cattle fodder Milk is sold through Milk Marque.

As tenants, these farmers were prohibited from starting further businesses on the farm. As owners, they are prohibited from changing the use of buildings for other business activities These owners have no intention of diversifying either into non-agricultural activities or changing from the dairy business, believing that "you should stick to what you're good at". They are keen to allow the public to use their land for enjoyment and have allocated specific areas for picnic parties They expect their eldest son (aged 11) to take over the farm business The farm is in need of modernisation, in particular replacing the byre with a modern dairy It is unlikely that funds for this will be forthcoming in the next few years Currently, the dairy operation is labour intensive and requires the daily assistance of both farmers' wives

Farm Three: Ayrshire

This 250 acre dairy farm is a combination of owned (150 acres) and rented (100 acres) land. Currently in its third generation of family ownership, the farm employs three people: the farmer, his father and a general worker. The current owners hope that their infant son will, in the future, show an aptitude for farming and inherit the business.

Five years ago the farm needed to modernise and upgrade equipment and machinery. In order to offset the cost, the farmer started contracting machinery to other farm businesses. This new venture of machinery contracting for slurry spreading and silage is lucrative, but they do not foresee any further types of business activity.

Farm Four: Ayrshire

The owner of this farm came from a family whose occupations were connected with farming, but not farm owners. Having worked as a farm manager for 12 years, he bought a small sheep farm in Ayrshire. This was sold after three years in order to buy his current 125 acre farm. In addition to the owned land, he rents a further 500 acres in summer and 1000 acres in winter for sheep grazing. His initial plan in buying the current farm was to diversify into caravan sites. The location of this farm on the Ayrshire coast and next door to a major holiday complex was a major factor in his choice of farm purchase. The local Council initially refused planning permission, but subsequently allowed him to open a farm zoo. The initial investment was in excess of £100,000, but the returns have been excellent. In his first year of opening 45,000 tourists visited the zoo and 70,000 came the following year. Now in its third year, the

zoo season has been extended from a three month summer business to year round opening

In addition to himself, the owner employs one shepherd to tend the 2000 sheep. His farm zoo, however, employs five full-time permanent employees and thirty full-time seasonal workers. This farmer hopes that his children will not enter farming as an occupation. He believes the future of farming to be financially insecure.

Farm Five: Dumbarton

The current tenancy of this 130 acre farm was taken up in 1940 by the present owners father. After his fathers early death, the present farmer inherited the tenancy at the age of 16. Up until 1985 the farm occupied the farmer, his wife and a full-time ploughman. Crop failure in 1985 caused the ploughman's redundancy and forced the family to reconsider its activities. In the past ten years they have restricted their agricultural activities to barley, silage and hay and use the land to graze another farmer's cattle. The family have also been forced to start other enterprises. Currently the farm rents five caravans and tent pitches to tourists and offers year round bed and breakfast. Much of the horticultural output is sold through their small farm shop. The bulk of farm income is now derived from these additional activities. Now their four children have left the farm, the farmer's wife does much of this domestic based work. None of the children wish to enter farming, although one son, an architect, returns to help with harvest.

Both the farmer and his wife are over retirement age. As neither they nor their children wish to continue the farm, they are currently negotiating retirement with the estate.

owners. Although their tenancy rights are protected by legislation, retirement does pose a problem for non-continuing tenants

Farm Six: Lanarkshire

The ownership of this 130 acre dairy farm was inherited by the present farmer on his father's death. Twelve years ago the tenancy of the 420 acre neighbouring farm became available. The farmer now farms both as one business, although they are registered separately for tax purposes. Dairying has been supplemented by the complementary activity of sheep grazing. In addition to the farmer, the business employs two full-time general workers.

Prior to the tenancy, this farmer investigated the possibility of diversifying his activities, specifically starting a livery business. The rare availability of a neighbouring tenancy prevented him from going into livery and he is currently fully occupied with the two farms. The family believe that their children will continue the farm business. Although an unlikely proposition with only 130 acres, the extra land makes family succession a viable option.

Farm Seven: Galloway

This 640 acre farm contains 600 sheep and 100 beef cattle. The farm is largely self-sufficient producing forage, although inputs such as nitrates are bought in. In addition to the agricultural output, the farm business includes a caravan park, holiday cottages, a water sports centre, a portaloo contract business and a catering firm. All are separately registered businesses.

The present owners are the third generation of the family to own the farm. Each of the three generations of owners have developed additional business activities alongside farming. The current owner's grandfather owned a coal and lime distribution business using the now-defunct railway way which cuts across the property. In addition, milk and homemade cheese was also distributed until the Milk Marketing Board commenced. His father, who bought the tenancy, supplemented farming with importing Holstein cattle from Canada. Although the current owner has moved into leisure and tourism, his son plans to restrict his activities to agricultural output.

Currently the farm employs two full-time workers: his son and a tractorman. The holiday complex employs three full-time and two seasonal workers. The farmer's wife runs the catering business on her own.

Farm Eight: Lanarkshire

This 240 acre farm was initially a part of a larger partnership owned by the present owner and his brother. The farm was divided into two in order to provide an inheritance for their children. Initially a cropping farm, this has gradually been reduced and replaced by suckler cows. The farm employs only himself and his eldest son who will inherit the farm. The farm is managed as a self-sufficient unit, but is in need of extensive modernisation. The owner has never thought of diversifying his activities. For the past thirty years he has nursed his severely disabled wife.

Farm Nine: Banffshire

This 640 acre livestock farm is now in its fourth generation of family ownership. The estate has been systematically increased by each successive owner. The current owner has added 200 acres and, in the past ten years, diversified activities into value-added dairy products. The farm produced ice cream is now listed in several of the major retail multiples. This business is now the primary activity of the family. Two years ago a new factory was built on the farm premises to enable increased volume of production. Currently the farm employs three full-time workers, and a further forty are employed in the ice-cream factory. The owner's son works in the ice-cream business, alongside a professional manager with extensive experience in the food industry. The current owner is concerned with further diversification and spends time scanning for new product and new business ideas.

