



Centre for Rural Policy Research

# Farming in Devon: changes since 2002 and developments in the near future

Allan Butler and Matt Loble

CRPR Research Report No. 22



**CRPR Research Report No. 22**

**ISBN  
September 2007**

**£10**

This report was commissioned by Devon County Council.

The views expressed in this report are those of the authors and are not necessarily shared by other members of the University, by the University as a whole or by Devon County Council.

This report can be downloaded from the CRPR website:  
[www.centres.ex.ac.uk/crpr/](http://www.centres.ex.ac.uk/crpr/)

For further information, please contact Dr Matt Lobley, Centre for Rural Policy Research,  
Department of Politics, University of Exeter, Rennes Drive, Exeter, EX4 4RJ.  
Tel: 01392 264539. E-Mail: [m.lobley@exeter.ac.uk](mailto:m.lobley@exeter.ac.uk)

Copyright © 2007, Centre For Rural Policy Research, University of Exeter

**Tests of Statistical Significance: A Note**

On a number of occasions in this report, comparisons are made between characteristics of sub-groups of respondents using bivariate tabular analysis. In these cases, Chi<sup>2</sup> has been calculated to test the statistical significance of the independence between two categorical variables. A 'significant' association between variables is taken to be one where there is less than a 5% probability of the difference arising by chance ( $p < 0.05$ ).

Tables with total rows may not sum exactly to 100% due to rounding.

## **Glossary**

CAP – Common Agricultural Policy

ELS – Entry Level Stewardship

ESA – Environmental Sensitive Area

FBT – Farm Business Tenancy

FMD – Foot and Mouth Disease

GOR – Government Office Region

HFA – Hill Farm Allowance

HLS – Higher Level Stewardship

NFI – Net Farm Income

OELS – Organic Entry Level Stewardship

SPS – Single Payment Scheme

SRC – Short Rotation Coppice

# Contents

|   |           |
|---|-----------|
| Executive Summary.....  | i         |
| <b>Chapter 1: Introduction .....</b>  | <b>1</b>  |
| 1.1 Background .....  | 1         |
| 1.2 CAP reform .....  | 1         |
| 1.3 Other developments .....  | 3         |
| 1.4 Structure of report.....  | 4         |
| <b>Chapter 2: Recent agricultural change in Devon.....</b>  | <b>5</b>  |
| 2.1 Introduction.....   | 5         |
| 2.2 Farm type and land use in Devon.....  | 6         |
| 2.3 Labour on farms .....   | 8         |
| 2.4 Livestock numbers .....   | 10        |
| <i>Dairy cattle</i> .....   | 10        |
| <i>Beef and suckler cattle</i> .....  | 11        |
| <i>Sheep</i> .....  | 12        |
| 2.5 Land tenure on Devon's farms .....  | 13        |
| <b>Chapter 3: Trends in farm incomes: evidence from the Farm Business Survey .....</b>  | <b>19</b> |
| 3.1 Introduction.....   | 19        |
| 3.2 The regional FBS results .....  | 19        |
| 3.3 The Devon FBS results .....   | 22        |
| <b>Chapter 4: Present and future plans of farmers and the impact of the Single<br/>Payment Scheme: evidence from a survey of Devon farmers.....</b> | <b>26</b> |
| 4.1 Introduction.....   | 27        |
| 4.2 Trends in strategic plans over the next five years.....   | 27        |
| 4.3 Trends in management plans over the next five years .....   | 33        |
| 4.4 Factors that influence management plans .....   | 37        |
| 4.5 Trends in the economic outlook of Devon's farmers .....   | 39        |
| 4.6 Discussion.....   | 42        |
| <b>5: Summary and recommendations .....</b>   | <b>43</b> |
| <b>References .....</b>   | <b>48</b> |

## **Preface**

This report was written before the current outbreaks of FMD and Bluetongue. The longer terms implications of both disease outbreaks for Devon's farmers is at present unclear and is beyond the scope of this report. We will consider these issues in a future report.

## Executive Summary

In 2003 the Centre for Rural Policy Research (then the Centre for Rural Research) published a report on the State of Agriculture in Devon. Following on closely from the FMD outbreak and a deep recession in farming, the 2003 report aimed to establish a sound evidence base from which to monitor future change and inform policy decisions. This was followed, 11 months later, with a report on the potential impact of CAP reform and then an update on farm incomes in 2006.<sup>1</sup> The current report, the latest in the series commissioned by Devon County Council, draws on a range of published and unpublished data sources in order to identify some of the key trends and changes that have emerged over the last 4-5 years. It is also forward looking in that it includes information on farmers' intentions and plans for the next five years and attempts to outline some of the issues of interest for future reports.

