

**AN ANALYSIS OF FARM DIVERSIFICATION IN FRANCE AND THE
UNITED KINGDOM BASED ON CASE STUDIES OF SUD MANCHE AND
WEST DORSET**

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University for the degree of Doctor of Philosophy.**

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Abstract

In the past two decades farming in the European Union (EU) has come under increasing pressure to survive as the profits from sales of agricultural commodities have fallen despite the substantial financial inputs from the EU's Common Agricultural Policy (CAP). To maintain their income, farmers have had to diversify their business. The sociocultural, political and economic reasons involved in farm diversification ought to be analysed critically at this particular time for European agriculture with the implementation of Agenda 2000 promoting farm diversification within its rural development policy.

Recent changes in the CAP which aim to shift away agriculture from a purely agricultural support agenda towards a broader approach to both agricultural and rural development have encouraged diversification and/or pluriactivity among farmers. The aim of introducing diversification and/or pluriactivity on farms is to maintain falling farm income by providing another source of income in the business and spreading the economic risk, to develop rural development by the creation of jobs, but also to protect the environment.

The primary aim of the research was to identify, analyse and compare the nature of diversification in two European dairy areas, sud Manche (France) and west Dorset (Britain). Sud Manche and west Dorset are two dairy areas that have a great opportunity for farm diversification linked to milk processing activities and tourism. The secondary aim of this research was to determine whether the decision-making process used by farmers to decide to diversify is driven by the changes in agricultural policy or by the characteristics of the farmers and the farms. The study used questionnaires, interviews and focus group to identify the nature and extent of diversification as well as to collect information on farmer's attitudes towards diversification.

The results have showed that farmers from both study areas have diversified and have a different attitude toward diversification. The nature of diversification is different in the two study areas. Farmers in sud Manche have diversified into a more agricultural orientated diversification whereas farmers in west Dorset have more non-agricultural diversification. However, some farmers in both study areas do not believe that diversification is a long term solution to the agricultural crisis in Europe. Moreover, many farmers have expressed their concerns about agricultural policy changes and the entry to the EU of countries from central and eastern Europe and the consequences this could have on agricultural prices. Farmers in sud Manche appeared not very knowledgeable about the various options to diversification and

were quite reluctant to do anything else except producing food. On the other hand, farmers in west Dorset appeared to have more knowledge about diversification and pluriactivity and were more inclined to the idea of producing something else than food production.

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List of acronyms

ADAS:	Agricultural Development and Advisory Service
AEP:	Agri-Environmental Policies
AFE:	Alternative Farm Enterprises
AI:	Artificial Insemination
ALURE:	Alternative Land Use for the Rural Economy
ANT:	Actor Network Theory
AOC:	Appellation d'Origine Contrôlée
BEP:	Brevet d'Enseignement Professionnel
BEPA:	Brevet d'Enseignement Professionnel Agricole
BT:	British Telecom
BTA:	Brevet de Technicien Agricole
BTS:	Brevet de Technicien Supérieur
CAD:	Contrat d'Agriculture Durable
CAEC:	County Agricultural Executive Committees
CAP:	Common Agricultural Policy
CNJA:	Centre National des Jeunes Agriculteurs
COSIRA:	Council for Small Industry in Rural Areas
CSS:	Countryside Stewardship Scheme
CTE:	Contrat Territorial d'Exploitation
CUMA:	Co-opérative d'Utilisation de Matériel en Commun
DAFF:	Direction Agricole et de la Forêt Française
DATAR:	Délégation à l'Aménagement du Territoire et à l'Action Régionale
DEFRA:	Department for the Environment Food and Rural Affairs
DEUG:	Diplôme d'Enseignement Universitaire Général
DJA:	Dôte aux Jeunes Agriculteurs
DUT:	Diplôme Universitaire de Technologie
EARL:	Entreprise à Responsabilité Limitée
EC:	European Community
ECU:	European Currency Units
EEC:	European Economic Community
EPI:	Etude Provisionnelle d'Installation
ESA:	Environmental Sensitive Area
EU:	European Union
MCA:	Monetary Compensatory Amounts
EMS:	European Monetary System

FASASA:	Fonds d'Action Sociale pour l'Aménagement des Structures Agricoles
FDGS:	Farm Diversification Grant Schemes
FNSEA:	Fédération Nationale des Syndicats d'Exploitants Agricoles
FOEGA:	Fond Européen d'Orientation et de Garantie Agricole
FWGS:	Farm Woodland Grant Schemes
GAEC:	Groupement Agricole En Commun
GATT:	General Agreement on Tariffs and Trade
GFA:	Groupement Foncier Agricole
INSEE:	Institut National de la Statistique et des Etudes Economiques
IVD:	Indemnité viagère de départ
JAC:	Jeunesse Agricole Chrétienne
LFA:	Less Favoured Area
LOA:	Loi d'Orientation Agricole
MAFF:	Ministry of Agriculture Fisheries and Food
MMB:	Milk Marketing Board
MSA:	Mutualité Sociale Agricole
MST-JA:	Moyen Termes Spéciaux-Jeunes Agriculteurs
NFAN:	National Farm Attraction Network
NFU:	National Farmers' Union
NGO:	Non Governmental Organisation
OGA:	Other Gainful Activity
PAM:	Plan d'Amélioration Matériel
PDO:	Protected Designation of Origin
PGI:	Protected Geographical Indication
PYO:	Pick Your Own
RGA:	Recensement Général Agricole
SAFER:	Société d'Aménagement Foncier et d'Aménagement Rural
SCEA:	Société Civile d'Exploitation Agricole
SCEES:	Service Central des Enquêtes et Etudes Statistiques
SMD:	Standard Man Day
SPSS:	Statistical Package for Social Science
WTO:	World Trade Organisation

Chapter 1: Introduction

From the 1950s, countries in Western Europe experienced a veritable ‘agricultural revolution’ (Gervais *et al*, 1965). Among the multifaceted progress occurring at this time, the most notable features were intensive mechanisation and the large shift of labour from the farming sector. Labour was replaced by unprecedented injections of capital used to purchase machinery, chemicals, new crops and livestock (hybrid species) to increase food production (Hoggart *et al*, 1995). The emphasis on state-sponsored support for high levels of output has been termed ‘productivism’ (Ilbery *et al*, 1998; Robinson, 1993). This included the growth of the research and development sector, which produced new farm technologies, industries to manufacture the inputs and educational programmes to provide farmers with the necessary skills to apply the inputs (Ilbery, 1998). The productivist era has also seen a dualistic farming economy appearing within the development of commercialisation. This has involved traditional family farms characterised by less capital-intensive and high-quality work, and modern capitalist farms, which are seen as technically efficient and able to respond to the changing demands of the market (Ilbery, 1998).

Despite the transformation brought by agricultural modernisation, farming in the European Union (EU) in the past two decades has come under increasing pressure to survive as the profits from sales of agricultural commodities have fallen. Notwithstanding the substantial financial inputs from the EU’s Common Agricultural Policy (CAP), farming businesses have been declining at a rapid rate. Those farmers who have survived have had to adopt various strategies to survive, including diversification of their business. The prime objective of farm diversification is to spread economic risk, but this has taken a complex variety of forms, with substantial spatial, temporal and sectoral variation. It is the nature of some of these variations that is investigated in this thesis.

1. 1. The importance of studying diversification and pluriactivity in dairy areas

Farm diversification is not a new phenomenon, even though it has become more common in recent years due to the reforms of the CAP. There has been a long tradition of diversified activities in some parts of Europe including both France and the UK. Diversification occurred as far back as medieval times when farmers provided farmhouses for lodging or were selling their own produce (e.g. butter, milk) to local people (Slee, 1986). However, changes occurring during both the Industrial and Agricultural Revolutions have greatly modernised and modified agriculture, and further changes in farming practices and policies during the last century have

provided new opportunities for farmers to diversify their activities in order to generate income from different sources.

From the late 1950s, farmers in member states of the EU have been encouraged to increase the production of food and fibre via the CAP. However, the success of the CAP has created problems with over production so that controls on output have been introduced, e.g. milk quotas, or set-aside of arable land. In order to maintain their income, farmers nowadays have had to introduce other gainful activities (OGAs) on their farms to maintain incomes. These diversified activities have sometimes involved the combination of farming with off-farm activity, and hence the term 'pluriactivity' and 'part-time farming'. For example some farmers took part-time work in the local factory in the late 1960s and early 1970s, as there was a high demand for industrial labour. These farmers have been referred to as 'worker-peasants' or 'farmer-fisherman' as found in Scotland's crofting areas or the '*paysan-ouvrier*' or '*double actif*' in France. On-farm activities or alternative farm enterprises (AFE) provide an opportunity to magnify profits of the farm business, sometimes considerably, and generate a rising demand for labour that is helpful for rural development (Bowler, 1999). For farmers, the current political and economic imperative is to search for alternative enterprises whose returns are less susceptible to the price cuts implied by the reforms of the CAP (Shucksmith and Winter, 1990; Walford, 2002).

Current tendencies in the development of the CAP suggest an increasing awareness of broader rural development issues. On-farm processing may present an alternative for farm diversification, income generation and rural development in the event of gradually more deregulated agricultural markets. Although pluriactivity has been subject to broad research in recent years, scrutiny has generally focused on farm-centred diversification rather than more extensive commercial activities of the farmers. Research reveals that various household factors are linked to diversification studies and pluriactivity in the UK. These are farmers' age, family life cycle, farming history, farmer education, farm succession, attitude to profits, other incomes and labour relations. Fuller (1990) highlighted the role of social diversity as a key component of pluriactivity in European farming as did Ilbery's work on farm diversification. Ilbery also analysed the farm household as a 'decision-making unit' (Ilbery, 1991; Kelly and Ilbery, 1995; Evans and Ilbery, 1996; Ilbery *et al*, 1996). Despite the growing concern with events affecting the whole of the EU and with global linkages becoming even more important, there has also been a concern for the local, and for the wide degree of variations that occur over short distances (Fuller *et al*, 1990). The Arkleton Trust study of rural change and pluriactivity within the EU in the late 1980s illustrates many of these points. It provides an illustration, which not only examines the issues of part-time farming and pluriactivity, but also the major forces of

social, economic and political changes in the last two decades. Hence, some of the key variables highlighted in this work will be examined herewith in the selected studies in France and the UK.

Farm diversification and pluriactivity (meaning multiple job holding) by farmers and members of farm households (i.e. farm businesses) have been an important area of academic research. However, research on dairy areas related to diversification/pluriactivity has often been limited. In fact, in dairy areas, diversification/pluriactivity has often been less common than in conjunction with certain types of farming as the nature of dairy farming is time and labour consuming and it leaves little time for extra activities (McNally, 2001). As such, one can wonder if diversification/pluriactivity are suitable for dairy farmers and if not, what is the solution for dairy farmers to increase their income? For reasons that will be elaborated in this study, the practice of diversification has not been so common for dairy producers and so there has been little work on diversification in dairying areas. This thesis seeks to fill this gap in our knowledge.

The research discussed herewith analyses farm diversification and pluriactivity utilising both quantitative and qualitative methods in order to compare agricultural development within two study areas, one in France and one in the UK. This method enables the investigation to examine the influence of a range of factors upon the nature and extent of diversification/pluriactivity, including the characteristics of farmers and farms, the nature of the changing policy environment and economic controls. Although there have been numerous studies on farm diversification in particular areas, there have been very few comparative studies or ones looking specifically at diversification in dairying areas, and with the added ingredient of tourism opportunities as presented in the two selected study areas.

One of the key influences on dairy production in the European Union during the last two decades has been the operation of milk quotas. These have had several impacts on dairy farming. Elderly farmers have been encouraged to take early retirement to free land, and milk quotas from their farms have been redistributed to other farmers or to newcomers to the farming industry. However, milk quotas have prevented farmers from producing as much milk as they want so some of them have had to find other ways to increase or maintain their income, for example through diversification/pluriactivity. It is important to note that dairy farmers' incomes have stagnated or decreased compared to other types of farm production in the last two decades. Furthermore, production costs are going to increase even further as many dairy farms will have to apply new norms linked to ongoing reforms to agricultural policy, including reductions in subsidies (Agrisalon, 2004). Although the French Ministry of Agriculture recently announced an aid package of 20 billion euros in order to help French dairy farms for restructuring in terms of modernisation of existing buildings to comply with new EU regulations regarding hygiene and

environmental issues, many dairy farmers still need to find other sources of income to maintain their farms in a viable financial state (Agrisalon, 2004). Some have turned to diversification and pluriactivity; others have chosen to intensify their production further.

The comparison of farm diversification in dairying areas in two different countries (France and the United Kingdom) is of significance, in part, as there is a lack of studies of diversification in this context. Diversification has mainly been studied in mountain areas or near urban fringes as it has been argued that farmers have better opportunities for diversification there than in dairy areas. However, more can be explored on diversification especially in comparative studies of dairy areas, largely ignored in previous foci on mountainous or urban fringe areas (Arkleton Trust, 1989, Ilbery and Evans 1992; Kelly, 1994; Higginbottom, 1996). By studying two similar European production areas, the research will show how different farmers react and adapt to the reforms of the CAP. It will help to determine the factors and processes involved with the choice of diversification.

1. 2. Aims and Objectives of the Research

Farm diversification has recently gained importance for the survival of family farms in the EU and elsewhere. Indeed a large amount of research now exists on the economics and patterns of adoption of AFEs, including the role of the state (e.g. Bateman and Ray, 1994; Fuller, 1990; Shucksmith and Smith, 1991, Bowler, 1998). Farm decision-makers are being required to make investment decisions within changing economic and policy environments. Farm diversification can be a multifaceted business investment. The farm family, agricultural extension workers and policy makers require guidance: both subjective and objective facts need to be combined and investment choices identified for a variety of future economic, political and farm family settings (Bowler, 1999).

Therefore, the aims of the research are:

- To understand the changes in the wider rural economy and its restructuring as farm decision-makers are being required to make investment decisions within changing economic and policy environments
- To explain how the management of risk and market uncertainty within a strategic economic and social context have an impact on decision-making for diversification/pluriactivity

- To establish the nature of diversification/pluriactivity, its components parts and its extent in two dairy areas: sud Manche (France) and west Dorset (UK)
- To examine decision-making at the level of farmers and farm business (i.e. entrepreneur, family life cycle and capital accumulation)
- To analyse diversification quantitatively and qualitatively and compare farm diversification in sud Manche (France) and west Dorset (UK) by focusing on the economic, socio-cultural and political aspects of on-farm and off-farm diversification;

The research aims to show that the type of farm diversification chosen by a farmer is linked to the farmer's education and age, the type of farm, household type, farm size, inheritance possibilities and location. Furthermore, it argues that on-farm diversification to cater for tourists will be more frequent in areas possessing tourist attractions (e.g. attractive coastline and countryside, beaches). The research also aims to show that in addition to state and supra-state policies there are certain cultural differences between the UK and France that influence farmers' attitudes towards diversification.

The objectives of the thesis are to analyse both diversification and pluriactivity within the two dairying areas by answering the following questions:

- What are the characteristics of diversification in the study areas?
- Why do farmers choose to diversify?
- Why is there variation between France and England with respect to the types of diversification pursued?
- What are the roles of education, location, age, type of business, nature of the farm household and possibilities for inheritance in farm diversification?
- How do farmers react and adapt to agricultural changes?

Essentially, the thesis will test the operation of a 'model' (Figure 1. 1), focusing especially upon the factors affecting farmers' decision-making and the context within which these decision are taken.

Chapter 1: Introduction

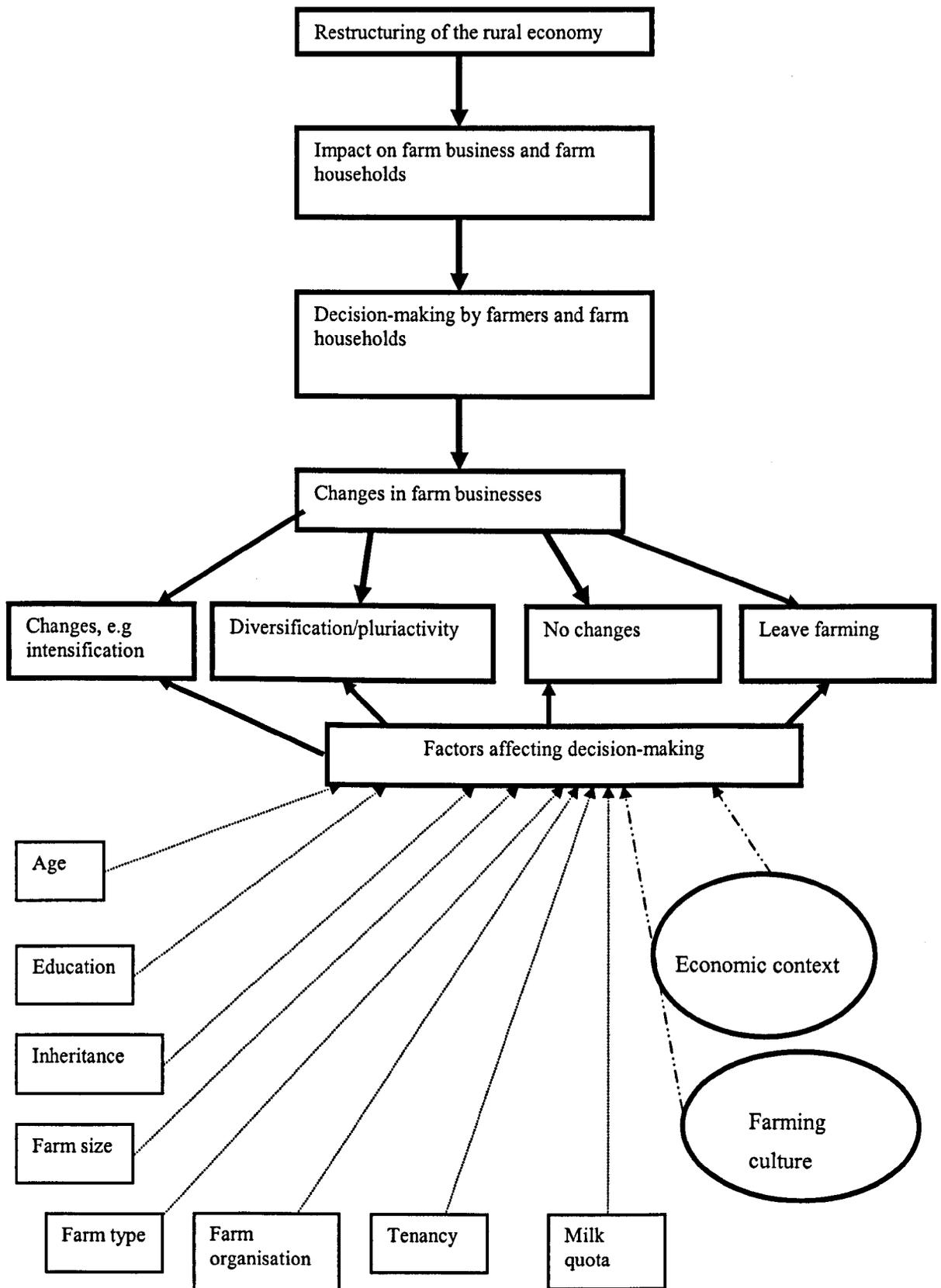


Figure 1. 1: Model

And therefore, to compare the nature and extent of farm diversification in France and England, a detailed examination of areas pursuing similar agricultural specialisation, namely the dairying regions of sud Manche in France and west Dorset in the UK, has been undertaken (Figure 1. 2). Both regions also have a good potential for tourism. The study focuses on the most prominent types of diversification to examine the process whereby farmers decide to diversify and the decision making this involves. To achieve this, quantitative and qualitative surveys of sample farms in both selected areas have been carried out. This was the basis for a comparative study of farm diversification, which focused on the economic, social and political aspects of farm diversification. A questionnaire to the farmers was used as a reference for detailed farm-based case studies as well as interviews of farmers. Sud Manche and west Dorset have similar characteristics: they are both located near the coast which offers a great potential for tourist activities; they are both in relatively easy access from urban areas (Bournemouth, Weymouth, Poole and Dorchester in Dorset; Saint Lô, Caen, Rennes, Coutances, in Manche). This is important for diversification in terms of an immediate market for selling farm products and providing accommodation. However, both areas are generally remote from large urban conglomerations and are dominated by small villages and hamlets in what might be termed 'deep rural' environments (Hoggart *et al*, 1995).

The research consists of comparing farm diversification/pluriactivity in sud Manche and west Dorset in order to understand the choices farmers take when they choose to diversify or to become pluriactive. It has to be noted that both countries have their own policies concerning farm diversification. In the UK, farmers have obtained limited government support for diversification (Ilbery, 1991). In France, farmers are also encouraged to diversify via the *Contrat Territorial d'Exploitation* (CTE) and the *Contrat d'Agriculture Durable* (CAD) from which they receive financial help from the government. However, the basic overarching set of policies controlling agriculture in both areas is the same, in the form of the European Union's Common Agricultural Policy (CAP).

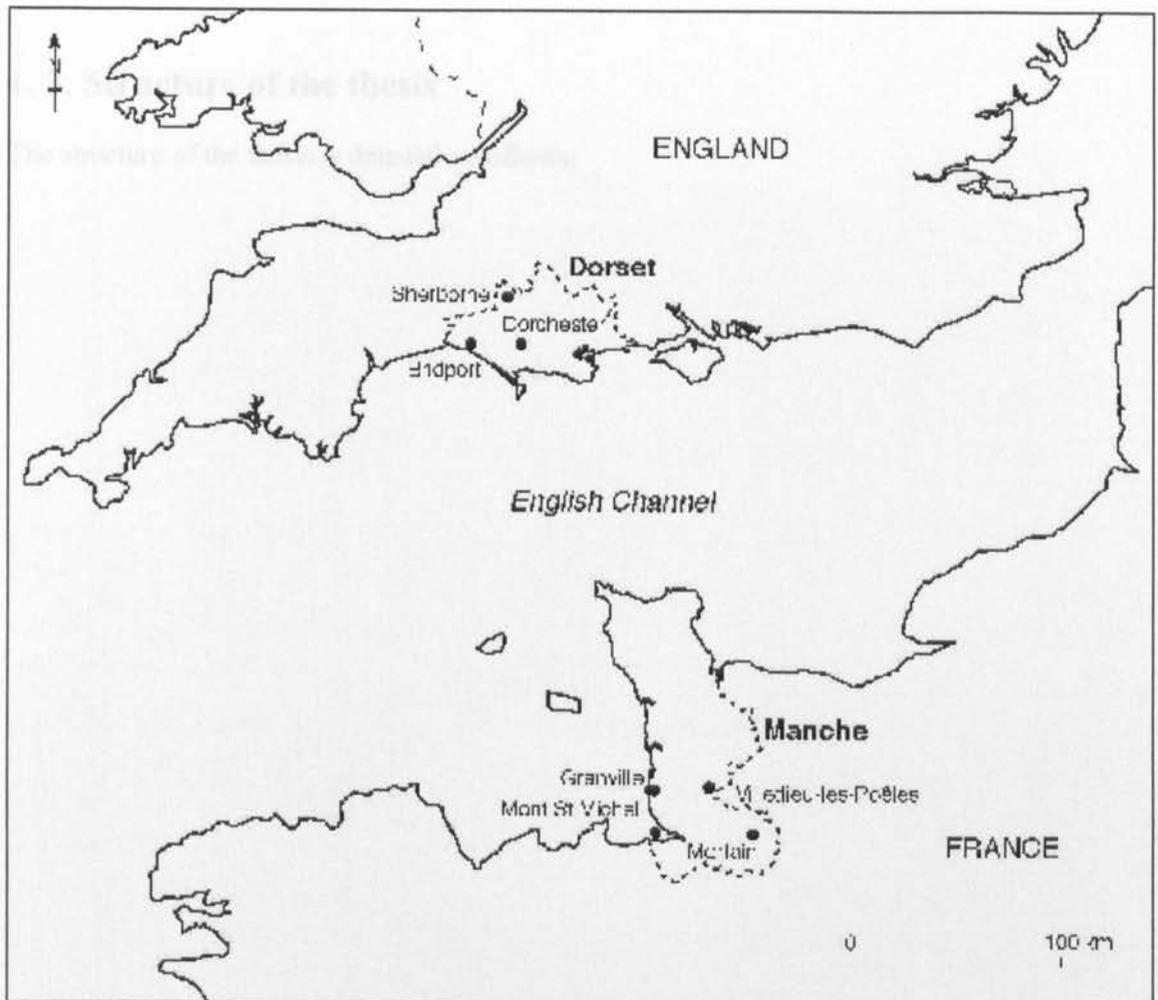


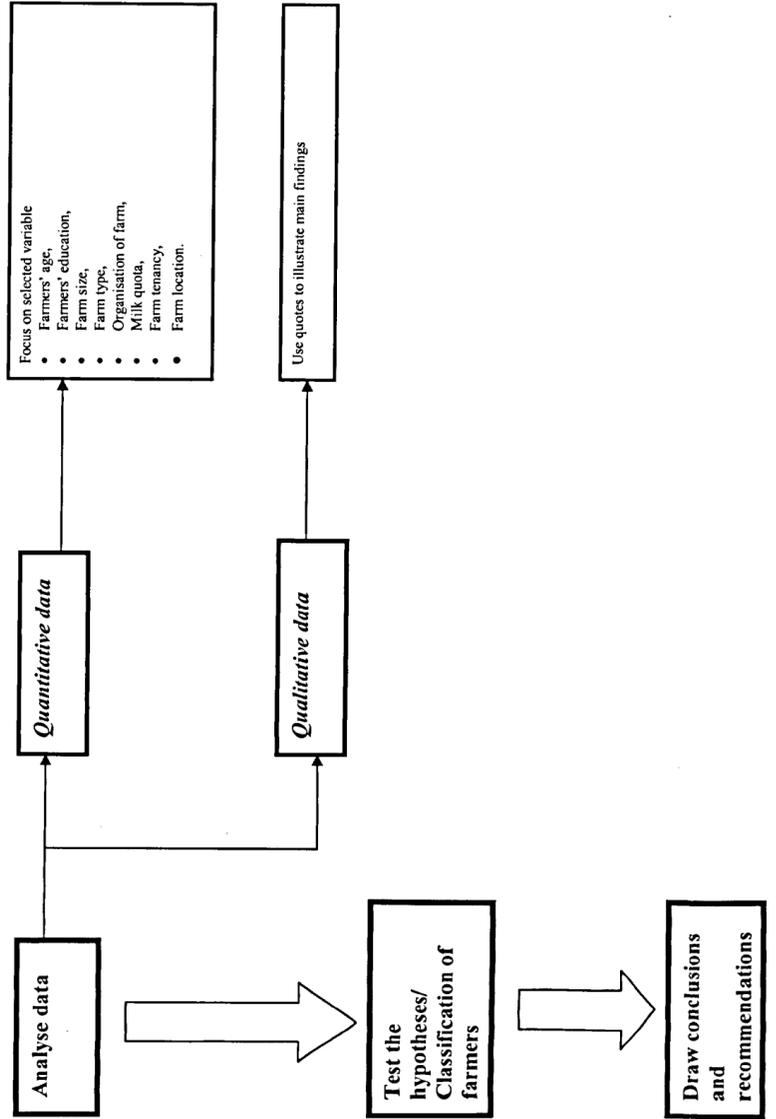
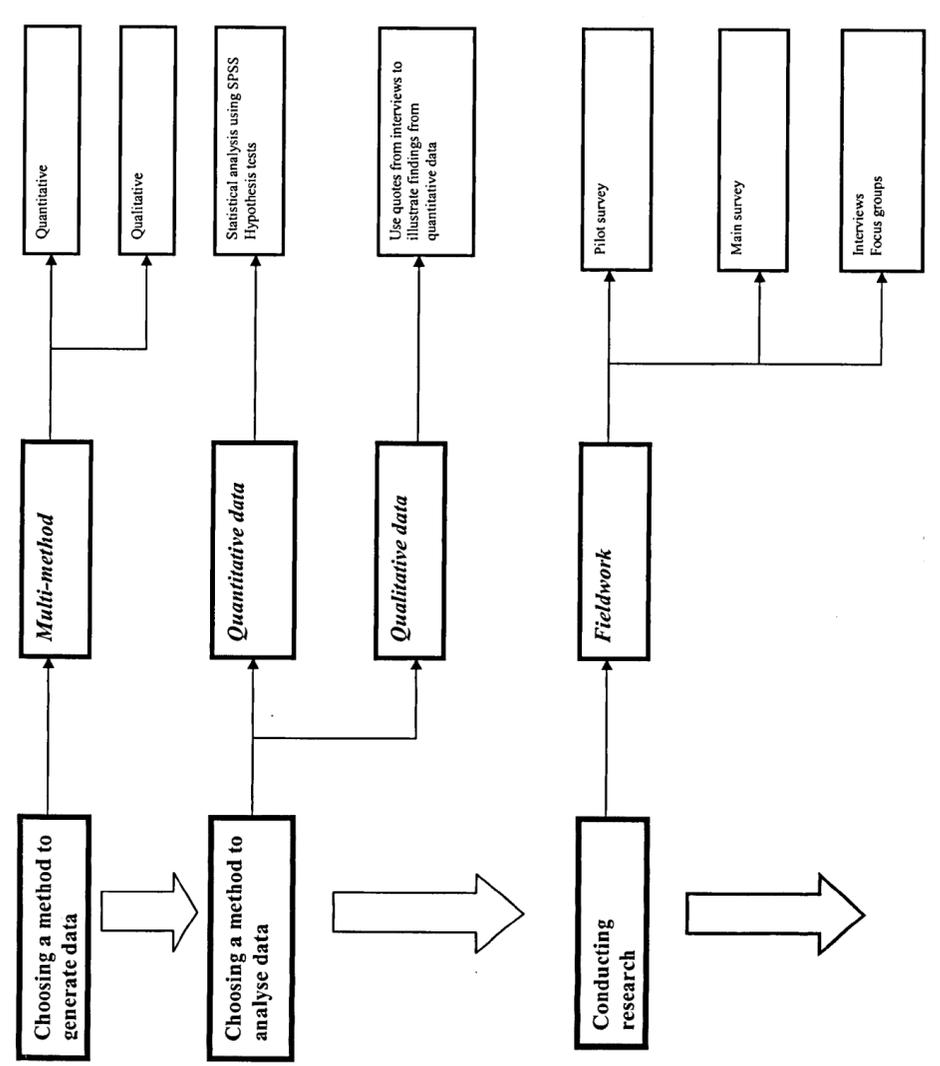
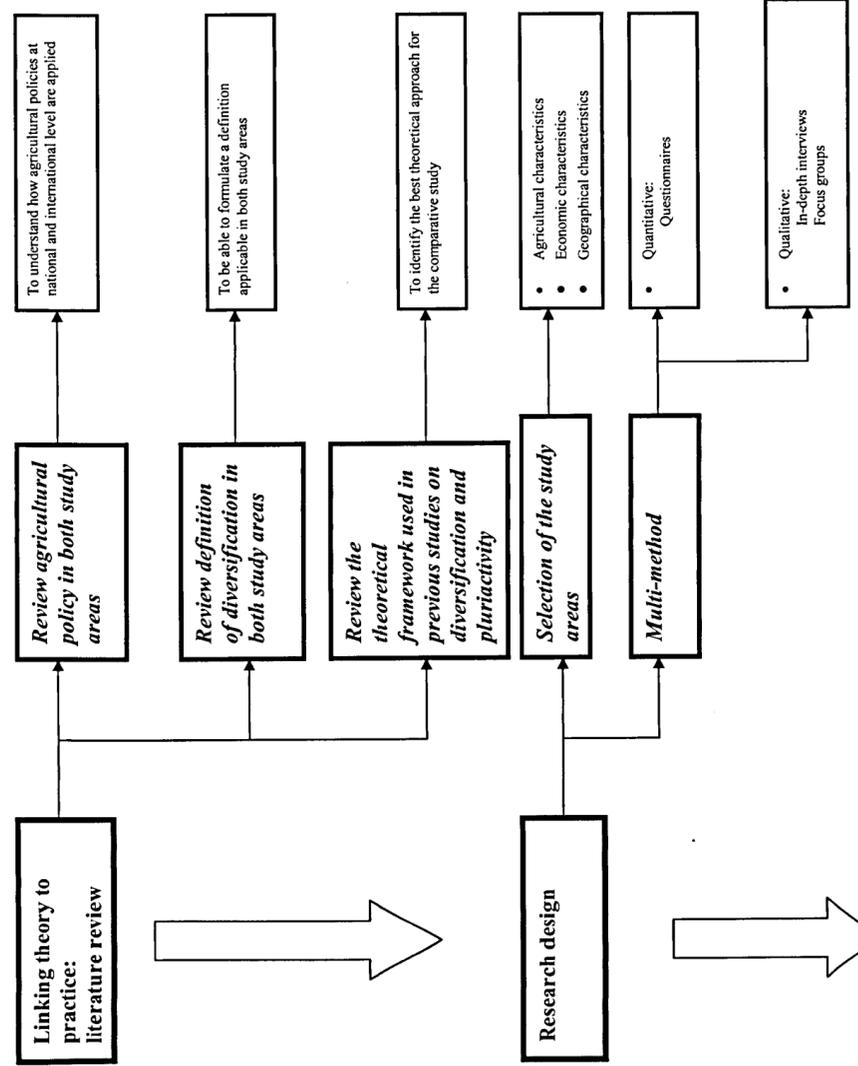
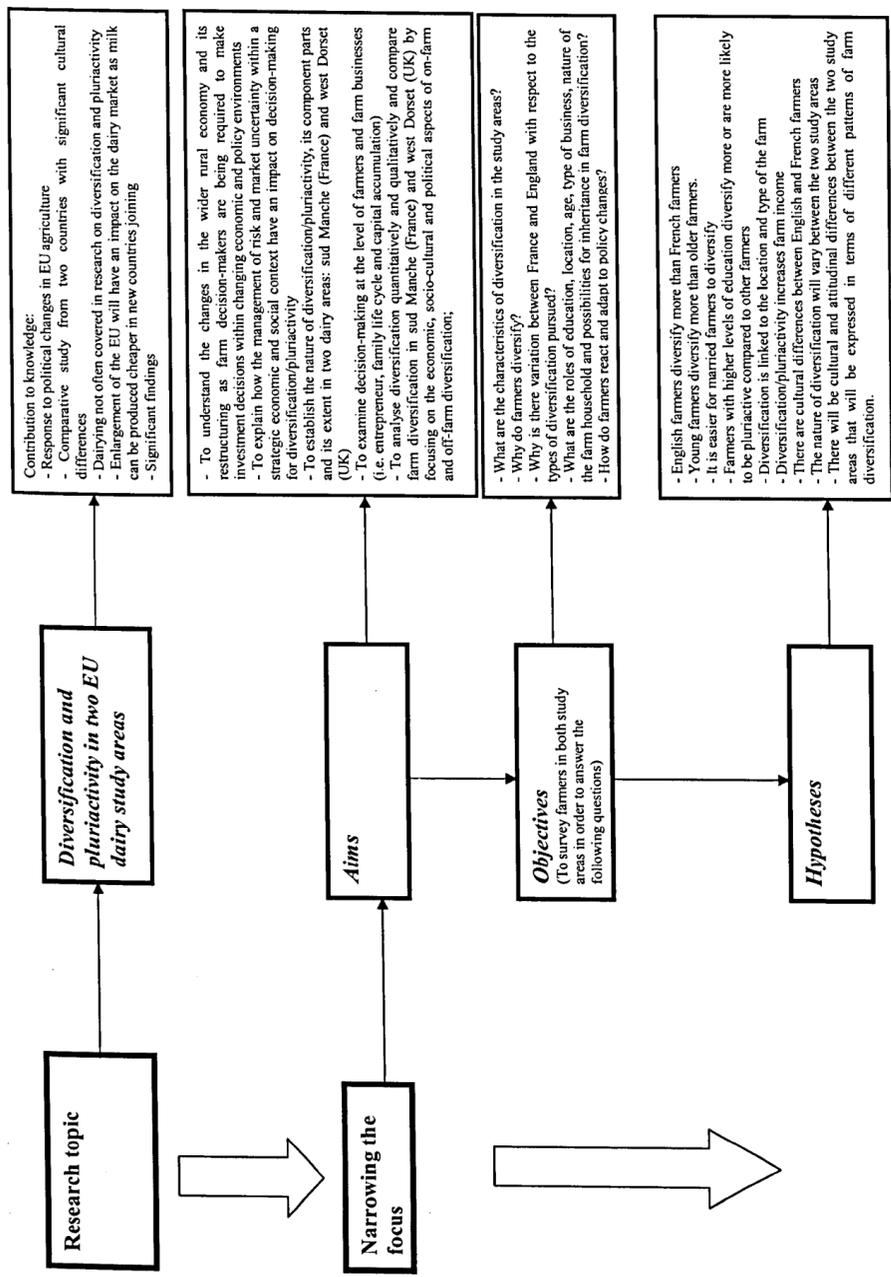
Figure 1. 2: Location of the two study areas.

Studying diversification in two different European countries will also show if the local culture and political differences have an impact on the choice or the type of diversification farmers adopt. Given the high tourist potential of the two study areas, it will be interesting to see if farmers are able (or not) to use this resource to develop particular types of diversified activities. Also 'internal' differences may occur in the type of diversification further from the coastline in both study areas. The role of accessibility to the countryside from local urban areas will also be considered as a potential impact on tourist activity on farms.

In order to analyse and compare diversification and pluriactivity, the author has reviewed the literature regarding diversification and defined diversification as 'the introduction into the farm business of an alternative farm enterprise (AFE) bringing any form of non-agricultural income movement on and off the holding and/or any conventional or unconventional production falling in or outside the price support scheme of the CAP in order to originate a new source of income'. This definition and its implications for the research design will be discussed further in chapter 3.

1. 3. Structure of the thesis

The structure of the thesis is detailed as follows:



1. 4. Summary

Chapter 2 reviews both French and UK agriculture in order to explain how the changes in agriculture have led farmers, and more precisely dairy farmers, to diversify. The chapter accounts for the similarities and differences between French and UK agriculture to establish a comparison of the two countries in terms of diversification from a political and social point of view. This chapter explains how UK agriculture was more advanced compared to French agriculture in the mid-1950s. It shows how the two countries have followed different agricultural policies until 1973 when the UK joined the EU. It also explains how, even under the same European policy regarding agriculture, the CAP, both countries are still under instruction from their national guidelines regarding agriculture.

After setting the historical background regarding agriculture, chapter 3 defines the concept of both diversification and pluriactivity. Both terms have been defined in various ways depending on whether they are used in a French or English context and researchers have adapted definitions to the particular aims of their research.

The thesis then progresses onto the theories and philosophies underpinning the analysis of the comparison of farm diversification in the two study areas (chapter 4). This shows how theory has dictated the identification of an appropriate methodology to collect data for the project. After a review of the several philosophies available to geographers for the study of agriculture, four key philosophies were utilised in order to amalgamate aspects to compare diversification from a political, economic and socio-cultural point of view.

Some researchers have studied diversification/pluriactivity from a behavioural or cultural approach to have a wider understanding on how and why farmers choose to diversify or become pluriactive. However, research using behavioural approaches has often been criticised for being too descriptive. In order to have a better insight to the nature of diversification/pluriactivity as well as the reasons behind the decision to diversify, the author decided to take aspects of these four theoretical approaches (i.e. positivism, political economy, behaviouralism and humanistic approach) to investigate the nature of diversification in the two study areas and also to understand the nature of the motivation behind the decision making regarding diversification/pluriactivity. The author drew upon these theories in her study in the quantitative and qualitative approaches used for the analysis of diversification in the two selected areas.

A multi-method approach for the study of farm diversification using postal questionnaires, in-depth interviews and focus groups was chosen as it accounts for the capacity to undertake

'triangulation' which is necessary in order to gain deeper insight to the problem. The advantage of such an approach is that it enhances capacities for interpreting meaning and behaviour. The chapter then moves on to how the data were collected and also presents how the data are analysed using the statistical analysis package SPSS.

Chapter 5 presents the characteristics of the two study areas. Both sud Manche and west Dorset are longstanding traditional dairying areas, and both are well removed from the effects of urbanisation. The chapter presents their similarities and differences which may play a role in diversification.

Chapter 6 presents the analysis of diversification for sud Manche. It reviews the general current agricultural situation in sud Manche and then presents both the quantitative and qualitative results from the author's survey. The chapter shows why farmers have chosen to diversify. The chapter portrays the characteristics of the farmers and farms and the statistical analysis between variables reveals how these characteristics influence the farmers' decision-making process towards diversification and/or pluriactivity.

Chapter 7 offers a similar analysis for the west Dorset study area while chapter 8 compares these findings with those from sud Manche. The characteristics of farms and farmers are compared in order to understand whether or not these characteristics influence decision-making about diversification. By including questions related to agricultural policy and personal opinion, the questionnaires yielded findings that were then explored in more depth and in a more qualitative fashion so that the role of culture could be investigated by exploring differences relating to cultural attitudes. This chapter also reveals whether or not one of the central hypotheses of the research is confirmed i.e. do English farmers diversify more than their French counterparts?

Chapter 9 concludes the thesis with a summary of the findings on diversification and pluriactivity in sud Manche and west Dorset and offers some recommendations for further research on diversification.

Chapter 2: Agriculture in France and the UK since World War II

Chapter 2: Agriculture in France and the UK since World War II

The development of agriculture in France and the UK has not happened at the same pace as both countries have had very different agricultural and economic histories since the era of the Industrial Revolution and Agricultural Revolution (Appendix 1). The dairy sector in both study areas has also evolved in a very different way as well (Appendix 2). In 1945, many French farmers were still described as peasant farmers as many were farming as 'a way of life' whereas English farms were larger, more efficient and had responded to World War II by producing more food than ever before. The aim of this chapter is to review post-1945 agriculture and agricultural policies in France and the UK in order to understand how the agricultural policies have contributed to farmers diversifying their business or becoming pluriactive.

2. 1. Productivism in European agriculture

After the Second World War there was a high desire for political and economic union that could ensure peace among the Western European countries. The latter were encouraged to agree to economic, social, political and defence co-operation. Agricultural production was promoted by individual governments and by the European Economic Community (EEC), established in 1957, via its Common Agricultural Policy (CAP). Since 1945, the modernisation of agriculture in Europe-stimulated by the Americans- had a major impact on the agricultural sector including modernisation and mechanisation (Figure 2. 1 and 2. 2) (Fearce, 1991). Large supplies of labour moved out of the farming sector (Figure 2. 3 and 2. 4) and were replaced by unprecedented injections of capital that have been used to purchase machinery, chemicals and improved seeds and breeds of cattle to increase food production. The increase of food production, also termed productivism, relates in part to the state-managed policy framework present throughout the Developed World that encouraged an acceleration in two key processes in the industrial agriculture: appropriation¹ and substitution² (Robinson, 2004).

¹ Appropriation is the process whereby certain parts of the agricultural production process were transformed into a more industrial activity and utilised as purchased farm inputs (e.g. horses were replaced by tractors and manure was replaced by synthetic fertilisers).

² Agriculture used to supply raw materials to industry but increasingly agricultural products have been substituted by industrial products (e.g. cotton replaced by the use of synthetic fibre).

Evolution of the number of tractors (France)

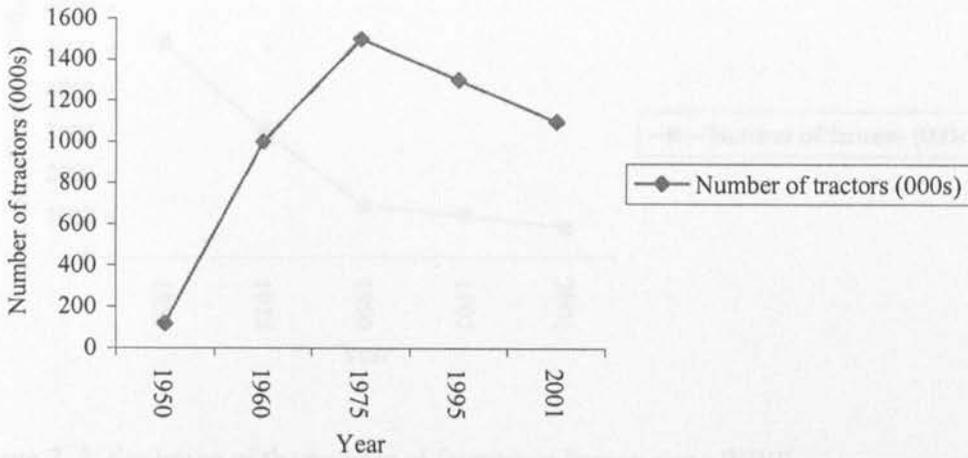


Figure 2. 1 Increased mechanisation in France (number of tractors)
Source: Colombel, 2005; Agreste, 2006.

Evolution of the number of tractors (UK)

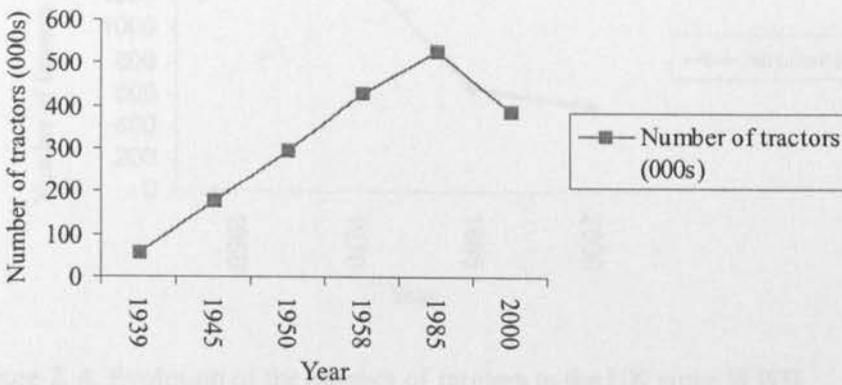


Figure 2. 2 Increased mechanisation in the UK (number of tractors)
Source: Robinson, 1988; Martin, 2000, DEFRA, 2006

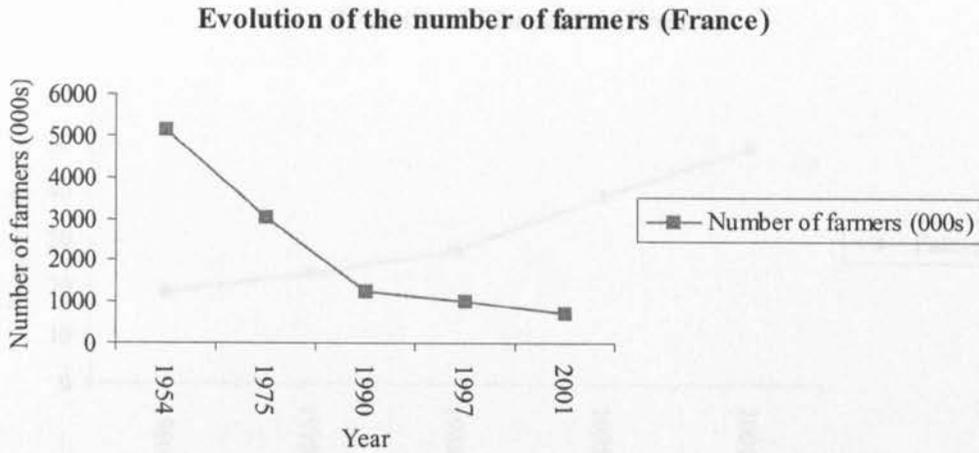


Figure 2. 3: Evolution of the number of farmers in France since WWII
Source: Colombel, 2005; Agreste, 2006.

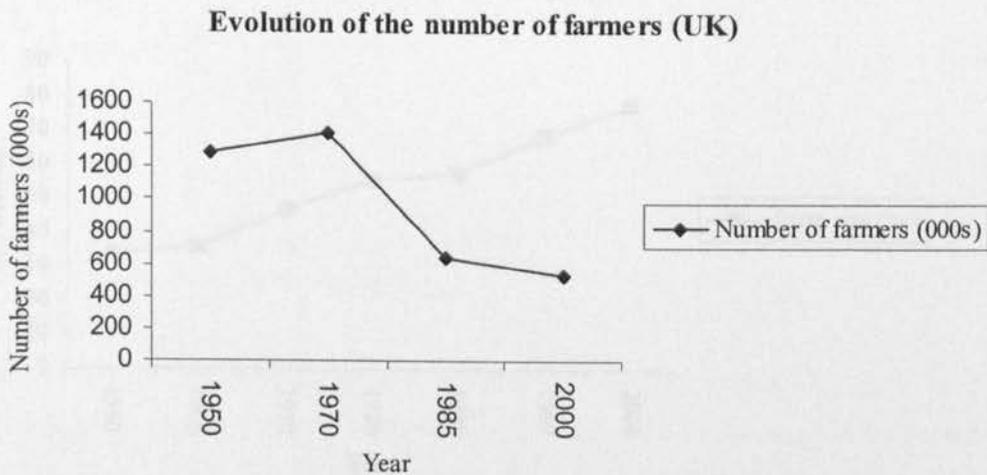


Figure 2. 4: Evolution of the number of farmers in the UK since WWII
Source: Robinson, 1988; Martin, 2000, DEFRA, 2006

These changes in agricultural practice in Europe after World War II brought an immense increase in productivity. The third agricultural revolution³, which occurred post 1945, again was more pronounced and happened earlier in North America and in the UK than in many parts of Europe. The use of manufactured fertilisers, pesticides and machinery enabled larger areas to be farmed and yield efficiency improved considerably. As the number of farmers decreased, the farm size increased (Figure 2. 5 and 2. 6).

³ The first agricultural revolution corresponds to the one occurring in the Bronze Age and the Second Agricultural Revolution occurred in Britain from the 17th to the 19th century but started later in the rest of Europe.

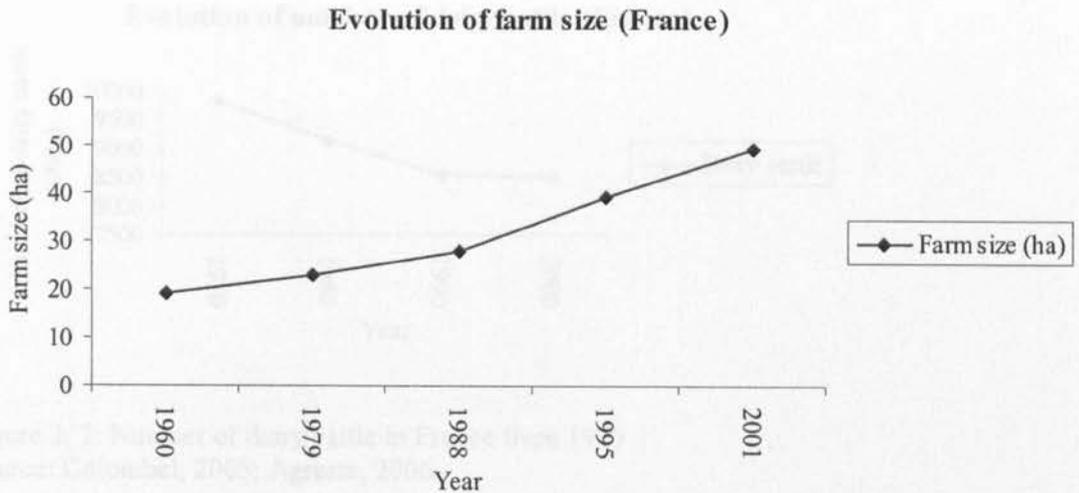


Figure 2. 5: Evolution of farm size in France since 1950
Source: Colombel, 2005; Agreste, 2006.

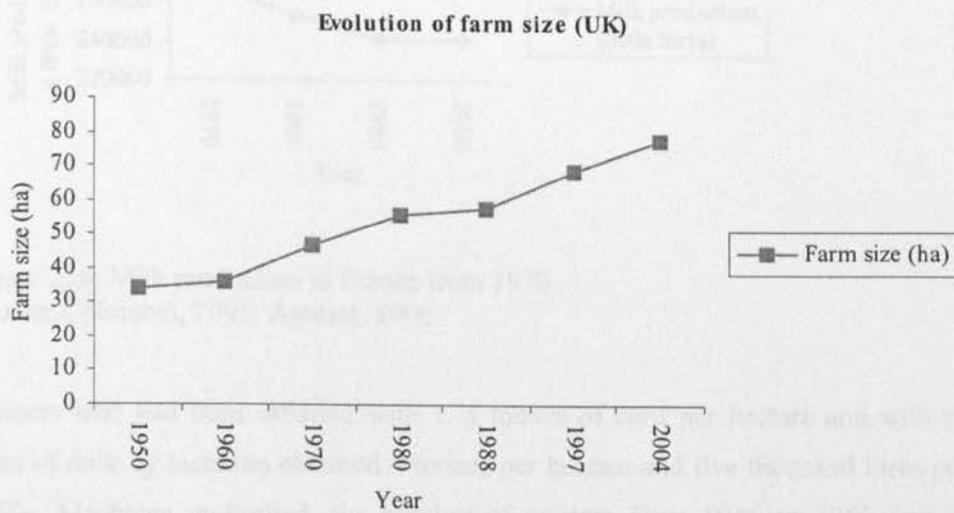


Figure 2. 6: Evolution of farm size in the UK since 1950
Source: Robinson, 1988; Martin, 2000, DEFRA, 2006

The post-1945 period in France has witnessed an enormous rise in output and capital investments, as well as a considerable increase in agricultural output. With modernisation of equipment, use of new sources of energy and application of modern technology, from 1945 French farmers have managed to increase food output and in less than ten years outputs more than doubled. Milk production increased after World War II but the number of dairy cattle as well as milk production started to decrease from the 1980s due to milk quotas (Figure 2. 7 and 2. 8).

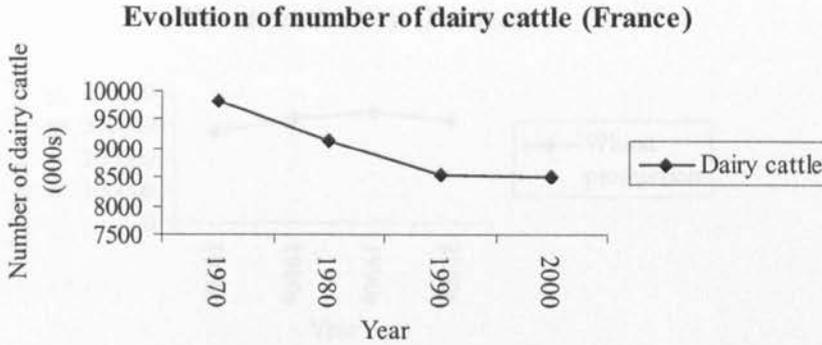


Figure 2. 7: Number of dairy cattle in France from 1970
Source: Colombel, 2005; Agreste, 2006.

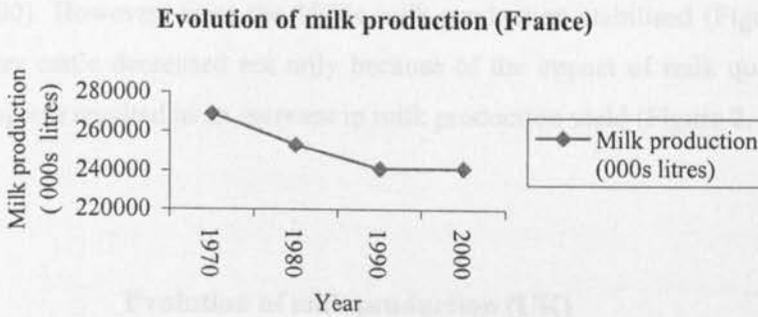


Figure 2. 8: Milk production in France from 1970
Source: Colombel, 2005; Agreste, 2006.

Farmers who had been satisfied with 1.5 tonnes of corn per hectare and with two thousand litres of milk by lactation obtained 4 tonnes per hectare and five thousand litres per cow in the 1960s. Machines multiplied, the number of tractors from 1946 to 1965 rose from twenty thousand to more than one million (Mendras, 1967: 22), and there was a rise in incomes and per capita incomes. Although the land surface used in agriculture fell from 35 billion hectares in 1959 to 29 million in 2000, French agriculture has increased its output. The milk production per cow doubled from 3000 litres per cow per year in the 1950s to 6000 litres per cow per year in the 1990s. Wheat production has also increased from 2 tonnes per hectare in 1950 to 6.8 tonnes per hectare in the late 1990s (Figure 2. 9). This increase of production was accompanied by an unprecedented decrease in labour in farming which has seen its labour shed from more than 4 million in 1960 to 970 000 in 1997 (Colombel, 2000).

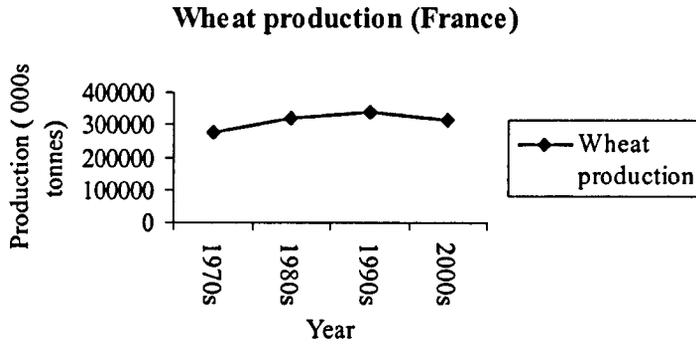


Figure 2. 9: Wheat production in France from 1970

Source: Colombel, 2005; Agreste, 2006.

Meanwhile, in the UK, between the early 1930s and the 1990s, milk production trebled (Martin, 2000). However, from the 1970s milk production stabilised (Figure 2. 10) and the number of dairy cattle decreased not only because of the impact of milk quotas but also because genetic progress resulted in an increase in milk production yield (Figure 2. 11).

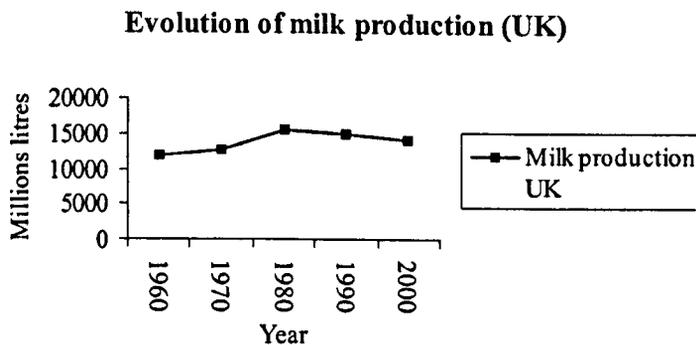


Figure 2. 10: Milk production in the UK from 1960

Source: Robinson, 1988; Martin, 2000, DEFRA, 2006

Evolution of the number of dairy cattle (UK)

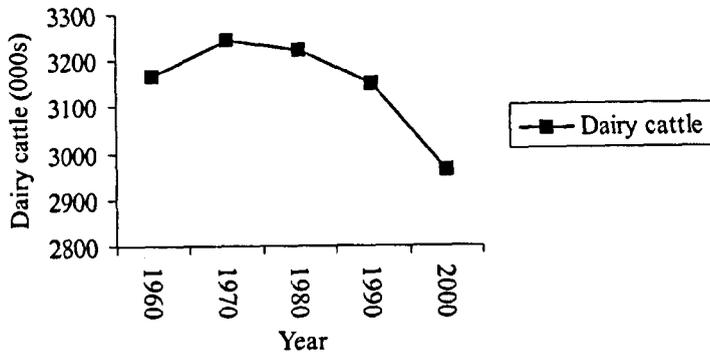


Figure 2. 11: Number of dairy cattle in the UK from 1960
 Source: Robinson, 1988; Martin, 2000, DEFRA, 2006

Throughout this time there were surpluses in milk and eggs. Successive governments encouraged investment in agriculture and modernisation, thereby raising the technical standards of its performance, and thus constantly increasing the likelihood of surpluses. Between 1951 and 1965, the area under wheat remained almost constant, but the yields doubled, and so did the total output. Figure 2.12 shows the increase of wheat production in the UK. In the same period the yield of maize doubled, the sown area increased nearly threefold and production rose from 0.6 million tonnes in 1951 to 3.8 million tonnes in 1963. Meat production rose during 1951-65 from 1.9 million to 3.1 million tonnes and milk production almost doubled (Franklin, 1969). The increase in food production was achieved, in spite of the loss of 324 000 ha of agricultural land which had been put to alternative use during the War. This loss of land, however, was partly offset by extensive land reclamation projects in areas such as the Fens. Moreover, prior to the War, large areas of agricultural land were under-utilised and often derelict, but were still officially recorded in agricultural returns (Murray, 1955).

The changes occurring during productivism have been driven by the changing market, development of technologies and scientific research, the emergence of globalisation and also the nature of agricultural policy. For 33 years, both French and British agriculture have been governed by the Common Agricultural Policy (CAP) as the next section explains.

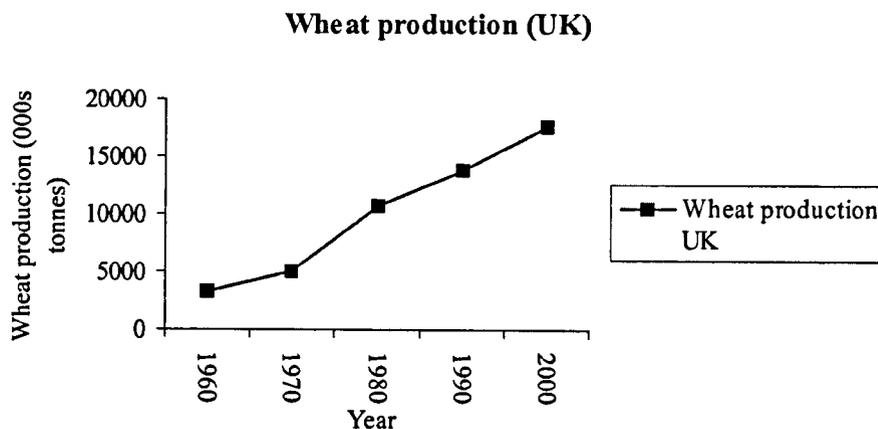


Figure 2. 12: Wheat production in the UK from 1960
Source: Robinson, 1988; Martin, 2000, DEFRA, 2006

2. 2. The Common Agricultural Policy (CAP)

The origin of the CAP, as part of the establishment of the European Economic Community (EEC) is detailed in Appendix 3.

2. 2. 1. Aims and objectives of the CAP

The objectives of the CAP (Table 2. 1), defined in chapter 39 of the Treaty of Rome, included in particular a specific system of agricultural pricing for European countries. The objectives were initially to enable the countries concerned to become self-sufficient in basic agricultural products. The purpose of the objectives was to increase the efficiency of European agriculture through modernisation. This required a more professional type of farming; a specialisation by the different types of farms into products for which they were best suited, both from an agronomic and economic point of view. The accumulation of the productive capital on these farms made a continuous increase in productivity possible.

Table 2. 1: Objectives of the Common Agricultural Policy

CAP	
Objectives	Increase productivity
	Ensure standard of living for agricultural community
	Stabilise market
	Assure availability of supplies
	Ensure reasonable prices for consumers.

Source: Adapted from Teulon, 2000

The modernisation and industrialisation of capitalist agricultural systems have led to an overproduction of many basic foodstuffs (Bowler, 1985; Healey and Ilbery, 1985; Ilbery, 1991). Farmers have intensified and specialised their production due to the technological development and governmental support policies. As a result, a decline in demand for food relative to income levels has caused the cost of production to rise at a greater rate than the price of food, often referred to as the 'cost-price squeeze'. The cost-price squeeze has spurred many farmers to diversify. In order to maintain or raise their income, farmers searched for economies of scale by diversification, intensification, and/or specialisation of production or increasing their farm size. This has led to investment in more modern technology and a substitution of capital for labour. As a result, intensification contributes to overproduction, a fall in prices and consequently a need to intensify further, increasing indebtedness as a result of buying modern technologies and land, and strengthening this effect (Ilbery, 1991). As a result, the European Community was transformed from being a major importer to being an exporter of food but the CAP has been heavily criticised. Although the CAP was a success in terms of increasing production, the CAP has several drawbacks (Table 2. 2) associated with the fact that it had contradictory objectives which generated serious problems within the EU itself and beyond.

The growing surpluses had to be stored (which was also expensive) and ultimately disposed of on the world market, which was sometimes already oversupplied, meaning that prices obtained were well below the guaranteed price paid within Europe to the producers. In other words, the surpluses were being disposed of at a massive loss, adding to the cost of the CAP⁴. Not only was this bad for the European Union itself but it was also having negative impacts on producers in other countries as world market prices declined.

The reduction in agricultural employment was paralleled by a corresponding decline in other sources of rural employment, which often jeopardised the social structure of traditional close-knit communities and the operation of existing rural services. Depopulation took place in many rural areas but its effects on local communities varied from one locality to another. In areas with good access and communications, a process of counter-urbanisation occurred.

⁴ After currencies were 'floated' market unity was maintained by the introduction of Monetary Compensatory Amounts (MCAs) which offset the difference between the 'green' rate and the market rate. Even before Britain joined the EEC, the CAP was facing major problems. By 1972, two-thirds of the EEC's budget was being spent on agricultural support. Only half of this was derived from import levies, the rest being funded by national budgets according to a scale of contributions laid down in Article 200 of the Treaty for the Community Budget.

Table 2. 2: Success and downside of the CAP

Success and downside of the CAP	
Success	The size of holdings increased
	The number of people employed in agriculture reduced significantly
	Yields rose increasing income
	Overall production increased quickly
	The EEC became self-sufficient in temperate foods (for dairy products, this was reached by 1974 and subsequently production increased by 2.6 percent per year and demand only increased by 0.6 percent per year) (Teulon, 2000)
Downside	Increasing reliance on fossil fuels in agriculture both for running machinery and as raw materials for the agrochemical industries was unsustainable
	Widespread use of pesticides and herbicides impacted heavily on ecosystems and threatened drinking water supplies
	Manure and other effluent from livestock units also posed a threat to ecosystems, particularly waterways
	Use of antibiotics in animals and agrochemical residues in arable crops appeared to be detrimental to the health of consumers
	As agriculture shed labour, many rural areas went into decline
	The CAP budget was spiralling out of control as until the mid-to late 1980s guaranteed prices encouraged farmers to increase production to the limit.

Source: Author

2. 2. 2. The need for reform

By 1970 the foundation of the CAP had been achieved; tariff and quota limitations on trade in agricultural produce between member states had been eliminated; a common set of tariffs on food imports from non-EEC countries had been expressed; and a common system of price support had substituted the diverse national mechanisms. Prices were to be based on a common denominator, initially symbolized as a European Unit of Account (EUA). These were then translated into individual currencies utilising fixed exchange rates. As early as 1964, financial difficulties had led to the devaluation of the franc and the revaluation of the deutschmark. For France, this should have meant that intervention prices set in EUAs rose in francs and fell in deutschmarks. Neither of these two options proved acceptable to their respective governments. In France, there was already extensive concern over existing levels of inflation. In order to reach the stable internal market as defined in the Treaty of Rome, an extensive system of farm support developed on the basis of four principles:

- free movement of agricultural goods within the community;

- common prices;
- standardised organisation for each commodity;
- and, uniform tariff walls against imports from non-EEC countries.

Imports from lower-cost non-EEC countries were subject to flexible levies being made on target prices and lower transport costs to centres of consumption. Receipts from these levies partially financed the cost of agricultural support, with additional revenue being provided directly from the EEC budget.

Although the creation of the CAP allowed great development in terms of productivity of agriculture, the important budgetary efforts were not sufficient to ensure both equal development as compared with industry or services for agriculture or to guarantee incomes for farmers. Greater supply led to increased exports from the EEC. However, world market prices of agricultural products have remained static since the 1980s. This is linked both to the international economic recession which took place in 1987 and also to the fact that Asian countries have started to be self-sufficient, hence there have been reduced exports to Asia. The economic crisis in the 1980s generated two main problems illustrated by the Uruguay Round of GATT (General Agreement on Tariffs and Trade) (Campagne *et al*, 1990). On one side it was quite difficult to satisfy the high food demand from the developing countries; while on the other there were serious battles between European countries and the USA on the world agricultural market. In 1982, the UK's relationship with her EU partners deteriorated when they agreed to increase the total farm budget without the UK's consent. In 1982, the UK contested its contribution to the EEC budget as it claimed that the budgetary system in place was a source of waste and unfairness. The question of the UK contribution came to the fore in 1980 as it was at this time that the new members (UK joined in 1973) had to give their total contribution⁵.

⁵ In fact, the gap between the UK contribution to the budget and the share of credit received by the UK was -when Margaret Thatcher became Prime Minister- very important. UK trade stayed mainly with countries outside the EU, whilst UK imports came from former members of the Commonwealth. However, the Fond Européen d'orientation et de garantie agricole (FEOGA) expenses are financed mainly by customs tax imports from non-EU members. As such the UK was heavily charged. In 1980 of 5 billion ECU received at EEC customs to be transferred to the EEC budget, nearly a quarter was given by the UK. Furthermore, because the UK has a small primary sector, the UK received very little from the Community. By requesting a 'fair return' for their financial contribution the UK shook one of the principal bases of the EEC. This request was judged excessive by the other EEC countries, as the size of the payment was explained by the imports from non-EEC countries to the UK. In order to put pressure on the other member states, the UK refused to approve the 1980 budget and to freeze agricultural revalorization when European farmers experienced inflation which inflated production costs.

2. 2. 2. 1. Mansholt reforms

The need for modernisation was first brought to a head in 1968, when Dr Sicco Mansholt, the Agricultural Commissioner, issued a memorandum which came to be known as the Mansholt Plan. The EEC was already experiencing overproduction of cereals and milk. This highlighted that price support on its own could not solve agricultural problems. His plans envisaged an extensive programme of cost efficiencies, amalgamations and diversification. In 1968, Mansholt proposed in his report to take out of production 5 million hectares (cereals) and to slaughter 8.5m dairy cows. However, it was not until 1972 that the Council of Ministers finally accepted a weakened version of his reforms. A modification of the original Mansholt proposals for farm structure reform was subsequently adopted in EEC legislation on the retirement of elderly farmers (EEC 72/160).

2. 2. 2. 2. MacSharry reforms

During the 1980s, overproduction in European agriculture, which until then had been limited to products such as milk and wine, spread to other basic products. As a result, production has been subject to some element of supply control or other means of attempting to reduce production. In 1984 the EU introduced a quota on dairy production, initially set at 1981 levels plus one percent, to alleviate the situation⁶. A system of penalty levies was included to encourage producers to operate within their limits. When the quota was introduced it was attached to land and could only be transferred with the land. However, loopholes in the regulations were uncovered and it is now possible to transfer quota between holdings with the minimum of red tape. The purchaser must take a lease out on the vendor's land for a minimum of ten months, and as long as no milk production takes place on that piece of land, the quota will be deemed to be transferred to the land the purchaser uses for milk production⁷. The milk quota aimed to encourage farmers to diversify but it resulted in a decreased of dairy farmers and an increase of dairy production in the remaining dairy farms.

⁶ A reserve of one percent of the total national milk quota was created to assist new entrants into the industry. Quota allocations could be transferred with the sale of land but those exchanged independently were subject to a 'siphon', which amounted to 15 percent of the quantity exchanged. The MacSharry reforms coincided with the deregulation of the UK milk market in 1993 and the creation of the non-statutory producers' co-operative, known as Milk Marque, which allowed farmers to benefit, as the dairy companies competed for the limited milk supply contracts.

⁷ This ease of transfer and the way in which quota can be used as an important management tool, have meant that quota trading is now big business. As with any tradable commodity there are a range of different factors which affect the market price of milk quota. The time of year has a large influence on quota price. The price is normally low at the start of the quota year, and can rise or fall steeply at the end of the year when information about the status of the national quota becomes available to producers.

It may be argued that an increasing degree of on-farm processing in the various stages of the food marketing chain may smooth the progress of a transition from a traditional agricultural policy, mostly symbolised by price supports and direct income payments, to an integrated rural development policy. Given the intended eastward expansion of the EU, a proposal was brought forward by the EU Commissioner of Agriculture, Franz Fischler, to gradually reform the CAP in such a direction (Tribe, 1991).

In order to reduce production, set-aside schemes were launched in all EU countries to persuade farmers to employ alternative sources of income to compensate for the lack of income from set-aside. Also during the interviews carried out by the author, farmers said they adopted set-aside schemes (even if those have been compulsory since 1992) only in order to get the subsidies as it is a key source of income. It has also been proved that where set-aside has been adopted, production has increased on the remaining land. The introduction of set-aside in the EU was first discussed in the Green Paper "A future for Community Agriculture", published in 1985 (CEC, 1985). In addition, consideration has been given to the environmental dimensions within these new agricultural policies, with the term "greening" being used to refer to environmental thought being increasingly brought to bear in political and economic choices, in educational and scientific research institutions and geopolitics (Robinson, 1994). As such, set-aside measures introduced in the EU have imitated the American notion of conservation compliance, in which environmentally-friendly measures are minor or are bolted onto productivist policies rather than taking on a wider notion of greening or green recoupling. The set-aside scheme to reduce production was introduced in 1992; and since 1986 support prices have been virtually frozen (Robinson and Lind, 1999).

These reforms, sometimes included in the term 'post productivism', refer to the reduction of food output, a progressive withdrawal of state subsidies, the production of food according to a competitive world market and also an emphasis on and growing interest relating to the environment (Hoggart, 1995). Changes to the CAP included a wider range of measures aimed at reducing production and making farming more environmentally friendly. However, many farmers have not reduced production but rather have begun production in another area, often in non-traditional activities.

From the mid-1980s, CAP support prices remained in excess of the international level and it is only since 1992-94 with the MacSharry reforms that the price supports have been replaced by

more direct income measures⁸. By the very nature of political diversity within the EEC all proposals were reviewed and compromise resulted in modification or the dropping of certain proposals (Table 2. 3). Agreement was finally reached by the Council of Ministers on 21st May 1992, to restrict levels of output, to sustain producer prices and to provide opportunities for new entrants into the industry by sharing out Community support more effectively and equitably. MacSharry's reforms can be summarised in three categories:

- supply controls through arable set-aside and livestock quotas;
- price reductions in line with prevailing world market prices for oilseeds, peas and beans and moves towards world market prices for cereals and beef;
- compensation via Arable Area Payments, Beef Special Premium and Suckler Cow Premium.

More farmers were then eligible for direct income aid in order to promote extensification in line with their dual roles as agricultural producers and 'stewards' of the countryside. However, the cut in dairy subsidies has not had any impact on dairy farmers and had not increased diversification.

Two other measures were part of the CAP reforms at this time. The Maastricht Treaty also known as the Treaty on European Union, approved in December 1991, was signed on 7 February 1992. It was after this time that the EC became known as the European Union (EU). The Treaty created joint foreign and monetary policies and fixed the ECU as the basis for a future single European currency, rendering the agri-monetary system redundant⁹.

⁸ In 1992, Ray MacSharry, the Agricultural Commissioner of the EEC, was assigned the task of co-ordinating the largest reforms of the CAP since its inception. Securing political agreement for agricultural reform was burdened with difficulties. MacSharry's initial proposals caused intense arguments within the European Parliament.

⁹ Without action, European agricultural policy would have prompted a regional shift in production to Germany, in line with higher prices. In order to avoid this it was necessary to set up a complex system of border taxes and subsidies on trade inside the Community. The EEC implemented a system of currency exchange commonly known as the "green" rate, which was fixed by Brussels and varied from the prevailing market rate. International instabilities following the end of the Bretton-Woods Agreement in 1971 led to the end of fixed exchange rates and the emergence of "floating" currencies. In 1984, the redefinition of the green ECU as an artificial currency tied to the Deutschmark specified standard levels from which national prices could diverge by means of the infamous Monetary Compensatory Amounts (MCAs). The European Monetary System (EMS) introduced in 1979, changed the EUA from a gold value to one representing a basket of member states' currencies, the European Currency Unit (ECU).

Table 2. 3: Proposals of the MacSharry reforms 1992

MacSharry reform	
Proposal	Switching of support from prices to farm incomes
	Breaking the links between price support and food production
	Substantial cuts in price support, especially cereals (30%) but also beef and butter (15%) and milk (10%).
	Compulsory set-aside of some arable land
	Income aid to smaller farms who set-aside land
	Provision for improved early retirement scheme for farmers at 55 years old
Actual reform	20% cut in grain subsidies
	15% cut in dairy subsidies
	20% cut in beef subsidies
	Compulsory set aside (subsidies) of 15 % of arable land
	Dairy quotas phased out by 2006
Dropped proposals	Individual countries to pay subsidies
	Gradual annual cuts in direct payments

Source: European Commission, 1995.

However, the modification in policy in the early 1990s away from maximising production to one of supply constraint, environmental protection and diversification, presented challenges for all sections of the farming community, above all for those who were already in financial difficulty. As such by the late 1990s, the CAP was in search of more changes. These came with Agenda 2000.

2. 2. 3. Agenda 2000 and diversification

In the late 1990s concerning the agriculture sector, the Commission planned to 'update the European Model of Agriculture' (European Commission, 1999). The aim of the European archetype of agriculture has not only become just to maximise production but to fulfil several functions, consisting of promoting economic and environmental development, as well as to protect the rural ways of life and countryside landscapes. Continuing economically healthy farming is vital and this necessitated updating a Common Agricultural Policy that was concocted for a community of 6 Member States rather than the 15 that it was in 2000, and certainly not at 28 as the EU may yet become. The reformed CAP is a step towards supporting the wider rural economy rather than just agricultural production, and will ensure that farmers are remunerated not only for what they generate but also for their general contribution to society. The resulting reform covers the arable crops, beef, dairy and wine sectors. The guaranteed prices that farmers received were cut by 20 percent in the beef sector and 15 percent in the arable crops and dairy sectors. This reduction will be implemented progressively, with the

objective of bringing Europe's farm prices closer in line with world market prices, therefore encouraging competitiveness of agricultural commodities on domestic and world markets and positive influences on both internal demand and export levels. Similarly, the changes will help enable the progressive incorporation of the new member states from Central and Eastern Europe.

The EU preserves its responsibility to ensure that farmers earn a reasonable living. This is accomplished by means of direct payments to farmers, which have been raised in order to help counterbalance the lower guaranteed prices. The new policy for rural development aims to establish a rational and sustainable outline for the future of Europe's rural areas. Agenda 2000 completes the reforms of the markets and promotes actions that encourage competitive, multi-functional farming in the context of a comprehensive strategy for rural development, which will also help to guarantee the future of more fragile rural regions. This new reform also acknowledges that agriculture has a significant role to play in safeguarding the countryside, natural spaces and the quality of rural life. It also seeks to act in response to consumers' fears relating to food safety, quality and animal welfare. Finally, the reform of the CAP aims to certify that the rural environment is protected and enhanced for the future generations.

The EU Agenda 2000¹⁰ aimed to modernise key policies and to reshape the Union so it can make a success of enlargement and at the same time deliver better economic prospects for Europe's citizens. Agenda 2000 intends to encourage a broad range of high-quality foodstuffs that are safe to eat and produced at competitive prices by a farming population guaranteed equitable incomes. Agenda 2000 proposals linked together proposals for changes in agricultural policy and the Structural Funds with the plans for the enlargement of the EU and the framework for the medium-term budget for the Union in agriculture. The Commissioner's objective was to pursue the reforms established in 1992 by decreasing price support towards world prices, but also extending the reforms to incorporate dairying as well as arable and beef production, moving away from certain supply controls and increasing direct compensation payment for farmers (Lowe *et al*, 2002).

As part of Agenda 2000, each country has to comply with the Rural Development Regulation (RDR) and each of them has to present a Rural Development Plan (RDP). This is the implication in establishing the Rural Development Regulation, which is known as the second pillar of the CAP. The fact that Member States are able to draw up their own programmes from

¹⁰ Launched by the Commission President Jacques Santer in July 1997. It was agreed on the 24-25 March 1999 at the EU summit in Berlin.

a set of measures means that what constitutes rural development still has the scope to vary, within this new framework, as the contrast between France and the UK illustrates. In France, the French modulation will refocus support on small and medium-sized farms and will transfer funds from agriculturally prosperous areas to marginal regions. In contrast, the UK has adopted universal modulation, with a flat-rate reduction of all direct payments, rising from 2.5 percent in 2001 to 4.5 percent in 2005. The arrangements for programming and implementing the RDR have been modelled on the operation of Structural Funds programmes, such as those under Objective 5b which promoted the development and diversification of fragile rural economies. This universal approach is likely to bring greater gains to cattle and sheep farmers and will boost resources allocated to agri-environment schemes (Robinson, 2003).

France and the UK took the opportunity under Agenda 2000 to modulate direct payments to farmers in order to make more money available. They are the only two Member States to do this from the beginning. However, they are continuing to use their own national policies. France, as a major beneficiary of the CAP, has traditionally been a firm defender of it and the leader of the protectionist wing (Gardner, 1996); whereas the UK, as a net contributor, has traditionally been antipathetic to the CAP and the leader of the liberalising wing (Lowe *et al* 2002). The French, unlike the UK, favoured a selective approach, exempting smaller farmers, targeting high productivity sectors (cereals and oilseed growers) and insisting that a proportion of the savings be redirected towards 'rural development and multifunctional agriculture' (*Agra Europe* 15 January 1999, EP/6). The UK government had signalled an interest in modernising rural policy with the announcement of its intention to produce a Rural White Paper, which was published in November 2000. This was not only important as the government has tried to counter criticism from an increasingly vocal rural lobby but also to give a lead to the UK farming community locked in its deepest income crisis since the War (Lowe *et al*, 2002). Farmers throughout Europe are struggling because the cost of inputs continues to rise while the price of outputs does not increase. Furthermore, many foodstuffs can be produced cheaper elsewhere so farmers cannot compete with Third World farmers who can buy inputs at a cheaper price. This is a widespread problem and one that has probably meant more farmers have sought to diversify.

The modalities and mechanisms of contemporary European agricultural policy are thus changing and three new aspects are apparent. The first concerns subsidiarity and the increasing decentralisation of agricultural policy within the European Union which could challenge the classic post-war model of national farming operating within a strong supra-national framework. The second concerns multifunctionality by which agriculture is now being more actively encouraged to play a variety of roles within rural spaces and within the rural economy, thereby

challenging the classic sectoral vision of farming as an exclusively productive enterprise. The third concerns territoriality by which is meant the increasing emphasis being placed (partly through the pursuit of the notions of multifunctionality and subsidiarity) on the role of contemporary agriculture in the constitution, representation and differentiation of rural space (Lowe *et al*, 2002).

However, as section 2.3 and 2.4 shows, despite the CAP being common to both France and the UK, both France and the UK have their own agricultural regulations and law which have made agriculture in the two countries different. Section 2.3 presents French agricultural policy since the 1960s where the *Loi d'Orientation Agricole* (LOA) have controlled French Agriculture. Section 2.4 reviews UK agriculture since the implementation of the 1947 Agriculture Act.

2.3. French agriculture

2.3.1. Agricultural policy from the 1960s

2.3.1.1. *Lois d'orientations agricole (LOA)*

The first '*Loi d'Orientation Agricole*' of August 5, 1960 or '*Loi Debré*', then the '*Loi Complémentaire d'Orientation*' or '*Loi Pisani*' of 1962 helped modernise French farming. They traced the broad outline of a national policy which was transposed at once at community level by European agreements from January 14, 1962 as regards cereals, livestock breeding, wine, fruit and vegetables.

The drafts of the agricultural orientation laws from 1960 to 1962 served as the basis for the contract between the French nation and its agricultural sector for 20 years. The objectives of the agricultural orientation law assigned to agriculture – besides the production function – concerned land occupancy, land security and land-use management (farming land). A social fund was also created to: "*help farmers living in certain underprivileged areas to remain on their farms - their presence being indispensable - through the granting of aid suited to the exceptional conditions of these farms*" (AL of 1962, title IV, art. 27).

In 1973, the land occupancy function assigned to agriculture led to the implementation of loans, the *Dotation aux Jeunes Agriculteurs* (DJA) (State-encouraged bank loans) to help young farmers establish themselves in mountainous regions. The 1980 orientation law specified these agricultural objectives by recognising the important role "*of farmers in the upkeep of the*

national heritage, the maintenance of natural equilibrium, and the preservation of plant species and domestic animal breeds" (AL of 1980, title I, art. 2). Simultaneously, at the beginning of the 1980s, concern relating to environmental preservation was gradually merging with certain initial objectives of the Common Agricultural Policy, which have since been achieved and are described in section 2. 2. In an administration which had come to recognise the necessity of a structural policy, farmers found a receptive and sympathetic collaborator in Edgar Pisani, the Agricultural Minister, so that the Pisani period (1961-1966) was one of the most inventive in the whole history of French agrarian policy making.