Farm Ten: Stirlingshire

This farm is part of an estate and baronetcy which has been in the same family for several generations. On his father's death, the elder brother inherited the baronetcy, castle and land and pursued a business career until retirement. The current farmer, the younger brother, inherited a working farm, which had been somewhat dissipated over the years, and also managed his elder brother's land. Twenty years ago a neighbouring farm became available and this was added to the estate. In total 600 acres are farmed as dairy and arable production. The current farmer has rebuilt the farm, modernised buildings and machinery and moved to volume production. The farm now employs five full-time employees. Only the farmer's youngest daughter has stayed on the farm.

No additional commercial activities have been pursued on this farm, although the farmer has pursued an active career as chairman and director of a number of commercial and quasi-governmental organizations

APPENDIX TWO

THE CAMBRIDGESHIRE STUDY AREA

A2.1 Introduction

Although pre-defined study areas have been frequently used in studies of rural small business research (Keeble and Gould, 1985, Keeble, Tyler, Lewis and Broom, 1992, Townroe and Mallelieu, 1993), the use of this approach in studies of structural change within the farm sector is relatively unusual. Bryden, Bell, Gilliat, Hawkins and MacKinnon (1992), however, describe the benefit of this type of approach in allowing farm change to be examined in the context of the area in which the farm is located. As detailed in Chapter Five, there is an assumption that a relationship exists between the farm, the farm household and the surrounding area. Within any area there are patterns of historical developments which can exert an influence on both rural culture (Anderson, 1995) and the "milieu of farm households", (Bryden et al, 1992: 57). Bryden et al (1992) define a range of area based factors which should be taken into account when profiling study areas for agricultural research. The primary factor is an area's dependency on agricultural employment. In addition, physical conditions (topography, proximity of urban areas), social conditions (population density, 'capacity to reproduce', migration), economic conditions (GDP, employment structure); and policy conditions (the status of the area) must also be considered.

This appendix presents an overview of the Cambridgeshire study area: its population, employment, business trends, agricultural structures and activities. Data is drawn from the MAFF Agricultural Census, the CSO publication Regional Trends, the OPCS 1991

Population Census (10 per cent Sample), the Cambridge Regional Economic Review and reports supplied by Cambridgeshire County Council (C C C) The appendix concludes by analysing the County using the five factors outlined by Bryden et al (1992)

A2.2 The County of Cambridgeshire

"Cambridgeshire stretches fifty miles from the home counties in the south almost to the Wash It covers over 1,300 square miles (840,000 acres), embracing the historically independent counties of Huntingdonshire, the Soke of Peterborough and the Isle of Ely It contains one of the great university cities - Cambridge - (simultaneously a leading European centre of scientific research and a major tourist centre), one of the most successful former New Towns in Britain - Peterborough, and some of the most productive farmland in the country"

(C C C , 1995a 1)

Cambridgeshire lies on the western edge of East Anglia and is well served by transport and communication links The East Coast ports face mainland Europe and the area has historically attracted large agricultural (mainly vegetable) processors serving the European market Good road and air links make the County readily accessible for both internal and international markets The County has two Training and Enterprise Councils, in Cambridge and Peterborough, and an Economic Development Unit attached to the County Council A regional office of the Agricultural Development Advisory Service (ADAS) and a local branch of the National Farmers Union (NFU) complete the infrastructure provided for its farming community

The rural small business literature has made distinctions between types of rural

environment. Keeble, Tyler, Lewis and Broom's (1992) study, for example, differentiated between accessible and remote rural areas. The first is typified by generally good transport and communication links and reasonable proximity to population centres, the latter is typified by peripherality and low population density. Although Cambridgeshire was not included in Keeble et al.'s (1992) study, the County conforms to the characteristics of an accessible rural environment.

The County's economic development has been assisted by a number of designations in recent years. In 1993, Wisbech was awarded Intermediate Area Status which has enabled the area to offer grants to businesses for expansion and inward investment. The same year, the Fenland Rural Development Area was re-designated with enhanced government funding. This is likely to last until 2003. The Fenland District has also been awarded EC Objective 5b¹ status and the Leader II programme. The Objective 5b designation allows Fenland District, together with three other areas in East Anglia, a share of £45 million regeneration funds available over a five year period (C.C.C., 1995b).

A2.3 Population and employment

East Anglia has the fastest growing population of any region in the United Kingdom (Mansley and Rhodes, 1990). Despite this, it is the most thinly populated English region (CSO, 1993). Cambridgeshire's population of 670,000 increased by 12 per cent in the ten year period up to 1991, with most growth seen in and around Peterborough.

¹ Objective 5b is a European Union scheme used specifically for the regeneration of agricultural economies and communities. The status is awarded only to communities with high levels of agricultural dependence. Other UK regions which have benefited from Objective 5b funding include the Highland and Islands of Scotland. It is distinct from Objective 5a which deals primarily with "horizontal" measures of support, i.e. those which apply to the whole of the Community (Bryden et al, 1992: 91).

(CSO,1993) Only 36 per cent of the population live in the two cities of Cambridge and Peterborough, however, the remainder being dispersed throughout villages (40 per cent) and towns (24 per cent) (C C C , 1995a).

Regional employment projections suggest that East Anglia will demonstrate the highest percentage growth between 1989 - 2000 at 10.5 per cent. The next highest region, the South West, is expected to increase by 4.6 per cent (Mansley and Rhodes, 1990). County level predictions show that of all the counties in East Anglia, Cambridgeshire will demonstrate the strongest growth. At the time of the 1991 census, the County's labour pool was estimated to be 328,080 made up of 190,020 males and 138,060 females. Between 1981 and 1991 the male labour force grew by 12 per cent, compared with a national rise of 1.5 per cent and the female labour force grew by 36 per cent against a national rise of 15 per cent. The projected growth of the County labour pool is expected to exceed 13 per cent by 2001, reaching a total of 371,660 (C C C., 1995b). Employment is concentrated in services and construction (70 per cent), a further 20 per cent are employed in manufacturing and only 5 per cent in agriculture (C C.C 1995a). In comparison with other regions of the UK, this proportion of agricultural employment is the highest outside of Northern Ireland (see Table A2.1).

