Arsyllfa **Wledig** Cymru
Wales **Rural** Observatory

AN ANALYSIS OF THE SOCIO-ECONOMIC IMPACT OF CAP REFORMS ON RURAL WALES

PHASE 1 and 2 REPORT

INCOME ANALYSIS AND FARMING HOUSEHOLD SURVEY ANALYSIS

2013

Cardiff University / Prifysgol Caerdydd
Prifysgol Aberystwyth University
Cronfa Amaethyddol Ewrop ar gyfer Datblygu Gwledig: Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
The European Agricultural Fund for Rural Development: Europe Investing in Rural Areas
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Welsh Assembly Government

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SECTION 1 INTRODUCTION

This report integrates the findings of a survey of farms in Wales conducted in May and June 2012 by the Wales Rural Observatory [WRO] with an income analysis of farms in Wales by the Welsh Government. The income analysis and the survey were Phases 1 and 2 of a larger multi-phase project commissioned by the Welsh Government to explore how CAP reform will affect rural Wales. This report is the first report of the overall project.

Before presenting this initial core report on the income analysis and farm survey phases, it is useful to first discuss the background to the wider research project and then to present its aims and objectives in order to position the income analysis and survey within it. There will be separate reports on each of the phases of the project. These reports will refer back to this initial report for the project's background.

1.1 Background from Welsh Government Project Specification

Data from the Welsh Aggregate Agricultural Account show that agricultural output in Wales is currently dominated by three livestock sectors (beef, dairy and sheep), which collectively contributed 73% (by value) of gross agricultural output in 2010. The dairy sector contributed 30% of gross output, with the beef and sheep sectors at 23% and 20%, respectively. Pigs and poultry contributed 12% and other sectors (crops, horticulture and inseparable secondary activities) accounted for 15%. The relative importance between sectors has remained broadly constant over the last decade.

However, 80% of farmland in Wales is classified as less favoured area (LFA): i.e. of sub-optimal agricultural quality. One consequence of this high percentage of lower quality agricultural land is that the direct support to the farming industry in Wales constitutes a higher proportion of GVA (Gross Value Added) than for the UK. For example, despite a significant improvement in market prices since 2008, LFA Grazing Livestock farms did not record positive incomes on the Farm Business Survey (FBS) in 2009/10. Average income from agricultural activities was negative on 550 farms recorded through the annual FBS: -£1,500 across all farm types. Income received from the Single Payment Scheme varied from 60% of Farm Business Income on dairy farms to 86% on LFA Grazing Livestock farms, with Lowland Grazing Livestock farms at 82%.

The CAP reforms are also expected to produce benefits from a derogation to the greening requirements of Pillar 1 direct payments to those farming to organic standards. To assist conventional farms the Welsh Government is working with the Commission to achieve comparable recognition for farmers in an agri-environment scheme: Tir Cynnal, Tir Gofal and Glastir.

Although CAP reforms are expected to come into effect in 2014, this is not certain and presently only an early draft of the regulations has been published. The Welsh Government will have opportunity to present its views in 2013 and the WRO's work and reports for this project will inform them.

The focus of the larger multi-phase project was, then, on how the post-2013 CAP reforms may affect farm household incomes and how decisions that farm households make in response to changed incomes may, in turn, affect farm support services, and the food processing and retailing industries. And further, in general, what the knock-on effects may be on rural society and the economy in rural Wales.

1.2 Aims of the Project

As stated by the Welsh Government the project had three aims. Its primary aim was to forecast how farmers, the farm support service industry, and the food processing and retail industry, may each in turn respond to the changes in farm incomes caused by the new CAP regulations.

A second aim was to explore what the knock-on effects may be on rural society and the economy in rural Wales.

The third aim of the project was to identify what these changes may mean for Welsh Government policies and interventions and to inform the Welsh Government's work to develop a new Rural Development Plan for Wales for 2014-20.

1.3 Objectives of the Project

The project's objectives, as stated by the Welsh Government, were as follows.

1. To examine the impact of likely CAP changes on farm household incomes.

2. To forecast how farm households may respond to change in their income.

3. To consider the impact of objective 2 on the farm support industry.
4. To consider the impact of objective 2 above on the food processing and retail industry.
5. To consider how changes identified in objectives 2 to 4 above may impact on society and the economy in rural Wales.

The project had five research phases and a conclusion phase. These phases are outlined following this description of project objectives. In undertaking the five research phases the project also explored two cross-cutting themes (a and b).

a. To identify what support farm businesses may need in terms of training, business advice and succession planning (and what this may mean for current Welsh Government intervention like Farming Connect).
b. To consider how planning control and housing supply may influence the responses and impacts of farm households, the farm support and food industries and wider rural society.

1.4 Phases of the Project

As stated above, the overall project consisted of five research phases and a conclusion phase. These were as follows.

1. ***Income analysis***

The project's starting point was the financial modelling work undertaken by the Welsh Government's Knowledge and Analytical Services team, which sets out the cash impact of predicted changes to CAP. These data were used to examine what difference these changes would make to farm household incomes. Specific attention was paid to geographic and farm sector impacts; the size of specific impacts; and the identification of geographical clusters.

2. ***How farm households respond***

Essentially, this was inferred from the farm household survey. The survey analysis sought to identify what if any changes farming households may make following CAP reform. For example, whether farm households would change their farming practice, expand or contract, leave farming, diversify their farming, or seek alternative or supplementary employment off the farm. Further, where changes to current practice were predicted by the analysis, attempts were made to quantify how farm commodity production and farm employment would be affected.

Phases 1 and 2 are covered by this report.

3. ***Impact on the farm support service industry***

This phase of work is described in the 'Report on Phases 3, 4 and 5'.

4. ***Impact on the food processing and retail industries***

This phase of work is described in the 'Report on Phases 3, 4 and 5'.

5. ***Impact on rural society and economy***

This phase of work is described in the 'Report on Phases 3, 4 and 5'.

6. ***Analysis of themes and implications for Welsh Government policies and interventions***

This phase of work is described the final report: 'Phase 6 - themes and implications for Welsh government policies and interventions'.

As the concluding phase of the project it draws together common and important themes from the five research phases and assess their implications for Welsh Government policy and interventions. Phase 6 of the project considers what forecast changes and responses in totality mean for rural Wales and estimate to what degree, and why, they matter or not.

1.5 Rationale for the Research Project

The underlying rationale for the research project was to provide an evidence base with which to inform the Welsh Government's work to develop a new Rural Development Plan for Wales for 2014-20.

In the wider context of the WRO's work for the Welsh Government, the research project will add value to other previous and existing research in two ways. Firstly, the survey element at Phase 2 will augment the work done by the Survey of Farming Households in Wales (WRO,2010), which had started to fill an evidence gap by focusing specifically on farms in Wales to garner information and provide comprehensive data on both farm practices and farmers' attitudes on a range of policy and other topical issues. It remains the case, that other than the Farm Business

Survey [FBS] and Farmers Voice, neither of which has an exclusive focus on Wales, there is little evidence concerning the state of farm business activities in Wales. Secondly, the survey data, and the data from Phases 3, 4 and 5 - the effects on the farm support service industry, the food processing and retail industries, and the effects on rural society and economy respectively - will connect with both completed and forthcoming WRO work.

1.6 Relations to Other WRO Work

A Survey of Farming Households in Wales (2010)

This project, which was carried out by the WRO team at Cardiff University, identified degrees of resilience, vulnerability, entrepreneurship, diversification and multi-functionality in farming households in Wales through analysis of in excess of 1,000 telephone interviews. Key aspects of these interviews were questions that sought to establish the extent of households' dependence of the Single Farm Payment and how households would react to potential CAP reform. In addition, the survey garnered information concerning farm practices and explored farmers' attitudes on issues such as ecology, environment, agri-environmental schemes, energy crops, organics, woods and climate change. The new research project builds directly on this survey, while interviewing a larger sample.

Farmers' Decision Making (2012)

This research, which was carried out by the WRO team at Aberystwyth University and was published on the WRO website early in 2012, addresses the following questions:

1. What are the key factors that influence farmers' decision-making in relation to their farm businesses and participation in agri-environment schemes?
2. How can participation in agri-environment initiatives and the delivery of ecosystem services be more effectively incentivised?
3. How can farmers be supported to operate more sustainable businesses, which are resilient to future challenges of CAP reform, market volatility, and increasing input costs?

The work is designed to inform agri-environment and other rural policy mechanisms, which target the delivery of ecosystem goods and services, therein contributing towards the delivery of Wales' Natural Environment Framework and Rural Development Plan. Equally, this research is intended to contribute to the planning of CAP reform and future agricultural policy measures to improve the resilience and sustainability of farming in Wales.

A mixed methods approach was applied, drawing on secondary survey data from the WRO 2010 Survey of Farming Households in Wales and IBERS Farm Business Surveys, with primary data collected through 51 semi-structured interviews with farmers across Wales. The sample was chosen on the basis of farm size (ESU). Interviews were also conducted with case study groups where ecosystem services delivery was being pioneered, including the Cambrian Mountains Initiative and the LIFE sponsored 'Blanket Bog Wales' Project. Project officers from the case studies were also interviewed, as well as Farming Union and Organic Centre Wales representatives.

There are direct links between the Farmers' Decision Making project, the 2010 Survey of Farming Households in Wales, and the new CAP reform project.

The Eco-economy

The new project will provide a data source for future WRO work on the eco-economy. It will identify (potential) connections between farming and the eco-economy by exploring farmers' attitudes to the proposed post-2013 CAP reform. These reforms are oriented towards 'greening' the CAP: for example, allocating funds to fulfilling environmental conditions and agri-environmental measures, and promoting the establishment of ecological focus areas [EFA].

Business survey

While the triennial WRO 'Rural Business Survey' specifically excludes Farmers, the new project will be a data source for WRO work on both farm businesses and off-farm businesses. It will, for example, examine farmers' attitudes towards issues such as innovation, entrepreneurialism, pluriactivity and synergies with other sectors. In addition, it will explore the knock-on effects of farmers' business decisions on other business sectors such as the farm support service industry and the food processing and retail industries.

The WRO Market Towns report

Phases 3,4 and 5 will provide data for updating the report 'Small and market towns in rural Wales and their hinterlands' [WRO, 2007].

1.7 The Policy and Academic Literatures

Below is an outline thematic review of existing farm surveys, and the policy and academic literatures.

Other farm surveys

The Farm Business Survey [FBS] is an annual survey carried out in England and Wales for Defra by a consortium of universities. IBERS at Aberystwyth University conducts the Welsh element of the FBS. The FBS is a longitudinal survey, with some farmers staying in the survey for 15 years, incorporating financial and physical data from a representative sample of around 600 farms in Wales. Broadly, the FBS collects management accounting information: revenues, costs and turnover; assets and liabilities; land use; areas and sales of crops; sales and purchase of livestock; and amounts of labour used.
The other main survey of farms that includes Wales is Farmers Voice, which is conducted by the Agricultural Development Advisory Service [ADAS]. Farmers Voice is, again, a survey of farmers in England and Wales.

The Policy literature

In Wales, three themes are prominent in the policy literature in terms of farming: a focus on sustainable rural development; CAP reform post- 2013; and the introduction of Glastir, the new agri-environmental scheme. To a great extent these themes are inter-connected; they signify a policy shift away from agricultural productivism.

Sustainable rural development

A policy focus on sustainable rural development was signalled by, among other policies, the Rural Development Plan for Wales 2007 -2013 [RDP], which is the policy document specifically aimed at CAP

administration in Wales for the period 2007-2013. The RDP is principally focused on the development and regeneration of rural space in Wales.

CAP reform

A Ministerial Statement of 25/11/08 announced that Wales can retain the historic basis for the single payment scheme until 2013 at least. This 'historic' basis is derived from the 'headage' payments made to farmers between 2000 and 2002: i.e. the payments they received for each head of stock they kept. However, for the period between 2014 and 2020, it is apparent that payments will move from the previous system towards area- based payments.

Glastir

Glastir is a five year whole farm sustainable land management scheme available to farmers and land managers across Wales. Introduced in January 2012, Glastir will eventually replace the five existing agri-environment schemes: Tir Gofal, Tir Cynnal, Tir Mynydd, the Organic Farming Scheme / Organic Farming Conversion Scheme, and the Better Woodlands for Wales scheme.
Glastir will pay for the delivery of specific environmental goods and services aimed at:

- combating climate change;
- improving water management; and,
- maintaining and enhancing biodiversity.

Designed to deliver measurable outcomes at both a farm and landscape level in a cost effective way, Glastir consists of five elements:

- Glastir-entry: a whole farm land management scheme open to application from all farmers and land managers throughout Wales. It is designed to provide support for the delivery of environmental benefits that meet today's challenges and priorities. Successful applicants will make a commitment to deliver environmental goods for five years under a legally binding contract.
- Glastir-advanced: part farm scheme which will run alongside AWE. It is intended to deliver significant improvements to the environmental status of a range of habitats, species, soils and water. This may require changes to current agricultural practices. Financial support from the Welsh Government will be targeted at locations where action will lead to the required result.
- Glastir-commons: designed to provide support for the delivery of environmental benefits on common land.
- Glastir-woodlands: designed to support land managers who wish to create new woodland and/or manage existing woodlands. The Woodlands Element will provide beneficial outcomes for a range of woodland types, species, soils and water.
- Agricultural Carbon Reduction and Efficiency Scheme (ACRES). A capital grant scheme available to farmers and land managers who hold an AWE contract. It is aimed at improving business and resource efficiency, and reducing carbon emissions of agricultural and horticultural holdings.

Wider UK policy

The research project connects to wider UK policy. For example:
Foresight (2011) The Future of Food and Farming: Final Project Report. The Government Office for Science.

The Academic Literature

The academic literature has responded to and reflects a perceived ongoing shift away from agricultural productivism towards

broader sustainable rural development. That is, public policy interest is perceived to be in the process of moving away from a singular focus on agriculture as an industry that produces things towards the wider question of how to develop rural areas sustainably. This re-focusing raises questions concerning issues such as food security, carbon governance, global warming, and climate change. The academic literature delivers a critique of both policy and theory, and takes a normative stance towards policy and practice.

Put broadly, the academic literature argues that there is an emerging new paradigm of rural development based upon the re-construction of a rural eco-economy. This new paradigm consists essentially in rural-based ecological modernisation and the growth of ecological goods and services more generally.

In summary, ecological modernization [EM] theory argues that the prevailing capitalist economy can be adjusted to bring about both ecological balance and economic development. Crucially, to varying degrees, the multi-level State is seen as a critical actor in intervening between the production and consumption of environmental goods and services. EM's key features are policy integration across sectors; the adoption of the Precautionary Principle at all levels of policy making and business decision-making; a belief in managed technological modernization and innovation to reduce inputs without affecting outputs (for example, less use of carbon fuels); greening supply-chains; institutional reflexiveness, with institutions being self-critical concerning their practices; and green taxes. It is argued that, given the correct technological market and policy environment, the 'triple bottom line' of economic development, environmental protection and beneficial social development, is potentially achievable. While EM and sustainable development are clearly related, EM has a sharper focus on the changes required to restructure the capitalist economy on more ecologically sensitive lines in order to achieve sustainable development aims.

Examples of component practices that potentially contribute to the emerging new rural development paradigm fall into the theoretical categories of regrounding, broadening and deepening activities. Working examples of deepening activities might be organic and quality food production and short supply chains; of broadening, eco-tourism and nature conservation; and of regrounding, renewable energy production. At the farm level the academic literature focuses on diversity, multifunctionality, adding-value, pluriactivity and entrepreneurial risk- taking.

In terms of policy the academic literature is concerned with theories of ecological modernisation and how ecological enterprise and the skills that are associated with it can be grown, with the assistance of interventions by the multi-level State.

A list of selected references is provided at Annex 1.

1.8 The Structure of This Report on the Income Analysis and Survey Phases

As the initial report of the multi-phase research project, this report integrates the Welsh Government income analysis with findings from the survey of farming households. The methods used for the survey, described in Section 2, resulted in five sets of data:

- The main survey of 2,400 farms
- A longitudinal sample of 452 farms
- Three geographical clusters, each of 200 farms

Detailed explanations of the survey methods are in the section on Methods.
The report contains the following sections:

- Section 1- Introduction
- Section 2 – Research methods and analysis
- Section 3 - Income analysis integrated with findings from the survey
- Section 4 - Analysis of farm household responses from the main survey
- Section 5 - An agricultural geography of the three geographical clusters
- Section 6 - A concluding section, which draws together the analyses of Sections 3, 4 and 5, and points to potential policy implications

SECTION 2 RESEARCH METHODS AND ANALYSIS

2.1 Introduction

The previous section provides the context and rationale for the project. This section describes the methods used for the survey and for analysis.

As described in the previous section, the survey was Phase 2 of a multi-phase project. Phase 1 was the analysis of the WG income data. This analysis led to three hypotheses:

a. That farm incomes, in general, will be vulnerable to CAP reform.
b. That CAP reform will negatively affect farm incomes in lowland areas (especially dairy farms).
c. That CAP reform will positively affect farms in Severely Disadvantaged Areas [SDA] and in Disadvantaged Areas [DA].

To explore hypotheses (a), (b) and (c) there was a main survey of 2,400 farms across all of Wales. In order to further explore hypotheses (b) and (c), using an initial analysis of the main survey data, three discrete geographical areas were selected: a predominantly dairy area, in the south-west; an upland area, in the north-west; and, as a comparator, a mixed area, in mid-Wales. Each of these three areas, which also would have been sampled in the main survey, was over-sampled with 200 interviews. The survey data analysis of these three areas provided the basis for the follow-on interviews with farmers, and the interviews for project phases 3, 4 and 5.

2.2 Project Aims and Objectives

The project objectives specifically applicable to the survey phase were:

1. To examine the impact of likely CAP changes on farm household incomes.
2. To forecast how farm households might respond to change in their income.

2.3 Survey Method

In order to achieve the project objectives it was decided to conduct the survey by means of a telephone questionnaire to farming households, using a survey contractor. Three parallel processes were then carried out: obtaining a suitable contractor; designing the questionnaire for the survey; and constructing the sample.

2.3.1 Contracting the telephone survey

Before obtaining quotations from contractors an outline format for the questionnaire was prepared. The project requirements provided to prospective contractors were:

- A telephone survey of farmers in Wales
- Each interview would be 20 minutes in length
- A prepared questionnaire would be used
- The majority of responses would be coded
- There would be two verbatim qualitative questions
- A total of 3,000 completed interviews was required
- There would be a pilot study of 40-50 interviews, which, if successful, would be included in the main survey
- A dataset of 24,000 farmers with contact details was available
- The main survey of 2,400 would be stratified
- Potentially, some interviews would be in the Welsh language
- The survey would be conducted during April and May 2012.

The prospective contractors were also apprised of the broad aims of the project.

Three contractors were asked to provide quotations. After due consideration and process, Opinion Research Services [ORS] of Swansea was chosen. While the ORS quotation was the lowest there were other factors contributing to the decision. The WRO had worked before with ORS with excellent outcomes and it was known that they offered good Welsh language capability.

2.3.2 Designing the questionnaire

The survey required a questionnaire that would elicit the required information; was telephone-friendly; and would take 20 minutes to complete.

An important step in the questionnaire design was the involvement of the farming unions. The WRO sent a working draft of the questionnaire to NFU Cymru, the Farmers Union of Wales [FUW], the Country Land and Business Association [CLA] and Wales Young Farmers Club and invited them to a meeting for discussions. A meeting was held on 29th March 2012 at Cardiff University and was attended by WRO team members, WG representatives and representatives from NFU Cymru, the FUW and the CLA. The meeting was extremely productive and the farming union representatives, in addition to being positive about the survey, made several important and useful contributions concerning both the content of the questionnaire and the conduct of the survey. These included the use of a third, mixed, farming area in mid-Wales as a comparator for the other two over-sampled areas.

Following a meeting between the WRO and ORS, during which the specific requirements with regard to a main survey of 2,400 interviews and three over-sampled areas, each of 200 interviews, were discussed and agreed, there was an iterative process of questionnaire design. The final questionnaire was sent to WG for perusal and approval and was subject to the WG Survey Control process. A copy of the questionnaire is at Annex Two of this report.

2.3.3 Constructing the sample for the main survey

The main survey (target of 2,400 interviews) was stratified at three, priority levels:

- Priority 1: five categories of economic farm size, with a quota in each category
- Priority 2: five categories of farm type, with a quota in each category
- Priority 3: seven agricultural regions, with a quota in each category

2.4 Conducting the Main Survey

Before the survey commenced, NFU Cymru advised their members via their e-mail newsletters. NFU Cymru, FUW and the CLA advised all of their offices throughout Wales, so that they could deal with any queries, and WG informed their enquiry points and included information about the survey in Gwlad: WG's bi-monthly magazine for farm, forestry and agricultural businesses in rural Wales.

ORS commenced the main survey on 16th April 2012 with the pilot interviews. The interview time was 23 minutes on average, which ORS considered to be acceptable, in that this would reduce as their interviewers became accustomed to the interview script, and within the bounds of the contract. On inspection of the Topline report, some adjustments were made and the survey proper continued. Topline reports were received on a regular basis. A total of 2,402 interviews was achieved and the main survey was completed on 10th June 2012. The response rate for the main survey was 29%.

This main survey included the longitudinal sample of 452 farms.

Tables 2.1, 2.2 and 2.3 show the distribution of the survey interviews by farm size (ESU), farm type and WG-designated agricultural region respectively.

Table 2.1 ESU size group (based on WG classification) [1]

ESU size of farm	Number of interviews	Proportion of survey
Very large	49	2%
Large	105	4%
Medium	283	12%
Small	907	38%
Very small	1058	44%
Total	2402	100%

[1] ESU [Economic Size Unit] is explained in the section on income analysis.

Table 2.2 Farm Type (based on WG classification)

Farm type	Number of interviews	Proportion of survey
Beef	448	19%
Dairy	190	8%
Sheep	723	30%
Sheep with Beef	413	17%
Other/Mixed	628	26%
Total	2402	100%

Table 2.3 Agricultural Region (based on WG classification)

Agricultural region	Number of interviews	Proportion of survey total
Carmarthen	391	16%
Ceredigion	257	10%
North East	344	14%
North West	341	14%
Pembrokeshire	212	9%
Powys	479	20%
South Wales	378	16%
Total	2402	100%

This main survey of 2,402 farms across Wales constitutes a random, stratified survey, the results of which may be generalized for Wales.

2.5 The Over-Sampled Areas

Recall from 2.1 that to further explore the hypotheses that CAP will negatively affect farm incomes in lowland areas (especially dairy farms), and positively affect farms in Severely Disadvantaged Areas [SDA] and in Disadvantaged Areas [DA], three discrete geographical areas were selected for over-sampling: a predominantly dairy area, in the south-west; an upland area, in the north-west; and, as a comparator, a mixed area, in mid-Wales. From an analysis of the main survey data, the three geographical areas were selected for over-sampling. The three areas selected were drawn at a radius of 30km around these settlements:

- Narbeth in the south-west – predominantly dairy
- Blaenau Ffestiniog in the north-west – predominantly SDA and DA
- Llanidloes in mid-Wales - mixed

A target of 200 interviews was set for each of the three areas, stratified by farm size and type. These areas were also covered by the main survey. Table 2.4 shows how many interviews were completed during the over-sampling in each area, together with the number of interviews in each area that were conducted during the main survey. Aggregating these amounts gives the total

.

Table 2.4 Interviews in each geographical area

Area	Over-sampled interviews	Interviews in main survey	Total interviews in area
Narbeth South-west	204	274	478
Blaineau Ffestiniog North-west	200	159	359
Llanidloes Mid-Wales	201	238	439

These three surveys, aggregating the over-sampled interviews and the in-area components from the main survey, constitute a random survey of farms in each area. Thus, the results may be generalized within each area. The survey data analysis of these three areas provided the basis for the follow-on interviews with farmers, and the interviews for project phases 3, 4 and 5.

The over-sampling was completed on 14th June 2012, which was the completion date for the entire survey fieldwork, with a response of 23%.

Average duration of interviews across the whole survey of 3,007 interviews was 22 minutes.

SECTION 3 WELSH GOVERNMENT INCOME ANALYSIS: INTEGRATION WITH SURVEY FINDINGS

3.1 Introduction

The section integrates the financial modelling work undertaken by the Welsh Government's [WG] Knowledge and Analytical Services team with those findings from the WRO farm survey that pertained to farm and household income. In outline, the WG's financial modelling (hence WG income analysis) sought to explore the cash impact of predicted changes to CAP and what difference these changes may make to farm household incomes. The principal predicted change to CAP that concerned the WG income analysis was the shift from the existing system of payments based on historical entitlement to a system based on a flat rate payment for each hectare of land farmed. In this analysis the total funds available, the claiming farms and the claimed area all remained constant. Therefore, what the analysis showed was the redistribution caused by the change of method, with any gains for individual farms being paid for by losses for other farms. Key findings from the WG income analysis were: [2]

- Based on the year 2010 claimants flat rate payment would be €248 per hectare.
- Significant redistribution of funding is inevitable under a flat rate payment because there is so much variation in the amount per hectare that farms currently receive.
- 17 per cent of the farms would remain within ten per cent of their current entitlement under a move to flat rate payments. Nearly 48 per cent of farms would gain, and just under 35 per cent of farms would lose at least ten per cent of their current entitlement.
- Those farms with a large historical entitlement would tend to receive less funding under a flat rate system while farms with a smaller historical entitlement would tend to receive more.
- All of the "larger" farm types have the majority of their farms currently receiving more than €250 per hectare. Thus under a flat rate system with a payment of just under €250 per hectare these farms would have a reduced subsidy payment.
- Dairy farms generally would receive significantly less funding under flat rate payment than their historical entitlement.
- The larger dairy farms have the largest share of farms receiving over €250 per hectare (just over 80 per cent). Nearly 70 per cent of the larger dairy farms receive more than €300 per hectare. That is, under the flat rate system, they would be losing at least €50 per hectare.
- By contrast just under half of the small sheep farms would gain at least €50 per hectare under the flat rate scheme. The biggest relative gainers would be the very small farms where almost 60 percent of the farmers currently receive under €200 per hectare.

- there is a large amount of variation around the trends. There are dairy farms that would gain under the changes and small farms that would lose.
- In cash terms a large number of small farms would gain small amounts of money, which would be paid for by a small number of large farms that would each lose larger amounts of money.
- A change to flat rate payments would affect all agricultural sectors.

In this section the WG income analysis is summarized concisely. That is, there is a focus on those parts of the analysis that can be integrated with the income-related data from the WRO farm survey. This entails omitting the WG analyses based on current entitlements and payments data. The database of subsidy payments currently received was not available to the WRO.

First, it is useful to explain some of the terms used in the WG income analysis.

3.2 Terms Used In The WG Income Analysis

Historically based payments - entitlement

CAP subsidy payments made under the existing system were referred to, in the WG income analysis, as 'entitlement'.

European Size Units [ESU]

European Size Units [ESU] are a European Union measure. They are a proxy for the financial value of agricultural output. ESUs are a weighted sum of the numbers of livestock and the areas of crops. There are different weights for a wide range of livestock and crop types. ESUs are used to compare the outputs of farms, types of farm or regions over the whole range of agricultural activity.

Using ESU values, within the European Union a range of standard farm sizes has been developed.

Table 3.1 Standard farm sizes by ESU value

Size group	ESU value
Very small	Under 8
Small	8 – 40
Medium	41 – 100
Large	101 – 200
Very large	Over 200

These farm sizes, together with the standard WG farm classifications, are used in this report for those sections that address directly the WRO survey.

Farm typology

Farms are also differentiated by their agricultural activities. Within the European Union, an activity is classed as 'dominant' if at least two thirds of a farm's ESU comes from that activity. The WG income analysis constructed an indicative typology of Welsh farms by combining ESU values and dominant activity.

- Larger – dairy. Medium, large and very large farms where dairy cows dominate.
- Larger – sheep and cattle. Medium, large and very large farms where the combination of non-dairy cattle and sheep dominate. Farms may be sheep specialists, beef specialists or a mix of beef and sheep.
- Larger – others. Any other farms in the medium, large and very large groups. Includes specialists in crops, horticulture, poultry and pigs. Also includes mixed farms where no particular activity dominates. For example a mainly dairy farm that has enough crops or sheep for the dairy element not to be dominant.
- Small – sheep. Small farms dominated by sheep.
- Small – others. Small farms not dominated by sheep.
- Very small - all farms classified in the very small category with any mix of activities.
- Others – farms where there were problems matching data.

Note that the WRO farm survey used the standard WG farm classifications:

- Beef
- Dairy
- Other/Mixed
- Sheep
- Sheep with Beef

Where appropriate, in this section, the WRO survey data have been grouped, using the WG farm classifications and the ESU-based farm sizes at Table 3.1, into the Farm Typology categories.

3.3 Outline of The WG Income Analysis

The analysis calculated, using year 2010 data, the average (arithmetic mean) of CAP subsidy payments to farms in Wales (i.e. historical entitlements) and explored how these payments may be redistributed under a flat rate payment system.

In 2010 the total area claimed was just over 1.3 million hectares and the available funding was just under €331 million - a flat rate payment of just under €248 per hectare.

Funding available/Total area claimed = €331 x 10^6/1.3 x 10^6 = €248 per ha
(In the analysis this was approximated at €250 per ha). As discussed above, the WG income analysis held both the available funding and the total area claimed as constants.

3.3.1 Distribution of historical entitlement

Broadly, in 2010 a large number of farms received small amounts of subsidy and a small number of farms received large payments. In aggregate, less than 30 per cent of the total number of farms received approximately 70 per cent of the total payments. [3] Table 3.2 shows these data by constructing 'entitlement bands'

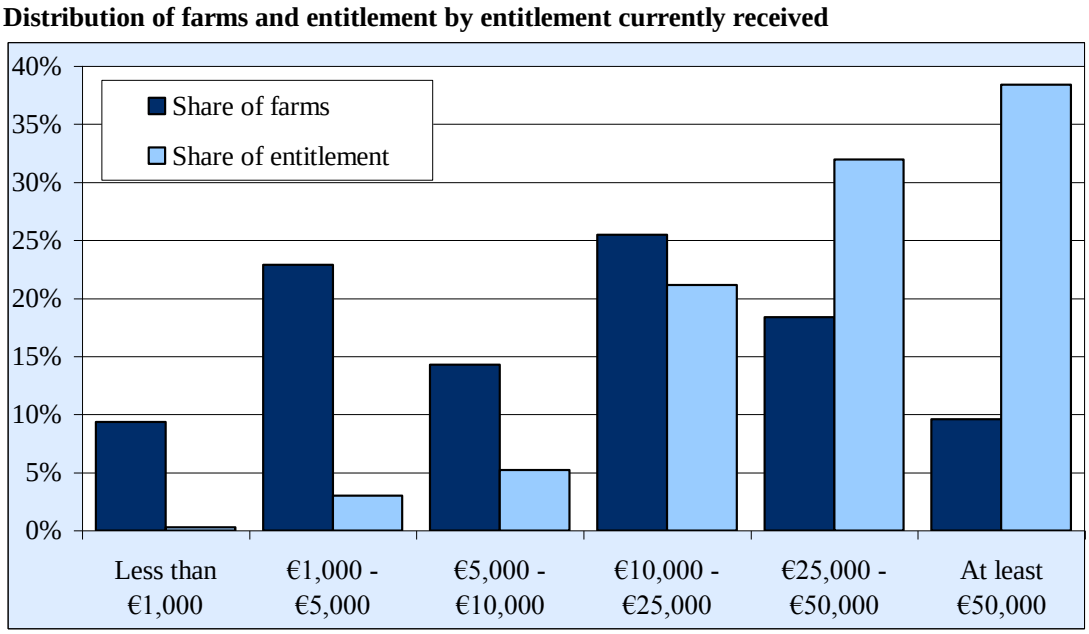
Table 3.2 Distribution of farms and entitlement by entitlement received in 2010 [4]

Entitlement band	Number of farms	Entitlement (€x000)	Proportion of total farms	Share of total entitlement
			%	%
Less than €1,000	1,533	877	9	0
€1,000 - €4,999	3,751	9,994	23	3
€5,000 - €9,999	2,341	17,198	14	5
€10,000 - €24,999	4,175	69,905	25	21
€25,000 - €49,999	3,009	105,655	18	32
At least €50,000	1,572	126,974	10	38
All farms	16,381	330,603	100	100

[3] This approaches Pareto's 80:20 rule.
[4] There may be rounding errors in all of the tables in this analysis.

These data are illustrated graphically at Figure 3.1

Figure 3.1 Distribution of farms and entitlement by entitlement received in 2010



3.3.2 Historical entitlement per hectare

Table 3.3 shows the historical entitlement per hectare. Arbitrary bands were constructed around the calculated mean of €250 per hectare.

Table 3.3 Proportion of farms and historical entitlement by historical entitlement per hectare

Entitlement per hectare	Number of farms	Entitlement (€x000)	Proportion of total farms	Share of total entitlement
			%	%
Under €100	1,867	9,869	11	3
€100 – €149	2,042	20,927	13	6
€150 –€199	2,597	35,890	16	11
€200 – €249	2,817	50,005	17	15
€250 – €299	2,510	57,453	15	17
€300 – €349	1,791	49,955	11	15
€350 – €399	1,085	38,136	7	12
At least €400	1,672	68,369	10	21
All farms	16,381	330,604	100	100

The table shows that 57 per cent of farms received less than the calculated mean of €250 per hectare.

3.3.3 Relative change resulting from flat rate payments

By applying the flat rate per hectare calculated from the total entitlement and total land claimed to the area of land claimed per farm the payments per farm under the flat rate system were calculated. Table 3.4 shows the relative changes in payment.

Table 3.4 Relative change in the distribution of payments

Change from historic to flat rate	Number of farms	Entitlement (€x000)	Proportion of total farms	Share of total entitlement
			%	%
Loss of at least 50%	724	30,335	4	9
Loss 30% - 49%	1,922	72,583	12	22
Loss 10% - 29%	3,073	81,651	19	25
Within 10%	2,720	54,800	17	17
Gain 10% - 29%	1,961	32,663	12	10
Gain 30% - 50%	1,353	19.136	8	6
Gain of over 50%	4,628	39,434	28	12
All farms	16,381	330,604	100	100

3.3.4 Distribution of farms and entitlements by farm type

Using the typology of farms discussed above, the WG income analysis calculated how the entitlements were distributed. These data are shown at Table 3.5.

Table 3.5 Distribution of farms and entitlements by farm type

Farm type	Number of farms	Entitlement (€x000)	Proportion of total farms	Share of total entitlement
			%	%
Larger – dairy	1,511	55,626	10	17
Larger – cattle and sheep	1,704	100,381	11	31
Larger – others	620	27,634	4	9
Small – sheep	1,966	39,539	13	12
Small – others	3,692	65,206	24	20
Very small	4,604	21,163	30	7
Others	1,403	11,727	9	4

Perusal of these data reinforces the observations made at 3.3.1 above: in 2010 a large number of farms received small subsidy payments and a small number of farms received large payments. Table 3.5 shows that, as before, in terms of the farm typology there was a split between a relatively small number of farms receiving relatively large amounts of funding and a

larger number of smaller farms which receive a smaller amount of funding. The largest individual category was the 'larger cattle and sheep' group, which received just over 30 per cent of the total entitlement. Taken together, the three 'larger' categories constituted 25 per cent of the total farms but claimed 57 per cent of the total entitlement.

Table 3.6 shows the entitlement distribution by farm type within the arbitrary bands used at Table 3.2.

Table 3.6 Entitlement distribution by farm type and entitlement band

		Historical entitlement band					
Farm type	**Number of farms**	**Less than €1,000**	**€1,000 - €4,999**	**€5,00 - €9,999**	**€10,000 - €24,999**	**€25,000 - €49,999**	**At least €50,000**
		%	%	%	%	%	%
Larger – dairy	1,511	0	0	4	36	39	21
Larger – cattle and sheep	1,704	0	0	0	6	45	49
Larger – others	620	1	3	4	23	37	31
Small – sheep	1,966	1	5	17	51	23	4
Small – others	3,692	2	12	20	44	20	3
Very small	4,604	22	50	17	9	1	0
Others	1,403	18	43	17	14	6	2
All farms	15,500	9	22	14	26	19	10

Table 3.6 again reveals the tendency of the 'larger' farm types to have higher value entitlements, and for small and very small farms to have lower value entitlements. Similarly to Table 3.5, the three 'larger' categories had high proportions claiming the higher value entitlements.

The WG income analysis also identified the current (year 2010) rate of entitlement per hectare by farm type. These data are at Table 3.7.

Table 3.7 Entitlement per hectare by farm type

		Entitlement per hectare			
Farm type	**All farms**	**Less than** €200	€200 to €249	€250 to €299	At least €300
		%	%	%	%
Larger – dairy	1,511	7	10	15	68
Larger – cattle and sheep	1,704	23	18	21	38
Larger – others	620	15	17	24	44
Small – sheep	1,966	49	23	14	14
Small – others	3,692	31	18	19	32
Very small	4,604	60	16	11	14
Others	1,403	48	18	12	22
All farms	15,500	40	17	15	28

Table 3.7 shows that in 2010 all three of the "larger" farm types had the majority of their farms receiving more than €250 per hectare. Thus under a flat rate system with a payment of just under €250 per hectare these farms would have a reduced subsidy payment.

The larger dairy farms had the largest share of farms receiving over €250 per hectare (83 per cent). Nearly 70 per cent of the larger dairy farms received more than €300 per hectare. That is, under the flat rate system, they would be losing at least €50 per hectare.

By contrast just under half the small sheep farms would gain at least €50 per hectare under the flat rate scheme. The biggest relative gainers would be the very small farms where almost 60 per cent of the farmers currently receive under €200 per hectare.

3.3.5 Change from historical to flat rate by farm type

Table 3.8 shows how the change from historical entitlement to flat rate payments would affect different farm types in terms of relative change.

Table 3.8 Change from historic to flat rate by farm type

		Change from historic to flat rate				
Farm type	**All farms**	**Loss at least 30%**	**Loss 10% to 29%**	**Within 10%**	**Gain 10% to 29%**	**Gain at least 30%**
		%	%	%	%	%
Larger – dairy	1,511	49	26	14	6	5
Larger – cattle and sheep	1,704	18	30	19	12	20
Larger – others	620	24	33	21	9	13
Small – sheep	1,966	7	14	18	16	45
Small – others	3,692	17	23	19	12	28
Very small	4,604	8	11	13	12	56
Others	1,403	13	13	16	12	45
All farms	15,500	16	19	17	12	36

The above table confirms the findings from Table 3.7. Almost half (49 per cent) of the large dairy farms would lose at least 30 per cent of their current entitlement because of the change to flat rate payments. From the earlier analysis here, dairy farms tend to have relatively large historic entitlements, while the very small farms tend to have smaller entitlements. Consequently, in cash terms a large number of small farms would gain small amounts of money, which would be paid for by a small number of large farms, which would each lose larger amounts of money.

A further important point is that each farm type is represented within each change band. Thus a change to flat rate payments would affect all agricultural sectors.

3.4 Findings from the Main WRO Survey and Integration with the WG income analysis

In this section there is a focus on income-related findings from the main WRO survey of 2,402 farmers. Where appropriate these findings are integrated with the WG income analysis.

3.4.1 The WRO survey and awareness of CAP reform

The WRO farm survey posed a number of questions that pertained to farmers' subsidy expectations following CAP reform. Participants were first asked whether or not they were aware of the proposed post-2013 CAP reforms. Table 3.9 shows these results.

Table 3.9 Awareness of the proposed CAP reforms – WRO survey

	Number of farms	Proportion
Yes	1,437	60%
No	956	40%
Refused	9	
All farms in survey	2,402	100%

Note that only 60 per cent of the 2,402 farms in the main survey were aware of CAP reform. This was an exceedingly low proportion considering that Single Farm Payment [SFP] was seen as an important source of income for the majority (85 per cent of the survey) of farms in Wales.

Moreover, Table 3.16 below shows that of the 85 per cent (2,015 farms) in receipt of SFP, only 71 per cent (1,437/2,015) of farms were aware of the CAP reforms. Taken together these results indicate a low level of awareness of the coming changes to CAP: a level that should concern WG. This low level of awareness and some anomalies and contradictions surrounding it are discussed further at Section 4.2 of this report ('Awareness of CAP Reform').

The 1,437 farmers who were aware of the CAP reforms were asked whether or not they were aware of the change from historical to flat rate payments. These results are shown at Table 3.10 below.

Table 3.10 Awareness of the change from historical to flat rate payments – WRO survey

	Number of farms	Proportion
Yes	1,225	85%
No	211	15%
Refused	1	
Farms aware of CAP reform	1,437	100%

3.4.2 Farmers' expectations in terms of CAP reform compared with calculated distribution under flat rate payments

The 1,437 farmers who were aware of the proposed CAP reforms were asked whether or not, following the reforms, they expected their subsidy payments to increase or decrease.

In addition to showing these data, Table 3.11 compares the results with Table 3.4 above, which shows the 'Relative change in the distribution of payments' from the WG income analysis. The figures in the 'Table 3.4 – calculated forecast change' column (in Table 3.11) were calculated by aggregating the 'Loss' and 'Gain' results at Table 3.4, and by assuming that 'Within 10%' equates to 'Stay the same'.