2. 3. 1. 2. Restructuring of the French countryside: early retirement, land consolidation and group farming

As early as 1972, in order to re-structure the countryside to adapt to modernisation, France encouraged its farmers to take up early retirement in order to 'renew' the agricultural sector. Many farmers retired but kept some land in order to become what is known in the UK as hobby farmers. These farmers were heavily criticised by the agricultural syndicates in France for two reasons. The first one was because these farmers were seen as preventing other farmers from starting a business and secondly these farmers did not agree with the syndicate ideology (*une ferme, un agriculteur, un métier*, i.e. one farm, one farmer, one job). The early retirement scheme aimed to retrieve more land to increase farm size as retiring farmers were allowed to keep up to 5 ha for themselves so the rest of their land was released to other farmers who therefore increased their farm size. At that time, there were many small farms with just a few cows and they were still able to sell their milk to the dairy firms. It was not until the change of milk collection by tankers that these farmers stopped producing milk and just kept beef cattle on their farm. Principally, older farmers obtained an *Indemnité viagère de départ*¹¹ (IVD) if they took early retirement and thereby freed up their land so that the 'regroupement' of properties could take place at a somewhat earlier date. Of the different measures resulting from the *Loi d'Orientation*, the IVD has been the most extensively adopted. According to INSEE (1978) nearly half of the farmers in 1963 were over 55 years of age, the majority with poor general education and lack of professional agricultural training and a lack of adaptability to changing techniques of production. Older people frequently ran small farms so that death or retirement released only limited areas of land for possible amalgamation. Between 1963 and 1978, a total of 562 000 farmers received the IVD pension and one-third of the total agricultural area of

¹¹ The basic retirement grant (IVD complement de retraite) supplemented the state old age pension. It was available to full-time farmers of 65 years of age and over, working between one ha and four times the minimum settlement area. The new legislation aimed to create optimal sized family farms, employing two men full-time and producing income comparable with other occupations (Coulomb, 1970).

France was transferred through the scheme, varying from over 40 percent in the Midi Pyrénées and Limousin to less than 13 percent in the Région Parisienne, Picardie, Haute Normandie and parts of the Mediterranean coast (Naylor, 1982). For a variety of economic and social reasons, the retirement grant is now of less importance.

Although the IVD was the most important measure introduced since 1962 as a solution to social and structural problems to French agriculture, there were no major changes in farm sizes as land from retiring farmers was transferred to newcomers in the farming industry. In addition, many farmers have remained in agriculture on units which, in spite of increased price support, are too small to provide a satisfactory standard of living or income levels comparable with those in other sectors of the economy; income disparities within agriculture have also widened. The declining economic attraction of the IVD was also a result of rising land values. IVD adoption was proportionately more frequent amongst tenant-farmers who had a less direct interest in land prices while owner-occupiers tended to hold on to their farms in the expectation of a future capital gain. This was particularly so where land might be sold for urban or industrial expansion, for tourist developments or holiday homes, and in these areas there was less interest in the retirement grant. Demand for land was high where agriculture is prosperous and technically developed while in areas suffering depopulation and agricultural decline a farmer wishing to take the IVD had difficulty finding someone to take over his holding. Areas of part-time farming also had lower levels of IVD adoption (Clout, 1975). Retirement decisions also involve a complex of social and psychological variables within the family¹². Restricted acreage has encouraged some farmers to increase business size by capital investment and intensification, with the introduction of pig and poultry units being particularly important in the livestock areas of Brittany and Normandy.

The desirable size of holding was never precisely defined and was replaced by a minimum settlement area corresponding to a subsistence unit for a farm family. This varied from 10 ha to 60 ha of mixed culture in different agricultural regions, with weighting factors for more intensive types of land use. The holdings released could be used for the installation of farmers under 45 years of age on the same unit, for farm enlargement, or for transfer to the *Société*

¹² A son working on the holding can be an encouragement to earlier retirement (Bonetti and Doreau, 1971) though succession is least likely in areas of predominantly small farms and elderly farmers. Some owner-occupiers are reluctant to accept the IVD and lease out their land since legislation on security of tenure prevents heirs no longer in agriculture taking over the holding or selling at the higher vacant-possession value. Other obstacles to increased IVD adoptions include the complicated nature of the regulations and a psychological fear of change, the feeling that retirement should only follow personal incapacity and the strong tradition of the value of work which is characteristic of many peasant societies (Naylor, 1982).

*d'Aménagement Foncier et Etablissement Rural*¹³(SAFER). Land passed to relatives had to be by gift or sale and this restriction and the low value of the pension limited early uptake of the IVD which declined after reaching a first peak in 1966 (Naylor, 1982). Improvements in farm structures have been limited by the relatively high proportion of new installations on the farms released, though a minimum permitted size for such transfers prevents the continued operation of the smallest units. Installations generally take place on larger, reasonably viable holdings where there is also a higher probability of a family succession (Ministère de l'Agriculture, 1975). Nearly half of all IVD transactions pre-1975 in Aquitaine, Midi-Pyrénées and Limousin were for installations, a significant number being French farmers repatriated from North Africa (Toujas-Pinède, 1965; 1974).

After World War II there was a need to restructure farms as the impact of the Napoleonic Code produced small and fragmented farms which were not suitable for the new machinery available to farmers. French farm owners are not free to dispose of their estate as they wish, in contrast to their English counterparts. French law makes almost no provision for a widow(er) or surviving partner as neither husband or wife is a legal heir under French law. Property usually goes to the children (but not the spouse) or if there are none, it goes to the siblings and parents¹⁴. Once machinery came into use, farm areas needed to be restructured to provide larger fields that increased both efficiency and productivity. In its attack upon the structural problems, the SAFER, present in each département, has run into difficulties of a fundamental nature. By the end of 1966 about 170 000 ha had been obtained and about 80 000 ha had been freed (Franklin, 1969). Over 13 millions ha had been freed by 1992 and a further 1.8 million was freed between 1992 and 1997 (Colombel, 2000). However, finance has been problematic. There has been a fondness to use up available budgets in purchasing land, and because the rate of retrieval has been slower than anticipated, funds have not been allocated and the work of the SAFERs has been limited. The slow rate at which properties have come on to the market has contributed to the scheme's complexity. The attitude of some SAFERs has been to stock land until such time

¹³ The individual most important structural re-organisation, largely the responsibility of Pisani, was the creation in individual départements of the SAFERs which are a land redistributor. When farmland comes up for sale, this society has the right to pre-emption which was provided by the "*Loi Complémentaire à la Loi Agricole*" (Pisani Law, 1962). SAFERs can stock the land for a period of up to five years and either sell it to existing farms, in order to increase their farm size and capability, or they may consolidate parts of properties to generate new holdings. In either case, the purchasing farmer should assign a reasonable proportion of his capital resources to ensure that sufficient funds remain to finance the development of the additional land.

¹⁴ It is possible to dispose of part of a property to a third party by making a will but only a portion of the property can be willed and that portion is set by the number of children someone may have. Someone having an only child then can give away half of his/her property to a third party. If there are two children then a third of the property can be willed but with over three or more children that portion is reduced to a quarter of the property. It was necessary to change the structure of French agriculture in order to adapt to modernisation and to be able to produce more and to use machinery effectively.

that a more rational reallocation of properties is possible. Their first course of action has been to put into practice the idea that the reorganisation of agricultural properties needs to be seen in a larger economic, social and regional framework. An ultimate difficulty has been associated with the very mixed conditions and structure of the French countryside so that the geography and demography of the region has influenced the position of their activities and the ease with which they have been able to operate. This has not always coincided with the location of the most challenging and most densely-inhabited parts of their territories.

The SAFERs consider land consolidation (*'remembrement'*) as an improvement of the internal functioning of the farm (i.e. by reducing fragmentation), but which does not necessarily point to general structural change. Since 1945, three quarters of agricultural land have been consolidated. The rate of *'remembrement'* is approximately 250 000 to 300 000 ha per year (Le Roy, 1993). It happened first in the arable areas as there was a necessity to have larger fields to use machinery and it then moved on to other types of farming, including dairying. The *'remembrement'* in farms in Manche happened largely in the early 1980s. The work of the local SAFERs, which is structural in purpose, is carried out on land that has been deserted or has gone out of cultivation. This land was being left by farmers who had retired. SAFERs would like to see greater emphasis placed on reclaiming land from retired farmers and part-time or marginal farmers. This would help in enabling a policy of generating larger units, which will place farms in the hands of competent individuals, with capital and who are acquainted with modern methods. Farms today are fewer in number, they are also larger and are more specialised. Nearly 20 percent of farms are either *Exploitation Agricole à Responsabilité Limitée* (EARL)¹⁵ or *Groupement Agricole en Commun* (GAEC). Farming is dominated by field crops in the North, and livestock rearing in mountain areas and *'hors-sol'*¹⁶ in the West. The number of large farms (over 100 ha) has increased since 1988. The average size of the French farm today is 42 hectares and has increased by 50 percent in the last twelve years (France Agricole, 1999).

Group farming or (GAEC) was another way to modernise French agriculture. GAECs were formally established in 1962 by the Pisani Law. They involve either the integration of separate farms, the joint management of individual enterprises or partnerships with agricultural workers. GAECs were the first type of farm society, thus giving farmers a new image of business

¹⁵ Most farms are nowadays under a company status: "*Exploitation Agricole à Responsabilité Limitée*" (EARL). EARL is a contract between husband and wife working (or not) together on the farm and where the personal and business finances are protected against each other. Nearly six holdings out of ten are specialised in field crops, vine growing or cattle breeding (Le Roy, 1993)

¹⁶ *'Hors-sol'* production is a production where the feed for livestock is purchased and does not come from the farm.

men/women. In their efforts to solve socio-economic problems GAECs have brought to light significant juridical difficulties as GAECs are, at one and the same time:

- associations of people working together on a regular basis but not living in common;
- joint investment matters, in which it is necessary to take account of each individual's input; and finally
- going concerns for which success demands a degree of running independently of the personal situation of their membership.

Membership of GAECs is limited to active *Chefs* – participation in the working of the farm is imperative – who bring together their separate holdings to run them as a single joint enterprise. GAECs have recognised legal status for the purposes of obtaining credits, tax relief and the signing of contracts. Better marketing was envisaged through the development of producer groups while new legislation allowed land from different proprietors to be organised into a single company, the *Groupement Foncier Agricole* (GFA), reducing tax liability at death and encouraging the creation and continued survival of larger farms.

The creation of GAECs has created profound changes in farming society: the tasks expected to be performed by farmers' wives are often reduced, especially when investment results in the mechanisation of some of their former tasks. The family is offered the true outlook of leisure on certain weekends, and even annual holidays become a realistic possibility. With the authorisation of GAECs, it was hoped that the difference between the family as a social and as an economic group would be highlighted and made more authentic; that the disadvantages, social as well as economic, occurring from the [too close] interconnection between family and farm might be reduced, without family labour, the *Chef* especially being downgraded to the status of a hired hand.

2. 3. 2. The 1999 Loi d'Orientation Agricole (LOA) encouraging diversification and pluriactivity

The importance accorded to the environment and to diversification of the type of farms had to lead to a diversified agricultural policy. It was necessary to give up the idea of transforming all farmers into full-time profitable farmers and to reject the idea of a professional agricultural label which reserved the right of farmers to benefit from subsidies and the right to sell their product, a project that was considered by some professional leaders who wanted to control farmers.

The new Agricultural Orientation Law (LOA), approved in 1999, describes the context in which current French agricultural policy is formulated:

“European agriculture will be heading for destruction if it set as its sole objective, the ability to sell raw materials on the world market at the same price as its keenest world competitors. This will only be possible at the price of destroying at least 300,000 French farms, and hundreds of thousands of European farms. This is a result no one wants. Government intervention is only justified if it promotes sustainable and balanced economic development-preserving farms over time, fostering the development of employment, thus allowing young farmers to establish themselves, and if it strengthens the role of farmers as producers of services and landscapes” (LOA draft, justifications, 1999).

The LOA provides in particular for the running of the ‘*Contrat Territorial d’Exploitation*’ (CTE), a type of farming agreement. The goal is to increase complementarity between an agricultural system organised in sectors and the development of the land. The objectives assigned to the CTEs introduced in 1999 cover two categories, to be combined on farms. First, socio-economic objectives are designed to create added value, broken down into operational objectives, the main ones being improvement of product quality, promotion of diversification and the means to encourage employers to maintain jobs and create new ones. The second category relates to environmental and land-oriented objectives, broken down in operational land management terms, and among which are improved qualitative and quantitative management of water, better use of grasslands, action in favour of biodiversity and wetlands, landscape management and the protection of the national, natural and cultural heritage and prevention of natural hazards and forest fires.

During the late 1990s, French officials and politicians had come around to the view that the CAP needed to be fundamentally re-orientated if support for farmers was to remain publicly acceptable (Pisani *et al*, 1994; Le Pensec, 1998; Assemblée Nationale, 1998). The basis of this reorientation is a new social contract between farmers and society enshrined in the new LOA. This was adopted in July 1999 after a long debate (Assemblée Nationale, 1998). The LOA can be seen as an attempt by the Socialist government to establish a new basis for support for French agriculture in the face of World Trade Organisation (WTO) pressures. The CTEs were introduced by the 1999 Act as a means of promoting and funding agricultural multifunctionality, and in reorienting agricultural policy towards a broader rural agenda (Hervieu, 1999). It builds upon the experience of agri-environmental measures introduced following Regulation 2078/92, not only in incorporating environmental objectives into agricultural management practices but also in using the ‘contract’ as a means of engaging farmers (Buller and Brives, 2000).

Under the LOA, French farmers are involved in voluntary farm management contracts (CTEs) designed to combine pre-existing and new aid schemes with the triple objective of maintaining and improving the economic, social and environmental contribution of farming to rural areas (Buller and Brives, 2000). The CTEs as a result have encouraged diversification and pluriactivity amongst farmers. However, since 2002, CTEs have been replaced by another scheme which is related to multifunctionality called the '*Contract d'Agriculture Durable*' (CAD).

To sum up, French policy has not supported diversification or pluriactivity since the 1960s (Table 2. 4). However, it is only since 1999 that agricultural French policy have encourage farmers to be less reliant on farming income and to look for other non-farming source of income.

Table 2. 4: Summary table of French policy

FRANCE	
Policies to increase production	1960: Loi d'Orientation Agricole 1962: Loi Complémentaire d'Orientation Agricole
Structural changes	IVD SAFER
Farmers	Younger farmers encouraged to join in via DJA Group farming to ease workload
Encourage diversification from the 1990s	1999: Loi d'Orientation Agricole CTE CAD
Dairy farmers	Are encouraged to intensify rather than diversify if the farm is large Medium and small farm are encouraged to leave the production.

Source: Author

2. 4. Agriculture in the UK

2. 4. 1. The transition to entry to the EEC

The most important changes in agricultural policy since the 1947 Agriculture Act occurred as a result of UK's entry into the EEC in 1973. Until this time, UK agriculture had been regarded as a special case within the UK economy, with legislative and financial support readily available to support it. Accession to the Treaty of Rome provided some continuity by recognising in principle, the need to help farmers throughout Europe. The transfer of control from London to Brussels did not fundamentally revise the existing objectives of UK agricultural policy, but it did lead to a fundamental alteration in the way in which support was offered. Guaranteed prices and deficiency payments were substituted by a CAP consisting of individual commodity price

support regimes and import levies. The CAP was not applied instantly in the UK but after a transition period during which the agricultural administration and other means of support were adjusted to correspond to the rest of the EEC. A number of UK agricultural policies were either phased out or modified prior to UK's entry.

In the 1960s agricultural policies were altered progressively to bring them closer to those in force under the Common Agricultural Policy (CAP) of the EEC. This progressive change meant that the UK was sufficiently prepared when joining the EEC in 1973. Even so, the disparities between the cheap food measures adopted in the UK in the 1950s and 1960s, and the high levels of support to farmers maintained under the CAP meant that considerable alterations had to be made. The CAP policies had a tendency to amplify some of the developments set up since 1947, with significant implications for both the economic and ecological structures of agriculture. What was not in question with the entry to the EEC was the on-going government obligation to support and control farming so as to avoid any shortages of food in the domestic market (Robinson, 1988). The 1970 White Paper had forecasted an annual growth in food prices of between 18 and 26 percent following the UK's entry into the EEC, which it was estimated would lead to a net annual cost to the balance of payments of between £175 and £250 million (Burkitt and Bainbridge, 1990). As it became more evident that the UK would join the EEC, Edward Heath's Conservative government instigated the amendment of existing agricultural support towards import taxes, which were more analogous to the EEC system. The phasing out of deficiency payments and the taking apart of production grants was widely welcomed. The amendment was also accepted by farmers who thought that they would obtain higher market prices for their foodstuffs in line with those existing in the EEC. Very few recognized that EEC prices were controlled by official interference and were considerably above world market prices.

The provision of free guidance to persuade farmers to engage in intensive high-input/high-output farming was undertaken by a large number of agencies. Predominantly, these were agri-chemical companies that had a vested interest in promoting their chemicals, machinery or buildings. Farming journals such as the *Farmer's Weekly* and the *Farmer and Stockbreeder* focused on stories of successful farmers who had developed their businesses with exceptional skill, energy and willpower. Banks were keen to grant more farmers loans to finance the acceptance of new methods and to enlarge production. The initial post-war period saw the re-establishment and growth of county-based Farm Institutes which presented three types of courses: day-release vocational training; one-year National Certificate in Agriculture; and a three-year sandwich diploma course for potential farm managers (Martin, 2000). By the late 1960s, following a phase of sustained educational expansion, the number of people finishing

land-based courses at universities, colleges and farming institutes was more than 2 400 a year. Recruitment to the agricultural sector, on the other hand, increased to over 17 000 a year (Martin, 2000). Following the return of students from agricultural colleges to farms, not all families could readily accommodate youthful enthusiasm with the practical experience of older relatives. The lack of suitable career opportunities for those who had undertaken farm management courses and the difficulty in financing farms of their own, forced many to transfer into allied work. Some obtained employment as representatives for companies selling chemicals or machinery to the agricultural sector, thereby promoting further modernisation.

2. 4. 2. UK agriculture since its entry to the EEC

The contrast between the cheap food measures adopted in the UK in the 1950s and 1960s, and the high levels of support to farmers continued under the CAP meant that many amendments had to be made to agricultural policy. The CAP policies tended to inflate some of the trends, which had been established since 1947, with key implications for both the economic and ecological structures of agriculture. Large cereal producers prospered while dairy farmers also performed quite well as long as the price of milk remained high. Although the UK government had doubts concerning its entry to the EEC, it continued to support and control farming in order to prevent shortages of food in the domestic market (Robinson, 1988).

The UK's entry into the EEC led to considerable changes in the organisation of agricultural support. The distinctions between the CAP and the former deficiency payment system were less important than their similarities (Table 2. 5). Price support under both regimes was mainly linked to levels of production. The CAP system was unable to achieve its original objectives and, even prior to the UK's entry, the fact that it engaged the largest slice of the EEC budget was a controversial issue. EEC price support was widely criticised as being the cause of European food surpluses and increasing land prices. Efforts to rationalise production in the 1980s were applied on an *ad hoc* basis. The 1992 CAP reforms were a step forward in rectifying some of the disparities of the original CAP. Nevertheless the CAP system prevented effective European integration and raised concerns about the way its expansionist policies influenced the natural and the socio-economic environment of rural areas.

Table 2. 5: The 1947 Agriculture Act and the Common Agricultural Policy

1947 Agricultural Act	Common Agricultural Policy
Minimum prices. Deficiency payment scheme (guaranteed minimum producer prices while simultaneously maintaining consumer prices). Production grants (unconventional production) Regulation of the market	Reasonable consumer prices. Import control: using a combination of variable import levies and support-buying operations known as intervention buying, producers' prices are not forced down by outside competition; if the domestic oversupply threatens to depress prices, the excess produce is purchased and stored in intervention stores (the excess is sold on the World Market and if the sale price is lower than the purchase one, the difference is made up from the EEC's general budget).

Source: Adapted from Martin (2000)

The CAP was less favourable to the UK than to its European counterparts because it had a technologically-advanced agricultural sector employing a mere 2.6 percent of its total workforce. The UK was welcomed into the EEC in 1973 as it offered a profitable market for potential food surpluses from other member states. UK agriculture was to come under the full authority of the EEC after a five-year transition period. At the time of entry, it was acknowledged that food prices would increase and that the UK would have to make substantial contributions to the cost of the CAP. These short-term problems were expected to be overcome by the expansion of other sectors of UK trade within the EEC.

The CAP's adherence to introducing limitations and export subsidies potentially undermined the UK's relationships with its Commonwealth suppliers such as Australia, which provided cereals, meat and sugar, and New Zealand, which exported lamb, butter and other dairy products. The Commonwealth's share of UK food consumption decreased from 12 percent to 5 percent between 1969 and 1987 (Burkett and Bainbridge, 1990). The UK's historical connection with the Commonwealth was taken into account within the Treaty of Accession. Protocol 18 sanctioned an import quota of 125 000 tonnes of butter from New Zealand, but this amount was planned to decline to 25 900 tonnes by 1995 (Martin, 2000).

One important objective of the CAP was the redistribution of agricultural production within member states to allow commodities to be produced in those areas that were most preferably suited in terms of climate, soil type and structure of the industry. It was expected that this would favour UK dairy farmers, whose well-structured organisation, high levels of production, technical and managerial efficiency and economies of scale differed starkly from other EEC countries. In Germany, for example, in 1968, 30 percent of dairy cattle were in herds of less than five cows, while in The UK the average herd size was 25 cows (Butterwick and Rolfe,

1968). Reorganisation across national boundaries was difficult to accomplish, since it required member states to reach political agreement, a common pricing structure, dismantling of internal trade barriers and for government subsidies to be applied equally to all member states.

The regional Milk Marketing Boards (MMBs) founded in the 1930s were initially not recognised under the Treaty of Rome. Following the UK's transition to the EEC, Regulation 1422/78 allowed MMBs to continue to operate, providing there was overwhelming backing from producers¹⁷. The MMBs received this approval in the 1979 referendum, which authorised them to control the milk market worth approximately £2 500 million. Legislation to abolish the Boards was passed in 1993, and the revocation of their took effect from 1 November 1994 (1 March 1995 in Northern Ireland). Since November 1994, it has been open to producers to join voluntary farmer-owned co-operatives which purchase milk from producers. In addition, many dairy companies buy milk from producers, and various independent producer groups have been set up to market their members' milk. The other functions of the Boards have either ceased, or have been taken over in by the private sector.

Target prices were set for milk delivered to the dairy while intervention prices existed for butter, cheese and skimmed milk powder (Martin, 2000). UK price levels were not in line with those in the rest of Europe because of the government's liability to an overestimated 'green' pound exchange rate¹⁸. The phasing out of the MMB in 1994 affected milk producers as many went out of business because milk price was no longer protected. As the result, this encouraged dairy farmers to either cease milk production or encourage them to find an alternative source of income through diversification.

A UK survey carried out by the National Consumers Council in 1988 suggested that the additional cost per household of the CAP was £63 a year, with 58.3 percent of consumers in the UK arguing that food prices were too high. Increased food prices were not purely indicative of the way that the CAP system functioned, but also reflected that the food industry was adding

¹⁷ The Boards purchased all milk produced, and sold it for liquid consumption or manufacture. Income was pooled and distributed to producers in proportion to the milk they had consigned to the Boards. The Boards also offered farm management services to farmers to help increase efficiency on the farm; milk recording schemes to enable farmers to plan breeding, culling and feeding; and general management and herd health schemes. They provided artificial insemination services as well and maintained bulls at stud for this purpose.

¹⁸ The 'Green Pound' was the Exchange rate used by the European Union (EU) for the conversion of EU agricultural prices to sterling. The prices for all EU members were set in European Currency Units (ECUs) and then converted into green currencies for each national currency. Its devaluation provided an easy, unilateral way of raising the price of competing imports, while at the same time increasing the prices which UK farmers received for their products. As a result of Prime Minister Thatcher's willpower, an agreement was made at Fontainebleau in June 1984 to reduce the UK's contribution to approximately 50 percent of the level that it should then have paid. This protected the UK from the rising overall cost of the CAP and eased some of the pressures for more radical reform from the UK point of view.

value to its products through additional processing and packaging (HMSO, 1988). In the UK, the deficiency payment system of farm support and the scientific and technological revolution had placed farmers on a treadmill leading to higher investment, rising production and falling real prices. This treadmill was maintained or even perhaps extended as part of the CAP.

The period of the most dramatic transformation was that following the UK's entry to the EEC in 1973, when problems of food surpluses and financial difficulties associated with the CAP appeared. UK agriculture prior to this had often been depicted as being the most efficient in Europe. UK state assistance for farming was extensive, though along different lines to the support under the CAP. Prior to 1970, the UK did not agree with the way that the EEC had sought to realise the CAP objectives. In the UK, producers' prices had fallen in real terms by an average of 1.9 percent per annum between 1954 and 1970, leading to a global decrease in the size of the national farm income (Martin, 2000). Even if average farm incomes had fallen behind those prevailing in the industrial sector, this decline had been partly offset by the contraction in the number of farmers. Increased levels of output and efficiency stemmed from technological advances, and had permitted pioneering farmers not only to cope with this virtual decline in prices but in many cases to substantially raise profits by expanding their enterprises. On the other hand, those farmers who had been unable or unwilling to expand production were seriously disadvantaged by the cost-price squeeze. France had a much stronger commitment to tariff protection and state assistance for its agricultural community than the UK and its extensive empire did not compete with the home market.

2. 4. 3. Encouragement of diversification in the UK

Incentives for farm diversification are not new. Between 1988 and 1992, MAFF's Farm Diversification Grant Scheme was in operation, grants for redundant building conversion were also available from the Rural Development Commission (Winter, 1996). FDGS as well as FWGS were pilot scheme aimed to encourage diversification (DEFRA, 2005). During the 1990s, although public funding for diversification began to decline, there was a plethora of both academic and policy-focussed research (see Bryden et al, 1992; Ilbery and Bowler, 1993; Bateman and Ray, 1994; Bowler, et al, 1996; NFU, 1999; Hodge et al, 2001; McNally, 2001; Milbourne et al, 2001; Shorten and Daniels, 2001). More recently, there has been more policy interest, re-emphasised by the report of the Curry Commission, in assisting and directing the process of diversification in order to broaden the business base of the farming sector and improve farm business viability.

The policy context in which farmers operate is also changing and it seems certain that the recent CAP reform, especially the introduction of the decoupled Single Payment Scheme (SPS), will impact on the future development of farm diversification in various ways. For example, the effect of the SPS in reducing farmers' reliance on commodity production could trigger interest in a further phase of more market-oriented business activities, providing new incentives to diversify. As the Rural Development Regulation is part of the second pillar of the CAP, it is reasonable to expect a wide range of farm diversification opportunities will be pursued by farmers under RDR measures, exciting either approbation or opposition from local residents. The planned introduction of a new Rural Development Regulation for the period 2007-13 will impact on future support for farm diversification in The UK in the context of DEFRA's Strategy for Sustainable Farming and Food.

The England Rural Development Programme (ERDP) contributes to the delivery of the Government's Strategy for Sustainable Farming and Food by helping farmers and foresters to respond better to consumer requirements and become more competitive, diverse, flexible and environmentally responsible. It also provides help to rural businesses and communities which need to adapt and develop. The ERDP provides a framework for the operation of separate but integrated schemes which provide new opportunities to protect and improve the countryside, to develop sustainable enterprises and to help rural communities to thrive. A total of £1.6 billion of EU and Government money is being made available under these schemes in The UK during the 7 years (2000-2006) of the Programme

The ERDP explains government's strategy for using the measures in the Regulation to run schemes in England to support environmental improvement and rural development. It aims to encourage farm diversification into non-agricultural activities in order to improve the economic viability of farm businesses and reduce their dependence on the production of primary subsidised commodities and will operate in conjunction with the support for diversification into agricultural activities under Articles 4-7. Two main categories of projects are expected: the production and marketing of non-agricultural crops or livestock products (e.g. volatile oils for cosmetics, dried flowers, keeping ostriches for feathers etc.); the conversion of agricultural or associated rural buildings, land or other facilities to new, non-agricultural uses

To sum up, Table 2. 6 highlights the policy within the UK that have encourage diversification or pluriactivity amongst farmers.

Table 2. 6: Highlight of the policy encouraging diversification

UK	
Policies to increase production	1947 Agricultural Act
Structural changes	Supported by legislation and financial incentive
Farmers	Part-time farmers to enter the profession Diversification and pluriactivity seen as positive
Encourage diversification from the 1990s	FDGS FWGS ERDP (Environmental Stewardship, English Woodland Grant Scheme, Hill Farm Allowance, Vocational Training Scheme, Rural Enterprise Scheme, Energy Crop Scheme and Processing and Marketing Grant (DEFRA, 2006)
Dairy farmers	The end of MMB divided the dairy farmers into two categories: those who could not buy milk quota went out of production as milk price fluctuate too much and those who could afford to expand their milk production intensify and consequently did not diversify.

Source: Author

2. 5. Summary

This chapter has reviewed the different agricultural policies France and the UK have followed since the end of World War II (Figure 2.13). It showed that modernisation and mechanisation of agriculture resulted in an unprecedented increase of output. Furthermore, agriculture has used more capital. However, this ‘third agricultural revolution’ was not without problems. The injection of machinery and capital resulted in a large number of farmers leaving the industry. Overproduction occurred in the early 1980s and production was subject to controls. The cost-price squeeze and international farm crisis have encouraged farmers to diversify in order to maintain their business in a viable financial state.

Figure 2.1 highlights the key points of French and UK national agricultural policies as well as the CAP that have encouraged farmers to diversify. The shaded boxes emphasise specific policy encouraging diversification /pluriactivity.

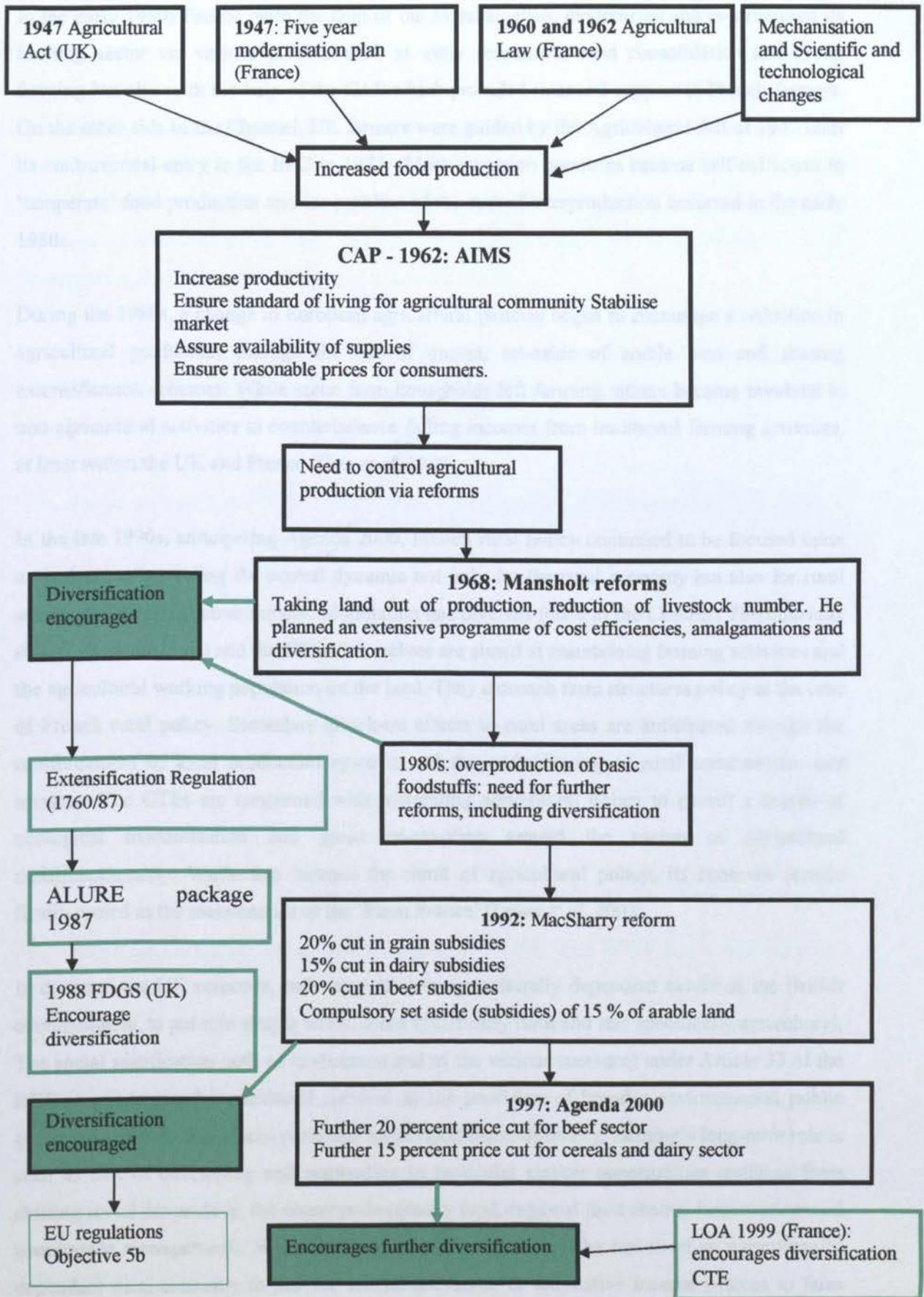


Figure 2.13: Reforms encouraging diversification /pluriactivity

In the early 1960s France, with the help of the Marshall Plan, modernised and re-structured its farming sector via various policies such as early retirement, land consolidation and group farming but also with the help of the CAP which provided financial support to French farmers. On the other side of the Channel, UK farmers were guided by the Agricultural Act of 1947 until its controversial entry to the EEC in 1973. Most European countries became self-sufficient in 'temperate' food production and the problem of the cost of overproduction occurred in the early 1980s.

During the 1980s, a change in European agricultural policies began to encourage a reduction in agricultural production through the use of quotas, set-aside of arable land and grazing extensification schemes. While some farm households left farming, others became involved in non-agricultural activities to counterbalance falling incomes from traditional farming activities, at least within the UK and France (Cox *et al*, 1989).

In the late 1990s, anticipating Agenda 2000, French rural policy continued to be focused upon agriculture as providing the central dynamic not only for the rural economy but also for rural society and the rural environment. Modulation has diverted funds to the *Contrats Territoriaux d'Exploitation* (CTEs) and the CTEs themselves are aimed at maintaining farming activities and the agricultural working population on the land. They entrench farm structures policy at the core of French rural policy. Secondary knock-on effects to rural areas are anticipated through the reinforcement of local production systems and the underpinning of rural communities and services. The CTEs are concerned with reorienting agricultural policy to permit a degree of ecological modernisation and green re-coupling around the notion of agricultural multifunctionality. While this extends the remit of agricultural policy, its concerns remain firmly rooted in the maintenance of the 'Farm France' (Lowe *et al*, 2002).

In contrast, the UK response, reflecting the less agriculturally dependent nature of the British countryside is, to put it in simple terms, more specifically rural and less specifically agricultural. The social justification both of modulation and of the various measures under Article 33 of the RDR is not so much agricultural survival as the provision of broader environmental public goods for a society that places particular value upon them. Similarly, farming's long-term role is seen as that of developing and responding to particular market opportunities resulting from shifting social demands on the countryside (quality food, regional food chains, farm tourism and countryside management). Whereas the French plan reinforces the notion of an agriculturally dependant rural economy to provide crucial additional or alternative income sources to farm families, ultimately the British agenda is a countryside one rather than an agricultural one, a

response to an increasingly differentiated rural space in which farmers are one set of economic, social and environmental actors amongst others (Lowe *et al*, 2002).

Although clearly pursuing divergent domestic agendas, the UK and French governments are converging in their strategies towards CAP reform at the European level. They both see the present system of compensation payments as politically unsuitable. Both look to a significant expansion of resources for the Rural Development Regulation and both are strongly in favour of downgrading compensation payments (Lowe *et al*, 2002).

As part of Agenda 2000, diversification and pluriactivity are encouraged further in order not only to help farmers to maintain a reasonable income and to protect the environment but also to help the rural economy.

This chapter showed since 1960, French agricultural policy aimed to modernise its agriculture. In order to do so, there was a need to restructure the agricultural sector. The 1960 and 1962 LOA helped the transformation of the French countryside via the IVD, DJA and the creation group farming. During this time pluriactivity was not encouraged among farmers and diversification was only favoured in certain areas and for certain type of farming. According to the researcher definition, diversification includes the idea of adding new conventional agricultural activities to a farm. During the 1980s, the CAP has encouraged farmers to do this. For example, in France there was an increase of dairy farmers growing gerkins and mushrooms because it was known to be a very good source of additional income. However, it was only in the late 1990s that the French government encouraged its farmers to diversify with the 1999 LOA, which encouraged diversification and pluriactivity via the CTE and in 2002, CAD.

This chapter also reviewed the agricultural policy in the UK since WWII and it explained how agricultural policy in the UK has encouraged farmers to increase production through the 1947 Agricultural Act and the CAP after 1973. From the late 1980s, farmers were encouraged to diversify or become pluriactive via the ALURE package, the FDGS and WDGS and more recently the ERPD. The CAP also encouraged UK farmers to diversify by adding new conventional products on their farm in order to generate a new source of income. For example, on the eve of joining the EEC, oilseed rape production develops in the UK because of the favourable price available. These prices have been raised and maintained by the CAP and hence many arable producers in the UK grow oilseed rape.

The following chapter presents the concept of diversification and pluriactivity in France and the UK.

**Chapter 3: Concepts of farm diversification and pluriactivity in France
and the UK**

Chapter 3: Concepts of farm diversification and pluriactivity in France and the UK

3. 1. Introduction

European agriculture 'in crisis' in the two last decades has been characterised by the great expense of the Common Agricultural Policy (CAP), overproduction, falling farm incomes and environmental damage. Until the mid 1980s traditional family farm strategies in response to this crisis included a bigger dependence on farm income compensation payments from the state, farm enlargement, the intensification or specialisation of production, other gainful activities (OGA) off the farm and withdrawal from agriculture (Bowler *et al*, 1996). The CAP has not managed to preserve farmers' incomes and its reforms have introduced the notion of farm diversification in order to counterbalance the abatement of subsidies and to relieve budgetary pressure¹. Consequently farmers have had to reconsider their farming strategies in light of this crisis, and progressively more have turned to diversification or pluriactivity as an alternative source of income (Béteille, 1996). On the one hand, farm diversification can be seen as the means by which public grants to farmers may eventually be reduced, since diversified income sources will allow farmers to survive a reduction in agricultural support, so leading to progress towards a free market in agriculture and deregulation. On the other hand, diversification can be seen as a means of appeasing budgetary pressure and so sustaining the CAP while serving environmental and other non-agricultural objectives and offering a continuing justification for state intervention at national levels.

Factors determining the taking and type of non-agricultural activities are multifaceted and also are not always connected solely with economic conditions (e.g. Bryden, 1994; Edmond and Crabtree, 1994). Off-farm work has often been linked with hobby farmers (Gasson, 1988) whereas on-farm diversification has been found to be more likely to take place along tourist routes (Edmond *et al*, 1993). In fact, farm households are by and large more educated than before (Corcoran and Dent, 1994) and the farm has a strategic role in the income earned by the household (Munton *et al*, 1989). Whatever the reason for farmers becoming pluriactive, the rate of uptake in certain areas has improved distinctly.

Current tendencies in the development of the CAP suggest an increasing awareness towards rural development issues. On-farm processing may present an alternative for farm

¹ As agriculture in the EU goes through a post-productivist transition, family farms are having to take action prompted by the progressive removal of state subsidies, augmented market rivalry from other producers, especially from outside Western Europe, and increasing environmental regulation of agriculture.

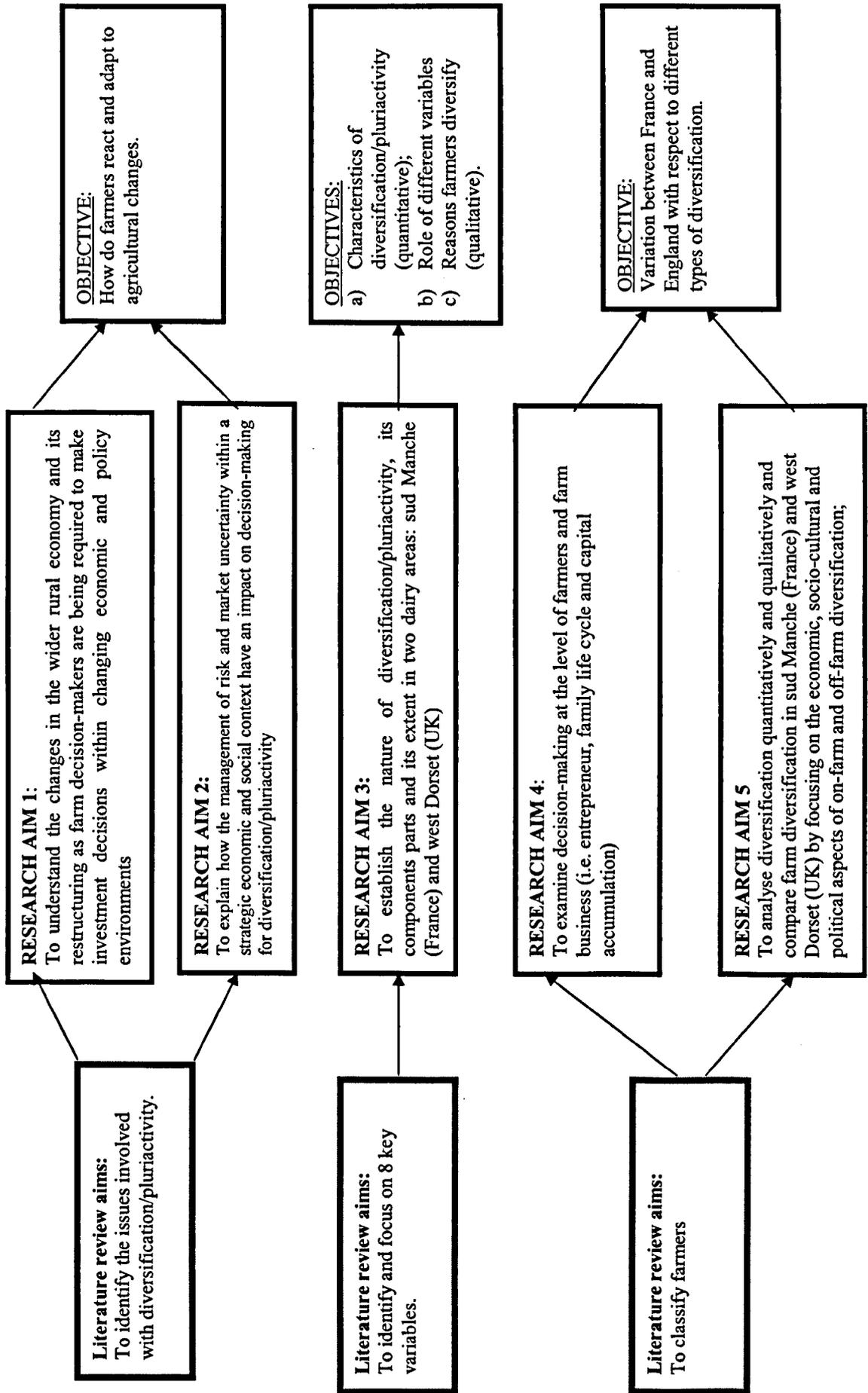
diversification, income generation and rural development in the event of gradually more deregulated agricultural markets. Although pluriactivity has been subject to broad research in recent years, scrutiny has generally focused on farm-centred diversification rather than more extensive commercial activities of the farmers.

Pluriactivity has a long history in France and the UK. For example, in the UK, Slee (1987) draws attention to the medieval English farmers who often undertook part-time activities such as cheese-making based on their farm. In France, many farmers used to provide B&B and many dairy farmers used to make butter. Pluriactivity is now perceived as an alternative to ongoing limitations within farming and the rural economy. Often omitted from the agricultural statistics and often marginalised, small farms and especially those in mountain areas have pursued pluriactivity to preserve their income². Reforms of the CAP since 1992 have encouraged farmers to be more pluriactive or to diversify their business. Pluriactivity is now part of the new CAP that not only actively promotes both pluriactivity and diversification among farmers, but also monitors production and favours the development of rural areas.

In order to meet the aims and objectives of this research, the author investigated the literature on diversification/pluriactivity (Figure 3.1). This chapter reviews the history and concept of diversification and pluriactivity in both France and the UK. It defines both terms and investigates how diversification and pluriactivity have been studied in order to select key variable which would be useful for the classification of farmers according to the type of diversification farmers have chosen.

² There is a long history of farmers holding down more than one job in some parts of Europe, especially in France but in recent years there have been new pressures prompting farmers to diversify and/or to become pluriactive.

Figure 3.1: Relationship between literature review and aims and objectives of the thesis



3. 2. Issues involved with diversification and pluriactivity

Several issues have been identified and recognised as being associated with the development of farm diversification as Figure 3. 2 shows.

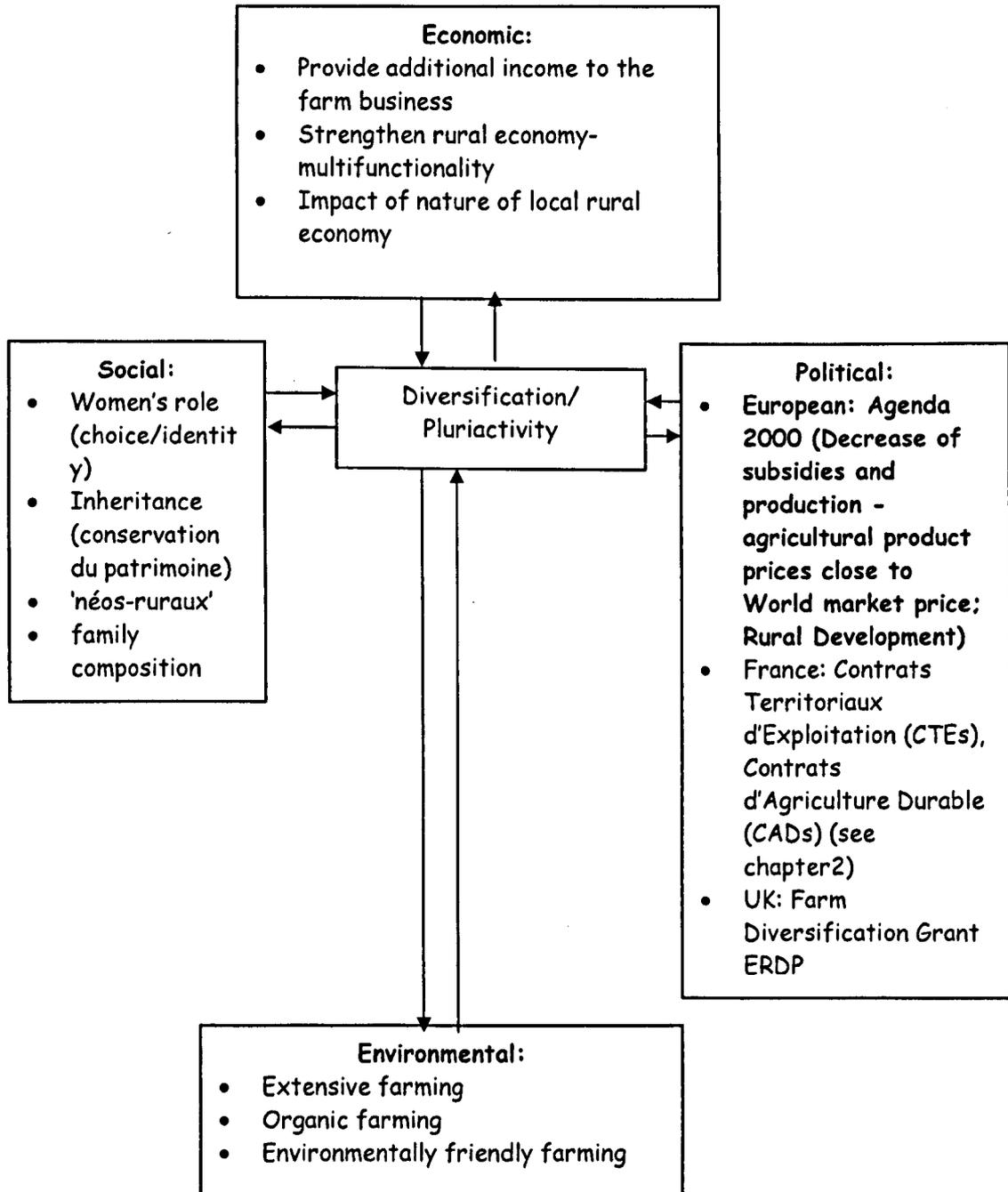


Figure 3. 2: Issues linked with pluriactivity and diversification

Although some farmers pursued diversification in the productivist era, an increase of diversified farms has occurred in the post-productivist era as many farm households have had to adjust their farm business, often in order to survive financially (Marsden *et al*, 1989; Ilbery, 1991; Ilbery *et al*, 1996). Economic reasons such as increasing income are generally the main reason for diversification as it generates extra sources of earnings. The cost-price squeeze in agriculture, underlying the so-called international farm crisis and reduced profits on farms, has favoured diversification as a possible alternative to maintaining the status quo and has encouraged farmers to develop new relationship between farming and other sectors of the economy. Consequently, this has introduced non-farm capital to the process of diversification (Robinson, 2003). Furthermore, alternative farm enterprises (AFE) provide an opportunity to magnify profits of the farm business, sometimes considerably, and generate a rising demand for labour that is helpful for rural development (Bowler, 1999). For farmers, the current political and economic imperative is to search for alternative enterprises whose returns are less susceptible to the price cuts implied by the reforms of the CAP (Shucksmith and Winter, 1990; Walford, 2002).

Similarly, environmental matters are linked to the notion of farm diversification. There are many possibilities of using the resources of the farm for activities other than agriculture. This has made the idea of diversification attractive to a number of non-agricultural interests which hope to see farmland managed for such purposes as conservation, forestry, recreation and rural employment creation. There is a growing international concern towards the conservation of the rural environment. Pressure groups are beginning to influence policy decisions and have helped to promote a wider interest in healthy, often organic, food. Specialist markets for both new and traditional products are emerging and farmers are well placed to exploit such opportunities (Ilbery, 1998). Pluriactive or diversified farms may be cultivated less intensively than mono-active ones because alternative sources of income reduce the pressure on households to farm 'all out'. Organic farms are much less intensive - in terms of input of non-renewable resources - than traditional farms, so organic production may help to recreate a balanced market. Organic conversion is growing in importance partly in response to concerns involved with food quality (e.g. BSE, salmonella). However, consumers require quality at reasonable prices which is often in contradiction to organic foods as they currently command high prices. Quality products can be identified under certain labels (e.g. *Appellation d'Origine Contrôlée* (AOC), *Certifié Conforme*, *Label Rouge*). Consumers also want safe products; they want to be able to find out where products come from and, where relevant, how products have been transformed.

Rural development is also associated with farm diversification and aims to preserve the local economy, as well as the upstream and downstream sectors of agriculture, which could be

uncertain, if the farming system diminishes. In fact, the economic interests of European farmers are less significant in political terms except when they are linked to the benefit of the industries downstream and upstream from agriculture. Diversification is also a search for new markets in response to a changed political and economic context. Diversification has been encouraged and seen as an opportunity to provide employment for the farm household.

Although the issue of gender may be regarded as of secondary importance, it does deserve further consideration as it has played an important role in diversification. The function of women has evolved in the farming industry. Farmers' wives have started many AFEs with activities such as Bed and Breakfast (B&B or *Chambre d'hôtes*) and farm catering (gîtes). It has now been realised that farm diversification offers a great potential for involving all family members (Ilbery, 1998). The gender aspect is a significant element when analysing the progress of economic transition (Bagguley *et al*, 1990). The division of roles and functions inside the household is central to the understanding of the economic changes and for the evaluation of questions of equity between men and women in modern rural development. In research carried out in Norway (Eikeland and Lie, 1999), it has been shown that men dominate the pluriactivity part of working life, particularly the tasks concerned with developing and running many types of business simultaneously. Women tend to deal with one particular aspect of farm diversification, which is usually structural diversification as typified by B&B, accommodation lettings and selling farm products (Table 3. 2).

In France, Rattin (1995b) highlights that today's young women work less and less in farming. In the past, farmers' daughters farmed and worked on their parents' farms, married farmers and became farm workers on their husband's farm. Today a farmer's wife often comes from a non-agricultural environment and has an independent profession. Farmers' daughters work less and less within the farming industry, even if they still live on the family farm: in 1993, 83 percent of women aged 20–24 living on farms undertook a professional activity outside the farm (Rattin, 1995). An increasing number of women have not only moved out of farming activity but have also moved away from the farming lifestyle with the result that farmers' celibacy increased.

The question of inheritance plays an essential part in diversification, as it is a way to ensure reasonable income for future generations. Traditional farm households are often characterised by the influence of three generations, whereby consideration of the eldest generation might have some bearing on the business decisions taken by younger successors (Battershill and Gilg, 1998).

As described in the previous chapter, changes in national and supra-national policy on agriculture have also promoted the growth of farm diversification and pluriactivity. The most recent major reform of the CAP, in Agenda 2000, have further helped to promote this growth. Agenda 2000 - the amendment of the CAP agreed by the European Council in 1999 - is designed to prepare European agriculture for the internal and external challenges awaiting it in the year 2000 and beyond. The reform aims to encourage agriculture to be more competitive and more environmentally friendly. It also marks a further stage in the policy of supporting farmers rather than products and of considering not only farmers' output but also their additional contribution to society. In addition it provided the basis for the EU's stance in the round of multilateral trade negotiations, which started in November 1999 under the auspices of the World Trade Organisation (WTO).

Promotion of extensification has occurred mainly from alterations to agricultural policy made since the early 1980s. The more farmers extensify their production the more likely they may diversify or become pluriactive in order to generate a new source of income on their farm. In the European milieu, measures were brought in under the CAP to support extensification as EC Regulation 1760/87 explicitly verified (Jenkins and Bell, 1987). Three actions have been obvious: measures to diminish stocking levels of farm animals; an effort to regulate cereal production through the voluntary and then statutory conditional introduction of set-aside on arable land; and an offer of 'agri-environmental' reasons to slow the rate of intensification (Evans *et al*, 2002). The 1992 CAP reforms were positive towards extensification and aimed to maintain the agricultural population, which accordingly promoted pluriactivity/diversification.

3. 3. Definitions of diversification and pluriactivity

According to the aims of their work, many researchers have used their own definition of farm diversification and pluriactivity (Table 3. 1). The review of the literature on pluriactivity and diversification within European countries demonstrates that both terms are used interchangeably (especially within the French context) as the notion of off-farm diversification implies part-time farming and thus pluriactivity. In fact, researchers refer either to on-farm and off-farm diversification or to on-farm and off-farm pluriactivity in their papers. It has to be noted that there is also a distinction between the farm being diversified and the farmers being pluriactive. For the purpose of this project, diversification and pluriactivity, both on-farm and off-farm, have been studied.

Table 3. 1: Comparison of definitions of diversification and pluriactivity

Year	Definition	Author	Country
	"An addition of another production to an existing production usually referred as the main production".	French geographers	FR
1969	"Having more than one enterprise on the farm and/or ensuring crops are produced and sold over different time spans"	Metcalf	UK
1986	"Those enterprises taking place on predominantly agricultural-proprietal units which (a) are not based on the primary production of food and fibre and (b) fall outside the price support mechanism of the Common Agricultural Policy".	Slee	UK
1986	A multitude of situations which can often only be adequately defined as "doing different"	National Farmers' Union	UK
1987	"Farm-based activity not directly concerned with producing crops or livestock and which involves marketing contracts outside the agricultural industry".	Griffiths	UK
1988	Farm diversification advertised in the EC's paper on 'The Future of Rural Society' is symbolised as "the on-farm use of the resources of the farm for generating either new agricultural commodities which are not in excess or non-agricultural goods".	EC	EC
1989	The adoption of income earning activities "outside the range of conventional crop and livestock enterprises associated with agriculture".	McInerny et al	UK
1989	The agricultural activity understands only the production of agricultural products to the strict meaning and wholesale marketing of these products. Diversification is then referred to as "para-agricoles" activities, which are very close to farming, oriented towards the marketing of one product or one service, and carried out with the production factors of the holding.	Rattin	FR
1990	"A multi-dimensional land holding unit in which farming and other activities are undertaken, both on and off the farm for which different kinds of remuneration are received (earnings, transfers, payment in kind and incomes)"	Fuller	UK
1994	"The addition of production, techniques or new activities in the same agricultural enterprise".	Couturier	FR
1996	"Every form of non-agricultural income movement on and off the holding".	Benjamin	FR
1997	Diversification involves the introduction of an alternative farm enterprise (AFE) into a farm business to generate a novel source of income. Two types of farm diversification are commonly recognised: agricultural diversification and structural diversification.	Ilbery	UK
1997	"Any other production except milk and its co-products – cows and veal".	Chambre d'Agriculture	FR
1998	"The introduction into the farm business of an Alternative Farm Enterprise (AFE) bringing any form of non-agricultural income movement on and off the holding and/or any (un) conventional production falling in or outside the price support scheme of the CAP in order to originate a new source of income."	Boulay	FR and UK
1999	Pluriactivity is defined as the obtaining of income from more than one economic activity.	Eikeland and Lie	UK

3. 3. 1. Definitions of diversification and pluriactivity

3. 3. 1. 1. UK

Although farm diversification is not a new development, different explanations of diversification/pluriactivity have been used to ascertain social, political and economic aspects of farm diversification (Ilbery and Evans, 1992; Higginbottom, 1996; Robinson, 2004). At the beginning of the research on this topic, Metcalf (1969) defined farm diversification as “having more than one enterprise on the farm and/or ensuring crops are produced and sold over different time spans”. Diversification in this context is the antonym of specialisation and is likely to be associated with risk avoidance. According to Slee (1986: 2) farm diversification is defined as “those enterprises taking place on predominantly agricultural-proprietorial units which (a) are not based on the primary production of food and fibre and (b) fall outside the price support mechanism of the Common Agricultural Policy”.

Farm diversification advertised in the EC’s 1988 paper on *The Future of Rural Society* is symbolised as the on-farm use of the resources of the farm for generating either new agricultural commodities which are not in excess, or non-agricultural goods (Shucksmith and Winter, 1990). As McInerney *et al* (1989) have argued, farm diversification implies the adoption of income-earning activities “outside the range of conventional crop and livestock enterprises associated with agriculture”. For Ilbery (1987) diversification involves the introduction of an alternative farm enterprise (AFE) into a farm business to generate a novel source of income. AFEs can be either ‘structural’ (i.e. farms resources are directed towards markets beyond the productive farming system) or ‘agricultural’ (i.e. growing unconventional crop) (Table 3. 2) (Ilbery, 1989).

A substantial literature investigating on-farm diversification and pluriactivity has emerged since the mid-1980s (Evans and Ilbery, 1993). However, caution must be exercised in the use of diversification as a descriptor and with respect to theorisation of post-productivism. First, there is the affirmation that farmers are moving away from farming systems where “a large proportion of total output is accounted for by a particular product” (Ilbery and Bowler, 1998: 71). Second, diversification can be defined as the transfer to acquire new sources of on-farm income generation from non-agricultural and innovative agricultural activities (Ilbery, 1991; Evans and Ilbery, 1993), i.e. towards post-productivist activities. Additionally, the post-productivist transition has seen the expansion of ‘alternative farm enterprises’ (AFE) where ‘alternative’ means the introduction of non-traditional sources of income into the pre-existing farm business,

a process widely identified in the published literature as farm diversification (Gasson, 1988; Ilbery, 1988).

Other definitions of farm diversification refer to the development of non-traditional farm enterprises and cover 'a multitude of situations which can often only be adequately defined as doing different' (National Farmers' Union, 1986). But also as Griffiths (1987) defines it, farm diversification is a 'farm-based activity not directly concerned with producing crops or livestock and which involves marketing contracts outside the agricultural industry'. As a result the term "diversification" has different meanings.

Whatever form it may have taken and the motivation to explain it, the notion of pluriactivity is now inseparable from the notion of rural development, to the extent that in certain areas it underlies economic growth and diversification (Campagne, 1990). However, the incorporation of off-farm occupations into the definition of farm diversification is not without its problems. It raises the whole issue of part-time farming, which itself is surrounded by definitional and conceptual difficulties (Gasson 1986, 1987; Gasson *et al*, 1988; Munton *et al*, 1989). Part-time farming is an element of the concept of pluriactivity. In general, pluriactivity is defined as the obtaining of income from more than one economic activity (Eikeland and Lie, 1999). It can also be described as "a multi-dimensional land holding unit in which farming and other activities are undertaken, both on and off the farm for which different kinds of remuneration are received (earnings, transfers, payment in kind and incomes)" (Fuller, 1990).

According to Gasson (1988), definitions of part-time farming based on the sub-viable holding or use of the occupier's time were appropriate when the main thrust or policy was to improve the productivity of resource use in agriculture. However the emphasis has moved to the income and welfare needs of farm families. As a result, definitions based on the existence of other paid occupations make better sense.

However, Gasson (1988) argued that 'there is no satisfactory way of describing the combination of farming with another gainful activity. Although widely used, part-time farming is not an accurate description since it focuses on the time devoted to farming and not its combination with other work'. Gasson (1988) used the term 'part-time farming' to denote the combination of farming with other paid work and does not relate to the use of time, the size of the farm or the theoretical labour requirements. Furthermore, Gasson (1988) showed that the use of terms like 'multiple job holding' or 'rural pluriactivity' does not identify farming as one of the activities. Pluriactivity is now important in the modern economic environment. Pluriactivity, viewed as diversification, can thus be understood as 'reciprocal' household strategies combining the

exploitation of new markets and coping with decreased economic support for agricultural activities.

Table 3. 2: Description of structural and agricultural diversification

	STRUCTURAL		AGRICULTURAL
*Tourism:	Accommodation:	*Unconventional enterprise:	* Crop products: Linseed Teaseed Evening primrose Borage Triticale Fennel Durum wheat Vineyard Lupins.
	Bed and Breakfast Self-catering Camping and caravan sites.		
	Recreation: Farmhouse: teas/coffee Demonstration/open days Farm zoo/children's farm Water/land-based sports 'Car boot sales' War games Horsiculture Craft centre Nature trail reserves Country/wildlife parks Farm museum.		* Animal products: Fish Deer Goats Horses Llamas Sheep milk Rabbits Ostriches Rare breeds.
	* Combined: Activity holidays	* Organic farming.	
*Adding value to farm enterprises	* By direct marketing: Farm gate sales Farm shops Delivery rounds PYO schemes.	* Farm woodland:	Energy forestry Amenity/recreation Wildlife conservation For timber.
	* By processing: Cheese Ice cream/yoghurt Cider/wine Jam/preserves Potato packing Flour milling.	*Agricultural contracting:	For other farmers For non-agricultural organisation
	* By selling skins, hides, wool.		
*Passive diversification:	Leasing of land Leasing of building Mobile phone pylon.		

Source: Adapted from Ilbery, 1987

3.3.1.2. France

The nearest French definition to the UK definition of diversification comes from Benjamin (1996) who interprets diversification as “every form of non-agricultural income movement on and off the holding”. As in the UK, France has a large number of definitions for the term ‘farm diversification’ or ‘pluriactivity’ which makes it difficult to make international comparisons (Table 3.1). French geographers identify diversification as an addition of another production to an existing production usually referred to as the main production. Couturier (1994) defines farm diversification as “the addition of production, techniques or new activities in the same agricultural enterprise”. A similar interpretation of the concept used by the *Chambre d’Agriculture* (1997) relates diversification to “any other production except milk and its co-products – cows and veal”. The *Chambre d’Agriculture* does not consider the production of veal as diversification as it is not a new production as it is closely linked to dairying. There are very few farmers who have a source of income from the sale of veal to the local butcher. However, most farmers do sell veal calves – that they do not need on their farm for cattle replacement- to the local cattle market. The production of veal has decreased in sud Manche as in the early 1980s veal production was in crisis and there are very few producers left.

According to Rattin (1989), strictly speaking, agricultural activity relates only to the production of agricultural products and the wholesale marketing of these products. Diversification is then referred to as ‘*para-agricoles*’ activities, described in Table 3. 3, which are very close to farming, oriented towards the marketing of one product or one service, and carried out with the production resources of the farm.

Table 3. 3: Description of the ‘*para-agricoles*’ activities

	Activities ‘ <i>para-agricoles</i> ’	UK equivalent
Description	Vinification or distillations for the benefit of the head of farm or for a third party.	Structural
	Packaging of fruit and vegetables: sorting, gauging, boxing, etc.	Structural
	Butter or cheese making.	Structural
	Other transformations of agricultural products: “meunerie”, brewery, “huilerie”, sugar refinery, manufacture of foods for the cattle, delicatessen, etc.	Structural
	Retail business of the products of the farm, on the premises, at the roadside or on a market stall.	Structural
	“Sylviculture”, forest exploitation (cutting down, etc.), “scierie”.	Agricultural
	Business of agricultural works.	Agricultural
	Tourist activity: rural “gite” (farm rented holiday accommodation), camping, rural inn, bed and breakfast, holiday complex, “relais équestre”, etc.	Structural

Source: Rattin (1989)

3. 3. 2. Definition used in this research

For the purposes of this project, which aims to compare diversification and pluriactivity in two dairying areas in France and the UK, a definition combining aspects of definitions from both countries has been adopted. In the UK the definition of 'farm diversification' does not include adding a 'standard' farming activity such as growing cereals or stocking cattle as farm diversification whereas in France it does. As such, the author's research regards the adding of such activities as a significant aspect of diversification as it is part of most French definitions of farm diversification and hence this aspect of diversification is included in the research and it is labelled as 'farm enterprise diversification or enterprise diversification'. Furthermore the reason why a 'standard' farming activity - and not only the definition generally favoured in many of the academic works on farm diversification - has been included is because it seems quite likely that dairy farmers might favour this as opposed to adoption of other forms of diversification as it might be easier to incorporate another farming activity as opposed to something structural or non-traditional (i.e. agricultural).

Thus, diversification is defined herein as: "the introduction into the farm business of an Alternative Farm Enterprise (AFE) causing any form of non-agricultural income movement on and off the holding and/or any conventional or unconventional production falling in or outside the price support scheme of the CAP in order to originate a new source of income". Figure 3. 3 shows how the concept of diversification and pluriactivity can be schematised.

Figure 3. 3: Concept of pluriactivity and diversification

Source: Adapted from Higginbottom (1996) and Bowler and Ilbery (1998)

* See Table 3.2 and 3.3

** See Table 3.2

*** Adding a conventional production (e.g. 'hors sol')

**** Multifunctionality: as well as having a food producing role, agriculture has also an economic, environmental and social role in rural areas. (Robinson, 2004). However, the concept of multifunctionality seems to have somewhat different meanings in the literature. According to the OECD, "Multifunctionality refers to the fact that an economic activity may have multiple output and, by virtue to this, may contribute to several societal objectives at once. Multifunctionality is thus an activity oriented concept that refers to specific properties of the production process and its multiple outputs" (OECD, 2001:11). Multifunctionality as such encourage diversification and pluriactivity by encouraging farmers to become part of rural development.

3. 4. Diversification and pluriactivity in France and the UK

3. 4. 1. France

According to the Agricultural Census, regional analysis of agricultural pluriactivity in France reveals specific characteristics in the late 1990s. In Alsace, pluriactivity is frequent both for the head of farm and the spouse. In neighbouring areas (Lorraine, Franche Comté) and in the south of the country pluriactivity of the head of farms is important (23 percent of farmers are pluriactive) whereas pluriactivity amongst spouses is weaker there than the national average. In Auvergne, the opposite is true. In the Limousin, pluriactivity is equally represented amongst the heads of farms and spouses (16.1 percent) (Rattin, 1998; Colombel, 2000). This region is the only one to present such a configuration. Lastly, pluriactivity remains a marginal practice in Corsica, Lower Normandy and in the Nord/Pas-de-Calais. Although pluriactivity for heads of farm and spouse is more frequent in the South and East of the country, it does not represent a real regional cleavage.

Since the end of the 1980s, the continuing decline in agricultural population and rural depopulation have become major issues demanding urgent government consideration. As a result, since 1988, the government has smoothed the progress of development of pluriactivity without officially recognising it. Farming has been redefined in the “Code Rural” by Article L311.1, which includes diversification and consequently pluriactivity:

“Any activity is considered agricultural if it is exercised in the prolongation of food production which supports the farm.”

Article L311.1.

The increase of employment in the tertiary sector is a key factor demonstrating the economic evolution of developed countries. While the tertiary sector in France created 2.8 million jobs between 1980 and 1995, the agricultural sector lost 700 000. Pluriactivity allows farmers to obtain complementary income which is a necessity for the survival of small- and medium-sized farms. It is founded on the notion of ‘agricultural services’ such as stables, tourism activities, shops, removal of snow and craft activities.

The creation of the “*Délégation à l’Aménagement du Territoire et à l’Action Régionale*” (DATAR) in 1963 generated awareness that economic activity does not develop evenly over the entire territory. Young people in particular leave rural areas to acquire an urban job bringing about a decline in rural services. For example, from 1980 to 1992, 4 500 villages lost their last

shop (Campagne, 1994). Since then, diversification towards craft and tourist activity has been promoted in order to reduce regional inequality. French agriculture has increasingly comprised small pluriactive units aiming to create jobs in rural areas and thus participating in the 'réveil de nos campagnes' which is in opposition to the concentration on large farms which assure essential production and exports.

The Order of Council of 27th March 1993 permitted diversification for any young farmers who were farming exclusively by giving them a loan '*Moyen Termes Speciaux-Jeunes Agriculteurs*' (MTS-JA) and a '*Dotation aux Jeunes Agriculteurs*' (DJA). MTS-JA and DJA have encouraged young farmers to start farm businesses. Pluriactive farmers can also obtain a MTS-JA; and half the DJA if their farm is located in a Less Favoured Area (LFA). The 1st February 1995 law allows any society whose social object is agricultural to benefit from a '*Plan d'Amélioration Matériel*' (PAM) if at least one associate works on the farm and the associate(s) have more than 50 percent of the share of the capital of the society. Towards the end of that year, the Order of Council of the 30th October 1995 regulated the PAM which aims to assist farm modernisation and improve farming conditions. Any farmers working at least 50 percent of their time can obtain a PAM. Pluriactivity allows farmers to obtain complementary income which is often a necessity for the survival of small- and medium-sized farms.

In France in 1995, one head of farm in five was pluriactive, and 144 000 farmers stated that they also undertook a non-agricultural activity (Frémont and Nabucet, 1997). One in three considered themselves to be farmers whose farming was their principal activity, the outside activity being secondary, while two in three farmed as a secondary activity and had a principal non-agricultural profession. This distinction demonstrates a bi-polar model of double activity. The farmer whose principal activity is farming diversified his activities to adapt to an economic environment in evolution. He managed the farm, and typically was oriented towards the cereal industry. He diversified as a contractor or craftsman–retailer, unless he had an electoral mandate (i.e. mayor). The farmer for whom farming is the secondary activity, was either employed as an employee or a factory worker – and kept a small family farm on a part-time basis, often a livestock breeding farm.

While the double activity develops as an economic diversification strategy, the more traditional model of the '*ouvrier-paysan*' is in decline. The practice of a double activity, for the head of farm, is of a permanent structural character. It should not be perceived as a step in a rural exodus process or as a transitional measure. The double activity has always been present in rural society. In this sense, it is an old phenomenon. Nevertheless, it also can be considered as a recent practice, a consequence of agricultural modernization. In fact, the multiple activities (i.e.

multiple job-holding), if it registers itself as an improvement strategy of income, is not a uniform phenomenon in farming. It evolves from two different logics: the one of farmers practising another activity and the one of non-farmers adding to their principal profession an activity involving agriculture.

In France in 1995, two farm households in three lived only on agricultural income. Two thirds of households (534 100) were described as 'monoactifs' i.e. neither the farmer nor his/her spouse worked outside farming. Among these, 159 600 were households where the farmer was retired (Rattin, 1995b). The pluriactive households were therefore those where either the farmer or the spouse, or even both, had a non-agricultural occupation, whatever the activity on the farm: there were 248 800 in 1993, constituting about one-third of the agricultural population (Rattin, 1995b). The pluriactive households can be classified in three groups. In the first one, only the farmer was pluriactive, either because he is single (35 400 households), or his/her partner was inactive or farmed as well (54 700 households). In the second group, the spouse was the only one being pluriactive (relating to agricultural activity or not), and the farmer worked exclusively on the farm (98 100 households). In the last group, both the farmer and his spouse had a non-agricultural profession (60 600 households). The households with heads aged less than 55, therefore non-retired, were in the majority pluriactive, most often due to the wife's activities. The proportion of pluriactive households progresses therefore over time, as young wives were more likely to have an independent job. The household activity type also evolves over time. Most households remained in the same category between 1988 and 1993, although an additional 9 percent of households became pluriactive and 8 percent shifted away from pluriactivity (Rattin, 1995b). Furthermore, a quarter of the pluriactive households between these two dates changed their type of pluriactivity.

Farmers for whom farming is their principal activity are pluriactive in order to ease their financial situation: additional revenue streams are added to their agricultural income by increasing the number of activities undertaken – whether agricultural or not. This could include farmers who diversify their agricultural activities, for example in creating a new '*hors sol*' workshop. In the case of the double activity, diversification is usually orientated towards non-agricultural activities (Frémont and Nabucet, 1997). Chronologically, the non-agricultural activities first served to supplement agricultural income. The practice of a non-agricultural activity was necessary as a means for farmers aiming to find necessary resources/income to fund the survival of their farm. Then, salaried work outside the farm overtook the agricultural activity, which then became smaller: this then supplemented the salaried work. But, crucially, this agricultural activity also guarantees the maintenance of a distinct social identity, supported by an important agricultural heritage. The absence of external income may ultimately have been

synonymous with the abandonment of the farm. In this case, the external activity allows the family property to be maintained and kept. The consequence of this has been that farmers' children, while establishing themselves outside farming, have kept the family farm running and their inheritance secure.

The evolution of farming in more recent years seems again to have increased this phenomenon: the relative stability of the number of pluriactive heads of farm whose farming is their principal activity is probably linked to the combined effect of the saturation of the markets and reforms of the CAP. Initially perceived as a marginal phenomenon, poorly recognized by the professional organizations, pluriactivity has become a positive adaptation strategy. The classic model of pluriactivity, the 'worker peasant', that had developed in the 1960s, has declined steadily since the beginning of the 1980s. Besides the ageing of the farm population, other phenomena can amplify the decline of this traditional model of pluriactivity. Considering the diverse nature of those heads of farm whose farming activity is a secondary concern, it is not easy to identify the principal reasons for farmers to leave the industry. Influences can be explained by a series of factors:

- a combination of crises (increase of farm prices due to structural reform and also to the expansion of tourism) ;
- dissatisfaction with the peasant lifestyle;
- concern relating to the lack of social promotion of their children.

The crisis of the industrial activities and the worsening of the constraints of the labour market affected the perception of the worker's status. Furthermore, permanent work in factories became downgraded and was no longer such a desirable activity. The activity of the head of farm determines the structure of the farm: if his principal profession is outside farming, he will tend to have a smaller farm, one that will be even smaller if the spouse works outside as well. On the other hand, if the non-agricultural activity is secondary, the farm may be very comparable to that of full-time farmers. It is the same if only the spouse works outside farming (Jollivet, 1988).

3. 4. 2. UK

As in France, the notion of part-time farmers in the UK is important and according to academics has not been looked at rigorously enough as the definition of part-time farming is unclear and also for a long time, part-time farmers were not part of the farming community as they were not seen as farmers by the other full-time farmers and the farmers' union. At the beginning of the

20th century in the UK, farmers were asked in agricultural censuses of 1907 and 1911 if 'they did not occupy the land for business purposes or as a source of income'. Over Great Britain, as a whole nearly 6 percent of holdings were returned as not farmed primarily for business or income in 1907. The question was not repeated after 1911 and official interest in part-time farming seems to have lapsed until the beginning of the Second World War (Martin, 2000).

During the Second World War, farm-based production had to increase substantially in order to feed the nation. As such, the government introduced the National Farm Survey in 1941/3, whose aims were to assist in local wartime administration, to form a permanent record of conditions on farms and to provide a basis for post-war administration, planning and policy-making. Although much of the information related to the physical layout and conditions of holdings, an assessment was also made to identify whether each occupier was fully engaged in farming (i.e. committed to the food production campaign) or not. As a result, 26 percent of farmers were found to have other sources of income and the percentage of holdings of 5 acres or more not being 'farmed for business' was 5 percent, which showed that little has changed from before the First World War (Martin, 2000).

In 1959, the Small Farmer Scheme was introduced to identify small farms, capable of surviving economically and eligible for state assistance. To achieve this, holdings were categorised on the basis of standard man days (smds) by applying standard labour requirements to the acres of crops and numbers of livestock recorded on each holding in the agricultural census. Full-time work in agriculture was then equated to 275 days a year. As a result, 275 smds served as the separation between full-time and part-time holdings. The 1955 agricultural census data showed that on this basis 180 000 of the 370 000 agricultural holdings in England and Wales were part-time. Then, in 1959, the Ministry of Agriculture survey showed a large proportion of farm occupiers had other full-time or part-time jobs, pensions or private sources of income (Ashton and Cracknell, 1961).

The concept of part-time farming is related to the one of the part-time holding, that is, according to Gasson (1988: 9-10) "to say the holding which is assumed to be capable of providing only part-time employment for an able-bodied adult, given average efficiency of labour". No acknowledgement was taken into account regarding physical conditions on the farm, which might have an impact on achieving average efficiency due to steep slopes, scattered fields or difficult access. A definition of part-time farming was established exclusively on the holding under existing management. The definition did not mention either what the occupier of a part-time holding did, whether he would have had another job or he would simply have been underemployed on the farm.

Since 1970, the agricultural censuses have recorded numbers of farmers under whole-time and part-time categories. Part-time farmers are classified as farmers spending less than full-time working or the equivalent of about 40 hours a week to farm work on his holding. In 1983, the agricultural census registered 87 000 part-time and 203 000 full-time farmers on UK farms. However, there was no evidence showing whether those part-time farmers (30 percent of all farmers) had another paid job (Martin, 2000).

During the 1960s, agricultural policies whose objectives were related to labour productivity defined part-time farming in terms of time spent on the farm. Then, high levels of underemployment, changing patterns of work and fears about tax invasion have urged governments to investigate the nature and extent of part-time farming. In the context of the EC Labour Force Survey, members of the labour force with second jobs were recorded. In this context part-time farming means having a first or second job in the agricultural sector.

Since joining the EC, the UK has had to provide information on the structure of its agriculture. The main problems of European agriculture were primarily structural. Statistics were required to observe the structural measures already established and to help in the development of new measures. Farm-structures surveys seemed the best strategy to obtain comparable data necessary to compare between regions and holdings of the Community (Heath, 1976). The first EC structure survey occurred in 1966/7, and was then repeated every four years. The UK took part in the 1975, 1979/80 and the 1983 surveys. The 1975 survey was the first to collect data on other gainful activities of farmers and spouses. The 1983 survey showed that 31 percent of agricultural holdings in England and Wales had other gainful activities (Martin, 2000).

According to Frank (1983) and Robson (1987), using data available from official censuses and surveys makes it possible to define part-time farming in terms of labour requirements of the holdings, use of the occupier's time or existence of another gainful activity. However, this definition has its limitation as the 1975 structure survey indicated, for example, that no less than half of all UK farmers below 275 smds worked full-time on their holdings and 60 percent of them had no other gainful activity. By contrast, a proportion of the occupiers on full-time holdings worked only part-time and had other paid jobs.

Although part-time farming is important, as in France, it has often been neglected in agricultural statistics as it is systematically connected and viewed as 'farming on the fringe' and consequently not 'real' farming (Robson, 1987). However, the Arkleton Trust (1985: 35) estimated that in a fairly representative sample of 12 European market economies, just over half the farmers were farming on a part-time basis in the 1970s.

Countries with relatively few farms run on a part-time basis such as the UK and France are characterised by highly intensive farming systems (north France, East Anglia and lowland Scotland) or a shortage of other employment opportunities (LFAs in France, Wales and Northern Ireland). Furthermore, government's attitudes towards part-time farming depend on whether it fits in with their agricultural policy. Neglect of part-time farming in the UK suggested that it had been perceived as irrelevant for agricultural policy. During and after World War II, part-time farming may have been dismissed as contributing little to the nation's food production. In the 1960s, part-time farmers were regarded as a stumbling block in the drive to improve productivity, using resources wastefully and impeding progress towards an improved structure of large, full-time farms. Since joining the EEC, the UK has been a party to the development of a more protectionist, socially orientated agricultural policy. By the mid-1970s, the Community's needs to pursue a price policy more adapted to the realities of the market was equally committed to keeping people in agriculture, with the family farm as the basic unit. Nowadays, part-time farming is considered as one potential answer to the agricultural problem as it would allow families to remain on small farms at a reasonable income. The EC's 1985 Green Paper argued that "the growing importance of part-time farming with gainful outside activities corrects to some extent the overall picture of low agricultural income" (European Commission, 1985:13).

Since the mid-1980s diversification has been energetically encouraged by governments as a constituent of new agricultural policies designed to oppose the problem of agricultural surpluses and the cost of the CAP. The first signs of support for farm diversification came in 1987 with the EC's Extensification Regulation (1760/87) and in the UK the ALURE (Alternative Land Use for the Rural Economy) initiative. The ALURE package consisted of £25 million to encourage farmers to farm woodland (afforest part of their farm and to treat timber as a standard farm crop), to promote private forestry, to diversify farm businesses and to an extent, employ more traditional and environmentally friendly methods to farm (arable and/or pasture) especially in Environmentally Sensitive Areas (ESAs) (Ilbery, 1988).

To promote diversification in England and Wales, the Ministry of Agriculture Fisheries and Food (MAFF) established in 1988 both the Farm Diversification and Farm Woodland Grant Schemes (FDGS; FWGS). The FDGS offered three types of grant to cover the cost of specific structural diversification projects or viability grants or finally a marketing grant. The FWGS is made up of an annual payment for farmers to grow trees. The amounts received vary according to location and are paid for over 10 to 40 years depending on the types of trees grown (Ilbery, 1991). The FDGS was one of the first ways of presenting grants to farmers to assist them to diversify. It offered funding for feasibility studies for creating new farm-based business

enterprises, and additional financial support for the new business, including assistance with marketing activities. Reflecting the limited funding available, farmers' response to the scheme was rather modest, with less than 2000 joining (Ilbery and Stiell, 1991). The FDGS had a rather slow start in the first two years of its operation (Clove and McLaughlin, 1989; Ilbery and Stiell, 1991). However, across most English counties, especially away from the southeast, over a quarter of the grants were given for accommodation improvements. In areas such as the far southwest (Cornwall and Devon) and the northeast (Northumberland), over half were for this reason. A comparable tendency to offer accommodation in traditional holiday-making areas has been recognised among farmers in other countries (Hjalager, 1996). It is now well established that the Farm Diversification Grant Scheme was too narrowly based to help most farmers (Gasson 1988) so MAFF axed it in 1992.

After this low initial response, UK farmers demonstrated more interest in diversification in the early 1990s, which may have been partly due to the reported relaxation of planning controls at this time (Boucher, Flynn and Lowe, 1991). Although developments for agricultural purposes were made exempt from the standard control measures by the 1947 Town and Country Planning Act, farmers seeking to change the use of buildings or land from agriculture to some other purpose (e.g. industrial, residential or recreational) were still required to obtain planning permission. This type of diversification (e.g. the development of farm-based accommodation) is generally more common in the traditional holiday-making counties of south-west England (Evans and Ilbery, 1992).

Policies for farm diversification and the FDGS were condemned as too farm orientated and restricted. As Gasson (1988) has argued, farm income sources could be varied more efficiently by supporting the formation of off-farm jobs suitable for pluriactive components of the farm households, and yet such a strategy is obviously missing from the plans of most rural development agencies and from the package of new policy proposals developed by the government. Research by Ilbery (1988) illustrated that few farmers had obtained information on farm diversification before engaging in such activities. Only a small number of farmers sought advice from the Agricultural Development and Advisory Service (ADAS), even though their initial advice was free. Diversification endorsement was in line with other policies for job formation. The adaptation of redundant farm buildings in rural areas was supported by the Development Commission and COSIRA (Council for Small Industry in Rural Areas) and for tourist and recreational potential in the countryside by organisations such as the Tourist Board or the Sports Council. Farm diversification was therefore being encouraged by non-agricultural bodies and agencies.

3. 4. 3. Research on diversification and pluriactivity

3. 4. 3. 1. Generalities

From the 1970s, diversified activities have been statistically recognised in France and analysed, and they are included in the agricultural category. However, farmers exploiting farm-based tourism activities are not recognised as pluriactive by the national agricultural statistics unit as farm-based tourism is not recognised as an 'agricultural activity'. According to Barthez (1986), para-agricultural activities are an 'outside' activity performed inside the farm. Blanchet and Déaud (1998) completed Barthez's idea by saying that para-agricultural activities are non-agricultural activities integrated in the activities of the farm. Thus, a farmer engaged in para-agricultural activities should be considered as a pluriactive farmer. Whether pluriactivity is temporary or permanent, it should feature in the statistics. Certain activities such as tourist-based activities, which make a farm diversified and a farmer pluriactive, are not counted in the French agricultural statistics.

In France, Benjamin worked on the growing importance of diversification in the French farm household. She argued that the decrease in produce prices and the new set-aside requirement has increased the probability of off-farm work participation. Also the increases in earning potential of farmers' wives have the greatest effect on the probability of off-farm labour participation (Benjamin, 1994).

In France, Barthez (1986) analysed pluriactivity by showing that pluriactivity reflects the 'wearing away' of professional agricultural activity. She recorded several forms of pluriactivity. Although we talk about pluriactivity when all members of a family do not pursue the same agricultural activity on the farm, it has been noted that this type of diversification has become rare. Nowadays pluriactivity typically concerns someone who has several activities whatever the nature of the activity, the time spent doing it, the importance of the revenue and gender balance and composition of the household. Farmers have become individualists and they are not as close to the community as formerly.