Table A2.1 Percentage of Employees in Agriculture 1992 By Sex and Region

Region	Males	Females
United Kingdom	1 8	0 7
East Anglia	4 5	2 5
North	1 6	0 3
Yorkshire & Humberside	1 7	0 6
East Midlands	2 2	1 0
South East	0 9	0 6
South West	3 2	1.1
West Midlands	1.6	0 8
North West	0 9	0 4
England	1 6	0 7
Wales	3 2	0 8
Scotland	2 2	0 5
Northern Ireland	6 0	1 3

Source: CSO. (1993) Regional Trends 28, London HMSO

A2.4 Business trends

Basic indicators demonstrate the strength and bouyancy of the region's economy. GDP grew at 2.5 per cent per annum throughout the 1970s and accelerated to 4 per cent per annum in the 1980s This level has continued into the 1990s (Lewis and Moore, 1990). Regional projections predict a growth in output in East Anglia for the years 1989 - 2000 of 3 8 per cent, the highest growth rate in the UK The region with the next highest predicted growth rate is the South West where output is expected to increase by 2.9 per cent over the same period (Mansley and Rhodes, 1990) Cambridgeshire is expected to register the second fastest employment growth of all counties in the UK, after Buckinghamshire Employment growth in the County will, however, be slightly slower than in the past two decades, falling from 2 per cent to 1 3 per cent per annum (Hirst, Mansley and Rhodes, 1990). Cambridgeshire has been identified as one of five

fastest growing counties for new and growing industry employment between 1981 and 1987 (Hirst, Mansley and Rhodes, 1990).

Compared with the rest of the UK, East Anglia has the highest level of self-employment, with one person in seven self-employed (CSO, 1993). In common with other parts of East Anglia, Cambridgeshire has a high level of self-employment and business ownership (CSO, 1993). The clustering of high rates of new firm formation within the County has been frequently noted (Gould and Keeble, 1985, Keeble and Gould, 1985; Segal Quince and Partners, 1985, Keeble, 1990) Of the 35,000 businesses estimated as operating in Cambridgeshire, two-thirds consist of just one or two people (C.C.C., 1995b) The sectoral distribution of self-employment largely replicates that of the employed population, with most self-employment concentrated in the service sectors (see Table A2 2)

Table A2.2 Cambridgeshire: Some Basic Employment Indicators (10% Census Sample)

Employment Indicator	Number
Total 10% Census Sample	63501
Total economically active	32713
Total self-employed	3815
Total economically inactive	17819
Total employed in agriculture	945
Managers/Proprietors in agriculture	388
Manager/Proprietors in services	1511

Source: OPCS (1993). 1991 Census County Report. Cambridgeshire (Part Two), London: HMSO.

A2.5 Agricultural employment

Throughout the 1980s the total agricultural workforce in the County declined from 17,076 in 1980 to 13,516 at the end of the decade, a drop of 21 per cent. Moreover, the numbers employed in the sector appear to be declining at an accelerating rate. Net losses between 1980-82 were 2.5 per cent, between 1982-84 were 3.9 per cent, between 1984-86 were 7.9 per cent and rose to 8.3 per cent between 1986-88 (C.C.C., 1991). Employment loss was not evenly distributed throughout the County. In the Ouse Valley (mainly Huntingdonshire) and Cambridge, employment in the sector fell by 15.5 per cent and 16.7 per cent respectively. Peterborough saw losses of 21.8 per cent and in the Fens and East Cambridgeshire the numbers declined by 24.9 per cent and 24.4 per cent respectively (C.C.C., 1991). Thus, agricultural losses were greatest in the areas that depend most upon the sector (C.C.C., 1991). Although agriculture remains large compared with the rest of the UK, it is now the third smallest sector in the regional economy (Lewis and Moore, 1990).

Between 1980 and 1988 there was a significant shift into self-employment within agriculture. In 1980 the agricultural self-employed amounted to 6,241 or 36.5 per cent of the agricultural workforce. By 1988, the number of self-employed had fallen in absolute terms by 9.9 per cent to 5654. But, as a result of employment loss, this figure accounted for 41.8 per cent of agricultural labour in the County. Clearly, the strongest sector of employment is now the self-employed. An analysis of agricultural employment based on the 1991 Population Census 10 per cent Sample, shows that just under half of male employment is now self-employed (Table A2.3), compared with the national average of 53 per cent (OPCS, 1993; OECD, 1994). Although the difference between national and County figures is slight, it is probably explained by the comparatively larger farm sizes that exist within Cambridgeshire. Although there are no national norms with which to compare the figure, levels of female self-employment

appear relatively high. a quarter of female agricultural employment in Cambridgeshire is self-employed.

Table A2.3 Cambridgeshire: Some Basic Indicators of Agricultural Employment (10% Census Sample)

Total males employed in agriculture	722
Total males self-employed	315
With employees	126
Without employees	189
Total male employees	399
Males employed (more than 31 hours)	380
Total females employed in agriculture	208
Total females self-employed	53
With employees	29
Without employees	24
Total female employees	148
Males employed (more than 31 hours)	66

Source: OPCS (1993) 1991 Census County Report, Cambridgeshire (Part Two), London: HMSO

Table A2 4 presents agricultural employment in the County by District. Agricultural employment is fairly evenly distributed throughout the County, although notably and expectedly low in Cambridge City East Cambridgeshire, Fenland and Huntingdonshire contain the largest proportions of agricultural labour, although the largest number of managers and proprietors are contained within Huntingdonshire By head of population farming is most important within the Fens and East Cambridgeshire where agriculture accounts for 12.6 per cent and 10.3 per cent of the workforce respectively (see Figure A2 1) The percentage of agricultural employment in the Ouse Valley is above the national average at 4.3 per cent of the workforce Agricultural employment in Cambridge (2.6 per cent) and Peterborough (2.3 per cent) is more or less equivalent to the national average of 2.5 per cent

Table A2.4 Employment in Agriculture in Cambridgeshire By District

District	All occupations	Managers/Propr. in agriculture	Other occupations in agriculture
Cambridgeshire	30231	422	373
S Cambridgeshire	6093	91	50
Cambridge	4186	6	3
E Cambridgeshire	2872	78	107
Fenland	3267	86	97
Huntingdonshire	7190	111	70
Peterborough	6653	50	46

Source: OPCS (1993). 1991 Census County Report: Cambridgeshire (Part Two), London. HMSO

A report examining agricultural employment in Cambridgeshire between 1980 and 1988 (C.C.C., 1991) attributed much of the employment loss to improved prospects elsewhere. Undoubtedly agricultural losses occurred simultaneously with high growth in other sectors of the County's economy. Such a view is supportive of research undertaken by Gasson (1974) on the mobility of agricultural labour in East Anglia. This approach does not, however, take full account of changes in productivity, crops and general industry organization. Employment losses in Cambridgeshire can be attributed to the same factors which have caused losses elsewhere: specialized production, mechanization and a transfer of production into the industrial sectors. The latter is of particular relevance to Cambridgeshire: the County contains some large vegetable processing factory farms, normally counted as manufacturing employment.