Table 3.11 Expectation of change in CAP-related payments post 2013 CAP reform

Expectation of change	Number of farms	Proportion	Table 3.4 – calculated forecast change
		%	%
Increase	142	10	48
Decrease	863	60	35
Stay the same	239	17	17
Don't know	172	12	
Refused	21	1	
Farms aware of CAP reform	1,437	100	100

Table 3.11 shows that farmers on the WRO survey were pessimistic regarding their subsidies following CAP reform. A far smaller proportion expected an increase than that calculated by the WG income analysis – ten per cent and 48 per cent respectively. The proportions expecting no change were the same in both cases, taking 'within 10%' to be 'stay the same'. And at 60 per cent the proportion of the survey expecting a decrease exceeded the WG calculated forecast figure by 25 percentage points. The survey results were, of course, depressed by the 'Don't knows' and 'Refused', but even if their combined 14 per cent is assumed to expect an increase, the resulting 24 per cent of survey participants expecting an increase remains pessimistic compared with the WG calculated forecast result.

The potential connections between pessimism, farmers, and their perceived place in the world, in terms of CAP, government, the public and policy are issues to be explored in the later phases of this research, through the follow-on

interviews with farmers. Table 3.12 breaks down the 'expectation' data by farm size.

Table 3.12 Expectation of change in CAP-related payments by farm size

	Farm size						
Expectation of change	**Very large**	**Large**	**Medium**	**Small**	**Very small**	**Farms aware of CAP reform**	**Proportion of total farms aware of CAP reform**
	%	%	%	%	%		**%**
Decrease	77	71	70	62	51	**863**	**60**
Stay the same	10	15	14	14	23	**239**	**17**
Increase	7	10	7	12	9	**142**	**10**
Don't know	5	4	9	13	14	**172**	**12**
Refused	0	0	1	0	5	**21**	**1**
Proportion of aware farms by size	**3**	**5**	**15**	**42**	**35**		**100**
Farms aware of CAP reform	**42**	**69**	**218**	**602**	**506**	**1,437**	

Table 3.13 combines data and categories from Tables 3.12 and 3.8 to present a comparison of expectations and calculated forecasts by farm size. These recalculations are shown at Annex Three.

Table 3.13 Farmers' expectations in terms of CAP reform compared with calculated distribution under flat rate payments by farm size [5]

Change	Large farms		Small farms		Very small farms	
	Calculated forecast	Survey	Calculated forecast	Survey	Calculated forecast	Survey
	%	%	%	%	%	%
Decrease	59	71	33	62	19	51
Stay the same	17	13	19	14	13	23
Increase	22	8	47	12	68	9
Don't know	NA	8	NA	13	NA	14
Refused	NA	0	NA	0	NA	3
Total	100	100	100	100	100	100

[5] The WG income analysis included a category of 'Others' - farms where there were problems matching data. This category comprised 1,403 farms. As shown at Table 3.8, the WG income analysis calculated that 26 per cent of 'Other' farms would receive decreased payments; 16 per cent would stay within ten per cent of current (year 2010) payments; and 57 per cent would receive increased payments.

Table 3.13 confirms the findings at Table 3.11: that across the survey, respondents tended to downgrade their expectations compared with the WG calculated forecasts. What Table 3.13 shows, in addition, is that small and very small farms were by far the most pessimistic in terms of both expected increases and decreases. By contrast, the expectations of large farms were closer to the WG income analysis calculations. That is, a large proportion of large farms predicted that there would be a decrease in their CAP payments, although here too a greater proportion thought they would receive smaller payments than the WG income analysis calculations indicated.

These findings point to the need for further exploration of the relationships between farmers' views of the world and the type of farming that they do. Potential issues are:

- Why are small farmers more pessimistic?
- Are small farmers less well informed?
- Is there a relationship between the proportion of income from farming, and therefore its perceived importance, the attention paid to farming issues, and negative assumptions?
- Do larger farmers use performance data and forecasting, and pay more attention to WG and trade sources?

As discussed above, these are issues to be explored in the later phases of this research, through the follow-on interviews with farmers.

3.4.3 Farmers' expectations in terms of CAP reform compared with calculated distribution under flat rate payments by farm type

For these comparisons we turn to the farm types arrived at in the WG income analysis farm typology. To enable a direct comparison, WRO survey data were grouped into the same categories as those of the WG typology. These categories are shown at Table 3.14 below.

Table 3.14 Farms in WRO survey grouped by WG Typology

WG Typology	Count WG income analysis	Proportion of WG income analysis	Count WRO Survey	Proportion of WRO Survey
Larger - dairy	1,511	10%	163	7%
Larger – cattle sheep	1,704	11%	190	8%
Larger - others	620	4%	84	4%
Small - sheep	1,966	13%	297	12%
Small - others	3,692	24%	610	25%
Very small	4,604	30%	1,058	44%
Others	1,403	9%		
	15,500	100%	2,402	100%

The data at Table 3.14 show a close correlation between the proportions of each farm category in farms across Wales and the proportions surveyed by the WRO, apart from the 'very small' category where there is a difference of 14 percentage points. However, taking the arguably reasonable assumption that the 1,403 farms in the 'Others' category (see Table 3.8 and Footnote 4) were 'very small' farms, the proportion of 'very small' farms in the WG income analysis rises to 39%.

Using the WG farm typology, Table 3.15 compares the calculations from the WG income analysis with farmers' expectations of CAP reform from the WRO survey.

Table 3.15 WG income analysis calculated gains/losses compared with farmers' expectations from WRO survey

	Larger - dairy		Larger - sheep and cattle		Larger - others		Small - sheep		Small - others		Very small	
	WG	WRO	WG	WRO	WG	WRO	WG	WRO	WG	WRO	WG	WRO
	%	%	%	%	%	%	%	%	%	%	%	%
Decrease	75	70	48	71	57	74	21	54	40	66	19	51
Stay the same	14	17	19	9	21	16	18	17	19	12	13	23
Increase	11	8	32	9	22	5	61	14	40	11	68	9
Not answered	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0
Don't know	NA	5	NA	11	NA	3	NA	16	NA	11	NA	14
Refused	NA	0	NA	0	NA	2	NA	0	NA	1	NA	4

From the table, across the types of farm, expectations from the WRO survey were lower than the WG income analysis calculations, except for 'larger dairy'. 'Larger dairy' displayed close agreement with the WG income analysis calculation and expectations were only slightly downgraded compared with the WG income analysis calculations.

Given the nature of their product, larger dairy farms are generally more likely to be connected to national and international markets. This, in turn, implies that they are more likely to follow business plans and to pay close attention to issues such as CAP reform and policy. Table 3.16 below, which shows 'sources of income', tends to support this view of larger dairy farms. The entire sample of larger dairy farms surveyed drew income from agricultural production, and 98 per cent drew SFP. And, larger dairy farms recorded the smallest proportions of farms drawing income from environmental schemes, diversification and rental income. In addition, Table 3.17 shows that, for larger dairy farms, agricultural production and SFP constituted the greater part of their income, at 71 per cent and 19 per cent respectively. The proportion for agricultural production was at least 20 percentage points more than the other types of farm, while the SFP contribution to larger dairy farm incomes was considerably lower than the other farm types, apart from very small farms, which also indicated that SFP contributed 19 per cent of total income. These data indicate that larger dairy farms had a principal focus on the business of agricultural production. They suggest that larger dairy farms were aware of CAP reform and its potential ramifications.

Again, these issues will be further explored in the follow-on interviews of the later phases of the project.

3.4.4 Farming households' income sources

Although, as indicated earlier in this report, the database of subsidy payments currently received was not available to the WRO, the survey posed three questions concerning household sources of income. Firstly, farmers were asked 'which of the following sources provides income to your farming household?'. Using the farm typology Table 3.16 shows both the numbers and proportions of farms in receipt of the different types of income.

Table 3.16 Sources of income by farm typology

	Overall	Farm Typology					
Income source	**Total**	**Larger - dairy**	**Larger - sheep and cattle**	**Larger – others**	**Small – sheep**	**Small – others**	**Very small**
Agricultural production	2,137	161	188	79	283	583	843
	90%	100%	100%	95%	97%	96%	82%
Single farm payment	2,015	158	189	82	284	558	744
	85%	98%	100%	99%	98%	92%	72%
Agri-environmental schemes and LFA	1,048	60	134	45	171	295	343
	44%	37%	71%	54%	59%	49%	33%
Diversification	557	31	51	30	60	151	234
	24%	19%	27%	36%	21%	25%	23%
Rental income	494	23	43	26	54	123	225
	21%	14%	23%	31%	19%	20%	21%
Other household members 'off farm' jobs	926	61	67	27	98	227	446
	39%	40%	35%	33%	34%	37%	43%

From the table, it appears that 18 per cent of 'very small' farms did not consider agricultural production to contribute to their income, together with relatively small proportions of 'larger – others', 'small sheep' and 'small-others'. A total of 2,015 farms gave SFP as an income source – see Table 3.9. Apart from 'very small' farms, over 90 per cent of the other types of farm indicated receipt of SFP.

A surprising finding was that five per cent of 'larger-other' farms did not draw income from agricultural production. Two possible explanations are suggested: these 'farms' consisted of forests or caravan parks, or a small number (i.e. four) of respondents misunderstood the question.

Farmers were then asked the proportion of total income that each income source contributed. Table 3.17 shows the

proportions that each income source contributed to total income across the survey and by farm typology.

Table 3.17 Mean proportions of sources of income by farm typology

	Overall	Mean by Farm Typology					
Income source	**All farms**	**Larger – dairy**	**Larger - sheep and cattle**	**Larger - others**	**Small - sheep**	**Small – others**	**Very small**
	%	%	%	%	%	%	%
Agricultural production	43	71	50	51	46	47	34
Single farm payment[6]	25	19	34	30	32	27	19
Agri-environmental schemes and LFA	5	2	7	3	8	5	5
Diversification	6	2	3	5	4	6	9
Rental income	4	1	2	3	2	3	6
Other household members 'off farm' jobs	17	4	4	7	8	12	29
	100	100	100	100	100	100	100

[6] The Farm Business Survey indicates that SFP constitutes approximately 80 per cent of **farm business profit**. Thus, direct comparison with the survey data analyzed here is not possible – the 25 per cent figure represents SFP as a proportion of **total household income**.

A number of interesting points arise from this table.

Across the survey, SFP contributed 25 per cent of farming household incomes. Breaking down the data by type, only 'larger-dairy' and 'very small' farms received less than a fifth of their income from SFP.

The types with the largest proportions were 'larger-sheep and cattle', 'larger –others' and 'small-sheep', each of which received at least 30 per cent of their income from SFP. At Table 3.8 it was shown that 48 (30 + 18) per cent of 'larger-sheep and cattle' farmers and 57 (33 + 24) per cent of 'larger –others' farmers will experience a decrease of at least ten per cent under CAP reform. When considered in terms of the high proportion of income that SFP contributes to these types of farm, it is apparent that CAP reform could be highly significant for them.

The WG income analysis suggests that dairy farms will tend to experience the greatest decreases in SFP under CAP reform. However, although SFP contributed almost one fifth (19 per cent) of the income of 'larger dairy' farms, this was relatively low relative to agricultural production (71 per cent). This suggests that while almost half (49 per cent) of the large dairy farms would lose at least 30 per cent of their current entitlement because of the change to flat rate payments (Table 3.8), they will be better placed to cope with lower SFP payments, as they are less dependent on SFP.

Table 3.17 highlights the small proportions of income derived from agri-environmental schemes and diversification. Clearly, these activities do not contribute significantly to farm incomes. This raises questions for WG agri-environmental policy and financial incentives to farmers, as apparently 'greening' will be a prerequisite for the

receipt of subsidies under CAP reform.

Finally, in this series of questions, farmers were asked which of their sources of income would be the most important to them in the future. Table 3.18 shows these responses by farm typology and, for the Overall survey population. For comparison, the sources are shown in the same order as Table 3.17, and for the Overall survey population the priority rankings are shown in a separate column.

Table 3.18 Future sources of income by farm typology

Income source	Priority across survey	Across survey	Larger - dairy	Larger - sheep and cattle	Larger – others	Small - sheep	Small – others	Very small
		%	%	%	%	%	%	%
Agricultural production	1	42	86	52	70	46	49	27
Single farm payment	2	24	7	41	19	32	26	20
Agri-environmental schemes and LFA	6	2	0	1	0	1	1	3
Diversification	4	8	3	2	4	6	8	11
Rental income	5	4	0	1	1	4	4	6
Other household members 'off-farm' jobs	3	15	3	1	5	7	9	26
Don't know		4	2	2	0	3	3	6
Refused		2	1	2	1	1	1	3

The data in Table 3.18 are best compared with Table 3.17. Table 3.18 shows that SFP will continue to be important to farms in Wales, with 24 per cent ranking it as the most important future source of income. 'Larger sheep and cattle' farms were the most likely to consider SFP as the most important source of future income, with 41% doing so. This confirms the finding at Table 3.17, where 'Larger sheep and cattle' farms reported the largest contribution of income from SFP. However, in view of CAP reform this appears to be unrealistic and raises concerns about the information that these farms were receiving or their understanding of the situation.

By contrast, the 'larger dairy' farms appeared to be more realistic and informed about CAP reform and its potential effect on incomes. The majority (86 per cent) of these farms perceived that agricultural production would be the most important source of income in the future. This supports the observations made above concerning the relatively low dependency of dairy farms on SFP and their enhanced business sense and acumen.

Both agri-environmental schemes and diversification ranked low as future sources of income – both in priority and proportional terms. This raises questions concerning the future willingness of farmers to enter or remain in agri-environmental schemes. In terms of diversification, the data raise questions about WG policy to create more diversified farming businesses. Given the relatively high interest in diversification shown by small and very small farms (although even here it was only six, eight and 11 per cent), and the low interest in diversification and high interest in agricultural production of the larger farms, there appears to be a relationship between

an increasing reliance on agricultural production and a lack of interest in diversification as a source of income.

Taken together, these findings raise questions for WG policy with regard to agri-environmental schemes, diversification, the dissemination of information and farm business training.

3.4.5 Income data from the WRO survey

The final questions of the WRO survey questionnaire were concerned with income, turnover and profit. Tables 3.19, 3.20, 3.21 and 3.22 illustrate the data from these questions using the WG farm typology. As some numbers are small, both counts and percentages are shown.

Table 3.19 shows the annual turnover of farms.

Table 3.19 Annual turnover of farms

Annual turnover	Overall	Farm Typology					
	Total	Larger – dairy	Larger - sheep and cattle	Larger - others	Small - sheep	Small – others	Very small
Less than £25,000	820	4	1	0	46	120	649
	34%	3%	0%	0%	16%	20%	61%
£25,000-£67,999	478	10	18	6	105	204	135
	20%	6%	10%	7%	35%	33%	13%
£68,000-£99,999	237	20	30	12	45	99	31
	10%	12%	16%	14%	15%	16%	3%
£100,000-£149,999	214	33	50	17	29	66	19
	9%	20%	26%	20%	10%	11%	2%
£150,000-£199,999	81	18	21	9	6	17	10
	3%	11%	11%	11%	2%	3%	1%
£200,000-£249,999	51	16	16	6	2	7	4
	2%	10%	8%	7%	1%	1%	0%
£250,000-£499,999	61	20	17	13	2	2	7
	3%	12%	9%	16%	1%	0%	1%
£500,000 or more	45	23	3	11	3	2	3
	2%	14%	2%	13%	1%	0%	0%
Don't know	249	10	23	5	32	69	110
	10%	6%	12%	6%	11%	11%	10%
Refused	166	9	11	5	27	24	90
	7%	6%	5%	6%	9%	4%	9%

The data in the table show that, unsurprisingly, high turnover was a function of size. Larger and dairy farms again were prominent in the higher ranges of annual turnover.

We can compare these data with other sources of farm data. 'A survey of farming

households in Wales' (2010), a WRO report from a representative survey with a population of 1,009, used the same bands for turnover. Table 3.20 shows the overall figures for the 2010 survey.

Table 3.20 Turnover by farm size - A survey of farming households in Wales (2010)

Annual turnover	Overall
	%
Less than £25,000	38
£25,000-£67,999	22
£68,000-£99,999	9
£100,000-£149,999	14
£150,000-£199,999	6
£200,000-£249,999	4
£250,000-£499,999	5
£500,000 or more	2

Comparing Tables 3.19 and 3.20 shows that the overall figures for turnover in the 2010 and 2012 surveys were of a similar order, with a greatest difference of five percentage points for the £100,000 - £149,000 range of turnover. Other data from the 2010 survey reveal similarities of order in terms of farm size and farm type, with larger and dairy farms tending to have larger turnover. These comparisons help to establish that the farm surveyed for this current project were not atypical and that, to a large extent the data were to be expected.

Survey participants were asked whether, excluding subsidies and diversified activities, their business made a profit or a loss. Table 3.21 shows these outcomes.

Table 3.21 Profit and loss by farm typology

Outcome (Count)	Overall (2402)	Larger – dairy (163)	Larger – sheep and cattle (190)	Larger – others (84)	Small – sheep (297)	Small – others (610)	Very small (1058)
	%	%	%	%	%	%	%
Profit	46	81	49	61	53	49	36
Loss	29	7	32	19	30	28	34
Break even	20	10	17	17	14	21	23
Refused and Don't know	5	2	2	3	3	2	7
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The data in the table suggest that large dairy farms were far stronger financially than other types of farm. This is apparent from both the profit and loss figures. Of the larger farm types, sheep and cattle were faring least well with the same proportion making a loss or breaking even as making a profit.

In addition, there should be concern about the high proportions of small and very small farms that made a loss or broke even. This raises questions about the policy implications should large numbers of these types of farm cease trading.

Tables 3.22, 3.23 and 3.24 quantify these outcomes using a set of ranges for profit and loss.

Table 3.22 Farms making a loss by farm typology

Loss	Overall	Larger – dairy	Larger - sheep and cattle	Larger - others	Small - sheep	Small – others	Very small
	%	%	%	%	%	%	%
£25,000 or greater loss	3	1	11	5	2	3	2
£24,999 -£10,000	4	1	10	7	9	5	2
£9,999 to zero	20	4	8	7	18	16	28
Don't know and refused	1	1	3	0	1	3	2

Table 3.22 confirms earlier observations that 'larger – sheep and dairy' farms appeared to be in financial difficulties. While the smaller types of farm had relatively high

levels of loss between zero and £9,999, their proportions reduced as the amount of loss increased. By contrast, the proportions of 'larger – sheep and dairy' farms experiencing loss increased as the amount of loss increased.

Table 3.23 Farms making a profit by farm typology

Profit	Over all	Larger – dairy	Larger - sheep and cattle	Larger - others	Small - sheep	Small – others	Very small
	%	%	%	%	%	%	%
Zero to £9,999	24	15	15	19	26	25	27
£10,000-£24,999	11	26	11	18	17	15	5
£25,000-£49,999	5	21	13	10	5	3	1
£50,000 or more	2	14	5	8	1	1	1
Don't know and refused	4	6	6	6	5	4	3

Larger dairy farms again indicated their financial robustness by recording larger proportions across all ranges of profit, particularly in the higher profit ranges. Some larger – sheep and cattle farms also recorded profits. What these farms do to make a profit will be explored in the follow-on interviews.

Table 3.24 Farms breaking even by farm typology

Overall	Larger – dairy	Larger - sheep and cattle	Larger - others	Small - sheep	Small – others	Very small
20%	10%	17%	17%	14%	21%	23%

Taking these tables together it would appear that less than half (46 per cent) of farm businesses made a profit, without subsidies and the income from diversified activities. Farms in the larger-dairy category were doing best, followed by the larger-

others type. Larger-sheep and cattle types were, in general, struggling financially, although some were making a profit. The small types of farm tended to operate around the break-even level, with some making small profits and some small losses.

Comparing these data with other farm datasets in Wales both verifies the farms surveyed as not atypical and reveals a longer term trend of financial difficulties, to a great extent, ameliorated by SFP and other subsidies. The data in Table 3.25 has been recalculated from the 2010-2011 Farm Business Survey [FBS], an annual survey of 600 farms in Wales conducted by Aberystwyth University. For six different types of farm, using FBS farm types, it shows the SFP and subsidies, and profit net of subsidies per farm.

[7]

Table 3.25 Farm business profit per farm – FBS (2010-11)

Farm Type	Profit after rent and finance £ per farm	SFP £ per farm	Tir Myndd £ per farm	Indirect subsidies £ per farm	Profit net of subsides £ per farm
Hill cattle and sheep	32,242	34,854	4,293	5,482	- 12,387
Hill sheep	33,183	33,777	5,635	7,171	-13,400
Upland cattle and sheep	30,176	29,597	2,560	2,910	-4,891
Lowland cattle and sheep	25,880	23,191	Zero	2,190	499
Hill and upland dairy	57,175	28,103	Zero	3,259	25,813
Lowland dairy	72,342	33,578	Zero	2,526	36,238

[7] The question for this current project survey asked for profit net of subsidies and diversification income. It was not possible to identify diversification income from the FBS data.

From the table it can be seen that hill cattle and sheep, hill sheep and upland cattle and sheep farms had negative income net of SFP and other subsidies, with SFP by far the largest contributor. The two types of dairy farm made the largest profits. Moreover, FBS data (e.g. 2008 -2009) show that, in recent times at least, only dairy farms in Wales have made a profit purely from agricultural production.

These FBS data support the analyses in this section and in Section 4, which suggest that dairy farms have been in a relatively strong financial position and perhaps are best positioned to absorb potential reductions in SFP following the CAP reforms, and that other farm types and sizes appeared to be overly dependent on SFP. However, it must be noted that the WG income analysis predicts that larger dairy farms will be hardest hit by CAP reforms. Finally, in this income analysis section, Table 3.26 shows the total household income by farm type.

Table 3.26 Household income by farm typology

Income	Overall	Larger – dairy	Larger - sheep and cattle	Larger - others	Small - sheep	Small – others	Very small
	%	%	%	%	%	%	%
Less than £10,000	13	13	6	4	14	13	15
£10,000 - £15,499	12	10	10	14	9	13	13
£15,500 - 20,999	13	14	13	8	15	13	13
£21,000 - 30,999	16	18	14	21	16	17	16
£31,000 - 51,999	15	15	13	23	15	15	15
£52,000 - 77.999	7	8	9	6	7	8	6
£78,000 or more	6	11	12	14	5	4	5
Don't know	9	4	17	4	9	12	8
Refused	8	7	7	6	9	4	10

In general, distribution on the table is even; smaller farms tending to populate the lower income ranges and larger farms populating the upper ranges, with a changeover around the £31,000-£51,999 range. However, there were surprisingly large proportions of larger dairy farms in the lower income ranges.

This finding is not inconsistent with the previous analyses. Tables 3.16, 3.17 and 3.18 show that larger dairy farms had a strong focus on agricultural production. And the returns for profit and loss, where larger dairy farms performed strongly, specifically excluded subsidies and diversified activities. The inference is that larger dairy farms tended to concentrate on agricultural production and were not overly dependent on SFP, agri-environmental schemes and off-farm incomes. Other types of farm might be overly dependent on subsidies and be 'topping-up' household income with non-agricultural activities.

In addition to implications for policy, these income analyses have pointed to a range of issues to be explored in the follow-on interviews with farmers.

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SECTION 4 FARM HOUSEHOLD RESPONSES FROM THE MAIN SURVEY

4.1 Introduction

This section focuses on farmers' responses to the questionnaire administered in the WRO main survey of 2,402 farms. Of necessity, some of the questions integrated with the WG income analysis in Section 3 of this report are revisited. As the issue of CAP reform lies at the core of this research project, analysis of CAP-related survey questions is brought to the fore in this section of the report.

Following this Introduction, Section Four is structured as follows:

- 4.2 Awareness of CAP reform
- 4.3 Expectations of change and responses to hypothetical changes in income
- 4.4 Key responses to hypothetical changes in CAP payments
- 4.5 Additional information about CAP
- 4.6 Characteristics of the farms and farmers surveyed: buying and selling trends
- 4.7 Farmers' plans for the future

The analysis in Section 4.7 'Farmers' plans for the future' is illustrated by quotations by survey respondents. Illustrative quotations feature also in some of the other analysis.

4.2 Awareness of Cap Reform

Some of the questions directly concerning CAP reform are addressed in Section 3, where they are integrated with the WG income analysis. In the following analysis, the responses to some of these questions are repeated for context and completeness. These responses are then subjected to deeper analysis.

In one of the early questions of the survey, farmers were asked whether or not certain issues were a concern for the future of their business. Table 4.1 shows the proportions of farmers with these concerns.

Table 4.1 Farmers' concerns

	Count	Proportion of farms with concern
Rising input costs	2,066	86%
Market prices	1,892	79%
General economic situation	1,898	79%
CAP reform	1,674	70%
Land prices	1,347	56%
Availability of land	1,165	49%
Succession	1,062	44%
Availability of finance	962	40%
Availability of training	538	22%
Abolition of dairy quota	162	7%
Don't Know	41	2%
Refused	27	1%

They were then asked to rank their top three concerns in order.

Table 4.2 Farmers' concerns ranked

Concern	Proportion that ranked it as most concerning	Ranking
CAP reform	31%	1
Rising input costs	26%	2
Market prices	12%	3
General economic situation	12%	4
Availability of finance	5%	5
Land prices	4%	6
Succession	3%	7
Availability of land	2%	8
Availability of training	0%	9
Abolition of dairy quota	0%	10
Other	6%	

Table 4.2 shows that, taken together, rising input costs, market prices and the general economic situation, all three of which may arguably be subsumed by the term 'general economic situation' were ranked first by 50 per cent of the survey. However, CAP reform was the single most concerning issue, with 31 per cent ranking it first.

Later in the survey, participants were asked whether or not they were aware of the proposed post-2013 CAP reforms. Table 4.3 shows these results.

Table 4.3 Awareness of the proposed post-2013 CAP reforms – WRO survey

	Number of farms	Proportion
Yes	1,437	60%
No	956	40%
Refused	9	
All farms in survey	2,402	100%

From the analysis in Section 3 we know that 2,015 farms indicated that they received Single Farm Payment [SFP]. Cross-tabulations show that 1308 i.e. 65 per cent (1,308/2,015) of farms in receipt of SFP were aware of the CAP reforms. At 60 per cent of the total survey population and 65 per cent of farmers in receipt of SFP the proportions of farmers aware of the proposed CAP reforms appear to be rather low in both cases.

In addition, there was an apparent contradiction. Table 4.1 indicates that 70 per cent of the survey population were concerned about CAP reform. But from Table 4.3, 60 per cent were aware of the proposed post-2013 CAP reforms. In terms of raw numbers, it appears that 237 (1,674 – 1,437) farmers were concerned, in general, about CAP reform but were not aware of a specific CAP reform – the proposed post-2013 CAP reforms. Or it might have been that they read more into the question posed, and were not aware of the details of the proposed post-2013 CAP reforms

Cross-tabulations revealed that 493 of the 1,674 farmers concerned about CAP were not aware of the post-2013 CAP reforms. Of these, 196 indicated that they did not require any additional information, advice or support to help them plan for the effects of CAP reform. However, 256 farmers were aware of the post-2013 CAP reforms but were not concerned about CAP reform in general. This suggests that they had made plans, although only 156 of these indicated that they did not require any additional information, advice or support to help them plan for the effects of CAP reform, suggesting that even farmers who are more prepared need continued advice and support.

The analysis reveals a number of contradictions, which may in some cases be explained by either differentiation between general CAP reform and specific CAP reform or confusion about the questions asked. Importantly, however, the analysis suggests more fundamental problems:

- Awareness of CAP reform was low, even among SFP recipients.
- Given the importance of SFP as an income source to many farmers, this suggests:
  - A lack of business awareness
  - Apathy
  - Fatalism
- There is a requirement for improved communication and information regarding CAP reform.

These issues will be explored in the follow-on interviews with farmers.

There are clear implications for WG policy in terms of dissemination, communication and business training for farmers.

Tables 4.4 and 4.5 provide breakdowns of the awareness of the proposed post-2013 CAP reforms by farm size and farm type respectively.

Table 4.4 Awareness of the proposed post-2013 CAP reforms by farm size

Overall	Very large	Large	Medium	Small	Very small
60%	86%	66%	77%	66%	48%

Table 4.5 Awareness of the proposed post-2013 CAP reforms by farm type

Overall	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
60%	76%	62%	59%	69%	47%

Tables 4.4 and 4.5 reveal that there was a greater awareness in very large and dairy farms, and that very small and other/mixed farms tended to be particularly unaware of the proposed CAP reforms. This concurs with the analysis in Section Three, which suggests that large dairy farms were more realistic and business aware.

The 66 per cent awareness figure for large farms at Table 4.4 was surprisingly low. However, if 'awareness' is cross-tabulated against the WG farm typology, which recalculates the very large, large and medium farms into three different types of larger farm, the 'awareness' data correspond more closely with the analysis in Section Three, where large dairy farms were more realistic and business aware and larger sheep and beef and larger others did not perform as strongly. Table 4.6 shows awareness against the WG farm typology.

Table 4.6 Awareness of the proposed post-2013 CAP reforms by WG farm typology

Overall	Larger – dairy	Larger-sheep and cattle	Larger-others	Small-sheep	Small-others	Very small
60%	79%	75%	69%	69%	65%	48%

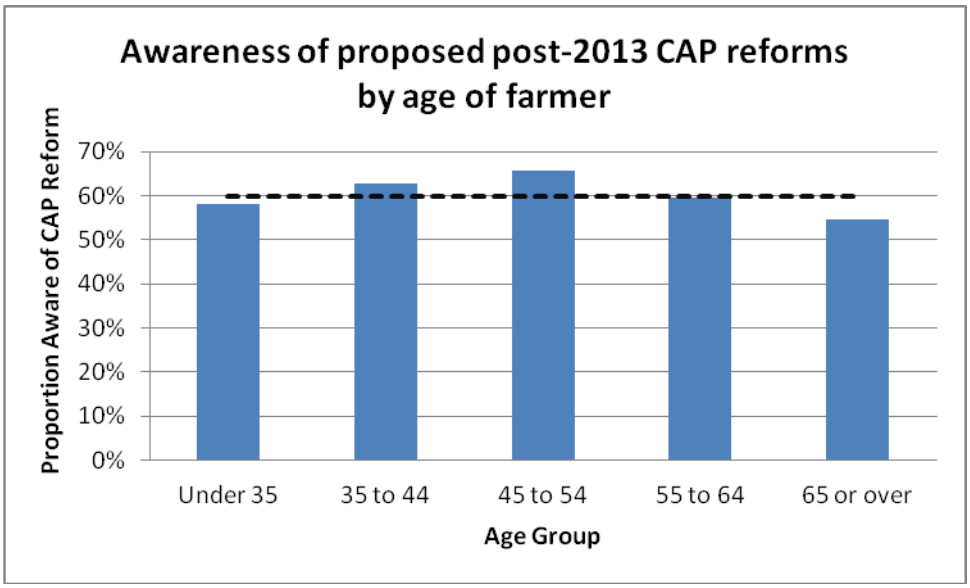
Table 4.7 provides a breakdown of awareness of the CAP reforms by age of respondent.

Table 4.7 Awareness of the proposed post-2013 CAP reforms by age of respondent

Overall awareness	18-24	25-34	35-44	45-54	55-64	65 or older
60%	25%	63%	63%	66%	60%	55%
Age profile of farmers Proportion of 2,402	0.3%	2%	10%	26%	31%	31%

The additional lower row in Table 4.7 shows the age profile of farmers in the survey. This shows that 62 per cent of farmers were 55 years or over, and that 88 per cent were 45 or over. At the younger end of the scale, 2.3 per cent of farmers were below 35 years. In raw numbers this represented eight farmers between 18 and 24 years, and 54 farmers between 25 and 34 years. Arguably, the 18-24 group, may be discounted with such low numbers. Figure 4.1 shows awareness against age.

Figure 4.1 Awareness of CAP reform by age group



Awareness of the proposed post-2013 CAP reforms peaked in the 45-54 age group and then dropped away slightly with increasing age.

Table 4.8 breaks-down by tenure how aware of the proposed CAP reforms respondents were.

Table 4.8 Awareness of the proposed post-2013 CAP reforms by tenure

Overall awareness	Owned by you and/or your family	Rented	Mixed/both
60%	56%	61%	73%

From Table 4.8 it is apparent that farms owned outright by families tended to be less aware of the post-2013 CAP reforms. Indeed, their awareness was lower by four percentage points than the overall result, a result highlighted above as a matter of concern. This lack of awareness in family-owned farms provides further evidence of a possible lack of business awareness; apparent apathy; and a requirement for improved communication and information regarding CAP reform.

The 1,437 (60 per cent of the survey population) farmers who were aware of the CAP reforms were asked whether or not they were aware of some details of the proposed reforms: the change from historic to area-based payments; the greening measures; the capping payments; and the emphasis on young farmers. These results are shown at Table 4.9.

Table 4.9 Awareness of specific details of the proposed post-2013 CAP reforms

Change to area-based payments	Greening measures	Capping payments	Emphasis on young farmers
85%	67%	74%	73%

To a great extent the change to area-based payments is the most far-reaching change and the one most likely to affect household and local economies. The relatively high awareness figure of 85 per cent for this measure reflects its potential importance.

Further analysis showed that, where farmers were aware of the CAP reforms, those with rented farms were more likely to be aware of the specific details. They performed at several percentage points above the overall figure, while family-owned and mixed tenure farms were around the overall results. Table 4.10 shows these results. Note that the numbers in each category who were aware of CAP reform are also shown.

Table 4.10 Awareness of specific details of the proposed post-2013 CAP reforms by Tenure

Type of Tenure	Owned by you and/or your family	Rented	Mixed/both	Total
Change from historic to area-based payments	84%	90%	88%	85%
	821	105	297	1225
Greening measures	65%	74%	72%	67%
	637	87	243	968
Capping payments	71%	81%	78%	74%
	699	95	265	1060
Emphasis on Young Farmers	72%	84%	72%	73%
	704	98	243	1046

The data at Table 4.10 also show that farmers with Mixed tenure also tended to be more aware of the specific details than those with family-owned farms. Taken together with the evidence at Table 4.8 there is the possible inference that farmers with an element of rented tenure may be less secure and thus more tuned-in to policy changes and their financial implications.

However, overall these results for awareness of specific aspects of CAP reform were low, considering their potential importance to farmers' incomes and way of life. They reinforce the findings of the earlier analyses, which point to a lack of business awareness, interest, information and training deficits, and implications for WG policy in terms of dissemination of information.

In a follow-up question, the 1,437 farmers who were aware of the proposed post-2013 CAP reforms were asked from where they obtained their information. This was a multi-response question, with the results tabulated at Table 4.11. The categories of CLA, FUW, NFU, Young Farmers and Welsh Government were suggested by interviewers as possible information sources and participants were encouraged to report other sources. As some of the counts were small, percentages have not been rounded to whole numbers.

Table 4.11 Sources of information about CAP reform

	Count	Proportion
		%
Country Land and Business Association (CLA)	42	1.7
Farmers Union of Wales (FUW)	221	9.2
National Farmers Union (NFU) Cymru	289	12.0
Wales Young Farmers	8	0.3
Welsh Government	354	14.7
Other sources mentioned by respondents		
Farming press/media/TV/Internet	448	18.7
Word of mouth/other farmers	146	6.1
Farmers Weekly	240	10.0
Farmers Guardian	263	10.9
Gwlad (Magazine)	211	8.8
Postal/leaflets	12	0.5
Private expert advisors/surveyors/consultants	17	0.7
Specialist advice (including meetings, conferences/input from specialist organisations)	77	3.2
The Daily Post	17	0.7
The Western Mail	14	0.6
Ffermio (S4C)	7	0.3
Countryfile	8	0.3
The Dairy Farmer	7	0.3
Other	10	0.4
Don't know/Can't remember	21	0.9
Refused	2	0.1
Not Asked – i.e. those not aware of the proposed post-2013 CAP reforms	965	40.2

What is striking about these data is that no single source of information dominated. Of the 'nominated' sources, the WG, and NFU, although high in the context of these responses, were relatively low at 12 per cent and 15 per cent respectively. There are implications here for WG policy in terms of dissemination.

The proportion that gained information from the Young Farmers was particularly low given that 12 per cent of respondents were aged under 45 years. At approaching 19 per cent the farming press/media/TV/Internet sources were the most productive.

While there was the potential for overlap and ambiguity in both the sources and the responses, these data indicate a trend away from traditional paper-based sources of information.

4.3 Expectations of Change and Responses to Hypothetical Changes in Income

4.3.1 The context for expectation

The analysis in Section 3 examines farmers' expectations of changes in income that may be caused by CAP reform and also compares these expectations with the forecast income level under flat rate payments in the WG income analysis. In this sub-section the analysis examines farmers' responses to hypothetical scenarios of various levels of income change that may be caused by CAP reform. To provide context, some findings from the Section 3 analysis are repeated.

Table 4.12 shows how the 1,437 farmers who were aware of the post-2013 CAP reforms expected their payments to change.

Table 4.12 Expectation of change in CAP-related payments post 2013 CAP reform

Expectation of change	Number of farms	Proportion
Increase	142	10%
Decrease	863	60%
Stay the same	239	17%
Don't know	172	12%
Refused	21	1%
Farms aware of CAP reform	1,437	100%

The standout point from the table is the small proportion (ten per cent) of farmers who expected an increase in payments. In general, then, farmers were pessimistic and expected their CAP payments to decrease. Few expected an increase.

As discussed in Section 3.4.2 of this report, the potential connections between pessimism, farmers, and their perceived place in the world, in terms of CAP, government, the public and policy are issues to be explored in the later phases of this research, through the follow-on interviews with farmers.

4.3.2 Expectation by farm size and farm type

Table 4.13 and Table 4.14 show, using the WG categories for size and type, how different sizes and types of farm expected their CAP payments to change.

Table 4.13 Expectation of change in CAP-related payments by farm size

	Farm size					
Expectation of change	**Very large**	**Large**	**Medium**	**Small**	**Very small**	**Overall (1437)**
Increase	3 7%	7 10%	16 7%	73 12%	43 9%	**142** **10%**
Decrease	33 77%	49 71%	152 70%	371 62%	258 51%	**863** **60%**
Stay the same	4 10%	10 15%	30 14%	81 14%	114 23%	**239** **17%**
Don't know	2 5%	3 4%	19 9%	75 13%	73 14%	**172** **12%**
Refused	0	0	1 1%	2	18 5%	**21** **1%**
1437 Farms aware of CAP reform	**42** **3%**	**69** **5%**	**218** **15%**	**602** **42%**	**506** **35%**	**1437** **100%**

The most realistic farms tended to be the very large, with most expecting a decrease. By contrast, the smaller categories of farmers tended to be pessimistic, although, as the integrated income analysis at Section 3 shows, under flat rate payments many smaller farms should receive an increase in CAP-related payments.

Table 4.14 Expectation of change in CAP-related payments by farm type

	Farm type					
Expectation of change	**Dairy**	**Sheep**	**Beef**	**Sheep with beef**	**Other/mixed**	**Overall (1437)**
Increase	12 8%	52 12%	29 11%	25 9%	24 8%	**142** **10%**
Decrease	101 70%	257 57%	159 61%	193 68%	153 52%	**863** **60%**
Stay the same	23 16%	76 17%	35 13%	39 14%	66 23%	**239** **17%**
Don't know	9 6%	61 14%	39 15%	28 10%	35 12%	**172** **12%**
Refused	0 0%	5 1%	1 0%	1 0%	14 5%	**21** **1%**
1437 Farms aware of CAP reform	**145** **10%**	**451** **32%**	**263** **18%**	**286** **20%**	**292** **20%**	**1437** **100%**

Comparison between tables 4.13 and 4.14 is not straightforward, as farm type does not equate exactly to farm size (see Section 3 - WG income analysis 'farm typology'). For example, while the proportions for 'dairy' (table 4.14) are practically the same as those for 'very large' (table 4.13) and many dairy farms would fall into the very large category, there were considerable differences in raw numbers for the two categories

4.3.3 Quantifying expectation of change by farm size and farm type

In order to quantify the expectations of CAP reform-related change, the 1,005 survey participants who expected their CAP payments to change (i.e. not including those who expected no change) were asked by how much they expected them to change. Tables 4.15 and 4.16, show the proportions of those farmers expecting an increase by farm size and farm type respectively.

Table 4.15 Expecting an increase by farm size

	Farm size					
Expectation of change	**Very large**	**Large**	**Medium**	**Small**	**Very small**	**Overall (142)**
Increase by more than 20%	2 67%	5 71%	7 44%	30 41%	20 47%	**64** **45%**
Increase by less than 20%	1 33%	1 14%	7 44%	35 48%	19 44%	**63** **44%**
Expecting increase but don't know or refused	0 0%	1 14%	2 13%	8 11%	4 9%	**15** **11%**
142 farms expecting an increase	3 2%	7 5%	16 11%	73 52%	43 30%	**142** **100%**

Table 4.16 Expecting an increase by farm type

	Farm type					
Expectation of change	**Dairy**	**Sheep**	**Beef**	**Sheep with Beef**	**Other/Mixed**	**Overall (142)**
Increase by more than 20%	9 75%	21 40%	10 35%	9 36%	15 63%	**64** **45%**
Increase by less than 20%	2 17%	26 50%	14 48%	15 60%	6 25%	**63** **44%**
Expecting increase but don't know or refused	1 8%	5 10%	5 17%	1 4%	3 13%	**15** **11%**
142 farms expecting an increase	12 8%	52 37%	29 20%	25 18%	24 17%	**142** **100%**

As indicated at table 4.12, only ten per cent of farmers expected an increase in payments. Consequently, the base numbers for Tables 4.15 and 4.16 were low, particularly in the very large, large and medium farm sizes, and in the dairy farm type. The low numbers in these categories tended to support the WG income analysis,

which suggested that larger farms, many of which are dairy farms, would witness a decrease in payments.