The combined effects of animal disease, depressed incomes and policy change mean that Devon's farmers, like those elsewhere in the country, have experienced a difficult period of adjustment in recent years. This period of transition is not over yet and there will be more change to come. No doubt some will decide that it is time to end their career on the land (although others may well replace them) but, most changes currently in place, and those planned, are part of well established trends. Devon's agriculture has yet to reach a 'tipping point', a point of no return in terms of agricultural decline. Indeed, our evidence continues to suggest that, for the near future, the trend is largely 'business as usual'. That is not the same as saying that there has been and will be no change. There will be and this report has highlights some interesting patterns of change that are often obscured by headline grabbing figures and a general tenor of 'doom and gloom'.

---

<sup>1</sup> The State of Agriculture in Devon: A report for Devon County Council (2003) <http://www.centres.ex.ac.uk/crpr/publications/pdfs/reports/devonagriculture03.pdf>;  
The Impact of the CAP Reform on Devon's Agriculture: Final Report to Devon County Council (2004) <http://www.centres.ex.ac.uk/crpr/publications/pdfs/reports/CAPReform1.pdf>;  
Agricultural change and farm incomes in Devon: An update (2006) <http://www.centres.ex.ac.uk/crpr/publications/pdfs/reports/DCC%20farm%20incomes%202006%20final.pdf>

A good example of this is the figures relating to agricultural labour. It is true that the number employed in farming continue to decline (falling by 1.9% between 2000 and 2006), but the fall in absolute numbers employed masks some subtle but interesting patterns of change. For instance, while the number of full time farmers has declined, the number of part time farmers has increased by almost 10%. *Some* of this increase will be associated with new entrants to the sector, but much will be accounted for by those winding down their farming activities as they enter what may be a prolonged period of semi-retirement, as well as those scaling back farming activity in order to increase economic activity elsewhere in the economy as part of a strategy to remain on the farm. Others are putting managers in charge of their holdings and, while numbers are small, managerial labour is the only employed labour category to have expanded in recent years.

Turning to changes in the type of farms found in Devon, popular commentary on the plight of dairy farmers could give the impression that the sector is in freefall. However, behind the headline figures of fewer dairy farmers (most of whom leave dairying to pursue other farming enterprises and **do not** leave farming completely), this report shows that the decline has been slower in Devon and that Devon's dairy sector is now relatively more important, accounting for over 28% of the region's dairy herd. Moreover, while the number of dairy cattle has fallen, along with a reduction in the number of holdings with dairy cattle, average herd size has increased by close to 16% since 2003. In other words, the dairy sector is becoming concentrated on fewer, larger holdings, a trend that has been apparent for a considerable period of time. Dairy farmers also emerge as the most expansionary in terms of their future plans. Our evidence suggests that a relatively small proportion of younger, dynamic dairy farmers will account for much of the expansionary change in Devon's agriculture in the next few years.

The Single Payment Scheme (introduced in 2005) was intended, amongst other things, to promote "dynamic adjustment" in the sector. In other words, a process of restructuring and exit that would leave a leaner, more market-facing farming sector. Our evidence suggests that this adjustment has yet to occur. The SPS currently provides almost 100% of profit on Devon's cereal farms and, with the exception of dairy farms, also offsets



some of the losses. Although aggregate farm income in Devon rose by some 20% in 2005/06 this was largely as a result of improvements in the general cropping, horticulture and Pigs and Poultry sectors. Other sectors experienced modest increases in income, while the diary sector saw income fall, largely as a result of increasing costs.

Other things being equal, the high level of subsidy dependence must at some point influence the future shape of agriculture in the county, particularly post 2007 when the historic element of the payment diminishes and the area based element becomes more prominent. At this stage income from agriculture, agri-environmental schemes and diversification will need to grow in order to reduce reliance on the SPS as the source of farm profit.

Despite the apparently powerful driver of policy reform in the shape of the SPS, evidence from a survey of 598 Devon farmers conducted in 2006 suggests that relatively few plan to give up farming and that most of those that plan to do so expect to hand the farm on to a family successor. Less than 2% of those who took part in our survey indicated that they planned to leave farming to do something else. The vast majority plan to stay, either making adjustments to their farm business or other economic interests to allow them to do so, or simply making no changes other than in the longer term.

More detailed analysis of the pattern of response to the introduction of the SPS reveals a complex interaction between farm type, size and farmer age. For instance, farmer age emerged as a more important factor than the SPS in the decision to leave farming. In addition, the SPS has less influence on the decisions of small farmers as the payment they receive is lower and they often have alternative income sources (or are already occupying 'retirement holdings'). On the other hand, there is evidence that those already highly dependent on farm income are 'locked' into a business trajectory that focuses on the farm as a business and actively seeking further opportunities to expand the core farming business. The future is likely to see an increasing polarisation between large farms highly dependent on agriculture as an income source and groups of smaller farms where

agricultural income is supplemented by a variety of sources such as pensions, rental income and income from diversification and off-farm working.