Work in France by Cavailhes *et al* (1995) and Perrier-Cornet and Capt (1995) has confirmed the importance of non-farming backgrounds to the success of diversification enterprises. Higher levels of education have also been linked to less-traditional household attitudes. For example, Benjamin, (1994: 340-1) found that high levels of education were a key factor explaining the participation of both husbands and wives in farm diversification. Duram (1997: 156) also found high levels of education to be strongly related to the adoption of more alternative farming styles

generally, along with a less profit-orientated approach to business management. In France, qualifications in subjects other than agriculture have also been found by Perrier-Cornet and Capt (1995) to be significant in the implementation of tourist enterprises, as are the influence of other incomes and experiences gained by the farmer's spouse in working off the farm. The absence of an exclusive definition of pluriactivity as well as its variable character makes it difficult to determine the number of pluriactive farmers. Pluriactive farmers have been ignored for decades and they were not taken into account in government statistics.

In Europe as a whole, but especially in the UK, there has been much research on farm diversification and pluriactivity in the last two decades, although in 1987 Griffiths recorded that there was little work on how farm diversification had occurred, when, where, why and why not. In 1986, Marsden *et al* suggested that farm diversification varies spatially as individual localities respond in different ways to national and international processes of change according to their varying histories and traditions.

From the 1980s, new approaches to the study of rural change have been developed, especially in the UK. The decade had witnessed the formulation of a critical perspective on agriculture via political economy approaches (Marsden *et al*, 1986). In the 1980s, the dilemma of part-time farming research, and the context of global change in which the reform of the CAP was a central characteristic, were contributory causes of the considerable growth in studies of pluriactivity. The Arkleton Trust study of rural change and pluriactivity (also called the multiple jobs holding farm household study) observed not only the issues of part-time farming and pluriactivity, but also the major forces of social, economic and political change in the 1980s. The research project on multiple job-holding in 12 countries of Europe was starting in part to resolve the problems concerning part-time and pluriactive farming. It was also premeditated to look at the elements of farming changes across Europe at a time of significant alteration in the CAP. The research aimed to make the link between models of farm household behaviour and situations in the external environment, both local and national. Earlier literature had concluded that multiple job holding was not specifically determined by such things as type of farm or size of farm and other factors such as family composition and life cycle, as well as non-farm labour markets were important.

A number of key changes in the EC policy framework predisposed the nature of the Arkleton project: notably the Single European Act and the reform of the CAP (Fuller, 1990). In the late 1980s, the Arkleton Trust surveyed farm households in 12 European regions and concluded that nearly 60 percent were pluriactive. Furthermore, the research concluded that 50 percent of the households had off-farm OGAs and 10 percent had on-farm OGAs. The research also showed

that one-third of farm household obtained over half their total income from off-farm sources. In addition, the Arkleton Trust project demonstrated that the spatial patterns of pluriactivity and farm diversification are complex, showing the link between several external and internal factors to the farm business (Shucksmith *et al* 1989; Shucksmith and Smith, 1991).

Since the mid-1980s, a great deal of evidence has appeared to demonstrate the types of activity farmers have diversified into, their significance to the business and motivations behind the decision to diversify (Slee, 1986; Marsden *et al*, 1987; Evans, 1990; Ilbery, 1991; Bateman and Ray, 1994; Edmond and Crabtree, 1994). One hesitation that can be expressed about diversification as a force of post-productivism is that certain enterprises such as llama farming or growing evening primrose are clearly 'productivist' activities. They are simply 'unusual' or novel forms of production. A more important reluctance relates to whether farm diversification is, in fact, gathering the momentum necessary for it to contradict specialisation and meet the 'progressive opposite' test central to the theorisation of Ilbery and Bowler (1998). Ilbery and Bowler (1998) interpret post-productivism as a progressive reversal of trends that dominated the productivist era. The trends, according to Bowler (1985) are intensification, concentration and specialisation. Ilbery and Bowler's (1998) theorisation of post-productivism is proposed as a straightforward reversal of intensification, concentration and specialisation into trends of extensification, dispersion and diversification.

On the whole the literature argues that in the case of Developed Countries, the era of productivism lasted from about the World War II to the mid-1980s (Shucksmith, 1993; Lowe *et al*, 1993; Ilbery and Bowler, 1998). Then again, Baldock and Lowe (1996) and Halfacree and Boyle (1998) have placed the beginning of the post-productivist transition in the 1970s in the context of the oil shocks in 1973, which gave urgency to resource conservation. However, Wilson (2001) argued that post-productivism is not directly the antithesis of productivism as there is no strong evidence showing farm dispersion, diversification is a limited phenomenon and it is not necessarily linked to environmental benefits or decrease in agricultural production, and extensification co-exists with intensification. In other words, Wilson criticises the concept of post-productivism as Ilbery and Bowler (1998) see it. According to Wilson (2001) post-productivism is not only a loss of the central position of agriculture in society, a reduced importance of the farm and landowning lobby in parliament and government but also changing public attitudes to farmers: from regarding them as stewards of the land to destroyers of the countryside. Furthermore, the agricultural policy community has changed to embrace environmental and other non-agricultural concerns (agri-environmental policies, reduced subsidies, tighter pollution regulations and changes in property rights).

As a result, there is a challenge to the second food regime³, what Wilson terms the 'Atlanticist Food Regime', in the form of a rapid dismantling of protectionist state and supra-state policies. This has created both uncertainties and new opportunities e.g. in part as non-standardised demand for high quality goods and services, new forms of agricultural production with less emphasis upon security and national self-sufficiency for agricultural commodities but also commodification of former agricultural resources, including land, wildlife habitat, barns and cottages, by urban migrants to rural areas, termed the *neo-ruraux* by the French. Wilson also argues that post-productivism is essentially a phenomenon of Northern Europe and North America. In contrast, parts of the Mediterranean may not have even fully entered the productivist phase, though post-productivist policies can be imposed there through the CAP.

Gasson (1988) and Slee (1991) have discussed the opportunities for and constraints on the development of on-farm processing. According to Slee (1991) on-farm processing encompasses activities creating utility by altering the product in some way from its raw state. On-farm processing activities may be considered in a wider context as activities adding value to agricultural products. Some empirical studies have been made in order to examine the extent of and the economic viability of on-farm processing at farms in the UK (Russel, 1987; Russel *et al*, 1991). On-farm processing activities boost farm incomes and consequently strengthen the rural economy. While previous studies of pluriactivity have generally used the farm business as the main unit of analysis, it is argued that including the wider business activities of the farm owner enables a more precise estimation of the total contribution of farmers to rural economic development.

³ The notion of food regimes (Friedmann and McMichael, 1989; Buttel and Goodman, 1989; Friedmann, 1993; Robinson, 1996) links international relations between food production and consumption to forms of accumulation and periods of capitalist transformation since 1870. Food regimes were recognised and their theory developed in the 1980s out of the French school of regulatory theory and applied to the agricultural economy. Food regimes are organised around capitalist crises that alter the agro-economy. A food regime is portrayed by Friedmann (1993: 30) as a "...rule-governed structure of production and consumption of food on a world scale". Three food regimes are acknowledged. The first was associated with the development of new land resources, while the second included accumulation based on the adoption of new technologies that enhanced farm productivity. The first food regime is understood to dominate the period from 1870 to 1914 while the second dominated from 1947 to 1973 though the date of its termination is contested as parts of this regime are still in place today. Two transition periods are identified, one between the first and the second regime, and the current period in which it is suggested that we are moving towards a third food regime. The third food regime which began in the 1980s consists of increasing global trading in food through World Trade Organisation (WTO) and more liberal trade policies which aim to increase production and competition. It also involves a consolidation of capital in food manufacturing by including fewer but stronger corporations. The third food regime also comprises the new biotechnology used in food production, the reduction in state or government subsidies and it takes into account the changes in consumer demand, with today's consumers expressing concerns over the environment or animal rights just to name a few (Le Héron and Roche 1995, Robinson, 2003).

The establishment of farm diversification enterprises in the UK reached a peak in the early 1990s and growth of new ventures has been subdued since this time (Chaplin, 2000). Indeed, in 1991, MAFF axed the FDGS, which offered achievability and financial and marketing support for diversification as very few farmers adopted the scheme.

Within the rural small business literature, the highlighting of agricultural decline (cf. Keeble *et al*, 1992; Blackburn and Curran, 1993, Curran and Storey, 1993) has ensured that the growth in 'part-time' farming is often viewed as an exit strategy, with farmers temporarily holding the land until their new occupation allows them to divest (Townroe and Mallelieu, 1993). However, the view that pluriactivity is a form of intermediary exit, where the farmer is less dedicated to agricultural production, has been rejected by agronomists (Carter, 1998). In the Arkleton Trust's study done between 1987 and 1991 in 12 Western European countries only 20 percent of pluriactive farmers were found to be disengaging or exiting, 21 percent were found to be engaging or transitional entrants and 59 percent were found to be stable (Bryden *et al*, 1992; Hawkins *et al*, 1993). The same study found that pluriactivity was dominant in all farm sizes and in all areas, averaging 60 percent of all farmers, although manifested differently according to regional traditions and economies (Campagne *et al*, 1990; de Vries, 1990; Reis *et al*, 1990). Research has also shown that farmers are turning out to be more interested in diversifying their income base as a result of policy (Shucksmith and Smith, 1991; Bryden *et al*, 1992).

Shucksmith and Winter (1991) showed that there has been much resistance to diversification due to five main problems linked with the farming system: First, many significant diversification projects need planning permission. Both the ALURE package and the FDGS, by promoting farm diversification, also created conflicts as planning permission may be refused so there was a need to consider the impacts of these policies upon the planning process. Second, farm diversification may also encounter tenancy restrictions. In fact, tenant farmers wishing to diversify could be confronted with higher rental charges and even notices to quit for breaking an agreement; this usually relies on the degree of tenant-landlord rapport. Third, because of the decline of farmers' income, some farmers have found it difficult to invest large sums of money in a diversification project. Fourth, farmers are used to producing food but when it comes to marketing it they tend to let other people do it for them. Farmers need to expand their business and marketing skills as well as their imagination and innovation skills. Slee (1987) argued that accommodating courses of action like diversification enterprises generally necessitates a high degree of marketing skill. Finally, farmers should see diversification as an integral part of the business. For example, many farmers do not feel comfortable talking to tourists. Education and training would help to resolve this.

A wide range of factors has been identified that influence the restructuring of agriculture (Robinson, 1990; Bowler, 1993). Robinson identified those factors as government subsidies stabilising the agricultural industry, the growth of consumer spending power, reduction of the agricultural labour force, reorientation of agriculture towards a more capital- and energy-intensive industry, market forces and higher levels of capitalisation. Farm diversification may be seen as one response to this immense restructuring which is occurring in the agricultural sector. Bowler (1991) recognised the 'international farm crisis' in the 1980s and warned that the link between farming and manufacturing industry is an important factor in restructuring being more competitive than co-operative. Farmers are facing new demands and must adopt different strategies such as diversification to cope with policies which now advocate environmental concerns, a reduction of output and the need to diversify into less-commonly produced foodstuffs (Marsden *et al*, 1989).

3. 4. 3. 2. *Key variables in diversification/pluriactivity*

A key feature of the literature on diversification and pluriactivity has been attempted to determine key characteristics of farmers and farm holdings that have favoured the development of diversification/pluriactivity.

A number of internal factors relating to the farm and the farm family (Ilbery and Bowler, 1998) have been identified as typical of diversifying farms. In general, it seems that the farmers who are more willing to diversify run larger farm businesses with a higher net income and greater degree of indebtedness. They are younger, continued full-time education after school, received formal agricultural training and have children wishing to continue in the farm business. These internal factors combine with the external factors of the socio-economic and physical environment outside the farm to add to the decision on whether or not to carry on with diversification.

In order for diversification strategies to succeed, they must build on the farm's main capabilities. Within the small business sector, however, the core competency of the firm may lie in the business skills of the owner. This has been demonstrated in agriculture, a sector where economies of scale can be achieved at a relatively low level (Gasson *et al*, 1988). Agriculture researchers have constantly commented that many farm businesses merge agricultural production with other income-generating activities and that such pluriactivity has always been an important and distinctive characteristic of the farm sector (Hill, 1982; Bouquet, 1985; Gasson *et al*, 1988; McInerney *et al*, 1989; Bryden *et al*, 1992). Without a doubt it has been

demonstrated that farm household pluriactivity is a main factor in allowing the survival of small-scale agricultural production (Banaji, 1980). It is estimated that 60 percent of farm owners were pluriactive in 1990 in the UK and that, of these, up to 75 percent may combine farm ownership with non-farm self-employment and the ownership of additional enterprises (Bryden *et al*, 1992).

Gasson (1988) and Ilbery and Bowler (1993) have also argued that larger scale farmers are more inclined to introduce diversification schemes than those working smaller farms, although large-scale farms like many other subsets of the farming community are a heterogeneous group. These authors concluded that this character towards diversification verifies the well-documented trend for larger farm businesses to be innovative across the whole range of new farming practices including the adoption of state-aided schemes. The smaller farms relied most on the ability of diversification to generate income (Ilbery 1996). According to Ilbery (1991) farm diversification tends to favour three farm size categories: small, less than 40 ha; medium, between 120 and 200 ha; and very large, over 400 ha. Furthermore, a clear tendency can be detected: off-farm diversification is concentrated on both small and very large farms and on-farm diversification favours medium size farms. If we relate diversification to Ilbery and Bowler's (1993) classification of farmers, we can say that diversifiers' farms are larger than non-diversifiers' farms.

Shucksmith and Smith (1991) comment that on-farm diversification is a more attractive option for operators of larger farms with capital to redeploy. On smaller farms lacking such capital, operators (or other household members) can only redeploy their labour on the farm. Gasson (1998) argued large farmers are in a more favourable position to diversify since they can more easily provide land for recreational activities and raise capital for building conversion or installing a processing plant. This was one of her criticisms of the FDGS (1988 to early 1990s) where the terms favoured larger farms.

The type of farm is very significant in the choice of diversification. In a study of the West Midlands, in 1991, Ilbery explained that only 16 percent of the farms that had diversified could be classified as dairy farms, whereas 40 percent of the study area farms were so classified. The time-consuming and capital intensive nature of dairy farming would appear to limit opportunities for diversification, except where value is added through the processing of milk into butter, cream, cheese and so on. Nonetheless, this type of enterprise requires lots of investment and some farmers cannot afford to invest these large amounts of money. Due to strict hygiene regulations every farm must be standardised. Gasson (1988) associated off-farm work with less time - and labour - demanding systems such as beef, sheep and cereals, rather

than more demanding dairy cows and non-cereal enterprises. In the case where alternative enterprises are developed on the farm (on-farm pluriactivity), the pluriactivity may alter the land use (e.g. alternative crops, golf courses, horse riding), although some forms of on-farm diversification do not have an effect on the land (for example, tourist accommodation and farm shops). With on-farm diversification, the intensity of land management may not be clearly reduced because, with the household staying on the farm, a more efficient use of time may be made (Ellis *et al*, 1999).

With the average age of non-pluriactive households being younger than that of pluriactive farms, the outcome of education and views about farming cannot be separated from the influence of pluriactivity. The difference in age between non-pluriactive and pluriactive farm households is in accordance with research in other areas of Britain (e.g. Nalson, 1968; Gasson, 1988). Non-pluriactive farms were also, on average, larger farms with more labourers (in accord with Gasson, 1988; Shucksmith *et al*, 1988; Bateman and Ray, 1994). The stability of a larger capital base from such farms also economically detached them from their younger counterparts. Therefore, the possibility exists that the land use and management characteristics of the farm may have already existed before involvement in pluriactivity. For example, farms with off-farm work may have already been managing less intensively than other farms before obtaining off-farm employment because of a low income accruing to the farm. Of course, time spent away from the land as a result of off-farm work may improve the effect of a less-intensive management regime.

As Bowler (1999) points out, farm diversification has acquired considerable importance for the survival of family labour farms in the EU. Much research has been done in the UK on the economics and models of adoption of AFEs including the role of the state (see Bateman and Ray, 1994; Fuller, 1990; Shucksmith and Smith, 1991). Nonetheless, farm families are still confronted with a lack of knowledge and uncertainty in selecting the best type of AFE, as the latter varies with farm, farm family and geographical location (Ilbery and Bowler, 1993). AFEs not only offer an opportunity to raise net revenues in farm businesses but they may also modernise and make those regions more accessible as well as raising requirements for labour which is helpful for rural development. As such, the development of AFEs impacts on whole farming systems and faces constraints through the redeployment of land, labour and capital from existing farm enterprises (Bowler, 1999).

Whatmore (1991) studied the role of women in the farm labour process. She argued that a significant political economy of agriculture must include an analysis of gender, centred on a theory of patriarchal gender relations (see also Gasson, 1989). It has been argued that women's

agricultural labour involvement is part of their domestic labour activities, particularly childcare (Whatmore, 1992). According to Errington and Gasson (1996) several studies have showed how the nature of farm work had changed on farms since mechanisation and modernisation had greatly reduced the size of the labour force or restricted it solely to members of the farm family. Hence, farmers' wives have often become more heavily involved in the day-to-day running of the farm.

Although pluriactivity may increase the economic freedom enjoyed by the farmer's wife, it may also change her position in the business and household decision-making process (Shortall, 1994, 2002). Nowadays, women often occupy more than one position on the farm. They often combine a domestic role with a responsibility for certain types of activity related more directly to commercial returns, e.g. managing a farm-based accommodation outlet or taking responsibility for a particular sector of the farming enterprise (Bouquet, 1982; Robinson, 2003). However, the increase in the amount of work performed by farm wives may not necessarily be linked to a gain in income (Evans and Ilbery, 1996; Gasson and Winter, 1992; Robinson, 2003).

The preceding discussion demonstrates the way in which a wide array of research has repeatedly highlighted key variables as being highly influential in the process of farm diversification and pluriactivity. There are eight variables in particular that have featured most commonly in these studies. These are age, education, farm size, farm type, farm organisation, farm tenancy, milk quota and farm location. It is these variables therefore that will be examined most closely in this particular study of farm diversification and pluriactivity.

- **Age** is a key factor for classification as younger farmers may be more inclined to diversify as they need an income for their family. Older farmers fall into two categories. If they have no successor, they often choose to intensify their production and use the capital (if any) to diversify or to invest for their retirement (Djurfeldt and Walderstrom, 1999). If they have (a) successor(s), they tend to behave like younger farmers and often diversify in order for their successor to continue the diversification project (Rattin, 1995; Djurfeldt and Walderstrom, 1999; Loble and Potter 2004).
- **Education** also plays a role in diversification as it encourages (or not) farmers to diversify or intensify. If farmers are aware of the various type of diversification available to them then it makes it easier for them to select the best type of diversification.

- **Farm size** is also an important factor in the decision-making process regarding diversification. Large farms often have enough capital, resources or labour to look after the diversified activity. Large farms are more likely to introduce diversification (Gasson, 1988; McInerney and Turner 1991; Ilbery 1991; Ilbery and Bowler 1993a; Walford 2003).
- **Farm type** is also a key factor for classification as the type of farm plays a role in the selection of diversification/pluriactivity. Dairy farms and mixed crops and livestock (including dairy cattle) often require large amounts of time and labour so it is less easy to diversify. For beef, arable, horticultural farms or mixed crop and non-dairy livestock it is easier to diversify as the activities on the farms are less time consuming and provide more freedom and flexibility (Ilbery *et al*, 1997; McNally, 2001).
- **Farm organisation** is also an important factor when it comes to classifying farmers in terms of diversification. Research has shown that the organisation of the farm (full-time family farms, partnership farm (Ltd or corporation) or part-time) plays a role in the presence of diversification/pluriactivity on the farm (Djurfeldt and Waldenstrom, 1999) and it also determines the type of diversification (de Corlieu, 1998).
- **Farm tenancy** is also taken into account in the classification of farmers as it can determine or limit the type of diversification farmers may have on their business. Research has shown that it may be more difficult for tenant farmers to diversify. Furthermore, tenant farmers may be restricted or prevented from diversifying due to the agreement they have with their landlord (Bateman and Ray, 1994; McNally, 2001).
- **Milk quota** plays a role in diversification as it may impact on the type of diversification a farmer may choose. For example, farmers with a high milk quota are less likely to diversify than farmers with a low milk quota. Farmers with a low milk quota may be more likely to diversify into non-agricultural activities, depending on the assets of their farm or the capital available to them. Research has shown that it is more difficult for dairy farmers to diversify because of the nature of the job.
- **Farm location** also plays a role in the decision to diversify or be pluriactive and especially it may affect the type of diversification. Structural diversification seems to be more prevalent near the seaside or tourist attractions. Pluriactivity is easier if the farm is located near a town and diversification related to traditional farming activity or intensification is

often on more remote farms (SCEES, 1989; Ilbery, 1991; Edmond and Crabtree 1994; Meert *et al*, 2005).

3. 4. 3. 3. *Classification of farmers*

Farmers who diversify have often been classified by academics into different groups (Table 3. 4). The author reviewed the different classification models and then selected which model was best to use to classify and compare the farmers in both study areas. As well as examining key variables in farms and farm households, the author is also interested in the ensemble of the variables into a classification of farms and farm households, as this will provide a means of making a direct comparison between the two study areas. This classification could also be extended to further comparison with different study areas. Hence the classification is in part a device for making objective comparisons about what is happening with regard to the development of diversification and pluriactivity.

According to Marsden *et al* (1986) there are three types of farmers who use three different types of diversification. First, there are the hobby, part-time and semi-retired farmers. These farmers have little or no income from their farm but are fond of the work and are pleased with any money from diversification. Then there are the 'survivors' through diversification. They have chosen to diversify in order to increase money to pay debts. Finally, there are accumulators of capital who invest the capital in either non-agricultural or agriculturally-related enterprises. However, this classification of farmers suggests that those most in need are least able to diversify. Moreover, Gasson and Winter (1992: 396) have observed that couples or individuals who are brought up outside the agricultural industry are more likely to engage in less traditional and more open paths of business development and management, as well as giving more power to women.

Ilbery (1988) also showed that farmers with alternative enterprises could be classified into three different types. The first type comprises the 'hobby and retired part-time farmers' characterised by minimal farm income and no farm debt or mortgage. Then there are the 'survivors through diversification' category who have gone into non-traditional agricultural activities as a positive step to increase profits and the scale of business. Finally there are the 'accumulators of capital' who represent farms where family businesses have developed non-agricultural or agriculturally-related investment either to increase returns on surplus capital raised from farming or to use excess capital from non-agricultural businesses to begin farming. The business remains family-based.

Table 3. 4: Classification of farmers

Authors	Country	Classification	Description	Farm business characteristics	BOULAY classification
Chambre d'Agriculture 1997	France	Enterprise diversification	Adding another activity to the core activity	Small/medium farm Young farmers Full-time Agricultural education	Traditionalist: farmers who diversify into activities close to farming. Principally, these farmers are involved in enterprise diversification (mainly poultry and pig production). These farmers do not combine different types of diversification. The diversified activity usually necessitates investments
Chaplin, Davidova and Gordon, 2004	Poland Czech Republic Hungary				
Meert et al, 1999	Belgium				
Marsden et al 1986	UK	Accumulators	Association of diversification and pluriactivity on the farm business	Large farm Young and old Full-time Any farm type	Entrepreneur: farmers who diversify into several type of activities by combining for example structural and pluriactivity or structural and enterprise diversification etc. Because they use various type of diversified activities, they behave more like entrepreneurs or businessmen.
Ilbery, 1988	UK				
Marsden et al, 1989	UK				
Ilbery and Bowler, 1993	UK				
Bowler, 1999	UK				
Meert et al, 1999	Belgium				
Lobley and Potter, 2004	UK	Integrators	Addition of activities away from farming	Small and medium Young Any farm type Full-time Well educated	Innovator: farmers who diversify into activities not related to farming. They may have B&B and farm restaurant but they do not combine activity from different types of diversification (i.e. they do not have structural activities as well as agricultural or enterprise or pluriactivity). The term innovator is used because they are looking for activity not related to farming, so they are more innovative than farmers who diversify into activities close to farming (traditional)
Meert et al, 1999	Belgium				
Campagne, 1990	France	Pluriactive	Off-farm diversification (not main income)	Small farm Young and old Part-time Non dairy Well educated Male dominated	Pluriactive: those farmers have an off-farm job.
Couturier, 1994	France				
Lobley and Potter, 2004	UK				
Chaplin, Davidova and Gordon, 2004	Poland Czech Republic Hungary				
Meert et al, 1999	Belgium				
Djurfeldt and Waldenstrom, 1999	Sweden				
Eikeland and Lie, 1999	Norway				

Marsden et al, 1986	UK	Hobby	Main income from non-farming activities Off-farm employment	Small Part-time Well educated Non agricultural education	Pluriactive
Ilbery, 1988	UK				
Meert et al, 1999	Belgium	Semi-retired	Farm incomes complemented by pension	Small Old Part-time	Leaver : farmers who diversify at small scale (little investment) and who aim to continue the diversified activity once they retire (often they have one room for B&B)
Lobley and Potter, 2004	UK	Capital consumers	Use resources of the farm No investment regarding diversification	Small Old Full-time Any farm type	Leaver: farmers who have no successor and who use the resources of the farm to increase their farm income. These farmers aim to leave farming with 5 years.
Lobley and Potter, 1996	UK				
Marsden et al, 1989	UK	Disengagers	Use resources of the farm No investment regarding diversification	Small or medium Old Full-time Any farm type	Leaver
Lobley and Potter, 2004	UK				
Meert et al, 1999	Belgium				
Marsden et al, 1986	UK	Survivors	Use resources of the farm, no or little investment	Small or medium old or Full-time Young Agricultural education	Survivor : farmers who diversify at small scale to increase their income but who often cannot diversify because of the lack of capital. They use the resources of the farm and are often involved in enterprise diversification (beef production) and rent a room as B&B.
Ilbery, 1988	UK				
Marsden et al, 1989	UK				
Ilbery and Bowler, 1998	UK				
Lobley and Potter, 1998	UK				
Whitby, 2000	UK				
Walford, 2003	UK				
Meert et al, 1999	Belgium				
Djurfeld and Waldenstrom, 1999	Sweden	Professionalism	No diversification, intensification	Young or old Full-time Dairy farm Agricultural education	Non-diversifier : farmers who have no interest for diversification, they often earn enough from their main production and do not want to invest into other activities. They intensify. Other farmers always have farmed in one production and claim that is what is best for them.
Chambre d'Agriculture, 1997	France	Intensifiers	No diversification intensification	Young or old Full-time Dairy farm Agricultural education	Non-diversifier

Source: Author

Marsden *et al* (1989) also developed a typology of farm households that focused on their strategies for getting through the 1980's agricultural crisis. They also acknowledged three groups: accumulators, disengagers and survivors, based on the farmers' business pathways and saw diversification and pluriactivity as options within these groups.

Bowler (1999) and Ilbery and Bowler (1993a) defined 'accumulators' as having extra large farms linked to farm contracting. Bowler (1999) and Ilbery and Bowler (1993) developed the classification by Marsden *et al*, arguing that accumulators are more likely to establish agriculturally related diversification schemes on their farms whereas disengagers lacking capital would diversify into non-agricultural sectors and apply their labour to other gainful activities (OGAs). According to Ilbery and Bowler (1998) survivors are viewed as passively adopting certain agri-environmental schemes (Lobley and Potter 1998; Whitby, 2000) and engaging in OGAs linked to farming such as contracting (Walford, 2003).

More recently, Lobley and Potter (2004) classified farmers into 6 categories. First, leavers who are farmers expected to leave the farming industry in five years time. Then 'static agricultural businesses' or 'minor change businesses' who are farmers remaining highly dependant on agricultural income and expect to continue to be so in future. The 'traditional agricultural restructuring' group shares characteristics in common with Shucksmith and Hermann's 'contented monoactive' being highly committed to continuing as professional farmers but also willing to restructure their core business in line with changing market and policy realities. Then, the 'diversifier' category related to people who embark on a strategy to reduce the economic centrality of agriculture within the farm household and taking steps to diversify incomes resources, either through on and off farm diversification. 'on' and 'off-farm diversifiers' set up non-agricultural businesses on the holding or sought income from off-farm employment. 'On-farm diversifiers' have been actively converting agricultural land and buildings into non-farming uses in the recent past while 'off-farm diversifiers' emerge as the most likely of all the sample to have undertaken significant enterprise change. The penultimate category, the 'agricultural integrators' have diversified into activities closely related to agriculture such as agricultural contracting, the provision of consultancy to other farming businesses or agricultural haulage. The final group, 'capital consumers' are small farms operated by elderly or retired, many of these are the 'retirement holdings' previously identified by Potter and Lobley (1996), occupied by individuals at the end of their farming careers, often uncertain of succession but unable or unwilling to give up farming entirely.

In order to classify farmers in terms of diversification, it is important to consider the characteristics of the farmers and farms and also the type of diversification practised. The author considered eight variables and the nature of diversification to classify farmers into seven categories: entrepreneurs, innovators, survivors, traditionalists, pluriactive, leavers and non-diversifiers. The seven categories are detailed as follows and figure 3. 4 illustrates the process of classification.

Traditionalists are farmers who diversify into activities close to traditional farming. Traditionalists choose enterprise diversification on their farm. Enterprise diversification provides another source of income, requires some investments but grants or loans may be available and it fits in easily with dairy farming.

Entrepreneurs are farmers who diversify into several types of diversification and pluriactivity. They often combine aspects of diversification in order to increase their income but also to reduce the economic risk. These farmers usually have enough capital to finance the diversification projects.

Innovators are farmers who diversify away from traditional farming. They use the assets of the farm to develop structural activities or diversify into unconventional crop or livestock production.

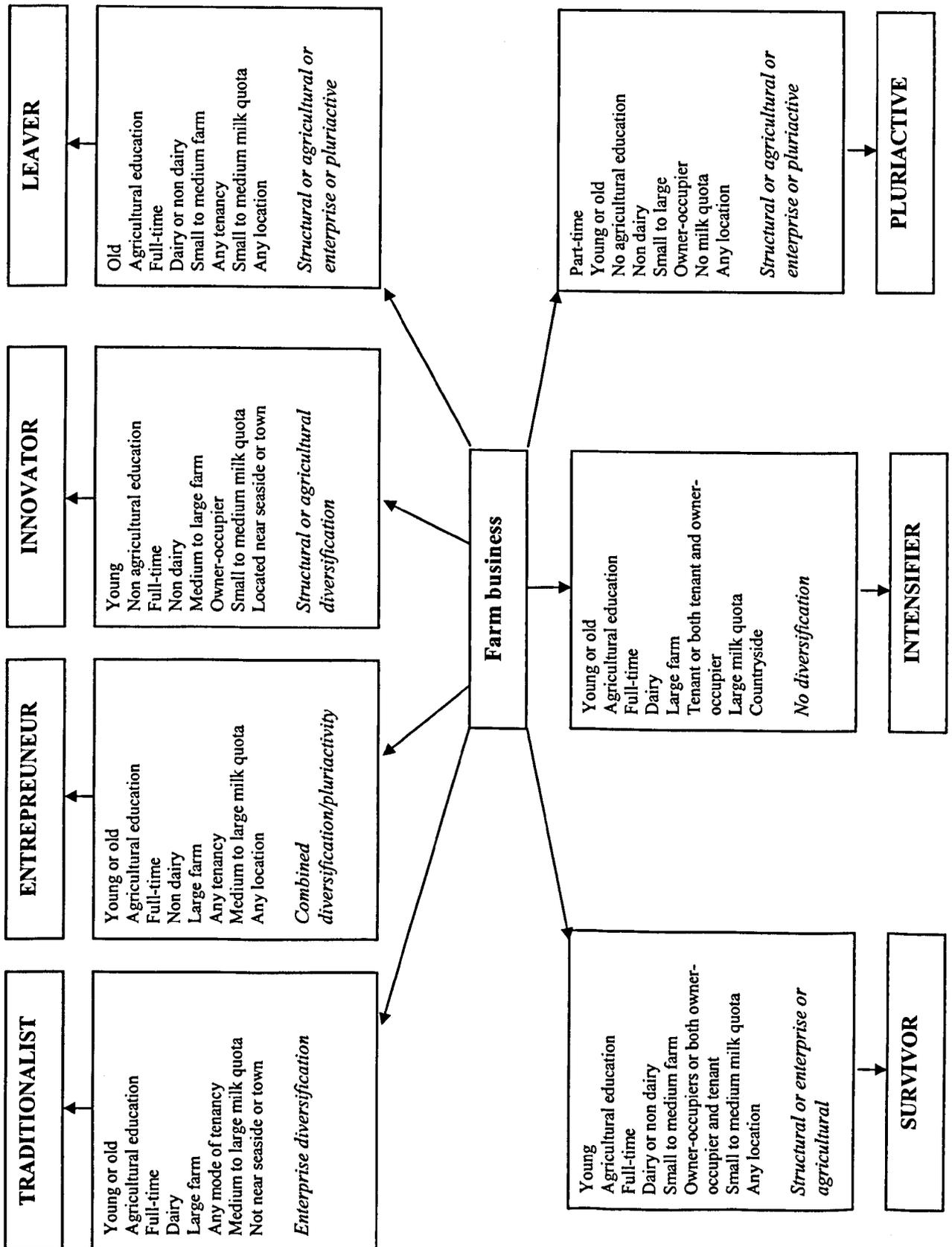
Leavers are farmers planning to move out of the farming industry either because they are close to retirement or because the income from the farm is not sufficient and farmers are also pluriactive.

Survivors are farmers who use the resources of the farms to diversify but the diversification is dictated by the low investment linked to the diversification. As such, farmers adopt structural diversification if they can lease land or building. Some pluriactive farmers wish to continue the family business and keep their part-time job. Other farmers who are not pluriactive but have facilities they can develop engage in enterprise diversification and produce beef as beef production uses the same facilities as dairy cows.

Pluriactive are farmers or any one from the farm business who have an off-farm job. The off-farm job may be full-time or part-time.

Non-diversifiers are farmers who argue that they do not need to diversify as they earn enough from their dairy production. These farmers often intensify their production and do not believe that diversification would bring anything extra to the business. They also strongly believe that the role of farmers is to produce food, not to transform it.

Figure 3. 4: Model for the classification of farmers



3. 5. Summary

The policy context in which farmers in Western Europe function has been adjusted since the mid-1980s, with a move of emphasis from the leading post-war beliefs of expansion and modernisation to diversification, environmental protection and extensification (Ilbery and Bowler, 1998). Tourism has become an important constituent within the sphere of farm diversification (Evans and Ilbery, 1989; Hjalager, 1996). Farm households have attempted to enter the rural tourism market by offering small-scale, high-quality accommodation for discerning customers and/or by developing specialist attractions for non-residential visitors, including museums, demonstrations of agricultural production, farm walks and war games. In the rural areas of many countries, tourism is viewed as offering a means to respond to economic decline and forestall outmigration by the indigenous population.

This chapter has reviewed the definitions and concepts of farm diversification and pluriactivity in France and the UK. The chapter also identified a definition suitable for not only this study but also the comparison of farm diversification and pluriactivity in the two selected study areas: sud Manche and west Dorset. The review of the literature on diversification and/or pluriactivity revealed that various household factors are linked to diversification studies and pluriactivity in the UK. These are farmers' age, family life cycle, farming history, farmers' education, farm succession, attitude to profits, other incomes and labour relations. The literature review also showed the importance of the farms' characteristics in terms of farm size, location, nature and type of farm.

By including questions on farm household and farm description in the questionnaire, the author was able to identify the characteristics of farms and farmers in both study areas and to analyse their relations with diversification. The author was also able to identify the role of age, education, gender, farm size, location, type of farm, nature of farm etc in diversification and compare her findings with those of other researchers.

Farm diversification can present business owners with a relatively inexpensive and risk-reduced method for adapting existing resources into new businesses. Farm diversification activities can, as a result, be seen as the first stage of the development of broadening business interest. The economic interests of European farmers have become less important in political terms except where they are related to the interest of the industries upstream and downstream from agriculture. Because of these external impacts (i.e. beyond the farmer's gate) it has become quite important for the EU to look at the farm crisis in agriculture and they have therefore encouraged farmers to diversify. Currently suggestions for agricultural reform in Europe are

looking to retain and encourage extensive farming to a certain extent by trying to re-direct farmers into non-farm activities (i.e. pluriactivity or diversification) such as leisure activities, marketing and processing (Ellis *et al* 1999). Diversification/pluriactivity is related to the socio-economic features of the household, so they may not, therefore, be connected directly with the type and intensity of the farming.

Chapter 4 presents the theoretical approaches and the methodology used for the analysis and the comparison of farm diversification in the two selected dairy areas: sud Manche and west Dorset.

Chapter 4: Philosophical approaches and methodology

Chapter 4: Philosophical approaches and methodology behind the study of farm diversification in sud Manche (France) and west Dorset (UK)

4. 1. Introduction

In the last three decades, the study of human geography has been subject to significant changes. New questions have been asked about the pattern and process of economic and social activities over the surface of the earth and new methods of analysis have been developed to answer them. Within agricultural geography, concepts and theory have been exposed to many contradictory views (Evans *et al*, 2002; Buttel, 1982) and have been affected by the lack of a consistent sound theoretical origin. This has changed in the last few years as the industry itself has become more and more integrated into advanced capitalist society and consequently the development of agricultural geography has received increased attention among academics.

Since the late 1960s, industrial capital has gradually played a more important role in changing the nature of agricultural and rural development (Robinson, 1990), inflicting its capitalist structure onto this sector – thus converting it into a more business-oriented affair. Marsden *et al* (1986) observe that overproduction of agricultural goods led by a profit - rather than demand - oriented market, better and more available technology, and the growth of state help for the sector, have increased the tendency towards concentration and centralisation of capital, both within farm businesses and firms in other parts of the food industry. For Marsden *et al* (1986), this agricultural restructuring includes a number of elements demanding close theoretical attention (e.g. farm adjustment strategies and the effects on the farm family). For Deslauriers *et al* (1981) the restructuring of the farm business affects the reorganisation of the socio-economic structure of farm production.

Although Kitchin and Tate (2000) argued that many geographers have reservations concerning the genuine relevance of philosophical issues to geographic research, no research, whether related to geography or otherwise, takes place in a philosophical vacuum. While not always clearly expressed, all research is channelled by a set of philosophical inspirations which have a role in the selection of the methodology used to conduct research. These concepts inspire or encourage the selection of topics for research and the manner in which completed projects are subjected to evaluation. For human geographers, a large number of schools of thought exist on the best way to approach the relationship between society, space, place and environment. Indeed Cloke *et al* (1992) claimed that modern human geography is remarkably varied, both in the topics scrutinised and in the collection of approaches and methods of analysis.

The aims of the research are to compare diversification and pluriactivity, so it is important to understand the theory available for human geographers and to apply those theories in the agricultural context. The aim of the chapter is therefore to review the various philosophical approaches used in the study of diversification/pluriactivity and to present the strategy chosen by the researcher to analyse and compare farm diversification in sud Manche (France) and west Dorset (UK). This chapter discusses the different philosophies used in human geography and more precisely in agricultural geography. Prior to selection, each approach is examined, and consideration taken of their relative strengths and weaknesses. It is also important to look beyond the frequently over-complicated language used, which may lead to confusion. After outlining the most frequent philosophies used in agricultural geography, and more precisely those used in the study of farm diversification and pluriactivity, the chapter reviews the methodology used for data collection in both study areas. The theory chosen for studying diversification and pluriactivity influences the choice of methodology for the project. Because of the aims and objectives of the research, the researcher has decided to combine both quantitative and qualitative analysis (multi-method analysis) thus including various aspects of theoretical approaches.

There is a distinct difference between quantitative and qualitative analysis (Table 4. 1). According to Hoggart *et al* (2002), a quantitative approach is to isolate and define categories as precisely as possible before the study is undertaken and then to determine again with great precision, the relationship between them. The qualitative approach on the other hand often isolates and defines categories during the process of research. The qualitative investigator expects the nature and definition of analytic categories to change in the course of the project.

According to Hoggart *et al* (2002) it is no longer controversial to state that research quality should be enhanced by multi-method investigations. The advantages of multi-method approaches in the study of farm diversification are asserted on account of the capacity to undertake 'triangulation', which means the use of a series of complementary methods in order to gain deeper insight to the problem. The advantage of such an approach is that it enhances capacities for interpreting meaning and behaviour. Each method is now investigated in turn, starting with the quantitative survey.

Table 4. 1: Quantitative and qualitative methods

Method	Characteristics	Advantages	Dis-advantages	Theoretical approach linked
Quantitative	Analytical Questionnaires Large numbers of cases and fewer attributes Highlight general trends	Data are representative of the sample population More respectability Organised	Conformist	Political economy Associated with positivism; structuralism Behaviouralism
Qualitative	Interviews Observations Focus on large numbers of attributes over small numbers of cases Understanding distinction, meaning	Data are not representative Revelation of attitudes, decision-making choices	Messier More expensive to collect data	Humanistic geography Post-modernism Feminism Cultural

Source: Adapted from Hoggart *et al* (2002)

4. 2. Quantitative method

In order to meet the aims of the research, the researcher decided to use a multi-method analysis. The determination of a multi-method analysis was decided after a review of theories used in agricultural geography. This section presents the theories associated with the project, namely, political economy associated with some aspects of positivism, behaviouralism and humanistic (as the qualitative work is concerned not just with decision-making but also with experiences and culture). The section then refers to the characteristics of quantitative research.

According to the aims of her research, the author is interesting in farmers' experiences and culture, as evidenced in aims 4 and 5, and hence the need to utilise both a behavioural approach (to look at decision-making) and a humanistic approach (to look at culture/experiences). In order to answer aims 1 and 2 of her research, the author needs to use a political economy approach whereas a positivist approach is used to answer aim 3 of the research (Table 4. 2).

Table 4. 2: Relation between aims and philosophical approaches used

Aims	Philosophical approaches
1- To understand the changes in the wider rural economy and its restructuring as farm decision-makers are being required to make investment decisions within changing economic and policy environments	Political economy
2- To explain how the management of risk and market uncertainty within a strategic economic and social context have an impact on decision-making for diversification/pluriactivity	Political economy
3- To establish the nature of diversification/ pluriactivity, its components parts and its extent in two dairy areas: sud Manche (France) and west Dorset (UK)	Positivism
4- To examine decision-making at the level of farmers and farm business (i.e. entrepreneur, family life cycle and capital accumulation)	Behavioural Humanistic
5- To analyse diversification quantitatively and qualitatively and compare farm diversification in sud Manche (France) and west Dorset (UK) by focusing on the economic, socio-cultural and political aspects of on-farm and off-farm diversification;	Behavioural Humanistic

Source: Author

4. 2. 1. Theories in quantitative research

4. 2. 1. 1. Positivism

Positivism is defined as a philosophical doctrine that denies any validity to speculation or metaphysics. Sometimes associated with empiricism, positivism maintains that metaphysical questions are unanswerable and that the only valid knowledge is scientific knowledge. The basic tenets of positivism are contained in an implicit form in the works of Francis Bacon, George Berkeley, and David Hume, but the term is specifically applied to the system of Auguste Comte (1798-1857), who developed the coherent doctrine in the 1830s in France (Bailly and Beguin, 1998). In addition to being a dominant theme of 19th century philosophy, positivism has greatly influenced various trends of contemporary thought. Logical positivism¹ is often

¹ Logical positivism, also identified as logical or scientific empiricism, is the modern school of philosophy that endeavoured to introduce the methodology and accuracy of mathematics and the natural sciences into the discipline of philosophy. The development originated in a group called the Vienna Circle, which formed around Moritz Schlick when he was the Chair of Philosophy at the University of Vienna in the 1920s. The Vienna Circle was the source of the modern tendency to believe philosophy to be an analytical, rather than a speculative investigation (Bailly and Beguin, 1998). The position of the original logical positivists was a mélange of the positivism of Ernst Mach with the logical concepts of Gottlieb Frege and Bertrand Russell, but their enthusiasm was derived from the writings of Ludwig Wittgenstein, who lived for a time near Vienna, and G. E Moore. For the logical positivists, philosophy was not a theory but an activity. They made a combined effort to elucidate the language of science in demonstrating that the substance of scientific theories could be condensed to truths of logic and mathematics tied with propositions turning to observations which were used in producing and verifying arguments.

considered as a direct outgrowth of 19th century positivism. Various versions of positivism exist, several of which have a high degree of complexity. At first, positivism was opposed to the 'negative philosophy' that prevailed in France prior to the 1789 Revolution. Comtean positivism distinguishes science from metaphysics and religion. Positivism regarded metaphysical questions as unscientific. Comte defined positivism as a scientific ideal in line with Locke's principles.

Positivism is not as anti-authoritarian as it claims to be because it seeks authority from the methods of natural science. This has appealed to geographers who have used and adapted the term positivism to scientific methodology by testing hypotheses in order to generate laws. The determinism of the 19th century proved to be rather an attempt to establish laws and to use hypothetic-deductive methods. As a consequence of the Quantitative Revolution² during the 1950s and 1960s, many geographers came to believe that science really offers a unity and that geography ought to develop laws in quest of science and should draw on the hypothetic-deductive method. In this way, they recognised a major element of positivism (Unwin, 1996). There are other elements in positivism that have been part of geography since Darwin's time. As a consequence of the 1950s and 1960s, geography was labelled as an empirical science: its data were concrete and studies involved that which really exists (especially what exists at the present time).

The creators of the modern discipline of geography often relied on perceptions of science, which were derived from positivism. Humboldt in the 19th century discarded the profound empiricism on which Comte's system was built, developing a complex and sophisticated philosophical method in its place (Bowen, 1979). However much of the subsequent history of geography was dominated by the often implicit approval of some or all of these hypotheses (positivism belongs to that broad tradition known as empiricism which argues that human knowledge is derived from experience rather than from some sort of divine illumination or innate source). When they were eventually clarified during the Quantitative Revolution, the so-called 'New Geography' which resulted was less of a fundamental departure than a logical broadening of ideas which were already generally acknowledged by many geographers (Guelke,

² Burton (1963) defined the "Quantitative Revolution" as the extreme alteration of spirit and purpose which Anglo-American geography was subjected to in the 1950s and 1960s, taking the place of an earlier idiographic approach and focusing on a real differentiation and a monothetic hunt for models of spatial structure. Although it contained a suitable and extensively used shorthand, most commentators highlighted its restrictions by prefacing it with the qualifying "so-called". This is in fact doubly misleading. First, it was not restricted to the use of statistical and mathematical methods but also included the conjoint foundation of formal theories of spatial organisation. Second, it was in some senses more evolutionary than revolutionary (Chisholm, 1975), honouring a long-term but ill-defined dedication to positivism. In more general idiom, the phrase is clearly inspired from Kuhn's ideas of paradigm modification and is susceptible to the same criticism as that has received.

1978; Gregory, 1978). In so far as these were in any sense philosophically novel, they derived their originality from a commitment to logical positivism.

Until the early 1950s, geography had used descriptive, largely qualitative methods. Fred Schaefer (1953) is extensively recognised with creating a move to seek “laws” which would explain geographical phenomena, particularly within the field of human geography, thus pioneering the adoption of logical positivism and the concept of geography as a science of spatial distribution. This movement to locational analysis was seen as a revolution in geography and was associated with widespread use of quantification. From that time, quantitative methods were adopted; at first slowly, with an emphasis on hypothesis testing, using statistical techniques such as the chi square test and correlation, but later making use of the ideas of social physics to apply mathematical models and more sophisticated analyses. The trend was for geography to develop into a spatial science and the effort of thinkers like Walter Christaller (1933), August Losch (1954) and Alfred Weber (1909) provided crucial insights.

The ‘glory days’ of logical positivism and the Quantitative Revolution were short-lived. The Quantitative Revolution did not occur without criticism. Dudley Stamp (1966: 18) chose to term the Quantitative Revolution a “civil war” and noted that the use of quantification had many aspects in the vein of political ideology; it was more or less a religious conviction to its followers and “its golden calf is the computer”. For Broek (1965: 21) “there are more things between heaven and earth than can safely be entrusted with a computer”. Even Ackerman (1963: 432), who was one of the supporters of quantification, cautioned that “the danger of dead end and nonsense is not removed by hardware and symbolic logic”. Stamp (1966) also showed that there were many fields of enquiry in which quantification may stultify rather than assist improvement. Temptation would exist to abandon information which could not be punched on a card or fed onto a magnetic tape. There was also a danger that ethical and aesthetic principles would be neglected. Broek (1965: 6) expressed the view that the hunt for general laws, at a high level of abstraction, “goes against the grain of geography because it removes place and time from our discipline”. Quantification was criticised for being unrealistic, changing humans into automata, for being too deterministic and for disregarding the significance of subjective know-how. Its lack of success in generating laws and widely-applicable models led to scepticism towards nomothetic approaches in geography. Despite widespread rejection of positivism, geographers have continued to use quantitative information and to test hypotheses statistically. In doing so, they have followed some of the principles of the scientific method while not fully accepting its rationale. Geographers therefore turned their backs on that major element of positivism, namely the unity of science with one methodology whose results are not modified by time and space.

For the purpose of my research, positivism is used, in so far as statistical tests are applied to test the data from questionnaires to show the relationships between the characteristics of farms and farmers and both diversification and pluriactivity. It is important to quantify the work but quantification alone is not enough and neither is the restrictive methodology of positivism. As such, the introduction of other theoretical approaches - like behaviouralism, political economy and humanism - are used in order to achieve a broader understanding of the study of farm diversification with all the decision-making processes this involves.

4. 2. 1. 2. Political economy approach

English classical economists such as Smith and Ricardo first used the term political economy³ in the late 18th century and early 19th century. Ricardo in particular emphasised two facets of economy and society that have remained pivotal in the definition of political economy: first, production and accumulation and, second, distribution of the 'surplus' so produced. Marx took up the issues of both production and distribution but then connected them to a theory of revolutionary change. After Marx, only the noun in political economy survived as neo-classical economics gained ascendancy from the late 19th century onwards. It was not until the 1960s that the original term was revived. In human geography, political economy first emerged in the late 1960s with radical geography and later, with an advanced Marxist approach, assisted with, in particular, Harvey (1973) and Castells (1977) writing on urbanism. Since the 1970s, human geography has been dominated conceptually by political economy theory, which is conventionally presented as the conformist reading of Marx (Duncan and Ley, 1982). Within this perspective, the actions of the individual are seen to be restricted by the wider forces operating in a politically-shaped society. Since the early 1980s political economy has become both more diffuse and more pervasive. Admittedly, it is difficult to find a common thread among the many uses of political economy within geography, but if it exists it is that in all practices the political and the economic are irrevocably linked, a sentiment not that distant from that proposed by the originators of the term. As stated by Marx (1968) and Lange (1963), the nature of theory in political economy is challenging and significantly related not only to method, but also to the nature of explanation and, most essentially, to the examination of social and economic adjustment in the context of dominant but adjustable social structures. As such,

³ The political economy approach can be defined as concern for "first, production and accumulation; and, second, distribution of the surplus so produced. It is the focus on distribution that really accounts for the political part of the political economy; for questions of apportioning the surplus among classes of society necessarily push inquiry beyond the purely economic, and into the spheres of the social and political" (Johnston, 1998: 446).

the attempt to integrate political economy perspectives inside institutionally-identified sub-areas (such as agricultural geography) would appear somewhat diversionary.

The implementation of political economy approaches has been suggested as one way of advancing the sub-field of agricultural geography from the 1980s (Marsden, 1988). The structural perspectives of political economy presented by Bowler and Ilbery (1987) under the wider heading of 'theory in agricultural geography' suggested that the requirement to expand the theoretical base of agricultural geography stems from the increasing awareness of the roles of non-farm capital and the state in the process of agricultural change and imbalanced regional development. A political economy approach to agriculture acknowledges that farm households are affected by the political and economic conditions of the capitalist mode of production in which they work (Evans and Ilbery, 1992). For Evans and Ilbery (1989), the most suitable way to investigate farm-based accommodation and tourism was the adoption of a political economy perspective. The use of a broad political economy approach to the understanding of agricultural development was also encouraged in the *Journal of Rural Studies* by Marsden *et al* (1986, 1987). This perspective acknowledges a model of the behaviour of individuals as forced by the political economy in which such action takes place. The concentration and accumulation of capital are crucial courses of action in accounting for change in agricultural production relations; these are simple beliefs of Marxist ideology. The application of political economy explanations to the phenomenon of farm-based accommodation and tourism helped meet the observation that agricultural geography needed to expand its theoretical base in accordance with the growing structuralist paradigm in geography (Bowler and Ilbery, 1987).

Recently there have been several changes in political economy approaches to agricultural geography. During the last decade, the main areas of debate have transferred from materialist concerns about uneven development, changes affecting the family farm and the role of the state to the related questions of consumption and society. The highlight of the common challenges faced by economic geographers addresses the introduction of economic relations in social, political and cultural practices, together with the need for theoretical approaches which research the differential constitution of structural processes, their articulation in localities and the roles of actors. Common challenges meet those trying to understand the manifestation of economic relations and processes in social, political and cultural practice (Sayer, 1992; Amin and Thrift, 1995).

Marsden *et al* (1996) also argued that agricultural research is predicated upon propositions concerning convergence of interest in economic geography. First, the use of a political economy perspective draws attention to some disciplinary intentions, especially those explaining and

countering the effect of uneven development. The common problem implicates divulging the heterogeneity and fluidity of social and institutional forms of economic activity and measuring how space has some bearing on outcomes. Then, in developed countries, processes of economic and social restructuring are amplified by local and regional variations in development. The advanced discussion over socio-spatial interactions developed by well-known political economic theorists offers a case in point. At its extreme anti-spatial state, this discussion has suggested that economic and socio-cultural activities in advanced capitalist countries such as the UK and France are planned on a completely aspatial basis. Thus, Dunleavy (1982) would suggest that to study 'rural' anything is wrongly to characterise existing political and socio-economic structures. Yet, Massey (1985) has argued that, although space may be a social paradigm, social relations are created over space. To disregard space is to overlook the territory of social formation; therefore geography matters (Cloke, 1987). In the mid-1980s, the prevailing productivist values founded on enhancing food output were contested by a political crisis comprising interrelated budgetary, production and environmental problems. Political economy approaches tried to present better clarifications of agricultural changes, and in so doing they demanded "an interdisciplinary effort whereby the boundaries of subdisciplines are progressively weakened" (Marsden, 1988: 320).

The materialisation of new theoretical concepts in human geography provides ideas about their potential relevance to descriptions of changes in the agricultural sector in the last two decades. Ilbery and Bowler (1987: 329) argued that "there is now a need for agricultural geography to extend its theoretical base to encompass the structuralist perspectives of political economy". Marsden (1988) presented a more detailed critique of the 'problems and possibilities' of integrating political economy perspectives into agricultural geography. An extra stimulus to Bowler and Ilbery's research schedule was that agriculture itself had entered a phase of policy uncertainty after an extensive era of stability. Subsequently, in the 1990s political economy became the dominant dialogue to the extent that it virtually came to represent agricultural geography, though it was not without criticism.

4. 2. 1. 2. 1. Criticism of the political economy approach

The political approach has been subjected to several criticisms. Friedmann (1986) argued that the emphasis on structural processes had tended to divert attention away from the role of human agency. As such, a 'modified political economy' structure has been progressively adopted over the last 15 years. This new approach concedes the structural restrictions within society but also encompasses the belief that individuals must be recognised as active in determining their own

destiny. Within this perspective, internal and external production relations and environments have been identified (Whatmore *et al*, 1987; Evans and Ilbery, 1989). The former relates to the degree of free choice available at the individual level, while the latter is concerned with macro-scale forces operating in capitalist society.

Healy and Ilbery (1990) have made some critical points about the political economy approach. First, the role of the macro-economy has been exaggerated and attention given to the development of political economy theory has often taken debate quite far from reality. Furthermore, members of certain classes are incorrectly alleged to act in a standard way because of their class membership. Lastly, the role of individual choice has been overlooked in a challenge to highlight the deterministic role of 'wider structure' in society. This point has been somewhat compensated for in the progress of 'modified' political economy and realist approaches which acknowledge the role of choice within a limited economic environment.

According to Morris and Evans (1999), the political economy approach has its limitations as it is very broad and tends to ignore human agency and cultural aspects. As such, it is necessary to add a cultural dimension to the political economy approach. Agricultural work has a cultural perspective which needs to be addressed in order to get away from excessive reliance on economic theory and things related to the economy. Agricultural geographers have not paid enough attention to what farming culture really is. In fact, Morris and Evans (1999) declare that geographers should concentrate more on agricultural and farming society, especially when agricultural geographers plan to work on European agriculture with its rich and varied cultural associations. Moreover, political economy should not be used as the only approach to agricultural problems as it ignores the cultural dimension and is also aspatial. Traditional political economy follows the ideas provided by the state and ignores all aspects of spatial dimensions that many researchers now regard as "... largely from a political economy perspective, (they) tend to retain an excessive economism and a set of "top down", structuralist assumptions about the nature of change" (Wilson, 2001: 86). Thus, "consistently approaching an analysis of agricultural change from one theoretical position has tended to eclipse the rich variety of work on agricultural change which exists alongside that adopting a political economy perspective" (Morris and Evans, 1999: 350). In order to counter this, geographers have re-introduced a behavioural and spatial dimension in their research. This acknowledges that political economy does not address human agency, essential especially in the study of farming, as farmers behave in different manners in similar situations. That is why it is important to introduce a behavioural approach as well as a political economy approach in studies of agricultural development.

Because of these limitations and the author decided to look at individual farmers, their behaviour (behavioural approach) and their experience and culture (humanistic approach).

4. 2. 1. 2. 2. Political economy approaches in the study of agricultural changes

A number of agricultural geographers have drawn upon political economy concepts that emerged from Kautsky's *Agrarian Question* written early in the 20th century (Marsden *et al*, 1996). This infusion of political economy could have produced a consistent approach within agricultural geography (Bowler and Ilbery, 1987). However, it had the reverse effect as the political economy perspective engendered as much criticism as accord, even among its practitioners, and was not adopted wholesale. It did though, stimulate some agricultural geographers to look outward and collaborate in interdisciplinary research endeavours (Marsden *et al*, 1988).

In the mid-1980s, Marsden *et al* (1986) reassessed the main areas of debate, suggesting numerous potential approaches. They sought to counter "structuralist tendencies in political economy, insisting on the need to incorporate the specificity of farm business and family change", and to do so with reference to "particular times and places" (Marsden *et al*, 1986: 468). This guided researchers to look beyond the farm gate in their understanding of the agricultural sector, leading to relations with other disciplines and geographical subfields and extending the range of topics studied.

Marsden (1988), Marsden *et al* (1996), Short (1996) and Whatmore *et al*, (1996) have reinforced this in a multitude of reviews in the late 1990s. Paradoxically, political economy could be perceived as offering consistency in agricultural geography through a clearly defined theoretical position, as behaviouralist work and models of economic rent did before it, contributing to a strengthening of the identity of agricultural geography as a definite subfield of analysis (Morris and Evans, 1999).

For Marsden *et al* (1996: 362), it has, in its adapted outline, increasingly made great efforts to capture some appreciation of the "diversity of social relations and cultural practices shaping accumulation and regulation". However, approaching a breakdown of agricultural change from one theoretical position has had a tendency to hide the diversity of work on agricultural change, which exists alongside that adopting a political economy perspective. Consequently, work that makes no direct attempt to develop political economy ideas is predisposed to fall beyond the sphere of activity of reviews of political economy that dominated "progress" reports on

agricultural research in the late 1990s (Marsden, 1998). It also exposes a general shift within human geography away from the search for a single theoretical position and towards a diversity of narratives on research topics (Morris and Evans, 1999).

4. 2. 1. 3. Behavioural approach

4. 2. 1. 3. 1. Definition and uses

Behavioural geography is a psychological turn in human geography which “emphasised the role of cognitive and decision-making variables as mediating the relationship between environment and spatial behaviour” (Johnston, 1988: 30). Behavioural political science was heavily influential in North American social sciences in the 1950s and 1960s. The skills of political scientists, both in data-collection and data-analysis, have been considerably enhanced as a result of the efforts of behaviouralists. However, few contemporary political scientists would now endorse behaviouralist psychology – the idea that the ‘non-measurable’ and the ‘non-observable’ are not worthy of analytical attention – or the thesis that the formal analysis of legal and constitutional documents has no place in their subject. In political science a strictly behavioural approach is one in which explanations are based on agents’ explicit, expressed and observable behaviour; on ‘what is really going on’ rather than on non-measurable values and motives. Behaviouralists emphasise that theories should be ‘operational’, that is, capable of being empirically tested⁴. Behavioural research has introduced to geographical issues a more grounded emphasis on decision making. Certainly, the decision-making rules of the actors were the major concern of another influential body of research in human geography, which examined the geography of natural hazards. Wolpert (1964) showed that for a sample of Swedish farmers, optimal farming procedures inherent in normative models were not realistic. He studied whether farmers were maximising their utility functions and were in possession of a complete stock of knowledge about available economic prospects. From the findings, he concluded that farmers were not ‘optimisers’ but in Simon’s term ‘satisficers’. However it was argued that, although Simon’s satisficers did not behave like ‘economic man’, satisficers could nevertheless still be studied in a rational and systematic fashion.

Gold (1980) portrayed behavioural geography as a close ally of the positivist tradition. Disciplines other than geography contribute to studies, which in general are seeking inductive generalisations about human behaviour and environment so that these may be used as the basis

⁴For example, some psephologists claim that it is not possible to study scientifically the way people vote through focusing on their [non-observable] subjective feelings or attitudes, but it is possible to measure the impact of objectively defined class, ethnicity and religion on the way in which people vote.

for change through environmental planning. This refers to a small body of work, for a more extensive area of study, closely related to behavioural geography's focus upon the decision-maker, was developed in the 1970s and gave explicit attention to the perceived environment, to phenomenology and to humanism. Humanistic geography is at once an attempt at 'understanding the value and [the] human significance of life events' (Buttimer, 1979) and 'an expansive view of what the human person is and can do' (Tuan, 1976). One of the ways in which it differed from behavioural geography was its concern for the use of qualitative methods rather than more complex statistical methods. Until the 1970s, 'techniques in human geography' was synonymous with 'quantitative techniques' or 'statistical methods' for many geographers.

Behavioural research in human geography and related interdisciplinary fields has multiplied across a broad terrain of subject areas (Golledge and Timmermans, 1990). But in certain respects, despite its range, behavioural geography has become increasingly homogeneous, at least methodologically. Research has shown that farmers are not always setting their sights on profit maximisation, and it is recognised within behaviouralism that choice to some extent is open to farmers in the course of their decision making. As Ilbery (1978) pointed out, the decision-making process is predisposed by a multiplicity of issues and the socio-personal characteristics of farmers have a direct influence on the spatial patterns of agricultural activity which emerge. As Harvey (1969) predicted, behavioural geography became 'an appendage' of the locational school and as such was shaped by the Quantitative Revolution, developing a preoccupation with measurement, statistical analysis and a highly formalised methodology.

There have been several criticisms of behavioural approaches. According to Kitchen and Tate (2000: 9) behaviouralism was severely disapproved as it was characterised as mechanistic, dehumanising and ignorant of the broader social and cultural context in which decision makers operate. Further criticisms have been directed against the assertive nature of behavioural methodology, which either works in a simplified quasi-laboratory format or else disrupts the flow of spontaneous action in the field and controls the nature of responses in its use of formalised research mechanisms (Unwin, 1996). Although behaviouralism increased the comprehension of why farmers did something in certain ways, there was also criticism of the approach from a theoretical standpoint. First, behaviouralism was considered to have too strong a descriptive base, while the explanative base was especially weak. Furthermore, distinctions between attitude and behaviour have been insufficient. Due to a degree of inconsistency in behaviour itself, methodological foundations have been weak. In addition, too much emphasis was placed on the individual's freedom of choice, with little reference to constraints in the economic system. Finally, the importance of history and exclusivity of place were given

inadequate attention. Although the behavioural approach has limitations, it is still attractive and attractive to work with if it is linked to something else (Unwin, 1996).

4. 2. 1. 3. 2. The need for a behavioural approach in agricultural geography

As Philo (1992) argued, rural population and farmers have often been portrayed as 'homogenous entities' and the range of individual views has been ignored by political economists. Ward and Munton (1992) also argued for combining political economy and socio-cultural approaches to understand pesticide pollution regulation on farms. Ward (1993: 352) further observed that "to understand how new sets of regulatory, market and social pressures impact upon farm businesses and household models we will need to be more sensitive to the actions and values of individual actors involved". Furthermore, Wilson (2001) showed that there is little confirmation yet that the wide range of actor-oriented and behavioural literature on rural/agricultural change has been integrated into the conceptualisation of post-productivism. According to Wilson (2001), conceptualisations of post-productivism have conventionally shown inadequate awareness of local action and thought. He also argues that this point should be seen as part of a continued evolution of an actor-oriented and behaviourally-grounded approach in a post-structuralist framework. There is widespread acknowledgement in the literature that an actor-oriented and behaviourally-grounded approach would strengthen conceptualisations of post-productivism (Wilson, 2001). In rural research, there have been examples of research developing existing conceptualisations by providing insights into the questions on whether attitudes and behaviour of actors have been converted into 'post-productivist'. Ward and Lowe (1994) and Wilson (1997) take account of behavioural approaches to understand farmers' land-use decision-making processes to work on reactions of grassroots actors to agricultural policies and agri-environmental policies (AEPs) (Brotherton; 1991, Whitby, 1994; Wilson, 1997). Morris and Potter (1995) and Wilson (1996) used behavioural approaches to research on farmers' attitudes towards farming and the environment.

Behavioural approaches have also been used to analyse the interaction between pollution officials and farmers (Ward *et al*, 1995; 1998), and also to study the roles and attitudes of agricultural extension services and officials in policy implementation (e.g. Winter, 1996; Lowe *et al*, 1997, Cooper, 1998) as well as enquiry into actor views and aspirations at the macro-level (Clark *et al*, 1997; Hart and Wilson, 1998; Wilson *et al*, 1999; IFLS, 1999). Results from these studies highlight that the conceptualisation of post-productivism needs to go beyond analysis of broad ideological changes and that researchers should also think about whether values of actors directly concerned in the processes of agricultural/rural change (e.g. farmers, agricultural

extension services, agricultural business managers, policy officials) replicate the proposed shift toward a post-productivist agricultural regime (PPAR). For farmers, the key actors of PPAR, agricultural researchers should argue that only if farmers' approaches (and eventual changes in their management behaviour) designate substantial shifts towards post-productivist thinking (i.e. concern for environment, adoption of environmentally-friendly farming practices, acceptance of new forms of policy regulation, changing perceptions of the role of farmers and agriculture, acknowledgement of multiple actor spaces in the countryside) can it be recognised that a transition toward the PPAR has taken place (Wilson 2001). Shucksmith (1993) and Burton (1998) proved that such behaviour could basically be clarified through the fact that farmers' attitudes and behaviour originate in large part from the subconscious and cumulative assimilation of established labels of being a 'farmer'. Farmers' identity and origins are frequently placed in traditional perceptions of the role of agriculture. Thus, Shucksmith (1993: 468) argues that many alternatives potentially exposed to farmers such as 'post-productivist' forms of diversification may never genuinely be imagined because they are literally 'unthinkable'.

4. 2. 1. 3. 3. Adding a behavioural component to the political economy approach

Despite the significant merits presented by a political economy approach to understanding the development of capitalist agriculture, the perspective in the 1980s was theoretically and methodologically limited (Evans and Ilbery, 1987). Buttel (1982: 49-50) cautioned "this political economy perspective is more a vocabulary superimposed on readily accessible knowledge than a fundamentally new lever for extending the boundaries of our knowledge". Duncan and Ley (1982), in their extensive critiques of political economy and structural Marxism, argued that, in the rush to show how societal structures determine behaviour, individuals have been consigned to the role of non-decision-makers. Thus, the political economy approach as it applies to agriculture should be adapted to include a behavioural and cultural aspect. Such an element would acknowledge that individuals are 'active' agents in the determining of their own destinies (human agencies). As Whatmore *et al* (1987: 120-21) said, there is a need to look at the individual farm family members as active participants and "not simply as passive subjects of inevitable structural process".

Since the 1980s there has also been much more work done on agricultural environmental skills by Ilbery, Wilson, Potter and Morris among others. The analysis of agricultural regions in Western Europe suggests that processes of agricultural restructuring may be articulated through locally and regionally constructed spaces and landscapes. Even on the basis of a poor resource

base (Less Favoured Areas - LFAs) or landscape specific to particular rural aesthetics (environmentally sensitive areas - ESAs), the origins of restructuring remain in the international economic and political systems. These new explanations are also leading to more refined theoretical and methodological approaches varying from realism (Whatmore *et al*, 1987) and communicative action theory (Pile, 1990) to actor network theory (Murdoch and Marsden, 1995) and the sociology of science (Clark and Lowe, 1992; Murdoch and Clark, 1994). Recent work is increasingly attempting to rectify the balance between the conception of structures and the still poor understanding of the importance of farmers' own personal choices (Morris, 1993). For example, farmers tend to act in a certain way if they have the perspective of inheritance. In the last 15 years, there has been a tremendous amount of work done on agri-environment schemes which have focused mainly on farmers' motivations (Robinson, 2003).

There is a need to examine both the economy (via the political economy) and the social aspect (via a behavioural approach) as they are linked. People behave in a particular way, often depending on the tendency of the economy which tends to be driven by political considerations. That such complex relations among social, cultural and economic spheres are widely recognised across all economic sectors should support dialogue without disagreeing with the distinctive significance of rurality (Whatmore, 1993), or detracting from the particularity of agriculture as a biological conversion process (Goodman and Watts, 1994). Goodman and Redclift (1991) stated that farming regions are in competition against each other. This is stimulated by an international food industry in which agricultural commodities are continuously re-defined and re-valued as they are communicated within and between commodity chains. Furthermore, the increasing social and political disengagement of farmers from markets and regulators is a key characteristic of most contemporary food production despite the presence of a small expansion of local markets.

A solution must be established for a much more complex situation where rural changes are the consequence of specific amalgamations of political, economic, social and cultural links. This should function at a mixture of spatial extents, from the local to the international. However, a variety of rural areas will be more concerned by the recent misfortunes in agriculture than others, while some will be more profoundly affected in the move towards a flexible service dominated economy.

Two related topics are emerging in political economic analyses of agriculture. These are "social nature", involving the institutions and conventions of science and society, and environmental regulation and consumption, focusing on the cultural and political procedures of access to food and countryside (Wilson, 2001). It has also been shown that the vigour of political economy

approaches in agricultural geography parallels other areas of analysis concerned with the social area of economic relations and institutions (Granovetter, 1994).

As such, it is vital in the research on diversification to bring together social, economic, behavioural and cultural aspects of unstable agricultural development which underline the ways in which production and consumption networks are socially co-ordinated and power is allocated.

From the early/mid 1990s, geographers have increasingly started to move away from a reliance on political economy by recognising that the behaviour of individuals and groups is important, and hence the need to combine political economy and behavioural approaches. This has included and developed the application of Actor Network Theory (ANT). In the 1980s, Actor-Network Theory (ANT) started in Paris as an exploration of actor-networks, and is current through to the special issue of *Society and Space* published in 2003. ANT is an interdisciplinary approach to the social sciences and technology studies, and in terms of difficulty and locality closely relates to research on activity theory, the sociology of knowledge and systems theory. According to Murdoch (2000:410) "Actor-network theory examines the complex composition of networks in the modern world and seeks to understand how the networks gain their strength and how they achieve their scope". The ANT perspective attempts to explain and interpret social and technological evolution using neither technical-material nor social reductionism, but rather it incorporates a 'principle of generalized symmetry', that what is human and non-human should be integrated into the same conceptual framework. As a result, humans and non-humans are sometimes both referred to as 'actants'. This central tenet has raised concerns about human agency and identity, the ideas of voluntarism and determinism, as well as to whom (which scientists) would fall the task of discovering, interpreting and defining the parameters of vast networks of people and things. In addition, ANT attempts to dissolve the micro/macro-distinction which it asserts as historically problematic in social theory. According to Robinson (2003: 34) "ANT has been used to explain conservation attitudes and behaviour amongst farmers and others". This approach has also included an element of culture and human experience and hence the need to look at humanistic, post-modern and post-structuralist approaches.

4. 2. 1. 4. *Humanistic geography*

During the last two decades, geographers' engagement with new philosophies has brought a recognition of the merits of a wide range of other methods, mainly qualitative in nature, initially associated with the emergence of humanistic geography. Humanistic geography emerged during the 1970s and was advertised as offering 'an expensive view of what the human person is and can do (Tuan, 1976) and as an attempt at understanding meaning, value and [the] human significance of life events (Buttimer, 1979). Humanistic geography is often associated with the French School of Human Geography (Vidal de la Blache), but more recently it has influenced the development of the new cultural geography. The growth of humanistic geography during the 1970s was in part a reaction against dehumanising aspects of positivist-based enquiry (Entrikin, 1976, Robinson 1998) and also a direct alternative to the emphasis upon structural forces in Marxist geography (Duncan and Ley, 1982). It developed in conjunction with behavioural geography (see Gold and Goodey, 1984), but diverged as geographers like Ley, Tuan and Buttimer questioned the supposed objectivity of positivism (and behavioural geography) and stressed the importance of human agency rather than a more narrow concern with decision-making processes. It was the development of a geography that did not refer to people merely as aggregate groups, but which sought to portray human experience and expression. It recognised that there was a social pattern and structures and it sought to capture this construction by use of new methods that could provide insights into human experience.

The author research combined a quantitative dimension (positivism and behaviouralism) with a qualitative dimension (covering some aspect of behaviouralism but also experience and culture). As such, the author is not just adding a behavioural component to political economy but also a cultural/experiential dimension. The author is interested in farmers' experience and culture in order to understand the decision-making process they use regarding diversification and pluriactivity. The cultural aspect is also quite important in order to compare the decision – making process in the two study areas. The author focused on the decision-making process regarding diversification and pluriactivity as well as experience and culture.

The use of aspects from positivism, political economy, behaviouralism and humanistic geography has helped the researcher to select a methodology to understand the decision-making process for diversification/pluriactivity. The next section details the quantitative methodology that has been used to provide the author with sufficient data for the statistical analysis for the starting point of the study and comparison of diversification and pluriactivity in two dairy areas.

4. 2. 2. Quantitative surveys for the study of diversification and pluriactivity in sud Manche and west Dorset: Methodology

The aims of quantitative surveys are to develop a representative sample of the research under study, revealing how particular trends are distributed. Large-scale quantitative surveys generally use 'closed-type' questions in a standardised format suitable for applying a variety of statistical analyses to the quantitative data generated. Such a standard type of questionnaire helps to reduce the problem of interview bias, so enabling valid comparisons of data. Table 4. 3 presents the advantages and disadvantages of the different types of surveys - written, oral or electronic - which can be used in research.

Questionnaires were used as they provide a base for further analysis of diversification/pluriactivity. They allow the researcher to identify key farm and farmer characteristics which have an impact on diversification/pluriactivity and they also identify the nature of diversification/pluriactivity. Quantitative research is associated with questionnaires in order to highlight general trends and to generate data for statistical analysis. Although questionnaires have been criticised, the criticism tends to be directed towards quantitative studies and structured questionnaires made up mainly of closed questions. Questionnaires are restrictive in the information gained due to the use of closed questions. They are largely descriptive; they are often statistical and they also are unable to establish a direct 'causal link' between variables. However, quantitative questionnaires are useful in the early stage of this research as they provide a base for further analysis on farm diversification and pluriactivity and then allow the researcher to focus on particular aspects of the project using a qualitative approach such as in-depth interviews.

For all types of surveys, some basic practicalities have to be considered before the surveying begins. For instance, it is necessary to find the most convenient time to carry out the data collection (this becomes particularly important in interview surveying and group-administered surveys) and how long the data collection is likely to take. Questionnaires were sent out in winter 1998/9 for sud Manche and autumn 2001 for west Dorset as it is a quieter time for dairy farmers at that time of year as the silage is finished and livestock may still be outside during daytime. Finally, practical arrangements for administering the survey were necessary. Piloting the survey helped in determining the time it takes to administer, process, and analyze the survey, and it also helps by eliminating some of the easy mistakes or unclear questions. Before deciding on any structure, the structure of questions had to be confirmed, having in mind the type of answer expected and how the answers would be analysed.

Table 4. 3: Advantages and disadvantages of different types of survey

SURVEY TYPE		STRENGTHS	WEAKNESSES
WRITTEN	Mail	Convenience Sampling –internal link Low cost Provide access to widely dispersed samples Respondents have time to give thoughtful answers, look up records.	Low response rate Ability of respondent to answer survey Not quite effective Disadvantages of not having interviewer involved to explain more obscure questions Need good mailing addresses for the samples
	Drop-off	Convenience Response rate Interviewer can explain research, clarify some points Effective Opportunity to give thoughtful answer.	Time Sampling Response rate High cost Long period of data collection
	Group administrated questionnaires	Rate of Response Specificity	Sampling Scheduling High cost
	Snowball	Cost	Time No follow up possible Lower response rate
ORAL	Personal interviews	Personal contact Response rate better Very effective Explanations of questions Respond to queries. Rapport and confidence building	Bias Type of question possible Attitude High cost Long data collection period Sample may be more accessible by other methods
	Telephone interviews	Short data collection period Effective	High cost Sampling limitations Questionnaires constraints Less appropriate for personal and sensitive questions
ELECTRONIC	e-mail	Cost saving Ease to editing /analysing Faster transmission Easy to use pre-letters Higher response rate	Sample limitations Lower levels of confidentiality Layout and presentation issues Additional orientation/instructions Potential technical problems with hardware and software Response rate Ethical considerations

Source : Adapted from Kitchen and Tate, 2000

4. 2. 2. 1. Design of questionnaire

Because questionnaires seek a mix of descriptive and analytical answers, questionnaire surveys use various types of questions (Table 4.4) in order to collect sufficient information. Table 4.5 reviews the advantages and disadvantages of each type of question. Descriptive questions tell us 'what' and analytical questions tell us 'why'. These aim to generate both factual and subjective data relating to people and their circumstances, the behaviour of people and attitudes, opinions and beliefs. Questionnaire data to be analysed quantitatively are usually generated using close-ended questions. Open-ended questions require some form of content analysis which seeks objectively and quantifiably to identify patterns within the text.

Table 4.4: Characteristics of questions

Questions	Characteristics
Close-ended question	often used in the beginning of the survey limit respondents' answers to the survey. The participants are allowed to choose from either a pre-existing set of dichotomous answers, or multiple choice with an option for 'other' to be filled in, or ranking scale response options.
Open-ended	do not give respondents answers to choose from, but rather are phrased so that the respondents are encouraged to explain their answers and reactions to the question with a sentence, a paragraph, or even a page or more, depending on the survey. The respondents give their answer using their own words. Often used at the end of the survey as they allow for more expansive answers
Close-ended with ordered response	The respondents have to find the most appropriate place on the continuum for their answer.
Close-ended with unordered response	The respondents are given a list of answers to choose from. These questions are also referred to as multiple choice.
Partially close	The respondents have to find the most appropriate answer from a list of options and space is given for them to explain their choice.

Source: Adapted from Hoggard *et al* (2002)

Table 4. 5: Advantages and disadvantages of question types

	Advantages	Disadvantages
Close-ended	<p>better suited for computer analysis: every answer can be given a number or value so that a statistical interpretation can be assessed</p> <p>can be more specific, thus more likely to communicate similar meanings</p> <p>take less time for the participant and the researcher, and so are a less expensive survey method</p> <p>high response rate</p> <p>respondents must fit their experience into the researcher's categories, which may be perceived as impersonal and can really distort what respondents mean by limiting their response choice</p>	<p>may not offer the respondents choices that actually reflect their real feelings because of the simplicity and limitations of the answers</p> <p>do not allow the respondent to explain that they do not understand the question or do not have an opinion on the issue</p> <p>restrict the respondent response</p> <p>constrain the respondent to give a 'set' answer.</p>
Open-ended	<p>excellent way of exploring unknown subjects, as they give the respondents the opportunity to give their opinion.</p> <p>useful when the respondents are asked to estimate or give an exact number.</p> <p>are suitable to situations in which precise information is needed.</p> <p>allow respondents to include more information, including feelings, attitudes and understanding of the subject. This allows researchers to better access the respondents' true feelings on an issue.</p> <p>allow the respondent to explain that they do not understand the question or do not have an opinion on the issue.</p> <p>cut down on two types of response error: First, respondents are not likely to forget the answers they have to choose from if they are given the chance to respond freely. Moreover, open-ended questions simply do not allow respondents to disregard reading the questions and just 'fill in' the survey with all the same answers (such as filling in the 'no' box on every question)</p> <p>Because they allow for obtaining extra information from the respondent, such as demographic information (age, gender, etc.), surveys that use open-ended questions can be used more readily for secondary analysis by other researchers than can surveys that do not provide contextual information about the survey population category such as farmers.</p>	<p>do not provide accurate measurement</p> <p>are more difficult to code.</p> <p>answers have to be coded so they tend to lose some of their initial meaning</p> <p>it is difficult to compare the meanings of the responses because open-ended questions allow respondents to use their own words.</p> <p>time constraint for the respondent to answer those questions may lead to a high level of non-responses.</p> <p>The lack of space for a detailed and complete answer as well as illegibility of the respondent's handwriting can be problematic.</p> <p>This kind of structure is very demanding for the respondents as they have to formulate the answer in their own words. It also produces a various range of answers and only a few might mention the topic.</p>
Close-ended with ordered response	<p>quite specific.</p> <p>less demanding for the respondents</p> <p>quite easy to code</p> <p>quite easy to analyse.</p>	
Close-ended with unordered response	<p>respondents are given the answer</p> <p>Respondents have to select the one that best reflects their situation.</p> <p>relatively easy to code and analyse.</p>	quite difficult to answer
Partially close	<p>Although answer choice is provided, respondents have the option of creating their own response. It has been proved that most of the time anyway the respondents choose their answer from the ones given.</p> <p>provide occasionally new information.</p>	

Source: Adapted from Hoggard *et al* (2002)

4. 2. 2. 2. Pilot survey

The researcher carried out a pilot survey in sud Manche to detect any major problems with the questions asked in the questionnaire (Appendix 4). No pilot survey was conducted in west Dorset because of the outbreak of the Foot and Mouth Disease. The objectives of the pilot survey were not only to survey a small number of farmers (N=50), to prepare the main questionnaire but also to determine the best survey methods to obtain an adequate answer rate. The objectives of the pilot survey were to collect data and provide analysis, which should enable the researcher to gain a sufficiently high response rate in order to give the research a reasonable degree of validity.

The pilot survey aimed to minimise measurement error. It asked specific questions that would not only provide credible information but also anticipate the respondent's answers. It also helped to determine if the respondent was willing to give the information. The questionnaire was designed and divided into several sections including *personal details and education, farm structure, work organisation, farm income, farming activity, agricultural changes, personal opinion, financial help and interview*.

This categorisation was necessary to make a comparison at a later stage of the research with the questionnaire used in west Dorset. The main question structures used were close-ended, partially closed and open-ended questions. Many tables were used to clarify the questionnaire and to guide the farmers with their choice. Using the pilot survey, a method had to be determined regarding how the questionnaire had to be delivered. The researcher decided to concentrate on five methods: mail survey, face to face surveys, telephone survey, drop-off survey and snowball survey⁵.

However, because of time and cost constraints, it was then decided that the mail survey would convey the main questionnaire. The drop-off survey was quite disappointing as the surveys were given to a local agricultural college in Saint Hilaire du Harcouët where most parents of students attending this college are themselves farmers. The subsequent snowball survey was unsatisfactory and there was no way of contacting the farmers in order to remind them to fill in the questionnaires, as addresses of the farmers were unknown. The face-to-face survey was completed during a fair frequented by many farmers in Saint Hilaire du Harcouët, sud Manche, but also at a local farmers' market, in Sourdeval, where farmers come and sell or buy mostly

⁵ Snowballing is a technique where one is put in contact with friends and acquaintances of initial contacts to construct a survey sample (Burgess, 1996).

calves. However, farmers were unwilling to take the time to answer the questionnaires as they were doing 'business' so this approach was not appropriate and it was too time consuming. The telephone survey was carried out using a prospectus providing addresses of farmers who had diversified. This method was also quite difficult as it can be quite expensive and farmers are not always willing to give up their personal details over the phone. Telephone surveys were expensive and the questionnaires would have to have been shorter if this method was used. So, the mail survey was the most effective for the project in terms of both cost and time.

The pilot survey enabled changes to be made in the questionnaire in order to make it easier to complete by the farmers. The following changes were made:

- Section 1: Personal details section as well as education section were summarised in a table.
- Section 2: The question about how much milk quota the farmer owns was added. The table on the organisation of the farm was detailed (parcels were numbered). Some questions regarding the organisation were put into tables
- Section 3. This section was previously part of section 2 in the pilot survey.
- Section 4: Section on income was added
- Section 5: Question regarding income moved to section 4.
- Section 6: Questions regarding activities on the farm moved to the previous section. Questions have been written in table, the question regarding justification for diversification were made clearer.
- Section 7: More space was made available for farmers to write down their answer
- Section 8: Tables were used instead of open ended questions
- Section 9: Contact details were asked in order to plan interview.