Tables 4.17 and 4.18 show the proportions of those farmers expecting a decrease by farm size and farm type respectively.

Table 4.17 Expecting a decrease by farm size

	Farm size					
Expectation of change	**Very large**	**Large**	**Medium**	**Small**	**Very small**	**Overall (863)**
Decrease by less than 20%	7 21%	12 25%	52 34%	142 38%	93 36%	**306** **36%**
Decrease by more than 20%	26 79%	28 57%	78 51%	154 42%	106 41%	**392** **45%**
Expecting decrease but don't know or refused	0 0%	9 18%	22 15%	75 20%	59 23%	**165** **19%**
863 Farms expecting change	**33** **4%**	**49** **5%**	**152** **18%**	**371** **43%**	**258** **30%**	**863** **100%**

Table 4.18 Expecting a decrease by farm type

	Farm type					
Expectation of change	**Dairy**	**Sheep**	**Beef**	**Sheep with Beef**	**Other/Mixed**	**Overall (142)**
Decrease by less than 20%	61 60%	109 42%	69 43%	80 42%	73 48%	**306** **36%**
Decrease by more than 20%	27 27%	99 39%	53 33%	77 40%	50 33%	**392** **45%**
Expecting decrease but don't know or refused	13 13%	49 19%	37 23%	36 19%	30 20%	**165** **19%**
863 Farms expecting change	10 12%	257 30%	159 18%	193 22%	153 18%	**863** **100%**

Tables 4.17 and 4.18 support the WG income analysis in terms of the larger farm sizes. Greater numbers and proportions of the larger farm sizes expected decreases in payments. However, respondents in the categories predicted by the WG income analysis to receive increased payments tended to be pessimistic.

4.3.4 Quantifying expectation of change by diversification

Table 4.19 shows the different responses, in terms of expectation, between farmers that operated diversified enterprises and those that did not.

Table 4.19 Expectations of CAP reform by diversification

Expectation of change	Operate diversified enterprise (649)	Not operating diversified enterprise (788)	Total (1437)
Increase	10%	9%	10%
	68	74	142
Decrease	57%	63%	60%
	370	493	863
Stay the same	17%	16%	17%
	111	128	239
Don't know	14%	10%	12%
	90	82	172
Refused	2%	1%	1%
	10	11	21

The table shows that diversified farmers tended towards optimism. They were slightly more likely to expect an increase in CAP payments than non-diversified farmers and considerably less likely (by six percentage points) to expect a decrease in CAP payments. However, the proportion of diversified farms that did not know what to expect from CAP reform was above the overall figure.

Tables 4.20 and 4.21 show the proportions of those farmers with and without diversification expecting an increase and a decrease respectively.

Table 4.20 Expecting an increase by diversification

	Operate diversified enterprise (68)	Not operating diversified enterprise (74)	Overall (142)
Increase by more than 20%	47%	43%	45%
	32	32	64
Increase by less than 20%	43%	46%	44%
	29	34	63
Expecting increase but don't know or refused	10%	11%	11%
	7	8	15

Table 4.21 Expecting a decrease by diversification

	Operate diversified enterprise (370)	Not operating diversified enterprise (493)	Overall (863)
Decrease by less than 20%	44%	47%	45%
	161	231	392
Decrease by more than 20%	36%	35%	35%
	134	172	306
Expecting decrease but don't know or refused	20%	18%	19%
	75	90	165

As expected the results shown at Tables 4.20 and 4.21 reflect those in Table 4.19, with farmers with diversification tending to be, in general, more optimistic.

Taken together these 'expectation' analyses support the analyses in Section Three, which suggest that larger dairy farms were more focused on agricultural production, less dependent on SFP, performed well economically, possessed greater business awareness, and were more realistic and better informed about CAP reform, compared with both the smaller types of farm and sheep and cattle farms.

More broadly, these 'expectation' analyses, together with the income analysis in Section

3, point to a certain degree of uncertainty concerning how the proposed changes to CAP payments may affect farms. This uncertainty is indicated by the undue pessimism and by the relatively high proportions amount of farmers who did not know what changes to their payments they may expect.

These issues and their implications for WG policy will be explored in the follow-on interviews.

4.3.5 Responses to hypothetical changes in CAP payments

All 2,402 participants in the survey were given scenarios for CAP payment change and asked how they would respond to each in turn. To assist them, a number of possible responses were suggested. The scenarios were:

Payments increase by less than 20 per cent

Payments increase by more than 20 per cent

Payments decrease by less than 20 per cent

Payments decrease by more than 20 per cent

Table 4.22 tabulates the suggested responses. Note that participants were allowed more than one response. Also, some categories had low counts and in order to capture these responses, percentages, in this table, are not rounded to whole numbers.

Table 4.22 Farmers' responses to hypothetical scenarios of payment change

	Decrease by more than 20%	Decrease by less 20%	Increase by less 20%	Increase by more than 20%
	%	%	%	%
Business as usual	34.0	52.2	64.3	51.4
Leave farming	20.1	7.0	1.0	0.6
Increase scale of existing agricultural operations	2.2	2.1	5.0	9.0
Reduce scale of existing agricultural operations	8.5	7.6	0.8	0.8
Buy new farm equipment	0.2	0.3	5.0	10.2
Seek more land	0.4	0.4	4.3	9.3
Intensify existing agricultural operations	3.2	3.4	2.4	3.7
Build more farm buildings	0.2	0.2	4.0	7.8
Reduce intensity of existing agricultural operations	5.3	5.5	0.7	0.6
Start new diversification activities	2.8	2.8	1.8	3.5
Give up land	3.5	1.9	0.5	0.3
Expand existing diversification	1.9	1.5	0.9	1.2
Change my type of farming	2.0	1.5	0.5	0.6
Buy more farm inputs and services locally – within 25 miles	0.1	0.2	1.3	2.0
Reduce diversification activities	0.8	0.8	0.1	0.1
Sell more farm products and services locally – within 25 miles	0.3	0.4	0.2	0.2
Buy more farm inputs and services from outside the local area	0.0	0.1	0.3	0.3
Sell more farm products and services outside the local area	0.2	0.1	0.0	0.0

Survey participants also offered responses. In the cases of decreases, among these 'other' responses were ideas to cut costs and find efficiencies, reduce staffing levels, and take on more off- farm work and alternative non-farming employment. For increases in payments, 'other' responses included ideas to improve the business in terms of better quality livestock and equipment, to invest and grow the business, to employ more staff, to pay-off debts, and to focus on environmental and conservation issues. For all four scenarios the proportions of 'Don't know and refused' was between 13 per cent and 16 per cent of participants.

Table 4.23 shows the proportions of interviewees who responded to different combinations of the scenarios.

Table 4.23 Responses of famers to different combinations of payment

	Yes to at least one scenario		Yes to one increase scenario		Yes to one decrease scenario		Yes to all scenarios	
Business as usual	1873	78%	1646	69%	1313	55%	**546**	**23%**
Leave farming	511	21%	31	1%	**497**	**21%**	4	0%
Increase scale of existing agricultural operations	315	13%	253	11%	81	3%	3	0%
Reduce scale of existing agricultural operations	313	13%	34	1%	287	12%	0	0%
Buy new farm equipment	272	11%	270	11%	9	0%	3	0%
Seek more land	252	10%	244	10%	16	1%	2	0%
Intensify existing agricultural operations	207	9%	112	5%	110	5%	3	0%
Build more farm buildings	209	9%	208	9%	5	0%	2	0%
Reduce intensity of existing agricultural operations	216	9%	29	1%	198	8%	1	0%
Start new diversification activities	191	8%	99	4%	106	4%	2	0%
Give up land	119	5%	18	1%	104	4%	1	0%
Expand existing diversification	102	4%	40	2%	69	3%	1	0%
Change my type of farming	87	4%	21	1%	70	3%	1	0%
Buy more farm inputs and services locally – within 25 mile	66	3%	63	3%	5	0%	1	0%
Reduce diversification activities	36	1%	5	0%	32	1%	0	0%
Sell more farm products and services locally – within 25 miles	20	1%	7	0%	14	1%	0	0%
Buy more farm inputs and services from outside the local area	14	1%	11	0%	3	0%	0	0%
Sell more farm products and services outside the local area	6	0%	0	0%	6	0%	0	0%

The salient point from the table is the high proportions of farmers who intended to continue with 'Business as usual' under most circumstances. In addition, a high proportion of those who said 'yes' to a decrease scenario planned to leave farming. These key responses are discussed below.

4.4 Key Responses to Hypothetical Changes in Cap Payments

From Tables 4.22 and 4.23 the leading responses were those for 'Business as usual' and 'Leave farming'. The following analysis further explores these responses.

4.4.1 Business as usual

From the table it is clear that many farmers would continue with 'business as usual' whatever changes to their CAP payments they may experience following reform. While the proportions for 'business as usual' were not as high in the cases of decrease, it was still the case that 34 per cent would continue 'business as usual' faced with a significant decrease in excess of 20 per cent. The analysis explores 'Business as usual' in terms of farm size, type and typology; off-farm incomes; and diversification.

4.4.1.1 Business as usual and farm size, type and typology

Given the high proportions of farms that would continue 'business as usual' under any of the four scenarios, Table 4.24, 4.25 and 4.26 break down the data by WG farm size, farm type and WG farm typology respectively. In total, 546 (23 per cent) of farms opted for Business as usual [BAU] under any of the four scenarios.

Table 4.24 Proportions of farms opting for Business as usual [BAU] by WG farm size

Farms opting for BAU	Very large	Large	Medium	Small	Very small
546	1%	3%	10%	32%	53%

Table 4.25 Proportions of farms opting for Business as usual [BAU] by WG farm type

Farms opting for BAU	Dairy	Sheep	Beef	Sheep with Beef	Other/Mixed
546	8%	30%	19%	13%	30%

Table 4.26 Proportions of farms opting for Business as usual [BAU] by WG farm typology

Farms opting for BAU	Larger – dairy	Larger - sheep and cattle	Larger – others	Small – sheep	Small – others	Very small
546	6%	5%	3%	10%	22%	53%

Taking the three tables together, it is apparent that the farms that would opt to continue with 'business as usual' tended to be small and very small, sheep and other/mixed farms, and small and very small in the WG typology. By contrast, very large and large farms, dairy, and the three larger categories of the WG typology had low rates opting for 'business as usual'. These findings concur with earlier analyses in this report, which show that larger and dairy farms tended to hold more realistic expectations concerning CAP reform

4.4.1.2 Business as usual and Off-farm incomes

The analysis now explores the potential relationship between farms opting for BAU and off-farm incomes. This analysis is multi-layered. The first layer is:

Of the 546 farms opting for BAU under all scenarios, 190 had off-farm incomes = 35 per cent.

That is, more than one-in-three farms that would continue with business as usual under any circumstances had sources of off-farm income. This is a high proportion.

The second layer of analysis shows, using the categories farm size, type and WG typology:

(i) How many farms in each category opted for BAU

(ii) The proportion of farms in (i) that had off-farm incomes

Tables 4.27, 4.28 and 4.29 display these data.

Table 4.27 Business as usual [BAU] cross-tabulated with Off-farm income by farm size

	Total	Very large	Large	Medium	Small	Very small
BAU farms	546	6	17	56	177	290
Number with Off-farm income	190	5	4	18	54	109
Proportion with Off-farm income	35%	83%	24%	32%	31%	38%

Recall from Table 2.4 that 53 per cent of 'very small' farms opted for BAU, together with 32 per cent of 'small farms'. These proportions were considerably higher than the other farm types. Table 4.27 shows that

'very small' farms and 'small' farms that opted for BAU, together with BAU 'medium' .

farms, had around the expected proportion (35 per cent) of farms with off-farm income. Arguably, the high figure of 83 per cent for 'very large' farms was distorted by the low numbers in this category.

Table 4.28 Business as usual [BAU] cross-tabulated with Off-farm income by farm type

	Total	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
BAU farms	546	43	164	104	71	164
Number with Off-farm income	190	18	53	37	15	67
Proportion with Off-farm income	35%	42%	32%	36%	21%	41%

From Table 4.25 we can see that sheep, beef and other/mixed farms had high proportions that opted for BAU. Again, the proportions in these categories that had off-farm incomes were either just below or higher than the overall proportion of 35 per cent. Dairy farms that opted for BAU and had off-farm incomes were high at 42 per cent, although numbers in this category were low.

Table 4.29 Business as usual [BAU] cross-tabulated with Off-farm income by WG farm typology

	Total	Larger – dairy	Larger - sheep and cattle	Larger – others	Small – sheep	Small – others	Very small
BAU farms	546	34	28	17	56	121	290
Number with Off-farm income	190	15	8	4	15	39	109
Proportion with Off-farm income	35%	44%	29%	24%	27%	32%	38%

When the farms opting for BAU were grouped using the WG typology, the proportions with off-farm incomes were generally close to the overall of 35 per cent. Only 'larger-others' at 24 per cent was appreciably lower – numbers in this category were low. The 44 per cent for 'larger-dairy' concurs with the 42 per cent

for ‘dairy’ in Table 4.28 – numbers were similar in both categories.

Taken together, that 35 per cent of BAU farms overall had off-farm incomes and that the categories of farms that had the highest proportions of BAU tended to have off-farm incomes suggests that off-farm income was a factor in planning to continue with ‘business as usual’. A possible explanation is that off-farm income was perceived as insurance or insulation against variations in farming incomes and subsidies.

4.4.1.3 Diversification, BAU and off-farm incomes

In terms of diversification, the data show that of the 546 farms opting for ‘business as usual’ [BAU] those not operating diversified enterprises were more likely to opt for BAU than those that operated diversified enterprises. The proportions were 57 per cent (309 farms) and 43 per cent ((237 farms) respectively.

With regard to off-farm incomes, of the 926 farms with off-farm incomes, 49 per cent (452 farms) operated diversified enterprises and 51 per cent (474 farms) did not.

Table 4.30 brings together these three layers of analysis and shows the proportions of diversified farms that opted for BAU under all four scenarios that also had off-farm incomes.

Table 4.30 Diversification, BAU and Off-farm incomes

	Off-farm incomes			Total
	Yes	**No**	**Refused**	
Number of Diversified farms opting for BAU	92	141	4	237
Proportion	39%	59%	2%	100%

Broadly, this analysis supports the ideas underlying diversification, which suggest that farms should move away from agricultural ‘business as usual’ and look for other farm-related enterprise. The analysis also suggests that off-farm incomes were not a dominant factor in choosing to diversify.

4.4.1.4 Summary of Business as usual

The findings concerning 'business as usual' reveal an innate conservatism manifested in a strong apparent desire among farmers to continue business as usual regardless of the potential financial ramifications of CAP reform, although off-farm income appeared also to be a factor. Farmers might alter the intensity of their farming but not its nature. But there must be questions about how realistic these plans are in view of the income and profit and loss data analyzed in Section Three, which show, for example, that less than half (46 per cent) of farm businesses made a profit, without subsidies and the income from diversified activities. Table 4.31 shows the profit and loss data for those 546 farms that intended to continue with 'business as usual' under all of the 'increase' and 'decrease' scenarios: i.e. under any circumstances.

Table 4.31 Profit and Loss – farms opting for Business as Usual for all scenarios

Farms opting for BAU	Profit	Break-even	Loss	Don't know	Refused
546	282	99	141	2	22
100%	52%	18%	26%	0%	4%

Similarly to the overall figures, the proportion of farms opting for 'business as usual' [BAU] that made a profit was around 50 per cent. Although greater proportions of the BAU subset made a profit than the across the whole survey (52 per cent compared with 46 per cent), this figure still suggests a less than realistic outlook, particularly when more than a quarter (26 per cent) of farms opting for BAU made a loss.

The apparent conservatism appeared to extend to the buying and selling of inputs and produce, with extremely low proportions planning to buy or sell more locally. This has potential implications for WG policy, which will be explored in the follow-on interviews of the later phases of research. These interviews should also, if possible, explore what farmers plan to do with any increased CAP payments, if they are not going to expand.

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4.4.2 Leave farming

To leave farming is a momentous decision and not one to be made lightly. The proportion of respondents who would leave farming increased sharply with the scale of potential decrease in CAP payments. Faced with a decrease of less than 20 per cent, seven per cent would leave farming but with a larger decrease in excess of 20 per cent, slightly more than 20 per cent of farmers would leave the industry. In total, 497 farmers would leave farming if faced with either of the scenarios for a decrease in CAP payments

These were relatively high proportions of potential 'leavers' and there are potential implications here for WG policy in terms of the resilience of the Welsh farming industry.

Numbers opting to leave farming for both the 'increase in payments' scenarios were low.

Table 4.32 shows cross-tabulations for the variable 'Leave farming' and the age-group variables. As the counts in some groups were low, percentages of less than one are not rounded to whole numbers.

Table 4.32 Proportions opting to leave farming in the event of Decreases/Increases in CAP payments by age group

		Proportions opting to leave farming – decrease/increase scenarios			
Age group	**Count in age group**	**Decrease by more than 20%**	**Decrease by less 20%**	**Increase by less 20%**	**Increase by more than 20%**
Under 45	287	19%	8%	1%	0.3%
45 to 54	614	23%	7%	0.7%	0.7%
55 to 64	740	18%	5%	1.2%	0.8%
65 or over	736	20%	8%	0.8%	0.5%
Refused	25	-	-	-	-
Overall	2402	20%	7%	1%	0.6%

There were 287 survey respondents under the age of 45: 19 per cent (53) of these would choose to leave farming if their payments decreased by more than 20 per cent. This was slightly lower than the overall proportion of 20 per cent. The table shows that age was a not a differentiating factor in the decision to leave farming. For both scenarios of decrease in CAP payment there were relatively small differences across the age groups and these differences pivoted on the overall figure. The largest difference was five percentage points between the 45-54 and 55-64 age groups, with those in the older group less likely to leave farming. There are implications here for WG policy; apparently, the draft reforms suggest that younger farmers are to be encouraged.

The proportions of farmers opting to leave farming in the event of an increase in CAP payments were very low, with few in any age category achieving one percent. The most likely to leave under these circumstances were those aged between 55 and 64; those with succession plans; and those with rented farms, although, unaccountably, those with mixed owned/rented farms were the most likely of all to leave in the scenario of 'Increase by more than 20 per cent'. Arguably, those who opted to leave farming following increases in CAP payments might have already decided to leave farming for other reasons.

Cross-tabulations for succession show that across all four scenarios of decrease and increase those respondents without succession plans were slightly more likely to leave farming. Only in the case of 'a decrease of more than 20%' was there an appreciable difference of four percentage points between those with and those without succession plans. For the other scenarios the difference was a fraction of a percentage point.

In term of tenure, cross-tabulations show that, unsurprisingly, those respondents whose farms were in family ownership were

least likely to leave farming. The ties of land and family were apparent in the WRO 'Farming Household Survey' (2010) and will be explored further in the follow-on interviews to be conducted in the later stages of this project.

Given the low numbers that would leave farming in the event of an increase in CAP payments, Tables 4.33, 4.34 and 4.35 focus on those opting to leave farming if their CAP payments decreased, and break down the data for by WG farm size, farm type and WG farm typology respectively.

Table 4.33 Proportions opting to leave farming in the event of Decreases in CAP payments by WG farm size

Farms opting to leave farming	Very large	Large	Medium	Small	Very small
497	1%	3%	12%	46%	38%

Table 4.34 Proportions opting to leave farming in the event of Decreases in CAP payments by WG farm type

Farms opting to leave farming	Dairy	Sheep	Beef	Sheep with Beef	Other/Mixed
497	8%	32%	20%	22%	18%

Table 4.35 Proportions opting to leave farming in the event of Decreases in CAP payments by WG farm typology

Farms opting to leave farming	Larger – dairy	Larger - sheep and cattle	Larger – others	Small – sheep	Small – others	Very small
497	7%	8%	2%	15%	31%	38%

Taking Tables 4.33, 4.34 and 4.35 together, they reveal that very large, large and medium size farms, dairy farms, and the larger categories of the WG typology were far less likely to leave farming in the event of a decrease in CAP payments than very small, small and sheep farms. Given that the majority of farms in Wales fall into those categories more likely to leave farming if their CAP payments decrease, this should be of concern to WG policy makers.

4.4.2.1 Off-farm income and leaving farming

Of the 497 farmers who opted to leave farming if their CAP payments were to be decreased, under either of the two decrease scenarios, 40 per cent (199 farms) had off-farm incomes. This was a high proportion and suggests that having off-farm income was a factor in leaving farming.

4.4.3 Other responses

Other potential responses to CAP reform such as increase/decrease agricultural operations and build more farm buildings appeared to be directly related to increases and decreases in CAP payments. Relatively small proportions would alter their diversification activities, and even smaller proportions would alter their selling and buying of products and services either locally or further afield.

There were relatively high proportions of farmers planning to buy new farm equipment in the event of increases in CAP payments (five and ten per cent). Where they planned to buy this equipment - locally or using larger and perhaps more specialized suppliers - will be explored in the follow-on interviews.

Few farmers - five per cent at most - planned to give up land. This has potential implications for WG policy in terms of land supply and new entrants to farming.

4.5 Additional Information about Cap

4.5.1 Concerns about the greening proposals of CAP

All survey participants were asked about their main concerns about the greening proposals of the CAP. Table 4.36 shows these results. Note that multiple responses were allowed; consequently, the 'proportions of all farms' sum to more than 100 per cent.

Table 4.36 Main concerns about the greening proposals of CAP

	Count	Proportion of all farms
None/no concerns	1124	47%
Will be too restrictive/complicated	230	10%
Reduction in food production/taking land away from food production	223	9%
Need more information	201	8%
Not practical/unrealistic	119	5%
Too much emphasis on the environment	105	4%
Reduction in payments/grants/subsidies	102	4%
Advantages for Big Farms Disadvantage for Small Farms Younger Farmers	93	4%
Too much red tape/paperwork/too bureaucratic	65	3%
Don't agree with it/it's unfair/I'm just concerned about it	48	2%
Reforms being made by people outside of farming	38	2%
Additional costs required to qualify/have to spend more to qualify	29	1%
Need a better balance between food production and environment	28	1%
Will affect food prices and market prices	18	1%
Other	69	3%

Table 4.36 shows that approaching half (47 per cent) of the survey had no concerns about the greening proposals. The table also codes the concerns that were expressed. In the text that follows the concerns of farmers about the greening proposals of CAP are illustrated by a selection of quotations from respondents. These quotations by farmers are not representative of farmers in Wales; rather, they serve to illustrate some of the issues that concern farmers. While the quotations have been anonymised, they are labeled by gender, age, farm size, farm type, household income and whether or not the farm had off-farm income. The text is arranged into a series of themes. There is some overlap between themes.

The principal concerns were that there would be a reduction in food production resulting from land being removed from food production and that the greening proposals would be too restrictive and complicated. As this farmer commented:

> *'They will be too restrictive and complicated. I can't use fertilizer, can't spread muck and I am limited*

on what can be planted. They are telling me what to do."

And this respondent was concerned about:

'Accidentally falling foul of one of the rules and being penalised for it.' (Male, 55-64, Very Small, Other/mixed, 21k-31k, off-farm income)

Some comments were specific and technical:

'I am specialist horticulture. I rotate my field once every five years, which to them means it doesn't make it environmental friendly - when it really is.' (Male, 45-54, Large, Other/mixed, 31k-52k, off-farm income)

There was a range of concerns about a potential reduction in food production, as this selection of quotes indicates:

'Find them unnecessary - losing ten per cent of land use.' (Male, 45-54, Very large, Other/mixed, 31k-52k, off farm income)

'Grazing land shouldn't be put in the greening proposals.' (Male, 45-54, Large, Dairy, 31k-52k, without off-farm income)

'I simply cannot give more land for environmental purposes. We are environmentally friendly anyway.' (Female, 65+, Very small, Other/mixed, without off-farm income)

'I think they should be talking about food production. We've planted thousands and thousands of hedging plants and double fencing. We've done a wonderful job. I think they should be taking that into account.' (Male, 65+, Small, Sheep)

'I'm concerned that too much land is being taken out of agriculture when it should be producing food. There's a lot of talk of building on 'green' sites when housing is built on 'brown' sites. No one takes into account that more land is being taken out for agri-environment schemes than land being taken out on greenfield sites.' (Male, Very small, Sheep, 15.5k-21k, without off-farm income)

'I'm not against greening in principle but sooner or later there will be a shortage of food. I feel we are being encouraged to go in the green direction but in ten or 15 years we will be asked to go in the other way. The EU farming budget is spent on greening rather than farming practices for political reasons rather than economic ones.' (Male, 65+, Very small, Sheep, <10k, without off-farm income)

'It could take too much land out of production in a situation where they are telling us the world is going to be running short on food. Encourages animals like rabbits and vermin, which takes further land out of production.' (Male, 45-54, Small, Other/mixed, 21k-31k, off-farm income)

'I think they tend to consider animals and wildlife more than the farmers themselves.' (Male, 65+, Very small, Beef, without off-farm income)

'It would undo a lot of work put down by our predecessors, clearing the hills to make them suitable for grazing.' (Female, 35-44, Small, Sheep with beef, <10k, without off-farm income)

'It's taken a lifetime to create the farm and they tell us to put some land back to nature; nature takes land back of her own accord. It's an ongoing battle to prevent this from happening - now they tell us to let it happen.' (Male, 65+, Small, Sheep with Beef, 31k-52k, without off-farm income)

'Money shouldn't be going to the greening concerns. It should be going on research on more efficient use of the fertiliser and rain and ground we already have.' (Male, 55-64, Small, Sheep with beef, 10k - 15.5k, without off-farm income)

'Ploughing of pasture is a major concern.'(Male, 35-44, Medium, Other/mixed, 21k-31k, without off-farm income)

'That the people doing it don't understand how it works and they're concentrating more on environmental rather than food production. They want to remember the countryside looks like it does because of farmers.' (Male, 35-44, Small, Beef, 21k-31k, without off-farm income)

'That they are taking emphasis off food production. They need to allow us to burn scrub land to stop fires. Too many trees that are dangerous near roads.' (Male, 65+, Small, Sheep, 21k-31k, without off-farm income)

'The implications may be that farmers will intensify.' (Male, 45-54, Small, Sheep with beef, 31k-52k, off-farm income)

'There is an encouragement to farming less intensive. There is restriction of stocking intensity, over encouragement of ecology, restrictions on ploughing, nitrogen usage level - totally against intensive farming. The total progress that has been made in farming over 40 years is going backwards.' (Male, 35-44, Small, Sheep with beef, 21k-31k, off-farm income)

Another set of concerns focused on the relations between the CAP reform greening measures and Glastir and other agri-environmental schemes. A related concern was that there was an apparent emphasis on paying people to change, but those who were already undertaking 'greening' would not receive greening payments.

'All the environmental work that we've done thus far - we're not going to be paid for that any more. That's how it appears.' (Male, 45-54, Very small, Other/mixed, 21k-31k, without off-farm income)

'I have concerns that they will have to re-write Glastir.' (Male, 45-54, Small, Other/mixed, off-farm income)

'Conflict with the Glastir schemes, the tree cropping rule, the percentage of features for ecological ground and not being able to plough premium pastures.' (Male, 35-44, Small, Sheep with beef, 21k-31k, without off-farm income)

'How they're implemented - there seems to be more points for things you're going to do rather than the things you're actually doing. There's more emphasis on changing to green rather than maintaining your green activities.' (Male, 55-64, Very small, Beef, 52k+, without off-farm income)

'I don't like the fact it's 30 per cent, it's too high and it treads on the toes of the Glastir scheme in Wales.' (Male, 45-54, Medium, Sheep, 52k+, without off-farm income)

'I have been a part of Tir Gofal scheme for some years now so I

have already done the work, so I am ahead of the game, and I am concerned I will be penalised for having already done the work. My land may not be suitable for some of the diversification in crops that they are proposing.' (Male, 45-54, Small, Beef, 15.5k-21k, without off-farm income)

'I suppose the way they laid them out. When they had the Glastir meetings and some of the things seemed wrong, like double fencing if you had already done it you wouldn't receive the grant money.'(Male, 55-64, Very small, Other-mixed, without off-farm income)

'Managing the change from my previous scheme to the new one, and how the two schemes are going to integrate.' (Male, 55-64, Very small, Other/mixed, 31k-52k, off-farm income)

'Money that is being given to people who have done no greening measures before. Whereas farmers who have done it before don't get anything.' (Female, 65+, Very small, Other/mixed, <10k, without off-farm income)

'Moving Tir Gofal to Glastir.' (Male, 65+ Very small, Beef, <10k, without off-farm income)

'That it will conflict with Glastir, which I have recently joined.' (Male, 35-44, Small, Sheep, 31k-52k, off-farm income)

'That we'll get bypassed. We've got over 12 acres of wood and under Glastir it doesn't count for anything. You get more for the change to green rather than having those features already in place.' (Male, 45-54, Small, Sheep, 31k-52k, without off-farm income)

That we'll probably have to go into some sort of conservation scheme. But in Wales there is only Glastir, which isn't a very good scheme. I think a stewardship scheme like the ones in England would be better. (Female, 45-54, Small, Sheep with beef, 31k-52k, without off-farm income)

'The greening proposals will not take account of the good work with previous agri-environmental schemes. If we start from a clean sheet and expect further work that will cause major problems.' (Male, 65+, Large, Sheep, 15.5k – 21k, without off-farm income)

'They don't seem to take into account previous measures taken over the past years. I have done a lot of work with hedges and double fencing that will not be considered.' (Male, 55-64, Very small, Sheep, 52k+, off-farm income)

'They say they won't allow the ones we've already done.' (Male, 65+, Very small, Beef, 15.5k -21k, without off-farm income)

'Too complicated and those farmers who have over the past 20 years have been environmental friendly in farming are not adequately compensated.' (Male, 65+, Very small, Other/mixed, 10k – 15.5k, off-farm income)

'We have carried out greening and helped the environment. We now won't be able to claim anything extra on our ground.' (Female, 55-64, Small, Sheep, 21k-31k, off-farm income)

'We hope that Glastir will be counted as greening.' (Female, 45-54, Small, Sheep with beef, 31k – 52k, off-farm income)

'We've done work for Glastir so I'd like greening to take account of that.' (Male, 35-44, Very small, Sheep with beef, 52k+, off-farm income)

'I feel that they are using the stick instead of the carrot. There are so many regulations. We have undertaken our own environmental practices already, but because we have done it before the scheme, then we won't be able to enter those areas into the scheme.' (Male, 45-54, Small, Other/mixed, 10k – 15.5k, off-farm income)

The reference in the quote directly above to carrots and sticks, reflected concerns that farmers were being forced into the CAP greening.

'Becoming too forcibly applied, less incentive more compulsory.' (Male, 35-44, Large, Dairy, 31k – 52k, off-farm income)

'A lot of it is fairly mindless, and a lot of it we already do anyway. We are being forced into doing things which are nonsensical.' (Female, 55-64, Small, Sheep, off-farm income)

'The main concerns are, we would be forced to do it rather than have a choice and there's always the risk of forgetting to produce.' (Female, 45-54, Very small, Sheep, 21k-31k, without off-farm income)

'Huge amount being done already. It should be voluntary and the emphasis is moving away from producing food. A lot is given to wildlife and nature already.' (Female, 55-64, Medium, Other/mixed)

A concern, discussed later in this report under 'Farmers' visions for the future', was that of the creation of a class of rent-seekers. That is, landowners who received payments for land that they did not farm: a category of non-farming farmers somewhat analogous to the infamous 'non-producing producers' of the milk quota.

'I feel that it gives payments meant for farming to people who don't actually farm.' (Female, 65+, Small, Beef, without off-farm income)

'I think all the payments should go to active farmers' (Male, 45-54, Medium, Sheep with beef, 31k-52k, without off-farm income)

'It's taking away money from active farmers and giving it to land owners.' (Male, 35-44, Very small, Other/mixed, <10k, without off-farm income)

'That people who actually work the land (as opposed to just rent it out) still don't get recognition and any payments for doing so.' (Female, 55-64, Very small, Other/mixed, 31k-52k, off-farm income)

'That money should be coming to the people farming rather than going to the people that are not farming.' (Male, 65+, Small, Beef, without off-farm income)

'The whole thing should be scrapped. It puts money into people who farm from their front windows - they don't have to do anything.' (Female, 35-44, Very small, Beef, 31k-52k, off-farm income)

The renewable energy provisions of CAP greening were criticized.

'I wouldn't like to see us flooded with alternative power arrangements, what do you do if the wind stops? I would like to see more use of hydro-power.' (Male, 65+, Very small, Sheep, 15.5k – 21k, without off-farm income)

'I don't think the technology is good enough to spend £8,000 on a solar powered thing on my roof.' (Male, 45-54, Very small, Beef, off-farm income)

'The renewable energy schemes are counter-productive. The country side is damaged for little effect. And also the aforestation of agricultural land is a waste.' (Male, 55-64, Small, Other/mixed, 21k-31k, off-farm income)

'Wind-farming can result in outcry from towns people due to the close proximity to the town.' (Male, 65+, Small, Sheep, 21k-31k, without off-farm income)

'Worried about a nearby wind farm. The cables are coming right though my land and I have had no say.' (Female, 55-64, Very small, Other/mixed)

There were those who argued against CAP payments in favour of better market prices, and those who argued that CAP subsidies should be separated from greening.

'I feel the CAP is not a viable basis for agriculture and it should be done away with altogether.' (Female, 55-64, Small, Other/mixed, 35-44, off-farm income)

'I think it's all been very artificial all along. I don't feel like I should even get a subsidy anyway. I think a reform has been a long time coming.' (Female, 55-64,Very small, Other/mixed, 15.5k – 21k, without off-farm income)

'I think the CAP should be separate from the greening matter.' (Male, 45-54, Small, Sheep, 21k-31k, off-farm income)

'It should not be part of the single farm payment. It should be part of the agri-environment schemes.' (Male, 55-64, Small, Sheep, 52k+, off-farm income)

'I prefer to have better market prices than CAP subsidies.' (Male, 65+, Very small, Beef, 10k-15.5k, without off-farm income)

'They want us to produce more food, but are tying our hands with the greening effect. It should be separate from the CAP payments. There are areas where you could do conservation corners. They should affect sections of the farm rather than the whole thing.' (Male, 35-44, Medium, Sheep with beef, without off-farm income)

A small number of respondents (six) argued that the greening proposals "do not go far enough" and that money would spent in the wrong places.

'They don't go far enough and they are going to be spending the money on farms that are not green.' (Male, 45-54, Very small, Other/mixed, 52k+, without off-farm income)

Finally, on this topic, there was a raft of general policy concerns, some of which reiterated concerns already expressed above.

'No flexibility, no food production element in it at all, the other main issue is there are no opt-out clauses for people retiring or giving up land.' (Male, 55-64, Medium, Dairy, 52k+, off-farm income)

'The effect it could have on the pillar two.' (Male, 45-54, Medium, Sheep, 21k-31k, off-farm income)

'That it is based on a European template rather than British or Welsh templates, and the most commonly voiced concern would be that greening measures that have

already been made have not been recognised. Policy makers lose sight that production is paramount in a hungry world.' (Male, 45-54, Medium, Sheep, off-farm income)

'That other member states in the EU do not look to green Pillar One payments. The Welsh government seems to blindly believe that the EU will not consider schemes such as 'Glastir' as double payments. Their track record is not very good so only time will tell.' (Male, 65+, Small, Sheep, 31k-52k, without off-farm income)

'That they are going to increase modulation and there won't be enough money to see through the policies that we want to see for greening.' (Male, 55-64, Large, Dairy, 15.5k – 21k, off-farm income)

'That we aren't being consulted.' (Male, 55-64, Medium, Dairy, 15.5k - 21k, off-farm income)

'The cost of engaging people to come up with phrases that deliver no meaning or add no value and they won't deliver any actual greening. They will make sure that the least deserving maintain or receive the larger share of any money available for bio-diversity or greening without actually delivering green improvements.' (Male, 55-64, Very small, Sheep with beef, 15.5k – 21k, without off-farm income)

'The likelihood is the people with small farms are exempt from environmental schemes, whereas they are the ones who are more willing to undertake greening measures. The larger scale farmers are having it made harder for them to produce.' (Female, 45-54, Very small, Sheep with beef, 65+, off-farm income)

'They are not going to deliver on the aims of the scheme as they are not targeted enough and are forced. I also think that the payments should all be going into Pillar Two and not Pillar One brackets. (Male, 35-44, Small, Sheep with beef, 21k-31k, off-farm income)

'They are unfair. We do not require any more. We already have various environmental works. The work we have already done should allow us to not need any more greening. I have been to many meetings, and we are hopeful that our existing greening will be sufficient. We have not got a committed minister for agriculture in Wales as they do in England. The current part-time minister does not seem interested in the agricultural sector.' (Male, 45-54, Small, Beef, 52k+, off-farm income)

'Too much emphasis on something that us farmers already are doing. It shouldn't be such a large proportion of SFP with too many hoops to jump through which is why we haven't taken up Glastir. Politicians are out of touch with the situation. if there was a fair division of prices in the market place then we wouldn't need the subsidy. The direct beneficiaries of the subsidies are the supermarkets.' (Male, 45-54, Small, Sheep, 31k-52k, off-farm income)

'Well, I can't understand where they are coming from. They are complaining that the population is growing and food production could fall short, and yet they are trying to push all the measures that would reduce the amount we could produce. Rather than give payments into schemes the majority of farmers cannot claim, how about rewarding farmers for good basic farming practices.' (Male, 35-44, Medium,

Sheep with Beef, 31k-52k, off-farm income)

'You have a differentiation between the directors and those who are proposing the scheme itself. Too much box ticking. It would be better run by just one governing body.' (Male, 65+, Very small, Sheep, 52k+, without off-farm income)

'A bit half-baked. I don't think they necessarily take a long term view of global issues. Quite simplistic and don't take into account local conditions.' (Female, 55-64, Very small, Other/mixed, off-farm income)

'At the moment they're talking about greening over the whole area. I think it's wrong to 'green' grade one agricultural land. The area payments should be the same across Wales but the greening should be tiered. I accept that we should have a higher level of greening than elsewhere.' (Male, 65+, Small, Sheep, 31k-52k, without off-farm income)

Arguably, many of these concerns and the ways in which they were articulated by farmers imply action by WG in terms of both the dissemination of information, particularly as approaching one-in–ten respondents required more information; explanation and understanding of CAP policy and regulation; and explanation of the thinking behind some policy actions and their potential implications and outcomes.

4.5.2 Advice and support about CAP reform

Table 4.37 shows what advice and support concerning CAP reform survey participants required.

Table 4.37 Advice and support required

Type of advice and support	
None / I have all the information	**41%**
I need to know everything	**13%**
More detailed and accurate information	**31%**
Face to face meetings with farmers to explain CAP reform	**5%**
Facts and figures	**10%**

At 41 per cent, a relatively large proportion of the survey considered that they had enough information about CAP reform. By contrast, 13 per cent felt totally uninformed. However, these results must been seen in the context of results at section 4.2, Table 4.3 of this report, concerning awareness of and concern about the post-2013 CAP reforms, which suggest that the 41 per cent result here is a misconception. In section 4.2 a number of contradictions are discussed, with the analysis pointing to problems of business awareness, information and communication.

Another relatively large proportion (31 per cent) required more detailed and accurate information, which was similar to the request by a further five per cent for facts and figures. A small proportion argued that face-to-face meetings with farmers to explain CAP reform were required. Farmers' responses to this question are illustrated by quotes in the text that follows. Note that the question asked was 'what additional information and support would you like to be provided to help you plan and deal with CAP reform directly?' While some responses did not directly answer the question they have been deemed to be relevant to the topic.

Some respondents argued that the WG lacked agricultural expertise and did not empathize with farmers.

> *'We need a decent Minister of Agriculture who knows the ins and outs of farming. At the moment the people in charge of agriculture know nothing about farming and all the pitfalls.' (Male, 65+, Large, Dairy, without off-farm income)*

> *'We need a decent agricultural administrator in the Welsh Assembly, who understands farming.' (Male, 65+, Very small, Beef, 15.5k - 21k, without off-farm income)*

> *'I would like to see them put somebody in charge who knows what they're doing.' (Male, 55-64, Small, Sheep, 15.5k - 21k, without off-farm income)*

> *'We need knowledgeable people dealing with the questions.' (Male, 45-54, Large, Other/mixed, 21k-31k, without off-farm income)*

> *'We need some helpful people in the ministry office.' (Male, 45-54, Medium, Dairy, <10k, off-farm income)*

> *'I would like the MEPS fighting in our corner and taking our concerns forward.' (Male 35044, Medium, Sheep with beef, 31k-52k, off-farm income)*

> *'Think we need better representation. We need a minister to have a back bone to say no and fight for farmers.' (Male, 55-64, Very small, Other/mixed, 31k-52k, off-farm income)*

> *'They need to listen to the agricultural unions.' (Male, 45-54, Very large, Dairy, 15.5k – 21k, off-farm income)*

However, the farming unions were also criticized.

> *'The unions are not doing enough to support the farmers. The amount of paper work is a problem. We get inspections all the time, which affects production.' (Male, 65+, Medium, Beef, 15.5k – 21k, off-farm income)*

The information about CAP reform flowing from WG was considered by some to be inadequate.