Although generally the SPS does not appear to have triggered radical change, a significant minority of those planning future diversification and off-farm working reported that they had been “largely influenced” by the introduction of the SPS. In the absence of the counterfactual, ‘policy-off’ situation (where the SPS does not exist) we cannot test the strength of this effect, but perhaps more significant is the fact that many farmers are planning diversification and/or off farm working without, it seems, much idea of what to do. Others will inevitably require guidance and support in developing business plans, applying for planning consent, etc.

The impact of CAP reform seems to have been to reinforce existing well established trends. However, given the very marked degree of subsidy dependence discussed above, the ‘business as usual’ approach cannot continue in the longer term. Consequently, the early years of the next decade are likely to see the emergence of lagged effects as farmers come to terms with the new policy regime and prevailing market conditions.

In the longer term, Devon’s agriculture may well be characterised by a large number of part time farmers who often employ a professional manager or who use contractors to undertake much of the day to day work of farming. New opportunities will develop such as bio-fuels and there may be a need to consider the balance of land use for food production and energy use. Although there may be only limited opportunity for farmers in the county to grow cereals for conversion into bio-fuels, there is greater scope for the development of biomass crops. Much of lowland Devon has the potential to attain high yields of miscanthus,<sup>2</sup> while for short rotation coppice (SRC) there is the potential of attaining medium yields of the crop (Defra 2007a). Biomass crops are carbon neutral so,

---

<sup>2</sup> Miscanthus, a tall perennial grass that grows up to 3.5m can be harvested using a sugar cane harvester. The crop stem is used as a fuel for the production of heat and electricity, but can also be converted into ethanol.

in theory, their replacement of fossil fuels to create heat and energy may reduce society's carbon footprint or, if developed at a farm-scale, the carbon footprint of the farm.<sup>3</sup>

Finally, assuming that the current interest in the provenance of food continues, there will also be further opportunities for agricultural entrepreneurs to develop and supply local food outlets as well as other means of direct sales initiatives that help farmers gain more control over the food supply chain.

### **Recommendations**

DCC should continue to monitor change in Devon agriculture. In this context, it will be important to ensure that the appropriate advisory and information resources are in place to assist those wishing to diversify and develop alternative but parallel careers alongside farming.

For those with no alternative other than to leave farming DCC should facilitate counselling on decision options and ensure that farmers have the opportunity to make a dignified exit.

DCC (and partner organisations) should consider the feasibility of biomass production and its impacts on the environment and economy of the county.

DCC should ensure that it remains well briefed opportunities and barriers to the further development of local food supply so that agricultural entrepreneurs can maximise the opportunity to develop innovative new ways of staying on the land while also delivering the kind of food and environment that is demanded by consumers and supported by the new policy environment.

---

<sup>3</sup> Biomass crops are carbon neutral in terms of their biological cycle. However, once energy used in its production, harvesting, transportation and processing is considered it is not 100% neutral.

# Chapter 1: Introduction

## 1.1 Background

In 2003 the Centre for Rural Policy Research (then the Centre for Rural Research) published a report on the State of Agriculture in Devon. Following on closely from the FMD outbreak and a deep recession in farming, the 2003 report aimed to establish a sound evidence base from which to monitor future change and inform policy decisions. This was followed, 11 months later, with a report on the potential impact of CAP reform and then an update on farm incomes in 2006.<sup>4</sup> The current report, the latest in the series commissioned by Devon County Council, draws on a range of published and unpublished data sources in order to identify some of the key trends and changes that have emerged over the last 4-5 years. It is also forward looking in that it includes information on farmers' intentions and plans for the next five years and attempts to outline some of the issues of interest for future reports.

## 1.2 CAP reform

In 2005 Defra implemented the CAP reform agreement of June 2003 using a 'hybrid' system referred to the Single Payment Scheme (SPS). This combines two payment elements: part based on historic receipts of subsidy support and part on an area-based payment. It is designed so the former element will be gradually replaced by the latter until 2012 when the entire SPS will be an area based payment, as shown in Figure 1.1. Under the SPS eleven former subsidy schemes have been replaced with one new single payment.<sup>5</sup> Despite the difficulties that beset its introduction, it has now entered its third year and the switch from the historic subsidy system to a flat rate area based payment has