A2.6 Agricultural structures and activity

An indication of agricultural structures for the County can be gained from the MAFF census. At the time of the 1992 Census, there were 3,518 farm holdings in the County

spread over 285,700 hectares. Compared with the English average, farms in Cambridgeshire are large. Over 34 per cent of County holdings are over 300 hectares, compared with 25 per cent in England. In the smaller sized range, only 3 per cent of County farms are less than 20 hectares and 24 per cent between 20 and 100 hectares, compared with 6 per cent and 32 per cent in England. At 38 per cent, the percentage of farms in the 100-300 hectare range is broadly similar to the English average of 37 per cent (see Tables A2.5 and A2.6).

The types of farming activity undertaken within the County highlight the topographical distinctiveness of the area. Over 90 per cent of County farms engage in general cropping compared with 43 per cent across England. Few County farms engage in either Dairy (0.2 per cent) or livestock (1.8 per cent), reflecting the favourable soil and climatic conditions conducive to cropping activities. Engagement in pigs and poultry are largely on a par with English norms.

Table A2.5 Farm Holdings in England: By Labour, Size and Type

Labour and Size Indicators	Holdings	Number	Area as % of England
Total labour force	132414	420374	100
Farmers, partners, directors	127698	171650	100
Regular full-time workers	35312	88296	100
Regular part-time workers	22134	41396	100
Seasonal or casual workers	22680	67744	100
Analysis by total area		Hectares	% of Region
Under 20 ha	66628	513178	5.5
20 - <100 ha	60711	3010436	32.1
100 - <300 ha	21508	3474192	37.1
300 ha and over	4575	2373384	25.3
Total	153422	9371190	100.0
Analysis by farm type		Hectares	% of Region
Dairying	18771	1206185	12.9
Cattle and sheep	45241	2263665	24.2
Cropping	33778	4012419	42.8
Pigs and poultry	5473	76664	0.8
Horticulture	9748	102741	1.1
Mixed and unclassified	40411	1709516	18.2
TOTAL	153422	9371190	100.0

Source: MAFF (1993) Digest of Agricultural Census Statistics, London HMSO.

Table A2.6 Farm Holdings in Cambridgeshire: By Labour, Size and Type

Labour and Size Indicators	Holdings	Number	Area as % of England
Total labour force	3179	10844	2.6
Farmers, partners, directors	2992	4046	2.4
Regular full-time workers	924	2525	2.9
Regular part-time workers	494	989	2.4
Seasonal or casual workers	670	2167	3.2
Analysis by total area		Hectares	% of County
Under 20 ha	1301	9239	3.2
20 - <100 ha	1363	68434	24.0
100 - <300 ha.	646	109586	38.4
300 ha. and over	208	98410	34.4
Total	3518	285669	100.0
Analysis by farm type		Hectares	% of County
Dairying	14	692	0.2
Cattle and sheep	160	5153	1.8
Cropping	2426	258353	90.4
Pigs and poultry	85	807	0.3
Horticulture	353	3229	1.1
Mixed and unclassified	480	17436	6.1
TOTAL	3518	285669	100.0

Source MAFF (1993) Digest of Agricultural Census Statistics, London HMSO

A more detailed analysis of farming activities is revealed in Tables A2.7 and A2.8. The skew towards cropping and away from livestock can be clearly seen. Although agricultural land use in the County accounts for only 3 per cent of the English total, the area accounts for a disproportionately high land area under cereals, in particular wheat (6.6 per cent), and crops such as peas (8.7 per cent), beans (7 per cent), potatoes (8.2 per cent) and sugar beet (11.8 per cent). Land used for livestock and grazing is low in comparison with the English average.

A concern for researchers is whether such skewing affects the representativeness of the sample. Agricultural activities are not evenly distributed throughout the country, but are affected by the historical patterns and topography present in different regions. As a consequence, different areas specialise in different activities. Although Cambridgeshire contains a disproportionately high level of cropping, a sample drawn from Scotland would be skewed towards upland grazing and a sample drawn from South West England would over-represent fruit farming. The advantage of a study area approach is that such variations are known in advance and can, therefore, be taken into consideration in the research findings.

Table A2.7 Farm Holdings in England: Some Indicators By Land Use

Land Use	Holdings	Hectares (* by number)	Area as % of England
Total agricultural area	153422	9371190	100
Total cereals	53919	2519046	100
Wheat	39079	1629617	100
Barley	39118	814265	100
Other cereals	8258	75165	100
Crops mainly for stockfeed			
Peas	4714	76835	100
Field beans	9558	162240	100
Other crops for stockfeed	14297	104092	100
Other arable crops			
Potatoes	14178	130378	100
Sugar beet	10021	196945	100
Oilseed rape	12510	314446	100
Other arable crops	8607	160768	100
Horticultural crops			
Vegetables	8952	113008	100
Orchard and small fruit	5902	39812	100
Bulbs and flowers	4359	12776	100
Glasshouse area	5378	2146	100
Grassland and other			
Grass under 5 years old	49352	826768	100
All other grassland	127475	3673191	100
All other land	90856	1038758	100
Total cattle and calves	76176	6699508*	100
Total pigs	12035	6501119*	100
Total sheep and lambs	49351	20258427*	100
Total fowls	23824	96599774*	100

Source MAFF (1993). Digest of Agricultural Census Statistics, London HMSO.