Some questions were re-formulated and some questions were deleted or added. The main questionnaire contained more tables to fill in and also a better explanation on how to fill in each section of the questionnaire. Generally speaking it appears that the farmers answered the

questionnaire rather well and only a few of them did not fill it up completely. A new and final questionnaire was designed and sent out in January 1999 to the French study area (Appendix 5) and, after translation, the survey was sent to the English study area in October 2001, after the Foot and Mouth outbreak (Appendix 6). The questionnaire sent to the British study area differed slightly from the French questionnaire but the differences were minimal:

- Section 1: Tables were replaced by closed ended questions
- Section 2: Some tables were replaced by close-ended questions, more questions about land use.
- Section 3: Less details asked about non-family farm employees
- Section 4: Currency has been adapted.
- Section 5: Question on principal production has moved to farm structure
- Section 6: More close-ended questions
- Section 7: This section came under the agricultural changes in the English version
- Section 8: Tables were replaced with closed-ended questions
- Section 9: Identical

4. 2. 2. 3. Main survey

The final questionnaire was sent out to 600 farmers in each study area and was divided into nine sections:

- Section one dealt with personal details in order to obtain information about the farmers and the household characteristics such as age, gender, education, location, and background.

- Section two dealt with the farm structure. This information was of relevance as the researcher could determine if farm structure is significant in the decision-making process involved in farm diversification or the pluriactivity process.
- Section three of the questionnaire looked at the work organisation within the farm. This section then helped to determine if diversification or pluriactivity was specific to one member of the household or if several household members were involved with diversification and/or pluriactivity.
- Section four concerned the income of the household over a decade and how it is distributed to the different activities on the farm unit. From the data collected the researcher was then able to assess the evolution of farm income and also if the farmers had adopted or dropped farm diversification or pluriactivity and whether this had an impact on total farm income.
- Section five also looked at the evolution of farm activities over a decade.
- Section six focused on the agricultural changes that had occurred on the farm.
- Section seven examined the respondents' personal views about agriculture in general, including agricultural policy and the outcome of diversification and pluriactivity.
- Section eight focused on financial matters.

The last section gave farmers the choice to take part in an in-depth interview. Once the survey had been re-designed and conducted, the results were ready to be processed and analysed. The author surveyed 600 farmers in sud Manche and west Dorset (Table 4. 6). For the French study area, 178 questionnaires were returned (29.6%) and 213 farmers replied from the British study area (35.6%) (Table 4. 6).

Table 4. 6: Response rate for the survey

	sud Manche	west Dorset
Questionnaires sent	600	600
Questionnaire returned and usable	178	213
Response rate	29.6%	35.6%
Those with diversification/pluriactivity	136 (77.2%)	156 (72.8%)
Those with no diversification/pluriactivity	42 (23.8%)	57 (27.2%)

Source: Author

4. 2. 2. 4. Sampling

In order to target farm diversification in the two study areas, a survey population was designed using the Yellow Pages, information from French agricultural syndicates (*Confédération Paysanne* and the *Centre National des Jeunes Agriculteurs -CNJA-*) which provided a list of farmers in the sud Manche study area as well as leaflets from the local government office, the *Chambre d'Agriculture*. The two syndicates taking part in the research are different in their political ideas so it is appropriate to use them, as they do not react similarly to the topic of farm diversification. In west Dorset, the National Farmer Union (NFU) did not wish to participate in the survey so farm addresses were found in the Yellow Pages and with the help of an Ordnance Survey map and the postal address book. Farms were located on the map and the addresses were found in the postal address book. This method of recording farms was time consuming and often not accurate as not only had some farmers vacated farms, but also many questionnaires were returned as the inhabitants of the 'farm' were not farmers. In fact neither the *Chambre d'Agriculture* which is a local branch of the Ministère de l'Agriculture et de la Pêche nor the Department for the Environment Food and Rural Affairs (DEFRA), formerly MAFF (Ministry of Agriculture Fisheries and Food), were able to provide the researcher with a complete list of farmers because of the Data Protection Act of 1998.

The size of the sampling frame reflects a need to have a representative number of farm households in each of the two study areas. In fact, 600 farms were surveyed in both sud Manche (France) and west Dorset (UK). The 600 farm-households were selected randomly from the compiled list of farm households in each study area.

According to Errington (1985) and Burton and Wilson (1999), the Yellow Pages give a representative sampling frame. Although previous studies in the UK have agreed that the Yellow Pages, as a sampling frame, have provided a sufficiently accurate estimate when the list from the former MAFF - now DEFRA - are not available, Burton and Wilson (1999) have noticed that the Yellow Pages may exclude some categories of farmers such as the less commercial ones or the hobby or part-time farmers.

For agricultural studies in the UK the most comprehensive and flexible sampling frames available have been provided by MAFF, now DEFRA, that was holding lists offering an almost total coverage of farmers in any given region (Clark and Gordon, 1980; Emerson and Macfarlane, 1995). However, use of these lists depends on official approval from the Ministry and typically involves restrictions on both the questions asked and the subsequent use of data

(Burton and Wilson 1999: 91). Nowadays the lists are not made available because of the restriction imposed by the 1998 Data Protection Act.

A popular alternative has been the use of the Yellow Pages business directory. This provides an easily accessible framework of names, addresses and telephone numbers under occupationally related headings. However, this sampling method is far from ideal but is nonetheless recognised by many rural researchers whose justifications for its use range from preclusion from official lists (Scambler, 1989) and absence of alternatives (Morris and Potter, 1995), to being based on previous assessments that the sampling frame is sufficiently representative (Holloway and Ilbery, 1996). Using the Yellow Pages as a source of data implies some restrictions: to be accessible via the Yellow Pages farmers must operate a British Telecom (BT) business line on the farm, accept Yellow Pages listing provided, and at the same time, advertise under a farmer related heading. The possibility that financial consideration may affect Yellow Pages listing warrants further investigation. While a business line or listing in the Yellow Pages is not an excessively expensive venture (£ 90 to £ 180 a year in 1997 depending on the farm area), it is a cost that financially constrained farmers may consider unnecessary during difficult years (Burton and Wilson, 1999). This suggests that the coverage, and therefore the representativeness of the sampling frame may fluctuate depending on the financial state of the farming industry. Emerson and Macfarlane (1995) conducted a comparative study using three sampling frames – the Yellow Pages, National Farmers' Union of Scotland (NFUS) list, and Scottish Landowners' Federation (SLF) lists – in order to ascertain which framework was likely to be most representative. The conclusion was reached that the Yellow Pages provided the best alternative framework to MAFF holding lists.

Burton and Wilson (1999) wonder whether farmers listed in the Yellow Pages are more likely to be in a secure financial position than farmers who are not listed. Furthermore, from the perspective of investigating decision-making, are farmers not listed in the Yellow Pages more likely to show behaviours and attitudes characteristic of 'life-style' farmers? Burton and Wilson (1999) also showed that there was a significant difference between the listed and unlisted groups in terms of their likelihood of having diversified, with unlisted farmers less likely to operate a diversification scheme on the farm. Results suggest that the more commercially productive the farm unit is, the more likely that it is listed in the Yellow Pages. This evidence of a 'life-style' oriented approach to maintaining the farm income is supported by non-listed farmers' resistance to diversification despite their lower income levels. Farmers were asked how dependent they were on the farm for income (including diversification enterprises), and those with higher dependency were more likely to be listed in the Yellow Pages. While at first glance this appears to contradict Burton's findings in a survey of farmers in Marston Vale, near

Bedford, that unlisted farmers are less likely to have diversified, research has shown that pluriactivity is commonly associated with 'life-style' or 'hobby' farming by commercially orientated farmers (Shucksmith and Winter, 1990), whereas evidence from the Marston Vale study suggests that diversification may be associated with operating the farm as a commercial business. However it is important to note that radical changes have occurred in the telecommunications industry. Since deregulation of the industry, there have been an increasing number of firms joining the sector, with currently over 50 competitors to BT (Sinden, 1995). It is now necessary to wonder whether BT's market share has declined to the point that the Yellow Pages do no longer provide the most comprehensive framework. To provide an accurate list of farmers (Table 4. 7), it was necessary to filter through the list from the Yellow Pages in order to eliminate any duplicates or foreign listings. By adding to the main list a list compiled from the use of OS maps and the postal address book, it was possible to avoid clusters and missing elements and thus the sample frame has relatively little bias. Furthermore, the author was able to avoid duplication in the list as the farmers list included both names and addresses so duplicates could be deleted from the list before the random selection of farmers. As such, bias in the sample frame was considerably reduced. While compiling the list of farmers, the author took good care to obtain an illustrative and representative sample. The number of farmers surveyed is really quite large and it is large enough to make comparison. The author did acknowledge the difficulty to get answer from part-time farmers in sud Manche, but the author strongly believes that even if more part-time farmers had taken part in the survey, their answer would have been similar to the ones already gathered.

Using a random numbers table, six hundred farmers were selected in each study area and were sent the postal questionnaire. Each questionnaire was sent with a covering letter explaining the context for which the specific questions were asked, with an emphasis about the confidentiality of the responses. A stamped addressed envelope was also provided for the farmers to return the questionnaire. A database was then used to allow the participants and the non-participants in farm diversification and/or pluriactivity to be identified using frequency counts as well as cross-tabulations of the main variables such as geographical location, farm size, type of farm and farm diversification type.

The postal survey revealed a propensity towards farm diversification and pluriactivity. It provided a starting point for the analysis but the explanation and understanding of the process of farm diversification and pluriactivity decision-making processes were examined in an intensive survey via in-depth interviews of selected farmers focusing on particular aspects of farm diversification.

Table 4. 7: Compiling a farmer population list

	Advantages	Disadvantages
Yellow Pages (France and England)	Accurate estimate of population parameters Best alternative when the comprehensive list from the Ministère de l'Agriculture et de la Pêche or MAFF/DEFRA lists are not available.	Exclude "less-commercial" or "life-style" farmers Farmers must have BT line Not every farmer can afford the cost of being listed in Yellow Pages Duplicates Outdated (newcomers in the population not counted in; leavers or dead farmers still in)
Syndicates list (France)	Accurate estimate of population Covers both adopters and non-adopters of farm diversification belonging to the syndicate Updated	Excludes farmers not belonging to syndicates (however, this represents a minority of French farmers). Non-farmers
Local government leaflets (France)	Provides addresses of farmers with specific type of diversification	Does not include all farmers who diversify (only the ones who belong to the network, "Les produits de la ferme")
Ordnance Survey maps Postal Address Book (UK)	Identifies farm but does not specify whether farms engage in agricultural activity or not	Address not always easy to identify Postcode identification is not always accurate, some (Dorset) DT postcodes are in Somerset and farmers did not reply as they did not feel concerned.

Source: Author

4. 2. 2. 5. Processing and analysing the results

Although there are many data-entry packages⁶ available for survey data analysis, the package chosen for the analysis of farm diversification and pluriactivity was SPSS. The questionnaire had many variables of a different nature and SPSS was the most appropriate package to deal with these. After receiving the returned questionnaires, data were input to the SPSS package ready for analysis in order to determine trends from the farms surveyed. From this, data were re-coded if necessary in order to identify which farm was participating in farm diversification or pluriactivity and which farm was not. Farms were then put into different categories depending on the type of diversification (i.e. structural, agricultural, enterprise), pluriactivity or combined diversification/pluriactivity. Once the data were collected, the results were assembled in a useable format that allowed comparison within the survey group, between groups, or both. Each

⁶ SPSS: Statistical Package for Social Sciences; can cope with most kinds of data,

SNAP: Offers simple survey analysis, is able to help with the survey from start to finish, including the designing of questions and questionnaires;

SAS: A flexible general purpose statistical analysis system;

MINITAB: A very easy-to-use and fairly limited general purpose package;

STATGRAPHS: General interactive statistical package with good graphics but not very flexible.

study area was analysed separately in the first instance and then further analysis was undertaken in order to compare them together in order to see the similarities and differences between the two study areas. From this farms were selected randomly in order to participate in the interviews to obtain more details about how and why they chose a particular type of diversification or pluriactivity. Interviews were necessary to justify and to explain the farmers' choices. Quantitative methods used in the research provided opportunities to look at variable linked to behaviour such as education, age, farm size, etc. However, the author decided to use qualitative method to further understand farmers' behaviour and it focused on farming culture and farmers' experiences and hence the link to humanistic approach as described in section 4. 2. 1. 4. The next section of the chapter presents the characteristics of qualitative method interviews.

4. 3. Qualitative methods

4. 3. 1. Generalities

Although they have increased in popularity in the last two decades, qualitative methods still tend to be undervalued as a research technique. Qualitative methods are used by researchers to break down the decision-making process by revealing attitudes, motivation and goals of adopters and their interaction with the external information environment. Qualitative methodologies are suitable for understanding how different processes such as farm diversification/pluriactivity come about and why differences occur in particular localities or between different farm households. In fact, quantitative methodologies do not offer this as they have a lack of explanation of why such processes are taking place and why some choices are made in favour of others. They also take no account of causal mechanisms such as anything specifically about the farm household (e.g. change in the life style) which has led farmers to choose farm diversification or pluriactivity. Quantification allows causation to be inferred through subsequent analysis. Qualitative approaches make numerous assumptions, several of which are particularly useful for the study of farm diversification and pluriactivity. They help examine the processes, not just the outcomes; how and why things occur not just the fact that they do; they avoid generalisations and they provide a real meaning behind events and actions (Hoggart *et al*, 2002).

By using an in-depth approach to the study of farm households, a more complete explanation can be reached. The less-structured research technique adopted uses informal and semi-structured interviews with mainly open-ended questions. Comparisons between the three types

of interviews possible are shown in Table 4. 8. Semi-structured interviews allow the researcher to be flexible and explore different outcomes of the decision-making process, while also being able to discuss previously thought-out issues (such as the impact of farm diversification on the decision-making role within the farm unit). Semi-structured questions allow the researcher to ask in-depth questions on the type of farm diversification, who runs it and how it happened. Also an informal dialogue with the respondent can lead to developing an interactive conversation between the researcher and the respondent(s). In qualitative surveys, data collected are purely descriptive and rely on the interpretations of words and not numbers. According to Cresswell (1994) qualitative research is an inductive process as the researcher builds concepts, hypotheses and theories from details, interpreting the specificity of each case rather than generalisations, as it is the farm household's realities that the researcher is attempting to understand. According to Cresswell (1994: 146), justification for using qualitative methods is approved if:

- a) Another methodology is “immature due to the conspicuous lack of theory and previous research;
- b) A notion that the available theory may be inaccurate, inappropriate, incorrect or biased;
- c) A need exists to explore and describe the phenomenon may not be suited to quantitative measure”.

The qualitative work in the thesis is concerned not just with decision-making, but also with experiences and culture. As such, the author used a humanistic and experimental approaches.

4. 3. 2. Qualitative survey

Qualitative data were obtained from in-depth interviews. There are three main qualitative techniques, namely interviewing, observation and focus groups to collect data. This section first reviews the different types of qualitative data and then presents the methodology used in the research.

The focus of the project is to identify the nature and extent of farm diversification and pluriactivity in both study areas. It aims also to explain farmers' reaction to policy changes and to changing external conditions such as the market, competition from other producers and changing consumer taste, and to obtain their views on whether or not they believe that farm diversification is one solution to the agricultural crisis. The results intend to focus on a deeper

understanding of the motivations, goals and experiences of farmers who have undertaken any on-farm diversification activities and/or pluriactivity as well as farmers who have decided not to adopt such a strategy. According to Cresswell (1994) this type of qualitative approach is named 'interpretative-descriptive' focusing on explanations and understanding of farmers' own words as the data for analysis.

4.3.2.1. Interviewing

Interviewing is the most commonly used qualitative technique as it allows the researcher to produce a rich and varied set of data in a less formal setting. Interviews can take many forms, ranging from structured to unstructured (Table 4. 8). Interviews differ from questionnaires in the nature of the questions and manner of presentation. While questionnaires are useful for asking very specific questions concerning quantitative information or for converting general information into closed form through rating and ranking, interviews allow a more thorough examination of experiences, feelings and opinions that questionnaires using closed questions could never hope to capture (Kitchen and Tate, 2000).

Table 4. 8: Type of interviews

Type of interviews	Advantages	Disadvantages
Structured	Concise Issues covered To the point Less extraneous material	Lack of details Goals, feelings, thought and motivation of the respondents may not be revealed Respondent has a limited choice for a response
Semi-structured	Good range of thought-out issues	Issues may be left out Interviewer has to be flexible
Unstructured	Cover many in-depth key issues Interview flows freely	Analysis of the interview difficult due to the vast amount of data Respondent may go off the point and the interview may then become time consuming

Source: Adapted from Kitchen and Tate, 2000

Interviews can provide rich sources of data on people's experience, opinions, aspirations and feelings. However, interviewing is not only asking a participant questions, it can also be a complex social encounter. Within a structured interview the conversation is highly controlled by the interviewer. The questions are highly structured and standardised. This yields responses that are not constrained into categories provided by the interviewer, and respondents can then give whatever answers they wish. Structured interviews are designed to try to increase the

comparability of responses and ensure each interviewee responds to all questions. Interviewees are asked questions in the same order; the exact wording and sequence of the questions is determined before the interviews are conducted. However, structured interviews have weaknesses. The structure and the standardisation allow little flexibility and remove individuality, and it may also strain and limit the naturalness and relevance of questions and answers. Furthermore, some questions might not be relevant to the interviewee and some answers, which are particularly interesting, cannot be detailed (Hoggart *et al*, 2002).

Within a semi-structured interview, the structure is more flexible. The researcher has a set of questions, which can be asked in any sequence or in a different wording style than used with another interviewee. The interviewer has much greater freedom to explore specific avenues of enquiry and logical gaps within data can be anticipated and closed. The interview then takes a more conversational feel while ensuring that all the topics of interest are covered. This method of interview provides a detailed and rich source of information. As the researcher has got a list of topics to be covered, no topics are left out. However, it is more difficult to compare the interviews as the order of questions is or can be different. It is also important for the researcher to keep the conversation floating around the topic to be covered in order to avoid the conversation from taking off in unanticipated and unmanaged directions (Kitchen and Tate, 2000).

Unstructured interviews have no formal structure and the questions asked are meant to emerge from the immediate context of the conversation and are asked in the natural course of a discussion. With little or no direction from the researcher, the respondents are encouraged to relate to their experiences, describe events that are significant to them and reveal their attitude and opinions as they see fit. The great strength of such an approach is that the interviewee can talk about any issue in any way they want.

4. 3. 2. 2. Observation

As Wolcott (1995) suggested, the difference between interviewing and observation is that in observation the researcher watches the event unfold whereas with interviews 'you get nosy'. Interviews are a self-report of experiences, opinions and feeling, whereas observation relies on the observer's ability to interpret what is happening and why. According to Marshall and Rossman (1992: 79) observation then "entails the systematic noting and recording of events, behaviours and arte-fact in a social setting". For the purpose of the research on diversification and pluriactivity, observational surveys were not employed. They are time consuming and not

necessarily accurate as observation of behaviour can be interpreted wrongly by the researcher and may be inappropriate for the type of information the researcher expects to collect. Instead, in-depth interviews were selected.

4. 3. 2. 3. *Focus groups*

A focus group approach was used initially to collect qualitative data in the sud Manche study area. However, this approach was subsequently dispensed with as it was not successful. Focus groups have some advantages, particularly as such collection occurs in real-life and in a social environment; focus groups are flexible. It is a quick way to collect results and at low cost. However, it has a few limitations. Focus groups can vary considerably and can be difficult to assemble. The environment must be conducive to discussion and the data can be difficult to analyse (Hoggart *et al*, 2002).

Focus groups are popular as a research method these days; they are simply discussion groups composed of members of the population to study. They are an exploratory research method, that is, they are useful in generating hypotheses to test in quantitative research. Unfortunately, focus groups are often used as a quantitative research method rather than as a qualitative one (Hoggart *et al*, 2002). Instead of using focus groups to generate hypotheses, the researcher treats them as a survey and uses them to test hypotheses, which have already been formulated. That is a bad idea for a number of reasons. First of all, the chances of getting a representative sample in focus groups are low. Focus groups take a relatively long time to conduct, so sample sizes are necessarily smaller than with other methods. And it is difficult enough to get people to answer a questionnaire that has been delivered to their homes; getting them to turn out in the evening and sit around for a couple of hours talking to strangers is even more difficult (and usually involves paying them money). Participants in focus groups therefore probably represent a much smaller segment of the population of interest than do participants in other types of survey. Payment creates another problem. The recipients of payment may try to say what the person paying them wants to hear. This is a variety of 'experimenter' effects – participants in research often try to be helpful and do what they think the researcher wants to see them do. After all, most of us want to be helpful and useful, especially if we're being paid! This problem is attenuated in mail surveys because the researcher is absent. In a focus group there is always a moderator to serve as a stimulus for good intentions. Then there are conformity effects. The pressure in groups to conform to the norm the group establishes has been well documented. Some important opinions may therefore not be expressed. For these reasons it is usually not a good idea to classify remarks made in focus groups, count them up, compare them, and then assume that the researcher learned something about the greater population in which s/he is interested. The best

approach is to analyse the discussion thematically and then test the researcher's analysis with a standard quantitative method and a new sample of consumers (Hoggart *et al*, 2002).

4. 3. 2. 4. Collection of qualitative data

Due to the nature of qualitative research, it is not possible to study the entire population in the quantitative database and, as a consequence, the study may miss some relevant issues. However, it is better to study a small sample in great detail rather than studying a larger sample and fail to fully understand the process under investigation. The quantitative survey provided a database of farmers who diversify (on-farm and or off-farm) or not, from which we can sample. After the quantitative analysis, which identified characteristics of farmers and farms but also the presence - or not - and the nature of diversification and pluriactivity, a sample of 15 farmers in each study area was selected for detailed investigation, resulting in a total of $n=30$. The sample size is not a critical component as statistical tests or generalisations of results do not apply. More exactly, the sampling method reflects the time and financial constraints of undertaking qualitative research while also being large enough to generate detailed and in-depth data on the adoption or not of farm diversification and/or pluriactivity.

A reserve list of 10 farms for each study area was also selected for 'back up' in case any farmers cancelled the interview. In such cases another farmer with similar characteristics would be approached. Farms selected for interviews were chosen on a few criteria related to the farm and the farmers including, size; presence or not of farm diversification or pluriactivity; type of on-farm diversification (i.e. structural, agricultural or enterprise); location; age. These criteria are important as they reflect the characteristics obtained from the quantitative survey. However, it is important to note that links between the criteria are indirect and consequently they are not necessarily causal.

Both diversifiers and non-diversifiers were interviewed, giving a fuller representation and maximum variation in the range of the sample population. The criteria chosen aimed to ensure a representative sample of farms in the postal survey. For example farm size was chosen as the literature suggest that smaller and larger farms are more likely to have diversification off and on the farm respectively (Higginbottom, 1996). The same applies to farmers' ages, as the literature suggests that younger farmers are more involved in diversification compared to the older farmers. It is therefore important to reflect those criteria in the sample. Furthermore it was useful to interview in each study area farmers with similar on-farm or off-farm diversification

such as accommodation or processing agricultural goods in order to make comparisons with another farm with the same activity.

The objectives of the interviews were to:

- reveal the different types of farm household undertaking farm diversification and /or pluriactivity, through a study of the family, resources, education, farming background, past experiences;
- understand the specific reasons why a particular type of diversification was chosen as opposed to an alternative pathway of farm development via the examination of the decision-making process involved;
- examine the characteristics of the diversification scheme;
- highlight the perceptions of advice and /or help from the local government office or farmers' union regarding diversification;
- draw attention to the future and the fear regarding farming activity and diversification.

Scheduling interviews is an important part in interview design as it gives the researcher a focus and direction while also allowing for flexibility and freedom to investigate where necessary. The first stage was to identify the focus of inquiry, how and why farmers adopt (or not) diversification and/or pluriactivity. Therefore, the main issues to explore included their motivation factors as well as their decision-making process.

4. 3. 2. 5. Question design

Driven by the literature review, the conceptual framework, and the research aims a number of ideas were generated to identify issues of inquiry. These were then categorised into several sections:

- the farm household
- the farm
- the presence or not of diversification and/or pluriactivity
- the external influence in the development of diversification (government, neighbours)
- concluding remarks, observations.

Within each section a number of questions were drawn up and put in a logical sequence as well as a number of possible prompts in case the interviewee needed them. The interview schedule

was then carefully examined and the most useful and relevant questions worth exploring were selected in order to understand the decision-making process involved with farm diversification. The questions during the interview focused on:

- background (about the farmer, the household and the farm characteristics)
- experience (what they have done, are doing and plan to do)
- opinions, perception or feelings (those questions dealt with the advice and help they received for starting a farm diversification scheme, and what they would expect to make it more efficient)

Interviews started after a short introduction by the researcher explaining how the interview was going to operate as well as a recall of details obtained from the postal questionnaire. It was essential to incorporate this information as it provided a starting point from which to investigate deeper by unwrapping what influenced the respondent to adopt farm diversification. The opening question was an open-ended question ensuring the interviewee could reply freely about their motivation, actions and feelings. For example, a farmer who diversified was asked how diversification started on the farm. Other questions were more precise ones and a probe would be added to encourage the respondent to detail further. The advantage of qualitative research is that the researcher is able to investigate deeper and to reveal the 'what', 'when', 'where', 'why' and 'who' of the decision-making process involved in diversification.

4. 3. 2. 6. Data collection

After the farmer was selected for interview, a letter was sent reminding them that they had already agreed at the end of the questionnaire to take part in an interview. A few days later a telephone call was made explaining how the farmer had been selected from the postal questionnaire and day and time of interview were arranged. If any of the farmers refused to take part in the interview, a farmer from the reserve list was contacted. Interviews in the same area were arranged on the same day and about two or three interviews were done per day in order to reduce costs and time for travelling.

The equipment for the interview was the interview schedule, pens and paper, tape recorder, tapes and spares, batteries and spares as well as a copy of the postal questionnaire. Directions to the farms were obtained from the farmers during the telephone conversation while organising the day and time for the interviews. Interviews took place in the morning, early afternoon and late afternoon if there were three of them, with the few exceptions of some being held in the evening, instead of the late afternoon schedule. No more than three interviews were held per day

as time to travel to interviews and from one to another one as well as time for the interview to be conducted had to be taken into account.

In order to get more information from the interviews, it was decided to tape each interview ready for transcription. Permission to tape farmers was asked at the beginning of the interview. No farmers refused to be taped. At the beginning of the interview information such as the name of the farmer, the location, date and time were recorded and the tape was also labelled. Interviews lasted on average one hour and a half ranging from 45 minutes to more than three hours. Taping the interview saved time, as the researcher did not stop the flow of the interview to take notes. However, transcribing the interviews was a very long process. Some of the interviews were transcribed during fieldwork, others were transcribed on completion of the fieldwork. Interviews were first written down and then entered into a computer. Any additional comments such as observations and or interruptions were added in brackets, as they did not transcribe on the tape. Places where the interview took place were also recorded as well as general information post-interview which were not recorded. Transcribing of the interviews was done soon after the interview in order not to lose any information.

4. 3. 2. 7. Data analysis

The data obtained from the interviews are evaluated in Chapters six, seven and eight. There are several methods by which we can analyse qualitative data. The simplest one presents a description of the facts where farmers use their own words to explain the issues of farm diversification and the researcher does not interpret this or the researcher can use a more difficult method by progressing to a high level of interpretation and grounded theory. For the purpose of her research, the researcher did not use the computer package NUDIST (Non-numerical Unstructured Data Indexing Searching and Theorising) as this package is more useful for large qualitative data. Furthermore, as Dey (1993: 55) argued “a computer can help us analyse our data, but it cannot analyse our data....we must do the analysis”.

This research follows a method of analysis that falls between the two. Here the researcher uses the respondent's own words and interprets them by selecting specific quotes to illustrate findings. In order to avoid any misinterpretations, the context in which the quotes occurs is explained if necessary. Qualitative analysis is representative in a causal sense, not a statistical sense. The method used to analyse interviews is non-mathematical and reviews what each interviewee says and then tries to provide some meaning to it in terms of understanding both farm diversification and pluriactivity.

According to Dey (1993), the core of qualitative analysis consists of the description of data, the classification of data and seeing how concepts interconnect. Analysing qualitative data is more than just describing data. The researcher wants to be able to interpret meaning and explain or understand the data generated. A qualitative analysis methodology consists of the description, classification and making of connections between data and is more iterative than linear as it has to follow an order. Description is central to research as it permeates all levels of enquiry and concerns the portrayal of data in a form that can be easily interpreted. Description of qualitative data seeks to provide a more thorough and comprehensive description of the subject matter.

While transcribing interviews, ideas and memos relating to the transcription were written down. There is a difference between ideas and memos. While ideas represent the researcher's own thoughts about the data, memos are notes about the data. This is the beginning of the description process. Once the interviews have been transcribed (Appendix 7A and 7B) the annotation process can begin. Annotating transcripts makes the researcher think about the data and will make subsequent categorisations and connections easier. Furthermore, annotations are also extremely useful guides to future data generation

Although categorising quantitative data is relatively straightforward as numeric data can be easily grouped into ordinal, nominal, interval and ratio categories and the relationships between data in these categories are rather logical, categorising qualitative data is not so simple. Placing qualitative data into meaningful categories can prove to be difficult. This process is made easier by using the annotations of the transcripts, which represent informal coding strategies. From this, it is for the researcher to define formal categories to help further analysis by allowing further and deeper insights. Once the main categories are identified, the researcher can determine sub-categories. Although the number of categories is unlimited, the list has to be comprehensive and the categories must all be exhaustive. All useful data must be included in a relevant category.

Once the data have been categorised, they can then be coded. This again is a long process, which consists of going through each interview transcript by placing a specific code next to each relevant piece of data, which can be a phrase, a sentence or a whole passage. The data are then ready to be put in relevant categories by using a cut-and-paste method. From this point, the data are sorted and the researcher can analyse them through comparison. Then the researcher identifies and understands the nature of relationships between data: how things are associated and how they interact. Through this process, the analysis of farm diversification and pluriactivity was undertaken.

Then the most important part of the data analysis is the corroboration of conclusions, which consists of 'cross-checking' of conclusions in order to try to avoid errors in analysis and interpretation. One of the main criticisms of qualitative data is that it is subjective, relying on the ability of the researcher to make subjective judgements concerning categorisation, to place a value on and interpret data and to think laterally. Corroboration is aimed at avoiding some of these criticisms by strengthening the claims made from qualitative data. This is concerned with integrity and validity. There are two ways to corroborate conclusions. The researcher can either try to think of possible alternative conclusions and then check whether they are more likely or valid; or check the quality of the data or compare the conclusion to those drawn from other studies. According to Kitchin and Tate (2000) both strategies should be undertaken before writing up the results as it is important that the researcher is confident about both the validity of her research and is prepared to stand by her conclusion.

However, researchers have to be careful when analysing qualitative data, as they are not 'representative' of the whole population under study. Furthermore, qualitative surveys do not aim to seek generalisations. What the method does allow is an understanding of the decision-making process and how farm households identify problems, how they choose to adapt to them (if they decide to do something about it at all) and how they search for a solution.

4. 4. Summary

This chapter reviewed the various philosophical approaches as well as the methodology used for the research. The author employed aspects of positivism with relevance to the application of statistical analysis of the quantitative data to show the relation between the characteristics of farms and farmers and both diversification and pluriactivity. It is important to quantify the work but quantification alone is not enough and neither is the restrictive methodology of positivism. As such, the introduction of other theoretical approaches is used in order to achieve a broader understanding of the study of farm diversification with all the decision-making processes this involves. Because farmers have to adapt to various policies set out by both national governments and the EU, political economy approach is introduced in the research as part of the quantitative analysis. The use of a political economy approach is justified as the author aims to see who (personal, other farmers, advisors) or what (capital availability on the farm, geography, policies) influences farmers to diversify or not.

The review of philosophical approaches concluded that political economy has been extensively used by agricultural geography researchers. However, my research goes further as it not only uses data to see where diversification and pluriactivity occurs but it uses various theories in

order to have a picture as close to reality as possible. Farmers are influenced by the political and economic conditions of the capitalist mode and this has an impact on their decision on diversification and/or pluriactivity. Because of the limitations of political economy, which tends to ignore farmers' behaviour, the researcher found it necessary to add a cultural/behavioural dimension to obtain insights to farmer decision-making and behaviour. A by-product is that this also enables the researcher to examine cultural differences amongst farmers, especially contrasts between attitudes prevailing amongst French farmers as opposed to English ones. The choice of using various approaches agrees with Morris and Evans (1999) who pointed out the limitations of political economy and the necessity to couple the approach with a behavioural/cultural aspect.

Farm surveys were undertaken in order to focus on the inquiry using semi-structured interviews with selected farm households who have or have not opted for either diversification and/or pluriactivity. The justification for using such methodology is that the researcher needs to understand a smaller number of cases rather than develop less detailed explanations of a large number of cases. Thus, this reflects the purpose of the study, which is to gain an understanding of how and why some farms are changing their farm structure with particular reference to how and why they choose (or not) farm diversification as an option.

An extensive postal questionnaire was sent out to farmers followed by interviews of selected farmers in each study area. Sud Manche was the first study area visited, and surveys and interviews were conducted between 1998 and 2000. The same process was undertaken in west Dorset between 2001 and 2002. The length of the surveys was due to the fact that the research was done on a part-time basis and also the timing of the surveys had to fit into the calendar of annual farm work. Furthermore, the outbreak of Foot and Mouth disease delayed the survey in west Dorset.

The qualitative approach used for the study of farm diversification and pluriactivity is very different from that gained in the quantitative methods. While the questionnaire is useful for asking very specific questions concerning quantifiable information such as age, income, location, or for converting general information into a closed form through rating or ranking, interviews allow a more thorough examination of experiences, feelings and opinions than closed questions could hope to obtain. Interviews are often informal in nature compared to the questionnaires and cannot be self-administered. While questionnaires have a formal question-answer structure, interviews are often described as entering and maintaining a conversation.

Because it gives significant weight to wider attitudinal influences, my research can be said to be helping to counterbalance the understanding of the structures and the understanding of the attitudes of various actors in the context of farm diversification and pluriactivity. In order to explore the attitude-structure dialectic to the full, farmers were questioned on their farming activities alongside an assessment of their attitudes and perceptions of farming and diversification issues. Chapter 5 presents the characteristics of the two study areas. The results are presented in the next three chapters. Chapter six analyses diversification and pluriactivity in sud Manche (France). Chapter seven examines diversification and pluriactivity in west Dorset (UK) and the author also provide a classification of farmers. Chapter 8 compares the findings between the two study areas.

Chapter 5: Presentation of the two study areas

Chapter 5: Presentation of the two study areas

5. 1. Introduction

The aim of this chapter is to present the two study areas, Manche and Dorset - two agricultural regions, which are dominated by dairy farming. The chapter explains the selection of these study areas for the study of diversification/pluriactivity in dairy regions. It also outlines the characteristics of farming in the two study areas.

5. 2. Selection of the two study areas

The author selected the French study areas first. In order to select a dairy area, the author looked at the spatial distribution of farm type in France. To select a dairy study area in France data from the *Chambre d'Agriculture* as well as from the *Ministère de la Pêche et de l'Agriculture* were consulted to indicate the principal dairying areas in the country. Both the *Chambre d'Agriculture* and the *Ministère de la Pêche et de l'Agriculture* possess reports on farming type according to each region of France, and agricultural census results were also available from these two sources. Further details on farming in each region were also available on the *Chambre d'Agriculture*'s website. According to the aims of her research, the author selected sud Manche, as it has been a dairy area for several centuries and Manche has the highest concentration of dairy cattle in France (even now after some reduction in numbers of dairy cattle) (Figure 5.1 and 5.2). The author focused more on sud Manche which is more agriculturally orientated than the north of the département which is more industrial. Moreover, there are also less dairy farmers in the north of the département than in the south.

Furthermore, sud Manche has the added attraction of having tourist potential. It offers a good potential for tourist activities as it has many attractions, such as Mont Saint Michel, Utah Beach and the ferry services to mainland Britain, Jersey and Guernsey and Granville (a well-know therapy centre, spa). The coastal location provides many opportunities for tourism (B&B, gîtes, ferme auberge, ferme zoo, etc).

Moreover, Manche is peripheral from large urban influences so its economy is more rural-based than Nord-Pas de Calais, for example. The author also looked at the broader rural economy of the regions as this may play a role in diversification and pluriactivity. There are a few factories such as l'ACOME (Mortain), 'Usine de Fabrication de bouchons pharmaceutiques (Brécey),

Figure 5.1: Location of dairy sector in France

Figure 5. 1: Location of dairy areas in France

Figure 5. 2: Distribution of dairy cattle in France

'Usine de Fabrication de boites à camembert' (Juvigny le Tertre), l'abbatoir (Villedieu les Poëllles), l'Usine Besnier (Torigny sur Vire). These factory might offer an opportunity for farmers to find part-time employment locally. It is also important to note that sud Manche is remote from major urban influences (for sud Manche, Caen or Rennes are about 1.5 hours drive away). The author also searched for study areas that had received relatively little academic focus in recent years. Incidentally, the author also had a personal knowledge of the area as her parents used to be dairy farmers there.

To select a study area in the UK, the author looked for a directly comparable region in the UK. The author looked at Coppock's agricultural atlases as well as information from MAFF, now DEFRA (Coppock, 1986). Coppock atlases showed a spatial distribution of farm type in the UK. Dairy areas are concentrated mainly in Dorset (and more specifically, west Dorset), north Devon, Somerset and in the Cheshire Plain (Figure 5. 3 and 5. 4). Once the author identified dairy areas, the author looked for physical characteristics similar to those in sud Manche. Both Manche and Dorset are also bordering the English Channel. As for sud Manche the author wanted to select a study area that had not been the prime focus of research in order to contribute to enhance the prospects of an original contribution to research knowledge. Although Dorset is not as concentrated in terms of dairying as sud Manche, dairying is the principal farming activity in the west of the county where agriculture constitutes the major economic activity and it does offer a good opportunity for tourist activity. Furthermore, Dorset has been quite remote from major urban centres. (in west Dorset, Dorchester and Bournemouth are also about one hour drive).



Figure 5. 3: Location of dairy areas in England

Distribution of Dairy Cattle

**Figure 5. 4: The distribution of dairy cattle in England
(The darker the area, the more concentration)**

Table 5.1 presents the characteristics of the two study areas. Both study areas are longstanding traditional dairying areas which are well removed from the effects of urbanisation and modernisation. They both had traditional rural economies reliant on farmhouse manufacture of cheese and butter, with little supply of fresh milk to local towns (see also Appendix 2). The coming of the railways and refrigeration then enabled both of them to send fresh milk further afield. However, in the 1950s they were both largely heavily reliant on traditional dairying activity.

Table 5. 1: Characteristics of Manche and Dorset

	Manche	Dorset
Area	5938 km ²	2655 km ²
Main economic activity (proportion of active population)	Agriculture (concentration of dairy cattle- south of the département))	Agriculture (concentration of dairy cattle – west of the county)
Geographic location	Bordering the English Channel	
Farm type	Mainly dairy but other types as well	
Population	479636	691200
Tourist activities	Mont Saint Michel Villedieu les Poëlles Granville Harbour American cemetery (saint James)	Jurassic Coast World Heritage Sites AONBs Bournemouth Weymouth Swanage
Coastline	330 kms	95 miles
Distance to the Capital city	250kms	200 kms
Average farm size	57 ha	165 ha
Number of farmers	15000	4968
Active population in farming	3.8 percent	1.6 percent
Average dairy cattle per farm	40	158
Milk quota allocation	216000 litres	N/a

Source: Adapted from DAFF, 2001, DEFRA, 2005, and Dorset County Council 2005

Although the author recognizes that the two study areas are not exactly the same in terms of agricultural activity, both regions are mainly dairying areas, offering a good potential for tourism activity.

5. 3. Agriculture in Manche

5. 3. 1. Characteristics of the Département

Manche is a traditional dairy area in the West of France (Figure 5. 5), with high potential for tourism activities. With over 330 kms of coastline, Manche is one of the principal maritime départements in France, and provides a great opportunity for farmers to diversify towards what was referred to in chapter 3 as structural diversification or 'para-agricole' activities. Tourist attractions include Granville's harbour, Villedieu les Poëllles, which is well known for its copper factory. St James is also well known as near this village there is the World War II American cemetery. Mortain has many natural features included in the Natura 2000 project, which attracts tourists to its waterfall and the Abbey Mortain. Jullouville has one of the most frequented sand beaches and both Pontorson and Avranches are near Mont Saint Michel. Avranches has many shops and also churches, and a botanical garden. Furthermore, recent improvements of the infrastructure makes the département more accessible from larger cities such as Rennes, Caen, Paris (250 kms) and other more 'inland' cities from the neighbouring départements such as 'l'Orne' for which the Manche coastline is the nearest. Farms in Manche are small (average farm size 42 ha in 1999, 57 ha in 2003) and vary in size depending on their type and organisation (DAFF, 2001, Chambre d'Agriculture, 2004). The farming population has been falling: there were more than a third of active people involved in farming after World War II, more than a quarter in 1955, and a fifth in 1962. Through the 1980s and 1990s, the decline has continued and nowadays less than 4 per cent of the active population are farmers, even though the overall rural population has increased (Hervieu, 1996; Ministère de l'Agriculture et de la Pêche, 1999).

5. 3. 2. Agriculture in Manche

Manche is a rural and agricultural département. In 2005, it had 6900 full-time farms and 8100 part-time ('*agriculture de double activité*') or retired farms (i.e. '*agriculture de complément de retraite*') (Chambre d'Agriculture, 2005). Full-time farmers cultivate 88 percent of the agricultural land of the département, while the part-time farmers farm 7 percent and the hobby/retired farmers use 5 percent of the agricultural land. Although the number of part-time/hobby/retired farms was stable until 1990, their number has decreased steadily ever since (Chambre d'Agriculture, 1997). There are twice as many retired farmers compared to part-time farmers still working on the land. Part-time farmers usually farm less than 10 ha and retired farmers have an average farm size of 5 ha or less. Part-time farmers and retired farmers often

have grassland-only farms but they rarely have dairy cattle. These farms have a negligible impact in terms of production output. More and more farms choose to be GAECs or EARLs for tax purposes. In sud Manche, there were 950 GAECs and 830 EARLs – i.e. around ¼ of all full-time farms in 2003 (Chambre d'Agriculture, 2004). Over the last decade, the number of full-time farmers has decreased at a steady rate of 4 percent per year. Manche, and especially the south of the département, is a dairy region: 81 percent of farms are dairy farms (Chambre d'Agriculture, 2004).

Agricultural land in Manche represents 473 000 ha of 599 000 ha of the total land surface of the département (DAFF, 1999). Grassland covers 2/3 of the agricultural land use. Only mountain areas have a comparable grassland coverage in France. This is related to the temperate climate in Manche which favours grass growth. However, much of the grassland is 'improved' sown pasture and there was more land under the plough in the 19th century. The decrease of cereal prices encouraged farmers to convert their farms to grassland. However, since the creation of the CAP, maize (silage) culture has developed (21 percent of agricultural land). Over the last few years the maize production has been stabilised. Cereal production occupies 9 percent of agricultural land (Chambre d'Agriculture, 2004).

Forest and woodland only cover 7 percent of the landscape in Manche. However, row hedges, part of the landscape known as 'bocage', are a key feature of the Manche countryside. Row hedges cover 78 000 kilometers and are everywhere in the countryside. The département of Manche is the last in France to have preserved bocage. Over the years, the increase of ploughing and "remembrement" (farm layout reorganisation) have spaced out hedges. The aim of remembrement is to increase parcel size without destroying too many row hedges and to reduce farm fragmentation. In many cases hedges are re-planted. Remembrement is now an integral part of rural planning.

In 2004, 125 new young farmers joined the farming sector in Manche. They all benefited from the *Dôte aux Jeunes Agriculteurs* (DJA). The agricultural education level has also increased and the majority of newcomers into the farming industry now have a "baccalauréat". 90 percent of these new farmers have parents already in the farming industry. Newcomers are often dairy farmers and their farm is either a GAEC or an EARL.

According to the Chambre d'Agriculture (2004) only 1 in 5 farmers have employees on their farm, less than a half have full-time employees and the rest constitute occasional labour. Manche is the département with the highest proportion of women involved in farming. In fact,

44 percent of farms have women working on them. However, it has been noticed that within younger generations, women are less and less involved in farming.

Farmers are involved in rural tourism in two ways: directly by offering accommodation such as B&B or self catering accommodation (some may benefit from grants to renovate old building into accommodation), and indirectly by creating and maintaining the countryside as one of the last areas of bocage in France which attracts many French and foreign tourists (no grants available for this yet).

1984 was a memorable year for farmers in Manche as the EEC decided to reduce its milk production and installed milk quotas. Nearly $\frac{3}{4}$ of Manche's agricultural income is dependent on milk. In order to comply with the milk quota, there was a necessity to re-structure the dairy farming industry. As a result, the number of milk producers has decreased from 20000 in 1984 to 5960 in 2004 (Chambre d'Agriculture, 2005). This reflected falling margins and the fact that small producers simply could not make a living out of farming anymore and hence the need to diversify as they had no other options: either they give up farming or they do something instead of / or in addition to dairying. However, Manche remains a dairy region. The 1992 CAP reforms had little impact on dairy farmers in Manche. Farmers were mainly affected by these reforms if they were beef or arable farmers.

Since the installation of the milk quota the dairy herd in Manche has decreased to reach a new low of 250 000 cattle in 2004 (Chambre d'Agriculture, 2005). However, it is still the largest dairy herd in France. Milk production represents 6 percent of the national production. The average milk quota allocation per farm in Manche was 216000 litres for 2004-2005 (Chambre d'Agriculture, 2005). This allocation is rising regularly. According to the Chambre d'Agriculture (2005) the average dairy farm has 40 dairy cattle and 55 ha. The proportion of maize in the dairy cattle diet has now stabilised. Dairy systems in Manche are based primarily on grassland, which constitutes an original character for the west of France.

Figure 5. 5 Geographic location of Manche
Source: Larousse, 2000.

5. 4. West Dorset

5. 4. 1. Characteristics of the county

On the other side of the Channel, Dorset (Figure 5. 6) is also a dairy area in the south-west of England, bordering the English Channel. Dorset also provides opportunities for tourist activities and the county is well served by infrastructure and easy access from London, which is only 200 kms away (Figure 5. 3). Dorset is famous for its picturesque coastline, the Jurassic Coast, which features unique landforms such as Lulworth Cove, the Isle of Portland, Chesil beach and Durdle Dor, as well as the holiday resorts of Weymouth, Bournemouth, Swanage and Lyme Regis (Dorset County Council, 2005). Agriculture is (and has been historically) one of Dorset's predominant industries but tourism is now also important, particularly along the coastal fringe in the resorts. Harbour facilities, docks and fishing are also economically significant in these areas. Both Weymouth and Poole contain ferry terminals offering regular services to France and the Channel Islands. Dorset has good rail links to London and Bristol but is one of the few English counties to have no motorways. The only passenger airport in the county is Bournemouth International Airport.

The 95-mile stretch of English Channel coastline (also termed 'Jurassic Coast') which lies between Exmouth in East Devon and Swanage in Dorset was finally granted 'World Heritage' status by UNESCO on 13 December 2001. In fact, the county has the highest proportion of 'Areas of Outstanding Natural Beauty (AONB)' (44 percent of the whole county), 'World Heritage Sites' and Sites of Special Scientific Interest in England (Dorset County Council, 2005). The county is also famous for warm summers and mild winters, being one of the most southern counties, but not westerly enough to be as seriously affected by the Atlantic storms as Cornwall and Devon.

The principal industry in Dorset has traditionally been agriculture. It has not however been the largest employer for many decades as mechanisation has substantially reduced the number of workers required. Agriculture has become less profitable in recent years and the industry has declined further. In 2002, 1903 km² of the county was agricultural use, down from 1,986 km² in 1989, although the figure has fluctuated somewhat (DEFRA, 2005). Cattle, the principal livestock in the county, fell from 240 413 to 178 328 in the same period, the dairy herds falling from 102 589 to 73 476. Sheep and pig farming has declined in a similar fashion (DEFRA, 2005).

Dorset is largely rural with many small villages, few large towns (apart from Bournemouth and Poole) and no cities. Blandford Forum, Sherborne, Gillingham, Shaftesbury and Sturminster Newton are historical markets towns which serve the farms and the villages of Blackmore Vale (Hardy's Vale of the Little Dairies). Blandford is home of the Badger brewery of Hall and Woodhouse. Bridport, Lyme Regis and Wareham are also market towns. Lyme Regis, Weymouth and Swanage are small coastal towns popular with tourists. Tourism has grown as a major industry in Dorset since the early 19th century. 4.2 million British tourists and 260 000 foreign tourists visited the county in 2002, spending a combined total of £768 millions. Foreign tourism declined from 410 000 in 1998 to 310 000 in 1999 and 302 000 in 2002, the latter decline being blamed on the effects of the global economy and security at that time (Dorset County Council, 2005).

Tourism has played an increasing role in the economy, particularly in the geographic county's major urban centres, the coastal towns of Bournemouth, Poole, and Weymouth. Bournemouth has been known as a holiday resort since 1879, and Weymouth and Portland attract large numbers of tourists as well. Manufacturing is important in parts of Poole and Bournemouth and includes pottery and brick production, engineering, electronics, pharmaceutical products, and chemicals. The major population concentrations are Bournemouth (population = 166 210) and Poole (population = 136 589) in the south eastern part of the county. The area of the geographic county represents 1 025 square miles (2 655 square km) (Dorset County Council, 2005).

Figure 5.6: Geographical location of Dorset
Source: Larousse, 2000. Phillips Atlas, 2002

5. 4. 2. Agriculture in Dorset

Dorset is a very rural county apart from the urban complex of Bournemouth and Poole in the south-eastern corner of the geographic county. Agriculture has always been an important way of life in Dorset. 75 percent of the land is used for farming. Agriculture has become less profitable in recent years and the industry has declined further. In 2002, 1903 km² of the county was in agricultural use, down from 1986 km² in 1989, although the figure has fluctuated somewhat (Dorset County Council, 2005). Agriculture remains the major user of land, though not the major employer of labour. On the chalk uplands (west Dorset), large farms concentrate on dairying and the cultivation of barley. In the mixed sand and clay terrain, farms are smaller, and agricultural enterprises are mixed. Pig and poultry production is carried on, as is some horticulture. Forestry now plays an important role, with most of the woodland owned by the Forestry Commission. Portland stone and Purbeck marble are renowned as building stone. Agriculture has always been of prime economic and environmental importance to Dorset.

Three-quarters of the land area of Dorset is used for agriculture, in North and West Dorset the proportion rises to 85% and 88% respectively. The area under crops (including temporary grass) in Dorset remained fairly static throughout the 1980's at around 100,000 hectares (Dorset County Council, 2005). Similar to the national trend, the area under crops fell by around 7% between 1992 and 1993, mainly as a result of the impact of EC Set Aside Schemes, which were established to reduce the amount of arable land in production (Dorset County Council, 2005). However, recent provisional figures show a reduction in the amount of set-aside land down to 4441 ha in 1997. This has been generally attributed to the reduction in payments made to farmers under the scheme. Cattle, the principal animal stock in the county, fell from 240 413 in the 1970s to 178328 at the end of the 1990s, the dairy herds falling from 102589 to 73476 during the same period. Sheep and pig farming has declined in a similar fashion (Dorset County Council, 2005).

Agriculture and fishing are important traditional industries in the Dorset area, but over the last few decades both industries have been declining. The restructuring of the dairy industry has had a very damaging effect with many farmers abandoning milk production. Today agriculture (including fishing) is a tiny sector, employing under 2% of the workforce. Even in 1841 it employed only 20% of workers and only three districts in England and Wales, all in Cambridgeshire, had over 50% of their workers in the agricultural sector. Mechanisation of farms in the 1950s and 1960s led to a much more rapid decline, so there were only about half a million workers left in 1971. In Dorset there are just under 5000 agricultural holdings, employing 6,000 people, including 2,000 full-time farmers (Ministry of Agriculture, Fisheries and Food, 1998; Dorset County Council 2005). Dorset has relatively little manufacturing industry, at 14.6% of employment (compared to 18.8% for the UK), and is ranked 30th out of the 34 English counties. The impact of the Foot and Mouth outbreak locally was not as bad as it was in other parts of the country and the outbreak never reached a Dorset farm – but the agriculture industry still suffered greatly. As is the case across the country numbers employed within farming and agriculture tend to remain fairly static as most farms are both family run and owned. Some farms do recruit seasonal help. The gross domestic product for the county is 84% that of the national average (Dorset County Council, 2005).

5. 5. Sud Manche and west Dorset in the CAP

Both study areas are in a different classification under EU designation (Table 5. 2). Manche has retained its distinctive landscape and network of small farms to the extent that it is one of the EU's poorest rural areas and hence the Objective 5b designation. Objective 5b of the current EU structural policy is applied to rural areas with a low level of socio-economic development; a high dependency on agricultural employment; low agricultural incomes and population problems (low density or declining population), whereas Dorset is currently under no specific objective. As such it will be interesting to discover if the EU classification or lack of it has an impact in the development and nature of diversification or pluriactivity in either study area.

Table 5. 2: Descriptions of the priority issues from the Structural Funds

Objectives of the Structural Funds	Description
Objective 1	Promoting the development and structural adjustment of regions whose development is lagging behind.
Objective 2	Converting regions or parts of regions seriously affected by industrial decline.
Objective 3	Combating long-term unemployment and facilitating the integration into working life of young people and of persons exposed to exclusion from the labour market, promotion of equal employment opportunities for men and women.
Objective 4	Facilitating the adaptation of workers to industrial changes and to changes in production systems.
Objective 5: Objective 5a	Promoting rural development by: Speeding up the adjustment of agricultural structures in the framework of the reform of the Common Agricultural Policy and promoting the modernisation and structural adjustment of the fisheries sector.
Objective 5b	Facilitating the development and structural adjustment of rural areas.

Source: European Commission, 1995.

Objectives 1, 2 and 5b have only a regional character; they contain measures limited to particular eligible regions or parts of regions. Objectives 3, 4 and 5a, on the other hand, comprise the whole of the Community. Objectives 1 and 5 are decisive to forthcoming European state action in rural areas. Objective 5 deals with both the adjustment of agricultural

structure (5a) and with sponsoring locally targeted schemes for integrated rural development (5b). The limits restricting which rural areas are entitled to receive funding under Objective 1 and 5b have grown as a key issue in the future shape of Europe. Areas qualifying for funds under Objectives 5b depend on:

“The degree to which they are rural in nature, the number of persons occupied in agriculture, their level of economic and agricultural development, the extent to which they are peripheral, and their sensitivity to changes in the agricultural sector, especially in the context of the reform of the Common Agricultural Policy” (European Commission, 1988, Regulation 2052/88).

Objective 5b status offer opportunities for diversification and in the long term it will help create a more diversified rural economy. Schemes for integrated rural development come under various project such as the designation of ‘pays’ according to the DATAR. within the framework of the, of regional planning. The fields of actions of the ‘pays’ are specified in a Charter of Country and implemented by 8 commissions of work: commission Industry, commission Trade-Craft industry, commission Environment, Socio-cultural commission, commission Agriculture, commission Tourism, commission Employment-Formation, commission Social-Habitat.

5. 6. Conclusion

This chapter has presented the physical, human and economic characteristics of the chosen study areas. The farming community is decreasing in both sud Manche and west Dorset but the farm’s characteristics are also evolving. Farms size are larger, the organisation differs as farms turn more to business orientation as opposed to family farms. The installation of milk quotas has had an impact on both study areas: farmers in Dorset have moved away from dairying, those remaining have intensified their dairy production and in sud Manche, although the number of dairy farms has decreased, the remaining farms have also intensified their dairy production. Both study areas also offer great tourist opportunities as they have specific physical characteristics: ‘bocage’ in Manche or AONB in Dorset and both have large areas of coastline.

The following chapter will present the results for the study of diversification and pluriactivity in the two study areas.

Chapter 6: Diversification and pluriactivity in sud Manche

Chapter 6: Diversification and pluriactivity in sud Manche.

6. 1. Introduction

The aim of this chapter is to analyse farm diversification and pluriactivity in sud Manche. The chapter focuses first on the factors involved in the decision making process towards diversification/pluriactivity. Then the author analyses each type of diversification and pluriactivity in order to understand which group of farmers and farms are involved in a specific type of diversification or pluriactivity. To achieve this, the author uses both quantitative and qualitative data from the questionnaires and the interviews. Vignettes are also used in this chapter to portray the characteristics of specific farms and farmers involved (or not) in diversification and /or pluriactivity. The chapter concludes by classifying the farmers according to the classification as discussed in chapter 3.

6. 2. General characteristics of diversification and pluriactivity in sud Manche

When studying diversification one of the key hypotheses of the research was that farmers in sud Manche would diversify less than farmers in west Dorset as sud Manche has a greater focus on dairying than west Dorset. The survey showed that 77.3 percent of the farmers in sud Manche diversified and only 22.7 percent of them did not have any form of diversification or pluriactivity on their farm, as shown in Table 6. 1. However, farmers did not diversify in terms of the traditional definition of farm diversification, e.g. they do not participate as much as expected in B&B or farm shops (*vente directe*). Overwhelmingly, diversification in sud Manche comprised the addition of another agricultural enterprise (e.g. beef production) to the farm business.

Farmers are often willing to diversify but only if they can claim that the extra work they are doing fits into their desired lifestyle and that they enjoy it. As such, farmers often choose a type of production or an activity they enjoy.

Guy: Ce que je veux pour diversifier il faut que ça rende mon métier agréable.

Table 6. 1: Nature of diversification/pluriactivity (sud Manche).

		sud Manche	
		N	%
Diversification/pluriactivity		136	77.3
	Structural	12	7.2
	Agricultural	15	8.4
	Enterprise	96	53.9
	Pluriactivity	13	7.8
	Combined	0	0
No diversification or pluriactivity		42	22.7

Source: Author's survey

6. 3. The role of key variables in diversification and pluriactivity.

The author looked at the cross-tabulation matrices from the chi-squared tests in order to examine the appropriateness of the conceptual model detailed in chapter 1. Tables 6. 2¹ and 6. 3² present the results from the statistical analysis produced using the SPSS package showing the statistical significance or relationship between the variables and the presence or not of diversification or the type of diversification in sud Manche. The numbers in the table represent the significance of the relationship between variables. These numbers, when highlighted, show that the relationship between two variables is significant at the 0.05 level. For each study area, the author uses this significance between variables to explain how these findings have an impact on diversification and pluriactivity. The focus here is on key variables: age, education, farm size, farm organisation, farm type, farm tenancy, milk quota allocation and farm location. The analysis of secondary variables is explained in Appendix 8

The variable in Table 6. 2 and 6. 3 represents factors that may have an influence on diversification. The variables were divided into categories. For example, diversification variable represents two categories: yes or no, while variable like type of diversification are more complex and represent several categories: structural, agricultural, enterprise, pluriactive, combined diversification or combined pluriactivity. The categories for each variable are issued from the coding of the questionnaires. Further details of categories can be seen in Appendix 9.

¹ Table 6.2 presents the statistical analysis showing the significance relationship between the characteristics of farmers and the presence or not of diversification

² Table 6.3 presents the statistical analysis showing the significance relationship between the characteristics of farms and the presence or not of diversification

Table 6. 2: Statistical analysis for farmers in sud Manche

	Age	Gender	Marital status	Background	Education	Agricultural diploma	General diploma	Training
Age								
Gender	0.000							
Marital status	0.162	0.062						
Background	0.000	0.964	0.877					
Education	0.001	0.053	0.177	0.870				
Agricultural diploma	0.001	0.623	0.345	0.175	0.249			
General diploma	0.001	0.007	0.657	0.248	0.248			
Training	0.005	0.882	0.324	0.420	0.025	0.348	0.329	
Work alone	0.334	0.013	0.009	0.416	0.017	0.594	0.388	0.305

Numbers represent significance levels i.e. a number < 0.05 is significant at the 0.05 level.

Source: Author's survey

Table 6.3: Statistical analysis for farms in sud Manche

	Age	Gender	Background	Education	Agricultural diploma	General diploma	Training	Work alone	Diversification	Nature of diversification	Farm size	Farm location	Farm tenancy	Farm organisation	Milk quota	Number of parcels	CUMA	Co-op	Number of employees	Nature of employees	Income 1984	Income 1992	Income 1998	Farm type	
Diversification	0.930	0.931	0.683	0.336	0.316	0.412	0.834	0.254																	
Nature of diversification	0.088	0.295	0.653	0.429	0.759	0.029	0.939	0.160	0.000																
Farm size	0.104	0.002	0.009	0.009	0.462	0.000	0.114	0.000	0.534	0.110															
Farm location	0.079	0.756	0.912	0.248	0.281	0.759	0.590	0.587	0.802	0.417	0.224														
Farm tenancy	0.024	0.853	0.300	0.000	0.741	0.049	0.674	0.461	0.430	0.039	0.002	0.288													
Farm organisation	0.023	0.025	0.930	0.007	0.188	0.063	0.254	0.000	0.147	0.000	0.000	0.982	0.151												
Milk quota	0.008	0.004	0.808	0.000	0.227	0.426	0.544	0.009	0.378	0.347	0.000	0.104	0.485	0.000											
Number of parcels	0.252	0.662		0.801	0.247	0.339	0.847	0.111	0.832	0.060	0.004	0.432	0.144	0.352	0.801										
CUMA	0.260	0.159	0.139	0.017	0.170	0.003	0.068	0.397	0.833	0.050	0.000	0.509	0.001	0.000	0.000	0.093									
Co-op	0.332	0.518	0.367	0.662	0.886	0.043	0.045	0.184	0.492	0.134	0.002	0.250	0.386	0.259	0.050	0.896	0.000								
Number of employees	0.191	0.630	0.895	0.309	0.571	0.355	0.114	0.777	0.356	0.306	0.000	0.463	0.049	0.000	0.003	0.537	0.509	0.125							
Nature of employees	0.057	0.928	0.957	0.091	0.650	0.001	0.178	0.633	0.324	0.328	0.178	0.084	0.138	0.436	0.790	0.502	0.058	0.643	0.537						
Income 1984	0.449	0.293		0.528	0.273	0.000	0.519	0.010	0.682	0.595	0.556	0.136	0.894	0.297	0.454	0.226	0.602	0.249	0.710	0.947					
Income 1992	0.409	0.967		0.054	0.311	0.050	0.331	0.086	0.651	0.681	0.575	0.147	0.650	0.365	0.295	0.162	0.309	0.161	0.243	0.851					
Income 1998	0.183	0.401		0.002	0.357	0.003	0.338	0.039	0.060	0.064	0.026	0.300	0.832	0.150	0.070	0.331	0.390	0.228	0.203	0.983					
Farm type	0.127	0.173	0.004	0.260	0.607	0.018	0.387	0.677	0.057	0.100	0.000	0.364	0.010	0.042	0.185	0.009	0.010	0.008	0.020	0.258					
Loan	0.744	0.643		0.213	0.914	0.498	0.635	0.000	0.931	0.907	0.885	0.380	0.331	0.442	0.642	0.099	0.499	0.020	0.095	0.026	0.064	0.184	0.556	0.925	
Debits	0.393	0.602	0.643	0.191	0.859	0.151	0.971	0.023	0.501	0.699	0.077	0.987	0.292	0.494	0.690	0.138	0.044	0.026	0.447	0.125	0.523	0.166	0.318	0.598	
Consultation	0.404	0.200	0.018	0.584	0.997	0.308	0.735	0.629	0.433	0.123	0.915	0.211	0.893	0.149	0.222	0.686	0.271	0.009	0.270	0.949	0.309	0.339	0.524	0.828	
diversification																									
Advisor(s)	0.000	0.856	0.178	0.957	0.551	0.236	0.785	0.299	0.941	0.980	0.771	0.926	0.461	0.721	0.823	0.613	0.773	0.239	0.416	0.019	0.421	0.572	0.428	0.826	
Number of advisors	0.703	0.283	0.283	0.558	0.115	0.931	0.295	0.496	0.632	0.397	0.961	0.001	0.290	0.617	0.993	0.119	0.552	0.212	0.780	0.858	0.102	0.269	0.607	0.949	
Grant	0.097	0.996		0.954	0.895	0.516	0.407	0.734	0.744	0.727	0.472	0.001	0.710	0.167	0.994	0.789	0.127	0.301	0.329	0.890	0.889	0.520	0.534	0.419	

Source: Author

6.3.1. Age

Age is an important factor in the decision making process for diversification. Table 6.4 presents the various categories of farmers' age groups taking part in the survey. The table shows that in sud Manche the largest category of farmers involved in the survey was farmers in the category 46-55 years old.

Table 6.4: Farmers' age (sud Manche)

Age category	sud Manche	
	n	%
under 25 years old	9	5.2
25-35 years old	40	22.1
36-45 years old	47	26.6
46-55 years old	50	27.9
56-65 years old	31	17.5
over 65 years old	1	0.6

Source: Author's survey

Farmers in sud Manche are generally quite young and they are also becoming younger. This means that more young farmers are joining the farming community. The author's survey also revealed that on average, farmers in sud Manche are 43.8 years old and only 0.6 percent of working farmers are aged over 65 years old as 60 years old has been the legal age for retirement since 1990³ (Table 6.4). Farmers over 60 years old who still run a business do so largely because their spouse is younger and they have to continue to farm until the spouse retires or until s/he is allowed to take an early retirement scheme. Farmers over 60 years old enter the category of part-time or hobby farmers and are only allowed to farm a maximum of 5 hectares. Many farmers retired in the late 1990s, leading to younger farmers taking over their holdings. Young farmers (< 35 years old) represent 27.3 percent of the sample. Whether these young farmers have taken over their parents' farm or started from scratch, they are encouraged to farm by the local government office, syndicates and agricultural college. The education system in France offers good benefits for young people to start a farm business if they have an agricultural education.⁴

³ Since the 1st January 1990, farmers have been able to take their retirement as early as sixty years old, and the departures have continued steadily since then. Furthermore, some farmers have benefited since the 1st January 1992 from the early retirement scheme that allows them to retire at the age of 55 years.

⁴ In France, anyone born after the 1st January 1971 must have a BTA in order to obtain a *Dotation aux Jeunes Agriculteurs* (DJA) - a capital grant -, which mainly makes it possible to fund the start-up costs of agricultural activity. It is thus a sum of money provided by the government via the Centre National pour l'Aménagement des Structures des Exploitations Agricoles (CNASEA), to the young person installed. This help is co-financed by the European Union. The amounts of the DJA vary, in particular according to the farmer's status (on a purely full-time basis or part-time or hobby basis), the situation of the spouse, the forecasting study (Étude Provisionnelle d'Installation - EPI), and the geographical area concerned.

- *Age and diversification*

The results from the survey in sud Manche showed that there is no relation between the age of the farmer and whether or not farmers diversify (chi-square = 0.308, df = 1, p= 0.930). However, although it has not been statistically proven, older farmers tend to be less willing to diversify, as they do not want to undertake more investment on their farm prior to retiring. Older farmers tend to diversify only if one of their children is about to take over the business. However, if there is no direct successor, farmers do not tend to diversify. This trend confirms the work by Demotes-Mainard and Rattin (1997) who argued that farms where the head is over 50 years old reduce their farm size. Desmotes-Mainard and Rattin (1997) found that the impact of a farmer's age is of importance and corresponds to a progressive decrease of farming activity as retirement approaches, especially if the farmer does not have a successor or the successor is not a son. A third of the farms that have reduced their farm size were run by retired farmers. Fifteen percent of farms were run by pluriactive farmers whose main employment is non-agricultural.

The statistical analysis also revealed that there was no significant association between farmers' age and the type of diversification (chi-square = 6.856, df = 4, p= 0.088). However, the trend also showed that younger farmers tend to diversify more into on-farm diversification, especially enterprise diversification whereas older farmers tend to diversify into any kind of diversification. If they run a family business then they are more likely to diversify into enterprise diversification. If they have no children in the business they are more likely to diversify into structural or agricultural diversification. If they choose structural diversification, the main type is recreation/tourism such as B&B. In fact, in that case they diversify into an activity they may be able to keep when they retire and consequently the income from the B&B will complement the pension farmers receive.

The objective of the DJA is to assist young persons to become farmers. The aim of this assistance is to help and support the farm as well as the financing of a take-over of an existing business or the creation of a new farm enterprise. To validate an application for funds, the necessary technical skills are acquired during occupational qualifications, which help applicants face the challenges of modern farming and to meet society's expectations. This financial help provides necessary additional technical support to help the young farmers once their farm business has been started. To be eligible for a DJA farmers have to be between 21 to 35 years old. This limit can be moved back one year for each dependent child or to take account of particular situations, up to an upper limit of 40 years. Furthermore, farming activity must be the principal occupation of the farmer. The candidates for the DJA must possess a diploma at least equal to the professional baccalaureate or agricultural technician (BTA). The farmer must also undertake a supplementary six months training course away from the family holding (at least 50 km from the farm residence in France or abroad). However, candidates born before January 1st 1971 can justify their professional capacity by the possession of a diploma of a level equivalent to the agricultural professional studies (BEPA) and do not have to undertake a training course.

6.3.2. Education

Education plays an important role in farming. Farmers in sud Manche need to have a compulsory agricultural education to start a farm business. Any farmers born after 1971 and willing to start a farm business are expected to have agricultural qualifications in order to benefit from extra financial help from the government. As a result 78.9 percent of farmers in sud Manche have an agricultural qualification and 42.1 percent have had some agricultural training (Table 6. 5).

Table 6. 5: Farmers' education (sud Manche)

	Farmers'education		Farmers'training	
	n	%	n	%
Agricultural	140	78.9	75	42.1
Non agricultural	38	21.1	103	57.9

Source: Author's survey

The survey also reveals that younger farmers have higher educational qualifications compared to the older farmers. Table 6. 6 shows that 25.2 percent of the farmers in the study area have a *Brevet de Technicien Agricole* (BTA) and also 55.5 percent have a *Brevet Elémentaire Préparation Agricole* (BEPA), which used to be enough to start a farm business. Among the 10.9 percent of farmers who have another agricultural diploma, many have a certificate that confirms that they have done training in agriculture.

These findings agree with Rattin who demonstrated that the level of agricultural education in France declines not only with age but also with gender as women (mainly farmers' wives) do not have agricultural qualifications (Rattin, 1999a). Farmers with no formal agricultural qualifications are usually older farmers or farmers who do not benefit from special grants from the government to start their business. The increase in the number of students registered in agricultural colleges corroborates the preceding results: there were 189 000 students joining agricultural college in 1998 compared with 12 700 in 1980 (Rattin, 1999a). The heads of farm aged less than forty years and full-time farmers have a better agricultural education if they benefited from an installation allocation to the young farmers (DJA). This regulation seems to have contributed to raise the educational level of the heads of farm, without having discouraged them from joining the farming industry.

Table 6. 6: Farmers' agricultural diplomas (sud Manche)

Agricultural diploma	n	%
BEPA	78	55.5
Baccalauréat agricole	12	8.4
Brevet de Technicien Agricole (BTA)	35	25.2
Other	15	10.9

Source: Author's survey

The author's survey showed that heads of farm have more agricultural education than their business partners (Table 6. 7). The survey demonstrated that for the business partner (usually the spouse) education is often less agricultural. This coincides with Rattin (1999a), who stated that women follow the general education system rather than obtaining special agricultural qualifications and she also showed that younger farmers have a higher education level compared to the older generation.

Table 6. 7: Education of the business partners (sud Manche):

Business partner's education	n	%
Agricultural	51	41.4
Non agricultural	71	58.6

Source: Author's survey

- Education and diversification

There were no significant relationships between agricultural education and the presence of diversification on the farm (chi-square = 2.182, df = 2, p = 0.336). Farmers with no agricultural education are only 1.38 times more likely to diversify compared to farmers with agricultural education. This means that education does not play a role in the decision of diversification. In fact diversification is not a prominent feature of agricultural education programmes. Most agricultural training focuses on traditional farm business management rather than encouraging the potential farmers to think about diversified business activities. The teaching involved in agricultural colleges encourages farmers to use modern technology and intensify the main production that farmers would choose on their farm. In both cases, younger farmers possessed higher qualifications.

However, research showed that the lack of skills could prevent farmers from diversifying so education is important. For example, according to Ilbery (1996) running a visitor attraction requires a range of skills often not associated with farming. The need for the training and development of staff becomes vital. Numerous factors ranging from finance, planning controls and legal requirements to training, marketing techniques and sources of advice have to be

considered and evidence suggests that relatively low levels of investment, lack of viability, inadequate marketing and inappropriate skills are leading to low recreation provision on some farms.

The statistical analysis showed no significant association between the farmer's agricultural education (up to baccalauréat or post baccalauréat) and whether or not the farmer diversifies (chi-square = 3.05, df = 1, p = 0.316). Farmers with an agricultural education up to "baccalauréat" are 2.14 times more likely to diversify compared to farmers who have an agricultural education of a higher level.

Further investigation revealed that there is no significant association between the nature of farmers' agricultural diploma and whether farmers diversify on- or off-farm (chi-square = 3.23, df = 2, p = 0.754). The nature of agricultural education does not play a role in the type of diversification farmers choose. However, farmers with agricultural education are 2.18 times more likely to diversify on-farm compared to farmers with no agricultural education. Farmers with an agricultural education are more likely to diversify into enterprise diversification whereas farmers with no agricultural diversification are more likely to be pluriactive or have structural diversification on their farms. Farmers with post-baccalauréat agricultural diploma are 1.45 times more likely to have on-farm diversification compared to farmers with up to baccalauréat.

6.3.3. Farm size

The average farm size in sud Manche (from the author's survey) is 56.06 ha compared with 25 hectares in Manche and 42 hectares in France (DAFF, Manche, 2001; France Agricole, 1999). However, there is a difference in size between part-time or hobby farms and full-time farms, which explains the difference between the author's survey and the data from the *Chambre d'Agriculture*. Very few part-time or hobby farms took part in the survey. These farms are usually less than 12 hectares.

Table 6. 8 shows that the majority of farms in sud Manche (37.1 percent) are medium-sized farms with an area comprising between 10 and 50 ha. Farms between 51 and 100 ha represent 34.3 percent of the total.

Table 6. 8: Farm size (sud Manche)

	sud Manche			
	At time of the survey		At start of farm business	
	n	%	n	%
< 10 ha	40	19.1	28	16
10-50 ha	66	37.1	101	68
51-100 ha	61	34.3	24	13.3
101 -200 ha	17	9.6	5	2.7

Source: Author's survey

It is interesting to note the evolution of farm size over the last two decades. In many cases, the farmers questioned had expanded the size of their farm business since its inception, and hence the increase in average farm size. As Table 6. 8 shows, the number of farms whose area is from 10 ha to 50 ha fell by nearly half. This represents 68 percent of the farm area since the farm business was founded. The number of farms whose area was between 51 and 100 ha tripled. Farms in this size range accounted for 13.3 percent of the total agricultural area. Only 2.7 percent of the farms had a farm size between 101 and 200 ha. This proportion had increased to 9.6 percent at the time of the survey. The increase of farm size is linked to the number of farmers retiring as explained before. From five farmers retiring, only one farm is taken over by a new entrant and the remaining farms are used to increase existing farm size. These results are confirmed by Agreste (2001) showing that farm structures in France have evolved and farms less than 20 hectares decreased by 32 percent between 1988 and 2000. During the same period of time, the numbers of farms over 50 hectares increased by a factor of 2.7 (Agreste, 2001).

Moreover, according to Rattin and Carlotti (2000) the evolution of farm size is linked to whether or not the farmer knows who their successor is. Rattin and Carlotti (2000) showed that one farmer in three knows the successor on his farm. If the farmers have children working on their farm, the children are very likely to take over, so if they have an off-farm job they have to decide whether or not to quit their job to join the farm business. If there is no one to take over the farm, the farm may represent an opportunity for a young person to start farming or for an existing farmer to increase his or her farm size or milk quota. However, a proportion of women aged over 50 years old become 'head of farm' when their husband retires. Those women who became head of farm can ensure that they will obtain a better pension on retirement. Larger farms find a successor more easily compared with smaller farms. Again this is due to the presence of milk quota attached to a farm, which would be bigger for larger farms than on smaller farms. Furthermore the larger the farm the more buildings and land there would be so there would be a need for less investment afterwards on the farm. De Corlieu (2000)

demonstrated that younger farmers increase the size of their farms in order to have a sufficient income for their family.

The author's survey shows that farm size is related to the type of the farm. Dairy and beef cattle farms are usually larger than the other types of farm. This is due to the fact that cattle need more land to be profitable. The majority of dairy farms were in the range of 51-100 ha.

- Farm size and diversification

The analysis showed no relation between farm size and the presence of diversification /pluriactivity on the holding (chi-square = 1.254, df = 2, p = 0.534). However, the trends show that medium and large farms are 1.3 times more likely to diversify than small farms. Large farms are 1.74 times more likely to diversify than small and medium farms. Large farms are 1.92 times more likely to diversify than small farms.

Further analysis showed no significant association between farm size and the type of diversification (chi-square = 4.408, df = 2, p = 0.110). However, the author argues that larger farms are more likely to have on-farm diversification, medium size farms are 7.71 times more likely to have on-farm diversification than off-farm diversification. Small farms are 5 times more likely to have on-farm diversification than off-farm diversification. The analysis also showed that 80 percent of pluriactive farmers had holdings of 11-50 ha. Enterprise diversification was most common on holdings of 51-100 ha. Two-thirds of farmers with agricultural diversification had holdings from 11-50 ha. Structural diversification occurs principally on small and medium sized farms. These farms correspond mainly to either part-time farms or hobby farms. They are often farms of people who are either retired or about to retire and who have a B&B in order to add to their pension.

Farmers often choose not to diversify if they do not have the capital to invest in diversification, which is valid for small farms. Farmers on large farms prefer to intensify their dairy production in order to make more profitable the machinery, buildings and land they have. The author's results regarding diversification and farm size agree with both Ilbery and Walford's findings.

6. 3. 4. Farm type

The author's survey showed that 78.1 percent of farmers in sud Manche are dairy farmers (Table 6. 9). However, over the last two decades in sud Manche farm production has changed. The numbers of dairy farms have decreased and the number of mixed farms has tripled (Table 6. 9).

Table 6. 9: Types of farm (sud Manche)

Farm type (%)	1984		1992		1998	
	n	%	n	%	n	%
Dairy	97	89	107	81.1	139	78.1
Beef	5	4.6	9	6.8	13	7.3
Arable	2	1.8	4	3	3	2
Mixed	5	4.6	12	9.1	23	12.6

Source: Author's survey

Although milk quotas aim to reduce and control dairy production, the author's survey showed that there are fewer dairy farms than in 1984 and this has contributed to increases in the size of dairy herds as the number of dairy cattle on farms has increased since 1984 (Table 6. 10). The number of beef cattle per farm has also increased since 1984 (Table 6. 10) as a result of increased enterprise diversification in favour of beef production. The numbers of pigs, poultry and even rabbits have considerably increased since 1984 even if these types of production are currently in crisis and farmers are losing money, as production costs are higher than the selling prices. The numbers of sheep per holding have decreased because it is quite difficult to obtain the '*pré salé*' label. There have been higher profits for '*pré salé*' sheep, but this certification is spatially restricted to the area around Mont Saint Michel. Sheep production has not been profitable elsewhere in Manche. Furthermore, the market for sheep with the '*pré salé*' label is not fully developed as consumers often cannot find it in the supermarket. As such, farmers do not wish to enter this production as there is only a limited potential market for these sheep.

Table 6. 10: Livestock (mean) on farms that have this type of livestock (sud Manche)

Livestock	1984	1992	1998
Dairy cattle	33.8	40.51	46.77
Beef cattle	15.52	27.29	33.61
Veal cattle	29	34.82	65.03
Pigs	275.28	493.18	511
Poultry	6690	5448.20	11800
Sheep	11.17	453.56	34.20
Rabbits	1062	2064	2527.5
Horses	3.5	4.5	4.86

Source: Author's survey

- Farm type and diversification

There is no significant association between the type of the farm and whether or not the farmer diversifies (chi-square = 3.610, df = 1, p = 0.057). Non-dairy farms are 2.85 times more likely to diversify compared to dairy farms. Dairy farmers are the category least likely to diversify compared to beef cattle or arable farmers. Compared to beef cattle and arable farming, dairying is time consuming and requires much investment for the dairying unit and consequently farmers have less available capital to invest into diversified activities. The category most likely to diversify is mixed farming.

Dairy farmers, when they diversify, often choose enterprise diversification, especially beef production, as it is the type of diversification that fits in better with the nature of the job and requires less work, especially for family farms. Furthermore, beef cattle production can share buildings with the dairy cattle and consequently reduce the cost of running the beef production. Pork and poultry production are often the type of diversification chosen by GAEC type of farms as it brings another production to the farm for which a member of the GAEC is responsible. Dairy farmers are often encouraged to diversify into this direction by technicians from the dairying collection firms or from the local government office, the *Chambre d'Agriculture*.

6.3.5. Farm organisation

In sud Manche, family farms (also termed individual/independent farms in the literature) represent 34.9 percent of the farmers surveyed. The numbers of GAECs are also quite important, with 38.6 percent of the farms in this category (Table 6. 11). This is much more than the national average, as de Corlieu (1999) recorded that the number of GAECs and EARLs represented 16 percent of the total farms and only 4 percent of EARLs or GAECs are over 300 ha. The majority of GAECs or EARLs are family orientated in order to avoid further division of the inheritance, especially when there is a perspective of succession (de Corlieu, 1999).

Table 6. 11: Farm organisation (sud Manche)

Farm organisation	n	%
Part-time/ Hobby	18	9.9
Family	62	34.9
EARL	29	16.4
GAEC	69	38.8

Source: Author's survey

- Farm organisation and diversification

The organisation of the farm in terms of its legal status/type of business can play a role in diversification, as it can strongly determine what type of diversification the farm business will accommodate. Although there is no significant association between the organisation of the farm and the presence of diversification (chi-square = 2.100, df = 1, p = 0.147), the analysis of the survey showed that there is a significant relationship between the organisation of the farm and the type of diversification/pluriactivity on the farm (chi-square = 29.80, df = 4, p = 0.000). Full-time farmers are as likely to diversify into structural diversification as part-time or hobby farmers. Full-time farmers are 3.3 times more likely to have agricultural diversification compared to part-time or hobby farmers. Full-time farmers are 40 times more likely to have enterprise diversification compared to part-time/ hobby farmers. Full-time farmers are 10.3 times more likely not to diversify compared to part-time or hobby farmers.

Enterprise diversification is present on larger farms - usually GAECs - whereas structural diversification is more often found on smaller family-run and part-time farms. When structural diversification is present in a GAEC, it is because the spouse of the head of farm is included in the GAEC and does not work elsewhere. The latter point confirms Ilbery's work which showed that women are more likely to deal with tourist-related activities such as B&B or accommodation lets.

The conflict of generations within a GAEC has an impact in the decision making process affecting diversification as these farmers may still farm with an older generation and hence the idea of diversification may bring into the business some generational conflicts. During the productivist phase, the older generation was encouraged to produce food almost at any cost whereas the younger generation has been brought up with ideas encouraging them to produce secure and quality food and to protect the environment. According to the author's survey the majority of farmers (69.1 percent) worked on their farm before becoming head of farm. This explains why 34.5 percent of the farmers became head of farm between 1985 and 1997. The introduction of milk quotas in 1984 encouraged many of the older generation to quit the profession, as they did not have enough milk quota for their farm to be viable in terms of earning a reasonable income.

6.3.6. Farm tenancy

Only 10.9 percent of the farmers in sud Manche are solely owner-occupiers, 18.2 percent are solely tenants and 70.8 percent of the farmers own part of their farm and rent the rest (Table 6.12). The part-owners/part-tenants are often farmers who have started with a small farm they owned but, in order to increase the size of operation, have subsequently rented more land. They often wish to buy more land but this depends whether or not they can afford it.

Table 6.12: Tenancy mode of the farm (sud Manche)

	sud Manche	
	n	%
Owner-occupiers	20	10.9
Tenants	32	18.2
Both	126	70.8

Source: Author's survey

In sud Manche, young farmers own part of their farms but have to rent another part in order to have a sufficient farm size for their business. As land prices have increased considerably over the years in sud Manche, farmers who start a business cannot always afford to buy the land. Furthermore, because of the inheritance law in France, farms are often divided first amongst the children when a farmer dies and the children do not always decide to sell it, especially if they plan to have the land for when they retire themselves. Older farmers who are both owner-occupiers and tenants are usually farmers whose sons and/or daughters have joined the farm and they need to increase the land area in order to obtain sufficient income.

The tenancy of the farm is linked to the structure of the farm and more precisely to the number of parcels a farmer has. Owners usually have compact farms as well whereas farmers who both own part of their farm and rent the other have more scattered farms.

- Diversification and farm tenancy

There is no significant association between the farm tenancy and whether or not farmers diversify (chi-square = 1.689, df = 2, p = 0.430). Owner-occupiers are 1.41 times more likely to diversify compared to tenant farmers. Mixed owner-occupiers and tenant farmers are 1.80 times more likely to diversify compared to solely tenant farmers and 1.27 times more likely to diversify compared to solely owner-occupiers. The tenancy of the farm has no significant statistical relation to diversification, which agrees with Walford's (2003) research in south east England.

There is a significant association between the farm tenancy and whether or not farmers diversify on- or off- farm (chi-square = 1.046, df = 2, p = 0.039). Owner-occupiers are 6 times more likely to diversify on-farm than off-farm. Tenant farmers are 9 times more likely to diversify on-farm than off-farm and farmers who own part of their farm and rent the rest are 10 times more likely to diversify on-farm than off-farm.

Farm households with both on- and off-farm business diversification are very under-represented on wholly tenanted farms but are more numerous in the owner occupancy category. There is a tendency therefore for owner-occupiers to experiment in both on- and off-farm types of business diversification whereas farm households, which rent some of their land, are more likely to diversify off-farm. The study conducted by Ilbery (1988) showed that the landlord-tenant relationship is important in diversification. He demonstrated that in his urban fringe project over time more tenant farmers began to diversify from their traditional farm activities. However, this could create problems because tenancy agreements do not cover activities outside mainstream food supply. Consequently, tenant farmers attempting to introduce farm-based recreation and tourism for example may be faced with higher rental charges or even given notice to quit.