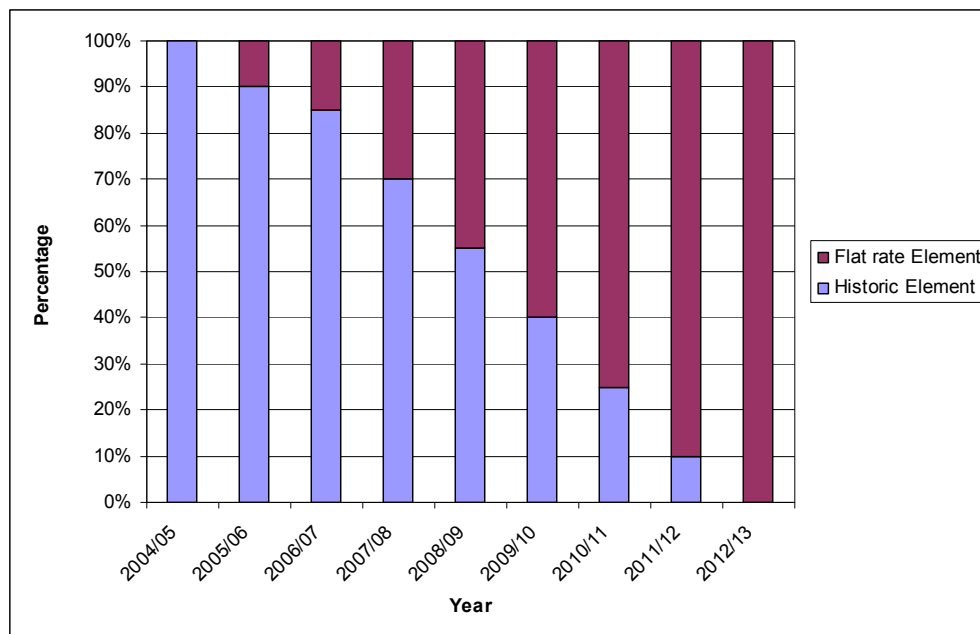
---

<sup>4</sup> The State of Agriculture in Devon: A report for Devon County Council (2003) <http://www.centres.ex.ac.uk/crpr/publications/pdfs/reports/devonagriculture03.pdf>;  
The Impact of the CAP Reform on Devon's Agriculture: Final Report to Devon County Council (2004) <http://www.centres.ex.ac.uk/crpr/publications/pdfs/reports/CAPReform1.pdf>;  
Agricultural change and farm incomes in Devon: An update (2006) <http://www.centres.ex.ac.uk/crpr/publications/pdfs/reports/DCC%20farm%20incomes%202006%20final.pdf>

<sup>5</sup> The schemes that were replaced were: Arable Area Payments Scheme, Beef Special Premium, Extensification Payment Scheme, Sheep Annual Premium Scheme, Suckler Cow Premium Scheme, Slaughter Premium Scheme, Veal Calf Slaughter Premium Scheme, Dairy Premium, Dairy additional payments, Hops Income Aid, and Seed Production Aid.

begun. As can be seen from Figure 1.1, in this present financial year, farmers will receive 30% of their SPS based on area, and the remainder from their historic element. In two years time, over 50% will be based on area. The introduction of the SPS decouples subsidies from production in order to encourage farmers to respond to, and farm according to, the demands of the market. In addition, modulation redirects a proportion of CAP subsidy payments into agri-environment and rural development schemes (Pillar II), such as Entry Level Stewardship (ELS), Higher Level Stewardship (HLS), and Organic Entry Level Stewardship (OELS). These recently introduced schemes are designed to build on previous agri-environmental schemes such as Environmental Sensitive Areas (ESAs) and Countryside Stewardship (CS), with the intention of enabling a wider number of farmers and other landowners to participate.

Figure 1.1: *Historic and flat rate elements of the SPS in England*



Source: Lobley et al. 2004

As part of the reform, the payment rates for the SPS are also partly dependent on whether the farm is inside or outside Severely Disadvantaged Areas (SDAs). Those outside the SDAs receive a higher area payment, whilst those within them have land split between two further categories: land outside the moorland line and land within the moorland line, the latter of which receives the lowest area payment. However, farms within SDAs are

still eligible to claim the Hill Farm Allowance (HFA), although this too will be subject to reform by 2010.

### **1.3 Other developments**

Since our last report, in addition to the progressive decoupling of agricultural support payments, other issues have emerged as increasingly important policy concerns, including a growing interest in food, its quality and provenance and the carbon footprint associated with its production and distribution. In turn, there is an emerging debate around the use of land for energy and the implications of this for the availability of land for food production and the impact on landscape and biodiversity.

For some farmers, the ability to switch to growing energy crops, or creating other forms of diversification, may be limited by the terms and conditions of their tenure arrangements. The potential to use land that is let for enterprises that are not traditional forms of agriculture has often been a contentious issue between landlords and tenants. Whilst recent reforms in land tenure are, in part, an attempt to create greater flexibility for tenants, the general limited opportunities for farmers to expand their businesses by taking on agreements has been problematic for some considerable time. This has often led farmers to entering into unconventional and informal arrangements to meet the needs of their business requirements.<sup>6</sup>

In October 2006, further developments in the tenanted sector were made by amendment to the 1995 Agricultural Tenancies Act using a Regulatory Reform Order in response to recommendations given by the Tenancy Reform Industry Group.<sup>7</sup> Specifically, the order aims to: encourage diversification by tenant farmers; maintain and improve viability of tenanted farms; allow restructuring of holdings without jeopardising valuable rights; improve flexibility in the tenanted sector; and maintain a balance between landlord and

---

<sup>6</sup> In the late 1980's, one in five farmers in England and Wales occupied land on an unconventional arrangement with grass keep and gentlemen's agreements being the most frequent (Winter *et al.* 1990).