Table A2.8 Farm Holdings in Cambridgeshire: Some Indicators By Land Use

Land Use	Holdings	Hectares (* by number)	Area as % of England
Total agricultural area	3518	285669	3 0
Total cereals	2514	133160	5 3
Wheat	2357	108128	6 6
Barley	1211	23963	2 9
Other cereals	125	1068	1 4
Crops mainly for stockfeed			
Peas	429	6675	8 7
Field beans	704	11312	7 0
Other crops for stockfeed	143	753	0 7
Other arable crops			
Potatoes	980	10725	8 2
Sugar beet	1367	23261	11 8
Oilseed rape	552	15301	4 9
Other arable crops	473	7573	4 7
Horticultural crops			
Vegetables	448	7304	6 5
Orchard and small fruit	273	1675	4 2
Bulbs and flowers	222	821	6 4
Glasshouse area	159	62	2 9
Grassland and other			
Grass under 5 years old	424	4018	0 5
All other grassland	1856	22200	0 6
All other land	2513	40831	3 9
Total cattle and calves	579	35065*	0 5
Total pigs	193	108682*	1 7
Total sheep and lambs	267	59468*	0 3
Total fowls	269	1561275*	1 6

Source. MAFF. (1993) Digest of Agricultural Census Statistics, London HMSO.

A2.7 Cambridgeshire: An agricultural analysis

The remainder of this appendix will be an analysis of Cambridgeshire using the five factors identified by Bryden et al (1992). The County's dependency on agricultural employment is the most important measure of the area's agricultural composition. Physical, social, economic and policy conditions are also appraised

A2.7.1 Dependency on agriculture

"Dependency on agriculture is one of the few variables which can give an indication of the 'rurality' of an area. The degree of agricultural employment reflects the dependence on primary production, the structure of the labour market and the likelihood of traditional agricultural values prevailing in an area. As rural areas lose farm populations and replace them with non-farming people, the character of rural areas change. They may look the same as before given their physical make-up of open landscapes and farm land, but their function becomes increasingly similar to those of urban places. This development of the countryside takes different forms and depends to some extent on the area's proximity to major urban centres, its topography and its land holding structure, as well as socio-cultural and political conditions. Some of the more recent forces influencing change include. improved communications and ease of allowing flow of goods and human resources between places, diffusion of industrialisation, population movement out of urban environments"

(Bryden et al, 1992 60)

In comparison with some more rural areas of Europe, in particular Southern European countries where agriculture can account for up to 70 per cent of employment, dependency on agricultural employment in the UK as a whole is very low. But in comparison with the rest of the UK, dependency on agriculture in Cambridgeshire is

still relatively high. The County has, however, experienced profound change in recent years. The forces identified by Bryden et al above, are particularly noticeable in and relevant to Cambridgeshire. The area is renowned for its excellent communications, contains relatively large and capitalized farms, and its attractiveness to in-migrants has been demonstrated in patterns of population growth. As Bryden et al describe above, physically the County may look the same as it always has, but its character has changed.

Although there has been recent turbulence within the agriculture sector, the future looks more certain. It is conventional wisdom that, across Europe, employment in both agriculture and industry will continue to decline and will be replaced by the service sectors. In Cambridgeshire, the transfer of employment out of the traditional sectors has already substantially occurred. Further decline is unlikely to occur within the farming sector, although upstream and downstream industries - notably present in Cambridgeshire - may be vulnerable to rationalization (OECD, 1994). Although rationalization in agro-manufacturing will have an effect on employment in the County, any further decline which may occur in the farm sector is unlikely to have any significant effect on the economic and social conditions of the County.

A2.7.2 Physical conditions

The physiographic features of Cambridgeshire are distinctive. Broadly, agriculturalists distinguish between upland areas which are characterised by extensive farming, often involving livestock grazing, and lowland areas which usually have more intensive cropping practices. This broad categorisation has become less rigid in recent years as technological improvements have changed farm practices and agricultural policies have altered farm structures. Cambridgeshire, however, clearly falls into the lowland

category The physical environment, climate and soil condition favours crop farming In recent years intensification has increased, particularly in the Fenland area (C C C , 1995a).

A2.7.3 Social conditions

The social conditions of the area are also favourable to farming The population of the County is growing, largely as a result of in-migrants, but is still thinly spread The age of the County's population, sometimes called its 'capacity to reproduce', is similarly favourable to the economy, although not necessarily to agriculture Over 20 per cent of the population is under 15 years compared with 23 per cent over pensionable age (C S O , 1993) In-migration has generally been of a working population, rather than retired groups. Whether this indicator demonstrates a robust level of reproduction of the farm population is unknown Although the potential inheritors and successors to farms are unlikely to leave the area, they may still transfer into other sectors of the County's economy

A2.7.4 Economic and policy conditions

The economic and policy conditions of the County are mixed In 1991, the GDP for East Anglia (£17,880 million) was low in comparison with other regions, reflecting its small population Agricultural GDP (£911 million) was relatively high, reflecting a robust sector with intensive output and dependence on cropping activities The employment structure within the County is notably favourable compared with other counties The buoyancy of the labour market and proximity to major population centres make Cambridgeshire ideally placed to take advantage of conditions associated with pluriactive farming (Bryden et al, 1992) The strength of the County's agricultural