> *'I would like it to be a lot clearer. It's up for negotiation and the goal-posts seem to be moving. WAG need to be a lot clearer about their objectives for Wales. Consultations with farming representatives need to be listened to more. Clarity is missing.' (Male, 55-64, Large, Dairy, 15.5k - 21k, off-farm income)*

> *'I would like to know what is ahead of us and the facts and timescale. We cannot make informed decisions until we know.' (Female, 65+, Medium, Beef, without off-farm income)*

Some respondents wanted specific information.

> *'Farmers across Wales are being encouraged to diversify but there is not enough help available to farmers, from the government, as to how to go about diversifying.' (Male, 55-64, Small, Sheep with beef, 52k+, without off-farm income)*

> *'We would like to know what they consider an active farmer is and small farmer and also more about the greening. We would also like to know about restrictions on permanent grass.' (Male, 55-64, Very small, Sheep, 31k – 52k, off-farm income)*

'I would like more information about what's going abroad as regards consumption of beef, sheep and lamb in order for me and Wales as a whole to plan.' (Male, 55-64, Very small, Beef, 10k-15.5k, without off-farm income)

Information was also required concerning succession.

'How to hand over to my son because of the new entrance scheme. To help plan for the future.' (Male, 55-64, Small, Sheep, 31k-52k, off-farm income)

'Help, advice and support with the process. There is very little support for people who are unexpectedly left a farm business.' (Female, 25-34, Very large, Other/mixed, 10k-15.5k, without off-farm income)

'I am fast coming to retirement age and my son will take over the farm. But there isn't enough emphasis for young farmers to take over.' (Male, 55-64, Medium, Sheep, 10k – 15.5k, off-farm income)

'Should have a lot of advice about the greening bit because people don't understand it fully.' (Male, 55-64, Very small, Other/mixed, 15.5k - 21k, without off-farm income)

This comment might have reflected old-fashioned thinking or a lack of broadband access.

'More things on paper and less on the computer.' (Female, 65+, Very small, Sheep, 10k-15.5k, without off-farm income)

And these respondents appeared to lack information about the time-scale of CAP reform.

'Needs a long transition between historic to area basis. Can't be one payment for the whole of Wales.' (Male, 55-64, Very large, Other/mixed, 52k+, without off-farm income)

'It needs as long a lead-in time to change as possible.' (Male, 35-44, Very large, Dairy, 21k-31k, off-farm income)

'The only thing they could give us is some time to plan it all out instead of doing it behind our backs overnight.' (Male, 35-44, Medium, Beef, 52k+, off-farm income)

Similarly to the comments about the greening proposals in the previous sub-section, there are implications here for WG's processes of dissemination of information concerning CAP reform.

4.5.3 Awareness of the 2014-15 Reference Year

The final question directly referring to CAP reform concerned the 2014-2015 Reference Year. All 2,402 survey participants were asked whether or not they were aware of it. Table 4.38 shows the results. The table follows the majority of tables in this report and percentages are rounded to whole numbers. Those 28 respondents, who for some reason refused to answer the question, have been absorbed into the 'not aware' proportion.

Table 4.38 Awareness of the 2014-15 Reference Year

Response	Count	Proportion
Aware	547	23%
Not aware	1827	77%
Refused	28	

At slightly more than one-in-five, awareness of the 2014-2015 Reference year was low.

The 547 farmers who were aware of the reference year were asked what plans they had made for it. Table 4.39 shows these results. Please note two points about this table. First, there were some multiple responses, therefore the count exceeds 547 (551). Second, in order to capture some responses, percentages are not rounded to whole numbers.

Table 4.39 Plans for the 2014-15 Reference Year

Plans	Count	
No plans	418	76.4%
Don't know Not enough information yet Will wait and see	40	7.3%
Business as usual Stay the same Do the same as last year	26	4.8%
Increase amount of land	16	2.9%
Increase livestock	9	1.6%
Claim as much reference as possible Ensure land has entitlements	9	1.6%
Maximise production Use as much permanent pasture as possible	5	0.9%
Reduce permanent pasture Plough up permanent pasture	4	0.7%
Reduce stock Cut costs Be as efficient as possible	6	1.1%
Retire	2	0.4%
Other	16	2.9%

The salient point from Tables 4.38 and 4.39 is the high degree of unawareness of and unpreparedness for the 2014-15 Reference Year. First, table 4.38 shows that 1,827 (77 per cent) of respondents were not aware of the reference year. Second, table 4.39 shows that, of the relatively low number (547 or 23 per cent) who were aware, 418 had not made any plans. Moreover, a further 40 'aware' respondents were waiting for more information before making plans. In effect, 84 per cent of those 'aware' of the

2014-15 Reference Year had not made plans for it. In addition, some responses in Table 4.39 suggest that some farmers might not have fully appreciated the implications of the reference year, even though they indicated that they were aware of it. For example, suggestions to increase/decrease livestock and to cut costs do not appear to have any relevance to the reference year as a basis for eligible land area to be claimed in the SFP.

There are potential implications for WG policy in terms of dissemination and business training.

4.6 Characteristics of the Farms and Farmers Surveyed:

Buying and Selling Trends

This sub-section examines characteristics of the farms and farmers surveyed. An important aspect of this was the economic power of farms, in terms of buying and selling.

4.6.1 Size and Location

The distribution of farm areas across the 20 hectare bands is illustrated by the histogram at Figure 4.2, and the numbers in each band are shown in the table below.

Figure 4.2b Area of farms surveyed

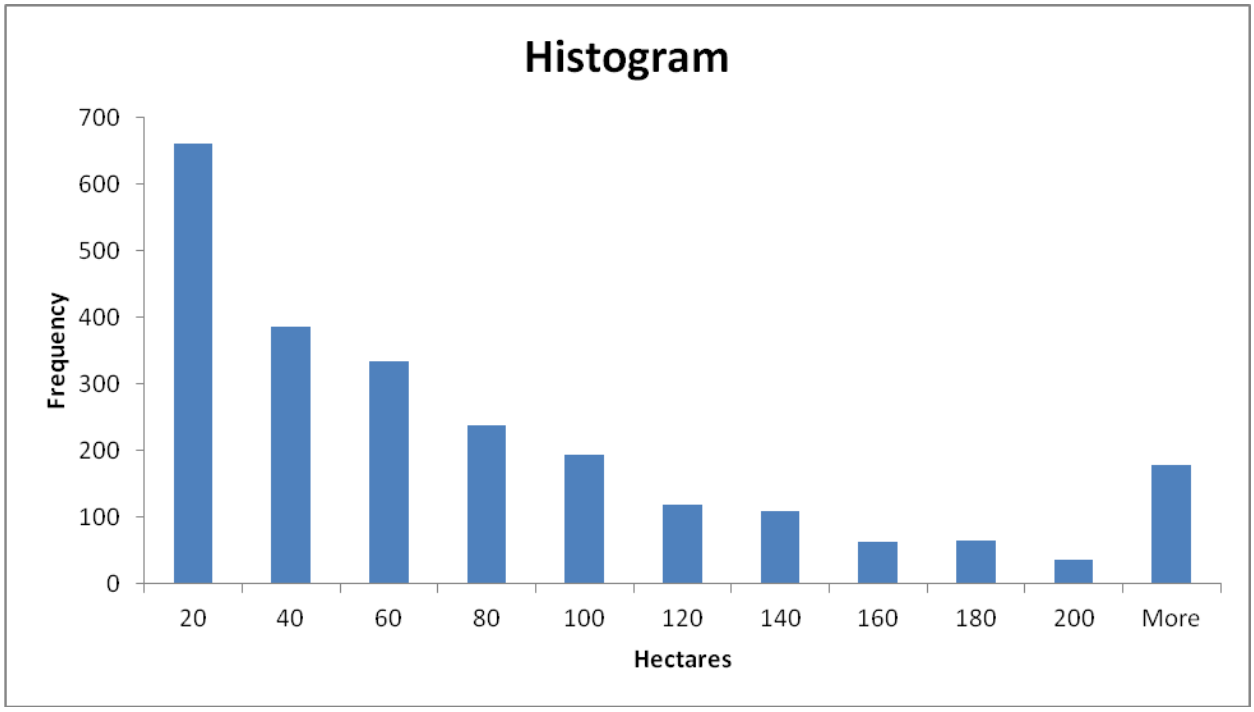

Table 4.40 Number of farms in each 20 ha band

Band (ha)	No of farms
20	661
40	386
60	335
80	237
100	194
120	119
140	110
160	63
180	64
200	36
More than 200	178
Total	**2,402**
	Don't know/ Refused =19

Note that a total of 402 farms surveyed (17 per cent) had an area of less than ten hectares.

Table 4.41, which repeats Table 2.3 in the Methods section, shows the number of farms surveyed in each of the regions of Wales.

Table 4.41 Agricultural Region (based on WG classification)

Agricultural region	Carmarthen	Ceredigion	North East	North West	Pembrokeshire	Powys	South Wales	Total
Number of interviews	391	257	344	341	212	479	378	2,402
Proportion of survey total	16%	10%	14%	14%	9%	20%	16%	100%

4.6.2 Tenure

Table 4.42 shows the types of tenure of the 2,402 farms surveyed and also breaks down the data by the WG farm sizes categories

Table 4.42 Tenure, Farm size and type

			Farm Size					Farm Type				
Tenure Type	**Total**	**Overall**	**Very large**	**Large**	**Medium**	**Small**	**Very small**	**Dairy**	**Sheep**	**Beef**	**Sheep with beef**	**Other/mixed**
		%	%	%	%	%	%	%	%	%	%	%
Family owned	1742	73	41	63	58	68	83	64	72	73	66	80
Rented	193	8	10	9	11	9	6	9	9	9	8	6
Mixed	465	19	47	29	30	23	11%	26	19	18	26	14
DK Refused	2		2	0	0	0		1	0	0	0	0
Total	2402	100	100	100	100	100	100	100	100	100	100	100

The table shows that at 73 per cent the large majority of farms were family owned. Very large farms were the least likely to be family owned. This category was the only one where family ownership fell below 50 per cent (41 per cent). The proportion of rented farms was relatively constant across both farm sizes and farm types.

4.6.3 Gender, Households and the Workforce

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Males continued to be in the majority of farming respondents: 27 per cent of respondents were female and 73 per cent were male.

The large majority of farms involved just one household in the partnership. Table 4.43 shows the breakdown of households involved in the partnership by farm size

Table 4.43 Households in partnership by farm size

			Proportion of WG Farm sizes with 'N' number of households				
Number of Households in partnership 'N'	Overall Count	Overall proportion	Very large	Large	Medium	Small	Very small
		%	%	%	%	%	%
1	1895	79	45	46	60	79	89
2	414	17	35	43	34	18	10
3	69	3	16	9	6	2	1
4	12	1	2	1	0	1	0
5	7	0	2	1	0	0	0
DK/Refused	5	0	0	0	0	0	0
Total	2,402	100	100	100	100	100	100

The table shows that while the large majority of farm partnerships (79 per cent) involved one family, there was a significant proportion (17 per cent) that involved two families, and smaller proportions of three, four and five family partnerships. Breaking down the data by farm size, the large majority of medium, small and very small farms partnerships involved one or two families but very large and large farms had relatively large proportions of partnerships that involved two and three families.

Tables 4.44, 4.45 and 4.46 show the total numbers and proportions of full and part-time workers, both family and non-family, employed by farms in the survey, and break them down by farm size. Note that casual labour is not included in the analysis.

Table 4.44 Full and Part-time workers

Type of worker	Family Full Time	Family Part Time	Non-family Full Time	Non-family Part Time	Total
Overall Count	2,939	2,264	262	466	5,931
Proportion of total workforce	50%	38%	4%	8%	100%

Table 4.45 shows the proportions of each category of worker employed across the different sizes of farms.

Table 4.45 Proportions of Full and Part-time workers employed across all farm sizes

Farm size	Family FT	Family PT	Non Family FT	Non Family PT
	%	%	%	%
Very Large	4	1	35	9
Large	8	4	14	11
Medium	18	11	19	20
Small	41	35	18	31
Very Small	29	49	14	29
Total	100	100	100	100

Table 4.46 shows the proportions of each category of worker employed by each size of farm.

Table 4.46 Proportions of Full and Part-time workers employed by each farm size

Farm size	Family FT	Family PT	Non Family FT	Non Family PT	Total workers for each farm size
	%	%	%	%	
Very Large	39	12	33	16	277
Large	57	21	9	13	403
Medium	58	26	6	10	915
Small	55	36	2	7	2,195
Very Small	40	52	2	6	2,141

Taking Tables 4.44, 4.45 and 4.46 together we can see that the large majority of workers (88 per cent) were family members. Looking at the proportions of each segment of the workforce, we can see that medium, small and very small farms were most likely to employ family members, with very large farms employing 44 per cent of non-family workers. These analyses are supported by Table 4.46, which shows that the workforces of small and very small farms were constituted almost overwhelmingly by family members (over 90 per cent in each case). Even so, the workforces of the very large, large and medium farms contained larger proportions of family members than non-family.

There are potential implications for policy. If people were to leave farming following CAP reform, there would be a significant effects on local and family labour markets.

4.6.4 Activities of farms surveyed

As indicated earlier in the report, 2,402 farms responded to the survey. Table 4.47 shows the primary activities of these farms as self-reported by respondents. The table also shows the type of farm as recorded on the WG database used by the survey.

Table 4.47 Primary activities of farms surveyed

Primary activity	Self-reported	Proportion of survey total for self-reported	WG database	Proportion of survey total for WG database
Beef	417	17%	448	19%
Dairy	215	9%	190	8%
Sheep	837	35%	723	30%
Sheep with Beef	583	24%	413	17%
Other/Mixed	350	15%	628	26%
Total	2,402	100%	2,402	100%

Other primary activities reported included poultry, cereals, forage crops, horticulture, horses, pigs, tourism (ten respondents), contracting land, forestry, bees, goats, raising cattle for market, fruit, vegetables, silage, construction and dog kennels.

The table reveals discrepancies between the WG database and the self-reported categories. This suggests that the WG database should be checked.

Respondents were also asked whether or not the farm had a secondary activity, which might have accounted for some of the discrepancies.

4.6.5 Alternative enterprises

Respondents were also asked whether or not they operated certain alternative enterprises, and if they were considering operating them in the future. Table 4.48 shows these results. In order to capture the low numbers and proportions in some categories, percentages in this table have not been rounded to whole numbers.

Table 4.48 Alternative enterprises

Enterprise	Currently operating	Considering	Not considering
	%	%	%
Horticulture	4.1	5.1	90.8
Alternative livestock	3.1	8.6	88.3
Energy crops/bio energy	2.1	10.8	87.1
Industrial crops	0.3	2.5	97.2
Organic crops	6.5	4.7	88.9

The proportion of the 2,402 farms surveyed that was currently operating any type of alternative enterprise was low. Organic crops performed best at 6.5% of the survey. Similarly, few farms were considering alternative enterprises, although approaching nine per cent and 11 per cent were considering alternative livestock and energy crops/bio energy respectively.

Alternative livestock currently being farmed or under consideration included rare breed cattle, deer, horses, goats, alpacas, llamas, pigs, bees, poultry, game birds and buffalo. Some respondents named sheep and beef as alternatives to their current livestock.

Energy crops being farmed or under consideration included trees, willow, miscanthus, rape seed, hemp, maize and oil crops. Bio-energy included wind turbines, solar panels and hydro-electricity.

Given that in all categories the proportion of the survey 'not considering' at best approached 90 per cent, and in the case of industrial crops was 97.2 per cent, there was little differentiation across farm size and type. The best 'performer' was energy crops/bio energy, which was being considered by 18.4 per cent and 14.1 per cent of very large and medium farms respectively. At least 10 per cent of the other farm sizes were considering energy crops/bio energy. In terms of farm type, apart from sheep farms and other/mixed farms, the other farm types were slightly above ten per cent. Sheep farms had the lowest proportion considering energy crops/bio energy at 8.4 per cent, while other/mixed farms had the highest at 14.9 per cent.

There are implications for WG here in terms of promotion.

4.6.6 Diversification

Respondents were also asked whether or not they were operating, or considering operating, a range of diversified activities. Table 4.49 shows these results.

Similarly to the analysis for alternative enterprises, there are some relatively low numbers in some categories and in order to capture them, percentages in this table have not been rounded to whole numbers.

Table 4.49 Diversified enterprises

Diversified Enterprise	Currently operating	Considering	Not considering
	%	%	%
Agricultural services (e.g. contracting)	14.8	8.5	76.8
Farm-based processing	3.2	5.9	90.9
Farm-based retailing	4.0	7.6	88.4
Internet or mail-based retailing	1.4	6.1	92.5
Non-agricultural contracting	6.6	6.8	86.5
Farm-based accommodation	11.2	16.9	71.9
Equine activities	8.5	8.0	83.5
Other farm-based leisure	3.3	6.7	90.0
Leasing buildings	2.8	9.2	88.0
Leasing land for agricultural use	7.6	15.0	77.5
Leasing land for non-agricultural use (e.g. renewable energy)	1.5	10.6	87.9

Generally, the proportions engaged in individual types of diversification were low, although in gross terms, 45 per cent of farms were engaged in at least one of the diversified enterprises. Only two diversified activities exceeded ten per cent – providing agricultural services [8] at 14.8 per cent and farm-based accommodation at 11.2 per cent. Farm-based accommodation had the highest proportion of farmers who were considering it at 16.9 per cent.

Given that 55 per cent of the survey was not engaged in diversification, in terms of farm size and type few stood out. Of those that did, very small farms were four percentage points lower than the overall rate for the provision of agricultural services (14.8 per cent) while sheep with beef farms were three per percentage points higher. No very large farms did farm-based food retailing, although at 10.2 per cent they had the highest proportion of those who were 'considering' this type of diversification.

Internet or mail-based retailing was surprisingly low at 1.4 per cent. While this

[8] Arguably, the provision of agricultural services by farmers is not actually diversification.

might have reflected broadband provision and access in rural Wales, an issue currently being addressed by WG, it is worth noting that of 33 farms that were engaged in this activity, 20 were very small farms: i.e. very small farms accounted for 61 per cent of the activity in this sector. This does raise questions concerning the nature of the linkages between broadband access and internet retailing.

Very small farms also led in those 'considering' this activity, with 49 per cent (72 out 147 farms). Another diversified activity in which very small farms had the highest proportions for both current engagement and 'consideration' was equine activities such as livery, riding trails and riding lessons (11.9 per cent and 10.4 per cent respectively). Indeed, 62 per cent of the farms providing equine services were very small (126 of 204 farms). No very large farms were engaged in equine diversification.

Those respondents who were considering further diversification were asked whether it was something that they wanted to do or whether they felt that they had to do it. Of the 1,090 farms that were considering further diversification 33 per cent wanted to do it, 59 per cent felt that they had to, and eight per cent did not know. Very small farms were the most likely to want to engage in further diversification at 41 per cent, and the least likely to feel compelled (51 per cent), while very large farms were the least likely to want to (17%) and the most likely to feel compelled (75 per cent).

In addition, 57 per cent of the total survey population thought that they faced barriers to engaging in further diversification. The most frequently cited barrier was planning permission, which included landlord's permission and planning restrictions such as those in the national parks. Planning permission was cited by 24 per cent. At 15 per cent, the location of the farm was the second most cited barrier. Other perceived barriers included red tape and bureaucracy and cost and the availability of finance.

The low figures for both farms operating alternative enterprises and for those engaged in diversification, and, indeed, for those considering them have potential implications for WG policy:

- It appeared that the majority of farms intended to rely on traditional agricultural production rather than become more diversified, entrepreneurial and multifunctional.
- There are potential implications for the broadband project.
- There are potential implications for energy agenda.
- There are implications for WG here in terms of promotion.

4.6.7 Considerations for future farm management

All of the 2,402 respondents were asked how important three factors for the future management of their farm were: food production, conservation, agri-environmental and ecological measures, and opportunities to use their land for other activities. Table 4.50 shows these results. Due to rounding-up rows may not total 100 per cent.

Table 4.50 Considerations for future farm management

Factor	Very important	Fairly important	Neither important not unimportant	Fairly unimportant	Not at all important	Not applicable/DK/Refusd
	%	%	%	%	%	%
Food production	70	16	4	6	4	1
Conservation, agri-environmental & ecological measures	33	42	7	11	5	1
Opportunities to use land for other activities	8	18	11	34	27	2

Tables 4.51 and 4.52 break-down the food production data by farm size and farm type respectively.

Table 4.51 Food production - Considerations for future farm management by farm size

	Very large	Large	Medium	Small	Very small	Overall
	%	%	%	%	%	%
Very important	76	89	87	82	54	70
Fairly important	24	10	11	11	21	16
Neither important nor unimportant	0	0	1	2	6	4
Fairly unimportant	0	1	1	3	10	6
Very unimportant	0	0	0	2	6	3
Not applicable	0	0	0	0	1	0
Don't know	0	0	0	0	0	0
Refused	0	0	0	0	0	0

Table 4.52 Food production - Considerations for future farm management by farm type

	Dairy	Sheep	Beef	Sheep with Beef	Other/Mixed	Overall
	%	%	%	%	%	%
Very important	83	72	74	85	53	70
Fairly important	14	15	16	12	19	16
Neither important nor unimportant	1	4	2	1	7	4
Fairly unimportant	2	4	5	1	12	6
Very unimportant	1	3	2	0	8	3
Not applicable	0	0	0	0	1	0
Don't know	0	0	0	0	0	0
Refused	0	0	0	0	0	0

From the tables, 100 per cent of very large and large farms attached importance to food production. Readings above 90 per cent were obtained from medium, small, dairy, beef and beef with sheep farms. In contrast, very small farms had the lowest proportion that considered food production to be very or fairly important (54 per cent and 21 per cent respectively).

Tables 4.53 and 4.54 show the importance attached to conservation, agri-environmental and ecological measures data by farm size and farm type respectively.

Table 4.53 Conservation, agri-environmental and ecological measures - Considerations for future farm management by farm type

	Very large	Large	Medium	Small	Very small	Overall
	%	%	%	%	%	%
Very important	22	27	19	29	41	33
Fairly important	47	37	53	45	37	42
Neither important nor unimportant	10	11	7	7	7	7
Fairly unimportant	14	16	13	12	10	11
Very unimportant	6	8	6	5	5	5
Not applicable	0	1	0	0	0	0
Don't know	0	0	0	1	1	1
Refused	0	0	0	0	0	0

While all farm sizes were far more likely to consider conservation, agri-environmental and ecological measures to be either 'very important' or 'fairly important', taking the two choices together, small and very small farms recorded more than 70 per cent, while the three larger categories recorded less than 70 per cent, although very large farms recorded 69 per cent.

Table 4.54 Conservation, agri-environmental and ecological measures - Considerations for future farm management by farm type

	Dairy	Sheep	Beef	Sheep with Beef	Other/Mixed	Overall
	%	%	%	%	%	%
Very important	25	32	29	24	45	33
Fairly important	40	43	44	51	34	42
Neither important nor unimportant	11	7	8	6	7	7
Fairly unimportant	15	12	13	10	9	11
Very unimportant	8	5	5	8	3	5
Not applicable	1	0	0	0	1	0
Don't know	1	1	1	1	0	1
Refused	0	0	0	0	0	0

Analyzed by farm type, taking 'very important' and 'fairly important' together, only dairy farms at 65 per cent recorded less than 70 per cent. Dairy farms were also the most likely to rate conservation, agri-environmental and ecological measures as 'fairly unimportant' or 'very unimportant'. Indeed, at 23 per cent, approaching one in four dairy farms recorded these ratings. 'Other/mixed' farms, at 79 per cent were the most likely to consider conservation, agri-environmental and ecological measures in their future management.

As Table 4.50 shows, just over one in four farms (8 per cent and 18 per cent) considered the opportunity to use their land for other activities to be important. While this was a considerable proportion, high proportions attached little or no importance to this potential use of land (34 per cent and 27 per cent respectively). Tables 4.55 and 4.56 break-down these data by farm size and farm type respectively.

Table 4.55 Opportunities to use land for other activities - Considerations for future farm management by farm size

	Very large	Large	Medium	Small	Very small	Overall
	%	%	%	%	%	%
Very important	4	8	5	9	9	8
Fairly important	27	14	18	18	17	18
Neither important nor unimportant	12	11	11	12	10	11
Fairly unimportant	29	33	37	33	33	34
Very unimportant	29	31	27	25	28	27
Not applicable	0	2	0	2	1	1
Don't know	0	0	1	1	1	1
Refused	0	0	0	0	0	0

From the table, very large farms were the most likely to rate opportunities to use land for other activities as important.

Table 4.56 Opportunities to use land for other activities - Considerations for future farm management by farm type

	Dairy	Sheep	Beef	Sheep with Beef	Other/Mixed	Overall
	%	%	%	%	%	%
Very important	7	7	7	7	12	8
Fairly important	18	16	15	18	21	18
Neither important nor unimportant	9	12	11	9	11	11
Fairly unimportant	31	34	35	36	31	34
Very unimportant	32	28	28	28	23	27
Not applicable	1	1	2	2	1	1
Don't know	1	1	2	0	1	1
Refused	0	0	0	0	0	0

‘

Other/mixed’ farms were more likely to consider opportunities to use land for other activities as important in their future farm management – they were the only farm type to exceed 30 per cent (12 per cent and 21 per cent). Moreover, they were less likely to consider this factor to be unimportant – they were the only farm type to record less than 60 per cent (31 per cent and 23 per cent. The other farm types recorded at least 62 per cent for ‘unimportant’. This concurs with the lower ratings that ‘other/mixed’ farms gave to the importance of food production and the higher ratings that they gave to the importance of conservation, agri-environmental and ecological measures.

These findings tend to reinforce previous findings in this report, which show that farmers appeared to be planning to rely on agricultural productivism in the future. The principal exception appeared to in the other/mixed category.

4.6.8 Inputs to the farm – goods and services

All respondents were asked a series of questions concerning the inputs and services that they purchased for their farms. Table 4.57 shows the proportions of inputs and services bought and the distances and locations at which respondents bought them. This table shows both the proportions for the overall survey and the proportions by farm size.

Table 4.57 Purchasing inputs and services by farm size

Location	Overall	Very large	Large	Medium	Small	Very small
	%	%	%	%	%	%
The local area – within a radius of 25 miles	82	58	62	70	80	88
Elsewhere in Wales	7	12	13	12	9	5
Elsewhere in Britain	10	25	21	17	10	6
Outside Britain	1	5	4	1	1	1

The table shows that at 82 per cent the large majority of goods and services purchased by farms were bought within the local area. There was a direct relationship between the size of farm and local trade: the smaller the farm the greater proportion it bought locally. Similarly, but with a reverse gradient, purchases from elsewhere in both Wales and Britain and from outside Britain decreased with decreasing farm size. Purchases from outside of Britain by small and very small farms were negligible (0.59 per cent and 0.43 per cent before rounding-up respectively).

Figure 4.3 illustrates these results graphically.

Figure 4.3 Purchasing inputs and services by farm size

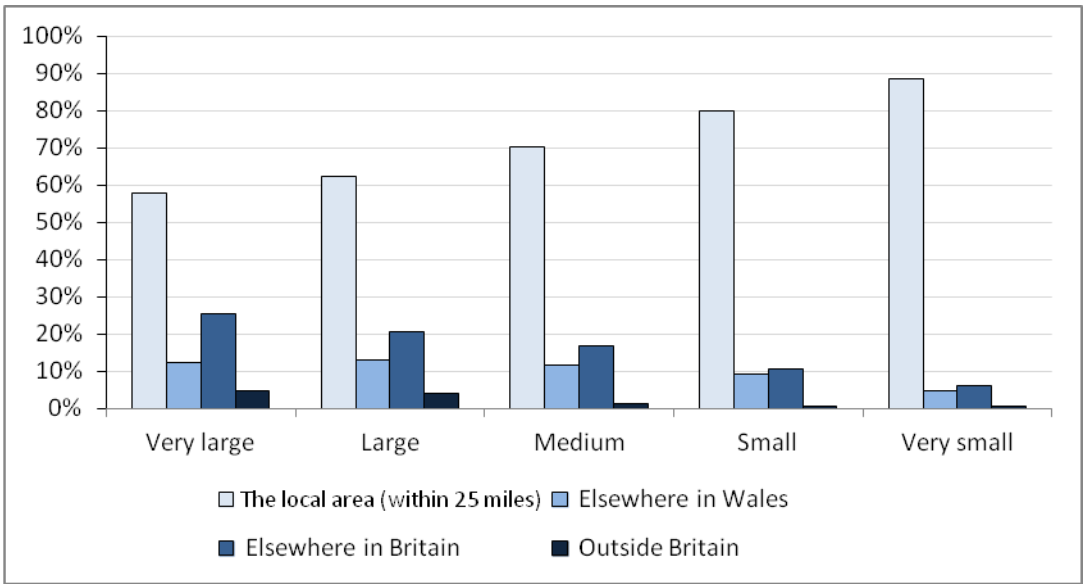


Table 4.58 shows the data for purchasing inputs and services by farm type.

Table 4.58 Purchasing inputs and services by farm type

Location	Overall	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
	%	%	%	%	%	%
The local area – within a radius of 25 miles	82	66	85	84	79	82
Elsewhere in Wales	7	12	7	6	10	7
Elsewhere in Britain	10	20	8	9	10	11
Outside Britain	1	3	0% (0.26%)	1	1	1

Trends for purchasing inputs and services were not as pronounced for farm types as for farm size. However, it is clear that dairy farms bought less from the local area and more from elsewhere in Wales, Britain and outside Britain than the other types of farm.

The salient point from the analysis is that at 82% the vast majority of farm-related goods and services were purchased in the local

area – within a 25 mile radius of the farm. Another important point is illustrated by Figure 4.3, which shows the gradient from larger farms to smaller farms in terms of local buying, with smaller farms buying more locally. Also, dairy farms, which tend to be larger, bought a smaller proportion of their goods and services locally than other farm types. However, this analysis does not show the value of goods and services bought. It might have been that the value of goods bought locally by larger farms exceeded the value of that bought by smaller farms, although the latter's proportion was greater.

Nevertheless, the analysis indicates potential implications for policy with regard to any loss of CAP payments, the resilience of farms, and relations between them and the local economy. Conversely, it may be that small hill farms running sheep and beef, if they receive increased CAP payments, will spend more locally. These relations will be explored further in the follow-up interviews with farmers, to be conducted in the later phases of this research project.

4.6.9 Outputs from the farm – selling produce

This analysis is based on two questions. First, respondents were asked to which types of outlet they sold their produce. Second, they were asked what proportion of their produce they sold to each type of outlet. Table 4.42 shows what proportion of the total survey, and what proportions of each size of farm, sold to each type of outlet. Please note that many farms sold to more than one type of outlet. In order to capture some of the smaller proportions, percentages are not rounded to whole numbers in the table.

Table 4.58 Outlets for farm produce by farm size

Outlet	Overall	Very large	Large	Medium	Small	Very small
	%	%	%	%	%	%
Milk processing companies	8.6	81.2	55.8	23.7	2.0	1.3
Livestock marts	86.9	81.2	86.4	92.8	89.7	83
Major abattoirs	41.8	68.8	61.5	70.3	50.4	21.0
Minor abattoirs	24.4	37.5	39.4	25.4	23.3	22.8
Direct to public in local area –within 25 miles	17.8	8.3	9.6	10.0	12.7	26.5
Direct to public elsewhere	6.6	6.2	1.9	4.7	4.3	10.0
Shops, hotels and restaurants in local area – within 25 miles	6.3	6.2	4.8	5.7	5.1	7.8
Shops, hotels and restaurants – elsewhere	1.3	2.1	1.0	1.8	0.9	1.5
Supermarkets	2.3	0	6.7	5.7	2.7	0.4
Food processing companies in Wales	4.2	14.6	15.4	7.2	3.8	1.8
Food processing companies elsewhere	2.6	16.7	3.8	7.5	1.6	1.3

Table 4.59 shows what proportion of the total survey, and what proportion of each type of farm, sold to each type of outlet.

Table 4.59 Outlets for farm produce by farm type

Outlet	Overall	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
	%	%	%	%	%	%
Milk processing companies	8.6	84.9	0.6	1.4	0.2	4.7
Livestock marts	86.9	87.6	94.2	87.9	94.4	70.1
Major abattoirs	41.8	56.5	38.6	37.6	62.8	27.4
Minor abattoirs	24.4	36.0	20.6	24.1	23.5	26.2
Direct to public in local area –within 25 miles	17.8	9.1	10.6	14.8	8.3	40.7
Direct to public elsewhere	6.6	2.7	3.0	5.5	3.4	16.2
Shops, hotels and restaurants in local area – within 25 miles	6.3	3.8	3.5	4.6	3.7	14.5
Shops, hotels and restaurants – elsewhere	1.3	1.6	0.3	0.7	1.5	2.9
Supermarkets	2.3	2.2	1.6	1.8	4.2	2.2
Food processing companies in Wales	4.2	10.2	2.3	2.5	3.7	6.3
Food processing companies elsewhere	2.6	4.8	1.0	1.4	2.4	5.3

Taking the two tables together, while only nine per cent of the total survey sold to milk processing companies, 81 per cent of large farms did so. This reinforces earlier suggestions that many of the large farms were dairy farms. Unsurprisingly, Table 4.59 shows that 85 per cent of dairy farms sold to milk processing companies.

Livestock marts were almost universally used, with usage at 87 per cent across the survey. Sheep and sheep with beef farms were the most likely users of livestock marts, at 94.2 per cent and 94.4 per cent respectively. Other/mixed farms were the least likely to use livestock marts yet still recorded 70 per cent.

Major abattoirs, which tend to be further afield, were used by higher proportions of farms than minor abattoirs, which tend to be more locally situated. There were slightly more than 17 percentage points between the proportions of the survey using the two types of abattoir.

Less than one in five farms (18 per cent) sold directly to the local public, within a 25 mile radius. Very small farms had the largest proportion selling directly to the local public at 27 per cent. However, by farm type, 41 per cent of other/mixed farms sold directly to the local public.

Few farms sold directly to local shops, hotels and restaurants. Again, very small farms with eight per cent and other/mixed farms with 15 per cent were the most likely to do so. Very few farms sold to shops, hotels and restaurants elsewhere. Notably, other/mixed farms were more likely to.

No very large farms sold to supermarkets although large and medium farms recorded the highest proportions at seven per cent and six per cent respectively.

The overall proportions selling to food processing companies in Wales were low at four per cent. Very large, large and dairy farms were relatively high at 15 per cent, 15 per cent and ten per cent respectively. The proportions selling to food processing companies elsewhere were uniformly low, although very large and medium farms were considerably above the overall figure of three per cent at 17 per cent and eight per cent respectively.

Table 4.60 shows the proportions of total output that each size of farm sold to each type of outlet. And Table 4.61 shows the proportions of total output that each type of farm sold to each type of outlet.

Table 4.60 Proportion of farm produce sold to outlets for farm produce by farm size

Outlet	Overall	Very large	Large	Medium	Small	Very small
	%	%	%	%	%	%
Milk processing companies	5.73	60.2	41.00	15.38	0.86	0.84
Livestock marts	59.28	13.53	24.97	45.01	64.40	64.81
Major abattoirs	18.33	15.44	17.55	29.68	23.39	10.05
Minor abattoirs	4.41	3.05	3.83	2.97	4.16	5.23
Direct to public in local area –within 25 miles	6.88	0.31	1.12	1.01	3.26	13.26
Direct to public elsewhere	1.48	0.47	0	0.13	0.89	2.70
Shops, hotels and restaurants in local area – within 25 miles	1.24	0.25	0.63	0.31	1.02	1.85
Shops, hotels and restaurants – elsewhere	0.13	0.02	0	0.02	0.11	0.20
Supermarkets	0.78	0	2.24	2.05	0.87	0.16
Food processing companies in Wales	1.06	0.86	7.49	1.43	0.67	0.63
Food processing companies elsewhere	0.69	5.86	1.17	2.02	0.37	0.27

Table 4.61 Proportion of farm produce sold to outlets for farm produce by farm type

Outlet	Overall	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
	%	%	%	%	%	%
Milk processing companies	5.73	62.94	0.26	0.73	0.00	2.90
Livestock marts	59.28	19.07	71.70	70.54	62.75	43.24
Major abattoirs	18.33	8.97	19.02	17.15	29.62	12.26
Minor abattoirs	4.41	2.57	4.05	4.84	3.54	5.86
Direct to public in local area –within 25 miles	6.88	1.72	2.23	3.90	1.52	22.04
Direct to public elsewhere	1.48	0.03	0.58	1.11	0.12	4.64
Shops, hotels and restaurants in local area – within 25 miles	1.24	0.21	0.54	0.78	0.51	3.53
Shops, hotels and restaurants – elsewhere	0.13	0.03	0.11	0.05	0.06	0.31
Supermarkets	0.78	0.80	0.51	0.60	1.23	0.91
Food processing companies in Wales	1.06	3.23	0.77	0.31	0.56	1.80
Food processing companies elsewhere	0.69	0.44	0.22	0.00	0.08	2.51

Tables 4.60 and 4.61 show that, across the survey, sales to livestock marts contributed the largest proportion at 59 per cent of total sales. Breaking this down by farm size, medium, small and very small farms sold the largest proportions of their produce to livestock marts. Very large and large farm sold relatively small proportions, which suggests a relationships with the similarly small proportions sold to livestock marts by dairy farms. Sheep, beef and sheep and beef farms sold large proportions of their produce to livestock marts.

Dairy farms sold the large majority of their produce to milk processing (63 per cent), livestock marts (19 per cent) and abattoirs (22 per cent).

Sales direct to local publics were relatively low at seven per cent of total sales, while sales to local shops, hotels and restaurants approached only one and half per cent of total sales.

Arguably, taking the buying and selling powers of farms together, CAP reform may have greater upstream effects than downstream. That is, farms appeared to spend more locally than they sold locally. But the local downstream effects, particularly on livestock marts and abattoirs should not be ignored. Similarly, there may be wider effects on milk processing.

There are potential policy implications following any changes to CAP payments and the resilience of farms particularly the effects on local suppliers and contractors to the agricultural sector and on livestock marts, abattoirs and direct sales to both local publics and local retailers, which would have knock-on effects in the local economy. These issues will be explored in the follow-on interviews to be conducted in the later research phases.

4.7 Farmers' Plans for the Future

4.7.1 Succession

Succession is an important factor in the longer-term future of farms and farming. In order to explore this aspect of farming, respondents were asked a series of related questions. Although the age variable has been discussed in earlier analyses, it is useful to re-visit the age profile of farmers in the survey. Table 4.62 shows the age ranges of respondents.

Table 4.62 Age profile of respondents

Age group years	18-24	25-34	35-44	45-54	55-64	65 or older
Proportion of 2,402	0.3%	2%	10%	26%	31%	31%

As discussed earlier, 27 per cent of respondents were female and 73 per cent were male. An important point is that 62 per cent of respondents were over 55 years.

Table 4.63 shows the number of persons in each responding household.

Table 4.63 Number of persons in each responding household.

Number of persons	1	2	3	4	5	6	7	More than 8
Proportion of total (2,402) households	10%	41%	20%	16%	9%	3%	1%	Less than 1%

All 2,402 responding farms were asked whether or not they had family succession plans - 1,330 farms had succession plans. Tables 4.64 and 4.65 show these results by farm size and farm type respectively.

Table 4.64 Succession plans by farm size

	Overall	Very large	Large	Medium	Small	Very small
	%	%	%	%	%	%
Yes	55	80	70	70	59	46
No	40	16	27	27	37	49
Don't know/Refused	5	4	3	3	4	5

Table 4.65 Succession plans by farm type

	Overall	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
	%	%	%	%	%	%
Yes	55	64	55	53	62	51
No	40	32	41	42	34	46
Don't know/Refused	5	4	4	5	4	3

The tables show that, in terms of farm size, the larger farms were considerably more likely to have succession plans – with very large farms ten percentage points ahead of both large and medium farms. Small and very small farms appeared to be less resilient in term of family succession (see below for dominance of family succession).

With farm type there was not such a clear differentiation. However, dairy and beef with sheep farms were the most likely to have succession plans, at ten and eight percentage points above the overall figure of 55 per cent respectively. The other types were close to the overall figure, with other/mixed farms the least likely to have succession plans.

Of the 1,330 farms that had succession plans, 21 per cent had a female successor and 74 per cent had a male successor. The remaining five per cent refused to answer. If these succession plans come to fruition, the existing male dominated gender ratio will be, at the least, maintained.

Planned successors were exclusively family members. Sons led with 65 per cent followed by daughters at 18 per cent. Nephews recorded five per cent and grandsons two per cent. One per cent planned for their spouse or partner to succeed and there were small numbers of other family members such as brothers, sisters, nieces and cousins. Four per cent refused to answer the question.

Table 4.66 shows the age range of likely successors. In order to capture some small numbers, the results are not rounded to whole numbers.

Table 4.66 Age range of likely successors

Age group years	Under 16 years	16-24	25-34	35-44	45-54	55-64	65 or older	Refused
Proportion of 1,330	16.2%	20.8%	24.4%	22.0%	8.3%	1.2%	0.4%	6.7%

The analysis shows that at 40 per cent a considerable proportion farms did not have succession plans. These were disproportionally small and beef and sheep farms.

With regard to policy, coupled with the high proportions who stated that they would leave farming if their CAP payments were to decrease (Table 4.32 – 20 per cent if more than 20 per cent decrease and seven per cent if a decrease of less than 20 per cent) there must be potential concerns for the resilience of the farm sector.