<sup>7</sup> The Tenancy Reform Industry Group comprise of industry representatives: Agricultural Law Association, Association of Chief Estates Surveyors and Property Managers in Local Government, the Central Association of Agricultural Valuers, Country Land and Business Association, Farmers Union of Wales, Local Government Association, National Farmers Union, National Federation of Young Farmers Clubs, Royal Institution of Chartered Surveyors and the Tenant Farmers Association (Defra 2006).

tenant interests. Given that over one-quarter of Devon's agricultural land is tenanted, the possibility for those entering into agreements may open new opportunities to improve farm profitability.

#### **1.4 Structure of report**

Against this background, the structure of the remainder of this report is as follows. Chapter 2 examines recent changes in Devon's agriculture in terms of trends in land use, labour, livestock numbers and land tenure. The next chapter considers trends in farm income based on Farm Business Survey data. Chapter 4 draws on a major survey of Devon farmers in order to explore changes in the recent past, plans for the future and impact of the introduction of the Single Payment Scheme. The analyses is based on data from farmers that manage over ten percent of Devon's agricultural land. The final chapter provides a summary of some of the key results and makes some recommendations regarding future actions.

## Chapter 2: Recent agricultural change in Devon

### 2.1 Introduction

This chapter draws largely on the June agricultural survey<sup>8</sup> to describe the current characteristics of farming in Devon in terms of land, labour and livestock. Furthermore, by focusing on changes in these statistics between 2004 and 2006, against the backdrop of the longer term trends described in ‘The state of agriculture in Devon’ (Lobley *et al.* 2003), it provides information and analysis on the most recent developments in the county’s agricultural industry. As in the 2003 report, a ‘health warning’ regarding the interpretation of the June survey data is necessary. First, it should be remembered that agricultural survey data is collected at the holding level and that this is not synonymous with farm businesses as these often consist of several holdings. Furthermore, while attempts have been made to correct for multiple holdings<sup>9</sup>, it is recognised that agricultural survey data fails to capture the true and complex nature of land holding, as many businesses hold land under a variety of tenurial systems and expansion is increasingly achieved by taking on contract farming agreements. Therefore, additional data derived from a national survey of farmers regarding their land tenure arrangements is also included to enable a more detailed discussion about the complexity of tenure systems and how this is changing on Devon farms.<sup>10</sup>

As well as providing a snapshot of Devon’s agriculture in 2006, this chapter builds on the 2003 report by identifying key trends and important changes. For example, the reduction in full-time farmers and the rise in part-time farmers; the increasing size of the largest

---

<sup>8</sup> “The June Agricultural Survey is an annual survey of agricultural activity which collects information from carefully selected agricultural holdings in England relating to land use, crops, livestock, labour, horticulture and glasshouse” (Defra 2007b). Previously referred to as the June Agricultural Census, data was collected on a near census basis. Now the survey is run on a sample of between 45-75,000 farms with a full ‘census’ taken every 10 years; the next is due in 2010.

<sup>9</sup> ie to identify cases where a ‘farm’ consists of several holdings.

<sup>10</sup> A survey of farmers in England and Wales about land tenure was conducted by the Centre for Rural Policy Research in the February 2007. From the 3149 questionnaires sent out a useable response rate of 38.7% was returned. Of these, 88, were from Devon which, while a small sample, nevertheless provides useful insight into the complexity of land tenure in the county. The land tenure report will be published in the Autumn of 2007 by the University of Exeter.



holdings; the longer term decline in the number of dairy cattle; and the more recent declines in the number of sheep and beef animals.

## 2.2 Farm type and land use in Devon

Devon is predominantly a county of livestock farming, where dairying, lowland cattle and sheep, and Less Favoured Area (LFA) cattle and sheep farms predominate. Table 2.1 illustrates the distribution of holdings by main farm type and shows how this has changed between 2004 and 2006. By comparing 2004 with 2006, it can be seen that lowland cattle and sheep holdings and dairy holdings have declined by 2.6% and 0.6% respectively. In terms of holding types that have increased, there are 1.6% more Less Favoured Area (LFA) cattle and sheep farms, as well as more Poultry and Horticultural holdings. Farms classified as ‘other’ in 2006 make up 43.0% of all farm types, an increase of 4.0% over 2004.