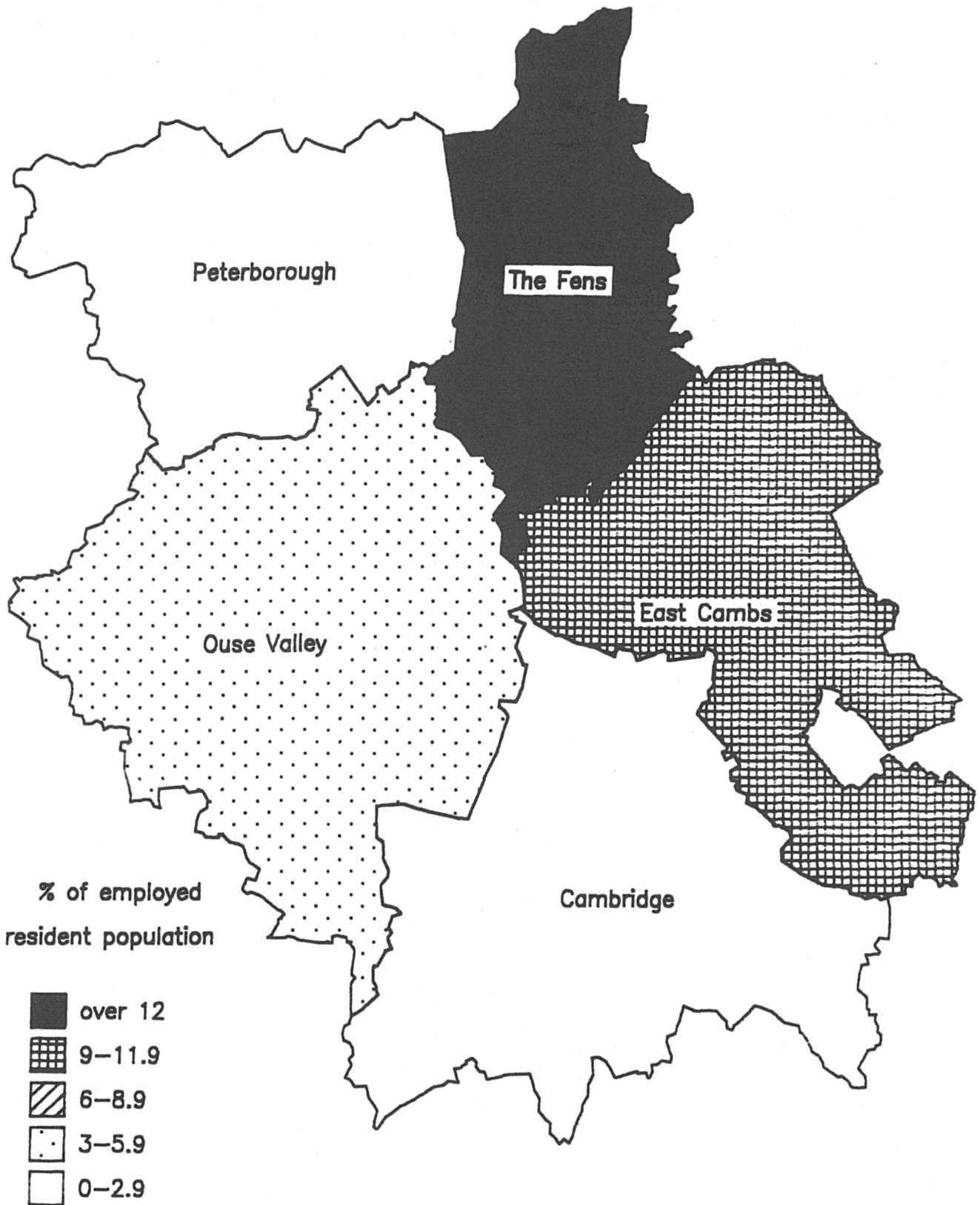
structures, however, may mitigate against pluriactivity, with farmer's keen to expand through agricultural activities rather than diversify into non-farm sectors. The County has mixed policy conditions. Overall, the County's agriculture sector does not suffer the disadvantages experienced by much of European agriculture. The eastern part of the County, however, has experienced problems in recent years. Its relative distance from population centres and its continued dependence on agriculture makes it distinctive from much of the County. These problems may be compensated, to some extent, by its success in achieving Objective 5b status.

A2.8 Future prospects

Within Cambridgeshire there is some concern about certain sectors of the agricultural economy. In particular, the horse racing industry in East Cambridgeshire and fruit producers throughout the County appear to be under threat from overseas competition. CAP reform and the GATT agreement may also affect the choice of crops and industry structure. One response may be that farms in the County could become part of international holdings (C C C, 1991). A more likely choice for farmers, however, will be to retain ownership, diversify their output and look to non-agricultural business opportunities. The extensive areas of Grade I and II agricultural land will ensure that many parts of the County, the Fens in particular, will retain their agricultural economies for some time.

Figure A2.1

Employment in Agriculture in Cambridgeshire 1988



Sources: Ministry of Agriculture, Fisheries and Food;
Research Group, Cambs. County Council.

Survey of Farm Business Activities

- 1 **This questionnaire seeks to investigate the numbers and types of businesses which are connected to farms and farmers' attitudes towards owning and managing businesses**
- 2 **Please answer all appropriate questions. If a question is not applicable to your farm, ignore it and move on to the next question**
- 3 **The questionnaire should be completed by either the farm owner/tenant or spouse on their behalf**

Confidentiality

- 4 ***Individual farm responses will be treated with strictest confidentiality. Any research published will be aggregated across the sample of farms, and will make no mention of individuals or individual farms***

Please tick if you would like to receive a summary report for this survey

[] [] [] []

SECTION A: THE FARM BUSINESS

A1 What are your main farming activities? Cereals 1
(Please tick one or more boxes) Other arable crops 2
 Horticulture crops 3
 Dairy cattle 4
 Beef cattle 5
 Pigs 6
 Sheep and lambs 7
 Fowls 8
 Other (please specify) 9
 .

A2 What is the total hectareage of your farmland? 0-50 ha 1
 51-100 ha 2
 101-250 ha 3
 251-500 ha 4
 over 501 ha 5

A3 Is the farmland: Wholly owned? 1
 Mainly owned? 2
 Mainly tenanted? 3
 Wholly tenanted? 4

A4 What is the structure of your farm business? Limited company 1
 Sole trader 2
 Partnership 3
 Co-operative 4
 Other (please specify) 5

A5 Is the farm registered for VAT? No 1 Yes 2

A6 Have you acquired any additional farm business(es) over the last five years?
 No 1 Yes 2

A7 Have you acquired any additional farmland over the last five years?
 No 1 Yes 2

A8 Please answer the following two questions. First, does the farm engage in any of the following activities? Second, if appropriate, please indicate if these activities are registered as separate businesses? (Please tick the appropriate boxes)

	Engage in Activity?		Registered as separate businesses?	
(a) 'Unconventional' crops or livestock	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(b) Accommodation or catering	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(c) Recreation or education services	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(d) Agricultural contracting	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(e) Non-agricultural contracting	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(f) Food preparation and packaging	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(g) Food processing	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(h) Direct retailing	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(i) Leasing of land to other businesses	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
(j) Leasing of buildings to other businesses	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>

A9 In comparison to your conventional farming activities, what proportion of your total income is *currently* derived from these other activities? _____ %

A10 In three years time, what proportion of your total income do you expect to be derived from these other activities? _____ %

A11 Do you own or part own any other business(es) which operates from the farm? No Yes

A12 Including your farm business, how many businesses do you operate from the farm? (Please include all businesses which you own or part-own) _____

Please will you give some details about these businesses

.....