The mode of tenancy of a farm has an impact on the decision making process in the nature of diversification/pluriactivity There is a significant association between the type of diversification and the farm tenancy (chi-square = 31.800, df = 8, p= 0.000). Owner-occupiers are more likely to be older farmers and consequently they are more likely to invest in structural diversification such as in a B&B or be pluriactive, compared to tenant farmers. Tenant farmers are more likely to have enterprise diversification or not diversify compared to owner-occupiers. Those farms combining owner-occupation and tenancy are more likely to be pluriactive compared to farms that are wholly owner-occupied and wholly tenanted.

6. 3. 7. Farm milk quota

One aim of studying farm diversification in dairying areas was to evaluate the impact of milk quotas on farming. Since 1984, dairy production has been subjected to a system of quotas. Every milk producer must limit their milk production to the volume that has been attributed to him/her or they are financially penalised for overproduction. The future reforms of the CAP could undermine this system by removing the quotas, in which case the price paid to the producer might come closer to the price determined by the '*Loi de l'offre et de la demande*' on the world-wide market; compensatory premiums would be paid to the producers and the quotas would increase for the farms located in mountain zones (de Corlieu, 1998). However, many

farmers do not believe that the abolition of the milk quotas will occur and as a result there is real pressure to buy land in sud Manche. Many farmers wish to increase their farm size in order to obtain more milk quota and also to grow more cereals in order to benefit from EU subsidies. As a result farmers are more willing to increase their farm size⁵ and develop enterprise diversification, though without making unrealistic labour demands.

The average milk quota per farm per annum from the author's survey is 267, 764 litres of milk for sud Manche. Table 6. 13 shows that only 2.5 percent of the farmers have an annual milk quota less than 50 000 litres. The majority of farmers, 55.4 percent, have a yearly milk quota comprising between 200 000 and 500 000 litres of milk. Only 5.8 percent of the farmers have a quota over 500 000 litres. Although it is not statistically proven, milk quotas play a role in diversification: if the farm has a sufficient milk quota, farmers will be less willing to engage in diversification, especially if the diversification involves quite a lot of time away from farming, such as '*Chambre d'hôtes*' or '*Ferme auberge*'.

Table 6. 13: Milk quota (sud Manche)

	sud Manche	
	n	%
< 50 000 l	4	2.5
50 000-99 999 l	19	10.7
100 000-199 999 l	46	25.6
200 000-499 999 l	99	55.4
> 500 000 l	10	5.8

Source: Author's survey

In sud Manche, the number of dairy cattle has increased since the installation of milk quotas and consequently milk production has also increased. This shows that dairy farmers have preferred intensifying their dairy production for which they usually have heavy investment, instead of diversifying.

This corresponds with the research by Briquel and Delame (1991) who have shown that on average in Europe in the first seven years of milk quotas, farmers retained the same size of dairy herd except in France and England where the number of dairy cattle rose on average by 2 to 3 cows per herd. They also noted that milk production increased by 15 percent in France, due to

⁵ Consequently the price of land has increased considerably recently. This trend is also fuelled by retiring farmers who do not take the *prime de cessation*, which is money given to them for their milk quota that is then put back to the SAFER that is supposed to re-distribute it equally between farmers or to allocate it to a newcomer to the industry. Farms with no milk quota left are more difficult to sell. Any farmers who buy land without milk quota tend to do so in order to produce more cereals or to use the land for beef production, which is the main type of enterprise diversification in the study area. Farmers are also seriously encouraged to consider enterprise diversification by the technicians from their food or milk companies as well as by the advisors from the local government office, '*La Chambre d'Agriculture*'.

better production technology and greater efficiency by replacing less productive cattle with specialised dairy cattle who produce more milk per animal. This agrees with the author's findings as the size of dairy herds has increased in sud Manche from an average of 33 cows per holding in 1984 to 40 cows in 1992 and in 1998, the average dairy herd was on average 46 cows.

- Milk quota and diversification

The analysis showed that there was no statistically significant relationship between the amount of milk quota and whether or not farmers diversify (chi-square = 3.092, df =3, p= 0.378). However, farmers with a milk quota allocation of less than 50 000 l or over 500 000 l are less likely to diversify than farmers with a milk quota between 50 000 l and 500 000 l. Farms with a small milk quota often do not have the capital to invest in diversification while farms with high milk quota prefer intensifying. There is no significant association between milk quota and whether farmers diversify on- or off- farm (chi square = 3.305, df = 3, p= 0.347). Enterprise diversification occurs mainly on farms where the milk quota is important. Structural diversification and agricultural diversification occur on farms which have a low milk quota allocation. Usually these farms are small or medium sized farms and farmers are either pluriactive or near retirement.

One of the main reasons for farmers not to diversify is that they prefer investing in more milk quota in order to generate more income instead of adding another type of production to their farm. Although milk prices vary a lot, milk production is still considered by farmers to be the best way to earn a secure income. That is why there is a veritable chase for quotas⁶. They may feel that they may not introduce a new enterprise properly due to time constraints linked to dairying. Some farmers argued that milk production is enough to live on if their milk quota is sufficient. Furthermore those farmers argued that once they had invested in milking machines and a milking parlour, there is hardly any more investment to be made. Even if the building had to be modernised, farmers receive a subsidy from the EU to enable them to comply with the new regulations. Farms with high milk quota and which do not diversify are farms which have chosen to intensify their dairy production as the farmers have invested a lot and do not see the necessity to diversify. Claude, a dairy farmer from sud Manche, declared:

⁶ In France, milk quota belongs to the dairies and not to the farmers. The dairies then distribute the milk quotas to farmers who apply to obtain extra milk allocation or to newcomers into dairying. Furthermore in France, quotas are attached to the land. That explains why land with milk quota attached to it is sold at a higher price and more easily than farms with no milk quota. Farmers who buy or rent farms with no milk quota are then more likely to diversify into enterprise diversification such as beef production. The qualitative analysis further examines why farmers with high milk quota are less likely to diversify or process and market dairy products themselves.

Claude: Quand on a déjà investi beaucoup d'argent en lait pour la production laitière, on intensifie et on rentabilise.

6. 3. 8. Farm location

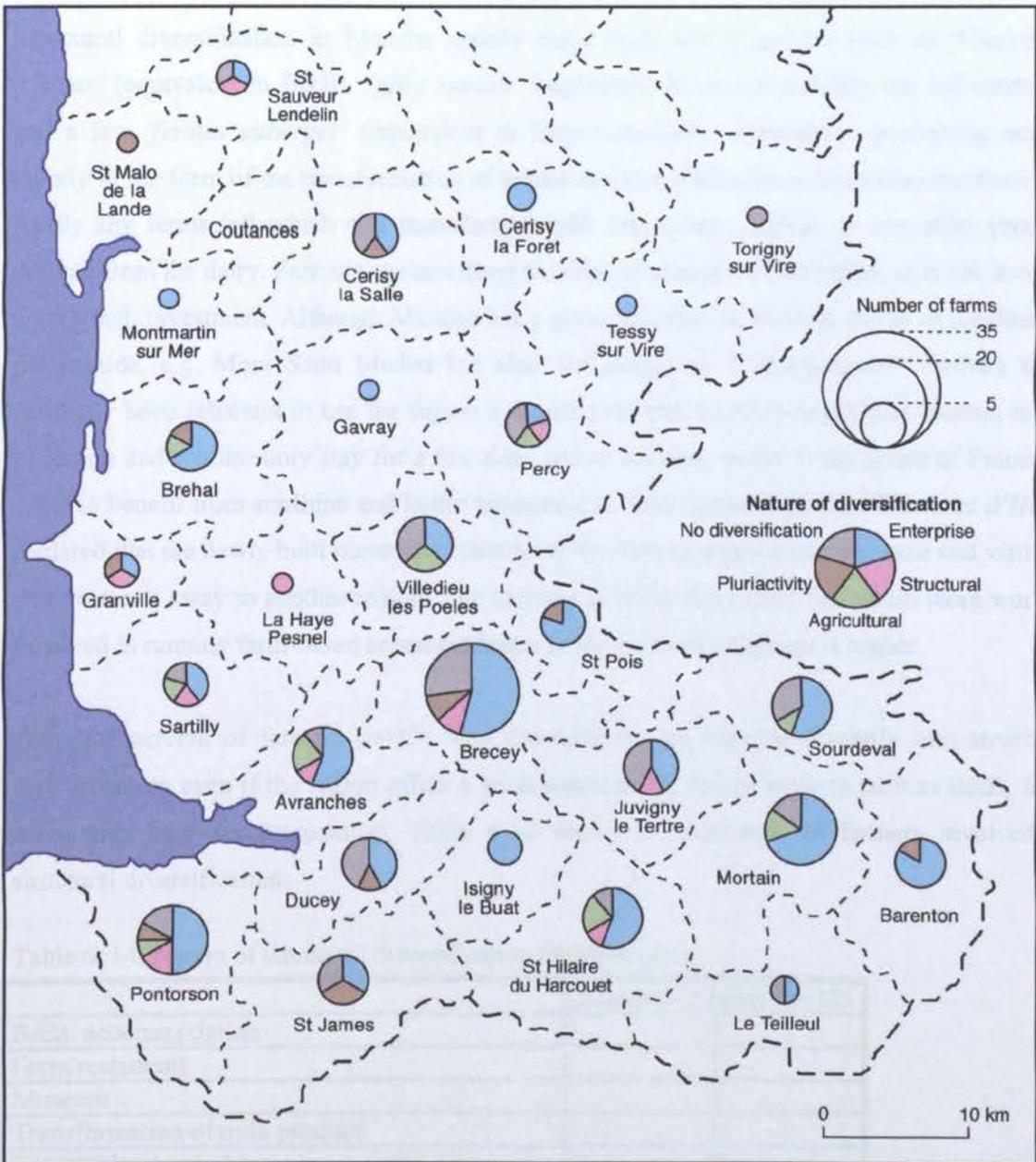
The survey aimed to investigate whether enterprise and agricultural diversification as well as pluriactivity often occurs away from tourist attractions and closer to an urban fringe or near roads that link major cities to ease the transport of their goods to cities (Figure 6. 1). This would confirm Ilbery *et al's* (1997) work which stated that structural diversification occurs near an urban fringe.

However, the author's study shows no relation at all between the nature of the diversification and the location of the farm⁷. There is no significant association between the farm location and whether or not farmers diversify (chi-square = 0.441, df = 2, p = 0.802). Farms located by the seaside are likely to diversify more than farms located near a town or in the countryside.

There is also no significant association between the farm location and whether farmers diversify or not into structural, agricultural enterprise, pluriactivity activity or no diversification (chi-square = 8.171, df = 8, p = 0.417). Explanations of this are detailed in part 6. 5 regarding the analysis of diversification and pluriactivity where farmers justify their choice for either adopting (or not) pluriactivity/diversification.

⁷ The location of the farm was determined according to the nearest distance to the seaside, and/or a medium or large town. Farms located more than 25 kilometers from a town or the seaside were characterised as 'in the countryside'.

Figure 6. 1: Nature of diversification and farm location (sud Manche)



Source: Author's survey

6. 4. Structural diversification in sud Manche

Structural diversification in Manche mainly deals with tourist activity such as '*Chambres d'hôtes*' (equivalent to B&B), '*gîtes ruraux*' (equivalent to accommodation let, self-catering) and a few '*fermes auberges*' (equivalent to farm restaurant). Farm-based processing occurs mainly in the form of the transformation of apples to cider, Calvados or Pommeau but there are hardly any farms left which still manufacture milk into cream, cheese, or any other product derived from the dairy. Farmers are unwilling to adopt structural diversification as it can involve a very high investment. Although Manche has a good potential for tourism due to its location by the seaside, e.g. Mont Saint Michel but also '*les plages du Débarquement*', farmers have generally been reluctant to use the region's tourist potential. Farmers argue that tourism is too uncertain and tourists only stay for a few days before moving down to the South of France in order to benefit from sunshine and hotter temperatures. One farmer who has *Chambres d'Hôtes* declared that the newly built motorway takes away tourism as it gets easier to come and visit but then to move away to another region. The increase of short-term stays has meant more work is involved in running farm-based accommodation as the turnover of guests is higher.

Only 7.2 percent of farmers (n=12) who diversify in sud Manche diversify into structural diversification even if the region offers a great potential for tourist activity such as B&B, farm restaurants, and accommodation. Table 6.14 shows the activities of farmers involved in structural diversification:

Table 6. 14: Nature of structural diversification (sud Manche)

	Number of farms (n=12)
B&B accommodation	4
Farm restaurant	1
Museum	1
Transformation of milk product	1
Cider/Calvados making	6
Marketing products (vente directe/local market)	4

Source: Author's survey

The author's survey showed that farmers involved in structural diversification would not only transform the product but would also sell it. A farmer who transforms the milk into cream and cheese, or apples into cider and Calvados will also market the final product. To market the product, the farmer needs to have the skills for it. The next sub-section reviews the characteristics of farmers who structurally diversify and the author tries to understand why so few farmers diversify structurally. However, due to the very small sample of farmers, only tentative conclusions can be made.

6. 4. 1. Farmers characteristics in structural diversification

The following section presents the characteristics of farmers and farms involved in structural diversification.

- Age

Table 6. 15 show that it is primarily from the age group 36-55 that structural diversifiers are drawn. The main reason is that structural diversification requires capital and labour that younger heads of farm may not have yet. Farmers aged between 36-45 years old are more involved in transforming products from the farm in order to sell them via the network '*Les produits fermiers*' or to the local market. Older people (over 55) may be involved in B&B as they often plan to continue the diversified activity when they retire, as it will complement the pension. Furthermore, they often have the space as their children have moved out. This is less easy for families with young children as they are not able to free the space necessary.

Table 6. 15: Characteristics of farmers in structural diversification (sud Manche)

Sud Manche		Structural (1)	
		n	%
Age	< 25 years old	0	0
	25 - 35 years old	1	9.1
	36 - 45 years old	4	36.4
	46 - 55 years old	4	36.4
	56 - 65 years old	1	9.0
	> 65 years old	1	9.1
Education			
Agricultural	BEPA	7	57.1
	Baccalauréat	0	0
	BTA	3	28.6
	Other agricultural diploma	2	14.3
General	Certificat d'études	5	37.5
	Brevet des Collèges	2	25
	Baccalauréat	0	0
	DEUG/BTS/DUT	5	37.5
Marital status	Married	10	81.8
	Single	1	9.1
	Divorced	1	9.1
	Widow/er	0	0
Farmer's background	Agricultural	11	90.9
	Non agricultural	1	9.1
Gender	Male	10	83.3
	Female	2	16.7

(1) % of farmers involved in structural diversification

Source: Author's survey

- Education and formation

Farmers involved in structural diversification have higher general qualifications and they also have agricultural qualifications. Farmers choose this type of diversification because it is convenient for them: either they have the space (if involved in B&B) or they want to be a businessman and follow their products from the beginning to the end.

Guy is married and has three children, none of which are involved in the GAEC. His wife works as a nurse. Guy has an agricultural education and farms 65 ha. He has a milk quota of 240 000 litres. He owns some of his dairy farm and rents the rest. He did have a project of structural diversification in 1980 (production and selling of cider, pommeau and Calvados as at that time there was a lack of apple production in) but could not go ahead as he had to buy more land to be in the GAEC with his brother:

Guy: L'agriculteur n'est pas commerçant, il subit le marché, pour faire fortune il faut faire du commerce. Nous, paysans il ne faut pas faire des affaires avec ces gens là car ils sont commerçants et on ne veut pas faire profiter le commerçant. La solution c'est la vente directe mais le problème est que l'on s'est spécialisé.

Other farmers explained during the interview that they were not interested in marketing their products as they feel that farming is producing food and not selling it and farmers do not have the skills to sell their products. Other farmers mentioned that supermarkets would not allow farmers to sell their product directly. Many farmers also argued that being a farmer for them consists only of producing food for the consumer. They feel they do not have the time or the qualifications to sell the product as well.

Most farmers also feel they are not qualified enough to have run educational activities on their farms and they do not all welcome the idea of farm open days as they find it difficult to communicate with the general public. Anne Marie diversifies structurally and produces cider with *Label Rouge*. She found it difficult at first to sell her products as she said she did not have the right formation for it. She admits there are very few farmers who are able to do that and according to her most farmers trust the co-op to sell their product:

Anne Marie: Il y a un réseau appelé Bienvenue à la ferme qui organise des portes ouvertes ou journées rencontres[...] Il y a des problèmes de communications avec les gens et plus principalement avec les enfants. Il y a beaucoup d'école de la région parisienne car c'est une découverte pour eux. C'est bien. [...] Dans nos formations on a souvent négligé toute la partie commerciale. C'est un sujet souvent mal traité, on s'intéresse à la production, à l'économie au financement mais l'agriculteur n'est pas souvent commerçant., ou c'est des COOP, des GIE, contracts avec des entreprises mais

c'est rarement avec l'agriculteur en personne. Nous, les démarches que l'on fait en restauration, crêperie, c'est vrai que l'on a appris un peu sur le terrain on est très mal préparé à tout ça, d'autant plus aller signer des contracts avec des centrales d'achats, il y a tout un système qu'il faut connaître.

- Marital status

Due to the nature of the activity, structural diversification requires labour so the majority of farmers involved in structural diversification are married farmers (Table 6. 15). The decision to diversify often comes from both the head and the spouse. However, it is not always the woman's role to look after the B&B. One farmer declared he had chosen to develop his business into B&B but he does not expect his wife to run it as she has the children to look after. Another farmer has developed into transforming the milk into cheese because he and his brother wanted to farm together and his brother had expertise in transforming milk.

Structural diversification is also often carried out by married farmers who have teenage children who can help with the activity during the school holidays. Furthermore, B&B, or any other form of rural accommodation is often seasonal and it is dependent on the weather. Single dairy farmers claim that they cannot diversify structurally as they cannot physically look after a dairy herd and have another time consuming activity.

- Background

The analysis shows that farmers involved in structural diversification have an agricultural background (Table 6. 15). As such, it can be suggested that usually the diversification was set up by the parents and when the current farmer took over the farm s/he carried on the diversification.

Marc is a married dairy farmer who works on the farm with his wife, children and brother. They have a GAEC with 100 ha (both owned and rented) and 350 000 litres of milk quota. Marc manufactures milk into cream on his farm. It was when he was farming with his parents that they started to produce cream as they realised that there was a market for it and it was the right time to do it as the market was there and there was not much competition. This created a generational conflict between the farm business partners regarding this decision to diversify. The younger generation argued that they had to commercialise their product in order to increase income but the older generation argued that farming is producing food and not selling it. As a result, the GAEC was dissolved, costing a large amount of money. As well as erecting a specialist building for the transformation of milk into cream the partners had to invest in

refrigerated vans for the transport of the cream to the First Market Place in Rungis, Paris as well as locally to supermarkets or the co-operative.

AB: Pourquoi avez vous choisi de diversifier votre entreprise?

Marc: C'est parce que mon père s'est mis à faire ça en 1965, ils étaient quatre à faire ça. Quand j'ai pris en 1977, on s'est séparé car il y avait un conflit de génération avec les autres associés car ils n'avaient pas le même sens du commerce, ils n'y connaissaient rien et ne voulaient rien savoir donc on s'est séparé et j'ai recommencé tout seul. Mon frère a fait in BTS laiterie et m'a proposé de faire un GIE ou on transforme et commercialise le produit ensemble. On a un quota donc on ne peut pas dépasser donc on est limité.

6. 4. 2. Farm characteristics in structural diversification

- Farm size

Farms involved in structural diversification are often small farms (under 50 ha) (Table 6. 16). Because the farm does not provide enough income, farmers unable to increase the farm size chose to use the farm as a base from which they could develop additional activities, so the farm can function as the location for other activities.

- Farm location

The location of the farm is important in structural diversification. However, although sud Manche is a tourist area, farmers generally have not used this to develop their farm to attract tourists. The majority of B&Bs in sud Manche are run by retired farmers. Some farmers would be interested and have the assets to run a B&B or any other type of rural holiday accommodation, but decide against it because of the location of their farm, which is away from the coast. Other farmers argue that tourism is too seasonal and it would take too much time to cover the cost involved in setting up that type of diversification. Farmers are more willing to diversify into tourism activity or *vente directe* if their farm is near a tourist site or has easy access to tourist routes.

Charles, a dairy farmer, is involved in structural diversification (B&B accommodation, fishing, shooting). His farm is surrounded by a lake and trees in a small village near Saint-Lô. The house is typical of the ones used by the gentry in France. He converted his barn into a *gîte* and another building into *chambres d'hôtes*. The price for the rental of his accommodation is slightly higher than average due to its high standards. He owns 58 ha and has a milk quota of 216 000 litres.

The income from the farm has increased and it is mainly due to the diversification activities on the farm. Charles has always diversified and is looking for a new market. Although diversification can increase income Charles is aware that it can be quite stressful for family life. He is looking for another aspect of structural diversification, which would give him the same returns and more freedom.

Charles's wife: On a diversifié en gîtes et en chambre d'hôtes. [...] C'est une région touristique entre le Mont Saint Michel et la Suisse Normande, les plages du débarquements. Oui, on n'est pas mal place pour les chambres d'hôtes [...] Pour l'instant ça permet de rembourser les emprunts.

The location of the farm also helps to determine if farmers can diversify into certain types of activity or not as farmers tend to think that unless they are near a town they cannot operate a *vente directe*.

AB: Avez vous envisagé à l'avenir de plus transformer vos produits ou vendre directement vos produits à la ferme?

Charles: C'est vrai vendre des produits on l'a dit au départ il faut être placé près d'une ville. Il y a trop de contraintes pour transformer les produits.

- Milk quota

Structural diversification tends to occur on farms which have a small milk quota (Table 6. 16). Many farmers declared that the main reason for them to start diversification was due to the creation of milk quotas, which prevented them from expanding, so they had to find an additional source of income.

Guy: Je fais du lait et je faisais des pommiers basses tiges car en 80 avec 200 000 l il fallait faire autre chose. A partir de 80, il y avait des hectares de disponible donc il semblait intéressant de faire du basse tige car les techniciens annonçaient une pénurie de pommes donc il y avait des aides intéressantes à ce niveau là. [...] A ce moment là j'avais prévu un atelier de transformation parce que le pommeau était complètement oublié. Il y avait quelque urgence et c'était un produit intéressant. Ça s'est pas fait car en 87 il y a eu un autre événement dans la ferme, car j'ai racheté 30 ha et je me suis donc mis en GAEC (60ha) avec un autre exploitant et on a fait la production laitière donc la diversification a été un peu contrarié par cet atelier lait qui a augmenté.

Table 6. 16: Characteristics of farms in structural diversification (sud Manche)

		Structural (1)	
		n	%
Farm size	< 10 ha	5	41.7
	10-49 ha	6	50
	50-99 ha	1	8.3
	100- 199 ha	0	0
Tenancy mode	Owner-occupier	6	50
	Tenant	4	30
	Both	2	20
Nature of the farm	Part-time	6	50
	Family full-time	3	25
	EARL	1	8.3
	GAEC	2	16.7
Farm type	Dairy	4	33.3
	Beef cattle	0	0
	Arable	0	0
	Mixed crops and livestock	8	66.7
Milk quota	< 50 000 l	0	0
	50 000-99 999 l	4	33.3
	100 000-199 999 l	8	66.7
	200 000-499 999 l	0	0
	>= 500 000 l	0	0
Number of employees	1	5	40
	2	4	30
	3	1	10
	4	2	20
	5+	0	0
Nature of employees	Family	10	80
	Non-family	2	20
Spouse working on farm	Yes	11	87.5
	No	1	12.5
Income 1984	< £ 10 000	6	66.7
	£ 10 000-29 999	3	33.3
	£ 30 000-49 999	0	0
Income 1992	< £ 10 000	3	27.3
	£ 10 000-29 999	8	72.7
	£ 30 000-49 999	0	0
Income 1998	< £ 10 000	2	18.2
	£ 10 000-29 999	7	54.5
	£ 30 000-49 999	3	27.3

(1) % of farmers involved in structural diversification

Source: Author's survey

- Income

Income from structurally diversified farms has increased over the years (Table 6. 16). This is linked to the development of rural tourism and also to a search for better quality products. However, transformed farm products are often more expensive than other products and not everybody can afford it. That is one of the reasons as well why some farmers, who could transform their product do not do it because they argue that food has to be affordable for every

branch of the society. Households able to buy products with a quality label are only a minority as those products are generally more expensive. However, nowadays, consumers are aware that products with quality labels are meant to be of a better quality and better for the health. As a result, the purchases of such products have increased in the last few years due to the increase of food scares but it still does not constitute the majority of households.

Some farmers have chosen to diversify as they do not want to specialise their production and they also want different non-related sources of income in order to reduce economic risk. If one type of production or activity does not bring a sufficient income, the other can compensate.

AB: Pourquoi avez vous choisi de diversifier votre entreprise?

Charles: Pour plusieurs raisons parce que d'abord au niveau de la production laitière il y avait les quotas qui ont limité la production mais aussi pour voir autre chose que des bovins. Je ne me spécialise pas, je veux toucher à tout.

- Tenancy

Farms involved in structural diversification are often owner-occupiers (Table 6. 16). The younger the farmer the more likely the farm will be half-rented and half-owned. This is explained by the fact that farmers try to extend their farm's area in order to grow more cereals or to buy milk quota from a neighbour. In fact, farmers explained during the interviews that it is easier for them to milk extra cows rather than moving into a different activity.

Marc: Il est plus facile de traire 10 vaches de plus que de s'embêter avec une autre production à côté.

In the scenario of a farmer involved in tourism activity on his farm, the farmers often aim to keep the activity after retirement. The majority of these farmers are owner-occupiers. Tenant farmers are more involved in the transformation of apple into cider and Calvados.

Example of a farmer in sud Manche involved in structural diversification

Charles runs a medium sized farm with his wife. He introduced structural diversification on his farm as milk quotas in 1984 limited his milk production and consequently he needed another activity to increase the farm income. But also he does not only want to look after his dairy cattle. As such he chose structural diversification and developed tourist accommodation and hunting and fishing for local people. Diversifying was Charles's idea and he did not take any advice from the Chambre d'agriculture or any other technician. Charles declares that farmers can either diversify on their own or they can listen to technicians. The latter have their own interests and it is the farmers who have the financial risk. Charles also argues that it is pointless diversifying into something that most of the neighbours are doing just because technicians from the dairy firms or the Chambre d'agriculture encourage it (e.g. 'hors-sol') as it is necessary for them that farmers engage in this in order to secure their job.

Charles' farm is located in a touristic area and it is not far away from Mont Saint Michel, Suisse Normande, and the D-Day beaches. However, Charles worries that the new motorway (A84) will take tourists away as it would become easier and quicker for tourists to travel through the area. In order to solve this problem, Charles and his wife are planning to increase the publicity for their farm. They belong to the networks 'Gites de France' and 'Bienvenue à la ferme' and are planning to enter into other tourist guides including a travel agent's guide. Starting a tourist activity was quite an important step for Charles and his wife as there is much investment involved. It took them a long time to establish it but Charles reckoned it was the only solution. Furthermore Charles is aware that in order for the diversified activity to succeed it is necessary that there are not too many farmers doing the same activity otherwise the market gets saturated and farmers do not earn enough to increase their income.

Charles agrees that no one can be against quality products but farm products should then be paid at a higher price and the customer aware of what quality products mean. Charles agrees that subsidies allow farmers to secure an income. On one hand he is happy to receive subsidies as it is a guaranteed income, on the other hand he finds it a shame farmers have to rely on subsidies to live on. Charles believes that if the subsidies diminish and if the milk quotas are withdrawn, there are many farmers who will not be able to survive financially. Those who will stay will have to work even harder and produce more in order to earn a minimum income.

Charles would not transform his farm into an organic farm as he says that there are too many constraints and he is not sure there is a market for organic products as they are more expensive. Furthermore nowadays the French have a more important leisure budget and consequently they are reducing their food budget. Charles is not planning to increase his farm size, as there is already enough work to do. However, if the diversified activities are earning him more money than farming he would consider stopping farming and expand the tourist activity. Charles also agrees that there are few farmers running Chambre d'hôte as it is quite time consuming and also it only works during the summer time and Chambre d'hôte in the area are often run by retired people in order to increase their pension. Charles does not believe that a PYO scheme would work in sud Manche as it is not in the customer mentality to go to a farm and pick their own fruits and vegetables or buy farm products. This activity would be only marginal and he does not believe it would have a high return on the investment. He reckons people only come to be curious and he does not like this idea at all.

6. 5. Pluriactivity in sud Manche

The survey revealed that only 7.8 percent of farms (n=13) were pluriactive. Pluriactivity in the dairy farms of the study area is quite specific as only the spouse is pluriactive (Table 6. 17).

Table 6. 17: Description of jobs from pluriactive farmers (sud Manche)

	Number (n=13)
Factory worker	3
Teacher	2
Nurse/carer	3
Mechanic	1
Shop assistant	1
Postman	1
Child minder	2

Source: Author's survey

The pluriactivity of the farms concerned the spouse of the head of farm who was working outside the farm and quite often she was not involved in the farming activities and did not claim to be. Table 6. 17 presents the nature of the jobs held by spouses. There are few spouses working off-farm and quite a lot of them have returned to farming as dairy farming is time consuming and their partners have needed their labour input on the farm. Furthermore, milking has been considered to be the woman's job on dairy farms for decades and Manche is a very traditional département so farmers expect their wife to milk morning and evening. In dairy farms, the farmers' wives work solely on the farm. That is why very few women have an off-farm job in dairy farming compared to other farm categories. In sud Manche, dairy farms do not support any pluriactivity and therefore pluriactivity is mainly associated with other types of farming. There are a few males who are pluriactive and their wives run a mixed crop and livestock farm. Furthermore, the costs involved in employing a worker to help out on the farm are too high in terms of insurance and pensions and farmers cannot afford to pay them if they work on a small or medium size farm. During the interviews farmers often declared that they would love to employ someone but the costs for the *Mutualité Sociale Agricole* (MSA) are too high and can be as much as the employee would get as his/her salary. Other farmers say that because their farms are not run to a high standard, young people do not want to work on their farms and these farmers find it difficult to find placement students as alternative employees. As such new farms are small in terms of size and work output. However, the presence of off-farm work is relatively rare even if one-third of new farmers have at the same time a principal non-agricultural job that assures them a sufficient income.

6. 5. 1. Farmers' characteristics in pluriactivity

The author's survey reveals the characteristics of pluriactive farmers. Again, the small number of pluriactive farmers only allows the researcher to attempt to make some tentative statements.

- Age

Usually farms are pluriactive because the spouse decided to keep his/her job when s/he got married with the head of farm. Older farmers are not pluriactive. This is not surprising in sud Manche as these farmers usually had strong links with the farmers' union when they were younger and back in the 1970s, as explained in chapter 3, farmers were discouraged from being pluriactive. However, this agrees with Rattin (1999b) who showed, not surprisingly, that pluriactivity was mainly present among part-time farms.

Table 6. 18: Characteristics of farmers involved in pluriactivity (sud Manche).

Sud Manche		Pluriactivity (1)	
		n	%
Age	< 25 years old	0	0
	25 - 35 years old	4	33.3
	36 - 45 years old	2	16.7
	46 - 55 years old	5	33.3
	56 - 65 years old	2	16.7
	> 65 years old	0	0
Education			
Agricultural	BEPA	10	75
	Baccalauréat	0	0
	BTA	1	12.5
	Other agricultural diploma	2	12.5
	General	Certificat d'études	5
General	Brevet des Collèges	4	33.3
	CAP	0	0
	BEP	2	16.7
	Baccalauréat	2	16.7
	DEUG/BTS/DUT	0	0
	Licence	0	0
	Marital status	Married	13
Single		0	0
Divorced		0	0
Widow/er		0	0
Farmer's background	Agricultural	10	81.8
	Non agricultural	2	18.2
Gender	Male	9	75
	Female	4	25

(1) % of farmers involved in pluriactivity

Source: Author's survey

Pluriactive farmers are all married farmers and the pluriactivity concerns the spouse only who works off-farm. The survey reveals that no dairy farmers in sud Manche were both working on the farm and also had a part-time job. Farmers argued that they could not work elsewhere and be a farmer as well.

This agreed with Fremont and Nebucet (1997) who found that the age of the farmers played an important role in pluriactivity. Pluriactivity was more frequent when farmers' wives are younger as they often keep the job they had before they were married.

- Gender

According to Table 6. 18, in pluriactive farms run by a man (75 percent of pluriactive farms), the woman is not involved in the farm, whereas if it is run by a female head of farm (25 percent of pluriactive farms), the husband helps on the farm after work and often at the weekend and his work is more field related i.e. work done with a tractor.

- Education

The author's survey found that the spouses in this category have the highest qualifications due to the nature of their jobs. Because the pluriactivity only concerns the spouse, the education of the head of farm, which is agricultural, is not important.

6. 5. 2. Farm characteristics in pluriactivity

- Farm size

Pluriactive farms are often medium sized farms (10-50 ha) as table 6. 19 illustrates. Because pluriactive farms are medium size, the labour force is mainly supplied by the family, and it is the spouse who works on a part-time basis on the farm, according to their main job commitment. These farms are mainly family farms (Table 6. 19).

Pluriactivity occurs on farms with specific characteristics and is rarer on farms with cattle, especially dairy cattle. Not all types of agricultural production system permit an external activity. It is possible that the practice of an additional activity is subordinated to the technicality of the agricultural activity and to the seasonality of farming. This confirms the research by Fremont and Nebucet (1997) who showed that when the activity requires a strong

technicality and/or a daily presence, it is difficult to time alongside a non-agricultural activity, and livestock rearing and breeding farms and non-agricultural activities are not as incompatible as they used to be. According to Fremont and Nabucet (1997), pluriactivity increased in the 1990s and was more frequent amongst farmers in association with viticulture, cereal production and forestry compared with farmers involved with horticulture, livestock breeding and dairying.

- Milk quota

Pluriactive farms have a milk quota varying from 50 000 litres to a maximum of 500 000 litres (Table 6. 19). If the head of farm is female, the milk quota is smaller as pluriactive farms run by a woman are often smaller farms. These farms are farms where the husband works elsewhere and the husband wanted to keep the family farm but also the farm provides the spouse with a pension for her older days. Pluriactive farms with the least milk quota are farms run by farmers who do not expect to live solely on the farm income. Farms with larger milk quotas are farms where the farmers have had the quota from before they got married and the wife has kept her work when they married. The income from farming constitutes an important part of the household income. The author results agree with Rattin (1989) as Rattin demonstrated that in France, pluriactivity is rarer in dairy or beef cattle type of farm.

According to Table 6. 19, most pluriactive farms are both owned and rented. Pluriactivity is not necessarily near a town and according to the interviews and questionnaires, some spouses travel up to 40 kms to go to work.

Table 6. 19 shows that pluriactive farms have a lower income than expected. This can be explained by the fact that these farms are often less intensive than the other ones. It is surprising to note that the proportion of farms earning less than £ 10 000 has increased since 1984 for those farms where the farm household is pluriactive whereas other farms involved in other types of diversification have seen the proportion of farms in that income category decrease.

Pluriactive farmers employ extra labour to help them with the work. The employees are family related and they are often the spouses. According to Fremont and Nebucet (1997) nearly 7 percent of the heads of farm in France declared that they worked mainly on the farm but also had a secondary non-agricultural activity. The second activity was frequently linked to the marketing of agricultural products and to tourism in parts of the Southwest and the Alps (both summer and winter). In the Bassin Parisien, these secondary activities are linked to the businesses of agricultural works such as farm contractors and cereals sellers.

Table 6. 19: Characteristics of farms involved in pluriactivity (sud Manche)

		Pluriactivity as % of all pluriactive farms (1)	
		n	%
Farm size	< 10 ha	0	0
	10-49 ha	11	83.3
	50-99 ha	2	16.7
	100- 199 ha	0	0
Tenancy mode	Owner-occupier	2	18.2
	Tenant	2	18.2
	Both	9	63.6
Nature of the farm	Part-time/ hobby	1	8.3
	Family	7	50
	EARL	4	33.3
	GAEC	1	8.3
Farm type	Dairy	4	33.3
	Beef cattle	0	0
	Arable	0	0
	Mixed crops and livestock	9	66.7
Milk quota	< 50 000 l	0	0
	50 000-99 999 l	3	22.2
	100 000-199 999 l	3	22.2
	200 000-499 999 l	7	55.6
	>= 500 000 l	0	0
Number of employees	1	9	66.7
	2	2	16.7
	3	1	8.3
	4	1	8.3
	5+	0	0
Nature of employees	Family	13	100
	Non-family	0	0
Spouse working on farm	Yes	11	87.5
	No	2	12.5
Income 1984	< £ 10 000	3	42.9
	£ 10 000-29 999	4	57.1
	£ 30 000-49 999	0	0
Income 1992	< £ 10 000	7	63.6
	£ 10 000-29 999	3	27.3
	£ 30 000-49 999	1	9.1
Income 1998	< £ 10 000	7	50
	£ 10 000-29 999	4	33.3
	£ 30 000-49 999	2	16.7

(1) % of farmers involved in pluriactivity

Source : Author's survey

6. 6. No diversification

Over 20 percent (n=42) of the farmers in Manche do not diversify. Statistical analysis shows no significant relation between the age and the education of the farmer and the decision for the farmer not to diversify. The reasons farmers chose not to diversify or to become pluriactive to increase their income are explained as follows.

6. 6. 1. Farmers' characteristics

- Age

Farms with no form of diversification are mainly farmers in the 36-55 years old group (table 6. 20). Younger farmers are often single and they argue that this is the main reason for them not to diversify but also they do not always have the capital to invest. Older farmers may not wish to diversify because of the cost involved with diversification and if they do not know their successor they do not want to invest money as they prefer investing in a house for their retirement.

Table 6. 20 : Characteristics of farmers not involved in diversification (sud Manche)

Sud Manche		No diversification farms as a % of all no diversification farms (1)	
		n	%
Age	< 25 years old	2	5.7
	25 - 35 years old	8	20
	36 - 45 years old	11	25.7
	46 - 55 years old	15	34.3
	56 - 65 years old	6	14.3
	> 65 years old	0	0
Education			
Agricultural	BEPA	20	46.4
	Baccalauréat	1	3.6
	BTA	15	35.7
	Other	6	14.3
General	Certificat d'études	17	40
	Brevet des Collèges	14	33.3
	Baccalauréat	8	20
	DEUG/BTS/DUT	0	0
	Licence	3	6.7
Marital status	Married	19	68.6
	Single	12	28.6
	Divorced	1	2.9
	Widow/er	0	0
Farmer's background	Agricultural	36	85.3
	Non agricultural	6	14.7
Gender	Male	37	88.6
	Female	5	11.4

(1) % of farmers involved in no diversification

Source: Author's survey

- Gender

Female heads of farm have become heads of farm since their husbands retired and they do not diversify as they are in the process of leaving the farming industry and they do not wish to invest any capital in any form of diversification.

- Education

Farmers with no form of diversification/pluriactivity on their farm have received all an agricultural education. This shows that agricultural education does not encourage farmers to diversify or to be pluriactive. Agricultural education invites farmers to intensify rather than diversify.

- Marital status

The survey revealed that single farmers often do not diversify as they argue they do not have the time for it. Furthermore, the high costs of employing labour are a deterrent for many farmers.

6. 6. 2. Farm characteristics

- Farm size

Table 6. 21 shows that the majority of farmers who do not diversify have medium sized farms. A significant relationship occurs between the background of the farmer and the size of the farm. If the farmers who start a business do not come from an agricultural background, they often have to buy or rent the land and that is an extra cost towards the start of the business so they cannot afford as much land as they would need to farm without extra income provided by diversification.

- Farm organisation

The majority of farms with no diversification are family farms followed by the GAEC and EARLs (Table 6. 21). Table 6. 21 shows that they are often medium to large farms. There is also no statistical relationship between the mode of tenancy and the fact that the farmers do not diversify (Table 6. 21). As shown previously, even if the farmer is a tenant, s/he is pretty much free to do what s/he wants depending on the agreement s/he has with the landlord. The

relationship between the landlord(s) and the farmers may be more complicated if the farm is owned by several people, which is often the case as farms are divided amongst children when an owner farmer dies due to the inheritance systems in France. The tenant may then require the authorisation of all 'new owners' to transform the farm.

- Income

Income from non-diversified dairy farms is only dependant on the milk price. The numbers of farms earning less than £ 10 000 a year have decreased slightly since 1984 whereas the proportion of farms earning between £ 10 000 and £ 30 000 a year have increased (Table 6. 21). Farmers often say that they hope milk quotas will stay as it maintains the price of the milk. Farmers are worried that the arrival in the EU of Eastern European countries will have a disastrous impact on the price of the milk as they are aware that milk production in those countries is cheaper and then consequently the price of milk may drop. Farmers in this category do not diversify as they reckon the investment to set up another activity would be too high and they claim they would not have the time to do anything else, as dairying is time consuming.

- Milk quota

Non-diversified farms have a higher milk quota allocation than other farms (Table 6. 21). Farmers prefer investing in buying milk quota. Some argue that because they have already invested in this production, the best thing for them is to intensify it as income from milk production is generally not bad if they have a high milk quota. Other farmers with less milk quota are willing to buy more milk quota but declare that it does become more and more difficult in the area as some farmers when they retire sell their milk quota to the company which collects the milk in order to have enough money for their retirement. The land is then left without a milk quota allocation. It is therefore less expensive but not useful for farmers wishing to expand their milk production. The company which bought the milk quota then sells it to other farmers or newcomers in the farming industry. Farms with no diversification are often intensive farms and as a consequence have to employ extra labour to help with the farm work (Table 6. 21). The nature of the employees is mainly family workers (spouse, children or parents). Some farmers choose not to diversify deliberately as they see themselves as dairy farmers and diversifying would be admitting they do not make a sufficient income from their chosen activity. They worry about what the 'neighbours might say'.

Table 6. 21: Characteristics of farms not involved in diversification (sud Manche)

		No diversification farms as a % of all no diversification farms (1)	
		n	%
Farm size	< 10 ha	4	8.6
	10-49 ha	17	40
	50-99 ha	17	40
	100- 199 ha	5	11.4
Tenancy mode	Owner-occupier	1	3.3
	Tenant	13	30
	Both	28	66.7
Nature of the farm	Part-time	4	9.1
	Family	18	42.4
	EARL	6	15.2
	GAEC	14	33.3
Farm type	Dairy	39	93.9
	Beef cattle	0	0
	Arable	1	3
	Mixed crops and livestock	2	3
Milk quota	< 50 000 l	1	3.4
	50 000-99 999 l	4	10.3
	100 000-199 999 l	9	20.7
	200 000-499 999 l	22	51.7
	> =500 000 l	6	13.8
Number of employees	1	19	44.4
	2	19	44.4
	3	5	11.2
	4	0	0
	5+	0	0
Nature of employees	Family	40	96.3
	Non-family	2	3.7
Spouse working on farm	Yes	30	70.8
	No	12	29.2
Income 1984	< £ 10 000	17	73.9
	£ 10 000-29 999	6	26.1
	£ 30 000-49 999	0	0
Income 1992	< £ 10 000	14	53.8
	£ 10 000-29 999	11	42.3
	£ 30 000-49 999	1	3.8
Income 1998	< £ 10 000	17	39.4
	£ 10 000-29 999	24	57.6
	£ 30 000-49 999	1	3

(1) % of farmers involved in no diversification

Source: Author's survey

Example of a typical farmer not involved in diversification.

Paul's farm is a typical non-diversified farm from sud Manche. It is a medium sized farm with a reasonable milk quota allocation according to Paul. Paul declared that before he got married he was working with his parents on the farm and became head of farm when his parents retired. At that time his mother was running a 'Chambres d'hôte' business but he cannot do this anymore, as he and his wife do not have the space available since the birth of their child. As the farm is located near a very touristic place, Paul agrees that 'Chambre d'hôte' is a good thing as there are many tourists in the area. However, the constraint attached to running a Chambre d'hôte business in terms of insurance and quality control makes it difficult to run this type of business. Paul does not find the idea of a PYO scheme interesting. Although it would be less time consuming than 'Chambre d'hôte', he declared that it is very rare in Normandy but he knows farmers in the South of France and Brittany who do it. He agrees it would only take one farmer to start it and maybe other farmers would engage in the activity as well but he does not feel he could be the one to start it as he worries if it does not work other farmers would criticise him. Paul would run an educational farm to change the vision of the farming society to other people but he declared that it would require too many investments and he cannot afford it.

Paul has decided not to diversify as he is working on his own on the farm. He wanted to be in partnership with another farmer in the form of a GAEC but it did not work out. Although Paul agrees that diversifying might increase the income, he is not entirely convinced as he says that it would increase the workload. Paul would also consider looking into diversifying through enterprise diversification into salt marshes sheep as his farm is very close to the salt marshes and he could obtain a label for it. Paul declares that this would be an easier type of diversification than 'Chambre d'hôte'.

Paul argues that the government and dairy factories encourage larger farms as it is more effective to collect for example 30 000 litres of milk from one large farm than 6 000 litres each from five smaller farms. Paul is against extensification, as he believes that intensive farms are the farms which benefit from most of the subsidies, earn more money and then are able to buy more land to increase their farm size. According to Paul, the government and the CAP contradict themselves as on one hand they talk about reducing production and on the other hand they give subsidies and also always agree to new buildings to have intensive production. Paul declared that large farms will be ready when milk quota is suppressed as they have genetically modified livestock which produce more milk and they have the land so large farms will be able to compete on the world market. Because output prices do not increase as much as input prices, farmers have always to produce more in order to get the same income.

Paul agrees that farmers have to produce quality but the price of the products should be higher otherwise the farmer does not make a profit. Paul would not convert his farm into an organic farm. He agrees this would reduce production and the products would be of a better quality but he argues that organic farming would only work if everybody (in every European country) engaged in it. Furthermore, organic produce is more expensive and consequently not every one is able to afford it.

Paul deplores the fact, that although French agricultural products are good products, they are not found in the French supermarket but instead there are Spanish or other countries' products on the supermarkets' shelves. He also finds labour too expensive and that prevents him from developing his farm business. Paul finds dairy farming difficult work as there are no weekends off as the cows have to be milked. He and his wife declare they are not going to encourage their son to become a farmer as there are far too many constraints. Paul himself became a farmer because he likes the job and was not a good pupil when he was younger and at the time it was the only option for him to take over his parents' business. Paul declared that if he could do another job, he would quit farming.

6. 7. Enterprise diversification

In sud Manche, 53. 9 percent (n= 96) of farmers are involved in enterprise diversification into three main types of enterprise as described in Table 6. 22.

Table 6. 22: Nature of enterprise diversification on farms (sud Manche)

	Enterprise diversification	
	n	%
Beef	52	53.8%
Pigs	30	31.4%
Poultry	14	14.8%

Source: Author's survey

The author's survey reveals that farmers undertaking enterprise diversification have specific characteristics, and this way to diversify a farm business is being encouraged by the local agricultural government office as well as animal firms which provide buildings, animals and feed for the farmer.

Farmers in sud Manche have diversified into enterprise diversification as it seems the more logical way to diversify for dairy farmers as adding another production to the main one has several advantages: it can be done during day time in between milking; it does not necessarily mean lots of investment depending on the type of enterprise involved; no specific skills are required; it is still traditional farming activity as many farmers argue that a farmer's role is to provide food and not to be a retailer. As such, farmers and to some extent farms involved in beef, pigs or poultry production have specific characteristics.

6. 7. 1. Farmers' characteristics in enterprise diversification

- Age

Table 6. 23 shows that more young farmers are involved in enterprise diversification compared to the other categories of diversification and pluriactivity. Farmers argue that they apply what they are taught in college and also listen to employees from the local agricultural government office, who advise them if they want to diversify their business to diversify into animal production. Furthermore, younger farmers benefit from a grant when they start a business if they have the right qualification – *Dôte aux Jeunes Agriculteurs* (DJA) which gives them the primary capital necessary to build a new building for animal production as younger farmers (less than 45 years old) are more involved in pigs or poultry production. Older farmers often

choose beef production as they can use the same buildings they have for the dairy herds as they often reduce the dairy herd near retirement and beef production is for them a logical step.

Although there was no significant difference between the farmer's age and whether or not a farmer diversifies, there is a significant relationship between the type of diversification and age. This implies that younger farmers do not add new forms of diversification. This can be explained by the fact that when a young farmer starts a business s/he takes over from someone else, usually the parents, and consequently carries on the type of production that is already on the farm in order not to create a need for additional investment. For example, George, a farmer who farms with his mother, carried on using the existing enterprise diversification (the production of eggs for the *Institut Pasteur*) as his parents had operated that production. This meant that there was no need for additional investment.

AB: Comment avez vous choisi de diversifier?

George: Mes parents avaient déjà choisi un poulallier donc j'ai continué. On est tombé par hasard sur les oeufs pour Pasteur et les oeufs ça m'intéresse plus que la poule pour la viande.

AB: Avez vous eu envie de changer de production?

George: Non, parce que les oeufs ça me plait bien donc je ne voyais pas l'utilité de changer et en plus par rapport aux investissements il fallait bien rentabiliser le bâtiment.

- Agricultural education

The majority of farmers involved in enterprise diversification have an agricultural education which plays a role in their decision to adopt enterprise diversification. Although 24.2 percent of them have a degree in agriculture, they have decided not to be more innovative and follow the trends of their elders and engage in enterprise diversification (Table 6. 23). They have chosen enterprise diversification as it seems to them the only option. Furthermore, as farmers in this category are often young and single they are under the influence of their parents who help them on the farm and would not want their son or daughter to diversify into anything else other than traditional farming activity. Nearly 10 percent of farmers involved in enterprise diversification have not received an agricultural education. Because they often ask for advice from either the Chambre d'Agriculture or the technician from the milking firm, this explains the choice of diversification orientation.

Table 6. 23: Characteristics of farmers involved with enterprise diversification (sud Manche)

Sud Manche		% of all enterprise diversified farms (1)	
		n	%
Age	< 25 years old	7	7.2
	25 - 35 years old	24	25.3
	36 - 45 years old	28	28.9
	46 - 55 years old	22	22.9
	56 - 65 years old	15	15.7
	> 65 years old	0	0
Education			
Agricultural	BEPA	54	56.1
	Baccalauréat	10	10.6
	BTA	23	24.2
	Other	9	9.1
General	Certificat d'études	45	46.4
	Brevet des Collèges	45	46.4
	CAP	3	3.6
	Ingenieur	3	3.6
Marital status	Married	75	78.3
	Single	17	18.1
	Divorced	4	3.6
	Widow/er	0	0
Farmer's background	Agricultural	87	90.4
	Non agricultural	9	9.6
Gender	Male	88	91.5
	Female	8	8.5

(1) % of farmers involved in enterprise diversification

Source: Author's survey.

- Marital status

The author observed a large number of single or divorced farmers in this category. Enterprise diversification fits in with dairy farming which is often a time consuming production (Table 6. 23). The majority of single farmers opt for beef production followed by pig and poultry production as this production is less demanding and can be dealt with easily with dairying. Enterprise diversification is the type of diversification preferred by both men and women as Table 6. 23 illustrates. The survey reveals that women often opt for either beef or pig production but not for poultry production. This is because most of the women heads of farm are women who have taken over from their husband when the latter retired and consequently they carry on the existing production, and beef and pig production give them more free time than poultry production. Pre-existing diversification⁸ is not widespread as it concerns less than 10 percent of farms. Very few farms were highly diversified and the survey recorded only a couple of farms that had become less diversified as the diversified activity they had did not earn a sufficient income.

⁸ Pre-existing diversification refers to previous heads of farm who had diversified and this diversification was then followed by the new head of farm when s/he took over. This is the case of a son taking over the farm when his parents retire and he carries on the diversification activity already established.

6. 7. 2. Farm characteristics in enterprise diversification

- Farm size

Farms involved in enterprise diversification are often large farms as Table 6. 24 shows. Larger farms practice enterprise diversification, and those farms are usually GAECs as diversification brings in another income to the business. This income is often crucial to the operation of the GAEC. Bernard, a farmer who belongs to a GAEC near Mont Saint Michel, declared:

Bernard: "Nous on a été plus ou moins poussé au départ car on s'est mis en GAEC avec les frères. On avait une petite surface et on était restraint avec les quotas. Les parents avaient déjà du hors-sol. Sans le hors-sol, on n'aurait pas pu s'installer. A chaque fois qu'il y avait de l'investissement, fallait trouver du revenu. Le cousin est reparti, les femmes sont venues dans le GAEC donc il y avait de la main d'oeuvre donc il fallait développer. C'est un peu une chaine sans fin."

- Farm organisation

Farm size is linked to the organisation of the farms. The GAEC type of farm selects enterprise diversification in order to provide enough work for all the labour force from the GAEC, which is often a father and son partnership which includes the wife(s). Family farmers engaged in enterprise diversification do it to increase their income or in prospect of a family member joining the business in the future.

The author's survey showed that GAECs involved in enterprise diversification are often involved with poultry or pig production. In fact, both production types require labour and GAECs often diversify in order to provide enough work for every member of the GAEC involved in the business. EARL and part-time farms are more likely to diversify into beef production as the lack of labour on those farms makes beef production more attractive.

The nature of the labour force from farms involved in diversification is often family labour (spouse, son and daughter-in-law or spouse and daughter and son-in-law) (Table 6. 24). Every employee works full-time on the farm as well. Some GAECs employ workers on a full-time basis. A farmer argued that dairying is hard work and diversification has to fit in well with the main production otherwise there is no point diversifying if the main production is neglected.

Claude: La diversification nécessite beaucoup de travail et de main d'oeuvre donc il faut que les emplois qui soient créés soient financer par la production.

- Farm tenancy

As explained in section 6 tenancy does not have a major role in diversification. Tenant farmers are equally divided into the production of beef, pigs or poultry. As such they must come to an agreement with the landlord in order to build adequate buildings for a specific production.

- Farm location

Although farm location is not significant to the type of diversification, it seems that enterprise diversification tends to concentrate slightly more in the east of the study area which coincides with being more inland and remote from major urban centre.

- Milk quota

As farms are larger the milk quota allocation is often much higher compared with the farms involved in other types of diversification (Table 6. 24). Farmers with little milk quota and who run enterprise diversification often choose beef production as it involves less additional investment on the farm.

- Farm income

Farm income from farms involved in enterprise diversification has increased over the years as the proportion of farms earning less than £ 10 000 a year has considerably decreased, especially since 1998 (Table 6. 24). The majority of farms earn between £ 10 000 and £ 30 000 per year. However, it is within this category of farm diversification that there was the highest porportion of farmers in debt.

Table 6. 24: Characteristics of farms involved with enterprise diversification (sud Manche)

		% of all enterprise diversified farms (1)	
		n	%
Farm size	< 10 ha	1	1.2
	10-49 ha	32	33.7
	50-99 ha	50	51.8
	100- 199ha	13	13.3
Tenancy mode	Owner-occupier	4	4
	Tenant	14	14.7
	Both	78	81.3
Nature of the farm	Part-time	3	3.6
	Family	28	28.9
	EARL	16	16.9
	GAEC	49	50.6
Farm type	Dairy	79	82.7
	Beef cattle	11	11.1
	Arable	0	0
	Mixed crops and livestock	6	6.2
Milk quota	< 50 000 l	1	1.4
	50 000-99 999 l	8	8.1
	100 000-199 999 l	26	27
	200 000-499 999 l	57	59.5
	> =500 000 l	4	4.1
Number of employees	1	37	38.2
	2	33	34.2
	3	14	14.5
	4	11	11.8
	5+	1	1.3
Nature of employees	Family	86	89.5
	Non-family	10	10.5
Spouse working on farm	Yes	76	79
	No	20	21
Income 1984	< £ 10 000	37	74
	£ 10 000-29 999	11	22
	£ 30 000-49 999	2	4
Income 1992	< £ 10 000	34	50.7
	£ 10 000-29 999	27	40.3
	£ 30 000-49 999	5	7.5
	£ 50 000-69 999	1	1.5
Income 1998	< £ 10 000	22	23.2
	£ 10 000-29 999	59	61
	£ 30 000-49 999	11	11
	£ 50 000-69 999	1	1.2
	£ 70 000-89 999	3	3.7

(1) % of farmers involved in enterprise diversification

Source: Author's survey

Example of a typical farmer involved in enterprise diversification

Henri and his wife have started to diversify as their eldest son joined the farm business in 1997. As they farm on a small farm, a small milk quota and a restricted budget, Henri and his son decided to look into enterprise diversification. Henri wanted to obtain certification (Label Rouge) for the chicken production but that was not possible, as it was not cost effective. Before engaging in enterprise diversification, Henri was advised to look into buying more milk quota allocation in order to increase the farm income. However, quota distribution is badly managed in Manche according to Henri, and he could not afford it. When his son joined the business he was allocated an extra 10 000 litres of milk whereas the neighbour obtained 30 000 litres of milk when his son joined the business. Henri does not like the idea of milk quota, as he had to pay a fine of £ 3500 in 1987 because he exceeded his allocation. He had to borrow money from the bank to pay off the fine. At the time he was advised to take early retirement and to find another job. However, as he and his wife had no qualifications this was not an option for them as they had three children to look after.

Henri, like many of the other farmers, believes that only farmers who intensify their business will survive. He reckons the market should be better regulating, as there is a too big a gap between the producer price and the consumer price. However, housewives, when they shop mainly look at the price of what they buy and not so much at the quality. Henri would not become an organic farmer as for him it would be farming like his grand-parents and he argues that it is not the way to move forward or to give a valuable future for his son as this type of farming would not be competitive enough with other farmers. Furthermore, there is no point for him to transform milk into other dairy products as it would take too much time and there is no market for it. It would be far too much investment and at the end, the supermarket would not buy it at a higher price. It would be too risky with all the sanitary and veterinary controls.

Henri did not want to transform the milk on his farm as it would involve too much investment and he does not have the skills for it and they did not have enough land to increase their dairy production either. He would not go and sell his fruit or vegetables to the local market either as it takes more time to prepare everything and he said that it is a good thing for retired people to do but not for him. People now go and buy everything at the nearest supermarket. Furthermore, not everybody can afford organic products so farmers have to produce food for both the rich and the poor. Customers nowadays still make food purchases based on considerations of cost rather than on consideration of quality. This explains why industrial food production such as 'hors-sol' works well and always will.

Farming life has changed since the installation of the milk quota. Farmers have become more selfish and individual: farmers try to push each other off the farming profession in order to grab the milk quota for themselves. Henri's wife declared she has very few contacts with the other farmers' wives. She remembered the time when farmers were meeting up in the evening and had a meal and played cards. However, as their farm is not making enough money they have been left out and they feel that other farmers in the village are only waiting for their business to go bankrupt in order to buy them out to increase their farm size. Henri quit the main farmers' syndicate in 1983 but would be tempted to join the other syndicate which concentrates more on the farmers' well being and family farms. Henri and his wife declared that there is one thing that should not be forgotten about agriculture: it is the quality of life. Henri said that nowadays farmers have become subsidy hunters ("chasseurs de primes") and it is the new agricultural education!

6. 8. Agricultural diversification

In sud Manche, 8.4 percent (n=15) of farmers diversifying are involved in agricultural diversification. Farmers involved in this particular aspect of diversification are only dealing with unconventional animals (Table 6. 25). Although sheep production like beef cattle may be regarded as another traditional production, for this survey they are regarded as non-traditional production as they have the label '*prés salés*' which makes them different from 'normal' sheep production found in mountain areas. Unconventional crops would be more for horticulturists. None of the farmers surveyed were organic farmers. Although organic produce is commercialised at a higher price, farmers are not willing to farm that way as they believe they would earn even less than they are already. Organic production is associated in the farmers' minds with reduced production and insufficient price premiums. Hence they feel it would not be profitable. Furthermore, organic milk collection is often very difficult as milk collectors do not always wish to come and collect farmers' organic milk if the farm is too far away from the main collection route as it is not cost effective for organic dairying.

Table 6. 25: Nature of agricultural diversification (sud Manche)

	Number of farmers (n=15)
Fish	1
Sheep (<i>prés salés</i>)	3
Rabbits	4
Bees (honey)	3
Horses	2
Goats	2

Source: Author's survey

6. 8. 1. Farmers' characteristics in agricultural diversification

- Age

Farmers involved in agricultural diversification also have specific characteristics (Table 6. 26) is farmers aged between 56 and 65 years old (Table 6. 26). Farmers in this age category are often family farmers and they are involved in 'more traditional' forms of agricultural diversification, e.g. sheep or rabbit production. Younger farmers are involved in more unconventional types of agricultural diversification. The more unconventional the more the farmers are seen as being marginal farmers by the other farmers. This contributes to the fact that not many farmers are involved in this type of production as they are marginalized and criticised by 'conventional

farmers'. Furthermore, most farmers do not see a potential market for unconventional products as they 'would not be for everybody due maybe to a higher cost, taste or habit'.

Table 6. 26: Characteristics of farmers involved in agricultural diversification (sud Manche)

Sud Manche		Agricultural (1)	
		n	%
Age	< 25 years old	0	0
	25 - 35 years old	1	7.7
	36 - 45 years old	2	15.4
	46 - 55 years old	5	30.8
	56 - 65 years old	7	46.2
	> 65 years old	0	0
Education			
Agricultural	BEPA	9	60
	Baccalauréat	2	20
	BTA	1	10
	Other agricultural diploma	1	10
General	Certificat d'études	7	45.5
	Brevet des Collèges	4	27.3
	BEP	1	9.1
	Baccalauréat	1	9.1
	Licence	1	9.1
Marital status	Married	14	92.3
	Single	1	7.7
	Divorced	0	0
	Widow/er	0	0
Farmer's background	Agricultural	12	76.9
	Non agricultural	3	23.1
Gender	Male	11	75
	Female	4	25

(1) % of farmers involved in agricultural diversification

Source: Author's survey.

- Education

Farmers involved in agricultural diversification have less agricultural qualifications than other farmers (3 farmers out of the 13 have not received an agricultural education, Table 6. 26). Their idea of diversifying into unconventional products is linked to the reasons for becoming a farmer. Again here farmers fell into two categories: those involved in sheep or rabbit production have chosen this because they are in a GAEC and needed another production on the farm and they were previously interested in the production. The other category chose to become a farmer as a way of life.

- Marital status

The majority of farmers involved in agricultural diversification are married (Table 6. 26). Because of the labour involved in dealing with an additional type of animal production, the spouse often looks after the diversified activity. If the farm is a GAEC farm, unconventional production has often been introduced to provide enough work and income for all members of the GAEC.

6. 8. 2. Farm characteristics in agricultural diversification

- Farm size

Farmers involved in agricultural diversification have small farms (Table 6. 27), often family farms. Larger farms represent GAECs. Except for the GAECs, farmers have chosen not to increase their farm size but to diversify their activity on the farm by introducing a product that is not yet overproduced. Most of the farmers do not work alone on their farm and the labour force is mainly family labour, often the spouse and children in the case of GAECs. According to many farmers' spouses, 'marrying a farmer is becoming a farmer yourself'. It is often a way for women to find employment in the region, which does not offer a great range of alternative employment.

- Milk quota

Farms diversifying into agricultural activities often have a small milk quota if they are family or EARL farms or a larger milk quota if they are a GAEC (Table 6. 27). However, it is important to note that some farmers responded to the questionnaire that the diversification will take over as the main production. Some farmers were considering stopping milk production and concentrating on the production of unconventional products (fish or bees) in order to develop it further and to add tourist activity. However, at the time of the author's survey no farmers combined agricultural and structural diversification.

- Income

Farm income from this category of diversification has increased since 1984 as the proportion of farmers earning less than £ 10 000 has been reduced and income from other categories is increasing (Table 6. 27).

- Location

Farmers argue that with the infrastructure nowadays, it is easy to transport any products so farmers diversify in what they like and do not worry too much about the expense linked to the marginal extra cost of transport.

Table 6. 27: Characteristics of farms involved in agricultural diversification (sud Manche)

		Agricultural (1)	
		n	%
Farm size	< 10 ha	1	7.7
	10-49 ha	11	69.2
	50-99 ha	1	7.7
	100- 199 ha	2	15.4
Tenancy mode	Owner-occupier	5	36.4
	Tenant	0	0
	Both	10	63.6
Nature of the farm	Part-time/hobby	3	23.1
	Family	7	46.2
	EARL	1	7.7
	GAEC	4	23.1
Farm type	Dairy	8	53.8
	Beef cattle	1	7.7
	Arable	1	7.7
	Mixed crops and livestock	5	30.8
Milk quota	< 50 000 l	3	20
	50 000-99 999 l	2	13.3
	100 000-199 999 l	2	13.3
	200 000-499 999 l	8	53.4
	> =500 000 l	0	0
Number of employees	1	10	66.7
	2	3	16.7
	3	1	8.3
	4	1	8.3
	5+	0	0
Nature of employees	Family	15	100
	Non-family	0	0
Spouse working on farm	Yes	14	91.7
	No	1	8.3
Income 1984	< £ 10 000	8	72.7
	£ 10 000-29 999	3	27.3
Income 1992	< £ 10 000	7	58.3
	£ 10 000-29 999	4	33.3
	£ 30 000-49 999	1	8.3
	£ 50 000-69 999	0	0
Income 1998	< £ 10 000	7	46.2
	£ 10 000-29 999	7	46.2
	£ 30 000-49 999	0	0
	£ 50 000-69 999	1	7.7

(1) % of farmers involved in structural diversification

Source: Author's survey

6. 9. Classification of farmers

From this the author has classified the farmers into various categories as explained in chapter 3. According to the characteristics of the farmers and farms, farmers in sud Manche can therefore be identified mainly as 'traditionalist' (n = 63), 'innovators' (n= 22), 'survivors' (n =37) or 'non-diversifiers' (n = 42) (Figure 6. 2). There were very few 'leavers' (n= 6) or pluriactive (n= 8) farmers and no 'entrepreneurs' (n= 0) in sud Manche.

Farmers in sud Manche can be identified primarily as 'traditionalist' as they are engaged in OGAs linked to farming (enterprise diversification). This is not surprising as this type of diversification is highly recommended by the advisors from the Chambre d'Agriculture as well as these from the dairy industry or by the farmers'union. Enterprise diversification takes the form of adding another traditional production to the main production. Dairy farmers use enterprise diversification as they can use the existing building on the farm for a production of beef, pig or poultry but also because these type of production do fit in well with the nature of dairy farming.

However, some farmers in sud Manche diversified into more innovative activities such as B&B, farm restaurant, transforming and marketing farm produces. These types of diversification often required more investments and the farmers wanted to increase their farm income but also engage into non-farming activity to spread the economic risk. The author classified these farmers as innovators.

Another groups, was the 'survivors'. Farmers in this category were often farmers who tried to increase their farm income and diversify into activity that did not require many investments. These farms were often family runs. If the farmers diversify into structural activity, it was often a B&B. Farmers were older so they has a couple of free bedroom they let as their children have moved out. Quite often, the B&B was not declared. Pluriactive farms run by a woman were often for self-consumption and the farm was not run as a business. It was a family farm that would provide a pension for the farmer while her husband has a job outside the farm. In this category we also find farmers who diversify into enterprise diversification, especially beef production as this type of diversification requires no investments as the beef can used the same building as the dairy cattle and often the beef production consist of a small herd of beef (< 10 heads). The beef were often calves that the farmers did not managed to sell when they were young so the farmer kept them to produce beef.

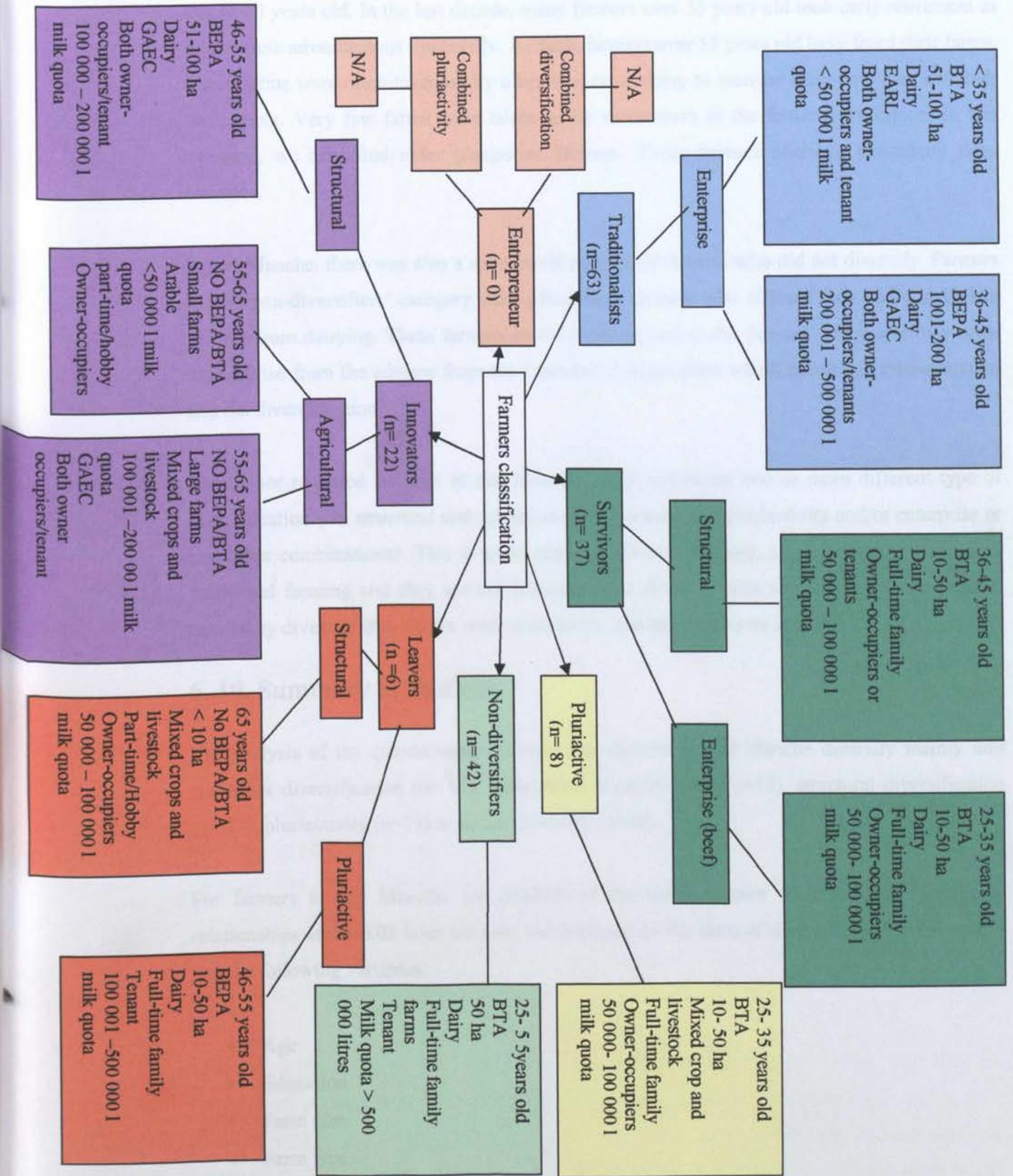


Figure 6. 2: Classification of farmers in sud Manche

In sud Manche, there were very little farmers in the 'leaver' category. Most farmers retire at the age of 60 years old. In the last decade, many farmers over 55 years old took early retirement as it was quite advantageous financially. As such, farmers over 55 years old have freed their farms. These farms were often taken up by other farmers wishing to increase their farm size and their milk quota. Very few farms were taken up by newcomers in the farming profession. In this category, we also find older pluriactive farmers. These farmers continue the family farm business.

In sud Manche, there was also a substantial number of farmers who did not diversify. Farmers in the 'non-diversifiers' category were often dairy farmers who claimed they had a sufficient income from dairying. These farmers had also strong link to the farmers' union and they often took advice from the advisor from the Chambre d'Agriculture which encourage intensification and not diversification.

The author recorded no farm in sud Manche which combined two or more different type of diversification (i.e. structural and agricultural or structural and pluriactivity and/or enterprise or any other combinations). This is quite representative of the area, as farmers are involved in traditional farming and they are not encouraged to diversify into non-farming activities, and when they diversify they do not want to diversify into more than one activity.

6. 10. Summary of findings

The analysis of the questionnaires reveals that farmers in sud Manche diversify mainly into enterprise diversification (n= 96), agricultural diversification (n=15), structural diversification (n= 12), pluriactivity (n=13) or do not diversify (n=42).

For farmers in sud Manche, the analysis of the results shows there were no significant relationships at the 0.05 level between the presence on the farm of diversification /pluriactivity and the following variables:

- Age
- Education
- Farm size
- Farm type
- Farm organisation
- Farm tenancy
- Milk quota

- Farm location

Further analysis shows that there was a significant relationship at 0.05 level between the nature of diversification and the following two variables:

- Farm organisation
- Farm tenancy

According to the analysis of the results, the 'key' variables are unimportant in sud Manche. However, the analysis of the qualitative data would suggest that farming culture and the economic context are the main important factors regarding the decision-making process for diversification/pluriactivity. As a result the 'model' as described in chapter 1 has to be modified as Figure 6. 3 shows.

One explanation is that the variables are not independent. For example, a young farmer may still be farming with his parents so the decision-making is not entirely his (e.g. George). The parents may have strong link to a farmer's union and may not be interesting in diversifying into non-farming activity. As they may believe that adding non-farming activities to the farm business may be seen by neighbouring farmers as bad farming practice (e.g. Alain). As a result, the young farmer is largely influence by his family, his agricultural education and does not diversify into non-farming activity.

Farm size is often related to the farm organisation and the farm tenancy. For example, large farms are often GAEC and some of the farm is owned by the farmers and the rest is rented. As such, the farmers might be prevented by the landlord to diversify. Furthermore, GAEC type of farms is often run by father and son so age and education also come into the equation when it comes to the decision-making. The young farmers may want to diversify into something 'new' and away from farming while the older generation may be strongly against a diversified activity away from traditional farming (e.g. Henri).

Farming culture plays an important role. Farmers in sud Manche do not see diversification/pluriactivity as a solution to the farming crisis. They often argue that if their produce were sold at a higher price, then they would not need to diversify or be pluriactive. Furthermore, farmers in sud Manche are not encouraged to diversify as diversification is still seen as a failure of a business and diversifiers or pluriactive farmers as often assimilated as 'bad farmer'. This is reinforced by advisors from the Chambre d'Agriculture and members of

farmers' union who do not encourage farmers to diversify into non-farming activities. They argue that by tradition, farmers are food producers and they should not be engage in anything else. According to them, if agricultural policies were efficient, farmers would not have to diversify. Furthermore, farmers who diversify are often marginalised and they are not seen as true farmers.

As stated by many farmers during the interviews, farmers diversify mainly to increase their income, which is an economic factor for the decision-making to diversify. However, the decision-making is based on the resources of the farm in terms of capital. If farmers have little to invest they will be more likely not to diversify, be pluriactive (on very rare occasions) or they will diversify into enterprise diversification. If the farm business has more capital they may invest into a diversification type that require more investment such as B&B or procesing of farm products.

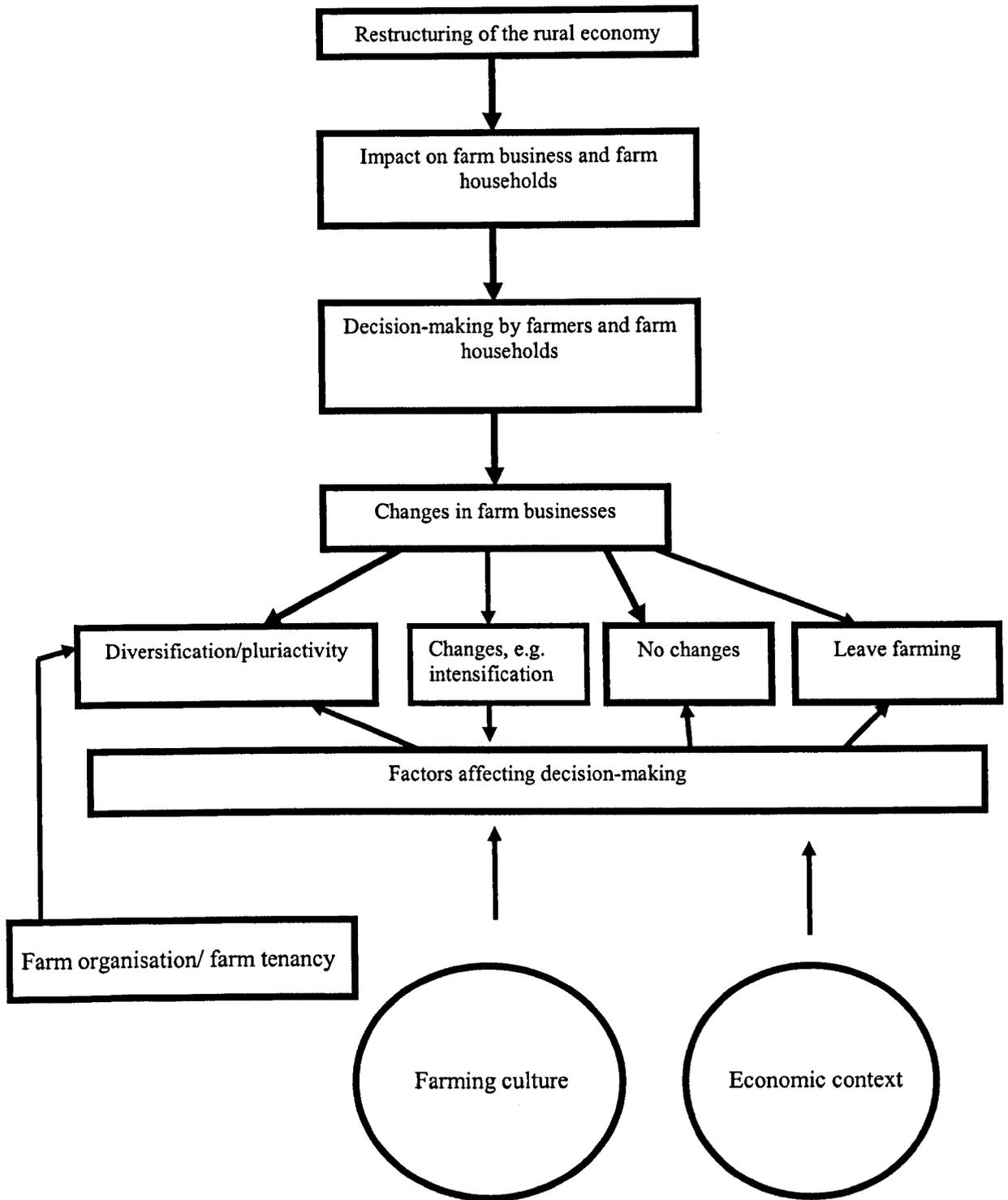


Figure 6. 3: Model for sud Manche

6. 11. Conclusion

In this chapter the author analysed diversification and pluriactivity in sud Manche in order to identify key characteristics of farms and farmers which led farmers to choose to diversify into a specific type of diversification, to become pluriactive or simply to intensify their farm business

instead of engaging in an OGA. The author showed that 77.2 percent of farmers had diversified. The main type of diversification in sud Manche is enterprise diversification. Dairy farmers are often involved in enterprise diversification as it fits in well with the nature of dairy work. However, some dairy farmers prefer intensifying their milk production as they have invested a lot in this production. Older farmers tend to diversify into tourism activities if no one takes over their farm in order to keep this activity once they retire so they can supplement the income from their pension. If older farmers have a young member of their family taking over their business then the farmer is quite likely to be involved in enterprise diversification. Young farmers are also mainly involved in enterprise diversification as they find that other types of diversification require too much work or investment and can be sometimes only seasonal whereas they can pursue enterprise diversification all year long. Pluriactive farms in sud Manche are farms where the spouse works elsewhere. The next chapter will analyse diversification and pluriactivity in the other dairy study area, west Dorset, in order subsequently to highlight the similarities and differences in chapter 8.

Chapter 7: Diversification and pluriactivity in west Dorset

Chapter 7: Diversification and pluriactivity in west Dorset

7. 1. Introduction

This chapter analyses diversification and pluriactivity in west Dorset. The author uses both quantitative and qualitative data from her survey to examine the characteristics of farms and farmers which have an impact on diversification and/or pluriactivity and then examines closely the nature of different types and combinations of diversification and pluriactivity. Vignettes are also used in this chapter to portray the characteristics of specific farms and farmers involved (or not) in diversification/pluriactivity. From the analysis, the author classifies farmers according to the classification discussed in chapter 3

7. 2. General characteristics of diversification/pluriactivity in west Dorset

The author's survey reveals 72.5 percent (n= 156) of farmers diversifying in west Dorset (Table 7. 1). Table 7. 2 details the type of diversification/pluriactivity in which farmers from west Dorset are involved.

Table 7. 1: Diversification and pluriactivity (west Dorset and sud Manche)

Diversification	West Dorset	
	n	%
Yes	156	72.5
No	57	27.5

Source: Author's survey

Table 7. 2: Nature of diversification/ pluriactivity (west Dorset)

	west Dorset		
	n	%	N for combined activities disaggregated
Structural	15	7.1	28
Agricultural	3	2.1	16
Enterprise	38	17.6	53
No diversification	57	26.8	57
Pluriactivity	48	21.8	59
Combined diversification	8	5.6	
Combined pluriactivity	44	19.0	

Source: Author's survey

Only 7.1 percent of farmers from west Dorset had diversified into structural diversification. Although this might sound surprising, it is important to note that farmers in west Dorset often

combined structural diversification with another activity ($n = 28$) and this is subsumed under the label of combined diversification or combined pluriactivity.

Only 2.1 percent of farmers are engaged solely in agricultural diversification and 17.6 percent diversify solely into enterprise diversification. When it comes to diversification/pluriactivity, farmers in west Dorset do not have the same ideas or attitudes as farmers in sud Manche. The number of pluriactive households exceeds 20 percent in west Dorset compared with 7.8 percent in sud Manche. Another concept /approach in west Dorset is that farmers combined aspects of diversification in order to spread the economic risk. As such, 24.6 percent of farmers have combined diversification and pluriactivity in west Dorset. These practices are non-existent in sud Manche. Farmers in west Dorset have larger farms and more employees, so it is easier for them to diversify their resources on the farm and it makes it easier, for example for dairy farmers, to have a part-time job as they have the necessary labour on the farm. Large farms in west Dorset diversify more which corresponds to the findings of various other research (e.g. Ilbery *et al*, 1997). Furthermore, farmers in sud Manche rely more heavily on the returns from traditional farming activity because they do not diversify to the same extent as farmers in west Dorset.

One of the characteristics regarding diversification and pluriactivity in west Dorset is that west Dorset farmers may have one or more OGAs on their farm (Table 7. 2). This deepening of diversification is confirmed by the marked increase in the proportion of diversified holdings in the south-west region as a whole engaged in two or more enterprises rising from 29.6 percent to 52.1 percent in July 2001 and August 2003 (Centre for Rural Research, 2003). This finding not only adds depth to the headline increase in the overall incidence of farm diversification but also clearly suggests that farm diversification is now a major development shaping farming, with widespread implications for the rural economies of south-west England and important policy ramifications.

The results from the author's survey largely agree with other research. For example Ilbery *et al* (1997) identified that 28 percent of farm households in the Midlands, North Pennines and Oxfordshire had adopted some form of business diversification. On-farm businesses were dominant, being found on 70 percent of the adopters' farms; only 30 percent of the adopters had only off-farm businesses (Ilbery *et al*, 1997). Indeed very few farms had both on- and off-farm businesses (12.6 percent of all adopters) (Ilbery *et al*, 1997). These results are different from previous studies on pluriactivity which emphasised the dominance of off-farm OGAs and suggested that those members of the farm household working off-farm tended to do so as employees rather than as employers or on a self-employed basis.