Table 2.1: *Changes in holding types between 2004 and 2006 in Devon (as percentages)*

|                            | England  |      | South West <sup>11</sup> |      | Devon |      |
|----------------------------|--|------|--------------------------|------|-------|------|
|                            | 2004   | 2006 | 2004                     | 2006 | 2004  | 2006 |
|                            | % of holdings not classed as Other <sup>12</sup> |      |                          |      |       |      |
| Cereals                    | 18.9   | 19.0 | 10.5                     | 10.3 | 7.6   | 7.2  |
| General Cropping           | 7.7  | 7.5  | 2.2                      | 2.3  | 1.5   | 1.7  |
| Horticulture               | 7.9  | 7.8  | 8.2                      | 8.5  | 7.2   | 7.6  |
| Pigs                       | 1.8  | 1.9  | 1.4                      | 1.6  | 1.2   | 1.4  |
| Poultry                    | 4.6  | 5.2  | 4.3                      | 5.1  | 4.7   | 5.3  |
| Dairy                      | 10.9   | 10.7 | 16.6                     | 15.8 | 16.5  | 15.9 |
| Cattle and Sheep (LFA)     | 9.4  | 10.7 | 7.1                      | 8.5  | 13.6  | 15.3 |
| Cattle and Sheep (lowland) | 29.7   | 27.9 | 39.8                     | 37.6 | 37.4  | 34.9 |
| Mixed                      | 9.1  | 9.2  | 10.0                     | 10.3 | 10.3  | 10.7 |
|                            | % of all holdings                                |      |                          |      |       |      |
| Other                      | 37.2   | 41.2 | 40.3                     | 44.2 | 38.9  | 43.0 |

Source: Defra June Agricultural Survey 2004 & 2006

There are a number of possible explanations for the recorded changes. For instance, as noted above, the number of holdings is not synonymous with the number of farm businesses and, consequently, the data may be pointing to a degree of enterprise

<sup>11</sup> This refers to the South West Government Region (City of Bristol, N. and N.E. Somerset, S. Gloucestershire, Gloucestershire, Swindon, Wiltshire CC, Bournemouth and Poole, Dorset CC, Somerset, Cornwall and Isles Of Scilly, Plymouth, Torbay, and Devon CC).

<sup>12</sup> Holdings classified as ‘Other’ are those that do not fit well with mainstream agriculture, such as specialist horses, specialist set-aside, specialist grass and forage and non-classifiable holdings.

restructuring rather than farm businesses exiting the industry. Another explanation is that apparent changes, at least in part, could be due to sampling error and non-return of census/survey forms. The increase in the proportion of farms classified as ‘other’ may be a reflection of the well known trend of new entrants purchasing small areas of land with a dwelling, but it could also be a consequence of a more rigorous approach to bio-security which has led Defra to issue more holding numbers.

Tables 2.2 and 2.3 present data on the size structure of holdings in Devon and its districts. For Devon as a whole, the pattern in 2006 is similar to that of the South West region and England as a whole. This distribution is more or less followed at the district level, with the exception of Teignbridge. In Teignbridge most holdings are less than 50 hectares, with over half (55.2%) being smaller than 5 hectares. At the county level, between 2004 and 2006, there has been little in the way of movement between size categories, although in Teignbridge the proportion of holdings of less than 5 hectares has increased by 8.0%, holdings between 20 and 50 hectares increased by 4.4% and holdings between 50 and 100 hectares rose by 2.6%.

Table 2.2:  *Holding size in England, the South West region and Devon (% of holdings)*

|                         | England                  |      | South West |      | Devon |      |
|-------------------------|--------------------------|------|------------|------|-------|------|
|                         | 2004                     | 2006 | 2004       | 2006 | 2004  | 2006 |
|                         | <b>% of all holdings</b> |      |            |      |       |      |
| Less than 5ha           | 42.6                     | 42.2 | 44.3       | 43.8 | 41.7  | 42.0 |
| 5ha to less than 20ha   | 19.1                     | 19.8 | 19.9       | 20.5 | 20.5  | 20.3 |
| 20ha to less than 50ha  | 13.3                     | 13.8 | 13.9       | 14.3 | 15.7  | 16.0 |
| 50ha to less than 100ha | 11.1                     | 10.9 | 11.3       | 11.1 | 12.6  | 12.5 |
| 100ha and over          | 13.9                     | 13.3 | 10.7       | 10.3 | 9.5   | 9.2  |

Source: Defra June Agricultural Survey 2004 & 2006

Table 2.3:  *Holding size in Devon districts in 2006*

|                           | East Devon                            | Mid Devon | North Devon | South Hams | Teign-bridge* | Torridge | West Devon |
|---------------------------|---------------------------------------|-----------|-------------|------------|---------------|----------|------------|
|                           | <b>% of holdings in each district</b> |           |             |            |               |          |            |
| Less than 5ha             | 43.9                                  | 39.9      | 37.6        | 44.1       | 55.2          | 39.9     | 43.3       |
| 5 ha to less than 20 ha   | 18.9                                  | 21.2      | 19.4        | 20.0       | 26.6          | 21.4     | 18.8       |
| 20 ha to less than 50 ha  | 16.1                                  | 16.3      | 17.7        | 14.5       | 18.2          | 15.8     | 15.8       |
| 50 ha to less than 100 ha | 12.0                                  | 13.4      | 14.7        | 12.3       | -             | 13.2     | 12.1       |
| 100 ha and over           | 9.0                                   | 9.1       | 10.6        | 9.1        | -             | 9.7      | 10.0       |

\* Information suppressed about holdings between 50 ha to 100 ha and 100 ha and over.