SECTION B: FURTHER BUSINESS OWNERSHIP

This section is concerned with other businesses you own or part own, but which operate from non-farm premises. If you have no other business activities beyond the farm, please tick the box opposite and move on to Section C.

B1 How many businesses do you own or part-own *operating from non-farm premises?* _____

B2 Is the administration of your non-farm business(es) undertaken on the farm?
 No 1 Yes 2

B3 What were your reasons for starting another business? *(Please tick the appropriate box, where 1 = strongly disagree and 5 = strongly agree)*

	Strongly Disagree	1	2	Neutral	3	4	Strongly Agree	5		
(a) To exploit a market demand	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
(b) To provide increased employment for yourself	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
(c) To provide increased employment for your family	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
(d) To provide financial assistance to allow you to stay in farming	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
(e) To help you eventually move out of farming and into a non-farm business	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
(f) To assist a family member to become self-employed	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
(g) Other, please specify	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5

.....

B4 Was your main farm business used to assist your additional business venture(s)? *(Please indicate the type of assistance given by the farm.)*

	Did not assist	Assisted
(a) Start-up capital	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(b) Security for loans	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(c) Staff/ labour	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(d) Premises	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(e) Equipment & machinery	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(f) Office or secretarial facilities	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(g) Management expertise	<input type="checkbox"/> 1	<input type="checkbox"/> 2
(h) Other (please specify)	<input type="checkbox"/> 1	<input type="checkbox"/> 2

.....

SECTION C: OTHER BUSINESSES ON THE FARM

This section is concerned with businesses which operate from the farm premises, but which are not owned by you. These may include businesses owned by family members or businesses which operate from converted farm buildings. If no other businesses operate from the farm, please tick the box opposite and move on to Section D

- C1 How many other businesses, *not owned by you*, operate from the farm premises? *(Please include all businesses owned by family and non-family members)* _____
- C2 Of these, how many are owned by family members? _____
- C3 Are the activities of these businesses related to farming?
No 1 Yes 2
- C4 Have you provided any form of assistance to these businesses?
No 1 Yes 2

SECTION D: FARM BUSINESS MANAGEMENT

- D1 How many farms do you own and/or manage? _____
- D2 Prior to running the farm, was your occupation: *(Please tick only one box)*
 - Employment in a farm? 1
 - Employment in a small non-farm business? 2
 - Employment in a large non-farm business? 3
 - Non-farm self-employment or business ownership? 4
 - Unemployment? 5

D3 Which of the following statements best describes your current occupation?
(Please tick only one box)

- | | | |
|---|--------------------------|---|
| My farm business is my only occupation | <input type="checkbox"/> | 1 |
| I combine farming with working for a small firm | <input type="checkbox"/> | 2 |
| I combine farming with working for a large firm | <input type="checkbox"/> | 3 |
| I am also self-employed in another capacity | <input type="checkbox"/> | 4 |
| I have wide and varied business interests | <input type="checkbox"/> | 5 |

D4 Which of the following best describes your entry into farming? (Please tick only one box)

- | | | |
|------------------------------------|--------------------------|---|
| I inherited a farm from my family | <input type="checkbox"/> | 1 |
| I bought a farm from my family | <input type="checkbox"/> | 2 |
| I bought a farm as a going concern | <input type="checkbox"/> | 3 |
| I started a farm business myself | <input type="checkbox"/> | 4 |

D5 Were you born in Cambridgeshire? No 1 Yes 2

D6 Did you move or return to Cambridgeshire in order to start or inherit your farm? No 1 Yes 2

D7 Please indicate your age:

Under 25	<input type="checkbox"/>	1
25 - 35	<input type="checkbox"/>	2
36 - 45	<input type="checkbox"/>	3
46 - 55	<input type="checkbox"/>	4
56 - 65	<input type="checkbox"/>	5
Over 66	<input type="checkbox"/>	6

D8 Are you male or female? Male 1 Female 2

D9 Have you undertaken any training in the following areas?
(Please tick the appropriate boxes in each row)

	Vocational Training	Degree level Training	Professional Training
(a) Agriculture	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(b) Management	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(c) Finance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(d) Marketing	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(e) Other subject(s)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

D10 Have you ever sought management advice from any of the following sources? Which, if any, do you use regularly (four times per year) for management advice? *(Please tick the appropriate boxes)*

	Have used this source	Use regularly
(a) ADAS/Other farm consultants	<input type="checkbox"/> 1	<input type="checkbox"/> 1
(b) Local enterprise agency	<input type="checkbox"/> 2	<input type="checkbox"/> 2
(c) Training and Enterprise Council (TEC)	<input type="checkbox"/> 3	<input type="checkbox"/> 3
(d) Bank manager(s)	<input type="checkbox"/> 4	<input type="checkbox"/> 4
(e) Accountant(s)	<input type="checkbox"/> 5	<input type="checkbox"/> 5
(f) Customers	<input type="checkbox"/> 6	<input type="checkbox"/> 6
(g) Suppliers	<input type="checkbox"/> 7	<input type="checkbox"/> 7
(h) Other business owner(s)	<input type="checkbox"/> 8	<input type="checkbox"/> 8
(i) Other, please specify	<input type="checkbox"/> 9	<input type="checkbox"/> 9

D11 Over the past five years, have you made any of the following changes to the management of your farm business? *(Please tick the appropriate boxes)*

(a) Increased the number of managers	No	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2
(b) Decreased the number of managers	No	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2
(c) Employed a professional manager	No	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2
(d) Increased my personal time spent on management	No	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2
(e) Increased my personal time spent on business planning	No	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2

D12 Who manages the farm business during the periods when you are unavailable? *(Please tick only one box)*

Designated farm manager	<input type="checkbox"/> 5
Farm employee(s)	<input type="checkbox"/> 4
Family members	<input type="checkbox"/> 3
No assistance is required	<input type="checkbox"/> 1

D13 Do you have a clearly defined growth objective for your farm business for the next five years? No 1 Yes 2