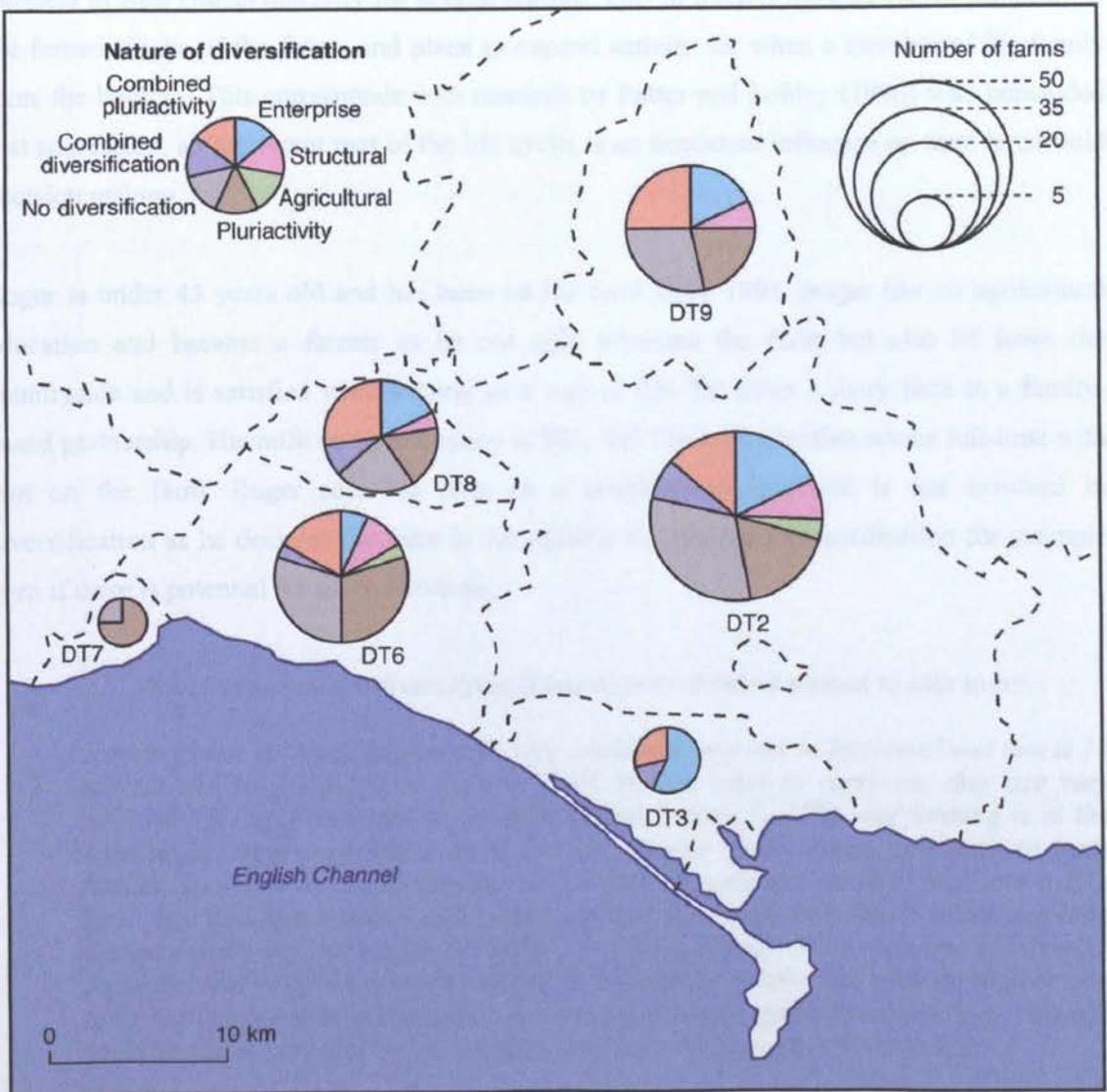


Figure 7. 1: Nature of farm diversification and pluriactivity location map for west Dorset.

Source: Author's survey

Farmers in west Dorset diversify for several reasons. One of them is the inheritance perspective: the farmer thinks of the future and plans to expand activity for when a member of his family joins the holding. This corresponds with research by Potter and Lobley (1996) who concluded that succession, an important part of the life cycle, is an important influence on farm household decision making.

Roger is under 45 years old and has been on his farm since 1991. Roger has no agricultural education and became a farmer as he not only inherited the farm but also he loves the countryside and is satisfied with farming as a way of life. He owns a dairy farm in a family-based partnership. His milk quota allocation is 541, 243 litres. His brother works full-time with him on the farm. Roger sees his farm as a conventional one and is not involved in diversification as he declares the farm is not suitable for structural diversification for example even if there is potential for diversification.

AB: Would you envisage diversifying if any of your children wanted to take over?

Roger: I have got three boys, one is very interested, one not so interested and one is 18 months old so (laugh) it is open to them. If they want to carry on, they are very welcome. If they decide not to, I would not push them [...] The way farming is at the moment we have to produce more for less returns which means you have to work harder, you have to run to keep up the standard so perhaps we shall look into it at a later date and fortunately we are on the Milled Way [a Roman Road] which is a long distance walk way, with a lot of ramblers walking through. We have some old derelict buildings that might be suitable one day as a hostel for people who walk through or into farm barn conversion. We just have to wait for changing government policy on that one because that is part of the planning game but we won't go down that road yet.

Although diversification is seen as one of the solutions to the uncertainties of farm income, several farmers in west Dorset were not willing to diversify for various reasons. The main reason for not diversifying is the investment involved with setting up a new activity on the farm, which can be quite sizeable. Time plays an important role in the decision making of farm diversification and/or pluriactivity. Because dairy farming involves milking both mornings and evenings some of the other activities dairy farmers can do are limited if no extra staff are employed to help out. However, during the interviews, farmers commented that if they start a new activity on their farm in order to complement their income, the new activity could be such that it does not adversely affect the main production. Farmers argued that if the efficiency of the main production is diminished because of the diversification activity then it is not worth doing it because the farmers could lose money. Dairy farmers have to be present on their farm at all times to look after the cattle and make sure there is nothing going wrong on the farm in order to minimise any risk of disease for the animals. When it comes to looking after the animals, farmers are often not willing to give that responsibility to employees. However, if the farm is

large, this might not apply. According to the questionnaire, for most of the farmers farming is a way of life and they love their animals. As such they sometimes go on holidays but while away they remained concerned about their animals.

The other main problem for farmers to employ staff is that the costs involved in terms of salary, insurance and cover - if the employee is sick - are quite high. Furthermore, farmers find it more and more difficult to find the right person to work with them on the farm. It is even more difficult for farmers who are not completely up to date with the technology and equipment as those farmers declared that youngsters do not want to work on their farms as it is not modern enough. Farmers blame the agricultural education system for it, as it is not giving the right example for the youngsters to become farmers.

AB: Do you find labour quite easily around here?

Andrew: Yes it is difficult to find staff, we do not have enough staff and we can't find anyone willing to work. Nowadays, young people do not want to work on a farm as it does not remunerate enough....

7. 3. The influence of key variables in diversification and pluriactivity in west Dorset

As for the French study area, the author used chi-square tests to analyse statistically the association between several variables and the presence and type of diversification. The results are displayed in Table 7. 3. Details of the analysis of secondary variables can be seen in Appendix 9. As in chapter 6, the author looked at the cross-tabulation matrices from the chi-squared tests in order to examine the appropriateness of the conceptual model detailed in chapter 1

Table 7. 3: Statistical analysis of variables for west Dorset

	Age	Gender	Marital status	Education	Education (agricultural)	Diversification	Nature of diversification	Farm size	Farm location	Farm tenancy	Farm organisation	Milk quota	Number of parcels	Co-op	Income 1984	Income 1992	Income 2000	
Gender	0.319																	
Marital status	0.254	0.002																
Education	0.879	0.235	0.619															
Diversification	0.075	0.669	0.799	0.261	0.820													
Nature of diversification	0.156	0.005	0.051	0.336	0.013	0.000												
Farm size	0.175	0.015	0.043	0.007	0.236	0.418	0.024											
Farm location	0.078	0.606	0.415	0.729	0.359	0.726	0.339	0.010										
Farm tenancy	0.002	0.287	0.586	0.104	0.225	0.291	0.703	0.128	0.102									
Milk quota	0.249	0.003	0.985	0.185	0.164	0.059	0.843	0.235	0.001	0.072	0.000							
Number of parcels	0.043	0.555	0.132	0.194	0.889	0.434	0.170	0.248	0.856	0.007	0.859	0.974						
Co-op	0.041	0.166	0.340	0.001	0.865	0.273	0.553	0.002	0.393	0.052	0.016	0.095	0.910					
Income 1984	0.332	0.153	0.998	0.044	0.235	0.245	0.245	0.029	0.047	0.455	0.003	0.145						
Income 1992	0.239	0.643	0.498	0.006	0.457	0.126	0.148	0.019	0.340	0.068	0.017	0.331						
Income 2000	0.624	0.768	0.887	0.033	0.256	0.127	0.157	0.236	0.197	0.166	0.342	0.083						
Type of farm	0.314	0.099	0.124	0.202	0.359	0.049	0.187	0.129	0.253	0.221	0.258	0.0123						
Loan	0.030	0.451	0.656	0.425	0.115	0.211	0.616	0.569	0.291	0.526	0.900	0.888	0.072	0.100	0.510	0.031	0.725	
Advice diversification	0.226	0.942	0.368	0.282	0.357	0.024	0.341	0.058	0.177	0.122	0.404	0.288	0.353	0.007	0.572	0.426	0.176	
Advisors	0.000	0.183	0.759	0.612	0.246	0.979	0.997	0.219	0.423	0.925	0.360	0.217	0.746	0.358	0.770	0.081	0.885	
Grant	0.080	0.147	0.163	0.385	0.263	0.577	0.038	0.982	0.254	0.039	0.728	0.516	0.574	0.008	0.824	0.686	0.798	
Farm organisation	0.001	0.023	0.344	0.002	0.516	0.757	0.004	0.000	0.515	0.179	0.000	0.000	0.710	0.017	0.581	0.494	0.548	

Source: Author

7.3.1 Age

Age is an important factor in the decision making process for diversification. Table 7.4 presents the various categories of farmers' age groups taking part in the survey. The table shows that for west Dorset, the largest category of farmers involved in the survey was those over 65 years old.

Table 7.4: Farmers' age (west Dorset)

Age category	west Dorset	
	n	%
under 25 years old	1	0.7
25-35 years old	11	4.9
36-45 years old	43	20.4
46-55 years old	56	26.1
56-65 years old	43	20.4
over 65 years old	59	27.5

Source: Author's survey

In west Dorset, less than 6 percent of farmers are younger than 35 years old which indicates that young people are not joining the farming industry. However, there was a larger proportion of farmers in the category over 65 years old in west Dorset.

In west Dorset there are very few young farmers as only 0.7 percent of the farmers are under 25 years old. It seems more difficult for young farmers in west Dorset to gain entry to the farming profession as farms are more expensive and also farm tenancies are harder to obtain. In the UK, young farmers do not benefit from any financial help to enter the farming industry.

As an attractive package, the French DJA has no British equivalent so young people are not so keen to start farming as it is recognised as hard work often for minimal income. The lack of capital is a key deterrent to young farmers in the UK. Most young farmers who start a farm business do it because their father passes the farm to them so they can continue the family business.

Although the analysis showed no statistically significant relationship at the 0.05 level between age and the presence of diversification and/or pluriactivity (chi-square = 3.178, df = 1, p= 0.075), younger farmers in west Dorset are generally more likely to diversify than the older generation. Farmers under the age of 45 years old are 2.37 times more likely to diversify compared with farmers over 45 years old. Non-diversifiers are in the majority in west Dorset for the over 65 years old group. There is a slight tendency for younger farmers to be more likely to diversify. Younger farmers are more likely to have fresh ideas and need to diversify compared

to older farmers. Furthermore they may have more reason to diversify if they have children. In contrast, the author's survey shows that in all age groups the numbers diversifying are about the same as those not diversifying. There is a greater likelihood of not diversifying only in the 46-55 age group. The author's results for west Dorset agree with McNally (2001) who argued that the age of the farm operator has a small or negligible effect on the probability of observing any diversification activity.

When we look closer at the type of diversification farmers practice, the statistical analysis showed that there is no significant association between the farmers' age and whether farmers diversify on-farm or off-farm (chi-square = 2.015, df=1, p= 0.156). Farmers under the age of 45 years old are only 1.83 times more likely to have on-farm diversification compared to farmers over 45 years old. Farmers over 45 years old are 5.33 times more likely not to diversify compared to farmers under 45 years old and 5.2 times more likely to be pluriactive compared to farmers under 45 years old. Older farmers are 4 times more likely to have structural diversification. Farmers under 45 years old are 2 times more likely to have agricultural diversification compared to older farmers

Middle-aged farmers in west Dorset (between 36 and 55 years old) are more likely to diversify into any type of diversification, depending on the family characteristics. West Dorset's older farmers (over 55 years old) are more likely to be either pluriactive or they do not diversify at all, with only a minority who adopt combined diversification/pluriactivity or enterprise diversification. Meert *et al* (2005) demonstrated in their survey in Belgium that the majority of very small farms can be described as 'semi-retirement' farms. Their proprietors are often retired but nevertheless stay active on their farms. In many of these cases, farming itself can be considered as the survival strategy of the farm household, supplementing a fairly low retirement pension.

7.3.2. Education

Farmers in west Dorset do not need to have a compulsory agricultural education to start a farm business. As a result only 20.6 percent have an agricultural qualification (Table 7. 5). In west Dorset, the category of farmers with the most agricultural training or education are those aged 36-45 years.

Table 7. 5: Farmers' education (west Dorset)

	West Dorset	
	n	%
Up to GCSE	73	34.4
A-level	26	12.2
Agricultural diploma	44	20.6
Degree	29	13.7
Other	41	19.1

Source: Author's survey

In west Dorset the more agricultural education a farmer has the less likely s/he is likely to diversify. The author's results for west Dorset agree with the literature on diversification claiming that general education – as opposed to agricultural education- plays an important role in diversification as it gives the farmers the necessary skills to engage in a non-agricultural business activity.

There is no significant association between the farmer's education (agricultural) and whether or not farmers diversify (chi square = 3.026, df =1, p= 0.82). Farmers with agricultural education are 2.67 times more likely to diversify compared with farmers with no agricultural education.

There is a significant association between the nature of the agricultural education a farmer had and whether or not they diversify (chi- square = 8.620, df =2, p =0.013). Farmers with post A-level agricultural education are 3.25 times more likely to diversify compared with farmers who have only an up to A-level agricultural education (i.e. the higher the agricultural education, the more likely the farmer is to diversify).

There is no significant association between the farmers' education and the type of diversification (chi square = 1.262, df =1, p=0.261). Farmers with agricultural education are 1.70 times more likely to have on-farm diversification compared to farmers with no agricultural education (i.e. agricultural education encourages farmers to diversify on-farm). There is no significant association between the nature of the agricultural education and whether or not farmers diversify on- or off- farm (chi square = 2.161, df= 2, p= 0.336). The higher the agricultural education the more likely are farmers to diversify off-farm.

Ilbery (1988) argued that farm diversification necessitates a change from a production orientation where levels of output are stressed rather than overall economic efficiency to one which emphasises marketing skills, so consequently agricultural business education or training should be developed within the farming community. As the qualitative analysis will show,

farmers have mentioned that the lack of marketing skills or communication skills has helped prevent them from diversifying.

According to many farmers - as the following extracts from the interviews in west Dorset show - it is important for them to choose an activity they enjoy doing and they have skills for, otherwise the diversified activity is not going to work and instead of earning money farmers lose some.

AB: What about farm education or a farm zoo?

Andrew: No, no, it is not my cup of tea. There are quite a few people who do that in the area, especially close to the sea in Devon and Cornwall and you have to be set up in a particular way to do that. No, it is not something we have considered seriously at all.

AB: And open days?

Andrew: Yes, I might but I will have to have a much better staff than I have got with me at the moment. I do not have time to do it.

AB: What do you think of farms who show the farm where everything is perfect? Do you think that gives the right image of farming?

Andrew: Well that is a reason why I would not want to open the doors to the public and I do not think a farm like mine is in a state where I would want to do that. The people who come and stay here looked around the farm and it is exactly as it is. They learn how us farmers are working at the moment.

Farmers also think that sometimes they do not have the right skills for certain types of diversification. Farmers are less likely to initiate new business activities in types of diversification of which they have no experience than they are for those in which they are already active.

Harold is a middle-aged farmer (under 45 years old). He has an agricultural diploma, He inherited the farm. He runs a 60 ha full-time family dairy farm (owns 45 ha and rents 15 ha). His brother works with him as well as his wife. Harold has decided not to diversify as he prefers working with animals. Because of the location of his farm, which does not have easy access from the main road, and the fact that he does not want tourists on his farm, he decided against running a camp site or B&B. He declared that so far they have enough money to live on so they would only look into diversification if they need more income when the children grow up.

AB: What would make you diversify?

Harold: It would have something to do with the tourist industry but then I would have a problem with that, as I don't get on with tourists very well. [Laugh]

7.3.3 Farm size

Farms are much larger in west Dorset (Table 7. 6) than in sud Manche. The average farm size in west Dorset is 176 ha compared with 56 ha in sud Manche. West Dorset has fewer small farms i.e. less than 10 ha (16.8 percent). The author's survey recorded 21.2 percent of farms are over 200 ha in west Dorset.

Table 7. 6: Farm size (west Dorset)

	west Dorset (%)			
	At time of the survey		At start of farm business	
	n	%	n	%
< 10 ha	35	16.8	107	50
10-50 ha	56	26.3	44	20.5
51-100 ha	47	21.9	24	11.5
101 -200 ha	30	13.9	19	9.0
201 -500 ha	26	12.4	19	9.0
>500 ha	19	8.8	0	0

Source: Author's survey

Table 7. 6 shows that farmers here have increased their farm size since the current operator assumed control. The number of farms under 10 ha has decreased from 50 percent to 16.8 percent between the start of the farm business and the time of the survey. The category of farm size which has increased most is those farms 10-100 ha. The most noticeable change is the proportion of farms over 200 ha which at the time of the survey accounted for 21.2 percent of farms. This has more than doubled from the time farmers started, when the proportion of farms over 200 ha counted for only 9.0percent.

There is no significant association between farm size and whether or not farmers diversify (chi-square =1.744, df =2, p=0.418). Medium-sized farms (61- 120 ha) are 2.1 times more likely to diversify compared to small farms. Small farms (< 60 ha) are 2.13 times more likely to diversify than not diversify. Medium-sized farms are 4.2 times more likely to diversify than not diversify. Large farms (> 120 ha) are 3 times more likely to diversify than not diversify. Nevertheless, results from the author's survey showed that medium-sized farms (61-120 ha) and very small farms (less than 10 ha) are the most likely to diversify but this relationship is not statistically significant. In west Dorset, small farms (less than 60 ha) diversify as well as medium-sized farms (61-120 ha). Farms over 200 ha diversify less. Farmers prefer intensifying their business if they have few employees rather than diversifying as it would necessitate them to employ more labour to work on the farm. It also showed that larger farms diversify less than smaller farms which is contradictory to the study by the Centre for Rural Research (2003) which

affirmed that larger farms diversify more than smaller units. This applied for accommodation and catering, recreation and leisure and unconventional crops and crop based processing. Walford (2003: 494) reinforced this idea by stating that “in particular farmers operating large scale farms have been prominent in adopting this approach [diversification] just as they were innovative across a range of farming practices in the expansion and modernisation of their agricultural production in earlier decades”. The author’s results are different because large dairy farms in both study areas do not tend to diversify.

There is a significant association between the farm size and the type of diversification (chi-square = 7.480, df = 2, p= 0.024). Large farms (> 120ha) are 3.24 times more likely to have on-farm diversification compared to small (< 60 ha) and medium (61-120 ha) sized farms. Medium-sized and small farms are more likely to have off-farm diversification. The nature of diversification is also related to the size of the farm as larger farms may have more labour and consequently are less bothered about time constraints for a specific type of diversification. For example this explains the fact that larger farms have more structural diversification than smaller farms.

However, the analysis also shows that a large proportion of farms (45 percent) under 120 ha do not diversify. This is linked to the mode of tenure of the farm as it is more difficult for tenant farmers to engage in a project of diversification as they need the landlord to agree to the project and the landlord also takes a share of the profit arising from the diversification scheme. The presence of diversification is not only linked to the size of the farm but also to the nature of the farm. Dairy farms require more land to feed their cattle and because it is also time consuming, it is less favourable for diversification and/or pluriactivity. As such, although it appears that larger farms are more likely to have resources, flexibility and entrepreneurship to pursue diversification, diversification is significantly more common on cereals, general cropping and mixed farms and notably less common on dairy and cattle and sheep farms and on other types involving livestock. These findings are consistent with earlier studies of farm diversification in the UK (Centre for Rural Research, 2003).

There have been many references in the literature on diversification and pluriactivity regarding their relationship to farm size. Gasson (1988) and Ilbery and Bowler (1993) contend that larger scale farmers are more inclined to introduce diversification schemes than those working smaller farms, although large-scale farms like many other subsets of the farming community are a heterogeneous group. These authors concluded that this character towards diversification verifies the well-documented trend for larger farm businesses to be innovative across the whole range of new farming practices including the adoption of state-aided schemes. The smaller

farms relied most on the attraction to generate income (Ilbery 1996). According to Ilbery (1991) farm diversification tends to favour three farm size categories: small, less than 40 ha; medium, between 120 and 200 ha; and very large, over 400 ha. Furthermore, a clear tendency can be detected: off-farm diversification is concentrated on both small and very large farms and on-farm diversification favour medium size farms. If we relate diversification to Ilbery and Bowler's (1993) classification of farmers, we can say that adopters' farms are larger than non-adopters' farms.

Shucksmith and Smith (1991) comment that on-farm diversification is a more attractive option for operators of larger farms with capital to redeploy. On smaller farms lacking such capital, operators (or other household members) can only redeploy their labour on the farm. Gasson (1998) argued large farmers are in a more favourable position to diversify since they can more easily provide land for recreational activities and raise capital for building conversion or installing a processing plant. This was one of her criticisms of the Farm Diversification Grant Scheme (FDGS) (1988 to early 1990s) where the terms favoured larger farms. A very small proportion of farmers in west Dorset took up this grant. However, none of them were farming very large farms. They only took the grant as it was available and the farmers had the opportunity to diversify so they took advantage of extra financial help that was offered to them at the time.

The author's results do not agree with Ilbery's results as Ilbery's work showed that on-farm businesses were primarily on medium size farms. Ilbery recorded off-farm businesses on small and very large farms and the other survey showed that off-farm businesses were on medium sized farms. For west Dorset, on-farm businesses were found on small, medium and very large farms and off-farm businesses were found on all farm sizes.

7. 3. 4. Farm type

The author's survey showed that in west Dorset, dairy farming accounts for 35.4 percent of the farmers (Table 7. 7). In west Dorset, dairy farms are for the majority full-time farms, either family, Ltd partnership or corporation non-family. Arable farms are mainly full-time as well. Sheep farms are more likely to be hobby or part-time. The majority of dairy farmers belong to a co-op in order to sell their milk at a better price. According to the interviews, the trend is that more farmers are trying to join or create a co-op.

Table 7. 7: Types of farm (west Dorset)

	west Dorset	
	n	%
Dairy	75	35.4
Arable	11	5.1
Beef cattle	28	13.2
Sheep	36	16.9
Mixed crops and livestock	31	14.7
Horticulture	5	2.2
Other	27	12.5

Source: Author's survey

There is a significant association between the type of farm and whether or not farmers diversify (chi-square = 3.873, df = 1, p=0.049). Dairy farmers are 2.19 times more likely to diversify compared to non-dairy farms. However, there is no significant association between the type of farm and the type of diversification (chi-square = 1.743, df = 1, p = 0.187). Dairy farms are 1.69 times more likely to have on-farm diversification compared to non-dairy farms. Farm type plays a role in the decision to diversify and/or become pluriactive as different types of production have different time constraints attached to them. Beef and sheep production are less time consuming for a farmer so it should be easier to diversify on farms specialising in these activities, although it is harder for dairy farmers to diversify as dairying has many time investment constraints. Just under 40 percent of the dairy farms diversify in west Dorset, whereas cereal producers do not diversify so much. Arable producers have not been under so much pressure to diversify as they have obtained higher prices for their production in recent years. However, the relatively low number of dairy farms diversifying in west Dorset confirms previous findings from research. In fact, several papers report that diversification is associated with farm type, in terms of production. For example, Ilbery *et al* (1997) found diversification to be associated with farms engaged in cash cropping but not on farms with dairy and beef cattle. McNerney *et al* (1989) found that dairy or livestock farm types in Less Favoured Areas (LFAs) were less diversified than other farm types, with only one farm in three diversifying. Neither west Dorset nor sud Manche are in a LFA. In contrast, McNerney *et al* (1989) reported that 49 percent of arable-based farms had some involvement in farm diversification in England and Wales. These results are similar to the literature on off-farm labour supply in the US and Canada (Sumner, 1982) which suggests that the seasonality of the farm enterprise will be influential in determining whether the farmer seeks another occupation. For example, farmers involved in highly seasonal production activities (such as cereals) have more time to pursue non-agricultural activities both on- and off-farm. On the other hand, livestock enterprises such as dairying have high time requirements throughout the year and this may prevent the farmer from seeking some form of non-agricultural employment (McNally 2001).

In west Dorset, it is the arable farmers who are pluriactive. Horticulturalists in the sample were also pluriactive, though arable and horticultural farmers comprise relatively small numbers. This relates to the fact that it was suggested that farmers involved in more seasonal, less labour-intensive farming businesses such as cereals might have more time to devote to the development of diversification activities. On the other hand, there is likely to be much less time for the pursuit of such activities on the more intensive farms such as horticulture, pigs and poultry and dairying. However, one could think of other reasons as to why farm type might influence the pattern of diversification if present. For example, diversification activities involving some sort of public use (e.g. renting out buildings; separate enterprise or recreation) might be much less attractive to potential users if the farm is engaged in intensive livestock production such as pigs and poultry (McNally 2001).

In Halliday's study (1989) many activities related to structural diversification were quantitatively insignificant in Devon. They were often dominated by the marketing of farm produce, particularly farm gate sales of potatoes, but also included the sales of eggs on a milk round and in one instance an exception to the general trend, quota related cheese production. She also found that timber-related activities were not adopted by farmers as a way to diversify, with very few farmers involved in commercial exploitation of timber, despite the widespread occurrence of small pockets of woodland. The author's research agrees with Halliday as only one farmer in the west Dorset study area commercially exploited timber.

Time and money are the two main restrictions towards diversification. Dairy farming is time consuming as farmers have to milk twice a day and looking after the cattle takes most of the day. Furthermore many farmers commented on the fact that if you diversify you might neglect the core production so they believe they could lose money by diversifying.

John is an older farmer who farms with his children and his wife. He enjoys running his own business and working with animals. As such he is not involved in any kind of diversification, as he'd rather concentrate his efforts and time on dairy farming. He argued that if he was involved in another activity he would not necessarily make more money as he would neglect his principal activity. He has increased his farm size to 180 ha (he owns 108 and rents 72 ha). He runs a family-based partnership dairy farm:

John: I think with diversification, there is no point doing it if you are going to neglect your main production. There are only 24 hours in a day, I think, this is a tricky one.

Jonathan is a middle-aged farmer who has no agricultural education. He started farming in 1970 and likes the independence provided by the job, running his own business and enjoys working with animals. He rents 200 ha. His dairy farm is a family-based partnership. His milk quota is 1 200 000 litres. Because his milk quota is quite high, he does not diversify. Furthermore because Jonathan is a tenant he cannot diversify into B&B as the landlord would increase the rent of the farm. Jonathan decided that instead of diversifying he would buy milk quota in order to increase the farm income.

Jonathan: Dairy farmers are rather busy and are tied to it 7 days a week, so it is more difficult.

7. 3. 5. Farm organisation

The author's survey revealed that west Dorset records a total of 34.6 percent part-time or hobby farmers (Table 7. 8). The farm organisations in Dorset can be divided into six categories: part-time, hobby farms, full-time family farms, family-based partnership farms, Ltd based partnership and corporation non-family. West Dorset does not have the equivalent of any GAEC or EARL farms but has many full-time family partnership farms and Ltd non-family farms including many hobby¹ and part-time² farms.

Table 7. 8: Organisation of farms (west Dorset)

	west Dorset	
	n	%
Part-time	44	20.6
Hobby farm	30	14.0
Full time family farm	69	32.4
Family based partnership	55	25.7
Ltd based partnership	12	5.9
Corporation non-family	3	1.4

Source: Author's survey

The statistical analysis shows that the organisation (i.e. mode of operation) of the farm is not related to the presence of diversification on the farm (chi-square = 0.096, df = 1, p= 0.757). Full-time farmers are as likely to diversify as part-time or hobby farmers. However, the

¹ Hobby farms are small non-commercial farms where farming constitutes a marginal activity. Farmers have another source of income, and profits from farming are not a prime consideration. In many cases, often areas beyond the rural-urban fringe, the farm functions as a retirement home, second home or vacation home.

² Part-time farms are non commercial farms, often small and low-income farms where farming is not the principal activity. They are run by long-term rural residents employed outside agriculture or retired but who continue to farm on a part-time basis.

organisation of the farm plays an important role in terms of type of diversification. There is a significant association between the nature of the farm and whether farmers diversify on- or off-farm (chi-square = 13.506, df= 3, p= 0.004). Full-time farmers are 4.71 times more likely to have on-farm diversification compared to part-time and hobby farmers. Hobby farmers are 7.5 times more likely to have off-farm diversification compared to part-time farmers. Full-time farmers are 7.75 times more likely to have combined activities on their farms compared to part-time and hobby farmers.

OGAs are linked to the organisation of farms. This is in line with other researches that have shown that OGAs are often linked to farms with less labour requirements. As such they are less prominent in activities with high labour requirements such as horticulture, field crops and in particular dairy farming. On the other hand, cattle rearing, fattening and intensive livestock (pigs and poultry) seem to combine well with the demands of another occupation, since the percentages are the same for farmers with an OGA as for all farmers (Robson, Gasson and Hill 1988). There is also a positive relationship between whether the farm is classified as a non-family business (i.e. other partnership, limited company) and the probability of engaging in all types of diversification. However, this excludes the development of a separate enterprise (where there is no significant relationship) and hirework (where there is a negative relationship) (McNally 2001).

7. 3. 6. Farm tenancy

Nearly 60 percent of farmers in west Dorset are solely owner-occupiers (Table 7. 9). There are very few tenant farmers in west Dorset but tenanted farms are either compact, with less than two parcels or more scattered with a number of parcels between 6 and 10. Owners usually have compact farms as well whereas farmers who both own part of their farm and rent the other have more scattered farms. However, the qualitative analysis showed that farmers in west Dorset try to keep their fields close to one another and are not willing to travel long distances to obtain land to farm.

Table 7. 9: Tenancy mode of the farm (west Dorset)

	west Dorset	
	n	%
Owner-occupiers	126	59.2
Tenant	15	7.0
Both	72	33.8

Source: Author's survey

Farm households with both on- and off-farm business diversification are very under-represented on wholly tenanted farms and over-represented in the owner occupancy category. There is a tendency therefore for owner-occupiers to experiment in both on- and off-farm types of business diversification whereas farm households that rent some of their land are more likely to diversify off-farm. Only 9 percent of farms with both on- and off-farm business diversification are tenant farms, even though such farms account for nearly 23 percent of the total sample of farms. Farmers may be reluctant to build up a business on premises over which they have no long-term control. The study conducted by Ilbery (1988) showed that the landlord-tenant relationship is important in diversification. He demonstrated that in his urban fringe project over time more tenant farmers began to diversify from their traditional farm activities. However, this could create problems because tenancy agreements do not cover activities outside mainstream food supply. Consequently, tenant farmers attempting to introduce farm-based recreation and tourism for example may be faced with higher rental charges or even given notice to quit.

The author's survey showed no statistically significant relation between the tenancy of the farm and the presence of diversification (chi-square = 2.467, df = 2 p= 0.291). Farmers who both own and rent part of their farms are twice as likely to diversify compared to sole owner-occupier or tenant farmers. Farmers who both own and rent part of their farms are 4.37 times more likely to diversify than not diversify. Owner-occupiers are 2.23 times more likely to diversify than not diversify. Tenant farmers are 2 times more likely to diversify than not diversify. Owner-occupiers are slightly more likely not to diversify compared with farmers who both own and rent land. The author's survey did not come across any owner-occupiers who rented some land to help them diversify. The author's findings agree with the conclusion from Walford (2003) and Ilbery and Bowler (1993). Walford (2003) demonstrated that farms with a larger area of rented land tended to favour agricultural contracting, whereas those with less rented land were more inclined towards value-added processing activities. No significant differences were found in farm tenure. Being a tenant farmer appears to be neither a help nor a hindrance in farm diversification (Ilbery and Bowler, 1993), despite the possible restrictive influence of some tenancy agreements.

However, when a farmer diversifies, the mode of tenancy of the farm plays a role in the decision-making concerning the nature of diversification. Tenant farmers in England are prevented by the landlord from diversifying into certain types of diversification such as B&B. As well as the tenancy mode of the farm the farmer may experience problems with planning permission. Planning legislation is a good example of an area where farmers need help and advice. Interpretation of planning policy guidance varies between local planning authorities, and farmers often need planning permission for 'change of use' or signposting. Similar concerns and

lack of understanding surrounds other important issues such as health and safety regulations (e.g. the Food Farm Act, 1990) (Ilbery 1996).

AB: Why don't you diversify?

Jonathan: The reason is that I am a tenant and my landlord would not help or will not allow me to develop buildings and diversify that way. That is really what it is.

AB: [...] Would the landlord have prevented you from doing B&B?

Jonathan: No, he would have allowed that as he had allowed my brother to do it on the other farm. He would charge extra rent for you if he allows you to do it. The rent was increased at Church Farm when they started doing B&B. He said to me that if I wanted to do B&B I could but I would have to pay more rent. At the end he would gain if I was to diversify into anything. He would want a share for the extra income generated from that diversification so it does not really encourage me to diversify. [...] Here that is not really possible because we don't have the number of bedrooms. There are three bedrooms in this house and they are taken up with family.

There is a no relation between the mode of tenancy of the farm and the type of diversification (chi-square = 0.704, df = 2, p = 0.703). Owner-occupiers are 1.66 times more likely to diversify off-farm compared to tenant farmers. Tenant farmers may be prevented from diversifying by the landlord if the latter does not agree to transform the buildings on the farm or to build new ones. This result of the author's research agrees with Bateman and Ray (1994) who gave a likely explanation by suggesting that tenants would frequently be under restrictive terms of their agreement with the landlord. Tenant farmers diversify mainly into enterprise diversification or pluriactivity as they do not necessarily need the agreement of the landlord for these kinds of activity. As such, the development of a separate enterprise, renting out farm buildings and recreation have a significantly lower probability of occurrence if the farm is wholly tenanted. Furthermore, if a tenant decides to diversify, the landlord may increase the rent in order to take part in the profits the farmer makes by diversifying. The mode of tenancy of a farm may also be linked to a grant received for diversification. In fact, grants are generally given to the landlord not the tenant. As a result, the tenant may have no say in the type of diversification he can have, as it is the landlord who decides what type of diversification s/he wants on his farm. The analysis also revealed that tenant farmers in west Dorset are not involved in structural diversification nor agricultural diversification whereas in sud Manche tenant farmers practice structural diversification. Structural and agricultural diversification in west Dorset concerns mainly owner-occupiers. Furthermore, owner-occupiers are the category which diversifies less than the two other modes of tenancy.

7.3.7. Milk quota

The average milk quota per farm per annum from the author's survey is 1,200,000 litres of milk for west Dorset (Table 7.10). Farmers in west Dorset have a high milk quota compared with their counterparts in sud Manche. Furthermore, the quota market seems more developed in Dorset than in sud Manche. Farmers in west Dorset are free to buy and sell milk quota as they wish, whereas in France, milk quota belongs to the dairies and not to the farmers. The dairies then distribute the milk quotas to farmers who apply to obtain extra milk allocation or to newcomers into dairying. Furthermore in France, quotas are attached to the land. That explains why land with milk quota attached to it is sold at a higher price and more easily than farms with no milk quota. Farmers who buy or rent farms with no milk quota are then more likely to diversify into enterprise diversification such as beef production. The qualitative analysis explains why farmers with high milk quota are less likely to diversify or process and market dairy products themselves.

Table 7. 10: Milk quota (west Dorset)

	west Dorset	
	n	%
< 50 000 l	2	4.4
50 000-99 999 l	1	2.2
100 000-199 999 l	2	4.4
200 000-499 999 l	11	24.5
> 500 000 l	29	64.5

Source: Author's survey

The analysis showed that there was no statistically significant relationship at the 0.05 level between the amount of milk quota and the presence or absence of diversification (chi-square = 3.576, df = 1, p = 0.059), but it is extremely close to being significant at the 0.06 level. However, farmers with a milk quota over 400 000 l are 3.76 times more likely to diversify compared to farms with a milk quota less than 400 000 litres. Milk quota seems related only to the organisation of the farm. Part-time or hobby farms have a lower milk quota than full-time ones. However, the former are then more likely to diversify or be pluriactive if their main income does not come from milking.

There is no significant association between milk quota and the type of diversification (chi-square = 0.039, df = 1, p = 0.843). Farms with a milk quota over 400 000 litres are 3.25 times more likely to have enterprise diversification compared to farmers with a milk quota less than 400 000 litres. Farmers with a higher milk quota are 12 times more likely to have combined activities compared to farms with a lower milk quota.

The survey examined amongst other things the effect of milk quotas on farmers' attitudes and responses to non-farming alternatives, for example farm processing of milk (into butter and cheese), tourism and recreation. The rejection by farmers in both study areas of such types of diversification is linked to the cost of the investment, time and labour costs.

Some farmers choose to diversify to counterbalance the loss of income generated by the installation of the milk quotas. Although milk quotas guarantee a certain level of income they do not prevent the price of milk from varying from one month to another according to the quality of the milk or the time of the year or fluctuating demand. Among the various solutions to increase income, Halliday (1989) showed that the introduction of mixed farming was considered, as well as a focus on efficiency to reduce costs on the holding and consolidate milk production by the acquisition of milk quota. It should be noted that this latter option was not one that appeared equally accessible to all. Nearly half of the farmers with quotas over 500 000 l (equivalent to about 100 cows) had bought or leased quota, whereas only one farmer with a quota of under 200 000 l (about 40 cows) had done so. Small farmers were as likely as the large farmers to actually want to increase their allocation. The author's survey agrees with Halliday's finding as many farmers both from the sud Manche study area and the west Dorset study area declared that they would prefer increasing their milk quota allocation rather than diversifying.

From either side of the Channel some farmers have decided not to diversify but to invest in milk production by investing in purchasing extra milk quota, as Jonathan's quote illustrates:

Jonathan: I make a comfortable living just milking cows. That really is all I want to do. I have got a quite good milk quota. Providing I work hard, I can make good money. I do not see me investing a lot of capital in other things than producing milk. Hmm, I think there will be a future in milk but you need to do it efficiently and that is all I am really interested doing. [...] I do not really want to see them do away with quotas because over the last 5 years we have spent over £ 0.5 million to buy milk quota and I shall have to pay for it for another 5 years. By which time I have a good asset to retire with. If they go away [the milk quota] I have got nothing....

7. 3. 8. Farm location

The author's survey shows that there is no statistically significant relationship between the location of the farm and the presence of diversification (chi-square = 0.639, df = 2, p = 0.726). However, farms located near a town are 2.18 times more likely to diversify than not diversify. Farms located near the seaside are 3.10 times more likely to diversify than not diversify. Farms located inland are 2.84 times more likely to diversify than not diversify. Location was measured by determining whether the farm is located near the coast, a main road, a village or town. The

location also is linked with the accessibility of the farm not only in terms of roads but also in terms of sign posting on the road. Although there is no significant association between the farm location and the type of diversification (chi-square = 2.168, df = 2, p = 0.339), some trends can be drawn as the location of the farm may influence the nature of diversification. Farms located near a town are 1.2 times more likely to have on-farm diversification than off-farm diversification. Farms located near the seaside are 1.6 times more likely to diversify off-farm compared to on-farm. Farms located inland are 1.53 times more likely to diversify off-farm compared to on-farm. Farms located near a town are 1.84 times more likely to diversify on-farm compared to farm located inland. Farms located near a town are 1.90 times more likely to diversify on-farm compared to farms located near the seaside. Tourist-related activities are more likely to be near tourist attractions or the seaside and direct marketing of the farm products is more likely to be near a town. There are also notable variations in the incidence of farm diversification across regions (Centre for Rural Research 2003). The author's survey confirms that tourist activity on farms is generally near the seaside and farmers further away from the seaside would not want to invest in tourist activities because they felt they would not attract sufficient numbers.

Although a few farms were close to Dorchester, the county town, the urban proximity had no influence on the decision to diversify. In fact, one farmer whose farm was less than a mile away from Dorchester would not diversify at all as he would not countenance having any non-farming activity on his farm and he would only concentrate on his dairy unit as according to him the income from dairying was enough for him and his family to live on and he would not want to risk investing money in another activity of any sort.

According to the author's survey, farms located near urban fringes do not diversify into recreational activity or retailing. Not surprisingly, retailing just surpasses accommodation as the most important enterprise type in the urban fringe, thus confirming the findings from an earlier study in this area by Ilbery (1991). Proximity to a large population and potential market demand has stimulated the direct marketing of produce to customers and farm-based recreation. However, this is not the case in west Dorset which is quite remote from major urban centres.

During the interviews the author asked farmers without any diversified activities their reasons for being reluctant to diversify or become pluriactive. Farmers declared that if they had not diversified into a specific type of diversification that was because it was not economically viable for them as they are aware that there was either no market for the product they wanted to launch or that the market is already full. This agrees with McNally (2001), who showed that economic motivation for diversification may reduce the overall risk associated with the farmer's activities.

The profitability of agricultural activities vis-à-vis diversified enterprises depends in part on the market opportunities available in the farmer's location. Hence the demand for diversification will vary spatially. Thus as McNerney and Turner (1993) argued in the context of West Somerset, diversification cannot be regarded as a general solution to falling farm income: if there is no market for particular diversified products/services, or the market is small with little prospect for growth, there is no future for this strategy.

This is linked to the fact that pluriactivity is also related to the location of the farm. If the farm is near a town, it offers better opportunities for part-time work for the members of the farm household. Bateman and Ray (1994) postulated that pluriactivity is a function of certain internal factors but the nature of the relationship will vary according to the geographic location within the region and internal factors will dictate the way in which households/individuals respond to the external environment.

Farmers are more tempted to diversify into tourism activity if their farm is in the right location. However, they only diversify if they can be sure that it will have no adverse impact on their main activity:

Andrew: There is nothing wrong with farmers to diversify if what they are doing is not working. But I mean whatever they diversify into has got to stand on its own feet. In a way if the government helps people to diversify they help to do things that perhaps don't work. Unless they receive that help they won't do that. Anything you do; it doesn't matter whether it is milking cows, B&B or selling compost, if that business does not stand on its own two feet in my view you should not do it.

AB: Are there many tourists around here?

Andrew: Yes, it is a good tourist area so it is a good area to invest in. However, there are already hundreds of caravan parks near the coast and our farm faces North so it is not suitable for a caravan park. Tourists prefer sunny caravan parks [...]. That is why we have a B&B.

Furthermore, farmers are aware that you have to be in the right location for any given activity and also that the market is not already over flooded with a specific activity.

AB: And a caravan park?

Andrew: We have looked at a caravan site. Again we have considered that we have got a very exposed farm and quite high up and north facing. Again there were an awful lot of better sites around here with a better position than we can offer. That was something we looked at and rejected for that reason. There are millions of caravan sites closer to the coast and there are quite a few small caravan sites around and about that are much better situated than we would be. So I have decided against it.

7. 4. Structural diversification

From the author's survey, only 7.1 percent (n= 15) of the west Dorset farmers have solely adopted structural diversification related to tourist activities without combining this with other forms of diversification (i.e. enterprise or pluriactivity). It seems that farmers from Dorset are interested in B&B, caravan parks and holidays lettings. Farmers involved in structural diversification alone undertake the activities listed in Table 7. 11. However, more farmers are involved in structural diversification because they combine it with other forms of diversification or pluriactivity and discussed here as part of combined diversification/pluriactivity (section 7. 8).

Table 7. 11: Structural diversification (west Dorset)

	n
B&B	4
Accommodation let	3
Camping	2
Sport facility	1
Hire worker	4
Leasing of building	1

Source: Author's survey

In order to determine why farmers diversify into structural activity only, the author examined both the characteristics of the farmers and farms involved in this category (Table 7. 12).

Farmers involved in structural diversification only are all married couples and the majority of them are over 45 years old. The farms themselves are run by the farmer (male) and it is the wife who looks after the B&B and accommodation business while both partners of the farm are involved in other activities, which corresponds to conclusions reached by Whatmore (1991) and Ilbery (1998) on the role of women in diversification. The statistical analysis showed no significant statistical relation between the level of education of the farmer and the type of structural diversification. These farmers decide to pursue this type of activity because they have the facilities to do so and their farm is located near the seaside. Farmers also enjoy the contact with tourists as it is a way for them to explain to other people what their job consists of if the tourists are interested.

Table 7. 12: Characteristics of farmers with structural diversification (west Dorset)

		Structural (1)	
		n	%
Age	<25 years old	0	0
	25-35 years old	1	10
	36-45 years old	1	10
	46-55 years old	7	40
	56-65 years old	1	10
	over 65 years old	5	30
Gender	Male	15	100
	Female	0	0
Marital status	Married	15	100
	Single	0	0
	Divorced	0	0
	Widow/er	0	0
Education	up to GCSE	8	55.6
	A-level	2	11.1
	Agricultural diploma	4	22.2
	Other	1	11.1

(1) % of farmers involved in structural diversification

Source: Author's survey

Table 7. 13 represents the characteristics of farms involved in structural diversification. Farms are often small, as two-thirds of them are less than 100 ha which is less than the average size of farms in Dorset (176 ha). Farmers are either owner-occupiers or they own part of the farm and rent some of it. It is no surprise not to encounter any tenant farmers involved in structural diversification as tenant farmers would have to obtain the owner's authorisation before being involved in either B&B or other types of accommodation and if the landlord accepts, s/he would increase the rent as s/he would want a share of the profit the farmer would make from the B&B. Other farmers, like Roger, would not want to invest their own money on a farm as the landlord would not pay it back when they retire:

Paul: The reason why we do not diversify, heum, we are on a rented farm so it is much harder to diversify because you do not feel like spending the money on capital and investment for the landlord.

Once again, the number of dairy farmers involved in this type of diversification is quite small (20 percent). This is linked to the fact that dairying is time consuming so the farm has to have the labour to allow this. Sixty percent of the labour in dairying comes from the family. Farms are full-time, family or Ltd Corporation type of farm. Table 7. 13 also shows that farm income has increased since 1984 as the proportion of farmers earning less than £ 10 000 has decreased and the proportion of farm earning between £ 10 000 and £ 30 000 has increased between 1984

and 2000. Farmers in Dorset were often not willing to declare how much milk quota allocation they have, in contrast to their French counterparts. For this category, none of the farmers answered the question and would not divulge the information during interviews either.

The author's survey showed that farmers adopting structural diversification were mainly involved in B&B, accommodation lets or passive diversification. Some farmers opt for passive diversification (i.e. leasing of buildings) as it provides income with no or little time or investment spent on it. Structural diversification occurs usually on farms located near the seaside or towns.

Some farmers (n=4) in west Dorset undertake paid work for another farmer. Contractual farming, also referred to as 'hirework', is part of structural diversification and is widely used among British farmers. This confirms McNally's (2001) conclusion as she demonstrated that hirework was by far the most common form of diversification amongst farmers in England and Wales.

Although PYO schemes have been an important activity in diversification near towns, the author's survey in west Dorset recorded no PYO schemes, even if some of the farms were close to urban centres. Roger, from west Dorset, presented his view regarding PYO:

AB: Have you ever considered a PYO scheme as you are only 2 miles from Dorchester?

Roger: We did one time, we had some friends who had a farm shop and they said yeah, it generates a lot of income you know, so we looked into it but at the end we looked into the fact that we did not want a lot of people up and down [...]

This contradicts Ilbery's work (1988) in the Midlands as he showed that an average of 2.2 farms per year in his study areas diversified into PYO, a figure that rose to a high of 9.6 for the late 1970s before falling back to 6.5 for the 1980s. Interestingly PYO schemes became important in the late 1970s replacing farm delivery rounds. Similarly farm tourism had been introduced only since 1975. Proximity to an urban centre was clearly important in the diffusion process, as 64 percent of the 120 farms were located within 5 km of either Coventry or Birmingham. Indeed 82 percent of the farmers stated that their urban fringe location was an important factor in the decision to diversify (Ilbery, 1988). However, the author's survey in Dorset recorded no PYO schemes.

Table 7. 13: Characteristics of farms with structural diversification (west Dorset)

		Structural (1)	
		n	%
Size			
	< 10 ha	3	20
	10-49 ha	6	40
	50-99 ha	2	13.3
	100 -199 ha	1	6.7
	200 -499 ha	3	20
Tenancy			
	Owner	11	70
	Tenant	0	0
	Both	4	30
Type of farm			
	Dairy cattle	3	20
	Beef cattle	3	20
	Sheep	5	30
	Arable	1	10
	Mixed crops and livestock	3	20
Farm organisation			
	Full-time	3	20
	Part-time	8	50
	Family-based	3	20
	Ltd Partnership	1	10
Income			
Income 1984	< £ 10 000	3	42.9
Income 1992	< £ 10 000-	1	14.3
Income 2000	< £ 10 000-	2	14.3
Income 1984	£10 000-29 999	3	42.9
Income 1992	£10 000-29 999	5	71.4
Income 2000	£10 000-29 999	11	71.4
Income 1984	£30 000-49 999	1	14.2
Income 1992	£30 000-49 999	1	14.3
Income 2000	£30 000-49 999	2	14.3
Milk quota	<50 000 l	0	0
Employee			
	Family	15	100
	Non-family	0	0
Work alone on farm			
	Yes	8	50
	No	7	50

(1) % of farmers involved in structural diversification

Source: Author's survey

The author's survey showed that structural diversification occurs mainly in the form of tourist activities which agrees with findings by Ilbery *et al* (1997) as they found that accommodation, retailing, services and recreation and leisure were the dominant types of diversification. Contrary to previous research by McInerney *et al* (1989) who showed that services, contracting,

processing and sales were the three major categories of diversification, the author's survey reported very few farms engaged in processing amongst dairy or mixed farms.

According to Marsden (1999) the forward trend for diversification appears to indicate an increase in the number of passive diversification schemes largely involving the development of industrial lets, whereas 32 percent of current diversification schemes in Marsden's work simply involve extending the farmers' traditional farming role, i.e. enterprise diversification in the author's definition.

Example of a typical farmer in west Dorset involved with structural diversification

Roger diversifies because he is incapable of earning enough income from traditional farming and also because Roger has young members of the family coming in and there was not enough income for everybody. Roger aims to diversify the business as he will retire in the near future so he wants to leave the farm with a reasonable income for all the members of the farm business. As a result, they have looked to diversify and Roger thinks the young have different outlooks on their management so as a business they have to try to get more income coming into the business. Roger thinks that milk quotas have done a good job in terms of controlling milk output. However, Roger reckons that nowadays they are no longer necessary. Roger thinks now people are getting out of dairying as it is basically if they are a) not very good at dairying, b) they are getting very old or c) they do not make any money out of it and they are being forced out.

Roger and his children have diversified into shooting and stag weekends as they can do this without spending too much money. Roger is proud to employ two or three local people full time and another ten-fifteen people on shooting days as it helps the local economy. Because shooting occurs only on Wednesdays and Saturdays in the winter time, Roger's son aims to develop a stag weekend business (they host rowdy celebrations of people –usually Londoners- about to get married) to balance with the shooting in the winter. Roger also rents a studio flat to students but he has not considered a B&B as his wife is already involved in the farm business (barn and office) so she would not have time to run it. They have also taken on contract work on another property. They have not got any financial risks as they are using their machinery for this work. Roger is also planning to use some of their sheds for storage for other business. They are looking to put Countryside Stewardship Schemes (CSS) on all the hills which are not easily accessible so they will be getting paid to leave them as they are.

Roger regards food quality as important but is worried about the production costs of quality produce and the selling cost of the produce “...no man gets wealthier for producing less unless he gets paid more for it”. Roger would not become an organic farmer as he does not understand the concept of organic farming. For him it would mean a throw-back to the past and not a move forward. Roger also believes that even if land is taken out of production and is invested in set-aside, CSS etc, because science is still moving on farmers still have cows to produce more milk on less land so it won't reduce production.

Roger had children visiting his farm. However, because of the location of the farm and the health and safety restrictions they decided not to continue this activity. Roger agrees he could develop his farm and have more open days but his farm is too far away from a big city and other farmers better located are doing it. Roger had a PYO scheme with sweet corn but it was not successful and he reckons the main reason was because the farm is too far away from a town. Roger would not go and sell his produce on the local market because it is much too time consuming for the return he would get.

Roger is concerned about the future of farming for his son who is only 25 years old. He will have to have employees but Roger is concerned he may not have enough income to pay the employees if he spends all his time working and not thinking where he is going to go. “The youngest are the problem, we have got to keep them in business. The euro is a problem, how to overcome the price in Europe, I do not know, it has to be done somehow. A level playing field has to be done (labour, welfare) and you have people still buying on the cheap. 40 per cent of our meat goes into processing (sandwich, ready meals). That is a huge amount”.

7. 5. Agricultural diversification

Agricultural diversification only concerns 2.4 percent (n= 3) of farmers in west Dorset. Farmers in west Dorset practising this type of diversification are organic farmers. The author looked at the key characteristics of these farmers (Table 7. 14) and their farms (Table 7. 15). However, due to the very small sample of farmers in this category, only tentative conclusions can be made.

According to Table 7. 14 organic farmers in west Dorset are middle aged farmers (35-45 years old) who have chosen this type of production because they think there is a market for organic produce and they showed environmental concerns. They also want to produce quality products: some of the farmers hope to obtain a certification for the products they produce, others just want to keep their conservation credentials. Farmers involved in agricultural diversification produced organic milk. Two-thirds of the organic farmers in the study area are married, one-third are single. However, because their number is quite small and their characteristics quite diverse, no trends can be drawn for farmers involved in agricultural diversification.

Table 7. 15 shows the characteristics in the study area of farms involved in agricultural diversification. Farms involved in agricultural diversification are small farms compared to the rest of those in study area. Two-third of the farmers do not work alone on their farm. The extra labour is family labour and it is often the spouse. The proportion of farmers earning less than £ 10 000 a year has decreased since 1992 so has the proportion of farmers earning between £ 30 000 and £ 49 999 a year. Farmers engaged in organic farming do it for specific reasons. They want their product to be safe and this is a way for them to reduce their input and to be 'closer to nature'. Also farmers argue it can be difficult at times, but they have no plan to stop in the near future and they also wish organic farming was better understood by both other farmers and the general public. Organic farmers are aware that because their products are more expensive, they do not suit everybody.

In west Dorset, farmers engaged in agricultural diversification refuse to produce any unconventional crops or livestock because of the lack of market opportunity for unconventional crops or livestock.

Table 7. 14: Farmers characteristics with agricultural diversification (west Dorset)

		Agricultural (1)	
		n	%
Gender	Male	3	100
	Female	0	0
Marital status	Married	2	66.7
	Single	1	33.3
Education			
	up to GCSE	2	50
	A level	1	50
Age group	< 25 years old	0	0
	25-35 years old	0	0
	36-45 years old	2	66.7
	46-55 years old	1	33.3
	56-65 years old	0	0
	> 65 years old	0	0

(1) % of farmers involved in agricultural diversification

Source: Author's survey

When it comes to agricultural diversification, farmers seldom produced unconventional crops or livestock such as fish or primrose. When asked if they would produce any unconventional crops or livestock farmers argued that there is no point doing so as there is no market for it. Some would agree to do it if this production was subsidised by the EU. When it comes to diversification by dairy farmers, the choice of diversification has to fit in well with the dairy as farmers argue that if they have to employ someone to either milk or work on the diversification activity, it is not worth it as the costs incurred in employing staff are quite heavy.

Although agricultural diversification is present in west Dorset, most farmers do not see the market opportunity for it so they do not find agricultural diversification an attractive solution to their problems. For many farmers agricultural diversification means organic farming and hence organic farming is the main aspect of agricultural diversification in west Dorset.

Table 7. 15: Characteristics of farms with agricultural diversification (west Dorset)

		Agricultural (1)	
		n	%
Type of farm			
	Dairy cattle	1	33.3
	Beef cattle	1	33.3
	Horticulture	1	33.3
Farm size	<10 ha	1	33.3
	10-49ha	1	33.3
	50-99 ha	1	33.3
Milk quota	100-200 000 l	3	100
Income 1984	< £ 10 000	1	50
Income 1992	< £ 10 000	1	50
Income 2000	<£ 10 000	1	33.3
Income 1984	£10 000-29 999	0	50
Income 1992	£10 000-29 999	0	0
Income 2000	£10 000-29 999	1	33.3
Income 1984	£30 000-49 999	1	0
Income 1992	£30 000-49 999	1	50
Income 2000	£30 000-49 999	1	33.3
Work alone	Yes	1	33.3
	No	2	66.7
Tenancy	Owner-occupier	3	100
Farm organisation	Part-time	1	50
	Hobby	0	0
	Full-time family	2	50
	Family based partnership	0	0
	Ltd based partnership	0	0
Family employee	Yes	1	50
	No	2	50

(1) % of farmers involved in agricultural diversification

Source: Author's survey

According to Walford (2003) the majority of farmers intending to undertake diversification based on agriculture (86 percent in his sample in south east England) are investigating or implementing organic farming techniques as an alternative to current agricultural practices (Walford, 2003). The results from the author's survey in west Dorset and sud Manche do not agree with Walford's finding as Walford's survey concerned only large-scale commercial farms and not just the dairy or livestock farms as found in the author's survey. The author's survey included very few organic farmers. Others farmers did not contemplate organic farming as they argued that it would not be financially viable.

AB: But is not organic produce paid more?

Harold: Yeah, but it is not worth it and I mean all the organic milk they have a job to sell it. They have got to be sold back on the open market you know. It is not really what people thought it was going to be.

AB: Have you considered transforming your farm into an organic farm?

Andrew: Yes, I have but I realised we would not have survived the conversion years financially.

7. 6. Enterprise diversification

In west Dorset 17.6 percent (n= 38) of farmers are involved in enterprise diversification. The type of production they have is shown in Table 7. 16. However, contrary to their French counterparts, some farmers are not only involved in one type of production but in two as many have beef and sheep production together. The author reviewed both the characteristics of farmers (Table 7. 16) and farms (Table 7. 17) of English farmers involved enterprise diversification.

Table 7. 16: Enterprise diversification (west Dorset)

Enterprise diversification	n
Beef	23
Sheep	14
Pigs	1
Poultry	0

Source: Author's survey.

According to Table 7. 16, these farmers are often older farmers as the majority are aged between 46 and 55 years old. Ninety-six percent of the farms are under a male head of farm. Nearly a quarter of the heads of farm are single and declare that adding another production(s) on their farm is what suits them best as they have the land for the type of production they undertake. Farmers in this diversification category have no specific type of education, even if over a quarter of them actually possess an agricultural qualification. Farmers often choose another animal production as they became farmers due to their love of animals. Most of them argue that they could have diversified into something else but because of the person they are they have no interest in diversifying into tourism or they do not have enough capital to begin to transform their products on the farm due to the high investment required but also due to the high and very strict regulations regarding food safety. Other farmers argue that the way their farm is structured and located, they have no other choice than to produce animals as their farm does not have easy access for tourists.

Table 7. 17: Characteristics of farmers with enterprise diversification (west Dorset)

	Enterprise diversification (1)		
	n	%	
Age			
	< 25 years old	1	4
	25-35 years old	5	12
	36-45 years old	9	24
	46-55 years old	6	16
	56-65 years old	11	28
	over 65 years old	6	16
Gender			
	Male	38	100
	Female	0	0
Marital status			
	Married	29	76
	Single	9	24
	Divorced	0	0
	Widow/er	0	0
Education			
	up to GCSE	9	23.8
	A-level	4	9.5
	Agricultural diploma	13	33.3
	Degree	1	4.8
	Other	11	28.6

(1) % of farmers involved in enterprise diversification

Source: Author's survey

As Table 7. 18 shows, enterprise diversified farms are often large farms. They are full-time farms and the author's survey shows that it is in this category that we find the most dairy farms. The mode of tenancy of the farms is not related to the type of diversification as the production mentioned can be done without having to build extra buildings on a farm. However, farmers in west Dorset would not only have one extra type of production but often two extra production types added to the dairy production. Furthermore, the additional production involved required little investment as the animals can use the dairy buildings and there is less need to build extra expensive buildings for the additional activity. Farmers in west Dorset are not encouraged by DEFRA to diversify into enterprise diversification. DEFRA encourage farmers into other type of diversification such as organic farming or encourage farmers to take part into CSS.

Incomes from farms involved in enterprise diversification range from some farmers earning less than £ 10 000 a year to more fortunate ones claiming to earn more than £ 90 000 a year. The majority of farmers are in the bracket of £ 10 000 to £ 29 999 per year. The income is also linked to the fact that dairy farmers in west Dorset have very large milk quotas and also the price of the milk fluctuates quite often according to the quality, availability, etc. Farmers hate to admit it is their main secure income as income from beef is more stable than that from milk.

Table 7. 18: Characteristics of farms with enterprise diversification (west Dorset)

		Enterprise (1)	
		n	%
Size	< 10 ha	0	0
	10-49 ha	5	12.5
	50-99 ha	11	29.2
	100 -199 ha	13	33.3
	200 -499ha	0	0
	> 500 ha	9	25
Tenancy	Owner-occupier	14	36
	Tenant	3	8
	Both	21	56
Type of farm	Dairy cattle	26	68
	Beef cattle	3	8
	Sheep	1	4
	Arable	0	0
	Mixed crops and livestock	8	20
Farm organisation	Full-time	21	56
	Part-time	0	0
	Family-based	12	32
	Ltd Partnership	5	12
Income			
Income 1984	< £10 000	5	25
Income 1992	< £10 000		9.5
Income 2000	< £10 000	16	40.9
Income 1984	£10 000-29 999	10	50
Income 1992	£10 000-29 999	2	52.4
Income 2000	£10 000-29 999	14	36.4
Income 1984	£30 000-49 999	2	10
Income 1992	£30 000-49 999	11	23.8
Income 2000	£30 000-49 999	5	13.6
Income 1984	£ 50 000-69 999	0	0
Income 1992	£ 50 000-69 999	5	4.8
Income 2000	£ 50 000-69 999	0	0
Income 1984	£ 70 000- 89 999	1	5
Income 1992	£ 70 000- 89 999	1	0
Income 2000	£ 70 000- 89 999	0	0
Income 1984	> £ 90 000	2	10
Income 1992	> £ 90 000	2	9.5
Income 2000	> £ 90 000	3	9.1
Milk quota	200 000-499 999l	6	35.3
	> 500 000 l	11	64.7
Employee	Family	31	82.6
	Non-family	7	17.4
Work alone	Yes	9	24
	No	29	76

(1) % of farmers involved in enterprise diversification

Source: Author's survey

Although dairy farms are not often associated with diversification, enterprise diversification is an exception as the nature of this type of diversification (especially beef production) fits in well with the nature of dairy farms. Three quarters of the farms involved in enterprise diversification have family labour working on the farm. However, larger farms require extra labour and employ labour from outside the family.

7.7 Pluriactivity

From the author's survey it was apparent that the number of pluriactive farmers is much higher in Dorset (21.8 percent, n=48) than in sud Manche (7.8%, n= 13). Pluriactive farmers are working in various jobs as described in Table 7. 19.

Table 7. 19: Characteristics of farmers involved in pluriactivity (west Dorset)

Job	n
Civil servant	10
Fire man	5
Self employed (mechanic, business men)	15
Cleaner	2
School assistant	2
Secretary	2
Factory worker	8
Postman	2
Waiter/ess	1
Teacher	1

Source: Author's survey

As Table 7. 20 shows, farmers engaged in pluriactivity in west Dorset are over 35 years old and the majority are married. In west Dorset, the pluriactivity concerns the head of farm. As such, in west Dorset we find single, divorced or widow/er heads of farm being pluriactive. Moreover, in the west Dorset study area, heads of farm are also pluriactive and sometimes they are the only person working outside the farm while the spouse works on the farm. Because of the job they are doing, pluriactive farmers have more qualifications than non-pluriactive farmers.

Although it might be expected that pluriactive farms would be smaller than non-pluriactive farms, the author's survey shows that two-thirds of pluriactive farmers farm less than 50 ha, one quarter farm between 50 and 99 ha and the rest have farms more than 100 ha. However, for English farmers these are relatively small farms compared to the rest of the study area but they are larger farms in comparison with the French study area. Table 7. 21 shows that pluriactive farmers are mainly owner-occupiers and most of the farms are part-time or hobby farms. Dairy farmers are involved in pluriactivity because it was for them a way to increase the farm income

using the skills they have and the opportunity to find employment in the area. Table 7. 21 also shows that incomes from pluriactive farms are much higher than other diversification categories, even if some of the farms still earn less than £ 10 000 a year. Employment outside the farm is often part-time for full-time farmers and employment is full-time for part-time or hobby farmers.

Table 7. 20: Characteristics of farmers with pluriactivity (west Dorset)

	Pluriactivity (1)		
	n	%	
Age			
	< 25 years old	0	0
	25-35 years old	0	0
	36-45 years old	8	16.1
	46-55 years old	12	25.8
	56-65 years old	9	19.4
	over 65 years old	19	38.7
Gender			
	Male	37	77.4
	Female	11	22.6
Marital status			
	Married	40	83.3
	Single	1	3.3
	Divorced	1	3.3
	Widow/er	6	10.1
Education			
	up to GCSE	15	32.3
	A-level	3	6.5
	Agricultural diploma	11	22.6
	Degree	13	25.8
	Other	6	12.9

(1) % of farmers involved in pluriactivity

Source: Author's survey

Table 7. 21: Characteristics of farms involved in pluriactivity (west Dorset)

		Pluriactivity (1)	
		n	%
Size	< 10 ha	20	38.7
	10-49ha	12	25.8
	50-99 ha	12	25.8
	100 -199 ha	1	3.2
	200 -499 ha	3	6.5
	> 500 ha	0	0
Tenancy	Owner-occupier	34	71
	Tenant	5	9.7
	Both	9	19.4
Type of farm	Dairy cattle	21	44.8
	Beef cattle	5	10.3
	Sheep	12	24.2
	Arable	0	0
	Mixed crops and livestock	10	20.7
Farm organisation	Full-time	10	20
	Part-time	14	30
	Hobby	16	33.3
	Family-based	8	16.7
	Ltd Partnership	0	0
Income 1984	< £10 000	5	23.8
Income 1992	< £10 000	7	30.4
Income 2000	< £10 000	9	19.2
Income 1984	£10 000-29 999	10	47.6
Income 1992	£10 000-29 999	7	30.4
Income 2000	£10 000-29 999	20	42.3
Income 1984	£30 000-49 999	3	14.3
Income 1992	£30 000-49 999	5	21.7
Income 2000	£30 000-49 999	13	26.9
Income 1984	£ 50 000-69 999	0	0
Income 1992	£ 50 000-69 999	2	8.7
Income 2000	£ 50 000-69 999	4	7.7
Income 1984	£ 70 000- 89 999	2	9.5
Income 1992	£ 70 000- 89 999	0	0
Income 2000	£ 70 000- 89 999	0	0
Income 1984	> £ 90 000	1	4.8
Income 1992	> £ 90 000	2	8.7
Income 2000	> £ 90 000	2	3.8
Milk quota	< 50 000l	1	16.7
	50 000-99 999 l	1	16.7
	100 000-199 999 l	2	0
	200 000-499 999 l	1	33.3
	> 500 000 l	1	33.3
Work alone	Yes	26	53.6
	No	22	46.4
Employee	Family	35	73.9
	Non-family	13	26.1

(1) % of farmers involved in pluriactivity Source: Author's survey

Milk quota from pluriactive dairy farmers varies from the bottom of the scale to the top of the scale so there is no relation between the milk quota allocation of a farm and the pluriactivity of the farm. Fifteen pluriactive farmers declared that they worked alone on their farm while the rest have both family help and non-family help on the farm. Employees are often people able to do several jobs such as milking, driving the tractor, harvesting, and so on.

7.8. Combined diversification and /or pluriactivity

Combined diversification is present on English farms but was absent from the French farms. Combined diversification includes either a combination of diversification i.e. structural, agricultural and/or enterprise alone or with pluriactivity (Table 7. 22). Once again it seems to be easier in the UK to find a part-time job compared to France. Farmers argued that if the part-time job can fit in with the dairy activity, then it is acceptable to go and work elsewhere but it is not easy for one farmer to have a dairy farm and work elsewhere in the daytime. If the farmer has to employ someone to help on the farm while away at work, according to some farmers it is not guaranteed that the income from the paid work and the work done on the farm is enough to pay the employee. Farmers also argued that if they diversify and if they have to employ someone to help with the added activity, then the income from the diversification has not only to cover the costs of salary of the employee but also it has to bring extras to the farm business itself to be worthwhile.

Table 7. 22: Combined diversification/pluriactivity (west Dorset)

	Combined diversification		Combined pluriactivity (%)	
	n	%	n	%
Structural and agricultural	6	2.8		
Structural and enterprise	1	0.7		
Agricultural and enterprise	4	1.4		
Structural, agricultural and enterprise	1	0.7		
Structural and pluriactivity			12	5.6
Agricultural and pluriactivity			6	2.8
Enterprise and pluriactivity			16	7.7
Structural, agricultural and pluriactivity			1	0.7
Structural, enterprise and pluriactivity			4	1.4
Structural, agricultural, enterprise and pluriactivity			1	0.7

Source: Author's survey

In the west Dorset study area, 5.6 percent (n= 12) of farmers combine several aspects of diversification, such as structural and enterprise or agricultural and enterprise, but also 19 percent (n= 40) of farmers are pluriactive and also add a form of diversification on their farm

such as a tourist activity. It seems that farmers in west Dorset make more use of the assets of their farms and rely less completely on the EU subsidies. However, it is important to note as well that the advice English farmers received from ADAS or DEFRA is turned towards diversification in any form or shape.

Farmers involved in combining diversification and pluriactivity are spread across all age ranges (Table 7. 23). Older farmers involved in this are often farmers who have a family farm so that their son or daughter will take over when they fully retire. Younger farmers are often farmers who farm more for leisure and also it is a way for them to decide whether or not to become a full-time farmer.

Farmers involved in either combined diversification or combined pluriactivity do not belong to a specific marital status and they often employ someone to help them with the extra activities on the farm. English farmers are more entrepreneurial than French farmers. Farmers in this category also have a wider range of education as a few have a non-agricultural degree which is favourable to find employment.

Table 7. 23: Characteristics of farmers with combined diversification/pluriactivity (west Dorset)

		Combined diversification (1)		Combined pluriactivity (2)	
		n	%	n	%
Age					
	< 25 years old	0	0	0	0
	25-35 years old	1	12.5	3	7.4
	36-45 years old	3	25	11	25.9
	46-55 years old	4	37.5	12	29.6
	56-65 years old	2	12.5	8	22.2
	over 65 years old	2	12.5	6	14.8
Gender					
	Male	9	75	31	74.1
	Female	3	25	9	25.9
Marital status					
	Married	9	75	29	74.1
	Single	2	12.5	6	14.8
	Divorced	0	0	3	7.4
	Widow/er	1	12.5	2	3.7
Education					
	up to GCSE	3	25	14	33.3
	A-level	2	12.5	5	12.5
	Agricultural diploma	4	37.5	6	16.7
	Degree	1	12.5	12	29.2
	Other	2	12.5	3	8.3

(1) % of farmers involved in combined diversification (2) % of farmers involved in combined pluriactivity

Source: Author's survey

Farms combining pluriactivity and diversification are often smaller, part-time or hobby farms (Table 7. 24). The majority of farmers are owner-occupiers or they mainly own some of the farm and rent the rest. Around half of these farmers describe themselves as dairy farmers which is surprising as dairying is a demanding activity. These farmers have to employ extra hands to work on their farm so they can be able to work elsewhere (be pluriactive) or spend time on the diversified activity. Income from these farms varied over the years and, in 2000, half were earning less than £ 10 000 a year which is very low. However, farmers continue looking for a specific niche that has not been exploited yet in order to make money out of it, but they often argued it was becoming more and more difficult. The dairy farmers in this category often declared that milk quota was their main source of income but they had diversified because they liked it and tried to make as much money as they could with it. For other farms, the diversified activity worked so well that the farmers were thinking of making the diversified activity the main activity of the farm and putting dairying as the second activity (diversification).

However, it is interesting to note that even if some farmers were involved in several types of diversification and/or pluriactivity, other farmers did not envy them as they were often portrayed as having no time outside work and they did not necessarily make the income that they should. There was a high proportion of farmers earning less than £ 10 000 a year involved in combined diversification and combined pluriactivity. Some British farmers who diversified felt it had to stay 'within limits'. British farmers argued that they did not understand why they had to diversify to increase their income, and they believed that their products should be bought at a higher price so they would earn the income they need to live and would not have to rely so much on subsidies. They often compared themselves to other professional categories and wondered what would happen if, for example, a doctor could not earn enough income, would he go and have a part-time job as a cleaner? Farmers in both study areas believed the agricultural crisis had reached the point of no return and many did not believe that diversification is a solution to increasing income as capital is invested in it and returns are not necessarily guaranteed.

John: Well, diversifying is OK but as long as it does not go wild. There is only so much farmers can do. I'd rather prefer looking after one production rather well, rather than diversifying into something else.

Table 7. 24: Characteristics of farms with combined diversification/pluriactivity (west Dorset)

		CD (1)		CP (2)	
		n	%	n	%
Size	< 10 ha	0	0	6	14.8
	10-49ha	1	12.5	12	25.9
	50-99 ha	3	25	8	18.5
	100 -199ha	3	25	8	18.5
	200 -499 ha	4	37.5	6	14.8
	> 500 ha	0	0	4	7.4
Tenancy	Owner	8	62.5	21	48.2
	Tenant	0	0	3	7.4
	Both	4	37.5	20	44.4
Type of farm	Dairy cattle	6	50	21	44.4
	Beef cattle	3	25	6	14.8
	Sheep	3	25	6	14.8
	Arable	0	0	3	7.4
	Mixed crops and livestock	0	0	6	14.8
	Horticulture	0	0	2	3.7
	Farm organisation	Full-time	4	37.5	13
Part-time		2	12.5	12	25.9
Hobby		2	12.5	4	11.1
Family-based		3	25	12	25.9
Ldt Partnership		1	12.5	3	7.4
Income 1984	< £10 000	1	16.7	3	15.8
Income 1992	< £10 000	3	16.7	4	18.2
Income 2000	< £10 000	8	62.5	20	44
Income 1984	£10 000-29 999	6	33.3	10	52.6
Income 1992	£10 000-29 999	6	50	9	40.9
Income 2000	£10 000-29 999	1	12.5	11	25.9
Income 1984	£30 000-49 999	3	33.3	2	10.5
Income 1992	£30 000-49 999	3	16.7	4	18.2
Income 2000	£30 000-49 999	3	25	11	25.9
Income 1984	£ 50 000-69 999	1	16.7	3	15.8
Income 1992	£ 50 000-69 999	2	16.7	3	13.6
Income 2000	£ 50 000-69 999	0	0	0	0
Income 1984	£ 70 000- 89 999	0	0	0	0
Income 1992	£ 70 000- 89 999	0	0	1	4.5
Income 1984	> £ 90 000	1	0	1	5.3
Income 1992	> £ 90 000	0	0	1	4.5
Income 2000	> £ 90 000	0	0	2	3.7
Milk quota	100 000-199 999 l	0	0	1	11.1
	200 000-499 999 l	0	0	1	11.1
	> 500 000 l	4	25	7	77.8
Employee	Family	5	42.9	33	73.9
	Non-family	7	57.1	11	26.1
Work alone	Yes	4	37.5	15	34.6
	No	8	62.5	29	65.4

(1) % of farmers involved in combined diversification (2) % of farmers involved in combined pluriactivity

Source: Author's survey.

Example of a typical farmer in west Dorset involved in combined diversification and pluriactivity.

Andrew and his wife diversified to maintain their business in a viable state because the milk income was decreasing and they had assets they could make use of. Diversifying was a way for his wife to do a job because they have a young family and working off-farm was not practical. Andrew considered doing another job off-farm as well as his job as a fireman, but argued he cannot run 120 –130 cows herd alone and have another full-time job. They have diversified into B&B for families as market research showed that there was a lack of accommodation for families in the area. They get different types of people at different times of the year. They have people with pre-school aged children during term time as well as business people. However they prefer families as they stay for more than one night so they are not planning to develop the B&B to cater for business people as they only stay for one night and that creates too much work. They also run a composting business which has been prevented from developing because of the Foot and Mouth Disease outbreak in 2001 and also they do not have enough labour on the farm as it is difficult to find labour in Dorset. As part of the B&B they offer pony rides for the guests (for which they are insured but do not charge any extra) but they are not willing to develop this activity further because of insurance regulations and staffing issues.

Andrew took advice from an organisation called Business Link and the Tourist Board. They also obtained a grant to help develop the B&B. Andrew's B&B is advertised in the West Dorset tourist guide, Stay on Farm guide, and the Dorset and Country Holiday guide which is linked to the Times. All these guides have a site on the internet. They also get clients by way of word of mouth. Local tourist information centres send tourists, and they advertise locally in shops and pubs. The B&B is running well and they are having to turn away clients because they are fully booked. However, Andrew said that they appreciate it when it is quieter because they have got people in their home all the time.

Andrew and his wife have looked into other types of diversification but have refused them for various reasons. They have rejected the idea of an educational farm as they do not feel their farm is appropriate and also Andrew knows other farmers doing it so there would be too much competition. They looked into running a caravan site but because of the farm's location (the farm is facing north and is quite high) it would not be worth it as there are a lot of better sites around with a better position that they can offer. Andrew has not considered converting his farm into an organic farm, as he believed he would not have survived the conversion period financially and looking at people who have gone organic, the price of organic milk has dropped very sharply. There is a market for it and a number of people willing to pay for it but in general terms he does not think the vast majority of people are interested. Andrew would not be involved in any form of enterprise diversification as, like many French farmers, he does not have the buildings for it and according to him the animal feed company does not pay for the building cost so there would be too much investment required. Andrew and his wife would not consider processing the milk on the farm as it requires too much capital and is too risky. Furthermore, they do not have the expertise for it. Instead they have invested in a processing plant off the farm and deliver their milk there.

As a part-time farmer, Andrew accepts part-time farmers who have jobs and keeps a few acres to grow crops, but also those who take a business as a full-time farmer. Andrew reckons there have always been part-time farmers but at the moment more farmers are moving from full-time farming into part-time farming.

7. 9. No diversification or pluriactivity

According to the survey of farmers, 27.5 percent (n= 57) of the farmers in west Dorset area do not diversify. Table 7. 25 looks at these farmers' characteristics in order to understand why farmers do not diversify. According to Table 7. 25, farmers who do not diversify are primarily those who are over 55 years old. All farmers less than 35 years old are diversifiers. The number of farmers with no diversification on their farm increases with the age category. Farmers do not diversify for several reasons: they are close to retirement, they do not want to overload themselves with work, or they do not diversify because they make a sufficient income from the main production they already have or they are not risk takers. Other farmers do not diversify because they do not have the capital to invest in something else or they do not have the skills required for specific types of diversification such as transforming the milk into cream or else or they do not like the contact with tourists. Some farmers argue that there is no point to try to transform the milk into dairy products as there is too much competition already. Some farmers working alone on their farm declare they cannot diversify as they do not have the time for it.

Just over a quarter of farmers in west Dorset do not diversify. Several factors explain this. The first one is that some farmers are anti diversification as it takes their attention away from the main production and they feel they cannot run several activities on their farm, especially if they are short of employees. As a result, they often prefer intensifying their main production. The addition on the farm of another activity is often linked to the presence of the spouse working on the farm or any other employee. Farmers who do not diversify claim that they could but this would mean for them to employ extra labour and labour is often difficult to find in west Dorset.

Table 7. 26 presents the characteristics of non-diversified farms. Amongst the non-diversified farms there were many part-time or hobby farms held quite often by retired people. This category often owns their farms and the house so they carry on farming as they enjoy it. Table 7. 26 shows that non-diversifiers may have farms below 50 ha but there are also some large farms that do not have diversification because they prefer intensifying their production rather than diversifying. Some older farmers run a large farm in order to give their farm to a family member willing to take over when they retire. A third of these farms are dairy farms. They are often family farms as well which have a sufficient farm size and milk quota so they do not have to diversify.

Table 7. 25: Characteristics of farmers with no diversification or pluriactivity (west Dorset)

	No diversification (1)	
	n	%
Age		
	< 25 years old	0
	25-35 years old	0
	36-45 years old	9
	46-55 years old	12
	56-65 years old	15
	over 65 years old	21
Gender		
	Male	49
	Female	8
Marital status		
	Married	46
	Single	5
	Divorced	3
	Widow/er	3
Education		
	up to GCSE	18
	A-level	11
	Agricultural diploma	7
	Degree	2
	Other	19

(1) % of farmers not involved in diversification

Source: Author's survey.

The income from non-diversified farms also varies considerably according to the type of farm. The larger the farm, the higher the income. Because the income is sufficient for the needs of the farmer and his/her family, there is no need for them to find another way to increase their income. Farmers with a sufficient income prefer intensifying their business rather than investing in something else. Furthermore, some farmers do not wish to diversify as no member of their family has shown any interest in joining the business so it does not encourage the farmer to diversify.

Table 7. 26: Characteristics of farms with no diversification or pluriactivity (west Dorset)

		No diversification (1)	
		n	%
Size	< 10 ha	7	11.8
	10-49 ha	20	35.3
	50-99 ha	10	17.6
	100 -199 ha	3	5.9
	200 -499 ha	10	17.6
	> 500 ha	7	11.8
Tenancy	Owner-occupier	28	65.8
	Tenant	4	7.9
	Both	15	26.3
Type of farm	Dairy cattle	27	47.1
	Beef cattle	7	11.8
	Sheep	10	17.6
	Arable	7	11.8
	Mixed crops and livestock	5	8.8
	Horticulture	1	2.9
Farm organisation	Full-time	18	29.4
	Part-time	10	17.6
	Hobby	8	14.7
	Family-based	19	32.4
	Corporation farm	1	2.9
	Ltd. Partnership	1	2.9
Income 1984	< £10 000	19	38.9
Income 1992	< £10 000	18	31.8
Income 2000	< £10 000	23	38.5
Income 1984	£10 000-29 999	22	44.4
Income 1992	£10 000-29 999	24	45.5
Income 2000	£10 000-29 999	23	38.5
Income 1984	£30 000-49 999	3	5.6
Income 1992	£30 000-49 999	2	4.5
Income 2000	£30 000-49 999	4	7.7
Income 1984	£ 50 000-69 999	0	0
Income 1992	£ 50 000-69 999	4	9.1
Income 2000	£ 50 000-69 999	4	7.7
Income 1984	£ 70 000- 89 999	0	0
Income 1992	£ 70 000- 89 999	0	0
Income 2000	£ 70 000- 89 999	2	3.8
Income 1984	> £ 90 000	6	11.1
Income 1992	> £ 90 000	4	9.1
Income 2000	> £ 90 000	2	3.8
Milk quota	<50 000 l	1	12.5
	200 000-499 999 l	2	25
	> 500 000 l	5	62.5
Employee	Family	39	68
	Non-family	18	32
Work alone	Yes	16	28.6
	No	41	71.4

(1) % of farmers not involved in diversification Source: Author's survey.

Example of a typical farmer not engaged in any form of diversification and/or pluriactivity in west Dorset.

John does not diversify because he argues that if he spends his time doing something else then he will have to pay someone to do what he is doing at present on his farm so it would not be worth it. Furthermore, he argues that he does not have the buildings to convert for various additional activities. According to John, him and his family earn a reasonable income so there is no point risking capital into something that may or may not work. John only wants to farm. He has always milked cows, he loves cows, he loves animals. His son is a mechanic; he does all their machinery work so they don't employ any contractors. If they diversify they would have to employ labour and have to pay them so the income from the diversified activity would have to be higher than the employee's salary in order to re-invest into diversification. John declares having had good returns from dairying, although returns from dairying have fluctuated and there have been hard times, these may be an upturn in the near future. Although they are not making much money at the moment, they are not losing any because unlike other people they do most of the farm work themselves.

John sees no point in diversification. John is a farmer before anything else. His father was a farmer, so was his grandfather and he has always worked on the farm ever since he left school, and always wanted to be a farmer. And until it comes to the situation where they are losing a lot of money he will continue to be a farmer. John argues that his farm is not in the right area to diversify but also he and his family do not like strangers on the farm so he argues he could not diversify into tourist activities. John looked into PYO or a golf course when it was in fashion but according to him, dairying is what makes the money, always has done really and although it has been 'up and down' really it still is a regular source of income. He argues that farm income is complex because farmers do not tell when they make money, they only tell when they lose money! Furthermore farming depends on so many things, the weather being the main one.

John has not considered transforming the milk on his farm because of the heavy investment that would be necessary. John hopes always to be a farmer; and he is not expecting to give up. According to him, people will always need food and he is a food producer. He deplores intermediary people in the food business as they take too much money. He would prefer selling his product at a higher price than diversifying.

John is an intensive farmer and thinks food quality is getting a lot better. According to him, it is useless producing poor quality products because there is no market for it. He would not go organic and he argues that many people are not able to tell the difference between organic and conventional products. According to John, if many farmers go organic it would certainly reduce production but it would not last very long because farmers would not make enough money to live on. There is a premium for some organic produce at the moment but, for example, there is not a very big market for organic milk so organic farmers are paid the ordinary price for their milk even if they have the extra cost for organic production.

John believes in the future there will be more part-time farmers as it will be a way for young farmers who do not have the financial backing to start a full-time farm business. However, John is against hobby farmers as they use land young farmers could start on and it also increases the price of land.

7. 10. Classification of farmers in west Dorset

From the statistical analysis, the author has classified the farmers in west Dorset into 7 categories (Figure 7. 2). innovators, entrepreneurs, survivors, traditionalists, pluriactive, leavers or non-diversifiers

Farmers (n =52) in west Dorset can be identified primarily as 'entrepreneurs' as they are engaged in several OGAs linked or not to farming (combined diversification or combined pluriactivity). Farmers who combined different type of diversification (structural and/or agricultural and/or enterprise) often own large farms, have a large milk quota, an agricultural education, full-time and beef cattle farmers. Farmers who combined diversification and pluriactivity owns and rents part of their farm, are arable farmers, have a lower milk quota and are educated to Degree level. These farmers are diversifying for economic reasons, that is they need to find extra source of income for all involved in the farming business.