Source: Defra June Agricultural Survey 2006

### 2.3 Labour on farms

The total labour force on Devon farms in 2006 was 23,240<sup>13</sup>. If this is compared to the start date of the current Defra data series on labour in 2000, this represents a 1.9% decline in total labour. This reduction however, is modest when compared against the relative decline in total agricultural labour in England and the South West GOR (see Figure 2.1a).<sup>14</sup> That said, the headline change in total labour over this period hides some important short-term trends. Of particular significance, from the perspective of the absolute numbers involved, is that there are fewer full-time farmers and more part-time farmers. In 2000, there were 8,388 farmers registered as full-time in Devon but by 2006 this had declined by 5.2% to 7,953. The number of part-time farmers, on the other hand, rose over this period from 8,948 to 9,836 – an increase of 9.9% (see Figure 2.1b). It is likely that some of this change is caused by farmers either semi-retiring from agriculture, reducing their level of farming activity as a strategy to increase off-farm work, or by new entrants in the farming industry that continue in some capacity in their previous employment. These issues are examined in Chapter 4 in an analyses of why and how farm level adjustments are influenced by CAP reform.

Perhaps of more interest are the recent trends in the *pattern* of labour use. Figures 2.1c-d point to divergent patterns in employed labour and managerial labour that reflect both regional and national trends. The greatest reduction in employed labour between 2000 and 2006 occurred amongst full-time employees, which fell by 29.0%. In absolute terms, this represents the loss of 673 full-time agricultural jobs. Part-time employed workers, on the contrary, have remained more or less stable over the same period. Casual workers, while not shown, have also reduced in number with 18.0% fewer employed on Devon farms in 2006 compared to six years before. In terms of employed labour categories, only managerial staff have increased in recent years. However, this rise needs to be put in context, as managers only account for 8.0% of all employed labour and 1.8% of the total agricultural labour force in Devon. Nevertheless, it does represent change in terms

---

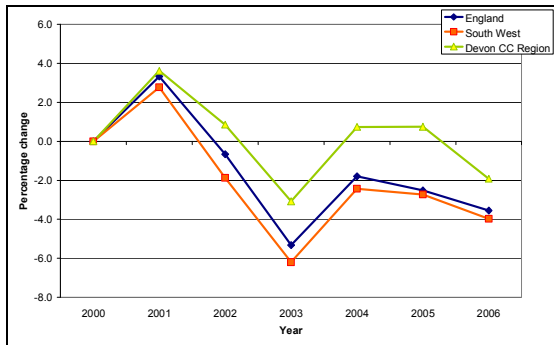
<sup>13</sup> Plymouth and Torbay are excluded from the analysis and their inclusion would only increase total labour figures by just over half of one percent.

<sup>14</sup> Labour statistics for 2000 are indexed at 100.

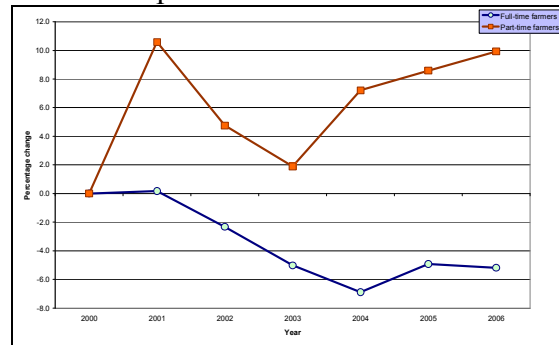
of how some farms are managed with relatively more holdings being farmed by managers, particularly on a part-time basis. There may be a number of explanations for this increasing trend. One perhaps relates to increases in contract farming that often uses other farmers as managers of land.