SECTION E: MARKETS AND CUSTOMERS

E1 Within the UK who are the major customers for your *agricultural* products?
(Please give rough percentage by value)

Wholesalers
Processors
Auction markets
Multiple retailers
Independent retailers
Farm shops and roadside sales
Restaurants and other caterers
Other (please indicate)

TOTAL 100%

E2 What proportion of your total sales are achieved from the following markets?
(Please give rough percentage by value)

Agricultural Sales

Local or regional markets
National (UK wide) markets
International (non-UK) markets
TOTAL

100%

E3 *If applicable,*

Non-Agricultural Sales

Local or regional markets
National (UK wide) markets
International (export) markets
TOTAL

100%

E4 Please indicate the extent to which the following statements describe the marketing strategy in your farm business (Where 1 = strongly disagree and 5 = strongly agree)

	Strongly Disagree	Neutral			Strongly Agree
	1	2	3	4	5
(a) There are new market opportunities for my agricultural products, if I wish to exploit them	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(b) We have a strong market orientation and can compete favourably with our closest competitors	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(c) We have changed our product range in the past three years to take advantage of market opportunities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(d) We have changed our customer service in the past three years to increase our competitive edge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(e) We are sensitive to our customer's needs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(f) We rely heavily on a few key customers for a large proportion of our sales	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(g) Competition in farming is more intense than in other rural industries	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(h) Business opportunities in farming are more readily available than in other rural industries	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

SECTION F: EMPLOYMENT AND FINANCE
--

F1 How many people are employed in the farm business (including partners and shareholders)? *(Please write in the numbers of employees in each category)*

Regular Full-time	_____	
Regular Part-time	_____	<i>(less than 30 hours per week)</i>
Regular Casual	_____	
Seasonal (min)	_____	(max) _____

F2 If applicable, how many people are employed in diversified activities on the farm (including partners and shareholders)? *(Please write in the numbers of employees in each category)*

Regular Full-time	_____	
Regular Part-time	_____	<i>(less than 30 hours per week)</i>
Regular Casual	_____	
Seasonal (min)	_____	(max) _____

F3 If applicable, how many people are employed in your *other non-farm* businesses which you own or part-own (including partners and shareholders)? *(Please write in the numbers of employees in each category)*

Regular Full-time	_____	
Regular Part-time	_____	<i>(less than 30 hours per week)</i>
Regular Casual	_____	
Seasonal (min)	_____	(max) _____

F4 If applicable, how many people are employed in businesses, not owned by you, but which operate from the farm? *(Please give a rough estimate if exact numbers are not known)*

Regular Full-time	_____	
Regular Part-time	_____	<i>(less than 30 hours per week)</i>
Regular Casual	_____	
Seasonal (min)	_____	(max) _____

F5 Please indicate the level of sales revenue for the farm business for the last financial year

- | | |
|------------------------|----------------------------|
| Less than £50,000 | <input type="checkbox"/> 1 |
| £50,001 to £100,000 | <input type="checkbox"/> 2 |
| £100,001 to £500,000 | <input type="checkbox"/> 3 |
| £500,001 to £1 million | <input type="checkbox"/> 4 |
| £1 to £5 million | <input type="checkbox"/> 5 |
| more than £5 million | <input type="checkbox"/> 6 |

F6 For the last financial year, did your farm operate at:
(Pre-tax profit or loss as percentage of turnover)

- | | |
|-------------------------|----------------------------|
| Profit of 5% or more? | <input type="checkbox"/> 1 |
| Profit of less than 5%? | <input type="checkbox"/> 2 |
| Breakeven? | <input type="checkbox"/> 3 |
| Loss of less than 5%? | <input type="checkbox"/> 4 |
| Loss of more than 5%? | <input type="checkbox"/> 5 |

F7 If you own or part-own any other businesses, please indicate the level of sales revenue for your combined *other* business interests, for the last financial year.

- | | |
|------------------------|----------------------------|
| Less than £50,000 | <input type="checkbox"/> 1 |
| £50,001 to £100,000 | <input type="checkbox"/> 2 |
| £100,001 to £500,000 | <input type="checkbox"/> 3 |
| £500,001 to £1 million | <input type="checkbox"/> 4 |
| £1 to £5 million | <input type="checkbox"/> 5 |
| more than £5 million | <input type="checkbox"/> 6 |

F8 If you own or part-own any other businesses, for the last financial year has your *other* business(es) operated at: *(Pre-tax profit or loss as percentage of turnover)*

- | | |
|-------------------------|----------------------------|
| Profit of 5% or more? | <input type="checkbox"/> 1 |
| Profit of less than 5%? | <input type="checkbox"/> 2 |
| Breakeven? | <input type="checkbox"/> 3 |
| Loss of less than 5%? | <input type="checkbox"/> 4 |
| Loss of more than 5%? | <input type="checkbox"/> 5 |

SECTION G: BUSINESS GROWTH AND OPPORTUNITIES

G1 Is your farm business growth hampered by any of the following:

- | | | |
|---|-------------------------------|--------------------------------|
| (a) Local labour shortages? | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |
| (b) Local skills shortages? | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |
| (c) Shortage of available land? | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |
| (d) Shortage of available buildings? | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |
| (e) Lack of long term capital investment? | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |
| (f) High cost of machinery or equipment? | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |
| (g) Lack of market demand | No <input type="checkbox"/> 1 | Yes <input type="checkbox"/> 2 |

G2 Please indicate the extent to which you agree with the following statements regarding business opportunities (Where 1 = strongly disagree and 5 = strongly agree)

- | | Strongly
Disagree | 2 | Neutral
3 | 4 | Strongly
Agree |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| (a) I can achieve greater business growth by specialising in specific farming sectors | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| (b) I can achieve greater business growth by introducing diversified activities | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| (c) I must initiate other business ventures in order to cope with declining farm incomes | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| (d) I actively seek out new business ideas for development | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| (e) I am an entrepreneur and will start a new business if I have the opportunity and resources | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| (f) There is a tradition in my family of starting new businesses | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

THANK YOU FOR ALL YOUR HELP

PLEASE SEND THE COMPLETED QUESTIONNAIRE IN THE ENCLOSED PRE-PAID ENVELOPE