The number of farmers (n= 38) classified as 'traditionalists' was less important in west Dorset than in sud Manche. This is because adding another production such as beef, pig or poultry into the farm business is not seen as diversification in the UK. 'Traditionalists' were dairy farmers with a milk quota of no more than 500 000 l, working on a medium farm size. Farmers usually owned some of the farm and rented the rest. 'Traditionalists' were often farmers who were interested in producing food and nothing else. Furthermore, as their counterparts in sud Manche, enterprise diversification does fit in well with dairy farming as farmers can use the same buildings, food as for their dairy cattle. For them, diversifying into structural activity was not an option as they claim not to have the skills or the willingness to do something else.

In west Dorset, there was two types of 'innovators' (n = 8). Innovators were farmers willing to diversify away from traditional farming activities. Farmers often used the resources from the farm and there were not much investment for the diversified activity. Farmers in this category argued that they did not want to invest a lot as they did not have the capital. Often, they planned to develop the business in the future. The first sub-category consisted of young, full-time farmers who diversified into solely structural activities. They often owned a large farm and were arable farmers. They often had a milk quota of less than 50 000 l per year. Diversification was often a way for the farmers' wives to earn extra money while still being able to look after the children. The second sub-category of 'innovators' comprised young full-time farmers who owned horticultural farms. They diversified into non-conventional crops.

In west Dorset, farmers in the 'survivors' categories (n =12) were full-time farmers who owned a small farm. Farmers were older and were educated to GCSE level. They had no milk quota

and were sheep farmers. Farmers in this category diversify as it was a necessity for the farm business. They diversified into structural activities (B&B, holiday let). The investments were often minimal as farmers did not have the capital to develop the diversified activity. During the interview, some farmers in his category admitted they were considering leaving the farming industry in the near future as they were not earning enough.

In west Dorset, there were much more 'pluriactive' farmers (n= 20) than in sud Manche. Farmers in this category were middle-aged farmers, rented a medium farm. Their farms were mixed crops and livestock and they often had a milk quota ranging from 200 000 to 500 000 litres. Farmers argued that it was a necessity for them to have a part-time job as well as farming income was not sufficient to leave on. Furthermore, because they were tenant farmers, they were often prevented by the landlord to diversify. As they were well educated, it was easier for them to find employment. These farmers often farmed as farming was for them a way of life. As opposed to farmers in France, a part-time farmer in the UK is more of an acceptable status. They are not seen as being in direct competition as full-time farmers as they do not farm to earn a profit. Furthermore, farmers in the UK have already large farms so they are not in the same position as farmers in France. In sud Manche, farmers are desperate to increase their farm size so it is one of the reasons why pluriactive farmers are not accepted as being part of the farming community in sud Manche.

Farmers classified as 'leavers' (n = 26) were often older farmers who kept their farms since they have retired. As such, they own a small farm (less than 10 ha), have no milk quota and often looked after sheep. Farmers in this category were hobby farmers. They farmed more for auto-consumption than to earn a profit from their farming activity.

Over a quarter of farmers (n= 57) choose not to diversify in west Dorset. Farmers in this category were often dairy farmers who had a large farm. Farmers were often in a Ltd partnership. 'Non-diversifiers' often argued that the best way for them to increase their income was to intensify their dairy production. As such, they have invested large amount of capital into buying extra milk quota. They also argued that diversification is not something they would choose, as they are farmers after all and they have no interest to diversify for example into tourist activity. For them, diversification is not an option and they will continue to produce food. They argued that they have enough milk to produce and they do not have the time to engage in another activity. If they did, this would result in them spending less time after their dairy herd and this is not an option.

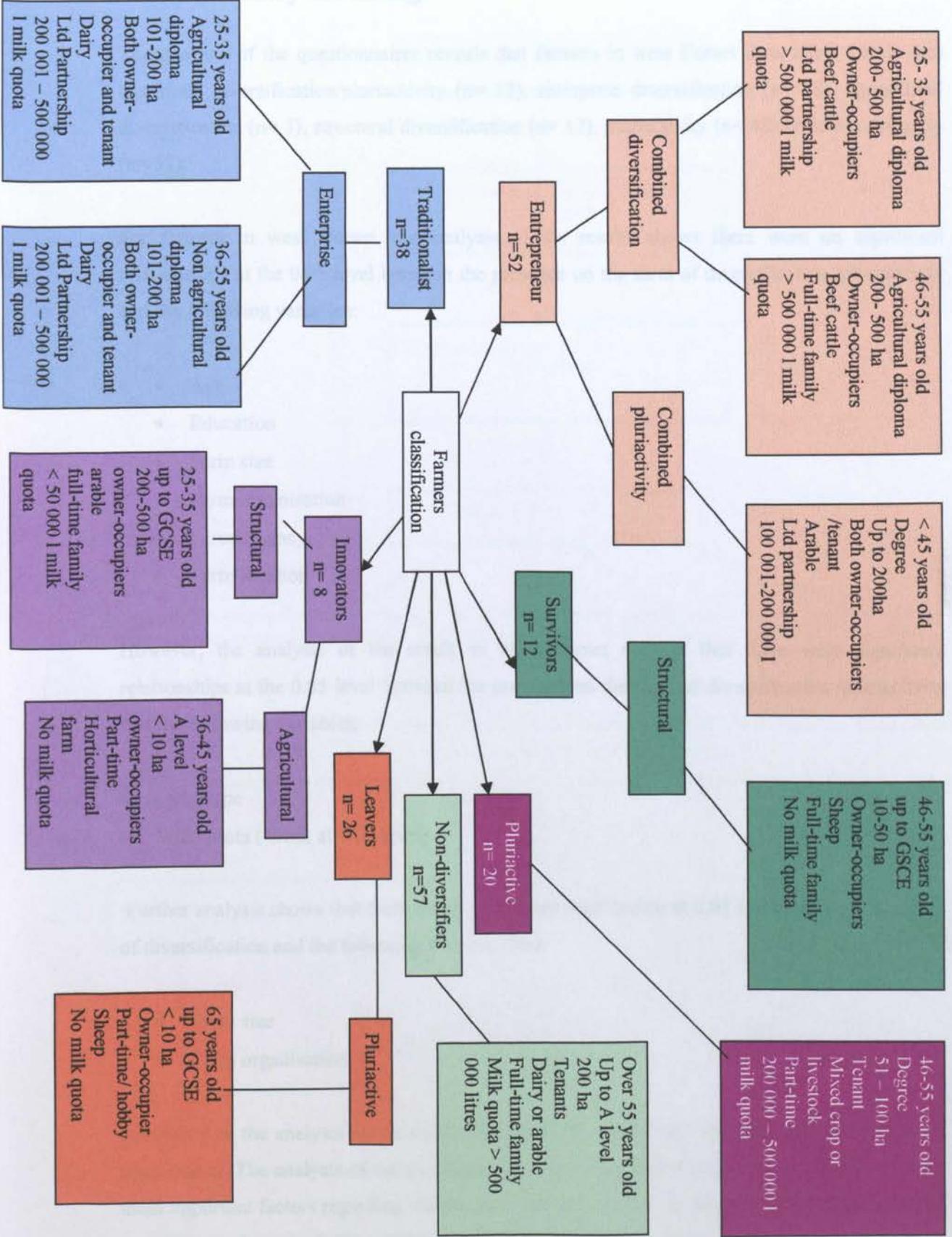


Figure 7. 2: Classification of farmers in west Dorset

7. 11. Summary of findings

The analysis of the questionnaires reveals that farmers in west Dorset diversified mainly into combined diversification/pluriactivity (n= 52), enterprise diversification (n= 38), agricultural diversification (n= 3), structural diversification (n= 12), pluriactivity (n= 48) or do not diversify (n= 57).

For farmers in west Dorset, the analysis of the results shows there were no significant relationships at the 0.05 level between the presence on the farm of diversification /pluriactivity and the following variables:

- Age
- Education
- Farm size
- Farm organisation
- Farm tenancy
- Farm location

However, the analysis of the result in west Dorset showed that there were significant relationships at the 0.05 level between the presence on the farm of diversification /pluriactivity and the following variables:

- Farm type
- Milk quota (close at 0.06 level)

Further analysis shows that there was a significant relationship at 0.05 level between the nature of diversification and the following two variables:

- Farm size
- Farm organisation

According to the analysis of the results, the six of the eight 'key' variables are unimportant in west Dorset. The analysis of the qualitative data would suggest that the economic context is the main important factors regarding the decision-making process for diversification/pluriactivity in west Dorset. As a result the 'model' as described in chapter 1 has to be modified as Figure 7.3 shows.

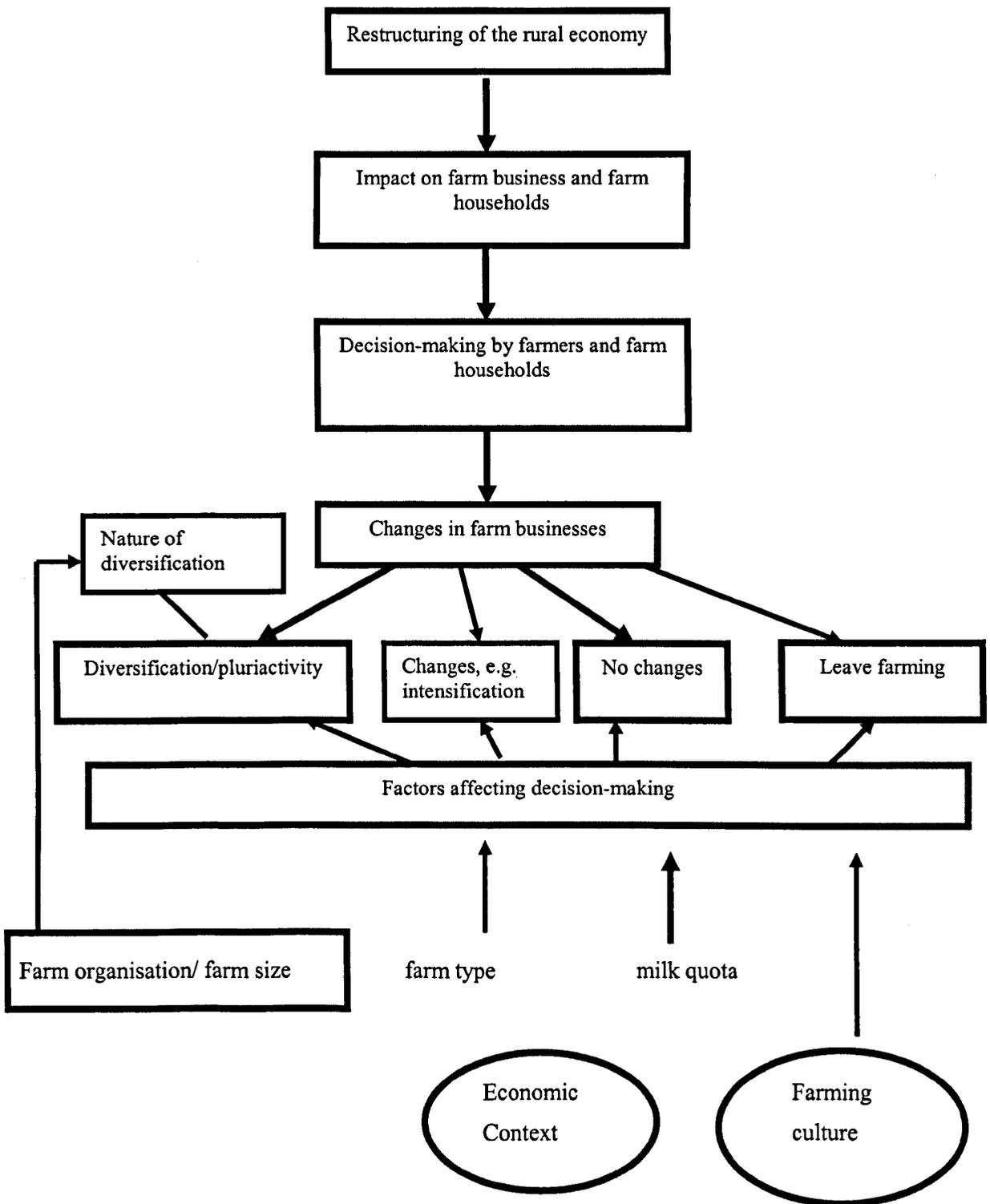


Figure 7. 3: Model for west Dorset

In west Dorset, the type of farm as well as the milk quota play a role in the decision making process regarding diversification. Farms with small milk quota are more likely to diversify than those with a large milk quota. Although in sud Manche there was no significant statistical relationship at the 0.05 level between the presence on the farm of diversification/pluriactivity, the findings from the analysis of the qualitative data were similar. In west Dorset, dairy farmers diversify more than any other type of farming. This is linked to the fact that the income from dairying fluctuate more than with the other production so it becomes a necessity for dairy farmers to find another source of income to maintain their farm business into a viable financial state. In west Dorset, farmers choose to diversify to increase the income of their farm business. As in sud Manche, the influence to diversify is primarily linked to the economic context. Some farmers might be willing to diversify but they may not have enough capital or assets so the bank do not lend them the money necessary for the investment.

As in sud Manche, farm organisation plays a role in the nature of diversification. For example, dairy farmers in west Dorset are more likely to diversify into enterprise diversification than into combined diversification/pluriactivity. As in sud Manche, the nature of job involved in dairy farming leaves little free time to pursue another activity. Farmers often opt for the option that fits best in the daily routine of dairying. As a result, dairy farmers diversify by introducing onto their farm business another traditional production.

In west Dorset, keys variables such as age, education, farm size, farm organisation, farm tenancy, farm location do not play a role in the decision-making process regarding diversification. As in sud Manche, the explanation is that these variables can be dependent one another and as such as single variable they do not have an impact on the decision or not to diversify. For example, a young farmer may still farm with his/her parents and as a result, diversification is not only his/her solution. Older farmers may choose to diversify because one sibling express wishes to continue the family farm business and the farmers need to keep the farm business financially viable if someone takes over the business (e.g. Roger). A tenant farmer might not be free to diversify or there might be restriction from the landlord to diversify into certain types of diversification. Here again, the decision to diversify is not only from the farmers or member of the farm business but it is influence by external factors.

In west Dorset, farming culture also plays an important role in diversification but as opposed to France, farmers the UK are encouraged via DEFRA, ADAS or Farmer's Union to diversify. As such, diversification has become part of the farming culture and it is more accepted by farmers. Farmers in west Dorset do not see themselves as non-farmers because they diversify. They see diversification as a solution to the farming crisis and as a way for them to continue the job they

love. That is why, some farmers introduce several type of diversification/pluriactivity on their farm in order to spread the economic risk (e.g. Andrew).

7. 12.Conclusion

This chapter analysed the nature of diversification and pluriactivity in west Dorset. Just under 75 percent of farmers diversify in west Dorset. The characteristics of farmers and farms were reviewed. These have an influence over the decision to diversify into a specific type of diversification. Farmers in west Dorset diversify in order to increase their income and also to spread economic losses linked to the uncertainties of the market. As a result, farmers diversify into a wide range of activities ranging from B&B and holiday lets to off-farm jobs. Farmers in west Dorset also behave more like entrepreneurs as they often combined different types of diversification and pluriactivity. However, farmers from west Dorset in general would prefer not to diversify as diversification brings a lot of pressure on farming system as there is no guarantee the diversified activity will bring enough income. Younger farmers are more innovative than their older counterparts. If older farmers have no successor they are even less tempted to engage in diversification.

The next chapter will compare the key findings from the analysis of diversification and/or pluriactivity in the two study areas.

**Chapter 8: Comparison of diversification and pluriactivity in sud
Manche and west Dorset**

Chapter 8: Comparison of diversification and pluriactivity in sud Manche and west Dorset

8. 1. Introduction

The aim of this chapter is to review and compare the characteristics of the farms and farmers, the key variables involved in diversification in both study areas, to review the 'model' proposed in chapter 1 and also to compare each type of diversification and pluriactivity in the two study areas. To achieve this, both quantitative and qualitative data from the author's survey will be used. To explore the differences between the two study areas, the author will statistically compare the quantitative data. Qualitative data from the interviews will be used to illustrate farmers' attitudes towards diversification/pluriactivity.

8. 2. Comparison of the characteristics of farmers in both study areas

The author identified some similarities (Table 8. 1 and 8. 2) in the characteristics of farms and farmers in both sud Manche and west Dorset as well as some differences (Table 8. 3 and 8. 4).

Table 8. 1: Similarities in the characteristics of farmers and farms in both study areas

	Similarities
Age	Farmers under 35 years old have the largest farms. Part-time and hobby farms concern farmers over 45 years old. Younger farmers are more likely to be tenants. Older farmers are more likely to be owner-occupiers.
Gender	The majority of heads of farms are male. Female heads of farms have small to medium sized farms Male heads of farms have large (sud Manche and west Dorset) to extra large farms (west Dorset). Female heads of farms often run part-time or hobby farms. Male heads of farms work full-time. Female heads of farms have a family farm.
Marital status	The majority of farmers in both study areas are married. Married couples usually have larger farms. Married farmers are often dairy farmers.
Nature of employees	Family members (spouse).
Advice on diversification	About 50 percent of farmers in sud Manche take advice on diversification (from technicians from the Chambre d'Agriculture, food company or milk company) and 43 percent of farmers in west Dorset take advice regarding diversification (conservation organisations, DEFRA or extension services).

Source: Author's survey

Table 8. 2: Similarities in the characteristics of farms in both study areas

	Similarities
Farm size	Small farms are part-time or hobby farms. Medium sized farms are full-time family farms.
Tenancy	Owner-occupiers have small farms, Tenant farmers work on medium to large farms Both types of tenancy mode include large farms (sud Manche, west Dorset) and extra large (west Dorset).
Income	The larger the farm, the higher the income. Dairy farms have the widest range of income in both study areas.
Work alone on the farm	In west Dorset, over a third of farmers work on their own on their farm In sud Manche, a quarter of farmers work alone.
Co-op	Most dairy farmers belong to a co-op in order to obtain a higher value for their milk. They also use the co-op to buy their inputs.

Source: Author's survey

Table 8. 3: Differences in the characteristics of farmers and farms in both study areas

	Differences
Age and farm organisation	In west Dorset, farmers under 45 years old are often full-time family farms or family based partnerships. In sud Manche, farmers under 35 years old are in GAECs and farmers between 36-45 are mainly in EARLs or full-time family farms.
Age and belonging to a co-op	In west Dorset, farmers over 45 years old do not belong to a co-op In sud Manche, farmers over 35 years old belong to a co-op.
Education	In west Dorset, very few farmers have an agricultural education. In sud Manche farmers have received an agricultural education (which is now compulsory to start a farm business in France).

Source: Author's survey

Table 8. 4: Differences in the characteristics of farms in both study areas

	Differences
Farm size	In west Dorset, farms are much larger (176 ha) than farms in sud Manche (56 ha).
Farm size and farm organisation	In west Dorset, large farms are full-time family farms or corporations and extra large farms are Ltd based partnerships and Family based partnerships. In sud Manche, large farms are GAECs or EARLs.
Farm size and type of farm	Farm size varies with the type of farm. In west Dorset, dairy farms are medium sized and large farms; beef cattle farms are small to large farms, arable and mixed crops and livestock farms are large to extra large farms. In sud Manche, dairy farms are large farms, beef cattle farms are medium size, arable farms are small to medium farm size and mixed crop and livestock farms vary from small to large farms.
Type of farm	Sud Manche is principally a dairy area West Dorset has a wider range of types of farm (dairying is dominant, then sheep production, mixed crops and livestock, beef cattle and arable).
Dairy farms	In west Dorset, dairy farms can be either full-time family, family based partnership, Ltd based partnership or corporation. In sud Manche, dairy farms are GAECs, EARLs or family farms.
Beef cattle farms	They are mainly family farms (sud Manche) and part-time farms (west Dorset).
Mixed crops and livestock farms	They are part-time farms in sud Manche and either full-time family or family based partnership in west Dorset.
Arable farms	They are mainly family farms (sud Manche) or Ltd based partnership (west Dorset).
Income	Incomes from farms in sud Manche are lower than farm incomes in west Dorset.
Milk quota	Farmers in west Dorset have a much higher milk quota compared to their French counterparts. In west Dorset, family based partnerships, full-time family farms and Ltd based partnerships have the highest milk quota and hobby farms have the lowest. In sud Manche, GAECs and EARLs have the highest milk quota compared to family farms
Tenancy	In west Dorset, the majority of farmers are owner-occupiers and there are very few tenant farmers. In sud Manche, the majority of farmers both own and rent part of their farms and there are very few owner-occupiers.
Farm structures	Farms in sud Manche are much more fragmented than those in west Dorset.
Milk quota	In west Dorset, the farmers have a higher milk quota In west Dorset, 11 percent of farmers have a milk quota under 200 000 litres In sud Manche 38.8 percent of farmers have a milk quota under 200 000 litres. In west Dorset, the majority of farms have a milk quota of over 500 000 litres. In sud Manche, the majority of farmers have a milk quota allocation comprising between 200 000 and 499 999 litres.
Income	According to the farmers, farmers' income has increased slightly in sud Manche but not in west Dorset. In west Dorset, the income ranges from less than £ 10 000 to over £ 90 000 per year. In sud Manche, farmers' income ranges from less than £ 10 000 to £ 49 999 per year.
Loan for diversification	In sud Manche, 55 percent of farmers take a loan to diversify In west Dorset, 20.7 percent of farmers take a loan to diversify.

Source: Author's survey

8. 3. Comparison of the key variables in diversification and pluriactivity

This section analyses and compares the relationship between key variables and whether or not farmers in each study area diversify or not and with which type of diversification they are most likely to be involved. In this section, the author refers to a three-way log linear analysis. A log linear analysis is a procedure used as an extension of the chi-square test to analyse situations in which these are more than two categorical variables and we want to test for a significant relationship between these variables. Essentially, a log linear analysis is the same as analysis of variance (ANOVA) but for entirely categorical data.

8. 3. 1. Age

When we look closer at the type of diversification farmers practice in both study areas we can say that younger farmers (less than 35 years old) in west Dorset and sud Manche are involved with enterprise diversification. Middle-aged farmers in west Dorset (between 36 and 55 years old) are more likely to diversify into any type of diversification, depending on the family characteristics. In sud Manche, middle-aged farmers are either involved in enterprise diversification if they have children willing to join the business or they do not diversify if there is no inheritance perspective to favour diversification. West Dorset's older farmers (over 55 years old) are more likely to be either pluriactive or they do not diversify at all with only a minority who adopt combined diversification/pluriactivity or enterprise diversification. In sud Manche, older farmers are more likely to be involved in structural diversification in B&B or direct marketing of farm products. Older farmers who have developed '*Chambre d'hôtes*' on their farm have mainly done so with the perspective of maintaining this activity when they retire in order to add to their pension income.

- Age and diversification

The author analysed the relationship between farmers' age and diversification in both study areas. There was no significant differences between sud Manche and west Dorset (chi-square=1.389; df=1, p=0.238).

There was no significant association between the farmers' age and whether or not farmers diversify, in sud Manche ($\chi^2 = 0.111$; df = 1; p= 0.739) or in west Dorset ($\chi^2 = 3.178$; df = 1; p= 0.075). However, the analysis revealed a stronger association between farmers' age and the

presence of diversification on a farm in west Dorset compared to sud Manche. The odds ratio¹ indicated that farmers in sud Manche were only 1.13 times more likely to diversify if they were under 45 years old but farmers in west Dorset were 2.17 times more likely to diversify if they were under 45 years old. Farmers in both study areas are more likely to diversify if they are under 45 years old.

- Age and type of diversification

The author also looked at the relationship between the farmers' age and the type of diversification (i.e on- or off-farm diversification) and the analysis revealed no differences between the two study areas ($\chi^2 = 4.349$; $df = 1$, $p = 0.037$).

¹ Explanation

			Age	
			< 45 years old	> 45 years old
Sud Manche	Do they diversify?	YES	65	54
		NO	18	17
West Dorset	Do they diversify?	YES	31	72
		NO	6	33

For sud Manche,

$$\text{Odds diversifying if } < 45 \text{ years old} = 65/18 = 3.61$$

$$\text{Odds diversifying if } > 45 \text{ years old} = 54/17 = 3.18$$

$$\text{Odd ratio} = \text{Odds diversifying if } < 45 \text{ years old} / \text{Odds diversifying if } > 45 \text{ years old} = 3.61/3.17 = 1.13$$

Hence, for sud Manche, farmers < 45 years old are 1.13 times more likely to diversify than those over 45 years old (i.e. age does not play a role in diversification in sud Manche)

For west Dorset,

$$\text{Odds diversifying if } < 45 \text{ years old} = 31/6 = 5.17$$

$$\text{Odds diversifying if } > 45 \text{ years old} = 72/33 = 2.18$$

$$\text{Odd ratio} = \text{Odds diversifying if } < 45 \text{ years old} / \text{Odds diversifying if } > 45 \text{ years old} = 5.17/2.18 = 2.37$$

Hence for west Dorset, farmers under 45 years old are 2.37 times more likely to diversify than farmers over 45 years old, which means that farmers over 45 years old in west Dorset are more likely to diversify than farmers under 45 years old

There was no significant association between farmer's age and whether or not farmers diversify on- or off-farm in sud Manche ($\chi^2 = 0.015$; $df = 1$; $p = 0.735$) or west Dorset ($\chi^2 = 2.015$; $df = 1$; $p = 0.156$). However, the analysis revealed a strong association between farmers' age and the type of diversification in west Dorset, in contrast to sud Manche (i.e. there is more of an association between age and type of diversification in west Dorset, especially for off-farm diversification). The odds ratio indicated that farmers under 45 years old in sud Manche were 1.23 times more likely to diversify on-farm compared to farmers over 45 years old. In west Dorset, the odds ratio indicated that farmers under 45 years old were 1.83 times more likely to diversify on-farm compared to older farmers. Farmers under 45 years old were 8 times more likely to have on-farm diversification in sud Manche compared to west Dorset. Farmers over 45 years old were 12 times more likely to diversify off-farm in west Dorset compared to farmers of the same age category from sud Manche.

Therefore the analysis seems to reveal a difference between farmers from sud Manche and west Dorset. Farmers in west Dorset are more likely to diversify on-farm if they are under 45 years old and off-farm if they are over 45 years old. In sud Manche, on-farm diversification occurred amongst all age groups of farmers.

8. 3. 2. Education

The research showed that in west Dorset farmers with an agricultural education are more likely to diversify than farmer without an agricultural education. In sud Manche farmers with agricultural education are less likely to diversify. However, in both study areas, the higher the level of agricultural education the less likely farmers diversify. In fact, many farmers from the French study area commented during the interviews that in an agricultural college farmers are not encouraged to diversify but rather to intensify.

Nevertheless, diversification is present in west Dorset where farmers have a degree and in sud Manche where farmers have a BEPA. Farmers having a BEPA are often older farmers and they tend to diversify once a member of the family joins the business. The author's results for west Dorset agree with the literature on diversification claiming that general education - as opposed to agricultural education - plays an important role in diversification as it gives the farmers the necessary skills to engage in a non-agricultural business activity. To some extent, we can then argue that agricultural education as dispensed in France has an impact on diversification as well by encouraging farmers not to diversify.

Anne Marie: Dans nos formations on a souvent négligé toute la partie commerciale. C'est un sujet souvent mal traité, on s'intéresse à la production, à l'économie au financement mais l'agriculteur n'est pas souvent commerçant. Ce sont souvent les COOP, les GIE qui ont des contracts avec des entreprises mais c'est rarement avec l'agriculteur en personne. Nous, les démarches que l'on fait en restauration, créperie, c'est vrai que l'on a appris un peu sur le terrain car on est très mal préparé à tout ça, d'autant plus aller signer des contracts avec des centrales d'achats, il y a tout un système qu'il faut connaître.

- Education and diversification

For the two study areas, the author analysed the relationship between the farmers' education and whether or not they diversify. The analysis was not significant at the 0.05 level ($\chi^2 = 3.20$; $df = 1$, $p = 0.074$) i.e. there were no differences between sud Manche and west Dorset.

There was no significant association between farmers' education and whether or not farmers diversify in sud Manche ($\chi^2 = 0.418$, $df = 1$; $p = 0.518$). This was also true for west Dorset ($\chi^2 = 3.026$, $df = 1$, $p = 0.082$). However, the analysis showed that the association was stronger for west Dorset than sud Manche. Farmers in west Dorset were 1.83 times more likely to diversify if they have an agricultural education compared to their French counterparts. Farmers with no agricultural education were twice as likely to diversify in sud Manche compared to west Dorset.

The odds ratio indicated that in sud Manche farmers who received an agricultural education were 0.72 times more likely to diversify than farmers who had not received an agricultural education (i.e. farmers with no agricultural education are more likely to diversify). In west Dorset, the odds ratio indicated that farmers with an agricultural education were 2.67 times more likely to diversify compared with farmers with no formal agricultural education.

Therefore the analysis seems to reveal no difference between farmers from sud Manche and west Dorset even if farmers in west Dorset are more likely to diversify if they have an agricultural education rather than not and farmers in sud Manche are more likely to diversify if they have no agricultural education.

- Education and type of diversification

The author also analysed the association between education and whether farmers diversify on- or off-farm. The result indicated no significant difference between sud Manche and west Dorset ($\chi^2 = 0.085$; $df = 1$, $p = 0.770$).

There was no significant association between the type of diversification and whether or not farmers received a formal agricultural education in sud Manche ($\chi^2 = 44.06$; $df = 1$; $p = 0.06$ – which is very nearly significant at the 0.05 level) or west Dorset ($\chi^2 = 1.262$, $df = 1$; $p = 0.261$). The odds ratio indicated that in sud Manche farmers with an agricultural education are 2.18 times more likely to diversify on-farm than off-farm. In west Dorset, farmers with agricultural education are 1.70 times more likely to diversify on-farm than off-farm. Therefore the analysis seems to reveal a difference between farmers from sud Manche and west Dorset.

In sud Manche, farmers with an agricultural education were 11 times more likely to diversify on-farm compared to farmers with an agricultural education from west Dorset. Farmers with no agricultural education were also 8.6 times more likely to diversify on-farm in sud Manche compared to farmers in west Dorset.

8.3.3. Farm size

The nature of diversification is also related to the size of the farm as larger farms may have more labour and consequently are less bothered about time constraints for a specific type of diversification. For example this explains the fact that larger farms have more structural diversification than smaller farms. The findings for west Dorset were similar to the French findings and also agreed with other research on diversification and/or pluriactivity. Nevertheless, results from the author's survey showed that medium-sized farms (50-199 ha) and very small farms (less than 10 ha) are the most likely to diversify but this relationship is not statistically significant (see below).

Contrary to west Dorset, small farms (less than 10 ha) in sud Manche are less likely to diversify. These farmers often run their farms as a prelude to leaving farming so they choose not to diversify, especially if no one has expressed any interest in continuing the family business. Small farms in Dorset are often part-time or hobby farms that are more likely to diversify because they are less traditional and more inclined to be entrepreneurial compared to small farms in sud Manche. This relates to the findings of Rattin (1999b) and Meehr *et al* (2005) as they concluded that small farms owned by older farmers do not diversify especially when the farmers did not know their successors. Medium and large sized farms (over 10 ha) are equally divided regarding diversification.

The author's results do not agree with Ilbery's results. For sud Manche, the results are the inverse of Ilbery's as the author's analysis showed that on-farm businesses occur on small and

large farms whereas Ilbery's work showed that on-farm businesses were on medium size farms. Ilbery recorded off-farm businesses on small and very large farms and the author survey showed that off-farm businesses were on medium sized farms. For west Dorset, on-farm businesses were found on small, medium and very large farms and off-farm businesses could be found on all farm sizes.

Gasson's (1988) claimed that large farms can more easily provide land for recreational activities. According to McNally (2001) farm retailing is the only diversification activity that seems to be negatively related to farm size. The probability of observing retailing on small or medium farms was about 1 percent higher than on large farms. The findings from the author's survey support this point for the west Dorset study area but not for the sud Manche study area. Recreational activities are present on small farms in sud Manche and on small and medium sized farms but also very large farms for west Dorset.

- Farm size and diversification

The author also compared the relationship between farm size and whether farmers diversify. There were no significant differences between the two study areas ($\chi^2 = 0.846$; $df = 1$, $p = 0.357$).

There was no significant association between farm size and whether or not farmers diversify in sud Manche ($\chi^2 = 0.634$; $df = 2$; $p = 0.634$) or west Dorset ($\chi^2 = 2.393$; $df = 2$; $p = 0.302$). However, the analysis showed a stronger association in west Dorset (i.e. the larger a farm is, the more likely it diversifies). Small farms in sud Manche (i.e. < 25 ha) were 1.41 times more likely to diversify than in west Dorset. Medium size farms in sud Manche were 1.32 times more likely to diversify than in west Dorset. Large farms in sud Manche were 1.25 times more likely to diversify than in west Dorset.

Farmers in sud Manche were more likely to diversify if they had a small or medium sized farm compared to farmers in west Dorset. If they have a large farm, i.e. over 55 ha farmers were equally likely to diversify in both study areas.

- Farm size and type of diversification

The author also compared the relationship between farm size and the type of diversification. The result showed no significant differences between sud Manche and west Dorset ($\chi^2 = 0.551$; $df = 1$, $p = 0.458$).

There was a significant association at the 0.05 level between the farm size and whether farmers diversify on- or off-farm in west Dorset ($\chi^2 = 11.71$, $df = 2$, $p = 0.003$). This was not true for sud Manche ($\chi^2=5.106$, $df = 2$; $p = 0.078$). Small farms in west Dorset (< 45 ha) are 15.5 times more likely to have off-farm diversification compared to farmers in sud Manche. Medium sized farms in west Dorset (46-100ha) are 16.66 times more likely to have off-farm diversification compared to farmers in sud Manche. Large farms (> 100ha) in west Dorset are 8.7 times more likely to have off-farm diversification compared to large farms in sud Manche.

Therefore the analysis seems to reveal a real difference between farmers from sud Manche and west Dorset. Farmers in west Dorset, on small, medium size or large farms were more likely to diversify off-farm compared to farmers in sud Manche.

8. 3. 4. Farm tenancy

The author's survey showed that owner-occupiers are slightly more likely not to diversify compared with farmers who both own and rent land. The author's survey did not come across any owner-occupiers who rented some land to help them diversify. According to Ilbery *et al* (1996) there is little to differentiate diversifiers from non-diversifiers in terms of occupancy. However, there does appear to be some association between mixed tenure and farm diversification. However, this contradicts the results of the Centre for Rural Research (2003) in a study of Devon as they showed that owner occupiers' holdings are less likely than average to be involved in any form of farm diversification. Wholly tenanted holdings were the most heavily involved with two-thirds in their sample being diversified.

However, there was a relation between the mode of tenancy of the farm and the type of diversification. Tenant farmers may be prevented from diversifying by the landlord if the latter does not agree to transform the buildings on the farm or to build new ones. This result of the author's research agrees with Bateman and Ray (1994) who gave a likely explanation by suggesting that tenants would frequently be under restrictive terms of their agreement with the landlord. Tenant farmers diversify mainly into enterprise diversification or pluriactivity as they do not necessarily need the agreement of the landlord for these kinds of activity. As such, the development of a separate enterprise, renting out farm buildings and recreation have a significantly lower probability of occurrence if the farm is wholly tenanted. This is also verified in the French study areas where the number of tenant farmers is much higher than in west Dorset. Furthermore, if a tenant decides to diversify, the landlord may increase the rent in order to take part in the profits the farmer makes by diversifying. The mode of tenancy of a farm may

also be linked to a grant received for diversification. In fact, grants are generally given to the landlord not the tenant. As a result, the tenant may have no say in the type of diversification he can have, as it is the landlord who decides what type of diversification s/he wants on his farm. Tenant farmers in west Dorset are not involved in structural diversification nor agricultural diversification whereas in sud Manche some tenant farmers practice structural diversification.

- Farm tenancy and diversification

The author compared the relationship between farm tenancy and the presence of diversification between sud Manche and west Dorset. There was no significant association between a farm tenancy mode and whether or not farmers diversified in sud Manche ($\chi^2 = 5.035$; $df = 2$; $p = 0.081$) or in west Dorset ($\chi^2 = 1.605$; $df = 2$; $p = 0.448$). Yet, the analysis showed a stronger association for sud Manche compared to west Dorset.

In sud Manche, owner-occupiers are 7.90 times more likely to diversify compared to tenants; part owners and tenants are 2.17 times more likely to diversify compared to tenant farmers and owner-occupiers are 3.63 times more likely to diversify compared to part owners and tenants. In west Dorset owner-occupiers and tenant farmers are equally likely to diversify; part owner-occupiers/tenants are 1.63 times more likely to diversify compared to tenant farmers and part owner-occupiers and tenants are 1.70 times more likely to diversify compared to owner-occupiers.

Owner-occupiers in sud Manche are 6.27 times more likely to diversify compared to west Dorset. Tenant farmers in west Dorset are 1.31 times more likely to diversify compared to tenant farmers from sud Manche. Part owner-occupier and tenants in both study areas are equally likely to diversify.

- Farm tenancy and type of diversification

The analysis showed that, although there was no significant association between the type of diversification and the tenancy mode of a farm for sud Manche ($\chi^2 = 0.447$, $df = 2$; $p = 0.800$) or west Dorset ($\chi^2 = 2.085$; $df = 2$; $p = 0.353$), the association is stronger for west Dorset than sud Manche. This means that farmers in west Dorset are more likely to have off-farm diversification than farmers in sud Manche.

In sud Manche, owner-occupiers are 8.82 times more likely to have on-farm diversification compared to west Dorset; tenant farmers are 17.5 times more likely to have on-farm diversification compared to west Dorset and part owner-occupiers and tenant farmers are 9 times more likely to have on-farm diversification compared to west Dorset.

8.3.5. Milk quota allocation

Dairy farmers in west Dorset have very large milk quotas compared to their French counterparts. Milk quota is not directly linked to diversification and it is only related to the organisation of the farm. Part-time or hobby farms have a lower milk quota than full-time ones. However, the former are then more likely to diversify or be pluriactive if their main income does not come from milking. Yet, it is important to note that only 20 percent of farmers in west Dorset declared how much milk quota allocation they had in contrast to their French counterparts (100 percent).

The survey examined amongst other things the effect of milk quotas on farmers' attitudes and responses to non-farming alternatives, for example, farm processing of milk (into butter and cheese), tourism and recreation. The rejection by farmers in both study areas of such types of diversification is linked to the cost of the investment, time and labour costs.

- Milk quota and diversification

The author compared the association between the annual milk quota allocation in both study areas and whether farmers diversify or not. This indicated no significant differences between sud Manche and west Dorset ($\chi^2 = 1.106$; $df = 1$, $p = 0.293$).

There was no significant association between milk quota allocation and the presence on the farm of diversification in sud Manche ($\chi^2 = 3.031$; $df = 1$; $p = 0.082$) or west Dorset ($\chi^2 = 0.043$; $df = 1$; $p = 0.835$). However the analysis showed there is no relationship in west Dorset whilst there is the suggestion of some relationship in sud Manche. For sud Manche, farms with a milk quota under 400 000 litres are 2.46 times more likely to diversify compared to farms with a milk quota over 400 000 litres. In west Dorset, farmers whose milk quota is under 400 000 litres per year are 1.20 times more likely to diversify compared to farmers with a yearly milk quota allocation of over 400 000 litres.

Therefore the analysis seems to reveal no difference between farmers from sud Manche and west Dorset. Farmers in Dorset with a milk quota over 400 000 litres are 3 times more likely to diversify than farmers in sud Manche with the same milk quota allocation. Farmers in west Dorset with a milk quota less than 400 000 litres are as likely to diversify as farmers in sud Manche with the same milk quota allocation.

- Milk quota and type of diversification

The author also compared the annual milk quota allocation and the type of diversification/pluriactivity between sud Manche and west Dorset. There was no significant association between milk quota allocation and the type of diversification in sud Manche ($\chi^2 = 1.359$; $df = 1$; $p = 0.244$) or west Dorset ($\chi^2 = 0.039$; $df = 1$; $p = 0.843$). This suggested that there really was no relationship in west Dorset whilst there was the suggestion of some relationship in sud Manche. The analysis showed that the higher the milk quota the more likely farmers diversify on-farm. In sud Manche farmers with a high milk quota (i.e. > 400 000 litres) were 1.375 times more likely to diversify on-farm compared to farmers with a lower milk quota (i.e. < 400 000 litres). In west Dorset, farmers with a milk quota allocation less than 400 000 litres per year were 1.17 times more likely to diversify on-farm compared to farmers with a milk quota allocation over 400 000 litres.

The higher the milk quota allocation, the more likely farmers in sud Manche were to diversify on-farm. Farms with a yearly milk quota allocation less than 400 000 litres are 4.82 times more likely to have on-farm diversification in sud Manche compared to west Dorset. Farms with an annual milk quota allocation over 400 000 litres were 7.85 times more likely to have on-farm diversification in sud Manche compared to west Dorset.

Therefore the analysis seemed to reveal a difference between farmers from sud Manche and west Dorset. The higher the milk quota, the more likely farmers in sud Manche are to diversify on-farm compared to their English counterparts. Farmers in sud Manche are 21.3 times more likely to diversify on-farm if they have an annual milk quota allocation less than 400 000 litres. Farmers in sud Manche are 26.8 times more likely to diversify on-farm if they have a yearly milk quota allocation over 400 000 litres compared to farmers in west Dorset with the same milk quota.

8. 3. 6. Type of farm

Dairy farmers in west Dorset diversify more than their counterparts in sud Manche. The author also showed that dairy farmers in her sample diversify less than other types of farms. In fact, several papers report that diversification is also associated with farm type. Dairy farming is less able to diversify compared to other farm types due not only to the nature of the job but also to the capital attached to dairy farming. McNally (2001) confirmed this trend and declared that farm businesses classified as horticultural, pigs and poultry or dairy are less likely to be engaged in any type of diversification except for retailing. Apart from retailing, McNally (2001) observed that the diversification activities observed are more likely to be on arable farms or the less specialised and possibly also less intensive farm types.

In both study areas arable farmers are pluriactive. Arable farmers are involved in more seasonal, less labour-intensive farming businesses such as cereals so they might have more time to devote to the development of diversification activities. When involved with diversification, dairy farmers from both study areas are involved with enterprise diversification or are pluriactive. Pluriactive dairy farmers in Manche correspond with GAEC farms where the wife has an off-farm job as her labour is not required on the farm. Very few farmers are involved with direct marketing or transformation of milk to dairy products for sales in order to counterbalance the impact of milk quotas. Not surprisingly, on-farm retailing is biased towards farms with pigs and poultry and dairy cattle, reflecting opportunities for the direct marketing of fresh produce to the public. Both on-farm services and recreation are concentrated on farms with cash cropping but not on dairy farms. Halliday (1989) concluded that about a third of her sample of Devon farmers engaged in additional non-farming enterprises but quota-induced diversification was limited. Alternatives present were instead mostly of a longstanding nature and dominated by the provision of accommodation for tourists, more specifically bed and breakfast or the letting of part of the farmhouse/farm buildings for self-catering holidays.

Halliday (1989) found that timber related activities were not adopted by farmers as a way to diversify, with very few farmers involved in commercial exploitation of timber, despite the widespread occurrence of small pockets of woodland. The author's research agrees with Halliday as only one farmer in the west Dorset study area commercially exploited timber. No farmers in the sud Manche study area exploited timber.

Another reason for farmers not to diversify is that if they have invested in dairying, they may be under financial pressure to intensify. Implicit in this reasoning was the feeling that, for personal

or financial reasons, it was better to continue to allocate resources to milk production than to divert them into alternatives (Halliday, 1989). According to Ilbery and Bowler (1993: 161) “Considerable resistance towards diversification was found among non-adopters who have still to be convinced of the financial viability of this type of business development ;to many, it is just not farming”.

Claude: Je ne suis pas partant pour la transformation des produits....c'est pas mal de travail et faut trouver les débouchés et ça coute très cher en investissements.

Hervé: Je dirai même que la politique est contradictoire car on nous dit ça (qu'il faut réduire la production et produire de la qualité) et au niveau des subventions on s'aperçoit qu'on a intérêt à intensifier...Les primes représentent 50 % de notre chiffre d'affaires... on travaille pour ça.

- Type of farm and diversification

The author compared the association between the type of farm and the presence of diversification/pluriactivity. There was a significant association at the 0.05 level between the type of farm and whether or not farmers diversify in west Dorset ($\chi^2 = 4.655$; $df = 1$; $p = 0.031$). This is not true for sud Manche ($\chi^2 = 3.610$; $df = 1$; $p = 0.057$) though the relationship is significant at the 0.06 level. Dairy farms in west Dorset diversify 2.39 times more than non-dairy farms whereas in sud Manche dairy farmers are 0.35 times more likely to diversify compared to non-dairy farms (i.e. non-dairy farms diversify 2.86 times more than dairy farms), hence dairy farmers diversify less than other types of farmers. As a result, the author can say that the notion that dairy farmers do not diversify as much as other types of farmer is incorrect in west Dorset. Dairy farmers in west Dorset diversify in order to counterbalance the fluctuation in milk price and diversification is a way for them to increase their income or spray the economic risk by investing into non-farming activities.

Therefore the analysis seems to reveal a similarity ($\chi^2 = 7.99$; $df = 1$, $p = 0.047$) between diversification and the type of the farm between farmers from sud Manche and west Dorset. Dairy farms in west Dorset are 1.66 times more likely to diversify compared to dairy farms in sud Manche. This means that dairy farmers in west Dorset diversify more than dairy farmers from sud Manche. Non-dairy farmers from sud Manche are 4.10 times more likely to diversify compared to non-dairy farmers in west Dorset.

- Type of farm and type of diversification

The author also analysed the association between farm type and the type of diversification (on- or off-farm). There is no significant association between the type of farm and the type of diversification in sud Manche ($\chi^2 = 0.024$; $df = 1$; $p = 0.876$) or west Dorset ($\chi^2 = 2.243$; $df = 1$; $p = 0.134$). The analysis also revealed that the association is stronger for west Dorset than sud Manche. In west Dorset, dairy farms are 1.85 times more likely to have on-farm diversification compared to non-dairy farms. In sud Manche, non-dairy farms are 1.15 times more likely to diversify on-farm compared to dairy farms. Dairy farmers in sud Manche are 8.10 times more likely to diversify on-farm compared to dairy farmers from west Dorset. Non-dairy farmers from sud Manche are 16.56 times more likely to diversify on-farm compared to non-dairy farmers in west Dorset.

Therefore the analysis seems to reveal a difference ($\chi^2 = 0.789$; $df = 1$, $p = 0.374$) between diversification and the type of the farm between farmers from sud Manche and west Dorset. Whether or not they are dairy farmers, farmers in sud Manche are more likely to diversify on-farm compared to their English counterparts.

8. 3. 7. Farm organisation

The organisation of the farm (i.e. part-time, full-time, hobby) plays an important role in terms of type of diversification. In sud Manche part-time or hobby farms are more likely to be involved in structural diversification compared to family, EARL or GAEC types of farm. Full-time family farms in west Dorset diversify more than family farms in sud Manche.

The survey also showed that OGAs are linked to the farm organisation. This is in line with other research that has shown that OGAs are often linked to farms with less labour requirements. For Robson *et al* (1988) OGAs are less prominent in conjunction with activities with high labour requirements such as horticulture, field crops and in particular dairy farming. On the other hand, cattle rearing, fattening and intensive livestock (pigs and poultry) seem to combine well with the demands of another occupation, since the percentages are the same for farmers with an OGA as for all farmers (Robson, Gasson and Hill 1988). McNally (2001) argued that there is also a positive relationship between whether the farm is classified as a non-family business (i.e. other partnership, limited company) and the probability of engaging in all types of diversification. However, this excludes the development of a separate enterprise (where there is no significant relationship) and hirework (where there is a negative relationship) (McNally 2001).

- Farm organisation and diversification

The author compared the organisation of the farm and the presence of diversification between the two study areas. There is no significant association between farm organisation and the presence on the farm of diversification in sud Manche ($\chi^2 = 0.014$; $df = 1$; $p = 0.905$) or west Dorset ($\chi^2 = 0.356$; $df = 1$; $p = 0.551$). Yet, the association is stronger for west Dorset than sud Manche. Full-time farmers in west Dorset are 1.33 times more likely to diversify compared to part-time farmers. Part-time farmers in sud Manche are as likely to diversify as their full-time counterparts.

Therefore the analysis seems to reveal no difference ($\chi^2 = 0.194$; $df = 1$, $p = 0.659$) between diversification and the organisation of the farm between farmers from sud Manche and west Dorset.

- Farm organisation and type of diversification

The author also compared the association between the organisation of the farm and the type of diversification. There is significant association between farm organisation and the type of diversification for west Dorset ($\chi^2 = 0.449$; $df = 1$; $p = 0.035$). This is not true for sud Manche ($\chi^2 = 0.045$; $df = 1$; $p = 0.832$). In west Dorset, part-time and hobby farmers are more likely to diversify off-farm than on-farm. Full-time farms in west Dorset are equally likely to diversify on- or off-farm. However, in sud Manche, on-farm diversification seems to dominate any aspect of diversification. Part-time or hobby farmers as well as full-time farmers are more likely to have on-farm diversification than off-farm diversification

Therefore the analysis seems to reveal a difference ($\chi^2 = 1.338$; $df = 1$, $p = 0.247$) between diversification and the organisation of the farm between farmers from sud Manche and west Dorset. Part-time and hobby farmers in sud Manche are 35.5 times more likely to diversify on-farm compared to part-time and hobby farmers from west Dorset. Full-time farmers from sud Manche are 8.9 times more likely to diversify on-farm compared to full-time farmers in west Dorset.

8. 4. Comparison of each type of diversification or pluriactivity in both study areas

8. 4. 1. Generalities

The author's survey reveals that farmers in west Dorset diversify slightly less than their sud Manche counterparts (72. 5 percent versus 77. 3 percent) (Table 8. 5).

Table 8. 5: Diversification and pluriactivity (west Dorset and sud Manche)

Diversification	West Dorset		Sud Manche	
	n	(%)	n	(%)
Yes	156	72.5	136	77.3
No	57	27.5	42	22.7

Source: Author's survey

- Diversification and farmers' country of origin

Table 8.6 presents the nature of diversification in sud Manche and west Dorset. The statistical analysis revealed that there is no statistical difference between farmers from sud Manche and west Dorset and whether or not they diversify ($\chi^2 = 0.884$, $df = 1$, $p = 0.347$).

Table 8. 6: Nature of diversification/pluriactivity in sud Manche and west Dorset

Diversification and pluriactivity		Sud Manche		West Dorset		
		%	N	%	N	N ²
		77.3	136	72.5	156	
	Structural	7.2	12	7	15	28
	Agricultural	8.4	15	2.1	3	16
	Enterprise	53.9	96	17.6	38	53
	Pluriactivity	7.8	13	21.8	48	59
	Combined	0	0	24.6	52	
No diversification or pluriactivity		22.7	42	27.5	57	

Source: Author's survey

- Type of diversification and country of origin

Also farmers from sud Manche or west Dorset are almost equally likely to diversify. Further analysis showed that there is a significant association between the farmers' country of origin and whether or not they diversify on- or off-farm ($\chi^2 = 53.873$, $df = 1$, $p = 0.000$). Therefore, there is a difference between the type of diversification between the two study areas. Farmers in

² Combined activities disaggregated

sud Manche are 11.28 times more likely to diversify on-farm compared to farmers in west Dorset.

As expected, because west Dorset has a large number of part-time farmers and hobby farmers, the number of pluriactive farmers is quite high (21.8 percent), compared to sud Manche where the number is just over 7 percent³ (Table 8. 6). Pluriactive farmers in sud Manche work on full-time farms. However, it is important to note that farmers from west Dorset also combined pluriactivity⁴ with other types of diversification, which increased even more the number of pluriactive farmers whereas this practice is non-existent within the French farming sample. However, it is surprising to note that only 7.1 percent of farmers in west Dorset diversify into structural diversification, as it is more in the British culture for farmers to diversify into B&B or PYO schemes for example. Farmers in west Dorset practice what the author refers to as combined diversification/pluriactivity. Combined aspects of diversification/pluriactivity do not appear in sud Manche where farmers concentrate only on one OGA. However, the author's survey reveals that PYO schemes were not present on any farms surveyed. Farmers' reasons for not adopting this approach are explained later.

Diversification occurs on west Dorset farms but its characteristics vary compared with diversification in sud Manche. Although structural and agricultural diversification are comparable in percentage terms, the number of farmers involved in structural diversification is twice as much as in sud Manche. The results from the survey also showed that there is much less enterprise diversification compared with sud Manche; only 17.6 percent compared to over 50 percent in sud Manche. In sud Manche, there are twice as many farmers involved in enterprise diversification compared to west Dorset. The other main difference is, although west Dorset has 8.6 percent of hobby farmers and sud Manche has 9.9 percent part-time or hobby farmers (*agriculture de loisir ou agriculture de complément*), the number of pluriactive households exceeds 20 percent in west Dorset compared with only 7.8 percent in sud Manche. The other main contrast between the two study areas is the presence of combined diversification and/or combined diversification and pluriactivity in west Dorset. These practices are non-existent in sud Manche. Because farmers in west Dorset have larger farms and more employees, it is easier for them to diversify their resources from the farm and it makes it easier, for example for dairy farmers, to have a part-time job as they have the necessary labour on the farm. As such, large farms in west Dorset diversify more which corresponds to the findings of various

³ In sud Manche, the sample did not record many small hobby and part-time farmers. Many of those farmers would have been pluriactive.

⁴ Farmers in west Dorset often combined several activities such as having an off-farm job and a B&B (combined pluriactivity) or having games activities (e.g. shooting) and being a farm contractor and renting out farm buildings (combined diversification)

other research (e.g. Ilbery *et al*, 1997). However, this is only applicable to west Dorset as large farms in sud Manche do not diversify as much as their English counterparts. Furthermore, farmers in sud Manche rely more heavily on the returns from traditional farming activity because they do not diversify to the same extent as farmers in west Dorset. The French government also has a strong historical link with farmers compared to the situation in the UK, and French farmers still have a strong impact on government decisions regarding farming. Farmers in sud Manche know they have the backup of the government and the general population as opposed to England where farmers do not make the news headlines so often for positive reasons. Rural votes are quite important in France but in recent years the links between the government and farmers in France have diminished.

- Reasons to diversify

Farmers in both study areas diversify for several reasons. One of them is the inheritance perspective: the farmer thinks of the future and plans to expand activity for when a member of his family joins the holding. This corresponds with research by Potter and Lobley (1996) who concluded that succession, an important part of the life cycle, is an important influence on farm household decision making.

Some farmers diversify and they are proud when their diversified activity provides job opportunities for the local people as they contribute to rural development. This form of diversification should become more and more apparent as reforms of the CAP promote multifunctionality of agriculture. Reforms of the CAP also aim to portray agriculture as a generator of employment in the countryside. As such, the role of diversification schemes is not only to introduce new sources of income on to the farm but also to strengthen the vitality of the rural economy. Back in the late 1980s, Gasson argued that the diversification initiative was certain to be welcome. Furthermore the underlying philosophy seemed to be that the best way of maintaining a viable rural economy was to invest in the farming sector (Gasson, 1988). Gasson's argument still holds good today as agriculture moves towards multifunctionality and rural development. Ilbery (1996) reinforced this by stating that farm attractions can have local economic and social benefit. Apart from maintaining the economic viability of some family farm businesses they can create employment opportunities for both family and non-family members. During the high season, farms which provide farm attractions employ an average of five full-time workers compared to less than two on the farm itself: of these five, 1.5 are non-family members. In addition, numerous part-time and casual workers are employed.

Paul runs a large farm with his son and daughter. They have diversified into shooting in the winter and they also offer stag weekends. As well as this they rent holiday accommodation. Roger B is proud to be able to employ people for the local village in his activities.

AB: Why do you diversify?

Paul: To try to get money coming into the business. We do shooting and stag weekends. [...]The shoot, you know we employ 2-3 local people so it helps the local economy and on shoot days we employ 10-15 people twice a week, then again it helps the local economy which I am aware of and I feel strongly for, so you know I enjoy that.

AB: Travaillez vous seule?

Anne Marie: Non, mon père suit la production laitière et on s'entraide pour la production cidricole. On a aussi un employé à temps plein, un à temps partiel et deux saisonniers. On pourrait en avoir plus mais les charges de la MSA sont trop importantes.

8. 4. 2. Structural diversification

It seems that farmers from Dorset are more interested in B&B (n = 4), caravan parks (n = 7) and holiday lettings (n=7) than their French counterparts who are more conservative. Another distinction between farmers from sud Manche and west Dorset is that some farmers in west Dorset undertake paid work for another farmer whereas in France farmers are more likely to work together and exchange work.

Although PYO schemes have been an important activity in diversification, the author's survey in west Dorset recorded no PYO schemes nor any 'vente directe' businesses in sud Manche, even if some of the farms were close to urban centres. John, from west Dorset, presented his view regarding PYO:

John : [...]we have enough to do all day so we'd have to employ someone to run the thing and then you have to pay somebody before you get a profit, so we guessed it would not be worth it.

AB: Que pensez vous de la vente directe?

Alain: D'abord, on a déjà beaucoup de boulot donc s'il faut vendre en plus on n'en finit pas, on est toujours en train de courir.

Farmers often find it difficult to select the right type of diversification. Farmers often argued that the public does not know what farming is or do not understand the difficulty with farming

business. One of the solutions could be a better collaboration between farmers in order to provide the right attraction to the public.

8. 4. 2. 1. *The respondents' attitudes towards structural diversification in sud Manche*

a- Reasons to diversify

Farmers involved in structural diversification have become farmers because they like the freedom the job involves, they enjoy the countryside life. These farms are often less intensive and farmers are more innovative to find non-traditional activities on their farm to increase their revenue.

Charles: J'ai diversifié en chambre d'hôtes et chasse pour voir autre chose que des bovins.

Farmers involved in structural diversification often require extra labour. The nature of the labour is often family (spouse) but when necessary extra labour is employed on a casual contract to help during the busy time (from June until October). Many farmers started diversifying because their spouse joined the business.

Gilbert is a married dairy farmer who has two children, who also work on the farm. He has an agricultural education and farms 122 ha (rented and owned). The milk quota allocation is 600 000 litres. He started farming in 1974 with only 17 ha. He has constantly increased the size of his farm and even more since the children have joined the business. All employees are family employees and work full-time. Farm income is only produced by farming activity and has increased since 1984. Gilbert started diversifying in 1975, and has no intention to stop as it generates enough income for all members of the GAEC.

AB: Pourquoi avez vous diversifié votre entreprise?

Gilbert: En diversification on fait des chambres d'hôtes depuis que ma femme s'est installée.

Jacques is a young married farmer who has started diversifying since his wife has joined the business. He is involved in structural diversification and his wife wanted to do so as they have the appropriate accommodation for it. They decided to have *Chambres d'hôtes* and *Table d'hôte*, which is a farm restaurant with products of the farm on the menu. Jacques owns 140 ha and has a milk quota of 400 000 litres. He started farming in 1991 and his farm is a GAEC. He

also works with his parents. The income derived from diversification is for the household and the income derived from dairying is re-invested in the farm. Jacques has a plan to diversify into enterprise diversification as well but has not done so yet as he wants to consider all the options.

Jacques: En diversification on fait des chambres d'hôtes depuis que ma femme s'est installée. Elle aime le contact avec les touristes et on avait une maison adéquate. Ça fait huit ans que l'on fait les chambres d'hôtes, ça marche pas mal car le Mont Saint Michel, la mer et les plages du débarquement ne sont pas très loin. C'est beaucoup de travail car en plus on fait table d'hôte.

b- Reasons not to diversify into structural diversification

- Lack of interest

Some farmers do not diversify into tourism activities, for example, as they have no interest in the matter. Hervé runs a family farm with his wife. The farm is several miles away from the main highway. Hervé and his wife said that they found it hard to find an employee that knows and enjoys what they are doing and they both declare that not many people understand what farming is. Hervé declared that he and his wife did not want to diversify into an educational farm because Hervé's wife does not like children:

AB: Avez vous songé à faire une ferme découverte?

Hervé: Non!

Hervé's wife: Non, je ne suis pas gamins. Déjà on n'y a pas pensé mais non. C'est vrai ça se fait. Quand j'ai fait mon stage de 800 heures, il y avait deux femmes qui voulaient faire des chambres d'hôtes.

Some farmers argued that their job is to produce food for everybody and they should not have to sell it directly as they are not qualified for this. As such, they are reluctant to directly sell their produce.

Bernard is a married dairy farmer with three children. He both rents and owns some of his farm. He has diversified into enterprise diversification (pork). He received an agricultural education and farms in a GAEC type of farm with his wife and brother, all of whom work full-time. They farm 114 ha and have a milk quota allocation of 456 600 litres of milk. He started farming in 1980 with only 20 ha. Although they live near the sea-side, Bernard and the co-farmers have showed no interest in structural diversification as they consider that type of diversification does not constitute farming. They have diversified since 1984 and do not plan to stop as like many other farmers they have taken a loan and have to continue working to pay it back. Bernard lives

near Mont Saint Michel and has decided not to have a gîte as he does not like the idea of tourists coming near his farm.

AB: Et la vente directe?

Bernard: Non, on est producteur et pas vendeur. Chacun son truc. Il y a du temps à passer. C'est plus facile en petite structure, pas produire plus mais mieux pour ces fermes là. Nous, on a un autre niveau. On ne peut pas tout faire. Si on fait les yahourts, faut aller les porter. C'est vrai c'est quelque chose qui se développe. C'est une autre diversification mais nous on ne prend pas ce créneau là. Si un jour ça se développe vraiment faut être dans les premiers à prendre le train et faut avoir la main d'oeuvre aussi.

AB: Et des chambres d'hôtes?

Bernard: Le tourisme: non, on n'a pas l'esprit pour faire ça.

- Lack of resources

Some farmers also declared during the interviews that they cannot diversify into tourist activities as they do not have the resources for it in terms of accommodation. This type of diversification would imply too much investment and it is therefore impossible for them as they do not have the capital.

AB: Avez vous considéré faire des chambres d'hôtes?

Hervé: On n'a déjà pas de maison, on ne peut pas faire de chambres d'hôtes.

Herve's wife: Oui, on vit avec les parents et les grand parents.

Paul's farm is located near Mont Saint Michel. The house has direct views of this well known tourist attraction. He used to run *Chambres d'hôtes* but he and his wife, who is hoping to work in a shop at Mont Saint Michel, have decided to stop doing it since they have had a baby. Paul said:

Paul: Ma mère fait les chambres d'hôtes, nous on en a fait mais avec le bébé on n'en fait plus. C'est vrai qu'on est bien placé. Faudrait être déclaré, il faut avoir des contrôles. Le fait d'être déclaré est une sécurité. C'est sûr que le tourisme c'est un atout, pour l'instant tant que le lait marche c'est bien. Les chambres d'hôtes c'est beaucoup de travail.

- Enough income from dairying

Other farmers have chosen not to diversify into structural activity as that it is not easy and it does not always fit in well with dairying activity on the farm. Consequently, for many it is easier either to choose enterprise diversification or to increase the milk quota on the farm. Farmers want to diversify in order to increase their income but the type of diversification they pursue has to integrate easily with their existing operation, and not require too much additional capital and make their life easier, not more difficult. Paul agrees that tourism is an important asset for diversification and said that he could restart *Chambres d'hôtes*, but for the time being the income he gets from dairying was sufficient for him so he does not see the point of developing into this tourist activity. In the future however, he admitted he might want to start diversifying into sheep with the 'prés salés' label, as his farm is so close to Mont Saint Michel. Only a handful of farmers, located near the Mont, can apply for the label.

Paul: C'est sur que le tourisme c'est un atout, pour l'instant tant que le lait marche c'est bien [...] Je pourrais faire des moutons avec labels pré-salé car je suis près de la grève, c'est plus facile.

- Investment too high

Farmers with smaller farms do not necessarily diversify into structural diversification such as *Chambres d'hôtes* or food processing due to the cost of the investment. Although many farmers diversify in order to increase their income, farmers may be reluctant to diversify due to the heavy investment involved. Some farmers declared it would not be worth it for them to diversify into tourism because their farm is not easily accessible. Also any activity linked to tourism is only seasonal so farmers do not see the point of investing money into a business that will only earn money during a few months a year. The investment linked to provision of accommodation to the right standard is quite expensive and in addition there is the cost of relevant insurance. Furthermore, *Chambres d'hôtes* are often run by retired people as this brings them extra cash toward their pension, and farmers said it is better suited for retired people to do that activity as B&B can be time consuming:

Charles: Il y a un petit peu d'agriculteur qui font des chambres d'hôtes mais en général c'est des gens âgés, à la retraite.

Paul: Non, [transformer les produits de la ferme, par exemple, faire du beurre, de la crème] c'est beaucoup trop de travail et trop d'investissement pour le rapport, ou faut faire ça à grande échelle, avec les mises aux normes et laboratoires.

- Lack of labour (single or divorced farmers)

Another reason for farmers not to diversify into structural diversification is that it is more difficult for them to undertake additional activities, as they do not have the manpower necessary. As mentioned before, the heavy tax incurred in employing someone also does not encourage farmers to employ paid farm labour. There are very few single farmers in dairying areas as dairying is time consuming and it has been a long tradition that milking was the woman's job on the farm. As such single farmers are more likely to be involved in beef cattle farms or cereal farms as their production is more easily managed by one person only.

Alain said he could not operate *Chambres d'hôtes* because he is single and as such it would be very difficult for him to milk the cows in the morning as well as preparing breakfast for the visiting guests. He said he could not employ anyone to help out, as the cost of an employee is too high:

AB: Avez vous envisagé de faire des chambres d'hôtes?

Alain: J'ai un copain qui fait des chambres d'hôtes, ça marche très bien. Moi je suis tout seul, je ne peux pas faire ça.

- Refusal to have more activities

Farmers also argued that because of the supermarkets and hypermarkets it has become more and more difficult for them to use *vente directe* as a way of diversification to sell their products. Farmers rarely deal directly with the supermarkets as contracts are with the co-op. Two out of the four farmers involved in direct marketing had direct contracts with the supermarket. However, they find it very hard to do business with supermarkets directly as the latter prefer dealing with a larger unit e.g. co-ops. Most farmers find it difficult to communicate with the supermarket marketing team and they find it quite an intimidating process. They trust completely the co-op to negotiate prices to their advantage. Furthermore European regulation has not helped as sanitary regulations are very strict. Hence even small-scale direct sale operations are affected e.g. it is not even possible to sell one litre of milk to a neighbour:

Henri: Le paysan ne contrôle pas grand chose. On ne va pas se mettre à faire la crème, le beurre. On y passerait toutes nos soirées et c'est des petits débouchés, et avec la mise aux normes...il y a trop de risques. Faut pas pousser dans les extrêmes. Il y a trop de contraintes et trop de risques. On n'a même pas le droit de vendre un litre de lait au détail, faut des contrôles, ça devient trop discipliné.

AB: Consideriez vous vendre les fruits et légumes directement à la ferme, il y aurait moins de contrôles?

Henri: C'est surement la même chose. Il faut faire certifier. Le petit détaillant ça n'a plus sa place. On n'en veut plus. Maintenant les gens n'ont plus le droit d'aller vendre au marché. En général c'est les retraités qui font ça car ça prend du temps. Comment voulez vous faire ça maintenant il y a la grande surface.

8. 4. 2. 2. Farmers' attitude towards structural diversification in west Dorset

Farmers often find it difficult to select the right type of diversification. Farmers often argued that the public does not know what farming is or does not understand the difficulty with farming business. One of the solutions could be a better collaboration between farmers in order to provide the right attraction to the public.

Kevin is a young farmer. He has an agricultural diploma and runs a full-time family dairy farm. He works with his wife and parents. He owns 112 ha and has a milk quota of 600 000 litres. He has diversified into B&B and self-catering accommodation (activity mainly run by his mother) and he has produced and sold ice cream since 1992. However, he is now re-considering this activity because of the EU regulations relating to quality products. Although the total income has not increased since 1984, the income from the diversified activities has increased.

AB: Many farmers have considered doing a B&B, others a farm zoo, or PYO and then you could have schools coming round or open days to educate people about farming.

Kevin: That is something we thought about, about a year ago. There is a school, an educational trust, in the village and they have lots of school children from all over the country. We thought about transforming the old building into somewhere where the children could come and walk about and then you need (to see) if you can get the grant for the children to walk around and see the different animals and things like that. That would be something we thought about if we could get a grant but then you would have to tidy, you would have to try to get contacts and contracts from schools.

Farmers also want to diversify but they do not want to spend too much time on this activity. As such most farmers find B&B time consuming and farmers may be less willing to adopt this strategy in order to maintain their privacy.

AB: Have you considered B&B or renting accommodation for holidays?

Jon 1: Yeah, we found it easier to rent the houses out as complete as private. One is the hassle, to have to produce work on it and we have an agreement, a heritage agreement with the tax people and there are some restrictions on this as in the past there were taxes we did not have to pay when we inherited this which mean that we cannot have a B&B, holiday type thing. We would not be able to do that because of the commission whereas renting it is not a problem.

Farmers also say that diversification is often seasonal. This prevents some farmers from diversifying into structural diversification as they prefer earning regular income from, for example, enterprise diversification or pluriactivity.

AB: Are you busier in the summer?

Andrew: Yeah, you get different people at different times. We have aimed our B&B to young families with small children so obviously we are busy in all the school holidays from now [July] until mid September, we are very busy with families with children. We get different types of people at other times of the year. We get people with pre-school aged children during the term. Our season would run from February-March through to November. Not fully booked. To say that we have not been booked really well this summer. We are booked now until September. You get some business people. That is not a huge part; they usually do the business in the area but they would be odd, they rarely stay for more than one night. We try to attract people to stay for longer than that.

AB: Have you considered lodgers?

Andrew: Yes we have but we haven't done that yet. It is something we consider doing in the winter when there are not so many B&B bookings.

Farmers do not diversify into tourism activity if their farm is not located at a strategic place. Ilbery (1996) confirmed that access is important and so good signposting and proximity to a main A-road are key considerations:

AB: I have noticed that you do not diversify in tourism activities but Dorset is touristic and not that far away from London, Why?

Roger: You had trouble finding us. If we went into caravan parks, we are not suitable because of the access. You need to be on a main road. Yeah, but then access if we ran into a campsite for caravans, roads to get here are not suitable.

8. 4. 3. Agricultural diversification

Farmers engaged in solely agricultural diversification represent only 2.4 percent of farmers in west Dorset. This takes the form of organic farming. Other farmers (4.5 percent) combined agricultural diversification with another type of diversification. As for their French counterparts, Dorset farmers engaged in agricultural diversification are not willing to produce any unconventional crops or livestock because they reckon there is no market for it and also the investment involved might be substantial, and it would not be worth it. Furthermore, there is a lack of market opportunity for unconventional crops or livestock. One farmer commented, "you can eat some Ostrich once but you won't replace the Sunday roast with it!"

Most farmers do not see the market opportunity for agricultural diversification and they do not find agricultural diversification an attractive solution to their problems. For many farmers agricultural diversification means organic farming. Organic farming is the main aspect of agricultural diversification in west Dorset but not in sud Manche. French farmers disagree with the concept of organic farming as for them it is synonymous to moving backwards and is not the future of agriculture as it contradicts what they have learnt at the agricultural college. Alain, a farmer from sud Manche commented:

AB: Transformeriez vous votre ferme en ferme bio?

Alain: Je suis pour l'agriculture raisonnée mais pas pour l'agriculture bio. Autant revenir à l'agriculture de nos grand-parents.

Whether they are French or English, most farmers do not really like the idea of organic farming and they do not consider it as diversification. Farmers are not willing to produce organic food as they claim they do not get enough money for it. The premium⁵ was quite attractive but nowadays the market for organic produce is not as important as expected as organic produce is sold at higher prices in supermarkets and farmers know that consumers mainly look at the prices of products while shopping. Farmers are also not all convinced that organic produce is of better quality compared to conventional foodstuffs. They also argue that for example, organic milk may be purchased at a higher price for 5 days a week and at a normal price for the rest of the week. Since 2001, prices for organic milk have fallen sharply and nowadays organic milk is often sold as conventional milk. Farmers from both study areas argued that organic farmers are not competitive with other farmers as the outputs are lower for organic farming. One farmer in Dorset argued that whatever is done to reduce production such as set-aside, organic farming, CSS, the production would not be reduced that much because of the progress in science and genetic engineering. In general, it may be summarised that growth areas for diversification in the future are likely to be the letting of land and buildings which correspond to McNally's (2001) analysis of the Farm Business Survey, and a general move into non-subsidised crops or organic foods.

AB: What about organic farming, have you considered converting?

Andrew: My mother is very keen, I am not.

AB: Why?

Andrew: I do not think we would have survived the conversion period financially and if you look at people who have gone organic, the price of organic milk has dropped very

⁵ The Organic Farming Scheme ran from 1999 to 2004.

sharply. The premium for organic milk in countries like Denmark is very little higher than the price of ordinary milk and I personally do not believe that organic milk is any better than what we produce. I am not a fan of organic produce. There is a market for it and a number of people willing to pay for it but in general terms I do not think the vast majority of people are interested.

AB: What about organic farming?

Harold: It has got its place I think [...] but I don't think it is a good way to farm.

AB: Why?

Harold: Because I think things have moved on from there. It was a good way to farm and in some senses I suppose it still is but technology has moved on a bit and then you can get more out of the ground with it rather than less smaller increase, I do not know. The organic farmers have tended to knock down the traditional farming and I think we should be on the same side. I don't really agree with that. I don't knock down organic farmers. I thought about it myself but I don't think I could make it work here. It would reduce production.

AB: Have you considered converting to organic farming?

Jonathan: I did consider it for quite a time and I was quite tempted to but now I am glad I did not. Because the market has been flooded and again the supermarkets now are giving virtually the same price for the organic than the rest. It was just a gimmick to get people into their supermarket. They were not really interested about supporting organic farming. A friend of mine he has gone organic and his milk is now collected with the same tanker that my milk is collected with. They all go in together. He is paid a better price 5 days a week and 2 days a week he is paid an ordinary price. Because once again it is over supplied again they can import it cheaper. Other countries are able to produce it cheaper and supply it to us and supermarket is a business. It can buy it cheaper elsewhere so it is going to buy it cheaper elsewhere.

AB: Avez vous considéré convertir votre ferme en ferme bio avec label?

Marc: Moi je voudrais bien mais ça va faire cher pour le consommateur. Déjà qu'ils regardent aux prix, en plus le bio concerne plus les fruits et les légumes.

8. 4. 3. 1 The respondents' attitudes towards agricultural diversification in sud Manche

a- Reasons to diversify into agricultural diversification

Adding an unconventional animal to the farm allows the farm to increase income while using the farm resources in terms of labour and buildings or land. Agricultural diversification fits in well with dairy farming as most of this production can be dealt with in between dairying. Furthermore, investment for agricultural diversification is minimal compared with other types of diversification such as enterprise diversification where expensive buildings may have to be built.

However, farmers mentioned that the problem with such activity is that the income tends to be irregular and is concentrated only for a few months per year and is strongly dependant upon the weather conditions. The other problem is that if one farmer earns a reasonable income from agricultural diversification, then neighbouring farmers may try that production as well and consequently the market is flooded by an over production, prices decrease and farmers lose money. Farmers are aware of this and some of them mentioned this during the interviews. Farmers feel they are not guided enough when it comes to the decision of diversification. Farmers do not want to invest in a production that many other farmers practice but often they find it difficult to find a niche in the market for a particular activity or production. As such many farmers wish the *Chambre d'Agriculture* was more helpful in terms of advice regarding diversification.

Paul has planned to diversify but finds it unrealistic, as he does not have enough labour to help him. His wife is planning to work during the summer time at Mont Saint Michel in order to increase their income. Paul has also been looking into quality certification by being able to sell the sheep as '*pré salé*', as the farm is located near Mont Saint Michel, which is also famous for the salt marshes sheep label, '*pré salé*'. This certification is controlled by the *Chambre d'Agriculture* that has a land register of where the salt marshes are. In sud Manche there was no other sheep production other than *pré salé* certification (which represents a protected geographical indication, PGI, as explained below).

According to Ilbery and Kneafsey (2000), the concept of 'quality' is one which is contested, constructed and represented differently by diverse actors operating within a variety of regulatory and market arenas. Food safety issues have been taken into consideration due to the anxiety about salmonella and listeria, the presence of Bovine Spongiform Encephalopathy (BSE) and *E.Coli* and more recently worries over genetically modified organisms (GMOs). Furthermore the public has become more aware of the ethical and environmental implications of intensive farming systems and the trend towards 'healthy eating', the 'body beautiful', and fitness in general. These concerns indicate a growing public interest in, and knowledge of, food (Shilling, 1993; Coakley, 1998; Nast and Pile, 1998). Quality is a complex notion, the meaning of which may vary for specific products and between individuals, regions and countries (Bowbrick, 1992). Quality is socially constructed through the relationship of different individuals who may search for various reasons to interpret, represent and regulate quality in particular ways (Marsden and Arce, 1995). Consumers, for example, are increasingly concerned to know where products come from and how they are produced, not only for 'health' and 'safety' reasons, but also in terms of satisfying a current 'nostalgia' which takes them back to a time of 'real' and

'wholesome' foods (Gilg and Battershill, 1998). The presence of these trends within consumer attitudes has encouraged the EU to apply regulations 2081/92 and 2082/92 to 'protect' food and drink products via a protected designation of origin (PDO) or a protected geographical indication (PGI) (Ilbery and Kneafsey, 2000).

b- Reasons not to diversify in agricultural diversification

One of the aspects of agricultural diversification is organic farming. However, the main reason for farmers not to diversify towards agricultural diversification via organic farming is that, although organic produce is sold at higher prices in supermarkets, farmers say it is not viable for them due to various constraints attached including the need to meet stringent regulations. In France, organic farming represents only around 1.5 percent of all farmland (Colombel, 2000). Furthermore, farmers argue that because there are few milk companies dealing with the collection of organic milk and the general lack of demand, they could end up selling their milk only part of the week as organic milk, and the rest is simply collected with the traditional milk supply, so financially it is not worthwhile. Some farmers argued as well that if everyone engages in organic farming, then there won't be anything special about it, prices would decrease and there would be no profits:

AB: Que pensez vous de l'agriculture biologique?

Michel: Ça peut être un débouché pour réduire la production mais faut pas que tout le monde s'y engouffre dedans sinon ça va être la banalisation.

Many farmers do not wish to transform their farm into an organic farm as for them it would be equivalent to going back in time by not using all the technology available to them. Organic farmers are usually seen as 'green' farmers and marginal farmers and consequently they are not regarded positively by the farming community.

Alain, a dairy farmer from the east of the study area, away from tourist attractions and operating on traditional lines, declared he was not willing to transform his farm into organic production unless it becomes more widespread. He felt that organic farmers were marginalised.

AB: Avez vous considéré transformer votre exploitation en ferme bio?

Alain: Non, ça ne m'intéresse pas, je n'ai pas la philosophie pour faire ça. Celui qui fait l'agriculture biologique, faut y croire et l'assumer jusqu'au bout. Faut voir la mentalité de ses gens là: faut plus mettre d'engrais, de phyto, ce n'est plus une agriculture de production, c'est vraiment pas mon truc. [...] Je suis pour l'agriculture raisonnée mais pas pour l'agriculture bio. Ça fait peur, il y a trop de contraintes. Je

suis prêt à y aller mais faudrait que tout le monde y aille. Entre l'intensification et le bio il faut un juste milieu. Remarquez dans quelques années ça changera peut être.....

Other farmers argued that only a certain category of consumer can afford to pay extra money for organic produce. As such it is more important to produce food at a lower price for less well off consumers. Furthermore they argued that organic farmers are not as competitive as 'intensive' farms so when the price of the milk for example will be based on the world market prices, organic farmers will not be able to compete.

During the interviews the notion of organic farming '*agriculture biologique*' was mentioned as the CAP since 1992 has encouraged farmers to extensify their production, i.e. reduce output and produce foodstuffs which are safe and of higher quality. Naturally farmers argue that their products are already very safe:

Gilbert: Il y a aussi dans la diversification les produits du terroir qui reflètent l'image de la région. C'est discuté par des gens au niveau top qualité, mais faut pas oublier quand même la population de masse qui a le droit à une certaine qualité. Il faut nourrir tout le monde. Tout le monde ne peut pas manger toute la semaine du poulet label. Malheureusement c'est beaucoup discuter par des gens pour qui l'augmentation du prix ne sera pas un gros problème.

Farmers do not wish to diversify into organic farming as they argue that organic farming is an old-fashioned way of farming.

Pascal: On ne peut pas ne pas produire de qualité parce que financièrement c'est trop dur. On a une marge minime donc si on veut la garder il faut produire de la qualité. De plus entre l'intensif et la qualité bio il y a un milieu. C'est là où ils nous matraquent avec le bio, retour à la nourriture traditionnelle de nos grands parents.

Farmers are sometimes unsure about what the general public wants in terms of quality. Farmers argue that they have never produced better quality products and they nowadays also have to register their farming practices into a logbook ('*cahiers des charges*'). Farmers argue that even if all livestock nowadays have to have a 'passport' that does not guarantee where the livestock come from. Charles commented:

Charles: Oui, mais [la qualité] c'est un principe. C'est un peu un leurre. J'ai fait des charolais pendant trois ans, je ne savais pas d'ou ils venaient et j'ai eu un label.

8. 4. 3. 2. *Farmers' attitudes towards agricultural diversification in west Dorset*

Farmers now are aware that it is important to produce quality food via certification if possible. Arthur is an older farmer (over 55 years old). He owns a full-time family dairy farm. He has diversified into structural diversification (rental of cottage) in order to increase his income. His milk quota allocation is 441 000 litres and he declared that this is enough for him to live on as he is single. His sister works with him and two other part-timers. He is not planning to develop any other kind of diversification as he is near retirement and sees no reasons to invest money in the business.

AB: And when farmers were encouraged to take up organic farming, do you think that was the best way to produce healthy and quality food?

Arthur: I think when they voted an organic subsidy four or five years ago they voted something, £20 per hectare for 5 years. I think people who were doing organic production before that were doing it because there is money available. They jumped on the wagon and they don't believe in it. I don't say all of them but a lot of them are doing it for the money and so lot of them still want to produce the same amount as before and I also feel that when the economy goes down there won't be so much demand for organic produce as they are more expensive. Yes, again people just look at the price and say they cannot afford 10p per pound for these organic carrots so they will buy conventional ones. So many people I think went from conventional to organic to reduce their overdraft, as money was available. I do not know what percentage it is that went into organic production but it is a very small amount compared to the total area of this country.

Mark is under 45 years old. He has an agricultural diploma. He only become a farmer as he loves the countryside and has inherited the farm. He had worked on the farm before and has not increased the farm size He owns 800 ha of land. He is a dairy farmer and has a milk quota of 1 900 000 litres. He has 12 employees, 10 of which are full-time, one part-time and one casual. He is a dairy farmer and has diversified into structural diversification (game/sport and woodland and nature conservation). Since 1996 he has developed forestry and woodsheds and rents out older buildings on his farm. He has other projects but declared that some of the EU regulations are 'over the top' and prevent him from diversifying further.

AB: What about organic products to reduce production and increase quality?

Mark: Yes absolutely it is. The problem is, it is the end price. Most organic dairy farmers are in a terrible state. Their prices are not even much better than ours are, and we thought of being organic and to be honest I looked at it. What was happening abroad and how many people were changing over here and then the supermarkets try to sell organic food as cheaply as they can. If they can get it cheap as the conventional that is what they really want. And what is the market going to be for the farmer you know? They had 2-3 good years like they did have, but it is now just about the same as

the conventional is. It would be far harder to manage the farm organically then conventionally. If I was guaranteed a price let's say 10-15 percent, 15 percent higher than what the conventional price could be then yeah, we would be organic. Because there is no guarantee then I don't see any point of doing it and I am really pleased we did not. We nearly did it 2-3 years ago and that would have been the end of it you know. I probably would have sold out by now. When it was good 2-3 years ago, they were getting 50 percent more than we were; it seemed very attractive. Now it is 10 -15 percent more it is not at all a lot; it is not very attractive at all. At the moment we get paid 13p a litre of milk and to be comfortable we need 16 p a litre. Last winter we got paid 20 p a litre but they were thinking there would be a shortage of milk. And when we hear for example that USA get paid more than we do it is unfair. If we were on a level playing field, it would be ok but we are not on a playing field at all.

8. 4. 4. Enterprise diversification

As the author's survey shows enterprise diversification is more popular with the French farmers (53.9 percent) than it is with English farmers (17.6 percent or just under 25 percent if we consider farmers who combined enterprise diversification with another activity), though English farmers agreed that enterprise diversification fits in well with dairy farming, as did the French farmers. If French farmers have gone to enterprise diversification, they are more likely to combine their dairying with another activity such as beef, pigs or poultry compared to their English counterparts. However, the difference between the two study areas is that farmers in west Dorset would not only have one extra type of production but often two extra production types added to the dairy production. Furthermore, the additional production involved required little investment as the animals can use the dairy buildings and there is less need to build extra expensive buildings for the additional activity. Although English farmers agree that enterprise diversification is a type of diversification, it is less used as the costs involved in the buildings to keep the animals for example are quite high. Farmers in west Dorset are much less solicited by animal firms to start a pig or poultry production in comparison with the farmers in the French study area. In fact, feed companies in England do not pay for the buildings as they sometimes do in France so it help prevent English farmers from diversifying this way in contrast to France where feed companies pay for most of the cost of the buildings as it secures them a business. Furthermore, the *Chambre d'Agriculture* encourages diversification into beef.