4.7.2 Farmers' visions for the future

Respondents were asked about their visions for their farm in both five years time and ten years time, and what they thought would either assist or impeded these visions. Table 4.67 shows the major recorded categories.

Table 4.67 Visions for five and ten years

Vision	5 years time	10 years time
	%	%
Stay as it is/no change/staying profitable as we are now	47	25
Retired/sold up/out of farming	5	13
Gradual succession/part retirement/children taking more on	5	10
Making a profit/being economically viable/improving finances	7	5
Expansion/take of more land/more buildings/increase livestock	11	8
Reduction/sell of land/less livestock	3	2
Let land/ rent it out/lease buildings	2	2
Diversify income earning activities (leisure/tourism)	2	2
Regeneration of the land/improve land/ improve farm	3	1
Change in current farming (no more milking/less dairy more vegetables)	3	2
More sustainable/self-sufficient/localised	1	1
Conservational/environmental/greener (use alternative energy)	2	1
Food production	1	1
Part of a larger farm/Shared farming	<1	1
Ceased to survive/Gone under/struggling/ eaten up by bureaucracy/bankrupt	1	1
Increase production/more efficient/ improving	5	3
Work on farm full time / give up other employment	<1	<1
Depends on the CAP reform	<1	<1
Other	1	<1
Don't know	16	35
Refused	<1	1

The analysis is illustrated by quotations from respondents.

At 47 per cent the most common vision in five years was for no real changes, and continuing to make a profit, for their farm businesses. The proportion envisaging this in 10 years had reduced to 25 per cent. A popular vision was expansion of the farm by having more land, more buildings or more livestock. Indeed, this was the second most common vision over five years at 11 per cent and the fourth most common over 10 years. In addition, five per cent for the five year period, and three per cent for the 10 year period envisaged increasing production and becoming more efficient. In general, there was little differentiation by farm type.

This selection of quotations illustrates the 'expansionist' vision.

> *'Expanded a bit with renting and buying land.' (Male, 45-54, Medium, Sheep, 21k-31k, off-farm income)*
>
> *'Would like to have my own farm.' (Female, 35-44, Very small, Sheep, 21k-31k, off-farm income)*
>
> *'Intensify farming.'(Female, 45-54, Very small, Sheep)*

Relatively large proportions of the survey - seven per cent for the five year period and five per cent for the 10 year period - had more modest ambitions and envisaged a change for the better whereby they would be making a profit and improving their financial position.

> *'Maintaining a living for myself and my parents, instead of looking for another way to keep the farm running.' (Male, 45-54, Small, Beef, 52k+, off-farm income)*

In contrast to visions of expansion, or at least staying the same, three per cent envisaged selling and reducing land or livestock in five years, and two per cent envisaged this scenario within 10 years. Two per cent of the survey, in both time-frames, foresaw leasing land or buildings.

There were respondents who envisaged leaving farming, either through retirement or selling the farm. The proportions increased with the time-frames. Five per cent envisaged having left farming in five years and 13 per cent in 10 years. Connected to leaving farming and showing the same relation in terms of time-frames was a scenario encompassing gradual or part retirement with younger family members and younger farmers in general, taking on more over time. Five per cent envisaged this scenario within five years while for 10 years it was 10 per cent.

> *'My son taking over and doing more of a greening thing with his interest in conservation.' (Male, 65+, Very small, Sheep, without off-farm income)*
>
> *'I should hope that we've got new blood coming in, and things rejuvenate a bit.' (Female, 31-52, Medium, Sheep, 52k+, without off-farm income)*
>
> *'I'd like to get younger people involved.' (Male, 65+, Very small, Sheep, <10k, without off-farm income)*
>
> *'I'd like to see some young farmers with ambition here.'(Female,65+, Small, Sheep, <10k, without off-farm income)*

A rather darker vision of leaving farming was envisaged by those who predicted that they would have ceased to survive, '*gone under*', '*ea10-up by bureaucracy*', or would be bankrupt. The proportions here were one

per cent for both the five year and 10 year periods.

> *'If money picks up we will be moving forward, if not then we will stay the same or have to leave.' (Male, 65+, Very small, Sheep, <10k, without off-farm income)*

> *'Less paperwork - paperwork is killing farming, killing everything.' (Male, 65+, Very small, Dairy, <10k, without off-farm income)*

The vision of a farming sector with less bureaucracy was popular. For example, this farmer coupled visions of disease-free animal husbandry with arguments for less government intervention and less regulation.

> *'Everywhere is free of TB so we'd be back with beef production and also stability of the markets and less government intervention and more freedom.' (Female, 45-54, Small, Sheep with Beef, 31-52k, without off-farm income)*

The argument for less regulation was echoed by these farmers.

> *'A farm that spends its time farming, rather than buried under paperwork.' (Male, 65+, Small, Beef, <10k, without off-farm income)*

> *'To make a tidy living and prosperity. Less paperwork and bureaucracy.' (Male, 45-54,Very small, Sheep, 10k-15.5k, without off-farm income)*

> *'Will get better when they get rid of the red tape.' (Male, 65+, Small, Sheep, 10k-15.5k, without off-farm income)*

> *'Just proper direction without meddling.' (Male, 35-44, Medium, Sheep with Beef, 31k-52k, off-farm income)*

> *'Retain the single farm payment and to have a more stable price for our commodities and a lot less red tape.' (Male, 45-54, Very small, Sheep with Beef, 10k-15.5k, off-farm income)*

> *'If we can have a profitable farming industry with less regulation and less restrictions then I would like to see a successful running business' (Male, 55-64, Very large, Other/mixed, 21k-31k, without off-farm income)*

However, this farmer argued that the WG should be more involved with farming.

> *'I'd like to see the government looking after farmers more than they do now.' (Male, 65+, Very small, Sheep, 10k-15.5k, off-farm income)*

It was argued that Welsh farmers did not receive a fair deal in relation to CAP payments, compared with European farmers.

> *'Successful running business - being able to make its own decisions in a proper business environment to produce what is required in the market place without interference from external sources. Agriculture in relation to our competitors within Europe - they get £80 more per hectare than land based payments in Wales.' (Male, 55-64, Very large, Other/mixed, 21k-31k, without off-farm income)*

Another case of perceived unfair treatment, in terms of CAP, was advanced by this farmer, who was considering emigration.

> *'If I haven't sold and farming in Canada, I'd like to be entitled to the same payments as everyone else after missing out as part of the last*

reference year.' (Male, 55-64, Very small, Other/Mixed, 10k-15.5k, off-farm income)

Relatively small proportions of the survey envisaged engagement with diversification, regeneration and improvement, conservation and greening. For example, only two per cent envisaged diversifying in both the five and 10 periods. And regeneration and improvement of the land was envisaged by only three per cent for the five year period and one per cent for 10 years. Similarly, with regard to the conservation, greening and alternative energy agenda, only small proportions envisaged engaging with them: two per cent in five years and one per cent in 10 years. Indeed, some perceived such ideas as a threat to farming. For example, this farmer argued against European involvement in agriculture and 'greening'.

'I think the Europeans are bad for agriculture. The world is starving and they're messing around with greening and that's not the way. As a result of this I see my farm slowly going down.' (Male, 65+, Small, Sheep, 52k+, without off-farm income)

Small proportions envisaged scenarios such as shared farming, being absorbed into a larger farm, and changing their current mode of farming.

'Sort things out with the house and building the land together, rather than have lots of land.' (Male, 45-54, Very small, Other/mixed, <10k, without off-farm income)

'Sell up and buy one big farm in all one place.' (Male, 16-24, Medium, Sheep with beef, 15.5k-21k, without off-farm income)

A small proportion (0.3 per cent) in both time-frames stated that the future would depend on CAP reform; less than one per cent refused to answer the question; and relatively large proportions did not know: 16 per cent for the five year period and 35 per cent for the 10 year period.

4.7.3 Farmers' visions for the future – Assistance and Impediments

Having set out their visions, respondents were then asked what would assist these visions in becoming a reality and what would impede them. Although the questions asked for aids and impediments, farmers are a heterogeneous group and the responses were often more general and fragmented. Rather than adhere to a strict rubric of 'assist versus impede' this analysis sets-out the main arguments advanced under broad themes, illustrated by quotations by respondents.

Approaching one quarter of the survey (23 per cent) argued that better market prices and a stable economy were required. Supporting these arguments, just over one quarter of the survey (26 per cent) argued that reduced market prices and the generally parlous economic situation would prove to be impediments - a requirement for improvement concisely identified by this respondent.

'A general upturn in economic situation would help.' (Male, 45-54, Small, Beef, 15.5k-21k, off-farm income)

But the current economic situation was seen to be an impediment to progress in farming. Impediments identified included.

'Lack of money or opportunity to improve the land.' (Male, 55-64,Very small, Other/mixed, <10k, off-farm income)

'Red tape and impossibility getting finance.' (Female, 45-54, Small, Other/mixed, 31k-52k, with off-farm income)

An aspect of the economic situation that some respondents alluded to were the low market prices caused by consumers choosing cheaper food, which was often imported and sold by supermarket chains. This impeded progress towards their visions for farming.

> *'Need the support of the country to buy home produce as opposed to imports.' (Male, 55-64, Very small, Other/mixed, <10k, without off-farm income)*

> *'The continued proliferation of supermarkets, especially in rural areas and villages.' (Female, 45-54, Very small, Other/mixed, 15.5k-21k, off-farm income)*

> *'Bomb all the supermarkets!' (Male, 65+ Very small, Other/mixed, without off-farm income)*

Imports were identified as an impediment to Welsh farming.

> *'Imports from South America, that's the biggest thing at the moment.' (Male, 55-64, Medium, Other/mixed, 52k+, off-farm income)*

> *'The Euro, New Zealand and Tesco!' (Male, 45-54, Medium, Other/mixed, 15.5k-21k, without off-farm income)*

> *'Too much imported from New Zealand, especially lamb.' (Male, 35-44, Small, Sheep with beef, <10k, without off-farm income)*

This respondent called for the maintenance of market prices.

> *'Market prices must be maintained to provide adequate income.' (Male, 65+, Very large, Sheep, 52k+, without off-farm income)*

While these farmers argued for better market prices, less regulation and controls on fuel costs.

> *'Less regulation, better market prices and control on fuel costs.' (Male, 45-54, Large, Other/mixed, 52k+, without off-farm income)*

> *'Less subsidies, better market prices and lower input costs.' (Male, 65+, Small, Sheep, without off-farm income)*

> *'Support to make sure our home markets and our export markets are up and strengthen the role of the HCC.' (Female, 45-54, Medium, Sheep with beef, 52k+, without off-farm income)*

> *'The CAP should be abolished and prices maintained at a realistic level.' (Male, 55-64, Very small, Sheep, 10k-15.5k, without off-farm income)*

The current problems with the price for milk were specifically identified by these farmers, together with calls for a badger cull.

> *'(We need) Reasonable milk prices and a badger cull.' (Male, 55-64, Large, Dairy, <10k, without household income)*

> *'Milk prices that don't keep pace with the retail prices index and the lack of national infrastructure, which will impede the dairy's willingness to pick the produce up.' (Male, 65+, Large, Dairy, <10k, without off-farm income)*

Input costs were another economic factor seen to affect farming in the future. Five per cent of the survey suggested that lower input costs would assist their visions. Presenting the same argument, seven per cent argued that high input costs would be an impediment in the future.

While a small proportion of three per cent suggested that CAP reform, or at least

clarity on CAP reform, was necessary to assist their visions, a much larger proportion of 15 per cent argued that there must be increases, or at least no decreases, in subsidies for their visions to succeed. And 11 per cent were concerned that reduced CAP payments and perceived negative CAP reforms would impede their visions and plans. For example, this farmer was concerned about decreasing subsidies.

> *'CAP reforms causing decrease in payments.' (Male, 25-34, Small, Other/mixed, 52k+, off-farm income)*

And these respondents perceived the 'greening' elements of CAP reform as an impediment to their farming visions.

> *'The CAP reform should be geared to make sure greening doesn't go overboard and become stronger than the production side.' (Male, 45-54, Small, Sheep, 31k-52k, off-farm income)*

> *'CAP reforms and greening measures (are an impediment)'(Male, 55-64, Large, Dairy, 31k-52k, off-farm income)*

> *'EU must listen to the farmer. Emphasis should be put on production not land.' (Male, Very Small, Other/mixed, without off-farm income)*

> *'Fair settlement in Europe regarding CAP reform and an acknowledgement of a need for us to make food, and food of high standard in Wales and the UK.' (Male, 65+, Large, Sheep, 15.5k-21k, without off-farm income)*

> *'Too much green conservation.' (Male, 65+, Small, Sheep, 10k-15.5k, without off-farm income)*

However, this respondent argued that increases in CAP payments could lead to unproductive farm-land as landowners became rent-seekers.

> *'If payments go up so people don't farm - they just want keep the land to get payments.' (Male, 55-64, Medium, Other/mixed, 21k-31k, without off-farm income)*

Reiterating the arguments of the anti-regulation and anti- bureaucracy lobby, discussed above, seven per cent called for less red tape and regulation to assist farming in the future, while 10 per cent argued that increasing bureaucracy and regulation would hinder their visions.

As these following quotations show, there was criticism of WG, although increased support and assistance from government were seen as necessary to assist their visions by five per cent of respondents.

> *'Continuation of government support and the information should improve. Tir Gofal inspectors to resume the service.' (Male, 65+, Very small, Sheep, 52k+, without off-farm income)*

> *'Practical common sense amongst our politicians for agriculture. Be practical with the processing of food –should be brought back to the people that actually do the job, not the ones that advertise it.' (Male, 45-54, Very small, Other/mixed, 15.5k - 21k, off-farm income)*

> *'Too many people working in the government, in the ministry, who have been to college and think they know better than someone farming 50-60 years. They haven't got the experience to make decisions.' (Female, 55-64, Very small, Beef, 15.5k-21k, off-farm income)*

> *'Push on healthy eating will help.' (Male, 35-44, Very small, Other/mixed, 31k-52k, without off-farm income)*

This farmer argued for more government assistance and a radical approach to the bovine TB issue.

> *'Help from the government instead of working against us. TB tests every six months. Sell badger meat!' (Male, 45-54, Small, Beef, 15.5k-21k, off-farm income)*

Five per of respondents suggested that longevity and good health would assist their visions. Perhaps reflecting an age profile biased towards the older farmer, more than twice this proportion (11 per cent) cited their age and health as potential impediments to the achievement of their visions for their farms. However, relatively small proportions of the survey cited either having succession plans as necessary to achieving their visions, or the lack of succession plans as an impediment to them – three per cent and two per cent respectively.

There were divergent views on age and farming. Some argued that there was too much emphasis on younger farmers and that older farmers were ignored.

> *'Assistance to the older farmer because everything stops at forty-one.' (Male, 45-54, Very Small, Sheep, 21k-31k, without off-farm income)*

Others called for support for younger farmers.

> *'Opportunity for the youngsters.' (Male, 65+, Small. Sheep with beef, 10k-15.5k, without off-farm income)*

> *'More prospective young farmers to come in to the business.' (Male, 45-54, Small, Other/mixed, 21k-31k, off-farm income)*

But some perceived problems for younger farmers in a struggling industry:

> *'My son is doing much more than farming will ever do for him, not a lot of future in farming for youngsters anymore.' (Male, 65+, Very Small, Sheep, 15.5k-21k, without off-farm income)*

> *'Lack of people wanting to rent, and lack of young farmers coming into the industry.' (Female, 65+, Medium, Beef, without off-farm income)*

> *'Lack of people willing to take the job on, there are young people in the area being held back.' (Male, 65+, Very Small, Sheep, 15.5k-21k, without off-farm income)*

> *'People coming into the farming business without prior knowledge and they have no clue what they are doing. Farming children have the knowledge but they don't have the finance.' (Female, 35-44, Very small, Beef, 31k-52k, off-farm income)*

Connected to this discourse was one concerning smaller farms being taken-over and amalgamated with larger farms. This was seen as an impediment.

> *'Larger farms taking over the small farms will force us out.' (Male, 65+, Small, Beef, 10k-15.5k, without off-farm income)*

There was a theme encompassing technology and the internet. Respondents argued that improved connectivity would assist a vision of better farming.

> *'Better connectivity with the outside world. Internet connection.' (Male, 65+, Small, Sheep, 31k-52k, without off-farm income)*

> *'Better technology, better internet connections, capital to be able to invest in buildings for diversification, finance.' (Female, 35-44, Very small, Beef, 52k+, without off-farm income)*

> *'Effective help or technology to do with energy.' (Male, 45-54, Medium,*

Dairy, 31k-52k, without off-farm income)

'I use a lot of internet communication systems so if they were made more mainstream that would be easier to use.' (Female, 45-54, Very small, Other/mixed, 10k-15.5k, without off-farm income)

And while, as discussed earlier, diversification was not widespread among the survey population, nor were many planning to embrace it, some respondents perceived the potential value of diversified and off-farm income.

'Family members having a secondary or diversified income would help.' (Male, 65+, Very large, Sheep, 52k+, without off-farm income)

'The ability to diversify on the farm. (would assist)' (Male, 55-64, Small, Sheep with Beef, 52k+, without off-farm income)

'The fact the both of them will have outside incomes, it's the only way it can be realistic because the farm can't give that much income and generate enough profit.' (Female, 45-54, Small, Sheep, 10k-15.5k, off-farm income)

Also discussed earlier was the comparative lack of interest in 'green' issues. Nevertheless some respondents saw 'green' as the way forward. This farmer argued for environmentally aware land policies.

'More bio friendly policies for surrounding land.' (Male, 55-64, Very small, Other/mixed, 21k-31k, without off-farm income)

And this respondent sought assistance.

'Help with setting up reed beds.' (Female, 65+, Very small, Other/mixed, 15.5k-21k, without off-farm income)

Weather is, of course, of fundamental importance to farming. Several respondents commented on the weather, the current wet summer, the issue of climate change, and the looming impediment of global warming.

'If it stops raining in 10 years time!' (Male, 45-54, Small, Sheep with Beef, 31k-52k, off-farm income)

'Weather is due to global warming.' (Male, 55-64, Large, Dairy, 31k-52k, off-farm income)

'Climate change poses a real risk.' (Male, 35-44, Very small, Beef, 31k-52k, off-farm income)

'It's the weather we are continually battling.' (Male, 65+, Small, Sheep, 21k-31k, off-farm income)

'The effect of global warming would change the landscape and would make it difficult for what we are planning.' (Male, 55-64, Very small, Sheep, 21k-31k, without off-farm income)

'The only concern I have is climate change.' (Male, 65+, Very small, Other/mixed, <10k, without off-farm income)

'Global warming issues will force us to be sustainable.' (Male, 55-64, Very small, Sheep, 21k-31k, without off-farm income)

'Climate change could be an issue as well- our water supply gets a bit iffy in very dry summers, as we are on sandstone.' (Male, 31k-52k, Very small, Other/mixed, <10k, off-farm income)

Alternative energy projects tended not to be perceived as beneficial.

'Alternative energy schemes- we are near the top of a hill and if they stick wind farms or solar arrays on the hill we would lose all our income from films as we would no longer look like a period site.' (Male, 31k-52k, Very small, Other/mixed, <10k, off-farm income)

'Energy is going pay a important role. I don't think wind farms are going to be able to cope with energy demands.' (Female, 65+, Small, Beef, 10k-15.5k, without off-farm income)

Wind farm plans nearby. (Will impede my vision) (Male, 55-64, Very small, Sheep, 21k-31k, off-farm income)

Unless, it was actually on the farmer's land.

'Possible income from wind turbine would provide a supplement.' (Female, 45-54, Very large, Dairy, 21k-31k, without off-farm income)

Small proportions of the survey referred to factors such as the eradication of TB, the availability of land and a reduction in the price of land, and beneficial adjustments to income tax, inheritance tax and capital gains tax as relevant to their visions for their farms. More than one in five of the survey (21 per cent) either did not have any ideas on what might assist or impede their vision, or refused to answer the questions.

Finally, this quote, while arguably utopian, provided a vision to aim for.

'Young people in a viable rural economy will stay to make living from it. Most just want a standard living. This will make communities stay together. People need to spend money in the local community for the economy to survive. People staying within the area contribute to social ethics such as less crime and other social benefits like trust.' (Male, 55-64, Large, Dairy, 15.5k-21k, off-farm income)

As with the earlier qualitative analyses, these quotations are not representative of farmers in Wales. Their value is that they provide insights to what farmers in Wales think about their current situation and their future, and they illustrate key issues. These issues include the widespread understanding that famers could continue with business as usual; concerns about having to leave farming; perceptions that farming was over-regulated; concerns about the general economic situation and its effects on farmers; ongoing problems in the dairy sector; a reliance on CAP subsidies; support for younger farmers; communications with WG; and the importance of technology and broadband connectivity. Importantly, the analysis supports and points to the implications for policy identified throughout the report.

Section 4.8 Longitudinal Analysis – Vulnerability, Resilience, Diversification, Multifunctionality and Entrepreneurship

4.8.1 The basis for the Longitudinal Analysis

As mentioned in Section 1.4 (Introduction) and Section 2.4 (Research methods and Analysis), the main survey of 2,402 farms included a longitudinal sample of 452 farms. These 452 farms were surveyed previously on the WRO project for the Welsh Government, 'A Survey of Farming Households in Wales (2010). Similarly to the current survey, this project used a telephone survey (of 1009 farming households) and although the two survey questionnaires had different foci, and hence different questions, longitudinal analysis was possible owing to some innovative aspects of the 2010 survey data analysis.

The 2010 project report incorporated three modes of analysis: quantitative, qualitative and 'typological'. Quantitative data were subjected to a conventional frequency analysis. Qualitative data were garnered from two 'open-ended' questions, which posed distinctive scenarios. The first question [Q21] concerned CAP reform, policy development and increased environmental responsibilities, and the second question [Q22] focused on the cost-price squeeze in the market for agricultural products. From the responses to these two questions codes were developed. These codes were assigned to one of two code-groups: Vulnerable or Resilient.

The next stage was a 'typological' analysis. Three Indices were created:

- *Diversification* - the development of farm-based, non-agricultural activities to help sustain the farm holding.
- *Multifunctionality* – the degree to which farms contribute, beyond their primary function of producing food and fibre, to environmental benefits such as land conservation, the sustainable management of renewable natural resources; the preservation of biodiversity; and socio-economic aspects.
- *Entrepreneurship* – the ability, skills and mindset of farmers in terms of assembling resources and innovations to find new ways of entering different markets.

The process of index creation consisted of, firstly, identifying those questions on the survey that applied to each index. Some questions, of course, applied to more than one index. Next, scores for each question were allocated. In allocating the scores, consideration was given to the weighting or importance of each question or part of a question. The maximum possible score for each index was then calculated. This process of index creation involved sensitivity testing and the construction of a continuum for each index. From this process three robust indices were created, which measured the extent of diversification, multifunctionality and entrepreneurship in the sample. And, using SPSS, each farm on the survey could be positioned on each index.

The final stage of this analysis was the integration of the qualitative analysis and the typological analysis. This consisted of cross-tabulating the variables of Vulnerability and Resilience for Q21 and Q22 with the indices of Diversification, Multifunctionality and Entrepreneurship. For more detailed descriptions and the results of this analysis, see Section 4 and Section 8 of 'A Survey of Farming Households in Wales (2010).

4.8.2 Longitudinal Sample - Awareness of CAP reform

Firstly, cross-tabulations were done with the longitudinal sample against the survey question – 'Are you aware of the proposed post-2013 CAP reforms?'.

Of the 452 farms in the longitudinal sample:

306 farms were aware = 68 per cent

146 farms were not aware = 32 per cent

4.8.2.1 Awareness of CAP reform by the indices of Diversification, Multifunctionality and Entrepreneurship.

Table 4.68 breaks-down the awareness data by the indices of Diversification, Multifunctionality and Entrepreneurship.

Table 4.68 Awareness of CAP reform by index

Awareness	Total	Least Diversified	Most Diversified	Least Multi functional	Most Multi Functional	Least Entrepreneurial	Most Entrepreneurial
Yes	306	174	132	99	207	128	178
	68%	68%	67%	65%	69%	67%	68%
No	146	82	64	54	92	63	83
	32%	32%	33%	35%	31%	33%	32%

Recall that the total longitudinal sample was classified within each index. Therefore, at Table 4.68 within each index the total longitudinal sample of 452 is split into four sets of numbers: e.g. for Diversified, 174 of the Least Diversified were aware and 82 were not; and 132 of the Most Diversified were aware and 64 were not. This pattern is repeated for the indices of Multifunctionality and Entrepreneurship.

Table 4.68 shows that the ratio of Aware and Not Aware in each index broadly reflected the ratio of the overall longitudinal sample. The Least Multifunctional group showed the greatest divergence – the least multifunctional farmers tended to be slightly more likely to not be aware of the CAP reforms.

Table 4.69 cuts the data in a different way. The table shows what proportion of the longitudinal sample were, for example, Least Diversified and aware of the CAP reforms and Most Diversified and aware, and so on for each combination of index and awareness/not awareness.

Table 4.69 Awareness of CAP reform by index as proportion of the total longitudinal sample

Total sample 452 =100%	Least Diversified	Most Diversified	Least Multi functional	Most Multi Functional	Least Entrepreneurial	Most Entrepreneurial
Aware	39%	29%	22%	46%	28%	40%
Not aware	18%	14%	12%	20%	14%	18%

Table 4.69 reveals a degree of complexity in the analysis. For example, not only were greater proportions of the Least Diversified aware of CAP reform than the Most Diversified, but also greater proportions of the Least Diversified were not aware. There is similar complexity with regard to the indices of Multifunctionality and Entrepreneurship, with the 'Most' categories dominating. These apparent contradictions may be explained by returning to the raw numbers displayed at Table 4.68. We can see that the Least Diversified, the Most Multifunctional, and the Most Entrepreneurial categories contained greater numbers than their counterparts.

Taking a trend view of the data, we can see that in terms of awareness of CAP reform:

- The Least Diversified were more likely to be aware
- The Most Multifunctional were more likely to be aware
- The Most Entrepreneurial were more likely to be aware

4.8.2.2 Awareness of CAP reform by Vulnerability and Resilience

To an extent this analysis is more straightforward as, on their responses to Q21 and Q22, the farms in the longitudinal sample were divided into two categories – Vulnerable or Resilient. Thus, for each of Q21 and Q22, we can see the proportions of the longitudinal sample that were Vulnerable and were aware or not aware of CAP reform, and similarly for those who were Resilient. This is shown at Table 4.70.

Table 4.70 Awareness of CAP reform by Vulnerability and Resilience

Are you aware of the post-2013 CAP reforms?	Overall	Q21 - CAP reform, policy development and increased environmental responsibilities		Q22 - The cost-price squeeze in the market for agricultural products	
		Vulnerable	Resilient	Vulnerable	Resilient
Yes	306	188	118	217	89
	68%	65%	72%	65%	74%
No	146	101	45	115	30
	32%	35%	28%	35%	26%

The table shows that for both Q21 and Q22, in the category of Resilient farms, the ratio of aware farms to not aware farms exceeded the ratio for the overall longitudinal sample. That is, in terms of of awareness of CAP reform:

- Resilient farms were more likely to be aware than Vulnerable farms
- Resilient farms were less likely to be not aware than Vulnerable farms

4.8.3 Business as Usual

As discussed earlier, 'Business as Usual' was a key response to the scenarios posed for both increases and decreases in subsidies, resulting from the CAP reforms. Of the 452 farms in the longitudinal sample, under all scenarios of increase and decrease:

74 farms opted for business as usual [BAU] = 16 per cent

378 farms did not opt for BAU = 84 per cent

4.8.3.1 Business as Usual and the indices of Diversification, Multifunctionality and Entrepreneurship

Table 4.71 shows the longitudinal data for BAU cross-tabulated with the indices of Diversification, Multifunctionality and Entrepreneurship.

Table 4.71 BAU under all scenarios by Index

	Total	Least Diversified	Most Diversified	Least Multi functional	Most Multi Functional	Least Entrepreneurial	Most Entrepreneurial
BAU under all scenarios	74	49	25	26	48	46	29
	16%	19%	13%	17%	16%	24%	11%
Not BAU	378	207	171	127	251	145	233
	84%	81%	87%	83%	84%	76%	89%

The table suggests a tendency for the Least Diversified, Least Multifunctional and Least Entrepreneurial farms to opt for BAU under any circumstances. That is, in these categories the proportions of those opting for BAU exceed that for the overall longitudinal sample. In addition, the Most Diversified, Most Multifunctional and Most Entrepreneurial farms have larger ratios than the overall between those not opting for BAU and those opting for BAU. This is particularly noticeable in Most Entrepreneurial farms, which has ratio of 89 per cent of farms not opting for BAU to 11 per cent opting for BAU (compared with an overall ratio of 84 per cent to 16 per cent).

4.8.3.2 Business as Usual and Vulnerability and Resilience

Table 4.72 shows the cross-tabulations between those farms in the longitudinal sample opting for BAU under any circumstances and the Vulnerable and Resilient categories for Q21 and Q22.

Table 4.72 BAU and Vulnerability and Resilience

BAU under all scenarios		Overall	Q21 - CAP reform, policy development and increased environmental responsibilities		Q22 - The cost-price squeeze in the market for agricultural products	
			Vulnerable	Resilient	Vulnerable	Resilient
	Yes	74	46	28	57	17
		16%	16%	17%	17%	14%
	No	378	243	135	275	103
		84%	84%	83%	83%	86%

There was not much differentiation between Vulnerable and Resilient farms in terms of opting for BAU. However, Resilient farms in the longitudinal sample were slightly more likely not to opt for BAU.

4.8.4 Leaving Farming

The other key response to the scenarios for change in CAP subsidies was to leave farming. Of the 452 farms in the longitudinal sample, under any of the two decrease scenarios:

96 farms opted to leave farming = 21 per cent

356 farms did not opt to leave farming = 79 per cent

Table 4.73 and Table 4.74 repeat the analyses above for this response. Table 4.73 shows the cross-tabulations for the longitudinal sample for those opting to leave farming if they received a decrease in CAP subsidies and the indices of Diversification, Multifunctionality and Entrepreneurship.

Table 4.73 Leave farming under any decrease scenario by Index

	Total	Least Diversified	Most Diversified	Least Multi functional	Most Multi Functional	Least Entrepreneurial	Most Entrepreneurial
Leaving farming	96	47	49	26	70	34	62
	21%	18%	25%	17%	23%	18%	24%
Not leaving farming	356	209	147	127	229	157	199
	79%	82%	75%	83%	77%	82%	76%

The data at Table 4.73 suggest that the Most Diversified, the Most Multifunctional and the Most Entrepreneurial farms in the longitudinal sample were the most likely to leave farming if their subsidies were to be decreased under CAP reform.

Table 4.74 shows the cross-tabulations for the longitudinal sample for those opting to leave farming if they received a decrease in CAP subsidies and Vulnerability and Resilience.

Table 4.74 Leave farming under any decrease scenario by Vulnerability and Resilience

		Overall	Q21 - CAP reform, policy development and increased environmental responsibilities		Q22 - The cost-price squeeze in the market for agricultural products	
			Vulnerable	Resilient	Vulnerable	Resilient
Leaving farming under decrease scenarios	Yes	96	68	28	76	20
		21%	24%	17%	23%	17%
	No	356	221	135	256	100
		79%	76%	83%	77%	83%

Table 4.74 indicates that for both Q21 and Q22 Vulnerable farms in the longitudinal sample were more likely to leave farming if their subsidies were to be decreased under CAP reform.

Introduction

Section five provides an agricultural geography of the three geographical clusters selected for further research. The three geographical areas were selected for over-sampling (using the methodology previously detailed in Section 2.5), taking each area to be indicative of a distinctive combination of farming conditions. Farms from each of these areas were predicted to be affected dissimilarly due to the proposed reform to the CAP. Financial modelling work undertaken by the Welsh Government's [WG] Knowledge and Analytical Services team suggested that CAP reform, through its shift from the existing system of payments based on historical entitlement to a system based on a flat rate payment for each hectare of land farmed, would result in specific changes to subsidy payments for farmers that have certain types of enterprise and are situated on particular types of land (the detail of the analysis is provided in Section 3). This section explores two hypotheses emerging from this work:

That CAP reform will negatively affect farm incomes in lowland areas (especially dairy farms).

That CAP reform will positively affect farms in Severely Disadvantaged Areas [SDA] and in Disadvantaged Areas [DA].

To test these hypotheses it was important to determine parts of Wales that were indicative of these farming conditions. Several existing data sources were available to select areas within Wales for over-sampling, for example the Welsh Government Agricultural Small Area Statistics, which details agricultural activity at the community level, and the Welsh Government designation of Less Favourable Areas (LFA) for farming in Wales. LFAs tend to be in the mountainous and upland areas of Wales. Cross-referencing these data sources indicated potential areas in Wales that were appropriate for over-sampling; mapping this information revealed concentrations of farm types on various land designations.

This section had the following aims:

- To test the hypotheses described above;
- To describe and analyze agricultural conditions in the three areas;
- To compare the three over-sampled areas in order to identify differences between them;
- To make comparisons with the main survey;
- To identify potential interviewees for the later phases of the research project.

Cluster selection

The Agricultural Small Area Statistics for 2010 (See Annex Four) indicated a predominance of certain farming sizes and types in particular areas of Wales, for example, lowland dairy in the south-west, upland sheep and cattle in the north-west, and mixed sheep and cattle in mid-Wales. Further analysis revealed correlations between dairy farms and higher output, upland sheep and cattle farms and lower output. In this context, output refers to the economic value of farm products.

The three areas selected for study contained farms that were located within a radius of 30km from the settlements of Narbeth in the south-west; Blaenau Ffestiniog in the north-west; and Llanidloes

in mid -Wales. Discussions with the farming unions of Wales guided the selection of these locations in Wales and verified the logic for their inclusion.

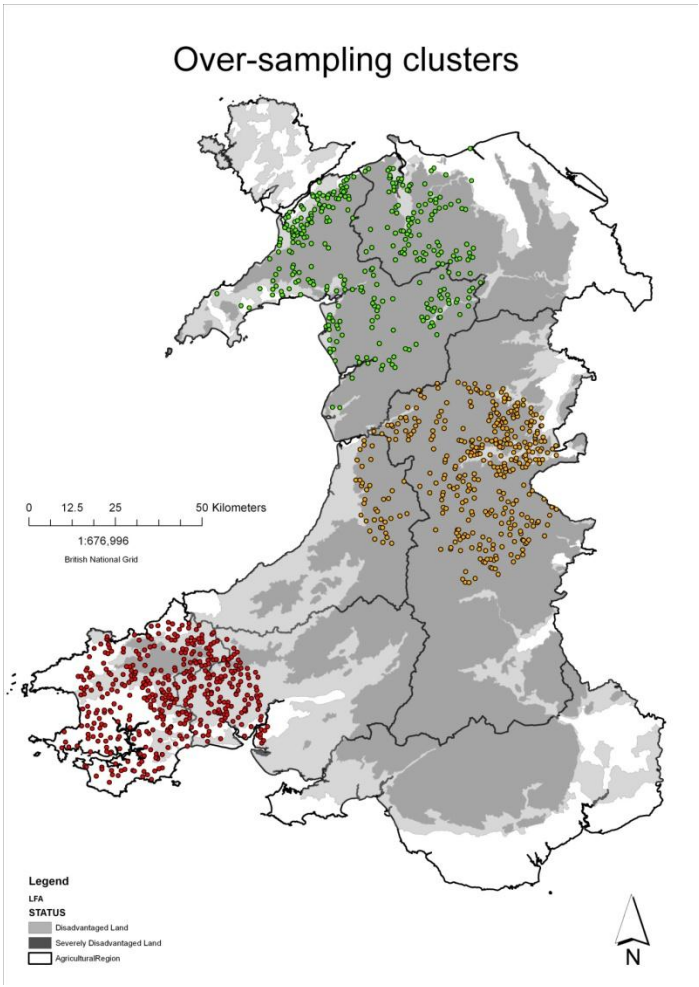
Using a 30km radius permitted sufficiently large sample sizes to be achieved in order to meet a target of 200 additional interviews from each of the three areas. Table 5.1 shows how many interviews were completed during the over-sampling in each area, together with the number of interviews in each area that were conducted during the main survey. Aggregating these amounts gives the total of interviews for each of the three 'geographical area' surveys.

Table Error! No text of specified style in document.**.1 Interviews in each geographical area**

Area	Over-sampled interviews	Interviews in main survey	Total interviews in area
Narbeth South-west	204	274	478
Blaenau Ffestiniog North-west	200	159	359
Llanidloes Mid Wales	201	238	439

Aggregating the over-sampled interviews and the in-area components from the main survey constituted a random survey of farms for each area. Thus, the results may be generalized within each area as the survey questionnaire remained unchanged. The location of the three geographical cluster areas is depicted in Figure 5.1.

Figure 5.1 Location of farms in each of the three study areas



The remainder of this section provides an analysis of how farms within 30km of Narberth in south-west Wales, Blaenau Ffestiniog in north-west Wales, and Llandiloes in mid - Wales responded to the survey. In this analysis, these areas will be termed the **south-west**, **north-west**, and **mid- Wales** respectively. The equivalent results from the main survey of farms in Wales have also been included in this section as a benchmark for further comparison.

Contextual information

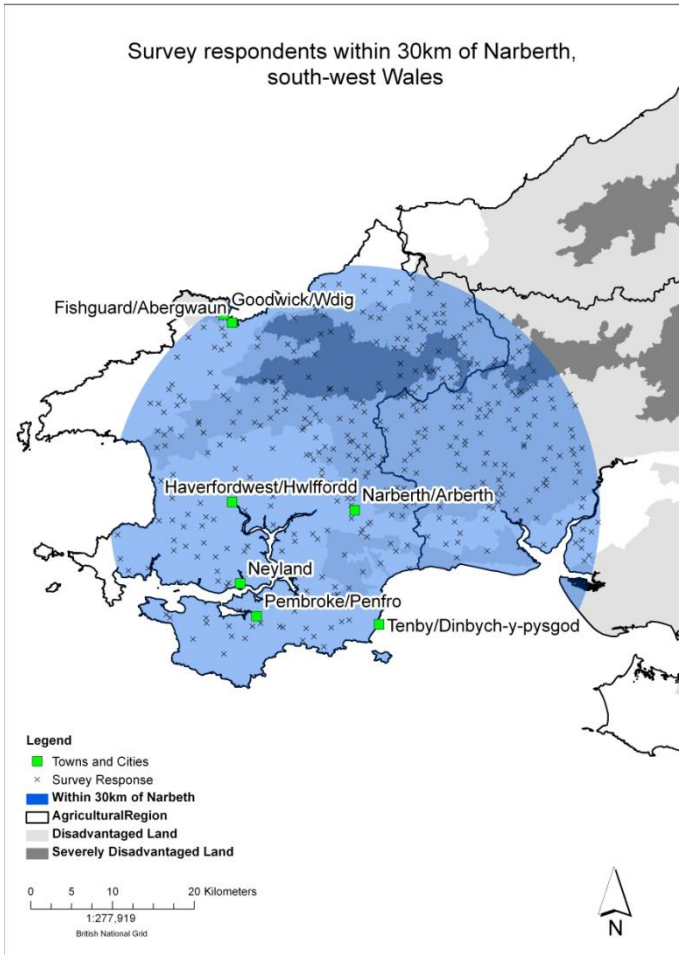
The south-west study cluster – based around Narbeth

Narberth is a rural town in Pembrokeshire, south-west Wales. It is close to the south-west border of Carmarthenshire. A total of 478 farms were interviewed in the area within 30km of Narberth. The 30km radius surrounding Narberth encompasses a number of towns and villages in both Pembrokeshire and Carmarthenshire including Haverfordwest, Neyland, Crymych, St. Clears, Pembroke, Fishguard and Tenby. The south-west area has a large proportion of land designated as lowland area but also includes disadvantaged land to the north. Agricultural Small Area Statistics show a high concentration of cattle, particularly dairy in both Pembrokeshire and Carmarthenshire. The south-west also has some of the highest ESU levels per hectare

in Wales. This study location was selected specifically to explore the hypothesis:

That CAP reform will negatively affect farm incomes in lowland areas (especially dairy farms).

Figure 5.2 Map of study area around Narberth, south-west Wales



The north-west study cluster – based around Blaenau Ffestiniog, north-west Wales

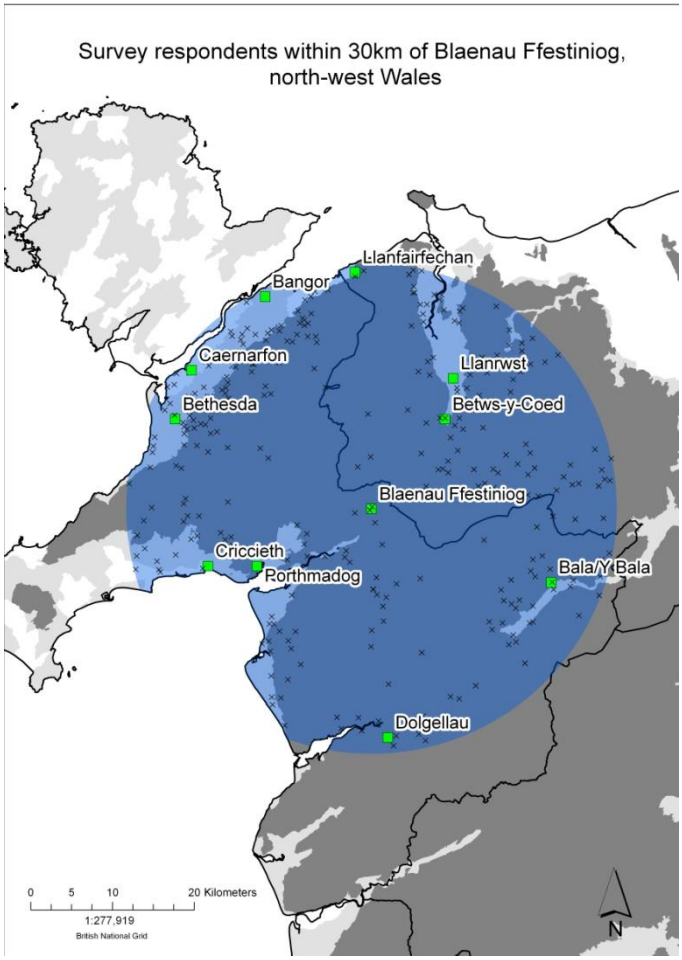
Blaenau Ffestiniog is situated in the mountains of Snowdonia in Gwynedd, north-west Wales. It is close to the south-west border of Conwy. A total of 359 farms were interviewed in the area within 30km of Blaenau Ffestiniog. The 30km radius surrounding Blaenau Ffestiniog encompasses a number of towns and villages in both Gwynedd and Conwy including Dolgellau, Bala, Betws-y-Coed, Porthmadog, Criccieth Llanrwst, Trawsfynydd, Bethesda, Harlech, Llanfairfechan, Caernarfon and Bangor.

The north-west is dominated by land designated as 'severely disadvantaged'; more favourable land is found towards the coast and along river valleys. Over three quarters of farms in the north-west are situated on severely disadvantaged land. Agricultural Small Area Statistics show a high concentration of holdings with sheep and rough grazing. The north-west also has

some of the lowest ESU levels per hectare in Wales. This study location was selected specifically to explore the hypothesis:

That CAP reform will positively affect farms in Severely Disadvantaged Areas [SDA] and in Disadvantaged Areas [DA].

Figure 5.3 Map of study area around Blaenau Ffestiniog, north-west Wales

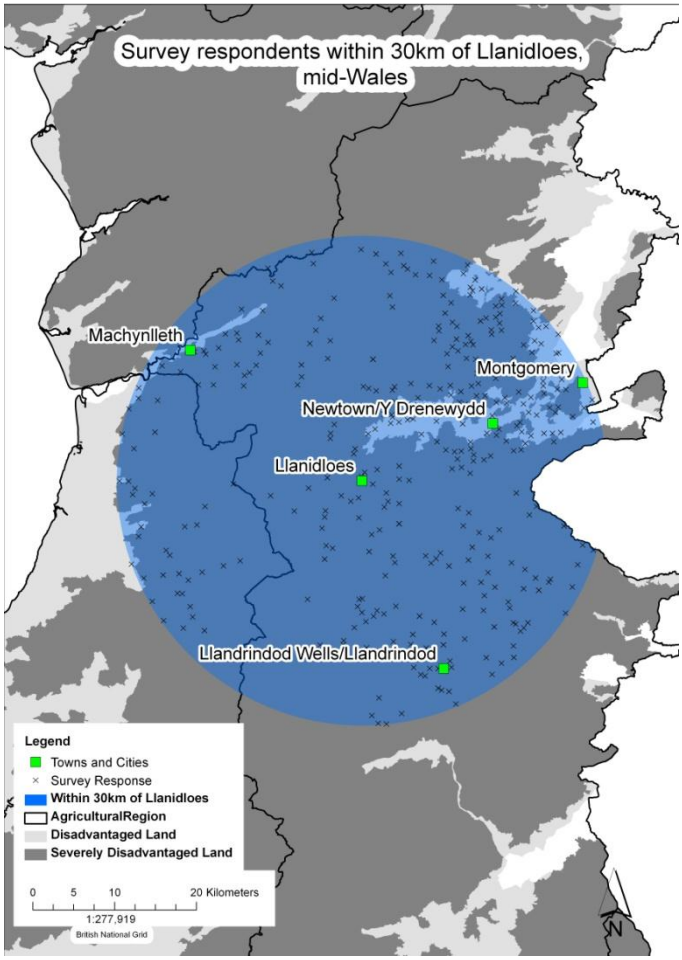


The mid-Wales study cluster – based around Llanidloes, mid-Wales

Llanidloes is a market town located in Powys, within the historic county boundaries of Montgomeryshire, Mid Wales. A total of 439 farms were interviewed in the area within 30km of Llanidloes. The 30km radius surrounding Llanidloes encompasses a number of towns and villages in Powys including Carno, Llangurig, Rhayader, Machynlleth and the larger centres of Llandrindod Wells to the south--east and Newton to the north-east. It also includes parts of north-east Ceredigion. The eastern parts of the study area are close to the border with England.

This study location was suggested by the farming unions in Wales as a mixed-farming balance for the lowland/hill farming dualism of the north-west and the south-west. The mid-Wales study area contained a mixture of farm types and it fell between north-west and south-west in terms of physical location and ESU output per hectare. In this study area the majority of farms were located on severely disadvantaged land.

Figure 5.4 Map of study area around Llanidloes, mid-Wales



The remainder of this section represents an agricultural geography for each of the three study areas. Each sub-section explores how farmers living in each area responded to key survey questions.

Farm Size And Type

To begin it is worth reiterating that for the purpose of the following analysis, the areas within 30km of Narberth, Blaenau Ffestiniog, and Llanidloes will be referred to in shorthand as the **south-west**, **north-west** and **mid-Wales**, respectively.

Table 5.2 shows the economic size of farms based on the Welsh Government classification scheme. According to this classification scheme for each activity (or 'enterprise') on a farm (for example wheat production or dairy cows), the standard gross margin (SGM) is estimated based on the area used for the particular activity (or the number of heads of livestock) and a regional coefficient. The sum of all such margins derived from activities on a particular farm is its economic size.

Table Error! No text of specified style in document.**.2 Economic Size**

	Very Small	Small	Medium	Large	Very Large
	%	%	%	%	%
South-west	39	27	15	12	7
North-west	35	42	18	5	1
Mid - Wales	26	45	24	3	2
Main Survey	**44**	**38**	**12**	**4**	**2**

The majority of farms in each study location were classified as small or very small. In general the study areas had greater proportions of medium, large and very large farms than the main survey. And the south-west had much larger proportions of large and very large.

Of the three study areas the north-west, at 77%, had the highest proportion of smaller farms (small and very small combined). The table shows that as ESU size increased from small to very large, the proportion of farms within each category decreased. Of the three study areas, the south-west had the most very small and very large farms. Compared with the figures from the main survey of farms in Wales the south-west had many more farms larger farms and lacked farms classed as 'small'. Mid-Wales had a relatively high proportion of 'medium' farms compared with the rest of Wales.

Table 5.3 shows how responses to the survey were distributed according to farm type, again using a Welsh Government classification scheme. According to this classification, each farm was allocated a farm type when over two thirds of the farming enterprise was dairy, sheep, beef, or sheep with beef. Farms outside these categories or with no main enterprise were classed as 'other/mixed'.

Table 5.3 Farm type

	Dairy	**Sheep**	**Beef**	**Sheep with Beef**	**Other/mixed**
	%	%	%	%	%
South-west	24	12	26	9	29%
North-west	4	48	12	27	8
Mid - Wales	2	43	9	34	12
Main Survey	**8**	**30**	**19**	**17**	**26**

The south-west study area contained a high proportion of dairy, beef and other/mixed types of farm. From the main survey, a total of eight per cent of farms were dairy (24 per cent in the south-west) and in total 19 per cent were beef (26 per cent in the south-west), suggesting a higher concentration of these farm types in the south-west area. In contrast, farms in the north-west had higher proportions of sheep farms and mid-Wales had the highest proportion of farms classed as sheep with beef.

Table 5.4 Farm typology

	Larger – dairy	Larger - sheep and cattle	Larger – others	Small – sheep	Small – others	Very small
	%	%	%	%	%	%
South-west	22	5	7	3	25	39
North-west	4	18	1	22	20	35
Mid - Wales	2	24	3	23	22	26
Main Survey	**7**	**8**	**4**	**12**	**25**	**44**

Further analysis of farm typology (combining farm size and type) showed there to be significantly higher proportions of larger-dairy farms in the south-west (22 per cent) compared with Wales (seven per cent). In addition, of the three study areas, the south-west also had the highest proportion of farms classed as 'small others' and 'very small'. Mid-Wales had the highest proportion of larger sheep and cattle farms. The north-west and mid-Wales had similar distributions of farms classed as small sheep and other.

Tables 5.2 to 5.4 highlight the complexity of farm distribution in Wales but also the tendency for certain parts of Wales to contain higher than expected levels of certain farm sizes and types. For example, the south-west contained larger dairy farms but also very small farms with no clear specialism; the north-west contained small sheep farms; and mid-Wales contained a mixture of farm types but was more similar to the north-west than the south-west.

As part of the survey farmers were asked to specify what they considered the primary activity on the holding. Results are shown in Table 5.5.

Table 5.5 Self classification of farm type

	Dairy	Beef	Sheep	Beef and sheep	Poultry	Cereals	Forage crops	Horticulture	Other	No Primary
	%	%	%	%	%	%	%	%	%	%
South-west	26	27	17	14	1	1	3	2	8	2%
North-west	4	8	42	38	1	0	<1	1	4	1
Mid – Wales	3	6	43	42	2	<1	1	1	3	1
Main Survey	**9**	**17**	**35**	**24**	**2**	**1**	**2**	**1**	**7**	**2**

Table 5.5 shows that farmers were more likely to classify themselves as dairy or beef farms in the south-west and sheep or beef with sheep farms in north-west and mid-Wales. This pattern is similar to that found for the Welsh Government classification of farm type in Table 5.3.

Agricultural Land

This sub-section focuses on the area of land contained on each farm. Table 5.6 displays the average farm size for each study location. The largest farms, in terms of area, were in the north-west: here the mean farm size was 132 hectares. The average for all surveyed farms in Wales was similar to the south-west at 75 hectares.

Table 5.6 Average area of farm

	Mean (hectares)
South-west	74
North-west	132
Mid - Wales	124
Main Survey	**75**

Table 5.7 shows that at 36 per cent, over a third of farming households in the south-west fell outside disadvantaged or severely disadvantaged land, 16 percentage points above the proportion for all farms in Wales. Farming households in the south-west tended to be located on disadvantaged land rather than severely disadvantaged land. Mid-Wales and the north-west both had over three quarters of farming situated on severely disadvantaged land

Table 5.7 Land designation

	Fall outside LFA	Disadvantaged Land	Severely disadvantaged land
	%	%	%
South-west	36	57	7
North-west	5	18	76
Mid - Wales	1	15	84
Main Survey	**25**	**36**	**39**

Farm Tenure and Workforce

The majority of farms in Wales were family owned. Three out of four farms in the south-west were family owned, slightly above the proportion for all farms in Wales (73 per cent). Farms in the north-west were more likely to be rented or mixed tenure compared with the other study areas. The profile of farm tenure in each study area is shown at Table 5.8.

Table 5.8 Farm tenure

	Owned by you and/or your family	Rented	Mixed/both
	%	%	%
South-west	75	6	19
North-west	60	14	26
Mid – Wales	72	6	21
Main Survey	**73**	**8**	**19**

In Wales the majority of farming households operated in isolation so were not in partnership with other households. Table 5.9 shows that a similar situation was found for the south-west as 77 per cent of farms operated alone, 19 per cent operated in partnership with one other household and 4 per cent were in partnership with more than one household. Farmers in mid-Wales were more likely to operate in partnerships than other areas of Wales (28 per cent suggested they were in partnership with additional households).

Table 5.9 Farming partnerships

	Not in partnership with other households	In partnership with one other household	In partnership with multiple households
	%	%	%
South-west	77	19	4
North-west	74	20	6
Mid - Wales	72	23	5
Main Survey	**79**	**17**	**4**

The workforce in each study location is now discussed. Data representing the composition of the farm workforce on the 478 farms in the south-west, the 359 farms in the north–west and the 439 farms in mid-Wales, highlighted the strong family household orientation of farms in the survey. This is shown at Table 5.10.

Table 5.10 Proportion of farms with a particular type of workforce

	Family members Full time	Family members Part time	Not family members Full time	Not family members Part time	Casual Labour
	%	%	%	%	%
South-west	79	52	10	15	45
North-west	81	62	5	10	57
Mid - Wales	83	61	8	12	61
Main Survey	**76**	**58**	**6**	**12**	**50**

Notice from the table that farms in the north-west and mid-Wales were more likely to employ family members and utilize casual labour, than in the south-west.

The total size of the family workforce outnumbered the non-family workforce by an approximate ratio of 5:1 for farms in the south-west and rose as high as 10:1 for the north-west. The total farm workforce structure (excluding casual labour) for the surveyed holdings is shown at Table 5.11.

Table 5.11 T otal number of farming workforce

	Total Holdings	Family members			Not family members			
		Full time	Part time	Total	Full Time	Part time	Total	Total workforce (exc. casual labour)
South-west	478	681	384	**1,065**	96	119	**215**	1,280
North-west	359	478	366	**851**	33	50	**83**	934
Mid - Wales	439	622	428	**1,056**	52	77	**129**	1,185
Main Survey	**2,402**	**2,939**	**2,264**	**5,203**	**262**	**466**	**728**	**5,931**

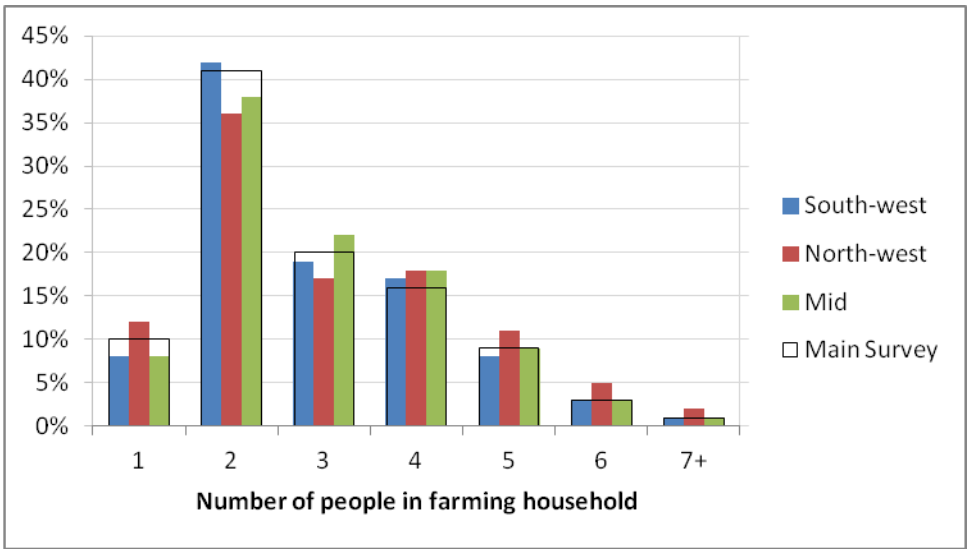
The farming household

Most farming family households in the main survey of Wales consisted of two people, the situation in the south-west was similar (42 per cent had two people). The north-west had more single person farming households than elsewhere in Wales. Figure 5.5 illustrates household composition graphically for each study area and compares and shows how the results tended to concur with the main survey of farms in Wales.

Table 5.11 Total number of farming workforce

	Number of people in the household						
	Single person	Two persons	Three persons	Four persons	Five persons	Six persons	Seven or more persons
	%	%	%	%	%	%	%
South-west	8	42	19	17	8	3	1
North-west	12	36	17	18	11	5	2
Mid – Wales	8	38	22	18	9	3	1
Main Survey	**10**	**41**	**20**	**16**	**9**	**3**	**1**

Figure 5.5 Household composition



The farm decision-maker

Interviews were conducted with the principal decision-maker in the farming household. The majority tended to be male; this was highest in the north-west where 80 per cent of principal decision-makers were male. Mid Wales had the same proportion of female decision makers (27 per cent) as main survey of farms in Wales. The results for all areas are shown in Table 5.12.

Table 5.12 Gender of farm decision-maker

	Female	Male
	%	%
South-west	24	76
North-west	20	80
Mid - Wales	27	73
Main Survey	**27**	**73**

Table 5.13 shows the age profile of interviewees in each study area compared with the main survey for Wales.

Table 5.13 Age profile of principal decision makers

	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 or over	Refused
	%	%	%	%	%	%	%
South-west	<1	2	9	25	34	29	1
North-west	1	3	10	26	31	28	1
Mid – Wales	<1	3	13	28	26	30	1
Main Survey	**<1**	**2**	**10**	**26**	**31**	**31**	**1**

The general distribution of decision makers was skewed towards the older age categories. The number of interviewees in the younger two categories was low. There was an above expected proportion of interviewees in the age groups between 35 to 54 in mid-Wales. The south-west had the highest proportion of interviewees aged 55 to 64. The profile in the north-west generally mirrored the age profile of the main survey of farms in Wales.

As results point to a generally ageing population of farmers, the process of succession is considered in the next sub-section. Succession is important for the future of farming households and for the long term sustainability of farming in Wales.

Succession

Succession lays the foundation for the continuation of farming activity. The proportion of farms with family succession plans is shown in Table 5.14.

Table 5.14 Family Succession Plans

	Yes	No	Don't Know/refused
	%	%	%
South-west	52	44	4
North-west	63	33	5
Mid- Wales	64	32	4
Main Survey	**55**	**40**	**5**

At 52 per cent the south-west had a lower proportion of farms with a family succession plan than in the main survey of farms in Wales. The north-west and mid-Wales had similarly high proportions of farms with succession plans, eight and nine percentage points above the Welsh average, respectively.

Profile of family successor

Table 5.15 Gender of family successor

	Male	Female	Refused
	%	%	%
South-west	74	20	6
North-west	80	17	3
Mid - Wales	82	15	3
Main Survey	**74**	**20**	**6**

The ratio of gender found for the family successor appeared to imitate the current gender profile of farm decision-makers i.e. a high proportion of male farmers. However, there appeared to be some evidence of a small shift towards more male farmers in the future, especially in mid-Wales.

The relation of the successor to the current farmer is shown in Table 5.16. Clearly the successor tended to be the son of the current farmer, this was especially the case in mid-Wales, and here only a small proportion of successors were other family members.

Table 5.16 Relationship between family successor and current farming decision-maker

	Son	Daughter	Other family member	Refused
	%	%	%	%
South-west	64	18	14	5
North-west	70	15	12	3
Mid- Wales	76	14	5	4
Main Survey	**65**	**18**	**13**	**4**

The age distribution of successors is shown in Table 5.17 below and reflects the current age distribution of farmers. Note the drop in the proportion of successors between the 35 to 44 age group and the 45 to 54 group. This was to be expected as successors are more likely to be a younger generation.

Table 5.17 Age of family successor

	Under 16	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Not given
	%	%	%	%	%	%	%	%
South-west	16	19	28	20	9	1	<1	7
North-west	18	25	24	20	6	1	<1	5
Mid - Wales	20	23	23	22	6	1	0	5
Main Survey	**16**	**21**	**24**	**22**	**8**	**1**	**<1**	**7**

Less than one percent of farms in each study area had successors that were not family members.

Alternative farm activity and diversification

Alternative farm activity

Interviewees were asked whether or not they were operating, or considering operating a range of alternative enterprises. Although alternative farm activities such as energy crops and alternative livestock were practised by a minority of the farms, there were indications that some farmers were developing these alternative enterprises, for example 12 per cent of farmers in the south-west were considering energy crops or bio energy. Despite this, 85 per cent were not considering alternative enterprises.

Table 5.18 Alternative enterprises

Alternative Enterprise		Currently operating	Considering	Not considering
		%	%	%
Horticulture	South-west	5	5	90
	North-west	4	4	92
	Mid – Wales	2	3	95
	Main Survey	**4**	**5**	**91**
Alternative livestock	South-west	2	6	92
	North-west	3	6	91
	Mid – Wales	3	7	90
	Main Survey	**3**	**9**	**88**
Energy crops/bio energy	South-west	3	12	85
	North-west	1	8	91
	Mid – Wales	1	9	90
	Main Survey	2	11	87
Industrial crops	South-west	1	1	98
	North-west	0	2%	98
	Mid – Wales	<1	1	99
	Main Survey	**<1**	**3**	**97**
Organic crops	South-west	7	3	90
	North-west	5	5	90
	Mid – Wales	7	5	88
	Main Survey	**7**	**5**	**88**

Compared with Wales the south-west had a slightly higher proportion of farms that operated or considered operating horticulture, and bio energy. Overall in the north-west and mid-Wales farms were more likely to not consider alternative enterprises.

Diversification

A range of questions explored the topic of farm diversification. Interviewees were provided with a list of diversification enterprises and asked whether or not they currently operated them or were considering doing so in the future. In gross terms, 45 per cent of farms in Wales operated at least one of the diversified enterprises; the corresponding result for the north-west was 51 per cent, six percentage point above the results for Wales from the main survey. Just under half (49 per cent) of farms in mid-Wales operated diversified activities and the south-west had the lowest proportion of the study areas (44 per cent). It appears that diversified activities were operated on a greater proportion of farms as one moved from south to north in Wales.

Table 5.19 Farms operating diversified activities

	Operate diversified activity
South-west	44%
North-west	51%
Mid - Wales	49%
Main Survey	**45%**

The breakdown of these results for each study area is shown in Table 5.20.

Table 5.20 Diversified enterprises

Diversified Enterprise		Currently	Considering	Not
		%	%	%
Agricultural services	South-west	13	8	79
	North-west	17	9	74
	Mid - Wales	18	11	71
	Main Survey	**15**	**8**	**77**
Farm-based food processing	South-west	2	5	93
	North-west	2	5	93
	Mid - Wales	3	4	93
	Main Survey	3	6	91
Farm-based food retailing	South-west	4	5	91
	North-west	2	7	91
	Mid - Wales	3	5	92
	Main Survey	4	8	88
Internet or mail food retailing	South-west	2	5	93
	North-west	2	5	93
	Mid - Wales	1	5	94
	Main Survey	**1**	**6**	**93**
Non-agricultural contracting	South-west	5	4	91
	North-west	7	8	85
	Mid - Wales	7	6	86
	Main Survey	**7**	**7**	**86**
Farm-based accommodation	South-west	11	17	72
	North-west	16	16	68
	Mid - Wales	8	17	75
	Main Survey	**11**	**17**	**72**
Equine	South-west	7	8	85
	North-west	6	6	88
	Mid - Wales	6	6	88
	Main Survey	**9**	**8**	**83**
Other Farm based leisure	South-west	2	5	93
	North-west	3	8	89
	Mid - Wales	4	7	89
	Main Survey	**3**	**7**	**90**
Leasing of buildings	South-west	3	9	88
	North-west	3	7	90
	Mid - Wales	3	9	88
	Main Survey	**3**	**9**	**88**
Leasing of land – Agricultural use	South-west	12	14	74
	North-west	3	12	85
	Mid - Wales	8	15	77
	Main Survey	**8**	**15**	**77**
Leasing of land – Non-agricultural use	South-west	1	12	87
	North-west	2%	10	88
	Mid - Wales	3	12	85
	Main Survey	**2**	**11**	**87**

The main points to take from the table are that agricultural services, farm based accommodation and leasing of land tended to be the most referenced diversified activities currently operating or being considered in Wales. Each of these activities were more likely to operate in a particular study area; Agricultural services were more likely to operate in mid-Wales (18 per cent), farm-based accommodation in the north-west (16 per cent) and leasing of land for agricultural use in the south-west (12 per cent).

Interviewees that considered further diversification were also asked if this was something they had to do or if it was something they wanted, Table 5.21 shows the response to this question for each study area.

Table 5.21 Consideration of diversification

	Want to further diversify	Have to further diversify	Don't know/refused
	%	%	%
South-west	33	60	8
North-west	34	57	8
Mid - Wales	32	61	7
Main Survey	**33**	**59**	**8**

The majority of farmers considered further diversification something that had to be done; farmers in the north-west were most likely to want to further diversify.

All farmers were asked if they perceived there to be barriers to further diversification on their farm. In all study areas the proportion of farms that perceived barriers to diversification exceeded those that did not. Table 5.22 shows the results.

Table 5.22 - Barriers to diversification

	Barriers to further diversify	No barriers	Refused to answer
	%	%	%
South-west	52	48	<1
North-west	62	38	<1
Mid - Wales	55	44	1
Main Survey	**57**	**42**	**1**

At 62 per cent the proportion of farms with barriers to further diversification was highest in the north-west, whereas the highest proportion of farms with no barriers to diversification was in the south-west (48 per cent). Combining these results with the information above, suggests that farmers in the north-west were able to adapt to barriers to further diversification; it more likely something that they want to do. This

contrasts with the situation in the south-west where a higher proportion of farms perceived no barriers to diversification and yet this area was least likely to have farms operating diversified activities.

The main barriers perceived by farmers are listed in Table 5.23.

Table 5.23 Top three perceived barriers to diversification

	Planning permission (1)	Location of farm (2)	Availability of finance (3)
	%	%	%
South-west	42	24	19
North-west	55	37	12
Mid - Wales	35	33	17
Main Survey	**42**	**26**	**17**

Planning permission and the location of the farm were considered a barrier by a higher proportion of farms in the north-west. The availability of finance was considered to be more problematic for further diversification in the south-west. Interviewees provided a range of additional reasons for not undertaking more diversified activities, these included bureaucracy, size of farm, restrictions from local council, lack of appropriate land, uncertainty in market, lack of time, and more farm specific barriers. These additional barriers were articulated by less than one in ten interviewees in all cases.

Market Orientation

Interviewees were asked a range of questions that related to where they bought services and farm inputs, and the types and locations of the outlets to which they sold farm produce.

Purchase of services and farm inputs

Each farm business was asked to indicate the proportion of inputs and services purchased from within the local area, elsewhere in Wales, elsewhere in Britain, and outside Britain. This provided a broad indication of the locations likely to be affected by a change to farming businesses. Table 5.24 displays the average proportion of inputs and services purchased at each location category relative to farms in each study location.

Table 5.24 Proportion of inputs and services purchased

	The local area	Elsewhere in Wales	Elsewhere in Britain	Outside Britain
	%	%	%	%
South-west	79	8	11	2
North-west	84	7	8	<1
Mid – Wales	78	10	11	1
Main Survey	**81**	**8**	**10**	**1**

All three study areas bought the majority of their services and inputs from the local area, with all three being close to the all Wales figure of 81 per cent. The north-west had the highest proportion of local purchases at 84 per cent. One might have expected a higher proportion of purchases from elsewhere in Britain from mid-Wales, given the close proximity of the border with England. The south-west had more purchases than the rest of Wales from outside Britain, although proportions in this category were uniformly low.

Sale of farm produce

A number of possible outlets for farm produce were provided and each interviewee was asked to indicate which of the outlets was used and the proportion of produce that was sold at each outlet.

Table 5.25 Proportion of farms selling produce at specified outlets

	Proportion of farms using outlet (South-west)	Proportion of farms using outlet (North-west)	Proportion of farms using outlet (Mid - Wales)	**Proportion of farms using outlet (Main Survey)**
	%	%	%	**%**
Milk processing companies	23	5	5	**8**
Livestock marts	72	89	89	**81**
Major abattoirs	43	36	36	**39**
Minor abattoirs	33	19	19	**23**
Direct to public in local area - within 25 miles	14	10	10	**17**
Direct to the public elsewhere	5	3	3	**6**
Shops, hotels and restaurants in the local area	7	3	3	**6**
Shops, hotels and restaurants elsewhere	1	1	1	**1**
Supermarkets	2	1	1	**2**
Food processing companies in Wales	8	2	2	**4**
Food processing elsewhere	3%	<1%	<1%	**3%**

A common outlet for produce was livestock marts. Over seven in ten farms sold to this type of outlet in all study areas. Farms in the south-west were less likely to use this outlet than other study areas and had a higher proportion of farms that sold to milk processing companies (23 per cent). Major and minor abattoirs were used in the south-west by 43 per cent and 33 per cent respectively - higher than other study areas. Other outlets were used by lower proportions of farms.

Table 5.26 shows the average proportion of produce sold at each outlet. The highest proportion of produce was sold at livestock marts in Wales (59 per cent), farms in the north-west sold more produce on average (74 per cent) to this outlet than other study areas. Farms from mid-Wales, on average, sold the highest proportion of produce (27 per cent) to major abattoirs. Of the study areas, the south-west, as expected due to high proportion of dairy farms, sold the highest proportion of produce to milk processing companies. A low proportion of produce was sold at the other outlets listed in the table.

Table 5.26 The proportion of produce sold at each outlet

	Proportion of total produce sold at outlet (South-west)	Proportion of total produce sold at outlet (North-west)	Proportion of total produce sold at outlet (Mid - Wales)	Proportion of total produce sold at outlet **(Main Survey)**
	%	%	%	**%**
Milk processing companies	18	3	2	**6**
Livestock marts	43	74	60	**59**
Major abattoirs	19	15	27	**18**
Minor abattoirs	5	4	3	**4**
Direct to public in local area - within 25 miles	6	3	2	**7**
Direct to the public elsewhere	2	1	1	**2**
Shops, hotels and restaurants in the local area	1	1	1	**1**
Shops, hotels and restaurants elsewhere	<1	<1	<1	**<1**
Supermarkets	1	0	1	**1**
Food processing companies in Wales	3	<1	1	**1**
Food processing elsewhere	1	0	1	**1**

In the Section 4 analysis, it appeared that farms bought more locally than they sold locally. This also appeared to be the case for the three case study areas, although the effects of sales to livestock marts and on abattoirs should not be downplayed. The policy implications, as suggested in the Section 4 analysis, are that there may be profound effects on local economies following CAP reform. These may be positive where CAP payments increase (possibly the north-west and mid-Wales)

and negative where they decrease (possibly the south-west).

Common Agricultural Policy (CAP)

CAP reform is central to this research project and a detailed analysis of results for the main survey of farming households in Wales can be found in Section 4. This section explores how farmers responded to CAP-related questions in each of the three over-sampled study areas. In total, 84 per cent of farms in Wales received the single farm payment [SFP]. The study areas with the highest proportion farms claiming payment was mid-Wales where 93 per cent received SFP. Table 5.27 shows the results for all study areas and compares these results with the main survey of farms in Wales.

Table 5.27 Farms receiving the single farm payment (SFP)

	Proportion of farms with income from SFP
South-west	85%
North-west	89%
Mid - Wales	93%
Main Survey	**84%**

All three over-sampled areas had greater proportions receiving SFP than all Wales. Consequently, the effects of CAP reform may be felt more in these areas, especially mid-Wales and the north-west, than other parts of Wales.

Farmers were also asked whether or not certain issues were a concern for the future of their business, one of these issues being CAP reform. Table 5.28 shows the proportions of farmers with these concerns.

Table 5.28 Farmers' concerns

	Proportion of farms with concern (South-west)	Proportion of farms with concern (North-west)	Proportion of farms with concern (Mid-Wales)	Proportion of farms with concern (Main Survey)
	%	%	%	**%**
Rising input costs	88	88	88	**86**
Market prices	80	84	87	**79**
General economic situation	80	81	82	**79**
CAP reform	69	76	78	**70**
Land prices	56	67	56	**56**
Availability of land	48	55	48	**49**
Succession	45	50	49	**44**
Availability of finance	42	47	43	**49**
Availability of training	22	25	21	**22**
Abolition of dairy quota	16	5	4	**7**

Concern about CAP reform showed a similar spatial trend to the proportion of farms receiving income from SFP, however, a lower proportion of farms were concerned about CAP reform than currently received SFP payments.

CAP reform was raised as a concern by 69 per cent of farmers in the south-west, one percentage point short of the result from the main survey of Wales. Similarly to results from the main survey of Wales, rising input costs, market prices and the general economic situation were the most frequent concerns held by interviewees. Land prices appeared to be a particular issue linked to the north-west and although abolition of the dairy quota was a less common response, the number of farmers that indicated that it was a concern was higher in the south-west than other parts of Wales.

Farmers were then asked to rank their top three concerns in order. Table 5.29 highlights that in the south-west CAP reform was not the most concerning issue (as it was for the main survey of Wales and other study areas). At 30 per cent rising input costs were considered most concerning in the south-west. CAP reform was ranked as the main concern by a third of farms in the north-west and by two in five farms in mid-Wales. Other concerns such as availability of finance and land, land prices, succession, abolition of dairy quota and training were less likely to be perceived as a primary concern.

Table 5.29 Farmers' main concerns ranked

	Ranking	***Main Survey***	*South West*	*North – West*	*Mid Wales*
		%	%	%	%
CAP reform	1	**29**	27	33	40
Rising input costs	2	**25**	30	22	19
Market prices	3	**12**	13	15	13
General economic situation	4	**11**	12	10	8
Availability of finance	5	**5**	4	2	3
Land prices	6	**4**	3	4	5
Availability of land	7	**2**	2	2	3
Succession	8	**2**	1	3	3
Abolition of dairy quota	9	**<1**	1	<1	0
Availability of training	10	**<1**	<1	1	0
Other		**6**	7	6	5

Participants were also asked a more specific CAP question: whether or not they were aware of the proposed post-2013 CAP reforms. Table 5.30 shows that 61 per cent of interviewees were aware of the specific post-2013 CAP reforms, a slightly higher proportion than for the main survey of farms in Wales. At 66 per cent, awareness was highest in the north-west.

Table 5.30 Awareness of the proposed post-2013 CAP reforms

Aware of the proposed post-2013 CAP reforms	**South West**	**North west**	**Mid Wales**	**Main Survey**
	%	%	%	**%**
Yes	61	66	61	**60**
No	39	34	39	**40**

Each of the three study areas showed a similar trend to results for the main survey of farms in Wales, in that a higher proportion of farms were concerned about CAP reform in general than were aware of the impending post-2013 CAP reforms. As more than 84 per cent of farms in each study area received SFP, and potentially may be affected by the reforms, this suggests inadequate information and a lack of understanding of the CAP reforms. There are policy implications here in terms of the dissemination of information.

Tables 5.31 and 5.32 deconstruct awareness of the proposed post-2013 CAP reforms using farm size and farm type respectively for each study area.

Table 5.31 Awareness of the proposed post-2013 CAP reforms by farm size

	Overall	Very large	Large	Medium	Small	Very small
	%	%	%	%	%	%
Southwest	61	85	66	69	71	44
North-west	66	100	94	83	76	39
Mid Wales	61	57	73	73	61	49
Main Survey	**60**	**86**	**66**	**77**	**66**	**48**

Table 5.32 Awareness of the proposed post-2013 CAP reforms by farm type

	Overall	Dairy	Sheep	Beef	Sheep with beef	Other/mixed
	%	%	%	%	%	%
South-west	61	71	58	59	57	55
North-west	66	87	62	65	79	33
Mid - Wales	61	100	64	54	64	39
Main Survey	**60**	**76**	**62**	**59**	**69**	**47**

The tables reveal that in the north-west, there was a greater awareness in all farm sizes and types apart for those that were very small. There was more variability in awareness in the south-west and mid-Wales.

Awareness levels were lower amongst sheep and beef farmers in the south-west, and beef farmers in mid-Wales. Apart from in the south-west other/mixed farms tended to be unaware of the proposed CAP reforms in mid-Wales and particularly in the north-west. More generally, dairy farms and larger farms tended to be more aware than other farm types and sizes. This supports the analysis in section 4, which suggests that larger and dairy farms tended to be more commercially and financially aware.

Table 5.33 Awareness of the proposed post-2013 CAP reforms by age of respondent

	Overall	Under 45	45-54	55-64	65 or older
	%	%	%	%	%
South-west	61	70	65	63	50
North-west	66	65	72	68	59
Mid- Wales	61	70	67	59	52
Main Survey	**60**	**62**	**66**	**60**	**55**

Most awareness of the proposed post-2013 CAP reforms was found for the less than 45 age group in mid-Wales and the south-west. In these two areas awareness appeared to decrease with age. In the north-west awareness was shown by a higher proportion in the 45 through to 64 age groups.

The 289 interviewees in the south-west (61 per cent), 268 interviewees in mid-Wales (61 per cent) and the 235 (66 per cent) interviewees in the north-west that were aware of CAP reform were asked further questions covering other aspects of the proposed reforms: the change from historic to area-based payments; the greening measures; the capping payments; and the emphasis on young farmers. Farmers' awareness of each of these aspects are shown for each study location in Table 5.32.

Table 5.32 Awareness of specific details of the proposed post-2013 CAP reform

	Change to area-based payments	Greening measures	Capping payments	Emphasis on young farmers
	%	%	%	%
South-west	84	70	69	69
North-west	88	74	77	76
Mid - Wales	90	72	73	73
Main Survey	**85**	**67**	**74**	**73**

Compared with the main survey of Wales, there was least awareness of proposed change to area-based payments in the south-west, although at 84 per cent awareness was comparatively high and practically on a par with the main survey. Farmers in the north-west appeared to be more aware of the additional details regarding post-2013 CAP reform: i.e. greening measures, capping payments and the emphasis on young farmers.

Farmers that were aware of the proposed post-2013 CAP reforms were also asked where they obtained their information. The results are shown in Table 5.33.

Table 5.33 Sources of information about CAP reform

	South-west	North-west	Mid Wales	Main survey
	%	%	%	**%**
Country Land and Business Association (CLA)	4	1	2	**3**
Farmers Union of Wales (FUW)	18	21	13	**15**
National Farmers Union (NFU) Cymru	21	19	18	**20**
Wales Young Farmers	1	1	0	**1**
Welsh Government	21	20	21	**25**
Other sources mentioned by respondents				
Farming press/media/TV/Internet	28	22	30	**31**
Word of mouth/other farmers	9	6	10	**10**
Farmers Weekly	25	7	17	**17**
Farmers Guardian	17	21	21	**18**
Gwlad (Magazine)	11	8	14	**15**
Postal/leaflets	1	0	0	**1**
Private expert advisors/surveyors/consultants	2	0	0	**1**
Specialist advice (including meetings, conferences/input from specialist organisations)	8	4	4	**5**
The Daily Post	0	3	0	**1**
The Western Mail	1	0	0	**1**
Ffermio (S4C)	0	1	0	**0**
Countryfile	<1	1	1	**1**
The Dairy Farmer	3	0	0	**0**
Other	3	5	4	**1**
Don't know/Can't remember	2	1	1	**1**
Refused	<1	0	0	**0**
Not Asked – i.e. those not aware of the proposed post-2013 CAP reforms	39	34	39	**40**

The main point to take from the table is that no single source of information dominated. There were subtle variations between study areas. For example, note the higher proportion of farmers that used the Farming Union of Wales from the north-west and the higher proportion that used Farmers Weekly, living in the south-west. Also note

the lower proportions of farmers that used farming publications, the media and internet as information sources in the north-west. However, there must be some concern that all three areas were between four and five percentage points lower than the main survey with regard to the proportions that obtained their information from the Welsh Government.

Expectations of change and responses to hypothetical changes in income

The following sub-section of the analysis examines farmers' responses to specific hypothetical scenarios for various levels of income change that might be caused by CAP reform.

Farmers that stated they were aware of CAP reform were further asked if they expected their payments to increase, decrease, or stay the same, results for each study location are shown in Table 5.34.

Table 5.34 Expectation of change in CAP-related payments post 2013 CAP reform

Expectation of change	Proportion (South west)	Proportion (North west)	Proportion (Mid Wales)	**Proportion (Main Survey)**
	%	%	%	**%**
Increase	9	11	7	**10**
Decrease	64	55	69	**60**
Stay the same	13	17	14	**17**
Don't know	12	16	10	**12**
Refused	2	0	<1	**1**
Farms aware of CAP reform	100 (289)	100 (235)	100 (268)	**100 (1437)**

Comparing results with the main survey of Wales reveals that there was a relatively greater degree of pessimism amongst farmers in mid-Wales and the south-west: here 69 per and 64 per cent respectively expected payments to decrease.

The south-west contained a concentration of larger dairy farms, which were predicted in previous modelling work (conducted by the Welsh Government) to receive reduced payments as a result of future CAP changes (see Section 3 for details). It therefore seems more likely that more farms would expect decreased payment in this area. However the proportion of farms that expected a decrease still appears unusually high. The north-west and mid-Wales areas were predicted to fare better than the south-west. However, here farmers were more likely to expect payments to stay the same

than increase. The least amount of farms expected an increase in mid-Wales (seven per cent). Within these spatial variations, this analysis supports broadly the analyses in Sections 3 and 4, which suggest that while dairy and larger farmers tended to be more business aware, more generally there were signs of undue pessimism.

In addition the sample of farmers, aware of post 2013 CAP reform, were also asked to quantify how much they expected payments to increase or decrease. Table 5.35 shows the results.

Table 5.35 Expectation of level of change in CAP-related payments post 2013 CAP reform

	Expectation of change	Proportion (South west)	Proportion (North west)	Proportion (Mid Wales)	**Proportion (Main Survey)**
Increase	More than 20%	4%	6%	2%	**4%**
	Less than 20%	5%	5%	4%	**4%**
Stay the same		13%	17%	14%	**17%**
Decrease	Less than 20%	21%	22%	34%	**27%**
	More than 20%	33%	21%	26%	**21%**
Don't know…	If increase/decrease	14%	16%	10%	**14%**
	By how much	10%	13%	10%	**13%**
Farms aware of CAP reform		100% (289)	100% (235)	100% (268)	**100% (1437)**

What is evident from the previous tables and the financial modelling work in Section 3 is that there was a degree of confusion amongst farmers as to exactly how proposed changes in CAP would affect payment to farms. This is shown by the overly pessimistic results and by the amount of farmers that could not provide a definitive response to the question of change (highest in the north-west at 16 per cent) and the additional farmers who did not know details of approximately how much payments would increase or decrease.