In sud Manche, the *Chambre d'Agriculture* encourages farmers to diversify into activities close to farming such as enterprise diversification. In west Dorset, farmers are encouraged by DEFRA, ADAS or even farmers' union to diversify into activities away from farming. Grants are available for farmers to renovate ancillary buildings into B&B or holiday lets for example.

8. 4. 4. 1 Farmers' attitudes towards enterprise diversification in sud Manche

a- Reason to diversify

Farmers in sud Manche diversify not only to increase their income, but also to find an additional activity if the status of the farm has changed because either the spouse or the children decided to join the family business. Henri is a married dairy farmer with three children and one of the children has joined the business. Henri diversified in 1997 to enable his son to join the business as they only farm 33 ha (rented and owned) and have a milk quota of 135 000 litres, which is not enough to assure sufficient income for all of them. They have then diversified into enterprise diversification (chickens). Henri started farming in 1970 with 16 ha. He has increased the farm size mainly because of his son joining the business. Henri's wife is involved in the GAEC as well.

AB: Pourquoi avez vous choisi de diversifier?

Henri: C'est pour l'installation de mon fils. Nous on a une exploitation moyenne, familiale. C'est même petit. C'est parce que le gars voulait s'installer car sinon on n'était pas prêt pour un hors-sol.

Michel: Pour gagner un peu plus d'argent. C'était surtout pour avoir un complément de revenu. On nous a pas poussé, c'était notre choix de faire des taurillons aussi car la ferme s'y prêtait il y avait de la surface et un quota pas très important et c'était une complémentation.

Claude: Etant donné qu'on était bloqué avec les quotas on a compté là-dessus.

Hervé: On fait une production laitière en production principale puis on fait un peu de boeufs pour diversifier. C'est un peu pour augmenter le revenu parce que c'est pas mirobolant. On a à peine 100 000 litres de lait donc pour retrouver du quota c'est un problème.

Farmers diversify into enterprise activities, as it is an easy option for them. Farmers also do not favour farm-based processing due to extensive regulation linked to processing and the factor of the additional time involved. Farmers declared that they do not have the time and it is easiest to pursue enterprise diversification.

b- Reasons not to diversify

- Intensification

Farmers in sud Manche are encouraged by the *Chambre l'Agriculture* to intensify, specialise and to practice enterprise diversification, which takes the form of the production of beef (53. 8 percent of farmers with enterprise diversification) or a *hors-sol* production of pigs (31. 4

percent) or poultry (14.8 percent). In sud Manche, the only enterprise diversification is from dairying into just another enterprise and farms in the author's survey had a combination of, for example, dairy and beef and sheep production. Farmers in sud Manche are encouraged to diversify and are not encouraged to take risks by running several types of production altogether. *Hors-sol* production means that the feed for the animals does not come from the farm itself but the farmers purchase it from the company that provides the animals. As a result, 53.9 percent of the farmers in sud Manche pursue enterprise diversification. The majority of farmers choose beef production as it is closely related to dairying and fits in quite well with the labour intensive production of milk. The *Chambre d'Agriculture* includes beef production as part of its definition of farm diversification and strongly encourages farmers to diversify that way as well as intensifying their production. A technician from the *Chambre d'Agriculture* declared to the author:

Technician: La Manche est une région où il faut intensifier la production laitière car c'est la seule production où les agriculteurs vont gagner correctement leur vie. La seule solution pour les agriculteurs Manchois c'est d'intensifier la production laitière. La diversification n'est pas la solution pour les agriculteurs, ça leur donne du travail supplémentaire et les risques sont plus importants à cause des investissements. Ceux qui travaillent à Bruxelles n'y connaissent rien en agriculture, dans une région comme la Manche il faut intensifier pas diversifier car on a les conditions favorables pour la production laitière. Le seul type de diversification que les agriculteurs manchois peuvent faire c'est de diversifier avec du boeuf, du porc ou des poulets, mais ça a aussi ses risques.

As such, *hors-sol* production is encouraged by technicians from the food industry that sell the feed for the animals as well as the technicians from the firm that is responsible for building the accommodation for the livestock. It has to be said that some farmers are well aware that it is in the technicians' interest to encourage them to invest as if no farmers invest the job of this category of technician is at risk.

Claude: Les techniciens vont pousser à diversifier car eux, ils y voient leurs propres intérêts.

- Subsidies

Another reason stated by farmers for their decision not to engage in diversification - not related to traditional activities - is linked to agricultural policy. Because farmers receive subsidies from the EU, in order to compensate for the lack of income many farmers prefer to diversify into enterprise diversification. The *Chambre d'Agriculture* encourages farmers to intensify and to diversify towards those activities. Furthermore a technician from the *Chambre d'Agriculture* argued that even if anyone from Bruxelles encouraged farmers towards diversification, that is

not the right thing for farmers in Manche to do and whoever encouraged farmers to diversify knew nothing about farming!!

Michel: Je dirai même que la politique est contradictoire car on nous dit ça (qu'il faut réduire la production et produire de la qualité) et au niveau des subventions on s'aperçoit qu'on a intérêt à intensifier... Les primes représentent 50 pourcent de notre chiffre d'affaires... on travaille pour ça.

- Risks

Some farmers argue that it is not worth diversifying into enterprise diversification via an *hors-sol* production as this type of farming is in crisis because there is an overproduction and there is strong competition from Eastern European countries:

Guy: Il est hors de question de faire du hors sol car c'est une production en crise.

Herve: Quant au hors sol, non, non, pas du tout, j'aime bien être au plein air et c'est de gros investissements aussi, des risques parce que on en voit qui gagnent bien mais d'autres perdent beaucoup. Non, ça ne m'intéresse pas.

8. 4. 5. Pluriactivity

From the author's survey it was apparent that the number of pluriactive farmers is much higher in Dorset (21. 8 percent) than in France (7. 8 percent). One of the explanations is that in France pluriactive farmers are mainly non-dairy part-time or hobby farmers and the majority of these farmers farm fewer hectares. Furthermore, for pluriactive farmers, farming is their secondary activity (i.e. they were in employment first and then they started farming). According to the 2000 French census pluriactive farmers are in general much older than the full-time farmers. French pluriactive farmers are often factory workers and postmen who inherited a farm in the 1970s and who have started farming it at weekends or before or after their day at work depending on their shift. Farmers argued in the interviews that dairy farming is time consuming and as a result it is difficult for them to have another job. Some farmers in France also argued that it is a good idea but when they see skilled persons not able to find a job they wonder how an unskilled person (or with specific skills i.e. farming education) would find employment. In fact some of the reasons that a spouse joins the farm business is that if the spouse does not have a job before she marries a farmer, by becoming a farmer herself she gets a social security status and then when she reaches retirement age she will be entitled to some pension.

There are three times more pluriactive farmers in the west Dorset study area than there are in the sud Manche study area. However, the main difference compared to the sud Manche study area is that the pluriactivity concerns the head of farm whereas in sud Manche the pluriactivity concerns the spouse.

The other main difference between the two study areas is the farmers' attitude towards pluriactivity. For English farmers, getting a job outside the farm is 'normal' and it is definitely not shameful whereas some French farmers would not consider it. French farmers also argue that farming is a full-time job and if they have to go and work elsewhere, they will spend less time on the farm and consequently problems will arise with the animals.

Alain in sud Manche commented:

Alain: Moi, je suis agriculteur avant tout, je ne me vois pas aller nettoyer les talus de la commune...

In contrast to their French counterparts, most English farmers do not discriminate against other farmers who have a job outside the farm. Farmers like Andrew said that if they have the energy and the possibility to have two jobs, it does not bother them. However, others, like John discriminate against pluriactive farmers:

John: No, no once you start having a job, you are no longer a farmer, you are a person who farms for a hobby. It is not a farming business as such.

In France, this is a different matter as pluriactive farmers are not included as much in the farming community and are not considered as true farmers as they are often marginalized.

8. 4. 6. Combined diversification and /or pluriactivity

Combined diversification is present on UK farms but was absent from the French farms. Combined diversification includes either a combination of diversification i.e. structural, agricultural and/or enterprise alone or with pluriactivity. One of the main differences between the two study areas is that in sud Manche, pluriactivity mainly concerned the spouse of the farmers whereas in west Dorset pluriactivity concerned either the head of farm or the spouse. Once again it seems to be easier in the UK to find a part-time job compared to France. Farmers in sud Manche find it quite difficult to combine dairy farming and a part-time job. The strong link with the farmers' syndicate reminds farmers that anyone combining farming and another activity is 'no good' and pluriactive farmers are not seen as real farmers. Indeed, sometimes

pluriactive farmers are seen as 'losers' as anyone farming correctly, according to farmers, should make enough money to live on and anyone needing another paid employment is not farming as they should. If the farmer has to employ someone to help on the farm while away at work, according to some farmers it is not guaranteed that the income from the paid work and the work done on the farm is enough to pay the employee. Farmers also argued that if they diversify and if they have to employ someone to help with the added activity, then the income from the diversification has not only to cover the costs of salary of the employee but also it has to bring extras to the farm business itself to be worthwhile.

However, it is important to note as well that the advice English farmers receive is turned towards diversification in any form or shape whereas farmers in the French study area are encouraged to intensify their production instead of diversifying or becoming pluriactive. Furthermore, sud Manche is not a very expanding area for jobs and it is quite difficult to find off-farm employment. One farmer's wife in France argued that even if she wanted to find a job she could not as her friends already have not found any. Alain, another farmer added:

Alain: Il n'y a pas beaucoup de travail dans le coin et en plus, malheureusement je n'ai pas été assez longtemps à l'école mes parents ne m'ont jamais poussé, et je suis allé au lycée à Saint Hilaire. En fin de compte c'est une belle bêtise.

8. 4. 7. No diversification or pluriactivity

Just under a quarter of farmers in west Dorset and sud Manche do not diversify. Several factors explain this. The first one is that some farmers are anti diversification as it takes their attention away from the main production and they feel they cannot run several activities on their farm, especially if they are short of employees. As a result, they often prefer intensifying their main production. The addition on the farm of another activity is often linked to the presence of the spouse working on the farm or any other employee. Farmers who do not diversify claim that they could but this would mean for them to employ extra labour. However, labour is often difficult to find in west Dorset and sud Manche and French farmers often argue that the taxation incurred in employing someone is too high.

The income from non-diversified farms also varies considerably according to the type of farm. The larger the farm, the higher the income. Because the income is sufficient for the needs of the farmer and his/her family, there is no need for them to find another way to increase their income. As with their French counterparts, farmers with a sufficient income prefer intensifying their business rather than investing in something else. Furthermore, some farmers do not wish to

diversify as no member of their family has shown any interest in joining the business so it does not encourage the farmer to diversify.

Farmers in sud Manche are also less willing to be pluriactive as, first, unemployment is around 8.8 percent in the region, and there are also very few jobs the farmers could do because their education is quite specific to farming. Hervé commented:

Hervé: Même si je voulais travailler, il n' y a pas de travail dans la région. Maintenant en plus il faut le bac, même pour ramasser les poubelles! Je n'ai pas d'études à part mon BEPA, donc je n'ai aucune chance.

Farmers with no inheritance perspective are less likely to diversify than other farmers:

AB: Why don't you diversify?

Harold: Yeah.....yeah, you could get higher income but hmm, I think it would cost too much to get things to go without a lot of money, it is just not there. Because I have not got anyone behind me, so you know.

Most farmers are not ready to diversify for environmental purposes. As such most of them are not interested in ESA or CSS. In the author's survey, no farmers in west Dorset took part in an ESA or CSS even though some parts of west Dorset are in an ESA. The interviews provided a few explanations from farmers regarding non interest in environmental issues. There was only one farmer who had diversified into farm woodland.

AB: Why don't you have any interest for environmental payments?

Arthur: Because it is another lot of rules and regulations. We have not got any. It is not something I have looked into and I am not willing to either.

Andrew: The payments would not pay the mortgage, so even if we wanted to we could not afford it.

Other farmers find the idea interesting, like Nigel who is a part-time farmer who loves being a businessman. As such he enjoys being a farmer and has diversified into tourist activities. He has a caravan park and a lake for fishing. Because he has an off-farm job, Nigel does not have the same pressure as the other dairy farmers.

AB: What do you think about the ESA?

Nigel: I think they are important. I think there is little doubt that we have a window of opportunity at the moment to gain land for totally very good reasons. The more private and independent bodies like the Environmental Agency, Nature Conservancy buy places at a reasonable price, the happier I am. It takes it out of production. It is part of the

rationalisation game. As long as they do not bring back wolves. And I think it is important to have more places such as national parks, where people feel an element of freedom.

Farmers in sud Manche can also sign up for agri-environmental measures and obtain payment. The new scheme applied in 1999 in France was termed *Contrat Territorial d'Exploitation* (CTE). However this scheme was short lived and was suspended in 2002. It has now been replaced by a *Contrat d'Agriculture Durable* (CAD) but many farmers in sud Manche have not joined the scheme. Farmers argue they have enough work to do and they are food producers not park keepers. Guy, an older farmer who believes in sustainable farming (*'l'agriculture raisonnée'*), said that he was willing to consider getting a CTE as for him it sounded quite a promising move for agriculture.

Guy: Au moment où des inquiétudes surviennent au niveau de l'environnement, la qualité de l'eau, je me pose souvent la question de savoir si l'agriculture que je fais est agréable pour le consommateur et pour moi d'abord et si les produits que je vends, est ce que je peux les manger moi même. Je pense qu'il faut qu'on aille vers les techniques douces, moins aggressive pour la nature et les CTE vont, je pense, apporter une solution.

8. 4. 7. 1. The respondents' attitudes towards no diversification in sud Manche

a- Reasons for not diversifying

- Lack of capital

Some farmers do not diversify as they do not have the buildings or the capital for it and their main concern is to extract as much income from their main production rather than employ capital to develop another activity on their farm. Once a farmer has invested in buildings for milk production further intensification is often required in order to make additional profit from the building:

Claude: On n'a pas la ferme qu'il faut On n'est pas équipé. Il faudrait qu'on mette l'exploitation aux normes, donc pour l'instant on ne s'occupe pas de la mise aux normes tant qu'on est pas obligé ce n'est pas la peine d'aller chercher des charges supplémentaires. Investir, si c'est pour gagner plus d'accord mais si on ne gagne rien, pour moi ce n'est pas la peine. [...] On a investi dans le lait donc on continue. Diversifier, oui, mais c'est pareil, économiquement c'est pas toujours valable. Il faut longtemps avant de rentrer dans ses frais. Si faut investir, compter son temps, employer quelqu'un c'est pas valable. Cependant tant que le lait paie, c'est pas la peine d'aller chercher des frais en plus.

Farmers do not want to diversify if this means additional large investment on their farm. They argue that if they have already invested in dairy production, it is better to intensify this activity and make it profitable:

Claude: La diversification ne permettra pas de subvenir au revenu et il faut savoir que la diversification va impliquer des investissements supplémentaires, donc quand on a déjà investi, on intensifie et on rentabilise...

- Lack of assets from the farm

Farmers with no diversification often argue they either do not have the structure for it or the skills required for some form of diversification. Most farmers in this category refuse to consider enterprise diversification as most of the types of production in this category are in crisis with the price per kilo of pigs being most of the time below or equal to the '*prix de revient*'. When asked if they would more likely engage in any form of tourist activity some argue that because of the location of their farm it would not work as the infrastructure is poor and there is no specific 'tourist attraction' near their farms (those comments come from farmers living more inland as opposed to farmers living nearer the seaside or main roads). One farmer wanted to diversify but was refused a planning permission because his farm was too close to a tourist site so he had no other options than to intensify his dairy production.

8. 5. Comparison of the 'model'

From the statistical analysis, the author tested the model as discussed in chapter 1 for each study area. As part of the design of the 'model', the author expected that key variables such as age, education, farm size, farm type, farm organisation, farm tenancy, milk quota and farm location would play a role in the decision-making process regarding diversification. The author also expected that external factors such as farming culture and economic context would have an impact on the decision to diversify or not.

According to the statistical analysis for sud Manche, the key variables when considered separately were unimportant for the decision-making process regarding the presence of diversification on the farm (see Figure 6. 3). The statistical analysis revealed however, that two variables had an impact on the decision-making regarding the nature of diversification on the farm: farm organisation and farm tenancy. The author also argues that what influences the decision-making to diversify is farming culture and the economic context. Farmers in sud Manche are largely influenced by consultants from the *Chambre d'Agriculture*, advisors from the dairy industry or even advisors from the farmers' union. Farmers who diversify in sud

Manche, diversify mainly to increase their income and to find another activity for all members of the farm business (i.e. head of farm, spouse or children).

In west Dorset, the 'model' was similar (see Figure 7. 3). Two out of the eight key variables had an impact on the decision making for the presence on the farm of diversification: farm type and milk quota. As in sud Manche, farming culture and the economic context were important factors contributing to the decision-making regarding diversification. Farm organisation and farm size were factors influencing the nature of diversification. As for their counterparts in sud Manche, farmers in west Dorset diversified to increase or maintain their farm business into a viable financial state but also to provide sufficient activities for all members of the farm business. One of the explanations why the 'model' does not work is that the variables are dependant on one another (i.e. inter-dependent). Individual variables are not necessarily related directly to diversification but when combined, they do have an influence as the author explains below.

- Age

The author argued that the decision-making process regarding diversification is not only based on key variables alone but it is a result of a combination of the key variables and both the economic context and farming culture. In fact, the key variables are often dependant on one another. For example, young farmers may still be working/ living with their parents. Parents may have a strong influence on the decisions made in the farm business. Parents acting as a financial guarantor may influence not only the decision to diversify but also the nature of diversification. For example, in sud Manche, Hervé and his wife had little freedom for decision-making regarding diversification as they lived with Hervé's parents and decisions were made according to the parents' wishes. In west Dorset, John diversified into tourist activities because his children joined the business. If John's children had not joined the farm business, he would have diversified into activities he described as being less demanding.

On other occasion, farmers diversified as they pursued the diversified activity established by their predecessors. As such, it was not their decision to diversify. This was the case for George in sud Manche who diversified into enterprise diversification in order to continue what his parents had started. In west Dorset, Kevin also chose to diversify into B&B as his mother had started this activity.

- Education

The statistical analysis of the results showed that agricultural education does not play a role in the decision-making process regarding diversification. Education is often linked to the age of the farmer. Young farmers may have higher agricultural qualification but their decision to diversify or not may be influenced by their parents who may have less or no agricultural education.

- Farm size

Farm size does not play a role in the presence or not of diversification on a farm business. Farm size is also linked to other variables such as age, farm organisation or farm type. For example, a young newcomer in the farming industry may only start with a small farm and hope to increase the farm size in the future. Certain types of farms, such as a horticultural farm, necessitates less acreage than a dairy farm to yield a profit. For example, in sud Manche, Guy had a medium size farm. His farm was pluriactive as his wife was working as a nurse and did not want to give up her job to join the farm business. Claude also had a medium size farm and did not diversify because he claimed that he and his wife preferred concentrating fully on their dairy production rather than investing in diversification. In west Dorset, Andrew runs a large farm and he was also involved in various structural diversification as well as pluriactivity. On the other hand, John, was also farming on a large farm but had no interest for diversification and as such he intensified his dairy farm.

- Farm organisation

Although farm organisation does not have an impact on the presence or not of diversification on the farm, it does play a role in the nature of diversification. For example, in sud Manche, Michel's farm was under the EARL system. He chose to diversify into enterprise diversification (beef production) as he was able to use same fields and buildings as for his dairy production. Claude also had an EARL but decided not to diversify because he did not believe that diversification was a solution to maintain or increase the farm income. In west Dorset, Roger run a family farm and chose not to diversify as he argued that his farm was not suitable for diversification whereas John who also runs a family farm diversified because his children joined the business.

- Farm tenancy

Farm tenancy had no direct impact on diversification in west Dorset nor in sud Manche. Tenant farmers in west Dorset were often prevented from diversifying into certain types of diversification by the landlord. For example, Jon wanted to diversify into a B&B but the landlord did not let him do so. As such, Jon decided to invest into buying more milk quota. In sud Manche, farm tenancy did have an impact on the nature of diversification. For example, Pascal would have preferred diversifying into tourist activity. To do so, he had to change slightly the structure of the house but the landlord would not agree to any changes in the house.

- Farm type

In west Dorset, farm type had an impact in the decision or not to diversify whereas in sud Manche it was not the case. As mentioned earlier, farm type can be linked to the farm size but also to farm organisation. Furthermore, certain types of farm offer more freedom to diversify than others. In west Dorset, dairy farmers often argued that it is more difficult to diversify if you have a large dairy farm. A sheep farmer may find it easier to diversify. In sud Manche, André, a pig farmer, diversified as he argued that he had the time whereas Charles, a dairy farmer, diversified into structural activities because he enjoys the contact with other people.

- Milk quota

Milk quota played a role in diversification in west Dorset. Farmers who had a large milk quota often did not diversify as they had invested most of their capital into buying milk quota and they could not afford to put the rest of the capital –if any- into diversification. Farmers like John did argue that income from milk was sufficient and they had no willingness or interest to diversify. Other farmers like Bob, did not have sufficient milk quota so they had to diversify to have a sufficient income.

In sud Manche, milk quotas were much lower than in west Dorset. However, farms with low milk quota were not necessarily involved in diversification. Paul had a low milk quota and was not diversifying whereas Hervé who also had a low milk quota on his farm diversified into enterprise diversification (beef). Marc had a large milk quota and transformed his milk into dairy products whereas Claude decided not to diversify as he claimed too many investments were needed and he preferred intensifying and concentrating on his main production (i.e. dairying) rather than investing into a new production or activity.

- Farm location

Farm location did not play a role in the decision to diversify or not. In sud Manche, Paul's farm was located near the seaside but he did not diversify into tourist activity. Pascal would have liked to diversify into tourist activity to have contact with people but also to make the farming industry better known to people who do not live in the countryside but he argued that the location of his farm was not suitable for such activity. Furthermore, as mentioned earlier, he was a tenant farmer and the landlord did not let him diversify. In west Dorset, John's farm was only a couple of miles from Dorchester but he had no diversification on his farm as he did not want 'strangers' on his land whereas Bob was also near Dorchester and his wife ran a B&B.

- Culture

The author also noted that the attitude towards diversification was different between the two study areas. As showed in the classification, farmers in west Dorset were more willing to combine various activities such as structural and agricultural or enterprise whereas in sud Manche farmers would only diversify into one activity. Farmers' views in west Dorset, or in the UK in general, have not been highly regarded by the UK government, whereas in France farmers' views have often been considered to be important. French farmers have a much greater political influence than farmers in the UK. This influence is reinforced with the strong links farmers have with their farmers' union. Furthermore, in sud Manche, pluriactive farmers are seen as farmers whose businesses have failed because of the connotation pluriactivity had in the late 1970s. Farmers who diversify are also seen as failures. This was not the case in west Dorset. Farmers in sud Manche are also very traditional and only see farming as food production. They have not received any specific skills regarding transformation or commercialisation of their products. There is also very little information on diversification.

- Economic context

It was more common practice for farmers in west Dorset to have a part-time job than farmers in sud Manche. The author noticed that there were more possibilities for farmers to find part-time employment in west Dorset than in sud Manche. Although sud Manche has many factories that could have provided jobs for farmers, the employers are not flexible and part-time jobs in factories are rarely available. This concept is linked to the French history (*Droit de l'Homme et du Citoyen*) which states that one should share work and should not have two jobs.

8. 6. Conclusion

This chapter compared diversification and pluriactivity in sud Manche and west Dorset. Just over 75 percent of farmers in the English study area are engaged in either diversification and/or pluriactivity which is slightly less than in the French study area. However, the type of diversification is different as farmers in west Dorset are more pluriactive and they also combine aspects of diversification and pluriactivity. This practice of combination is non-existent in sud Manche but some farmers there during the interviews were looking into this possibility. The reason that prevents them from doing this is that they are generally smaller farms than their English counterparts and the labour they would need to employ would cost them a lot. According to farmers in sud Manche, diversification and/or pluriactivity are marginal activities and are by no means a way of supporting or increasing income as it would involve further investment. On the other hand, their English counterparts see diversification and pluriactivity as a solution to the farm crisis, as being involved in various activities spreads the economic risks. Farmers in sud Manche claimed that some aspects of diversification are seasonal and consequently they do not constitute a valuable increase of income over the year. West Dorset farmers agree with the seasonality argument for some kinds of diversification but look for a complementary activity in order to counterbalance the effect. West Dorset has larger farms therefore offering greater scope for both diversification and increasing production. West Dorset also has less reliance on dairying.

Although west Dorset and sud Manche are two dairying areas, the type of farm diversification varies considerably. The different characteristics of both farms and farmers play an important role in this. Farm diversification is present in both study areas but the type of diversification varies considerably. Farmers in sud Manche simply add another farming enterprise (e.g. beef) whereas farmers in west Dorset diversify into a wider range of activities including structural, agricultural or pluriactivity. As such, farmers in west Dorset are more diversified, less specialised than their French counterparts. Farmers in sud Manche are far more likely to participate in enterprise diversification, most notably beef, pork and poultry production while farmers in west Dorset are more involved in pluriactivity and are much less likely to be involved in enterprise diversification. Pluriactivity is higher in west Dorset and is linked to the fact that a large number of farmers are part-time and hobby farmers. It is also significant to note that farmers in sud Manche generally focus on one type of diversification while their English counterparts are often involved in one or more diversification activities. In west Dorset, 20 percent of farmers received a grant to diversify and 18 percent took a loan. In sud Manche, 45 percent of farmers took a loan to diversify and 30 percent received a grant to diversify. In sud Manche, 31 percent of farmers admitted being in debt while farmers in west Dorset did not

reply to this question. It is clear from the interviews that farmers in both study areas would prefer to sell their products at a higher price rather than diversify which inevitably increases their workload and requires additional investment.

The comparison of the model for both study areas indicated that individual variables such as age, education, farm size, farm type, farm organisation, farm tenancy, milk quota and farm location do not have any influence on diversification when considered separately. However, a combination of these variables has an impact on the decision-making regarding diversification, especially to establish the nature of diversification. Culture and the economic context also influence the decision of whether or not to diversify.

Chapter 9: Conclusions

Chapter 9: Conclusions

This chapter aims initially to show the importance of the author's contribution to the development of a methodological framework for the study of agricultural geography. Then, the chapter summarises the thesis and presents the key findings of the analysis and comparison of the study of farm diversification in sud Manche and west Dorset. The author also explains how these key findings relate to the literature on diversification, and the chapter concludes by considering future research directions.

9. 1. Author's contribution to research in agricultural geography

The author observed that agricultural geography has often been studied using only one method. However, in order to undertake a comparative study of diversification and pluriactivity, the author used a multi-method analysis. By doing so, the author has introduced the need for more research using a combined approach as this can provide a more comprehensive understanding. Farm diversification has often been studied from a political economy approach. However, by adding an element of behaviouralism, humanistic and cultural geography to this research, greater understanding of the whole picture of the decision-making process in farm diversification was generated. Furthermore, it was essential for the researcher to understand the cultural differences and similarities of farmers in the two study areas to compare the decision-making process and the nature of farm diversification.

The research has attempted to shed a new light on the issue of diversification by adopting a holistic and comparative approach to the study of farm diversification and pluriactivity. The research employed a combined theoretical approach and a multi-method analysis involving both quantitative and qualitative data. This new approach was necessary in order to generate a broader understanding of the topic. As a result of this strategy, the research has been able to examine decision-making at the level of individual farms within the broader context of changing national and supra-national policy.

When studying agricultural issues, it is quite important to add to the research a behavioural, humanistic and cultural dimension in order to recognise the decision-making role of individual farmers and farm households. The information obtained from interviews with farmers enabled the researcher to have a better understanding of an individual farmer's actions or reactions when it comes to the decision-making process for diversification. The interviews enabled the author to go beyond the limitations of a positivist approach. This confirms recent studies by Evans and Morris (1999) who have pointed out the need for research being done from a behavioural or

cultural approach. Cultural and behavioural approaches in human geography have become an increasingly important dimension of the discipline. Cultural and behavioural approaches have been recognised as central to the organisation and operation of society rather than some universal or residual category that is marginal to social, political and economic concerns. Little (1999) argued that agricultural geography is now connected with other disciplines such as agricultural economics, rural sociology, political science and anthropology as part of rural studies in general, within which there has been an eager embracing of the cultural turn.

In contrast to this growing academic focus on the cultural and the qualitative, reports demanded by government agencies generally require questionnaire-type approaches rather than more in-depth methodologies required by cultural and behavioural perspectives (Young *et al*, 1995). These sentiments are reinforced by Cloke (1997) and Milbourne (2000), who both suggest that there is an incompatibility between qualitative rural research (characterised by a cultural, humanistic or behavioural approach) and contemporary policy discourses which valorise numerical data (characterised by positivist or political economy approaches). However, the author would like to stress that using behavioural or cultural approaches alone for the study of any aspect of agricultural geography would not put into perspective the whole picture. The introduction of behavioural and cultural dimensions to the study of agricultural changes enabled the researcher to obtain rich details from the interviews which benefited the research as it provided additional insights and allowed the researcher to understand the whole process of diversification.

9. 2. Summary of the thesis

The thesis established the nature of farm diversification; analysed it both quantitatively and qualitatively and compared it in two European dairy areas: sud Manche and west Dorset. The comparison of farm diversification in dairy areas and in two different countries is significant because:

- it has been argued in the past that diversification is less likely in dairy areas. Diversification has mainly been studied in mountain areas or near urban fringes as the contention is that in these environments farmers have better opportunities for diversification than in dairy areas.
- the comparison of two study areas in different countries is not a common feature of rural studies in general.

- the author tried to offset the possible limitations of dairying for diversification by choosing two areas likely to have potential for farm-based tourism and recreation.
- the author focused on how the advent of milk quotas might have affected farm diversification in dairying areas.
- the socio-cultural, political and economic reasons involved in farm diversification and pluriactivity are of particular interest at this time due to the implementation of Agenda 2000, which has promoted farm diversification by reinforcing a particular approach to rural development policy.

Whatever the form it may have taken and the motivation to explain it, the notions of pluriactivity and diversification are now inseparable from the notion of rural development to the extent that in certain areas they underpin economic growth and diversification. The agricultural policies of European countries have been deregulated, which has meant declining governmental support (i.e. less direct income support) for the traditional ways of farming. Diversified agricultural production is becoming a key word in the discussion on agricultural development.

The thesis started by reviewing both French and British agricultural policies from the mid 20th century. Both countries have followed their own agricultural policy in conjunction with the Common Agricultural Policy (CAP). From the 1960s, both the 'Debré Law' and the 'Pisani law' changed the French countryside by reducing the number of farmers, increasing the farm size and introducing a new way of farming (GAECs) in order to enable French farmers to modernise their farms and to make French farmers more competitive. The results were outstanding: not only because France became self-sufficient in temperate and Mediterranean produce but it also started producing food for exportation. This was what Henri Mendras (1967) described in his book, *La fin des paysans*. Nevertheless, on average, French farms are smaller than their British counterparts.

British farmers were also encouraged to increase their productivity with the 1947 Agricultural Act and then from 1973 efficient British farmers benefited from the CAP. The productivist era led to the phenomenon of overproduction, which induced various strategies from government and the EU to review and reform their policies towards food production. Productivism also changed the nature of farming, which now requires high capital and is more business-orientated than it used to be. In order to counterbalance the loss of income from agricultural products, many farmers have had to diversify their activities in order to maintain a viable business.

A review of the French and British literature showed that diversification can take many forms, ranging from tourist activities, processing agricultural goods, letting buildings, growing unconventional crops or livestock, organic farming, woodland, working off-farm to the addition of another conventional activity to the existing ones. This highlighted numerous differences when it comes to the definition of both diversification and pluriactivity, which made the author decide on a specially adapted definition in order to be able to make a comparison between the two countries.

Studying farm diversification in dairying areas is of importance as milk production is the most important agricultural activity in several EU countries. Agenda 2000 plans to suppress milk quotas beyond 2006 and consequently, milk prices should fall becoming closer to the international/world market prices and farmers will have to adapt in order to secure their income. As such, to study diversification and pluriactivity in two dairy areas, quantitative data from a postal questionnaire helped identify the characteristics of farmers and farms as well as the nature of diversification and/or pluriactivity in both areas while the qualitative data via interviews provided an explanation of the decision-making process involved when a farmer decides to diversify.

9. 3. Summary of the findings

9. 3. 1. Findings for sud Manche

- Nature of diversification

The author's survey reveals that some farmers (around 7 in 10) in sud Manche have an OGA on their farm. The dominant type of diversification in sud Manche was enterprise diversification (53. 9 percent), 22. 7 percent of farmers did not diversify. Those who did not diversify were farmers who either preferred intensifying their business, farmers who did not have any successors who were running down their business prior to quitting or farmers who continued to farm as they always have done. Only 8. 4 percent of farmers were involved in agricultural diversification, 7. 2 percent in structural diversification and 7. 8 percent were pluriactive. The author found very few accommodation, retailing or recreation activities on farms in sud Manche.

Enterprise diversification is largely encouraged by the local government office, '*Chambre d'Agriculture*', by the farmers' syndicate (union) and also animal food companies. Enterprise

diversification is mainly beef production if the farm is a family farm or an EARL (*Entreprise à Responsabilité Limitée*) farm. If the farm is a GAEC (*Groupement Agricole en Commun*) type of farm, enterprise diversification consists of the production of pigs or poultry, as these require more labour and this additional labour is more likely to be present on GAECs. However, in recent years, 'hors-sol' production has been in crisis, so farmers are less willing to adopt this strategy to complement their income. Some farmers felt that it was not in their interest to practice such diversification despite being encouraged to diversify. Most of the 'hors-sol' investment is undertaken by the company (i.e. farmers are paid to diversify by a commercial company) that wants the farmers to breed the animals. However, some contracts do not include such investment and this is left to the farmers.

Milk quotas have not had a major impact on diversification. Farmers with a large milk quota have intensified their business or diversified into enterprise diversification rather than diversifying into milk processing or direct marketing. The investment in these types of diversification as well as the lack of knowledge of the farmers regarding transformation of the product or time constraints linked to dairying have been the main reasons put forward by farmers to explain the lack of diversification from dairy farmers in both study areas. In sud Manche, farms with large milk quota are encouraged to intensify their dairy production. Diversification/pluriactivity is only seen as a last resort solution to overcome the loss of income. Furthermore, diversification as well as pluriactivity is not well received amongst French farmers as farmers' unions have given diversification/pluriactivity a negative image.

There has been relatively little structural diversification in sud Manche. It comprises mainly the production of cider and Calvados, milk processing into cheese and cream or tourist activities such as '*Chambre d'hôte*'. Structural diversification took place mainly on small family farms for tourist related activities, but activities related to adding value to farm enterprises by either processing or direct marketing took place on larger farms, mainly on GAECs. Most farmers in Manche are not very enthusiastic about B&B. They argue that, although the area has several tourist attractions, the main one being Mont Saint Michel, the weather is often uncertain and tourists often stay for a few nights only.

In addition to structural investment, farmers also argued that in order to develop activities related to tourism on their farms such as Open Days, Educational Farm, etc they would need to gain better communication skills. For example, some farmers did not feel confident enough to receive tourists on their farms as they felt they could not answer their questions in an appropriate manner. Others declared that to practice such activities it had to be in their blood. They would also need to possess amenable personalities. Other farmers argued that the farm

would have to be presented in a sanitised form: farmers rejected the principle of having everything in perfect order as to them that is not what farming is about.

It is only since the late 1990s that the French government has encouraged farmers to diversify by implementing voluntary farming contracts such as *Contrats Territorial d'Exploitation* (CTEs), which were transformed to *Contrat d'Agriculture Durable* (CADs) in 2002. Those farming contracts focus on environmental issues as well as rural development. Because the author's survey took place in 1998/1999, it was before the introduction of the CTEs and the CADs. As such, no farmers had implemented CTEs, and only one farmer showed interest in the scheme.

Although Manche is under Objective 5b of the EU classification, which encourages diversification, there is very little evidence that shows farmers diversify more than farmers not under the same objective (i.e. west Dorset). Grants are available for farmers to diversify but farmers in sud Manche have not taken them up because grants are not well advertised. However, since the survey had been completed, the author noted that the *Chambre d'Agriculture* has opened local offices in almost every 'chef lieu de canton' where an advisor help farmers to develop non-farming activities on their farms. The research has shown that farmers were advised to intensify rather than diversify. Although Objective 5b deals with sponsoring locally targeted schemes for integrated rural development, it has had little impact on the type of diversification selected by farmers. In fact, farmers' choice to diversify is related to the individual characteristics of farmers and farms. The *Chambre d'Agriculture* has not promoted enough diversification towards structural development amongst farmers.

- *Typology of farmers*

In order to compare diversification/pluriactivity in both study areas, the author classified farmers from both study areas relating farmers to Marsden *et al's* (1989) three groups of diversifiers: accumulators, disengagers and survivors. Further research allowed the three groups to be re-defined as follows. According to Bowler (1999) and Ilbery and Bowler (1993a), accumulators are more likely to establish agriculturally related diversification schemes on their farms. Disengagers are often lacking capital so they diversify into the non-agricultural sector and apply their labour to OGAs (Ilbery and Bowler, 1998). Lobley and Potter (1998) and Whitby (2000) describe survivors as passively adopting agri-environmental schemes or engaging in OGAs linked to farming (contracting).

From the literature review as detailed in chapter 3, farmers were classified into seven categories:

- **Traditionalists:** farmers who diversify into one or more activity linked to traditional farming (i.e. beef and/or/ pig and/or chicken production.)
- **Entrepreneurs:** farmers who diversify using a combination of diverse activities, linked or not to traditional farming (structural and/or agricultural and /or enterprise and/or pluriactive). They may have a B&B and have a part-time job or a beef or pig production or process the farm products etc.
- **Innovators:** farmers who diversify into activities not related to traditional farming and the nature of the activities is either structural or agricultural (i.e. B&B and/or camping and or processing farm product (structural) or non-traditional crops or livestock and or organic farming). Investment is often high.
- **Survivors:** farmers who invest very little for diversification, as they do not have sufficient capital. Farmers in this category often have small or medium sized farms and they diversify into beef production (small herd) or rent a room as B&B.
- **Pluriactive:** farmers who have an off-farm job.
- **Leavers:** older farmers who diversify mainly into B&B or who are pluriactive. They diversify into B&B as they aim to continue this activity once they retire in order to have additional income.
- **Non-diversifiers:** farmers who do not choose to diversify. Often they intensify, or if older they extensify prior to retiring or quitting (if they do not have any successors) or farmers who farm as they have always done.

Farmers in sud Manche can be identified primarily as 'traditionalist' as they are engaged in OGAs linked to farming (enterprise diversification). According to the characteristics of the farmers and farms, farmers in sud Manche can therefore be identified as 'traditionalist' (n=63), non-diversifiers (n= 42), 'innovators' (n=22) or 'survivors' (37) (Figure 9.1). There were very few 'leavers' (n=6) and pluriactive (n= 8) and no 'entrepreneurs' (n=0) in sud Manche.

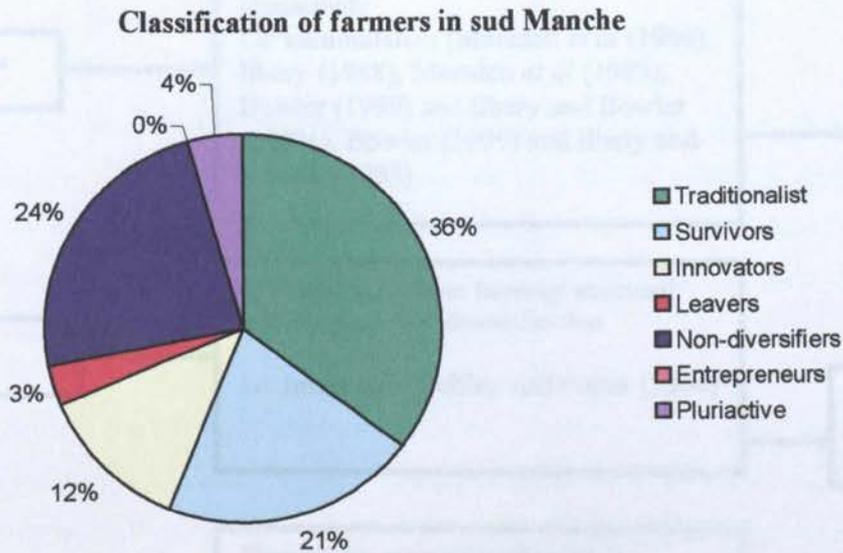


Figure 9. 1: Classification of farmers in sud Manche

9. 3. 2. Findings for west Dorset

- Diversification

The main aspect of diversification in west Dorset was the combination of activities, especially pluriactivity and diversification (Table 9. 1). In west Dorset, the author recorded few accommodation, recreation or retailing activities on farms. However, one of the explanations is that the author's survey counted a large number of dairy farms and the survey's results confirm that dairy farmers are less inclined to diversify than any other type of farm.

The proportion of dairy farms in west Dorset was less important than in sud Manche. The number of dairy farmers was smaller in west Dorset (n=78) compared to sud Manche as 35. 4 percent farmers called themselves dairy farmers compared to 78.1 percent in sud Manche (n=139). The number of dairy farmers was less important than in sud Manche, but there were more dairy farms with large milk quotas (> 500 000 litres). Generally these farms with large

milk quotas did not diversify. Where they had diversified it was usually into enterprise diversification. In west Dorset, farmers with little milk quota allocation (< 100K l) were often pluriactive. These farmers were often part-time or hobby farmers and the income from the milk production did not constitute their main income. Purchasing milk quota in west Dorset was relatively easy so farmers were more likely to purchase additional milk quota rather than diversifying. Farmers with a low milk quota were more likely to sell it (i.e. they moved out of dairying) and invest into diversification.

Only 7 percent of farmers in Dorset engaged in solely structural diversification. The most common type of structural diversification is B&B, holiday cottages or caravan parks. Farmers are not keen to start adding value to their products due to several constraints such as high investment costs, competition from supermarkets or co-ops and lack of time. Farmers argued that dairy farming is a full-time job and they do not have the time for diversification. Taking time off for diversification could have major implications for the core business.

During interviews the issue of ease of road access to the farm for tourists was mentioned. Dorset roads are often very tight and on many occasions access to a farm with a caravan would have proven impossible. Furthermore in many rural localities there were hardly any road signs indicating clearly where farms are or in which villages they are. In fact, as an anecdote, the researcher spent more time looking for one farm than the length of time covered by the ensuing interview...! As such, farmers do not want to invest money for something that they contend is not physically possible.

- Typology of farmers

In west Dorset, older farmers with no successors can be classified as 'leavers' (i.e. farmers who plan to leave farming within the next 5 years due to the lack of a successor) as they are actively withdrawing assets from farming. They are farms operated by elderly or retired farmers (> 55). Many are retirement holdings (Potter and Lobley 1996) occupied by individuals at the end of their farming careers, often uncertain of succession but who are unable or unwilling to give up farming entirely.

Extra large farms linked to farm contracting can be classified as 'entrepreneurs'. This corresponds to 'accumulators' as defined by Bowler (1999) and Ilbery and Bowler (1993a) or as 'agricultural integrators' as defined by Lobley and Potter (2004) and these are farmers who have diversified into activities closely related to agriculture such as contracting, the provision of

consultancy to other farmers or agricultural haulage. They are often young well-educated farmers.

According to the nature of diversification as well as the characteristics of the farms and the farmers, the author classified farmers in west Dorset who diversify or are pluriactive into the 7 categories as detailed in p 322.

Farmers in west Dorset are classified into 7 categories: 'innovators' (n= 8) , 'entrepreneurs' (n= 52), 'survivors' (n= 12), 'leavers' (n= 26), 'traditionalists' (n= 38) or 'non-diversifiers' (n= 57).

There are fewer traditionalists in west Dorset compared to sud Manche.

Classification of farmers in west Dorset

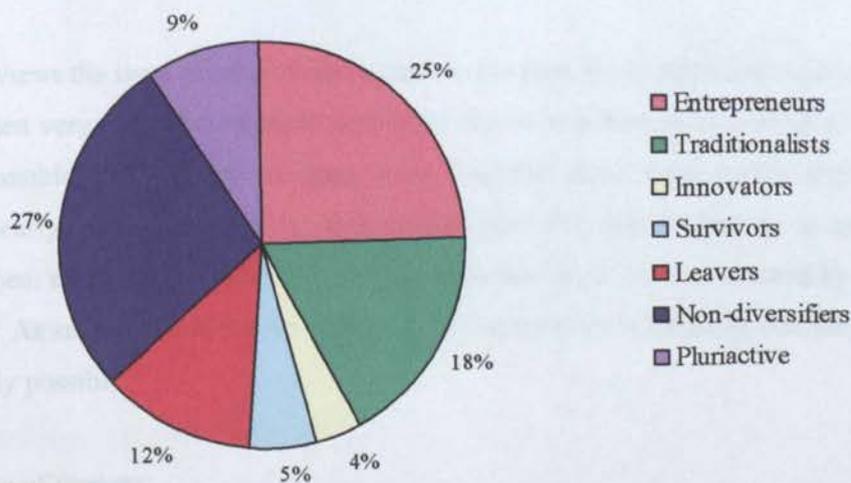
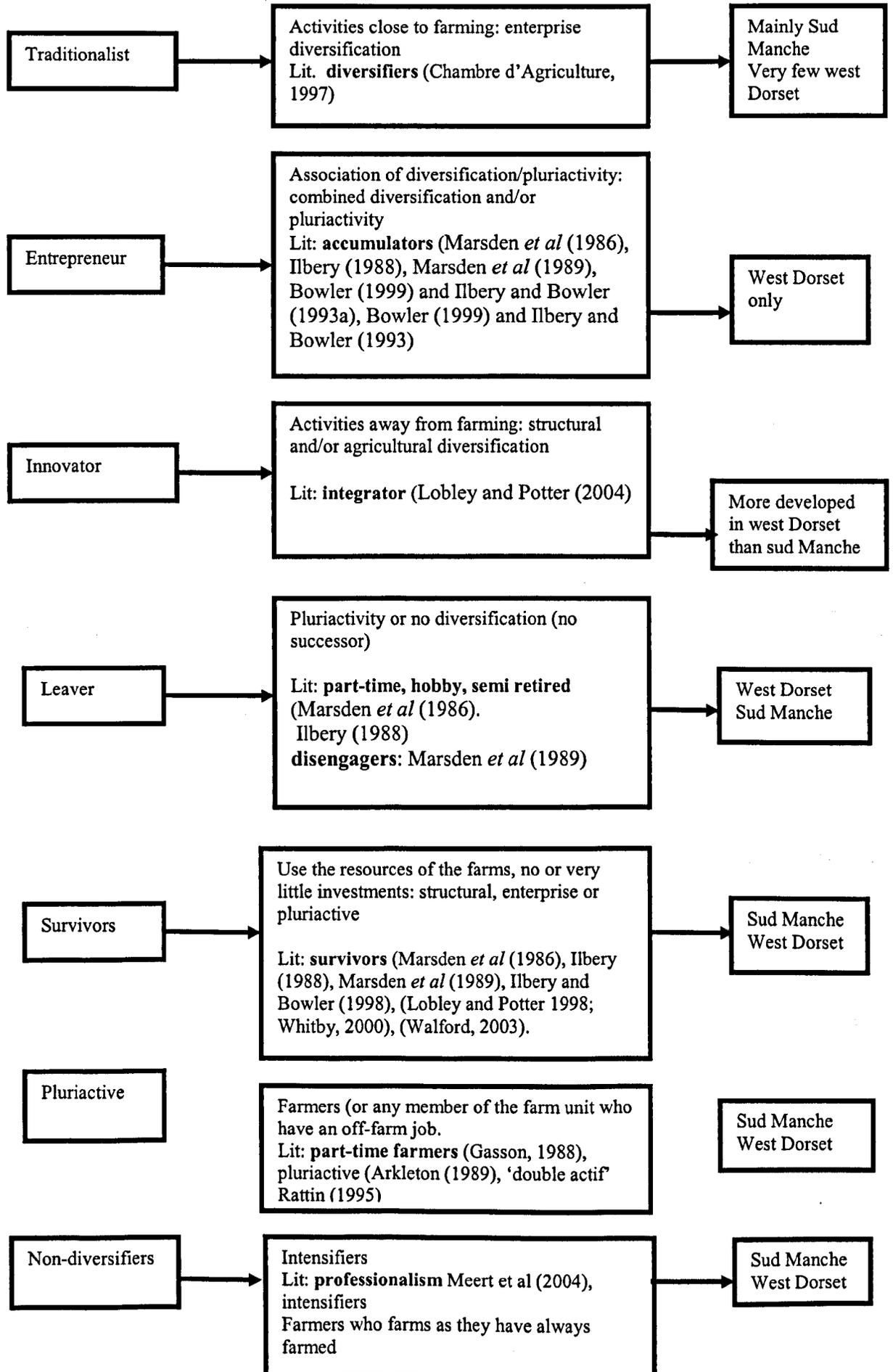


Figure 9. 2: Classification of farmers in west Dorset.

Figure 9.3 summarises the typology of farmers. The typology was designed from the literature review on diversification and pluriactivity as detailed in chapter 3. The author then regrouped and adapted different terms to fit and illustrate her sample.

Figure 9. 3: Summary of classification



9.3.3. Similarities

The differences and similarities of the characteristics of farms and farmers in both study areas are summarised in Table 9. 1 and 9. 2.

In both study areas, 1/5 (sud Manche) and 1/4 (west Dorset) of farmers do not diversify. Farmers in both study areas have OGAs on their farm in order to maintain their farm income. However, the nature of diversification differs from one study area to the other.

For farmers in sud Manche as in west Dorset, if they have a high milk quota, they tend not to look for any form of diversification as they reckon that they will earn enough money from the price of the milk and also they claim that they have enough work to do. For them, diversifying would mean that they would neglect their main production and it is not worth it as, if they produce poor quality milk, then they get a lower price for it.

Time and money are the two main restrictions towards diversification. Dairy farming is time consuming as farmers have to milk twice a day and looking after the cattle takes most of the day. Furthermore many farmers commented on the fact that if they diversify they might neglect the core production so they believe they would lose money. Farmers working alone on their farm do not see diversification as a solution to their income-related problems. Other farmers diversify if their wife or the children are part of the business or plan to be.

According to the 'model' established in chapter 1, key variables have no impact on diversification. However, the analysis of these variables as seen in chapter 6, 7 and 8 showed that the variables are not important on their own. Yet, a combination of these variables has an impact on diversification. As such individual variables cannot be treated separately. Chapter 8 described, for example, how farm type does influence diversification but its effects are modified by other variables, e.g. by the farmers' age, education, farm size, tenancy mode or farm organisation. It is therefore important to stress that variables are inter-related and as a result the 'model' of a series of influential variables is not incorrect, it is just that the individual variables do not act in isolation, they act collectively.

9.3.4. Differences

- Nature of diversification

The project showed that French farmers (77.2 percent) diversify slightly more than their English counterparts (72.5 percent) but the type of diversification varies considerably between the two countries. However, it is clear from the interviews that farmers in both study areas would prefer to sell their products at a higher price rather than diversify, which inevitably increases their workload and requires additional investment. In sud Manche, farmers diversifying into enterprise diversification and some who diversify into structural diversification take out loans to diversify. Loans are often given to young farmers who farm on a large farm. In west Dorset, loans are often taken out by young farmers to who wish to diversify into structural activities (i.e B&B or transforming products of the farm). The dominant type of diversification in sud Manche is enterprise diversification (53.9 percent) which mainly consists of adding an 'hors-sol' activity on their farms. Farmers are encouraged to diversify using this strategy by the '*Chambre d'Agriculture*', the animal food companies and/or technicians from the milking companies. The most common type in Dorset is pluriactivity (26.8 percent). A major difference between sud Manche and west Dorset is that farmers in west Dorset seem to combine different aspects of diversification and pluriactivity as, for example, they may diversify and be pluriactive at the same time or they may have both structural and agricultural diversification schemes on their farms. Farmers in sud Manche only have one scheme. In both countries, farmers have decided to diversify in order to increase their income. Some farmers blame the milk quota for the decrease of farming incomes over the years, others think supermarkets are responsible for it as they purchase from farmers at low prices. However, in both countries, whether they diversify or not, many farmers would prefer not to diversify, or rely so much on farm subsidies and farmers from both countries produce the same arguments towards diversification. Farmers wish they could get more money from their 'normal' products so they would not have to diversify and would not have to rely so much on subsidies.

- Farmers' characteristics

- Age

Farmers taking part in the survey in west Dorset were older than farmers from the French study area. This played a part in the nature of diversification/pluriactivity as farmers did not necessarily diversify for the same reasons.

Table 9. 1: The characteristics of farmers in west Dorset and sud Manche

		Sud Manche	West Dorset
Age			
	< 25 years old	5.2%	0.7%
	25-35 years old	22.1%	4.9%
	36-45 years old	26.6%	20.9%
	46-55 years old	27.9%	26.1%
	56-65 years old	17.5%	20.4%
	> 65 years old	0.6%	27.5%
Marital status			
	Married	79.2%	80%
	Single	17.4%	11.4%
	Divorced	3.2%	3.6%
	Widow	0	5%
Agricultural diploma			
	YES	78.9%	20.6%
	BEPA	55.5%	N/A
	Baccalauréat agriculture	8.4%	N/A
	BTA	25.2%	N/A
	Others	10.9%	N/A
	No	21.1%	79.4%

Source: Author's survey.

- Education

Farmers in sud Manche received an agricultural education whereas farmers in west Dorset did not to the same extent. Possession of an agricultural education has made these farmers less likely to diversify as agricultural education, especially in France, promotes intensification and not diversification.

- Gender

If there is a sign of pluriactivity on the farm in west Dorset, the pluriactivity often related to the farmer himself and not only the spouse. However, in sud Manche, the pluriactivity of the farm was only linked to the spouse working off-farm. Gender's role in diversification and pluriactivity is explained on page 335-6.

- Farm characteristics

In sud Manche, diversification is more agriculturally orientated compared to west Dorset. The difference in the nature of diversification can be explained by the different characteristics of farms and farmers in both study areas. Large farms, owner-occupiers, part-time or hobby farmers as well as high milk quota characterise the west Dorset study area. On the other side of the Channel, farming in sud Manche is

characterised by smaller dairy family (partnership or not) farms with less milk quota allocation. Farmers are often both owner-occupiers and tenants and they have received an agricultural education. However, farmers in sud Manche have not been encouraged to diversify but to intensify.

Table 9. 2: The characteristics of farms in west Dorset and sud Manche

		Sud Manche (%)			West Dorset (%)		
		1984	1992	1998	1984	1992	2000
Farm size	< 10 ha	19.1			16.8		
	10-50 ha	37.1			26.3		
	50-100 ha	34.3			21.9		
	100-200 ha	9.6			13.9		
	200-500 ha				12.4		
	> 500 ha				8.8		
Milk quota	< 50 000 litres (l)	2.5%			4.4		
	50 000-100 000 l	10.7			2.2		
	100 000-200 000 l	25.6			4.4		
	200 000-500 000 l	55.4			24.4		
	> 500 000 l	5.8			64.4		
Type	Dairy	78.1			35.3		
	Mixed	2.5			14.7		
	Others (beef, sheep)	19.4			50		
Organisation	Full-time family	43.4			32.4		
	Part-time	9.9			20.6		
	Family-based partnership	17.8			25.7		
	Other partnership	38.8			7.3		
	Hobby				14		
Income		1984	1992	1998	1984	1992	2000
	< £ 10 000	71	51.2	30.5	26.9	22.3	36.1
	£ 10 000-30 000	27	41.7	56.3	46.2	43.7	36.1
	£ 30 000-50 000	2	6.3	9.9	12.9	17.5	19.3
	£ 50 000-70 000		0.8	1.3	4.3	8.7	3.4
	£ 70 000-90 000			2	3.2	1	0.8
	> £ 90 000				6.5	6.8	4.2
Diversification increase income	Yes	65.6			58.8		
	No	34.4			41.2		
Grant towards diversification	Yes	35.9			24.7		
	No	64.1			75.3		
Loan for diversification	Yes	55			20.7		
	No	45			79.3		

Source: Author's survey

- Farm size

The main difference between farmers in sud Manche and west Dorset is that farms in sud Manche are much smaller (average size = 56 ha) than the ones in west Dorset (average size = 176 ha). Larger farms in west Dorset offer more scope for diversification. Larger farms in sud Manche often diversify into enterprise diversification or intensify.

- Type of farm

Although west Dorset and sud Manche are two dairying areas, the type of farm diversification varies considerably between them. Furthermore, the concentration on dairying in sud Manche is greater. This has explained the different nature of diversification between the two study areas. Farmers in sud Manche have often diversified into an activity close to traditional farming (i.e. enterprise diversification), while in west Dorset where the concentration of dairying is less important farmers have diversified into a wider range of activities, not always close to traditional farming. The different characteristics of both farms and farmers play an important role in this (Tables 9. 1 and 9. 2). Farmers in sud Manche are far more likely to participate in enterprise diversification, most notably beef, pork and poultry production while farmers in west Dorset are more involved in pluriactivity and are much less likely to be involved in enterprise diversification. Pluriactivity is higher in west Dorset and is linked to the fact that a large number of farmers are part-time and hobby farmers. It is also significant to note that farmers in sud Manche generally focus on one type of diversification while their English counterparts are often involved in one or more diversification activities.

- Organisation of farm

The author focused on full-time farmers in both sud Manche and west Dorset. There are a few differences in farm characteristics in both study areas. In sud Manche, there were fewer part-time or hobby farms in the sample compared with west Dorset. In sud Manche, 38. 8 percent of farms were in GAECs and 17. 8 percent were in EARLs. West Dorset counts many full-time family partnership farms and Ltd non-family farms, including many hobby and part-time farms. Farm sizes in west Dorset are much larger than in sud Manche, and it is significant that farm size varies with the organisation of the farm. Large farms in west Dorset are often full-time family farms, Ltd or corporation farms whereas small or medium sized farms are often part-time and/or hobby. In sud Manche, large farms are often GAECs, medium and small sized farms are often EARLs or full-time family or part-time farms. The organisation of the farm affects diversification as it determines which type of diversification the farmer chooses.

- Tenancy

There are many more owner-occupiers in west Dorset compared to sud Manche. In sud Manche, many farmers start on a small farm and then increase their farm size by renting more land. As such there are a high proportion of farms in sud Manche, which are conjointly owned and rented. The other difference in farm characteristics that plays a role in diversification is the land tenure mode of the farm. Only 11 percent of farmers in Manche completely own their farm, 18.2 percent were tenants and 70.8 percent owned part of their farm and rented the remainder from another landowner. The majority of farmers in Dorset were owner-occupiers (59.2 percent), 33.8 percent owned and rented some of their farm and, with only 7.0 percent, tenancy-only was the minority. In fact, the tenure of the farm in west Dorset is a significant indicator of diversification whereas it does not seem to be in sud Manche. In west Dorset landlords may prevent farmers from diversifying into structural diversification or they may not allow the farmers to erect new buildings on the farm. The mode of tenancy of a farm played a role in the determination of whether or not the farmer diversifies. Tenant farmers have to ask permission of their landlord if they want to diversify in any kind of activity. Then if farmers choose to diversify landlords often want a share of the profit, so they increase the rent. As income from diversification is not guaranteed, farmers are not willing to engage in a situation where no returns are guaranteed, but there will be an increase of their rent.

9. 3. 5. Key cultural differences that have produced differences (or similarities) between the two areas

- French farmers rely more on their influence on the government and on financial help from the EU. French farmers are less encouraged to diversify in non-farming activities compared to their English counterparts. Because French farmers farm smaller farms, they have less resources so they rely more on loans (55 percent) from the bank and grants (35.9 percent) from the EU and the *Ministère de l'Agriculture et de la Pêche*. Over 50 percent of farmers in sud Manche declared being in debt. Farmers in west Dorset did not provide this information.
- English farmers are much more reliant on extra sources of income from OGAs as opposed to their French counterparts. They do not have a high impact on their government and maybe they are not supported as much by the general public compared with the situation in France. The French public have generally shown more support for the farming community as the number of farmers is more important in France than in

England so many people have a close relative in the farming industry. French farmers are mainly associated with the right wing. Their interests are looked after by the farmers' unions (*syndicats*) *Fédération Nationale des Syndicats d'Exploitants Agricoles* (FNSEA) and *Centre National des Jeunes Agriculteurs* (CNJA). French farmers are encouraged to think only in terms of enterprise diversification (i.e. traditional farming activity). However, in the last two decades, farmers have felt that the government does not help them enough and many farmers have left the farmers' unions, especially farmers with small and medium sized farms. These farmers argue that both the FNSEA and CNJA only favour large farms and do not support small and medium sized farms. Thus, many smaller-farmers have joined another growing farmers' union, the *Confédération Paysanne*, whose leader is José Bové. He has lead campaigns against import of foreign foods and is against globalisation. Its political ideology is linked to the Socialist Party (left wing).

- The author noted a different cultural attitude between farmers in the two study areas. Farmers in sud Manche are more conservative and food production orientated and are quite reluctant to make any changes in farming whereas farmers in west Dorset are more open to new opportunities in farming. Falling incomes have been a strong motivating factor in forcing farmers in west Dorset to diversify.
- Another cultural farming difference is that in sud Manche there has been a clearer survival of the small farmers – the inheritors of the '*paysan*' tradition. As such, this has maintained a greater survival of the small family farm in which traditional farming culture is continued in the form of the small family-run dairy farm. Only 'standard' agricultural enterprises such as beef production will seriously be entertained by these farmers. This is not the case in west Dorset where small family farms are fewer and there has been more commercialisation and the creation of larger farms, run by people who are more open to a variety of business influences – and hence the greater willingness to be pluriactive, and to combine various forms of diversification.
- French farmers are reluctant to engage in tourist activities. Farmers pointed out that the summer season only runs for a few months. It can also be very stressful on the family as farmers have strangers in their own house over the summer, which can sometimes be difficult if they have children. This explains why farmers welcome the money from tourists but are quite pleased when the summer period ends! Running a B&B or a '*gîte*' may require much investment and that is one of the reasons why farmers in Manche do

not favour this activity. Although farmers could obtain grants from the EU to restore ancillary buildings to convert them into accommodation, the grants only cover some of the costs and some farmers could not afford to borrow any more money as reimbursement would take too long because tourism occurs only at certain time in the year and is quite dependant on the weather. Although diversification into tourism brings extra money, the majority of farmers felt it was not sufficiently remunerative unless they already had the facilities and there was little need for further investment. Furthermore, insurance requirements can make it costly.

9. 4. Link with previous literature

9. 4. 1. Farmers' characteristics

- Age

Although there was no statistically significant relationship between the age of the farmer and the presence of diversification on the farm, the author can draw a trend which implies that farmers under 35 years old (though there were few farmers in west Dorset in this category) in both study areas tend to diversify into enterprise diversification. Farmers in sud Manche have tended to go for enterprise diversification, i.e. a 'traditional' farming activity. The fact that there is no significant statistical relation between the age of the farmer and the presence or type of diversification agrees with McNally (2001) as she concluded that the age of the farm operator has a small or negligible effect on the probability of observing any diversification activity. French farmers diversify into enterprise diversification as they are encouraged to do so by the *Chambre d'Agriculture* but also by the technicians from the feed company or the dairy company. In west Dorset, the picture is different. The 36-45 year olds category combines diversification and pluriactivity. The 46-55 year olds as well as those over 65 years old did diversify or they were pluriactive. The 56-65 year olds were involved in enterprise diversification and pluriactivity. This confirms work by Rattin (1995d), who showed that older farmers are involved in pluriactivity, and research by Djurfeldt and Walderstrom (1999) as they showed that in Sweden farmers involved in pluriactivity tend to be older farmers.

The author also confirmed that French farmers are more encouraged to intensify their production rather than diversify it. Older farmers who intensify their production are usually farmers who have a successor. This reinforces findings by Djurfeldt and Walderstrom (1999) who claimed that both young and older farmers (with successors) intensify and older farmers

(without successors) tend to scale down farming to withdraw from farming whilst younger farmers intensify further.

- Education

The author concluded that farmers in the French study area have received an agricultural education whereas there were only a few in the British study area. French farmers are encouraged to follow an agricultural education if they want to benefit from grants and lower loan rates from the government when they start a business. The *Ministère de l'Agriculture, de la Pêche et de l'Alimentation* (1996) argued that young farmers are better qualified. According to Rattin (1999), farmers have had a specialised education adapted to their profession. Furthermore since 1992, a new law made compulsory the obtaining of the BTA to start a farm business. However, education tends to have a negative impact on diversification as it tends more to encourage young farmers to intensify rather than diversify. In west Dorset, the education of the farmer does not play a role in the type of diversification of the farm.

- Marital status

The marital status of a farmer plays a role in diversification. Single farmers tend not to diversify or they are involved in enterprise diversification as it is easier for them to fit the work from enterprise diversification into the daily routine of dairying. Married farmers are more likely to diversify as diversification often provides an activity for the spouse and as such an income for the spouse who has joined the farm business. The author also showed that the categories most involved in pluriactivity are the 25-35 and the 46-55 years old age groups. This confirms Delame's (1999) work as she showed that off-farm work is often due to the presence of a spouse on the farm as they have kept the job they had before they got married (like many urban households). For Delame (1999) some pluriactive farms are the results of the conversion of dairy farms after the installation of milk quotas. Early retirement has allowed agriculture to become a younger activity. Spouses often have stayed on the farm to help with dairying and some have kept their off-farm job, as it constitutes an important complementary income.

- Gender

For west Dorset, the survey showed that female heads of farms are more likely to be involved in pluriactivity or combined pluriactivity. The author showed that structural diversification was often run by a female member of the household. In sud Manche, as there were very few

structural diversifications, it is more difficult to draw conclusions, even if the trend also was that women were involved in structural diversification. This confirms McNally (2001) who related the presence of spouses on the farm to the type of diversification. She observed that recreation (especially tourism) and retailing on the holding was more likely if there was a spouse on the farm. Ilbery *et al* (1997) also noted the strong female presence in accommodation enterprises. In the context of a survey in Devon, Halliday (1989) stated that the provision of tourist accommodation was more frequently seen as an entirely separate business venture, run by female members of the household and with the revenue considered as pocket money rather than part of farm income.

The author concluded that in sud Manche, pluriactivity only concerned the spouse and not the head of farm. If the spouse is female and pluriactive, she has generally kept the job she had before getting married (9 out of 12 in sud Manche study area). This agrees with work from the *Ministère de l'Agriculture, de la Pêche et de l'Alimentation* (1996) who declared that spouses are generally less involved in agricultural activity and as such are more likely to be involved in pluriactivity. If the spouse is male, he is often retired but still helps his wife on the farm (3 out of 12 in the study area, one retired and two men were employed as a mechanic). This agrees with the *Ministère de l'Agriculture, de la Pêche et de l'Alimentation* (1996) who stated that if the farmer is female then male spouses are often retired and it is in Lower Normandy that most male retired spouses are found as when they retire they hand over the farm to their wife and still work on the farm.

- Successor

The presence or not of a successor influences the farmers to diversify or not. In sud Manche, as in west Dorset, farmers who think that a child will take over in the near future are more likely to diversify than farmers who do not have any successor. Older farmers with no successor tend not to diversify as they are going to retire soon and it is not worth investing any capital in the business. These farmers can be compared with the 'leavers' identified by Lobleby and Potter (2004). The leavers are older farmers with smaller farms and one-third of these 'leavers' had an identified successor, so the number of exits from the sector may be lower. Young farmers or older farmers with a successor tend to intensify their business and they often have larger farms with diversification. These farmers were identified by Meert *et al* (2005) who demonstrated that the size of the farm determines the possible activities to a large extent. Industrial development often demands large investment - technology and land - and is therefore only a realistic option for medium and large size farms which are often run by younger households or by older farmers with an identified successor providing the long-term security necessary for this kind of

investment. Rattin (1997) also argued that older farmers diversify only if they have a successor. Furthermore she argued that 4 out of 5 'leaver farms' are taken over by existing farmers who wish to increase their farm size and only one in five is for a new entrant in the business.

9. 4. 2. Farms' characteristics

- Farm type

The author agrees with other papers that recognised that diversification is associated with farm type. Although the nature of dairy farming makes it less easy for this category of farm type to diversify, the author concluded that some dairy farmers diversify but the nature of the diversification they choose has to fit in closely with the nature of the dairying. The author included enterprise diversification in her definition of diversification whereas this has not been the case in most other studies. The author noted that most dairy farmers are involved in enterprise diversification as they can use existing farm buildings and some of the feed from the dairy cattle, and also this type of diversification is the one that fits in best with the nature of dairy farming. This can be related to McNally's (2001) findings as she concluded that the seasonality of the farm enterprise is influential in determining whether the farmer seeks another occupation. For example, farmers involved in highly seasonal production activity such as cereals have more time to pursue non-agricultural activities both on and off the farm whereas livestock enterprises such as dairying have high time requirements throughout the year and this may prevent the farmer from seeking some form of non-agricultural employment. Farm type influences the pattern of diversification. For example, diversification activities involving some sort of public use (e.g. renting out of buildings, separate enterprises or recreation) might be much less attractive to potential users if the farm is engaged in intensive livestock production such as pigs and poultry. According to SCEES (1989), diversification also varies with the nature of farm. Diversification is more likely in association with horticulture or vineyards than with dairy and beef farming. According to Rattin (1999a), dairying requires lots of energy and presence of the farmer and dairy farmers rarely employ labour, so spouses also work on the farm and consequently there is very little pluriactivity or diversification.

Contrary to Ilbery *et al* (1997), who demonstrated that diversification is associated with arable farms and not dairy and beef cattle farms, the author showed that arable farms in west Dorset are quite likely to have combined diversification or structural diversification but a third of them do not diversify at all.

The type of diversification on arable farms in west Dorset confirms McNally's (2001) work as she concluded that arable farms are more likely to engage in renting out of farm buildings, engage in hirework (i.e. structural diversification) or develop a separate 'diversification' enterprise instead of being involved in recreational diversification and combined diversification.

Contrary to previous findings from the literature, horticultural farms do not diversify into retailing in west Dorset, though there were very few horticulturalists in the study area. Some of these farmers were involved in agricultural diversification, others were pluriactive because their farms were full-time family farms and they had the labour available so it was easier to have a part-time job and grow strawberries, for example.

From the interviews with the farmers, the author concluded that most farmers would prefer selling their output at a higher price rather than diversifying. In sud Manche during the interviews, a third of dairy farmers declared they were aiming to increase their farm size and obtain more milk quota in order not to diversify as many of them have invested in dairy units and they want to make it profitable. This confirms Lobley and Potter's (2004) finding as they showed that 23 percent of surviving dairy farmers in their sample planned to expand over the next five years compared to 4 percent of livestock producers.

- Milk quota

For farmers in both sud Manche and west Dorset, if they have a high milk quota they will not look at any form of diversification as they reckon that they will earn enough money from the price of the milk. They also claim that they have enough work with looking after their dairy herd. For them, diversifying would mean that they would neglect their main production and it is not worth it as if they then produce poor quality milk, they will get a lower price for it.

In west Dorset farmers with little milk quota allocation (< 100K l) are often pluriactive. These farmers are often part-time or hobby farmers and the income from the milk production does not constitute their main income.

- Tenancy

There are many more owner-occupiers in west Dorset compared to sud Manche. In sud Manche, many farmers start on a small farm and then increase their farm size by renting more land. As a result, there are high proportions of farms in sud Manche that are conjointly owned and rented.

The mode of tenancy has different impacts in the two study areas. Tenant farmers in west Dorset are less likely to diversify than owner-occupiers as opposed to farmers in sud Manche. Furthermore the mode of tenancy has an impact on the type of diversification. This confirms McNally's (2001) work as she showed that if a farm is wholly tenanted, the development of separate enterprises such as renting out of farm buildings and recreation are less probable. Bateman and Ray (1994) argued as well that tenant farmers are under restrictive terms of their agreement with the landlord so this may prevent them from diversifying.

Owner-occupier farmers tend to diversify into structural activities as structural diversification often involves building restoration into B&B or accommodation or they can rent out buildings. Tenant farmers tend to intensify their business and farmers who both owned and rented their farm are involved in a variety of activities ranging from enterprise diversification to pluriactivity. The author observed in west Dorset that farmers introducing value-added activities on their farms were owner-occupiers. Tenant farmers did not diversify and for the mixed tenancy farms, the type of diversification was related to the size of the farm. This agrees with Walford's (2003) finding as he concluded that farms with a large area of rented land tended to favour agricultural contracting whereas those with less rented land were more inclined towards value-added processing activities.

- Nature of farm employees

The nature of farm employees plays a role in diversification. If the employees are family members then the farm may have diversified in order to provide the family member with a job. This can be linked to work by Bowler *et al* (1999) who reported that the need to create employment for family members is one of the important factors motivating diversification. Pluriactive farms in sud Manche, for example, are farms where the spouse works off-farm.

In west Dorset there is a high proportion of farms involved in pluriactivity or combined pluriactivity when there is a family member working on the farm. This can be related to McNally's (2001) work in which she showed that the presence of family members in the farm business (other than the farm operator and the spouse) has a significant impact on diversification.

- Farm size

The main difference between sud Manche and west Dorset is that farms in sud Manche are much smaller (56 ha) than the ones in west Dorset (176 ha). The author concludes that small

farms in west Dorset are pluriactive. Medium sized and very large farms (120- 250 ha) do not diversify and large farms (60-120 ha) and the largest farms (> 250 ha) are involved in enterprise diversification. As such it confirms some of the findings by other researchers who concluded that diversification occurs on large farms, but it also contradicts them, as some large farms do not diversify. The large farms which do not diversify are often dairy farms which agrees with other papers from the literature, for example those that said that diversification is also linked to the type of farm.

Gasson (1988) and Ilbery and Bowler (1993a) have stated that large-scale farmers are more inclined to introduce diversification schemes than those working on smaller farms. They also concluded that this disposition towards diversification confirms the 'well documented trend for larger farm businesses to be innovative across the whole range of new farming practice'. Diversification is more likely to be observed on large farms as it is a way of using 'spare' labour, machinery or buildings and they also have the capital to redeploy (McInerney and Turner 1991, Ilbery 1991). For Walford (2003) large-scale farms have been prominent in adopting diversification, as they are more innovative.

According to McNally (2001), farm size is not as important for diversification into recreational enterprises, though the farm size bias in favour of large farms is still observed. With regard to tourism, diversification is less likely on medium size farms than on large or small farms. This is consistent with Gasson (1988) who argued that large farms are in a more favourable position to diversify since they can more easily provide land for recreational activities and raise capital for building conversion or installing processing plant.

- Income

The author's survey showed that farmers in both study areas have diversified in order to increase their income but also in some cases to provide a job for new members of the farm business. It is important to stress that the information collected on income is only rough and ready as farmers did not like giving specific details on income and they were also being asked to estimate income over a 15-year period, a difficult task. However, incomes in west Dorset tend to be higher (probably due to larger farm size) and gross incomes have increased (partly through a reflection of inflation). However, there was no statistical relationship between the presence of diversification and an increase of income from the mid-1980s. Farmers argue that diversification has increased income but only to a limited extent. This can be compared to McInerney and Turner (1991) who stated that diversification was used to generate extra income on the farm and as such was the most important motivating factor for undertaking the activity

even if it only represented a relatively minor source of income. Farms with off-farm activities are better off than those with on-farm activities. This agrees with McNally (2001) as she illustrated that on-farm diversification is less frequently observed and is less important in terms of income generation than off-farm employment activities. She also concluded that, although particular types of diversification are frequently observed on farm holdings, often they make a relatively small contribution to total business income. Only a minority of farmers keep a separate account for the diversification activity. Farmers in west Dorset who combined several aspects of diversification and/or pluriactivity did not report a significant increase of income compared to other farmers. This contradicts Meert *et al* (2005) who declared that the increase of farm income was related to the presence on the farm of one or more forms of diversification.

- Farm organisation

In sud Manche, there is a link between the organisation of the farm and the presence of diversification. GAECs have to diversify in order to provide a job to each member of the corporation. However, it is important to note that most GAECs are family orientated. For instance, de Corlieu (1998) stated 94 percent of GAECs were family based. EARLs are also family based as by law an EARL can only be between husband and wife. This confirms work by Djurfeldt and Waldenstrom (1999) who found that family farms in Sweden had a higher rate of diversification than other farm types.

In west Dorset there were very few incorporated farms and most of the farms were also family related. The author concluded that there was no relation between diversification and the organisation of the farm, which is not in line with McNally (2001) who argued that there is a positive relationship between whether the farm is classified as a 'non-family business' (i.e. other partnership, limited company) and the probability of engaging in all types of diversification except for the development of a separate enterprise and hirework. For her, 'non-family' farms are often big business and have different objectives and farming practices compared to more traditional family-orientated businesses. Large farms are more profit orientated and may have access to a greater range of consultants than 'family-run' farms. However, it is important to note that the author's survey did not count many non-family farms to be able to make a valid comparison.

- Location of the farm

There is a lot of literature that links the location of the farm and the type of diversification. However, the author cannot confirm this as some farms were well located for diversifying (e.g.

into tourist related activities) but the farmers would not diversify at all, preferring intensification or maintaining the status quo rather than diversification. Ilbery (1991), Edmond and Crabtree (1994) and Meert *et al* (2005) argued that the location of the farm is related to the type of diversification. They showed that spatial location of farms plays an important role in their capacity to market their produce directly. Within the French context, SCEES (1989) showed that the nature of diversified activities varies with geographic location. They are more likely to be found in the south than in the west of France because of better weather conditions and more tourist attractions.

9.5. Recommendations

The reforms of the CAP, as described in Agenda 2000, encourage farmers to move away from intensified agricultural systems. As such, farmers have to diversify towards non-traditional production activities. The reduction of subsidies will have a major impact on farmers as many rely heavily on these subsidies. Dairy farmers will also be quite affected as the changes to the milk quota systems may force many dairy farmers out of business. Those who will be able to diversify will manage to continue. Hence, it is quite important to provide farmers with the necessary information they may need to diversify. This can be achieved by integrating diversification into the curriculum for agricultural education. It would also be essential to promote a positive image of pluriactivity. The reforms of the CAP encourage rural development so it is essential that farmers are made aware of the possibilities offered to them to take part.

To move away from reliance solely on farming, farmers should also be advised on how to diversify into tourism or if farmers want to keep their 'producteur' image they should be encouraged towards organic production or energy crops as these types of production have a good future.

Farm diversification and pluriactivity have a potential to stimulate farm business improvement. Recent changes from the EU via the development of multifunctionality of agriculture as well as national changes such as CAD in France should also help to some extent. However, in order for diversification to become a 'normal' part of farming, a few changes/improvements should be considered by both political and education bodies. During the research, the author observed that farmers in general were ill-informed regarding the possibilities available to them regarding diversification/pluriactivity.

Ideas, benefits and advice regarding diversification/pluriactivity should be part of the curriculum as it is as important as knowing how to look after the animals or being aware of the latest technology or scientific research. Local government agencies, such as the *Chambre d'Agriculture*, should also be able to provide help regarding the setting up of on- or off-farm businesses and they should inform farmers either by holding one-day courses, providing leaflets or publishing articles in the farming press.

The image of farmers should also be improved in order to develop a better relationship between farmers and consumers. The author noted that there were very few '*vente directe*' in the study areas and very few farmers also directly negotiated the sale of their product directly to the supermarket. As such, as part of their educational training, farmers should be trained as not only being food producers but also as food sellers. Furthermore, diversification should have a more positive image so farmers would feel better about diversifying. Diversification and pluriactivity need to be included in the farming culture as recent policy from the EU promotes such activities via multifunctionality.

English farmers are better informed than their French counterparts when it comes to diversification. However, as for their French counterparts, they do not seem to be very well informed by DEFRA or other agencies about all the options available to them, which varied according to the capital available to the farmers. In sud Manche, very few farmers chose to sell their products directly to the customer. In fact, no PYOs were recorded in the survey.

In order to encourage farmers from both study areas to diversify more, European regulations should be written in a clear manner and the administrative paperwork should be simplified. Grant availability should be well advertised and accessible to farmers.

In France, farmers should have a more general education that would encourage them to obtain a part-time job outside the farming industry. The agricultural education systems should be reformed to include more general topics such as economics, environment, marketing so it would be easier for farmers to advertise, sell their products or find alternative job employment locally in order to increase their farm income.

English farmers should benefit from a more specific agricultural qualification in order to complete their general education. As such, they would be better equipped to follow their production from the growth stage to the selling stage. Also, the image of farming in the UK has to be improved as farmers are no longer only food producers but they are businessmen/women who also look after the countryside and the environment.

9. 6. Future work

The reforms to the CAP are changing the context within which farmers operate. The aim of the current CAP reform is to shift agriculture away from a purely agricultural support agenda towards a broader approach to both agricultural and rural development. The recent Fischler proposals aim to achieve an agricultural industry that is not only more competitive and profitable but also ecologically and environmentally sustainable. This was the focus of the newly introduced second pillar of the CAP and could be interpreted as an attempt to arrest the steady decline in the number of smaller-sized farm businesses.

Nowadays with the integration of the central and east European countries (CEECs) into the CAP, new reforms have been introduced. These changes pursue the reform process begun in 1992, which aims to shift income support away from price support for commodities towards direct income support and payments targeted at environmental and other objectives. At the Copenhagen European summit in December 2002, the EU agreed a transitional period with a gradual phasing in of direct payments. However, one can wonder if these reforms will solve the problems of the CAP as the budgetary limits will remain problematic, the policy ignores possible developments in the World Trade Organisation (WTO) and the extension of direct payments to the CEECs will further capitalise agricultural support. The latter makes future reform even more difficult and to overcome these problems, an alternative strategy to integrate the CEECs into the CAP should be considered.

Farm diversification is stimulated within the reform of the CAP as farmers are looking for one or more OGAs to add to their farm in order to complement their farm income. The EU has set up many measures in support of rural development in the Second Pillar of the CAP. There is a need to rethink traditional agricultural policies due to their limited contribution to rural development and to avoid negative side effects. As these traditional policies are dominated by commodity market interventions, they cause major market distortions but have limited leverage on rural development. In addition, these agricultural policies do not score well on equity grounds since they benefit mainly large farms, which are usually well off in terms of income and assets. They contribute little to rural poverty alleviation and the maintenance of rural environment.

Various studies have shown that on-farm processing and direct marketing are options for farmers considering diversification, but farmers often lack a market-oriented approach. The results of the effect of diversification on rural job creation and household income indicate that

the level of diversification is relatively small and enterprise diversification by farmers is unlikely to generate sufficient new jobs to solve the problem of high rural unemployment.

The reforms of the CAP and the introduction of the CEECs into the EU have encouraged farmers to change their attitudes towards farming. However, as much research has shown, farmers in some parts of the EU are ill prepared for agricultural multifunctionality. The new reforms encouraging rural development might see an agricultural division within Europe. The poorer countries will become the principal food producers as they can do it more cheaply whilst wealthier countries will have a reduced agricultural output and concentrate their effort on broadly based rural development.

There has been a lot of academic interest in the study of diversification activities and off-farm employment by farm household members. This is regarded as an important strategy for moderating the effects of low agricultural income since the 1990s. The CAP reforms from 1992 have been seen as an indication of a transition from productivist to post-productivist philosophy in agricultural policy. Post-productivism suggests that agricultural policies have progressed away from a principal emphasis upon sustaining and increasing levels of agricultural production. Post-productivism also implies that farmers can no longer expect either to be largely paid for all the food they produce or permitted maximum freedom in the use of rural space for commodity production irrespective of other demands. Post-productivism issues have often been studied from a political economy, behavioural or structuralism approach. However, recent studies by Evans and Morris (1999) have pointed out the need for research being done from a behavioural or cultural approach.

Agricultural changes within the EU need to be looked at in greater detail in order to establish a conceptualisation of these changes. Efforts should also be made to understand deeper processes underpinning agricultural changes using existing theoretical perspectives developed in human geography but which lack application in the agricultural context. The cultural and behavioural dimensions need to be emphasised in research by using depth interviews. The study of agricultural geography has often used only one method. However, in order to compare the analysis of diversification/pluriactivity, the author used a multi-method analysis. By doing so, the author has introduced the need for more research using a combined approach as it provides a better view and understanding of a phenomenon.

The author argued that a move forward for the study of agricultural changes is to use a combination of theoretical approaches as these agricultural changes are perceived differently by farmers and policy makers. When making a decision for their business, the author noted that

farmers not only follow the prevailing policy but they also made their decision in relation to the characteristics of their farms, their household composition and prevailing farming culture.

The research has raised some interesting ideas for further study and has highlighted issues which require more detailed examination. From the conclusions of the thesis, it would now be interesting to expand the study to other EU countries, especially those specialised in dairy production such as Poland as milk production is cheaper in eastern European countries than it is in France or Britain.

Further work could include a study of rural development in dairy areas in order to link it with the progress of rural development and diversification and pluriactivity amongst farmers. This could be studied using a behavioural approach in order to identify the social impacts in small rural villages associated with an increase of diversification and pluriactivity. Another aspect of future research, especially within the French context would be to evaluate the role of the '*néo ruraux*' in rural accommodation and restoration of farm buildings.

As the author has shown that the educational qualifications of farmers have no direct impacts on diversification, it would be interesting to concentrate on agricultural education, especially in France to understand why farmers are not advised or taught to diversify and why they are advised to intensify at a crucial time when major changes are happening in farming with the implementation of the Second Pillar of the CAP.

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