Responses to hypothetical changes in CAP payments

All participants in the south-west, north-west and mid-Wales were given scenarios for CAP payment change and asked how they would respond to each in turn. To assist them, a number of possible responses were suggested. The scenarios were:

Payments increase by less than 20 per cent

Payments increase by more than 20 per cent

Payments decrease by less than 20 per cent

Payments decrease by more than 20 per cent

Tables 5.36 - 5.39 tabulate the responses. Note that participants were allowed more than one response. Also, some categories have low counts and in order to capture these responses, percentages in this table are not rounded to whole numbers.

Table 5.36 Farmers' responses to hypothetical scenarios of payment change

Decrease by more than 20%

	South-west	North – west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Business as usual	34.3	28.4	29.2	**34.0**
Leave farming	19.9	22.6	22.3	**20.1**
Increase scale of existing agricultural operations	3.8	3.1	2.7	**2.2**
Reduce scale of existing agricultural operations	8.2	13.1	8.7	**8.5**
Buy new farm equipment	0.8	0	0.2	**0.2**
Seek more land	1.0	0	0.5	**0.4**
Intensify existing agricultural operations	4.0	2.8	2.3	**3.2**
Build more farm buildings	0.6	0	0.2	**0.2**
Reduce intensity of existing agricultural operations	4.8	5.6	6.4	**5.3**
Start new diversification activities	2.3	3.6	3.2	**2.8**
Give up land	4.0	5.0	3.2	**3.5**
Expand existing diversification	1.0	1.9	1.6	**1.9**
Change my type of farming	1.5	0.8	2.1	**2.0**
Buy more farm inputs and services locally – within 25 miles	0	0	0	**0.1**
Reduce diversification activities	0.6	0	0.7	**0.8**
Sell more farm products and services locally – within 25 miles	0.4	0.3	0.7	**0.3**
Buy more farm inputs and services from outside the local area	0	0	0	**0**
Sell more farm products and services outside the local area	0.8	0.3	0.5	**0.2**

The responses shown in the table represent the worst case scenario for farmers reliant on CAP payments, a decrease by over 20 per cent to their existing payments. Here the two dominant responses were 'business as usual' and 'leave farming'.

The proportion of farmers that would continue business as usual was lowest in the north-west at 28 per cent and highest in the south-west at 34 per cent, comparable to the overall figure for Wales. Slightly higher proportions suggested they would leave farming from the north-west and mid-Wales. Note that 13 per cent of farmers in north-Wales stated they would reduce the scale of their existing agricultural operation. This proportion was relatively high and contrasts with the other study areas.

Table 5.37 Farmers' responses to hypothetical scenarios of payment change

Decrease by less than 20%

	South-west	North – west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Business as usual	52.1	46.8	52.8	**52.2**
Leave farming	5.9	7.0	6.2	**7.0**
Increase scale of existing agricultural operations	3.3	3.9	2.3	**2.1**
Reduce scale of existing agricultural operations	6.5	11.1	8.2	**7.6**
Buy new farm equipment	0.6	0.3	0.2%	**0.3**
Seek more land	1.3	0.3	0.7	**0.4**
Intensify existing agricultural operations	3.3	3.3	3.4	**3.4**
Build more farm buildings	0.6	0.3	0.2	**0.2**
Reduce intensity of existing agricultural operations	4.2	5.8	6.6	**5.5**
Start new diversification activities	3.1	2.2	2.7	**2.8**
Give up land	2.5	3.3	0.5	**1.9**
Expand existing diversification	0.8	1.1	1.6	**1.5**
Change my type of farming	1.9	1.1	1.8	**1.5**
Buy more farm inputs and services locally – within 25 miles	0	0.6	0.2	**0.2**
Reduce diversification activities	0.8	0	0.9	**0.8**
Sell more farm products and services locally – within 25 miles	0.2	0.3	1.1	**0.4**
Buy more farm inputs and services from outside the local area	0	0.6	0.2	**0.1**
Sell more farm products and services outside the local area	0.2	0.3	0.7	**0.1**

If farms received a reduction in subsidy, by less than 20 per cent of their current payments, over half of farms would continue business as usual apart from in the north-west, here the proportion was just under half at 47 per cent. Farmers were around three times less likely to leave farming than when the reduction in CAP payments was more than 20 per cent. Slightly more would tend to reduce the scale and intensity of existing agricultural operations to compensate.

Table 5.38 Farmers' responses to hypothetical scenarios of payment change

Increase by less than 20%

	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Business as usual	63.4	60.7	67.0	**64.3**
Leave farming	0.4	0	0.5	**1.0**
Increase scale of existing agricultural operations	3.6	6.1	5.2	**5.0**
Reduce scale of existing agricultural operations	0.2	0.6	0.5	**0.8**
Buy new farm equipment	7.5	8.1	5.0	**5.0**
Seek more land	4.4	4.7	6.8	**4.3**
Intensify existing agricultural operations	2.9	3.3	1.8	**2.4**
Build more farm buildings	5.2	4.7	5.5	**4.0**
Reduce intensity of existing agricultural operations	0.2	0	0.2	**0.7**
Start new diversification activities	1.5	2.2	2.3	**1.8**
Give up land	0.2	0.6	0.2	**0.5**
Expand existing diversification	0.8	1.9	2.5	**0.9**
Change my type of farming	1.3	0	0.5	**0.5**
Buy more farm inputs and services locally – within 25 miles	1.0	1.4	2.1	**1.3**
Reduce diversification activities	0.2	0	0.2	**0.1**
Sell more farm products and services locally – within 25 miles	0.4	0	0	**0.2**
Buy more farm inputs and services from outside the local area	0.8	0	0.2	**0.3**
Sell more farm products and services outside the local area	0	0	0	**0**

In the scenario of an increase in CAP payment but by less than 20 per cent, again the proportion of farmers that would continue business as usual was the predominant response. This was particularly the case in mid-Wales. Farmers in the north-west were likely to buy new farm equipment and farmers would seek more land in mid-Wales. However the portions that said they would do so were relatively low.

Table 5.39 Farmers' responses to hypothetical scenarios of payment change

Increase by more than 20%

	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Business as usual	51.7	45.4	51.5	**51.4**
Leave farming	0.8	0.3	0.2	**0.6**
Increase scale of existing agricultural operations	6.7	10.0	8.9	**9.0**
Reduce scale of existing agricultural operations	0.6	1.1	0.9	**0.8**
Buy new farm equipment	12.3	10.9	8.9	**10.2**
Seek more land	9.0	12.8	14.6	**9.3**
Intensify existing agricultural operations	4.4	4.7	2.3	**3.7**
Build more farm buildings	9.8	9.2	8.7	**7.8**
Reduce intensity of existing agricultural operations	0.2	0.6	0.9	**0.6**
Start new diversification activities	2.7	3.9	3.4	**3.5**
Give up land	0.4	0.6	0.2	**0.3**
Expand existing diversification	1.3	2.2	2.1	**1.2**
Change my type of farming	0.8	0	0	**0.6**
Buy more farm inputs and services locally – within 25 miles	2.3	0.8	2.1	**2.0**
Reduce diversification activities	0	0	0	**0.1**
Sell more farm products and services locally – within 25 miles	0	0	0	**0.2**
Buy more farm inputs and services from outside the local area	0.4	0.3	0.	**0.3**
Sell more farm products and services outside the local area	0	0	0	**0.0**

If farms received more than a 20 per cent increase in CAP payments, farmers in the north-west were most likely to increase the scale of existing operations, farmers in mid-Wales would seek more land, and farmers in the south-west would buy new farm equipment and build more farm buildings. Overall most farms in the three study areas would still continue business as usual.

As found in the main survey of farms in Wales, two sets of statistics stand out in general, from the all study areas. First, there was a high proportion of farmers who suggested they would continue 'business as usual' regardless of any change made to their CAP payments. In most scenarios over half the farms in the study areas would continue 'business as usual', the exception being when payments decreased by more than 20 per cent. Here, 'business as usual' was around 30 per cent. Note that the north-west had smaller proportions for 'business as usual' for all four scenarios. Second, the rise in the proportion of interviewees who suggested they would leave farming when payments decreased by over 20%. These scenarios will now be considered in more detail.

Leave farming

From Tables 5.36 - 5.39 the salient responses were those for 'Business as usual' and 'Leave farming'. The following analysis explores the response for those farmers that would leave farming with a reduction of payments of over 20%, in terms of farm type and size.

Tables 5.40 and 5.41 unpack the responses by farm size and type.

Table 5.40 'Leave farming'

	Leave Farming	Very large	Large	Medium	Small	Very small
	%	%	%	%	%	%
South - west	20	18	22	22	26	15
North - west	28	0	44	26	22	36
Mid - Wales	22	14	27	18	22	27
Main Survey	20	12	15	20	25	17

Table 5.41 'Leave farming'

	Leave Farming	Dairy	Sheep	Beef	Sheep with Beef	Other/Mixed
South - west	20%	25%	14%	22%	23%	16%
North - west	28%	40%	27%	35%	28%	27%
Mid - Wales	22%	11%	27%	13%	23%	14%
Main Survey	20%	21%	21%	21%	27%	13%

Table 5.40 shows that farms that fall in to the very large or very small classification were less likely to leave farming. Of all farm sizes, the small farms were most likely to leave farming, 26% of farmers suggested they would from this type of farm. Table 5.41 indicates that farms classified as 'dairy' were most likely to leave farming but farms classified as mainly 'beef' or 'sheep with beef' were also likely to leave farming compared with the main survey of farms in Wales. Spatially, however, the north-west stands out with regard to 'leaving farming'. Apart from 'very large' farms, which recorded zero farms leaving, and 'small 'farms, which were three percentage points below the main survey, the proportions of those opting to leave farming in the north-west exceeded both the two other areas and the main survey for all types and sizes of farm.

Concerns about the greening proposals of CAP

All survey participants were asked to detail their main concerns about the greening proposals of CAP. Respondents were split almost evenly between those that had concerns with the greening proposals and those without any concern. In the south-west, 48% of farmers were not concerned with the greening proposals, whereas the highest proportion of farmers had concerns in mid-Wales. Table 5.42 below lists in order of overall significance farmers main concerns about the greening proposal.

Table 5.42 Main concerns about the greening proposals of CAP

	South-west	North- west	Mid -Wales	**Main Survey**
None/No concerns	48%	45%	43%	**47%**
Will be too restrictive/complicated	10%	6%	8%	**10%**
Reduction in food production/taking land away from food production	10%	10%	12%	**9%**
Don't know enough about it/Need more information	8%	11%	9%	**8%**
Advantages Big Farms/Disadvantage to Small Farms/my farm/Younger Farmers	4%	3%	4%	**4%**
Too much red tape/paperwork/too bureaucratic	4%	2%	2%	**3%**
It will go too far/not practical/unrealistic	3%	6%	9%	**5%**
Reduction in payments/grants/subsidies	3%	5%	5%	**4%**
Too much emphasis on the environment	3%	6%	3%	**4%**
Don't agree with it/it's unfair/I'm just concerned about it	2%	3%	2%	**2%**
Will have an affect food prices/market prices	2%	0%	1%	**1%**
Reforms being made by people outside of farming	1%	1%	2%	**2%**
Need a better balance between food production and environment	1%	1%	1%	**1%**
Additional costs required to qualify/have to spend more to qualify	1%	1%	1%	**1%**
It does not go far enough	<1%	<1%	<1%	**<1%**
Other	8%	8%	8%	**7%**
Refused	4%	3%	3%	**4%**

It can be seen from the table that no clear concern dominated. The principal concerns were the greening proposals would be too restrictive and complicated, and the reduction in food production resulting from land being used for other purposes. A number of illustrative quotations are presented below and arranged in to a series of themes, which on occasion overlap. On the restrictive and complicated nature of the greening measures the farmers below commented:

> *"There's far too much control. We're all liable but everyone makes mistakes sometimes. They make farming hard. I would prefer if the powers that be were working with the farmers rather than controlling them" (North-west, Male, 55-64, Large, Sheep with beef, without off-farm income).*

> *"The practical issues. We farm in an environmental way. We know our land and so we are the best at doing it. The way we have done it is the best way in my opinion. I do not feel that someone imposing a set of rules is the way forward" (Mid-Wales, Female, 45-54,Small, Sheep with beef, 15.5k-21k, without off-farm income)*

> *"Seems to be a lot of paperwork and not a great financial reward for the work that you do. It enhances the property in the long term but not financially" (South-west, Male, 45-54, Small, Beef, 21k-31k, without off-farm income).*

There were many quotes specifically about the reduction in food production, illustrated by the following selection of concerns,

> *"I think it's immoral on a planet where people haven't got enough resources that they are paying farmers to produce less" (North-west, Male, 65+, Very small, Sheep with beef, 21k-31k, without off-farm income).*

> *"That they're taking agricultural land away from us... we've got to look after the frogs the bats and the birds" (Mid-Wales).*

> *"The likelihood is the people with small farms are exempt from environmental schemes, whereas they are the ones who are more willing to undertake greening measures. The larger scale farmers are having it made harder for them to produce. This is the concern particularly in upland areas, where the climate has a large influence on the type of farming you can actually do" (Mid-Wales, Female, 45-54, Very small, Sheep with beef, 52k+, off-farm income).*

> *"There are too many environmental schemes out there that are reducing the incomes of the farms, they are making livestock less and less viable" (Mid-Wales, Male, 45-54, Medium, Sheep with beef, 15.5 – 21k, off-farm income)*.

> *"When you have got clean land it doesn't give you much alternative. The requirements will take productive land out of production. We have 200 acres surrounded by a council road. We have no control over the road hedges so we have to put clean good agricultural land in to a wildlife scheme to qualify. If you haven't got slurry and are traditionally farming it is very difficult to get points" (South-west, Female, 55-64, Small, Sheep, 31k – 52k, without off-farm income)*.

> *"Huge amount being done already. it should be voluntary and the emphasis is moving away from producing food. a lot is given to wildlife and nature already" (South-west, Female, 55-64, Medium, Other/mixed).*

There was slight variation in responses between study locations, farmers in mid-Wales, for example, were more concerned

about moving away from an emphasis on production and that planned proposals would go too far, farmers in the north-west were more likely to need more information as they did not know enough about the proposals.

Another set of concerns focused on the relation between CAP reform greening measures and those who already undertaken 'greening' measures and were involved in Glastir or other agri-environmental schemes.

> *"There are a lot of things in Tir Gofal that we were doing before, the changes that are being enforced don't have much effect as we were pretty green before" (North-west, Male, 55-64, Medium, Sheep, without off-farm income).*

> *"I'm green already and can't do anymore so it's unfair for me" (North-west, Male, 45-54, Medium, Sheep, 15.5k – 21k, without off-farm income).*

> *"I'm in a conservation scheme anyway, what concerns me is if they divert the funding away from farming to urban projects then I can't go back to where I was ten years ago overnight. I'd be stuck between two stools. The people in conservation are stuffed" (North-west, Male, 45-54, Small, Sheep, 21k – 31k, off-farm income)*.

> *"There isn't much land that we can set aside which we haven't already" (North-west, Male, 55-64, Small, Sheep, 21k – 31k, without off-farm income).*

> *"Our biggest concern is that we are not that intensive and we are pretty green as we are, they are trying to make something green when really it already is" (Mid-Wales, Male, 55-64, Medium, Beef, 31k – 52k, off-farm income).*

> *"Too complicated and those farmers who have over the past 20 years have been environmental friendly in farming are not adequately compensated" (South-west, Male, 65+, Very small, Other/mixed, 10k-15.5k, off-farm income).*

There was also a sense that some farmers felt forced to adopt greening measures as the following quote illustrates

> *"I do not like being told what I can and cannot fence off and what land I can use" (South-west, Female, 65+, Very small, Other/mixed, without off-farm income).*

> *"Current measures are ok, we don't need more reforms" (South-west, Male, 45-54, Small, Other/mixed, 52k+, off-farm income).*

> *"I can't see how anyone would benefit from having land taken away for these measures" (North-west, Male 55-64, Small, Sheep with beef, 31k-52k, without off-farm income).*

There were also concerns that money was not being directed in an effective manner,

> *"It does not support good farming. It will destroy the environment rather than protect it. The environment which they are trying to safeguard is one that has been created by good farming practices. The emphasis is too heavily weighted towards bio-diversity and not enough towards capital investments and protecting built environments such as boundary walls, traditional buildings and so on" (North-west, Male, 55-64, Small, Sheep, 31k – 52k, off-farm income).*

> *"I think the greening of farms should be compulsory and they should stop taking payments from people up in the hills just for being green. I think they are hammering dairy farmers too much instead of helping us. We need*

to invest in the slurry storage, if we could store that for longer periods and use it at the right times of the year, it would make my farm greener and more environmentally friendly. If they take that 20% off then it would be much harder to invest in that. I think the proposals need to go. They should make people set aside say 1% of their farm for it, it should be compulsory" (Mid-Wales, Male, 35-44, Very large, Dairy, off-farm income).

"It's a non starter for me; it is for larger farms with plenty of land to spare and is leaving out the smaller farms. Payments need to be done by the amount of work per yard and the quality of work done" (Mid-Wales, Male, 65+, Medium, Sheep with beef, without off-farm income).

"Main concerns are about what the Welsh Government have already done, they have removed the hill farming. Hoping the CAP will make the Welsh Government look at hill farming again. People like the National Trust are getting away with the financial payments of the CAP reform where the ordinary farmers have to buy their own farm and everything for it". *(Mid-Wales, Female, 55-64, Medium, Sheep with beef, <10k, without off-farm income)*.

"The likelihood is the people with small farms are exempt from environmental schemes, whereas they are the ones who are more willing to undertake greening measures. The larger scale farmers are having it made harder for them to produce. This is the concern particularly in upland areas, where the climate has a large influence on the type of farming you can actually do". (Mid-Wales, Female, 45-54, Very small, Sheep with beef, 52k+, off-farm income).

There were also more general concerns about feasibility and content of the measures

> *"My concerns are they want us to change the land in ways that are not feasible. (e.g. ploughing hill farms). Not fair treatment with regards to greening regulations in cities and towns. It's the farmers that are penalised each time and required to protect the environments and habitats" (North-west, Male, 35-44, Large, Sheep, 31k-52k, off-farm income).*
>
> *"Are they going to carry on the same or are they going to chuck everything they've done for the past ten years in the bin? They've been trying to restore the land to its pre-1900s state for the past ten years; are they going to keep that up or change everything? If the agri-environment payments aren't good enough I will go back to doing all those things I was doing before, so that ten years of policy would have been a waste" (Mid-Wales, Male, 35-44, Large, Sheep, 21k-31k, without off-farm income)*.
>
> *"A bit half-baked. I don't think they necessarily take a long term view of global issues. Quite simplistic and don't take into account local conditions" (South-west, Female, 55-64, Very small, Other/mixed, off-farm income)*.
>
> *"Our small holding is in national park boundaries there are big issues here for any energy schemes that we wish to put in place whether wind turbines or water-power or solar, there are always issues associated with planning consent" (South-west, Male, 65+, Very small, Dairy, without off-farm income)*.

Advice and support about CAP reform

At 59 per cent, a relatively large proportion of the survey did not have enough information about CAP reform. Farmers were asked to suggest what they would require in terms of advice and support about CAP reform. The results are presented in Table 5.43.

Table 5.43 Advice and support required

Type of advice and support	South-west	North-west	Mid-Wales	**Main Survey**
	%	%	%	**%**
None / I have all the information	41	37	38	**41**
More detailed and accurate information	29	37	34	**31**
I need to know everything	13	12	9	**13**
Facts and figures	7	6%	8	**10**
Face to face meetings with farmers to explain CAP reform	6	4	4	**5**

The farmers in the north-west and mid Wales were more likely to need advice and support than the south-west. More detailed and accurate information was a frequent request amongst all study areas, especially in the north-west.

Specific information about the requirements for support and advice was provided by a minority of farmers. Several farmers required decisions to be made well in advance, illustrated within the following quotes,

> *"A quick decision; don't leave us waiting. Once it comes in, to keep it as it is, not change it too soon, but not to be too inflexible altogether. To consider that Wales is very different to the rest of Europe; there are different issues here and that Welsh farmers are the main custodian of the Welsh heritage, language and culture" (North-West, Male, 65+, Small, Sheep with beef, 21k-31k, without off-farm income).*

> *"Information from change of historic to area based payments, needs to be staggered rather than all done within 3 years. Would like to know well in advance". (North-West, Male, 55-64, Medium, Sheep with beef, 15.5k – 21k, off-farm income).*

> *"I would like to know what is ahead of us and the facts and time scale. We cannot make informed decisions until we know". (Mid-Wales, Female, 65+, Medium, Beef, without off-farm income).*

Some farmers requested comparable information between types of farm and other European countries,

> *"I would like to know what is happening in the rest of Europe to make sure we are all on a level playing field" (North-West, Male, 55-64, Small, Sheep, 15.5k - 21k, off-farm income).*

> *"I'd like to know what the proposals are and how they are going to affect different areas of farming. The Welsh Government should tell us about this" (South-west, Female, 35-44, Medium, Dairy, 15.5k – 21k, without off-farm income).*

Other farmers required more specific details of what was to be included in the CAP and pointed to the uncertainty of what would it would contain

> *"More greening issues information. Just a confirmation if it is definitely moving from historic to area based payments". (Mid-Wales, Male, 35-44, Small, Sheep with beef, without off-farm income).*

> *"Everything is uncertain. Just basically how long the regime will last and if there are any more changes to the money that we get". (South-west, Male, 55-64, Large, Other/mixed, 31k-52k, off-farm income).*

> *"I would like to hear firm decisions about what will be required and how it's all going to be pieced together - what sort of rate per hectare it's going to be, when it's going to be phased in, and so on. I don't have an issue with the proposals in general; I would just like to know more details about how they will affect my particular type of farming" (South-west, Male, 35-44, Small, Beef, 52k+, off-farm income).*

Several farms requested more clarity in what was being proposed,

> *"Information to be more precise, I don't understand everything. I am fast coming to retire age and my son will take over the farm. But there isn't enough emphasis for young farmers to take over. Whatever schemes they bring out, to have the public to see the land as it is farmers have done that without any of these new schemes" (South-west, Male, 55-64, Medium, Sheep, 25-34, off-farm income).*

> *"How they will work out the payments for the direct payments, and how non-agricultural income will affect that. Also presented in a clear and simple way" (South-west, Female, 55-64, Very small, Beef, off-farm income).*

> *"More obvious published material - such as a direct mail from the Welsh Government specifically about CAP reform; it's no good sticking an article in their magazine because that way I wouldn't read it (South-west, Male, 55-64, Very small, Other/mixed, off-farm income).*

> *"Some basic information about what DEFRA would like us to do. We don't fall into the higher tiers because we're too small but we would still like to do the things they'd like us to do - I think a lot of people with smallholdings are more eco-friendly than people with large farms, but we don't get the info". (Mid-Wales, Female, 55-64, Very small, Other/mixed, 31k-52k, off-farm income).*

In addition the following farmers felt their opinions were not being accounted for in terms of the decisions that were being made,

> *"More of a consensus and openness than already in the Welsh Assembly. Decision making should involve active farmers themselves" (South-west, Male, 55-64, Small, Beef, 15.5k-21k, off-farm income).*

> *"I would like it to be a lot clearer. It's up for negotiation and the goal posts seem to be moving. WAG need to be a lot clearer about their objectives for Wales. Consultations with farming representatives need to be listened to more. Clarity is missing" (South-west, Male 55-64, Large, Dairy, 15.5k – 21k, off-farm-income).*

Table 5.44 shows farmers' awareness of the 2014-15 reference year in each of the study areas compared with the proportion of overall awareness for the main survey of farms in Wales.

Table 5.44 Awareness of the 2014-15 Reference Year

Response	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Aware	24	26	22	**23**
Not aware	75	73	77	**76**
Refused	1	1	1	**1**

Awareness of the 2014-15 reference year was greatest in the north-west (26 per cent aware), but in all study areas more than seven out of ten farms were not aware. The minority of farmers that were aware of the 2014-15 reference were asked about their plans and as Table 5.45 shows, even if farms were aware they were unlikely to have any plans or would continue business as usual regardless.

Table 5.45 Plans for the 2014-15 Reference Year

Plans	South-west (116)	North – west (95)	Mid – Wales (98)	**Main Survey (547)**
	%	%	%	**%**
None/no plans	76	86	83	**76**
Don't know/not enough information to say yet/will wait and see	5	3%	5	**7**
Business as usual/stay the same/do the same as last year	10	3	6	**5**
Increase amount of land	2	4	3	**3**
Keep more animals/ increase livestock	0	1	0	**2**
Claim as much reference as possible/ensure land has entitlements	3	1	1	**2**
Maximise production/use as much permanent pasture as possible	3	0	1	**1**
Reduce permanent pasture / plough up permanent pasture	0	0	0	**1**
Reduce stock/cut costs/be as efficient as possible	0	1	0	**1**
Retire	0	1	0	**<1**
Other	1%	3%	1%	**3%**

Farm income profile

The following subsection focuses on income, a sensitive subject in most surveys. Interviewees were assured that all data would not be attributed to individual farms and would be treated as confidential and these assurances elicited a good response to all questions. This subsection provides an indication of the business income and turnover of the farms surveyed and also total farming household income. Farmers were also asked to detail the source of their income.

Turnover

Farmers were asked to indicate the annual turnover of their business for the tax year 2010-2011, the results are shown in Table 5.46.

Table 5.46 Annual Turnover of farm business

	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Less than £25,000	30	28	21	**34**
£25,000 - £67,999.99	16	25	25	**20**
£68,000 - £99,999.99	8	9	12	**10**
£100,000 - £149,999.99	9	10	11	**9**
£150,000 - £199,999.99	4	5	4	**3**
£200,000 - £249,999.99	3	2	4	**2**
£250,000 - £499,999.99	5	3	5	**3**
£500,000 or more	5	0	2	**2**
Don't know	13	12	10	**10**
Refused	7	7	7	**7**

A number of findings result from this table, foremost the majority of farms nested within the lower turnover ranges; additionally there was a low proportion of farms that had a turnover of at least £500,000. A greater proportion of farms in the south-west were in this largest turnover category. However, this only equated to five per cent of south-west farms. The south-west also contained the highest proportion of farms with an income of less than £25,000 suggesting that this study area contained both extreme turnover ranges. In contrast the north-west was most likely to have income ranges that fell below £68,000 and mid Wales contained a higher proportion of farms with higher turnover in the ranges between £100,000 and £149,999.99. Surprisingly, over one in ten farmers did not know their turnover for the business year 2010-2011, which could be connected to business awareness or a proxy for 'refused'.

Farmers were asked to exclude subsidies and diversified activities from their turnover and asked whether the business then made

a profit, a loss or broke even. Table 5.47 shows the responses.

Table 5.47 Annual Profit and Loss (excluding subsidies and diversified activities)

	South-west	North - west	Mid - Wales	**Main Survey**		South-west	North - west	Mid - Wales	**Main Survey**
PROFIT	49%	46%	52%	**46%**	£50,000 or more	8%	6%	5%	**5%**
					£25,000 - £49,999.99	11%	9%	10%	**10%**
					£10,000 - £24,999.99	27%	26%	31%	**24%**
					Zero - £9,999.99	49%	51%	47%	**52%**
					DK/Refused	5%	8%	7%	**9%**
BREAK EVEN	21%	17%	18%	**20%**					
LOSS	25%	30%	26%	**29%**	Minus £9,999.99 to zero	70%	57%	52%	**68%**
					Minus £24,999.99 to minus £10,000	14%	20%	22%	**14%**
					Minus £25,000 or greater loss	11%	15%	14%	**10%**
					DK/Refused	5%	8%	12%	**8%**
Don't Know	5%	7%	4%	**5%**					

The left partition of the table shows the proportion of farms making a profit, loss or breaking even. The right portion of the table shows the quantity of profit or loss.

The key points to be taken from Table 5.47 are that in general most farms made an annual profit (highest in mid-Wales at 52 per cent) but over one in four farms made a loss (greatest loss in the north-west). Farms that made a profit were most likely to make a profit of less than £10,000 per year and farms that made a loss were most likely to make a loss less than £10,000. Therefore the majority of profit and loss fell with £10,000 of breaking even over the financial year.

Farmers in the south-west were more likely to make a profit above £25,000 per year, whilst the least profitable farmers (under £10,000) were from the north-west. Farmers from mid-Wales were most likely to make a mid-range profit. In terms of farms that made a loss, the north-west and mid-Wales showed a much higher tendency to make a loss of above £10,000 than in the south-west where 70 per cent of loss-making farms were below this amount.

Annual income of the farming family household

Farmers were asked to consider income from all sources, not just the farm, coming in to the household before any taxes had been deducted. There appears to be no clear pattern to Table 5.48. The north-west, mid Wales and the south-west all contain similar proportions of farms that fall below £21,000 and those that fall above.

Table 5.48 Total gross household income

	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Less than £10,000	11	12	12	**13**
£10,000-£15,499.99	14	9	11	**12**
£15,500 - 20,999.99	12	16	14	**13**
£21,000 - 30,999.99	16	17	15	**16**
£31,000 - 51,999.99	14	13	14	**15**
£52,000 - 77.999.99	7	6	9	**7**
£78,000 or more	7	8	6	**6**
Don't know	11	12	10	**9**
Refused	8	8	9	**8**

The sources of farm income are considered in the following subsection.

Income Sources

The majority of farms received income from agricultural production and SFP - these sources were most quoted by farmers from mid-Wales. Income from agri-environmental schemes and LFA was most popular in the north-west and mid-Wales; in the south-west two in five farms received this type of payment. The 'off farm jobs' of household members were also income sources on 43 per cent of farms in the north-west, 40 per cent of farms in mid-Wales and 37 per cent of farms in the south.

Other income sources such as diversification and rental income represented the least popular income sources. Finally note that not all farms received income from agricultural production.

Table 5.49 Sources of income

	Proportion of farms with income source			
	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Agricultural production	89	93	96	**90**
Single farm payment (SFP)	87	91	95	**85**
Agri-environmental schemes and LFA	40	56	57	**44**
Diversification	23	25	22	**24**
Rental income	20	13	22	**21**
Other household members 'off farm' jobs	37	43	40	**39**

Table 5.50 Proportion of income from source

	Average proportion of income from income source			
	South-west	North – west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Agricultural production	50	37	44	**43**
Single farm payment	21	31	30	**24**
Agri-environmental schemes and LFA	4	7	7	**5**
Diversification	7	7	5	**6**
Rental income	4	2	3	**4**
Other household members ‘off farm' jobs	1	16	12	**17**

Table 5.50 displays, on average, the proportion of income received from each of the sources. Here it can be seen that in most cases the majority of income was sourced from agricultural production, single farm payment and other household members 'off farm' jobs. Compared with the main survey of farms in Wales, agricultural production accounted for a more substantial portion of total income for farms from the south-west, whereas farms from the north-west and mid-Wales tended to have a larger portion of income from single farm payment. The north-west had the highest proportion

of farms that received non-farm income from other household members. Given the greater proportions of SDA and DA land in the north-west and mid-Wales, it was to be expected that 'Agri-environmental schemes and LFA' were far more prominent as income sources in these areas and that in the south-west 'Agri-environmental schemes and LFA' were less prominent.

Finally farmers were asked to suggest which of the income sources they perceived to be most important to the future of their household. Table 5.51 signifies the proportion of farms that prioritized each income source.

Table 5.51 Most important source for the future

	Proportion of households perceiving income source as important for the future			
	South-west	North – west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Agricultural production	53	36	47	**42**
Single farm payment	16	33	28	**24**
Agri-environmental schemes and LFA	1	2	1	**1**
Diversification	9	7	6	**8**
Rental income	5	1	3	**4**
Other household members 'off farm' jobs	11	12	9	**15**
Don't know/refused	5	9	7	**6**

Table 5.51 shows a similar distribution of responses to the previous Table 5.50 above. There are subtle differences between study areas. In general it seems that the importance of agri-environmental schemes and LFA was perceived to be less important in the future than current income trends suggest, while diversification gained importance as a source of income. And farmers in the NW appeared to attach less importance than the other areas to agricultural production and more to other sources of income such as SFP and off-farm incomes. The following subsection explores farmer perceptions of the future for their farming households.

Plans for the future management of the land

Interviewees were asked three questions about their plans for the future management of their land. The first question concerned the importance of food production, the next agri-environmental and ecological measures and the third asked about opportunities to use the land for other activities. Farmers' responses to these questions are shown diagrammatically in Figures 5.6, 5.7, and 5.8.

Figure 5.6 Importance of food production in plans for the future management of land

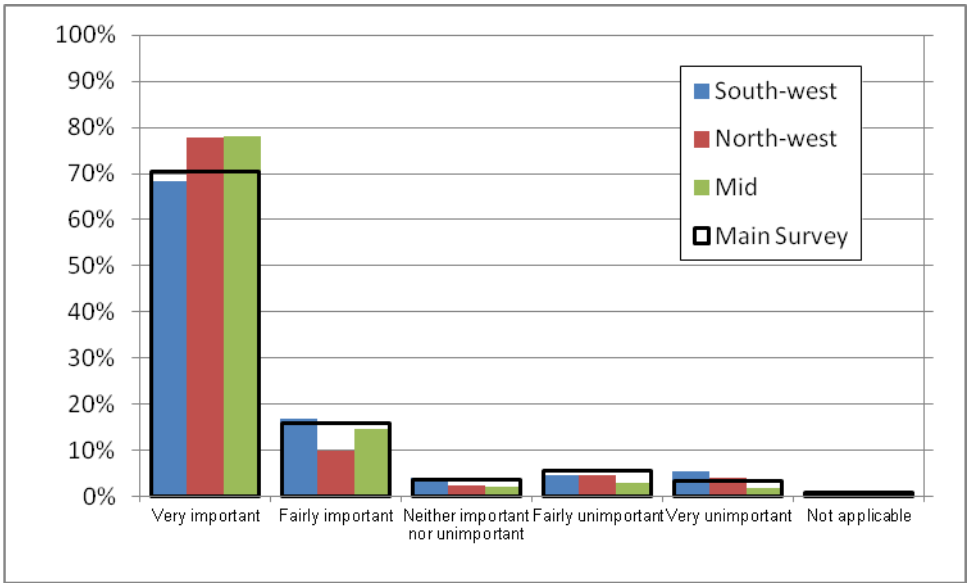


Figure 5.7 Importance of conservation, agri-environment and ecological measures in plans for the future management of land

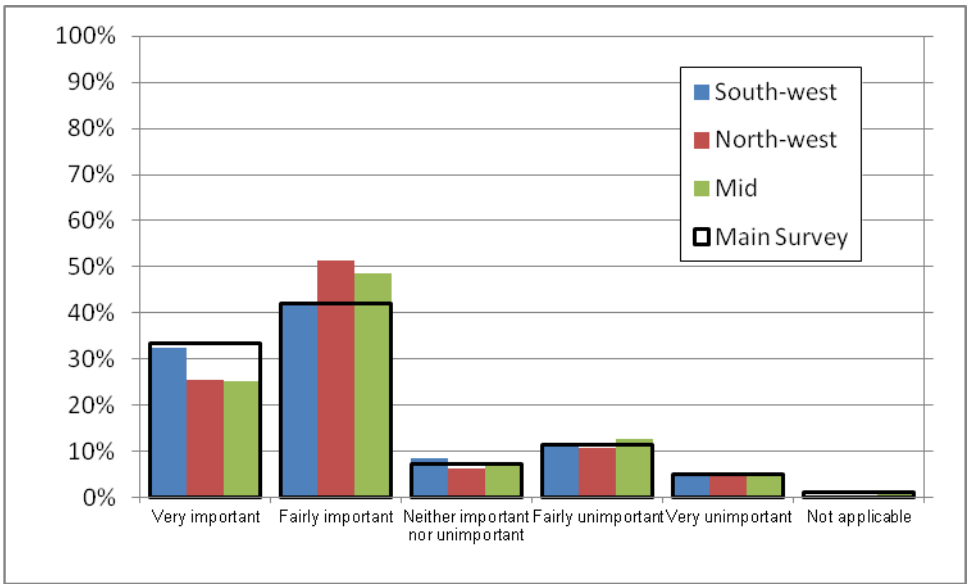
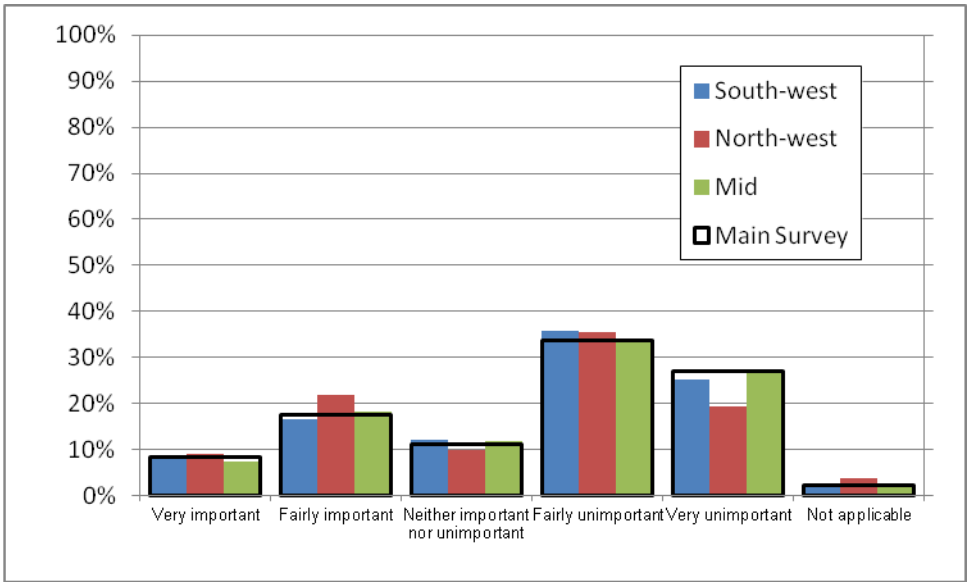


Figure 5.8 Importance of opportunities to use land for other activities in plans for the future management of land



Figures 5.6 to 5.8 indicate that the use of land for food production tended to be perceived as very important or fairly important across all of the areas. By contrast, conservation and environmental measures were split between those that considered them very important and those that considered them fairly important. Using the land for other purposes tended to be rated as fairly unimportant or very unimportant in plans for the farms future.

There were subtle variations between study areas. For example, farmers in the south-west were more likely to consider conservation, agri-environment and ecological measures very important compared with other study areas. And farmers in the north-west were more likely to consider opportunities to use land for other activities as fairly important and least likely to consider it very unimportant.

Farm in five and ten years

Farmers were asked to describe how they perceived their farm developing in five and ten years time. The question was left open ended and the verbatim responses were coded to look for themes within the data. Table 5.52 shows the resulting code scheme and the proportion of farms that fell within each of the coded categories. Note some farms provided responses that fell in to more than one category.

Table 5.52 Farmers farming vision

	5 years time				10 years time			
	South-west	North - west	Mid - Wales	**Main Survey**	South-west	North - west	Mid – Wales	**Main Survey**
	%	%	%	**%**	%	%	%	**%**
Stay as it is/no change/staying profitable as we are now	44	46	46	**47**	23	24	23	**25**
Retired/sold up/out of farming	6	4	6	**5**	12	10	12	**13**
Gradual succession/part retirement/children taking more on	6	5	7	**5**	13	8	13	**10**
Making a profit/being economically viable/improving finances	6	9	9	**7**	5	5	5	**5**
Expansion/take of more land/more buildings/increase livestock	11	10	13	**11**	11	8	11	**8**
Reduction/sell of land/less livestock	2	2	1	**3**	2	1	2	**2**
Let land/ rent it out/lease buildings	3	1	1	**2**	1	1	1	**2**
Diversify income earning activities (leisure/tourism)	2	2	2	**2**	1	1	1	**2**
Regeneration of the land/improve land/improve farm	3	2	3	**3**	1	1	1	**1**
Change in current farming (no more milking/less dairy more vegetables)	4	3	3	**3**	2	1	2	**2**
More sustainable/self-sufficient/localized	0	2	1	**1**	1	1	1	**1**
Conservational/environmental/greener (use alternative energy)	3	1	2	**2**	2	2	2	**1**
Food production	1	0	0	**1**	1	0	1	**1**
Part of a larger farm/Shared farming	0	0	1	**<1**	1	0	1	**1**
Ceased to survive/Gone under/struggling/ eaten up by bureaucracy/bankrupt	1	1	1	**1**	1	1	1	**1**
Increase production/more efficient/ improving	5	8	6	**5**	5	5	5	**3**
Work on farm full time / give up other employment	0	0	0	**<1**	0	1	0	**<1**
Depends on the CAP reform	0	1	0	**<1**	0	0	0	**<1**
Other	2	1	1	**1**	1	1	1	**<1**
Don't know	17	18	16	**16**	35	41	35	**35**
Refused	0	1	0	**<1**	0	1	0	**1**

Several points can be made from Table 5.52. First, a common response by farmers was to predict no change and so they would stay as they were at the time of the survey: 46 per cent suggested this in mid-Wales and the north-west, and 44 per cent in the south-west.

However, for each of the study areas, the proportion of farms that made this suggestion had almost halved when the farm was envisioned in ten years. In addition, this fall was offset by the proportion of farmers who did not know what their vision was for the farm in the future. This ranged between 16 per cent and 18 per cent in the study areas when considering the farm in five years time and almost doubled to between 35 per cent and 41 per cent when envisioning the farm in ten years time. Similarly to the main survey, these results were probably connected to the ageing farming population. The results from Table 5.52 indicate that farmers perceived business to be able to continue as usual and were unlikely to envision the farm with any other purpose. There also appeared to be a large proportion of farmers leaving farming in ten years time. Finally farmers were asked what would hypothetically assist or impede their vision for the farm. The results are shown in Table 5.53 and 5.54 below.

Table 5.53 Assistance to farming futures

	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Living longer/good health	6	2	4	**5**
For things to stay the same/no changes	5	4	4	**5**
Lower input costs	4	3	6	**4**
No change and/or more grants/subsidies/farm payments	10	15	23	**15**
Better and/or stable market prices/economy	30	21	29	**23**
Less/no more bureaucracy/red tape/paperwork/regulations	5	5	9	**7**
Availability of land (not planning)	2	2	3	**3**
Clarity on cap reform/CAP reform to be finalised	2	3	3	**2**
Having a succession plan/family being more involved	4	2	4	**3**
More support/advice/assistance from WAG/Councils/UK government	4	3	6	**5**
No raising of taxes/inheritance tax/capital gains tax	1	<1	<1	**1**
Eradication of TB/disease	2	0	<1	**<1**
Other	4	5	9	**5**
Don't know	18	13	21	**18**
Refused	2	1	1	**2**
Not Asked	15	14	17	**14**

A common area where assistance was suggested was for improvement to market prices and the economy. These concerns were supplemented by suggestions that related to equivalent or improved farm payments. Again, a large proportion was uncertain what would assist their vision for their farm. For example, 17 per cent of farmers did not know what would assist their vision becoming a reality in mid-Wales. Additional ideas for assistance are detailed in the table.

Table 5.54 Barriers to farming futures

	South-west	North - west	Mid - Wales	**Main Survey**
	%	%	%	**%**
Nothing/nothing at the moment	4	3	5	**3**
My age/health	10	5	12	**11**
High input costs	8	5	4	**7**
Reduced CAP payments/loss of CAP payments/Negative CAP reforms/loss of subsides/no funding	9	15	19	**11**
Bureaucracy/red tape/paperwork/regulations (inc. planning/greening proposals)	11	7	12	**10**
Spread of disease/TB	3	1	3	**2**
Reduction in land prices/cheaper land prices	1	0	1	**1**
Availability of land (inc. high prices due to demand)	3	1	4	**2**
No succession plans/no one to take over/children changing their minds about taking over	2	1	3	**2**
Lack of support/advice/assistance from WAG/Councils/UK government	3	1	6	**2**
Lack of clarity on CAP reform	1	1	2	**1**
Reduced market prices/drop in prices/ General economic situation (rising cost of living/the Euro/market crashes/availability of money	26	21	32	**26**
Raising of taxes/inheritance tax/capital gains tax	1	0	1	**1**
Don't know	17	17	17	**16**
Refused	2	0	1	**1**
Not Asked	15	14	17	**14**

A number of specific themes emerged that would impede farmers' visions for their farm becoming a reality. Market prices and the economy were again suggested by most farmers indicating that these wider issues could assist but also impede farmers. Other perceived barriers included reduced farm payments, bureaucracy /red tape and the age and health of farmers. Additional barriers are detailed in the table.

Summary

The rationale underlying the over-sampling aspect of the survey was to further explore the hypotheses, drawn from the Welsh Government income analysis, that CAP reform would tend to (i) have a negative effect on dairy farms and (ii) a positive impact on hill farms. From an analysis of the main survey data, the three geographical areas were selected for over-sampling.

While the distribution of farm types observed in the survey across the three areas reflected the overall complexity and mixture of farm types across Wales (see Tables 5.3 and 5.4), the data broadly confirmed the expected pre-dominance of farm types in each area. That is, the south-west [SW] tended towards dairy; the north-west [NW] had more sheep and sheep and beef; and mid-Wales [MW] was mixed. In addition, Table 5.26 indicates that the SW sold significantly more produce to milk processors than did the other two areas. Thus, the choice of areas was validated.

However, it was also the case that results in the three geographically discrete areas tended to be similar to each other, with only minor differentiation. There were, of course, exceptions. For example, while the SW had more large dairy farms, in terms of output, Table 5.6 shows that farms in the NW and MW areas tended to be significantly larger, in terms of area, than those in the SW.

Recall, from Section 3, some of the key points of the Welsh Government income analysis:

- All of the "larger" farm types (in terms of output) have the majority of their farms currently receiving more than €250 per hectare. Thus under a flat rate system with a payment of just under €250 per hectare these farms would have a reduced subsidy payment.
- Dairy farms generally would receive significantly less funding under flat rate payment than their historical entitlement.
- The larger dairy farms have the largest share of farms receiving over €250 per hectare (just over 80 per cent). Nearly 70 per cent of the larger dairy farms receive more than €300 per hectare. That is, under the flat rate system, they would be losing at least €50 per hectare.
- By contrast just under half of the small sheep farms would gain at least €50 per hectare under the flat rate scheme. The biggest relative gainers would be the very small farms where almost 60 percent of the farmers currently receive under €200 per hectare.
- There is a large amount of variation around the trends. There are dairy farms that would gain under the changes and small farms that would lose.
- In cash terms a large number of small farms would gain small amounts of money, which would be paid for by a small number of large farms that would each lose larger amounts of money.

An implication of these key points is that under area-based payments, not only would dairy farms potentially receive reduced CAP payments but farms with larger areas would potentially receive increased CAP payments. Thus, any move towards area-based payments, as predicted for the CAP reforms, would tend to favour the more extensive, in terms of area, farms in the NW and MW areas. This analysis supports broadly the hypotheses that (i) dairy farms would receive decreased CAP payments and (ii) hill farms would receive increased CAP payments.

To a certain extent farmers in the NW area appeared to be aware of their potential gains, as they were the least pessimistic of the three areas: in the SW area 64 per cent expected a decrease in payments; in the

MW area the figure was 69 per cent; but in the NW a relatively low 55 per cent expected a decrease in CAP payments. The NW also led in other categories.

For example, the NW had the greatest proportion of farms with diversified enterprises at 51 per cent (SW at 44 per cent and MW at 49 per cent) and the area had the largest proportion considering diversification. But farmers in the NW were more likely to perceive barriers to further diversification (NW 62 per cent, SW 52% and MW 55%). Clearly, diversification was topical in the NW area.

In addition, the NW had the greatest proportion of households with off-farm incomes: NW at 43 per cent; MW at 40 per cent; and SW at 37%. Arguably, the comparatively low-key performance of the SW area in diversification and off-farm incomes was attributable to the reliance of the larger dairy farms in the area on agricultural production and SFP. Although, the analysis in this report highlights the business awareness of dairy farms in general, their potential vulnerability to the changing agricultural environment should be considered.

Finally, an important aspect of the over-sampling of the three selected areas was to provide discrete areas in which to conduct the follow-on interviews with farmers and their suppliers to inform the later phases of the research project. The schedules of these semi-structured interviews will be based on the survey analyses. Key elements will include the importance of the farming household; off-farm incomes; the purchase of local goods and services; and what incentives farmers would require to become more diverse, multi-functional and environmentally aware.

SECTION 6 CONCLUSIONS AND POLICY IMPLICATIONS

The Report's objectives have been to provide systematic and representative evidence on how farmers might respond to the changes in farming incomes emanating from potential changes in the CAP post-2013; and to assess what these changes and responses may mean for Welsh Government policies and interventions, specifically regarding the likely shape of Pillar 1 and 2 in the future.

It is not necessary here to repeat the main results but rather to draw out some of their policy implications.

(i) A main conclusion is that knowledge of CAP reform, practices associated with it, and the perceptions and future scenarios of change are not at all aligned. For example, 40 per cent of farmers were not aware of CAP reforms and this proportion grew on a scale to 60 per cent with descending farm size. Hence there was a lack of awareness and planning for the changes. Sources of information were fragmented, such that conflicting messages and policy dissonance could be created. Only 14 per cent absorbed Welsh Government information, well below the 21 per cent listening to the farmers unions. The farming media were overwhelmingly relied upon, together with 'word of mouth'. There was a clear information and knowledge gap about the potential changes to CAP and the benefits and challenges these could bring. Many of the most vulnerable farmers were lacking basic information, which in turn compounded the problems of ineffective business planning. Recent market strengths in beef and sheep might be acting as a 'comfort-zone' for many farmers.

(ii) There was also pessimism about the prospective changes, with 60 per cent expecting a decrease in CAP payments, skewed towards the larger, especially dairy farms. Larger proportions of smaller farmers and hill farmers were expecting CAP support income to stay roughly the same. There is a process of cognitive dissonance appearing with CAP reform expectations, with only 10 per cent expecting an increase in CAP payments and with the non-dairy sector particularly uncertain about future support.

(iii) Family viability and relative social resilience to changes in CAP and market mechanisms is a key factor in the sustainability of Wales's farm population, especially given the overriding family-owner pattern of occupation. Whilst mixed tenure farms were developing in the larger farm categories, with 19 per cent overall, the majority of farms were still family run and only eight per cent were rented properties. The

overriding picture is one of at least one or two family household members running and being variably dependent upon farm-based incomes. Where two or more households (21 per cent) of farm businesses were running the business, there was more opportunity for extra forms of non-farm income and diversification. Nearly 40 per cent of farm businesses had family members who held 'off-farm jobs', which has important effects on the local and regional economy, on the farm family household and on its relative resilience. The significance of off-farm employment is especially important for the survival of the smaller farms, where it can significantly boost and supplement farm income. For instance, younger and female family members were contributing to significant overall family household incomes in over half those businesses in the highest income categories (over £31,000 per annum).

(iv) A picture emerges therefore, where we have (i) agricultural productivist farms (especially dairy, and extensive large beef and sheep), which are well attuned to CAP reforms and making rational business planning decisions for the future: (ii) a significant multi-functional group (of up to 40 per cent) who are variable in size, but are creating their resilience through combinations of agricultural production and marketing, non-farm income, and diversification strategies; and (iii), as we identified in the previous survey (WRO, 2010), a severely vulnerable group of smaller farm families who have little knowledge or means to adapt to market or CAP-induced changes, and who are not planning any form of family succession. By implication from the results of the income analysis in Section 3 of this report, if these farms are dairy, they are likely to be particularly high up the vulnerability escalator.

(v) Only 46 per cent of small farmers were planning succession compared to 80 per cent of the very large. What we witness here is the differential combination of social reproduction and economic reproduction mechanisms, whereby farm families display different levels of resilience and adaptive capacities according to the varying levels of family commitment to agricultural production and/or multifunctionality. The absence of one or other of these strategies creates greater vulnerability for the family and its business.

(vi) A key expression of these variations came in farmers' responses to scenarios for CAP payment changes. Multi-functional farms (with off-farm income, diversification), or the more productivist farms, were far less likely to see the status quo as an option. Whilst, overall 34 per cent of all farms saw this as a strategy

if payments fell by 20 per cent, where there were no off-farm incomes this increased to 65 per cent of farms. These more adaptive farms were also far more likely to buy farm inputs locally, change the type of farming, diversify activities and retain their land.

(vii) Whilst the current levels of alternative enterprise adoption (e.g. horticulture, alternative livestock, energy crops/ bio-energy, or organic crops were low (less than 10 per cent in all categories), given the strategies identified above, revised CAP policies could encourage much more take-up of these multi-functional activities. There is considerable policy potential (through Pillar 1 and especially Pillar 2) to encourage more farming capacity in these alternative enterprises, given their current levels of take-up. This could target both small and large farms and farms of different type. More information and knowledge sharing, as well as extension services are needed in this regard. Up to 10 per cent were seen as considering these options; but they need more incentives and knowledge. These incentives and support structures for more diversification and value-added could be aligned to spatial policies. For instance, some upland areas and groups of farmers could be selected to encourage more diversified rural development, local sourcing and processing and the provision of environmental goods and services. Policies would need to encourage more farmer-to –farmer, and farmer-to –processor and retailer collaboration.

(viii) Currently CAP policy reform discussions should consider removing the 'glass-ceiling' with regard to its current diversification and greening. The experience, up until 2012, and probably since the major reforms of 2002, has been one of experiencing something of a plateau effect of below 10 per cent of all farmers. The evidence here suggests this could at least be doubled with a combination of targeted incentives and conditions placed on direct CAP payments. If the hill and sheep and beef farmers are likely to continue to receive viable, if not extra, CAP payments under the area-based Pillar 1 scheme proposed, then there are serious grounds for making this conditional upon (i) adopting diversified and alternative enterprises; and (ii) sourcing and selling more locally and regionally. Whilst traditional diversified activities like farm-based accommodation and providing agricultural services (both just above 10 per cent) may have plateaued-out, there are opportunities for growth in energy, organic and horticultural enterprises, which could also allow farming to contribute to wider rural economy and sustainability goals. Planning

policy could assist in increasing permitted development rights for such activities; 20 per cent of all farmers saw opportunities for alternative land use as important for the future. Hence the glass, or 'green ceiling' on the agriculturally-based eco-economy needs to be raised, at least by another 10 per cent over the next CAP period; with all CAP spending being conditional on such stimuli.

(ix) Smaller and off-farm income farmers are more locally based in their purchasing; so if they obtain more CAP funding this is more likely to enhance the local area. While this may follow it clearly does not take into account actual amounts. As we know Dairying is less locally based, but in the livestock sector, livestock marts and abattoirs are still very important parts of the farming and food processing local community. These infrastructures could be built upon and stimulated by Pillar 2 funding. The local and regional impacts of CAP reformed payments should be enhanced and again made a condition for receipt of funding. There has been a 'hollowing out' of food processing in Wales; but in some areas it is reviving. New incentives are needed to encourage local rural and market town business development in Wales regarding food processing and value-adding (see Table 4.58).

(x) Farmers were sceptical about the current CAP greening mechanisms, and this is reasonable and not surprising given the new (post-2008) emphasis in the farming media about the need to produce more food. Farmers are seeking a more sophisticated understanding on the part of policy-makers concerning the new equation between greening mechanisms and the new productivism. This needs careful education and extension work.

(xi) Many farmers, especially those in the third 'vulnerable' category above seem to be suffering from a sort of 'false consciousness' with regard to CAP changes. For example, 47 per cent of the survey envisaged no changes over the next five years and we have already seen the dominance of 'business as usual 'expectations; but 13 per cent expected to have left farming in the next decade; and relatively few farmers seemed to have the incentive to break through the diversified 'glass-ceiling'. This may be partly explained by the relatively good recent market conditions in beef and sheep. Policy support for developing entrepreneurial skills in business planning, network-building, and Broadband use should be made more available and conditional on receiving CAP payments. There may be a very good argument for top-slicing CAP funding (and regional development funding) for creating these

knowledge infrastructures across Wales.

(xii) The data suggest that more emphasis should be placed upon understanding the relationships between family structures and farm strategies when considering the sustainability, resilience and adaptive capacities of Welsh farming. Further analysis is needed on the characteristics of the three strategies identified above, as these seem realistic scenarios over and above questions concerning the location of the farm. In short, it is the combination of family occupancy and household characteristics combined with relative skill capacities and degree of agricultural dependence that tends to create a variety of response to both CAP and market changes. If maintaining vibrant family farming is a significant part of Wales agricultural and rural policy, it will be necessary to re-skill and rejuvenate the 20-30 per cent of smaller and more vulnerable farms who are likely to leave the land if CAP payments are reduced by 20 per cent or more. These farmers are made more vulnerable by a lack of alternative forms of income and the social means to achieve this. This rejuvenation towards multifunctionality could create significant benefits for the local economy.

The longitudinal analysis in Section 4.8 reinforces these conclusions in that we can witness the significance of farm family skill sets (for instance, levels of entrepreneurship, multifunctionality) and types of farm family strategy as being important factors in shaping the degree of resilience and adaptability of farms to impending CAP changes. Those farmers displaying higher levels of these factors were less likely to adopt a 'business as usual strategy', and were therefore less vulnerable to CAP change effects. Hence, we need to recognise that while static variables like farm type and size provide the broad market and policy parameters for setting the levels of adaptability, the more dynamic features of farm and family strategies are a key feature of sustainability and of the degree of local impact we might expect. We will need to find out more about these farm family strategies in the intensive local surveys, and, indeed, how these affect the ability of farmers to buy and spend locally.

The spatial analysis of the three selected areas in Section Five tended to support the earlier income analysis, with at least some variation of the income gains and losses likely between dairy farms and extensive beef and sheep holdings. This analysis is most valuable as setting a context for the more in- depth surveys on the local impacts of CAP revenue changes. Given that extensive beef and sheep farms are potential gainers from the CAP changes it would suggest that a stronger emphasis upon more diversification and local multipliers should be a priority in areas like the Northwest. Here 51 per cent of farms were diversified already and this could show a potential for more growth, even though many farmers saw barriers to this strategy. In the Southwest, we can begin to see a different scenario, with more vulnerability associated with less CAP payments on dairy farms, less diversification and multiple-income earning. In these regions, a focus upon how to change the strategy of the smaller dairy farmers would seem appropriate, given they are likely to be the most vulnerable in income terms. These farmers were also the most tied to local

dairy processing and livestock abattoirs (see Table 5.25), which means that if they are vulnerable so are these local processing facilities. This begins to indicate that there could be significant local and regional downstream and upstream effects of the CAP changes, with an overall disinvestment in the dairy dominated areas like the Southwest, and at least the maintenance of local facilities in the Northwest and mid-Wales areas. Also the reliance on local livestock marts in the Northwest and mid-Wales areas is striking; such that we can begin to see a third level of causation of variation in CAP changes, after (i) farm size, type and income; and (ii) farm and family strategy and skill sets. Thirdly, (iii) comes a degree of differential spatial vulnerability and opportunity, which is tied to the different level and type of local and regional embeddedness groups of farms display in their local areas. This is associated with their level of purchasing and marketing, and becomes all that more important as the more diversified and eco-economies of rural regions gather momentum (combinations of food, fibre, energy, and amenity provision - see Kitchen and Marsden, 2009). It reinforces the points made earlier that any changes in the distribution of CAP subsidies, should also incorporate all three of these levels of variation. So an emphasis on skill sets and (collaborative) local and regional buying and selling become important areas for policy innovation.

Overall, we see from the spatial analysis that a set of generic factors are affecting the responses of farmers, associated with their farming strategies, their family cycle and position, and in their ability to gain off-farm incomes. There are clearly general patterns to adaptability, vulnerability, resilience and multifunctionality. However, distributional changes in CAP revenues will have effects both on these general patterns and strategies, and on the quality and value of local and regional markets and supply chains in different parts of Wales. As Table 5.24 and Table 5.25 indicate, Welsh farmers are major traders in goods and services at the local and regional level, whatever the region or type of farm. However, changes in CAP revenue have the capacity to disrupt or to augment these 'nested' market relationships, with an average of 81 per cent of inputs and services purchased locally.

ANNEX ONE SELECTED REFERENCES

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ANNEX TWO RECALCULATIONS FOR SECTION 3

The recalculations from Table 3.8 and Table 3.12 are as follows.

'Calculated forecast'.
Taking the 'large farms' as an example:

- 'Larger dairy', 'larger cattle and beef', and 'larger others' at Table 3.8 are combined into 'large farms' at Table 3.13
- At Table 3.8, for each type of 'larger' farm the count of farms in each category of 'loss/within 10%/gain' is calculated by applying the recorded percentage to the total in that 'larger' farm category
- The two 'loss' counts are added together; similarly the two 'gain' counts (the 'within 10%' count is singular). These counts are the numerators for the 'decrease', 'stay the same', and 'increase' columns at Table 3.13
- For the denominator, at Table 3.8 the total counts for 'larger dairy', 'larger cattle and beef', and 'larger others' are aggregated into a 'larger farms' category
- At Table 3.13 the percentages for 'decrease', 'stay the same', and 'increase' for 'large farms are calculated.

The same process is applied to 'small sheep' and 'small others' at Table 3.8 to recalculate the 'calculated forecast' results for 'small farms' at Table 3.13.

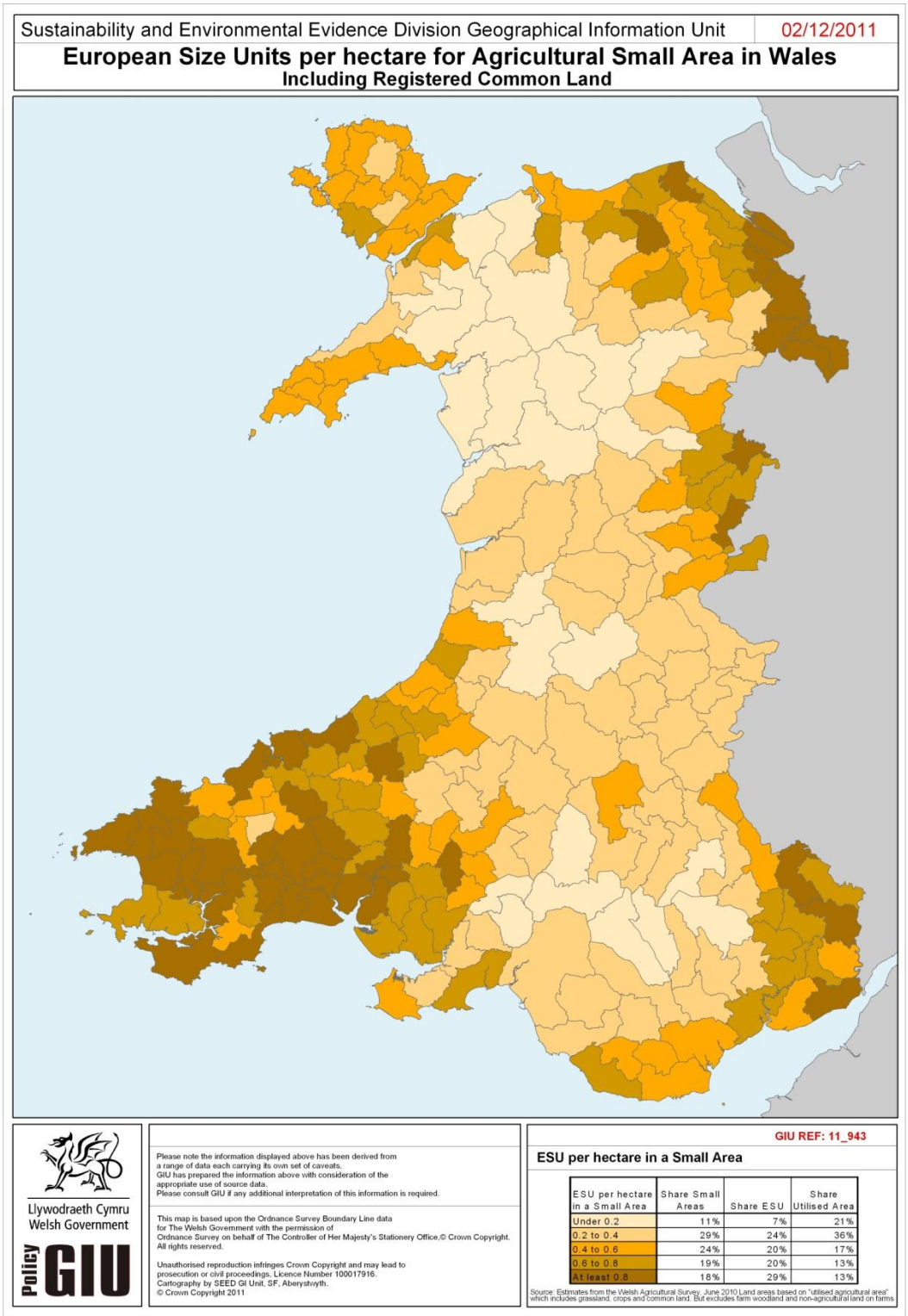
'Very small' is singular and may be read directly from Table 3.8 to Table 3.13.

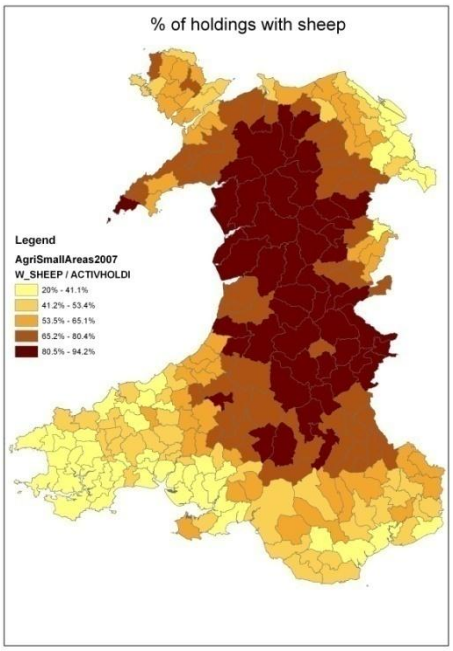
'Survey'
The 'very large', large' and 'medium' farms at Table 3.12 are combined into the 'large farms' at Table 3.13 using the arithmetic process described above.

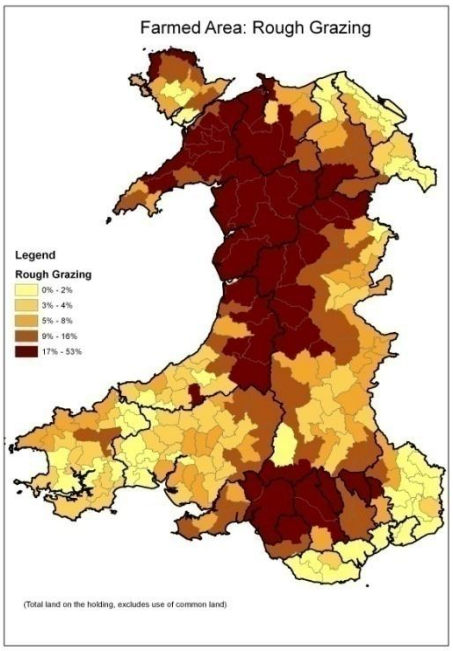
'Small' and 'very small' may be read directly from Table 3.12 to Table 3.13.

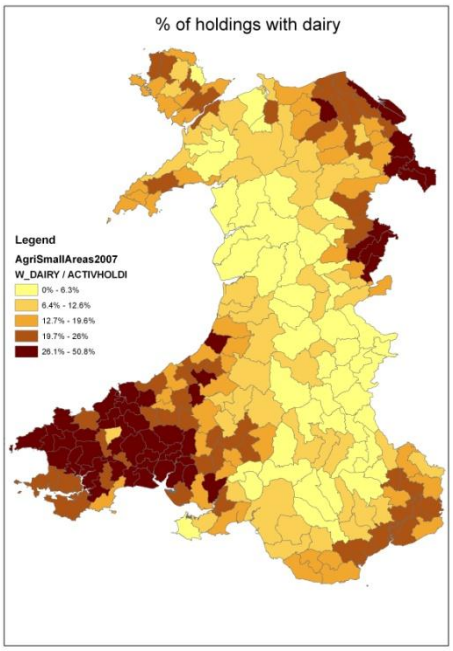
ANNEX FOUR FOR SECTION 5

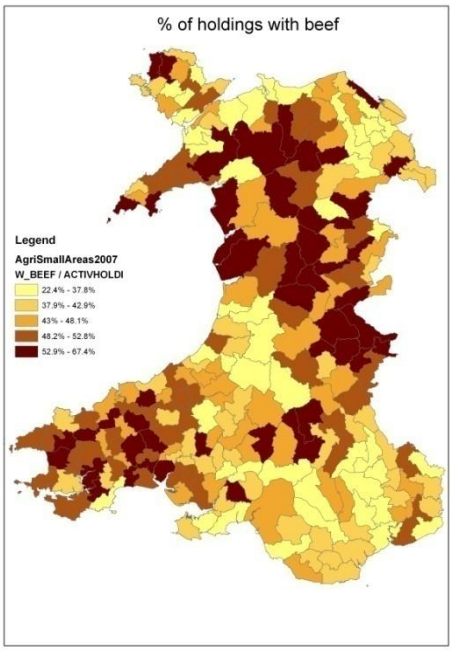
Distribution of agricultural output per hectare, 2010

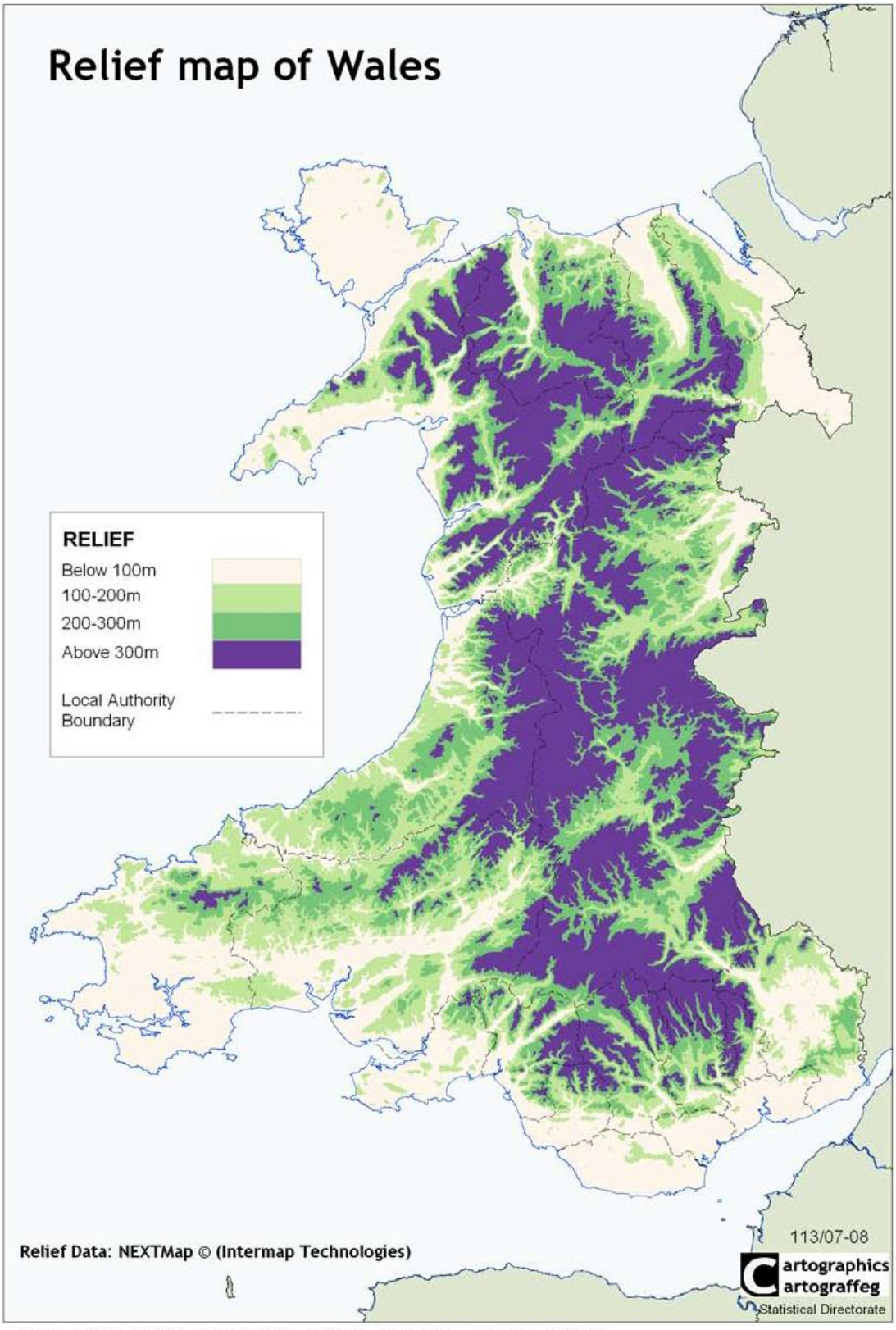


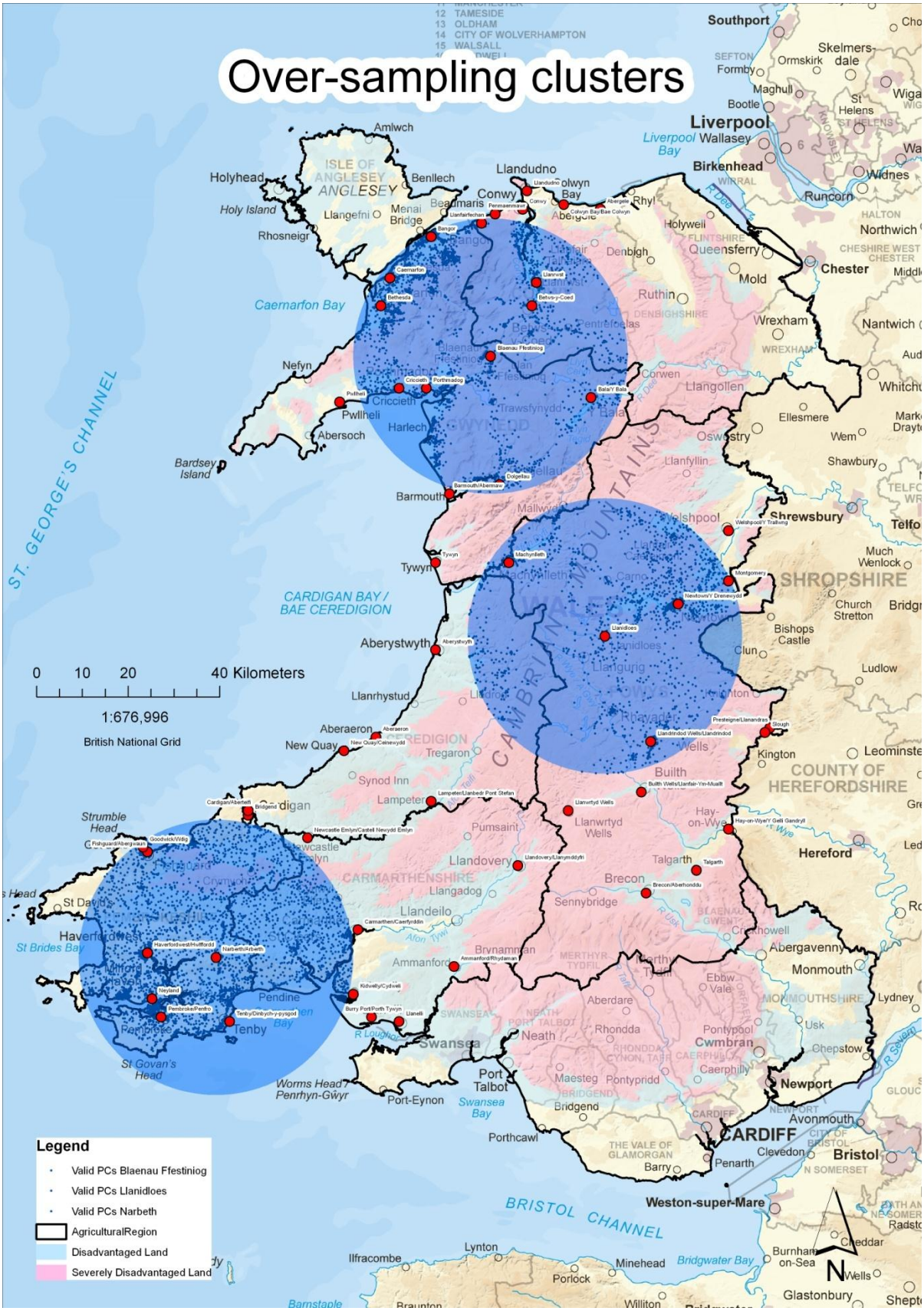

% of holdings with sheep
Legend
AgriSmallAreas2007
W_SHEEP / ACTIVHOLDI
20% - 41.1%
41.2% - 53.4%
53.5% - 65.1%
65.2% - 80.4%
80.5% - 94.2%

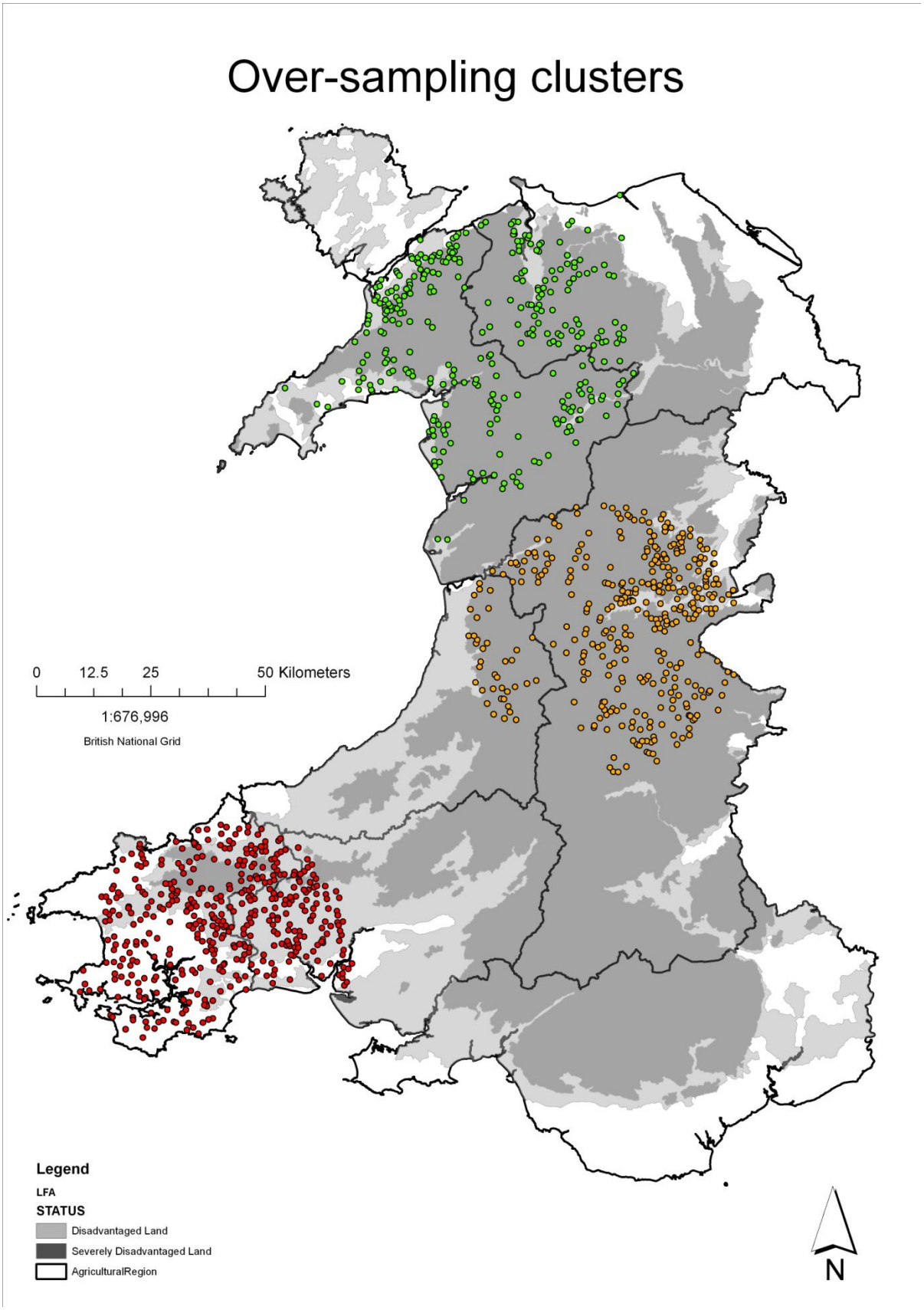

Farmed Area: Rough Grazing
Legend
Rough Grazing
0% - 2%
3% - 4%
5% - 8%
9% - 16%
17% - 53%
(Total land on the holding, excludes use of common land)


% of holdings with dairy
Legend
AgriSmallAreas2007
W_DAIRY / ACTIVHOLDI
0% - 6.3%
6.4% - 12.6%
12.7% - 19.6%
19.7% - 28%
28.1% - 50.8%


% of holdings with beef
Legend
AgriSmallAreas2007
W_BEEF / ACTIVHOLDI
22.4% - 37.8%
37.9% - 42.9%
43% - 48.1%
48.2% - 52.8%
52.9% - 67.4%




Over-sampling clusters
0 10 20 40 Kilometers
1:676,996
British National Grid
Legend
Valid PCs Blaenau Ffestiniog
Valid PCs Llanidloes
Valid PCs Narbeth
AgriculturalRegion
Disadvantaged Land
Severely Disadvantaged Land
ST. GEORGE'S CHANNEL
CARDIGAN BAY / BAE CEREDIGION
Caernarfon Bay
St Brides Bay
Liverpool Bay
BRISTOL CHANNEL
Swansea Bay
Bridgwater Bay
CAMBRIAN MOUNTAINS
Liverpool
Southport
Chester
Wrexham
Shrewsbury
Aberystwyth
Haverfordwest
Carmarthen
Swansea
Cardiff
Newport
Hereford
Bristol
Weston-super-Mare


Over-sampling clusters
0 12.5 25 50 Kilometers
1:676,996
British National Grid
Legend
LFA
STATUS
Disadvantaged Land
Severely Disadvantaged Land
AgriculturalRegion
N