Figure 2.1: *Percentage change in farm labour in Devon between 2000-2006*

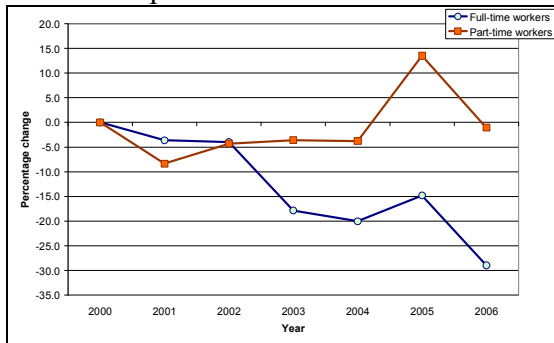
a. Total labour



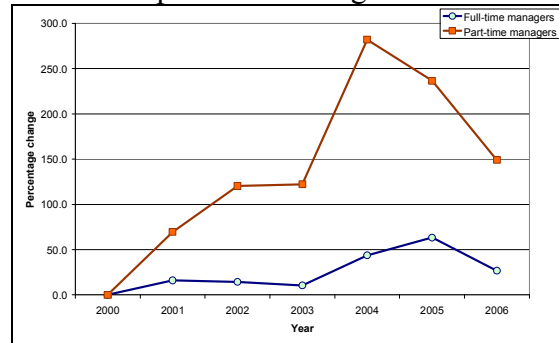
b. Full and part-time farmers



c. Full and part-time farm workers



d. Full and part-time managers



Source: Defra June Agricultural Survey 2006

Whilst farmers make up the majority of labour on Devon farms, employed labour accounted for 23.5% of the workforce in 2006. An examination of Table 2.4 shows that this is considerably lower than England as a whole and, to a certain extent, lower than the South West average. This is not surprising given the predominance of livestock farming in Devon, which tends to employ less labour and rely more on family labour. The agricultural workforce at the district level in 2006 is fairly even in its distribution. Farmers tend to make up between 70 and 80 percent of all agricultural labour in each of

the districts, while full and part-time farm workers, excluding managers, range between 12 and 18 percent.<sup>15</sup>

Table 2.4: Percentage of farmers and employed labour on farms in Devon in 2006

|                 | England | South West | Devon CC |
|-----------------|---------|------------|----------|
| Farmers         | 62.0    | 70.7       | 76.5     |
| Employed Labour | 38.0    | 29.3       | 23.5     |

Source: Defra June Agricultural Survey 2006

## 2.4 Livestock numbers

This section considers changing livestock numbers for dairy, beef and sheep farms from 2000 to 2006 as this illustrates some interesting recent trends.<sup>16</sup>

### *Dairy cattle*

Since 2000, both the number of holdings with dairy cattle and the total number of animals in the county's dairy herd have been in decline, although the beginning of this trend can be traced back to 1984 when milk quotas were introduced. In 2000, there were 2,153 recorded holdings in Devon with dairy cattle, but by 2006 this figure had declined by over one-quarter to 1,584 holdings. Whilst FMD in 2001 had a clear impact on the number of holdings with dairy cattle, dairy holdings have nevertheless been in steady decline ever since with an 11.9% reduction since 2002. Compared to England and the South West Region, the loss of dairy cattle from holdings is on a par with both national and regional trends.

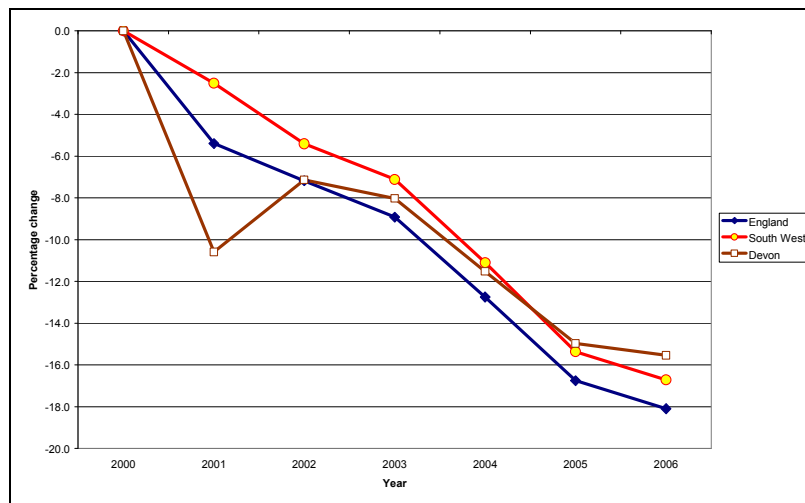
Turning to the county's dairy herd, there has been an 18.1% reduction in the dairy herd of England since 2000 (see Figure 2.2.) The decline is marginally less for Devon at 15.1%, which represents 24,128 fewer dairy cattle in 2006 than were on farms in 2000. As the rate of decrease is lower in Devon, the relative importance of Devon as a dairying county has increased with 10.2% of the English dairy herd and 28.2% of the region's dairy herd

<sup>15</sup> The equivalent figures for workers in Teignbridge cannot be determined as the data has been suppressed because of too few cases to report.

<sup>16</sup> Recent trends can be contextualised by reference to the 2003 State of Agriculture in Devon report.

now in Devon. This recent trend should be viewed in the context of a much longer downward trend that began with the introduction of milk quotas in 1984. Whilst both the number of holdings with dairy cattle and the size of the county dairy herd are in decline, individual herd size is increasing. In 2000, the average dairy herd per holding in Devon was 72 but by 2003 this had risen to 83, a 15.6% increase. Since then, it has remained relatively constant. As holdings do not necessarily equate to the extent of farm businesses, the average size herd in Devon is likely to be higher.

Figure 2.2: *Percentage change in Devon's dairy herd between 2000 and 2006*



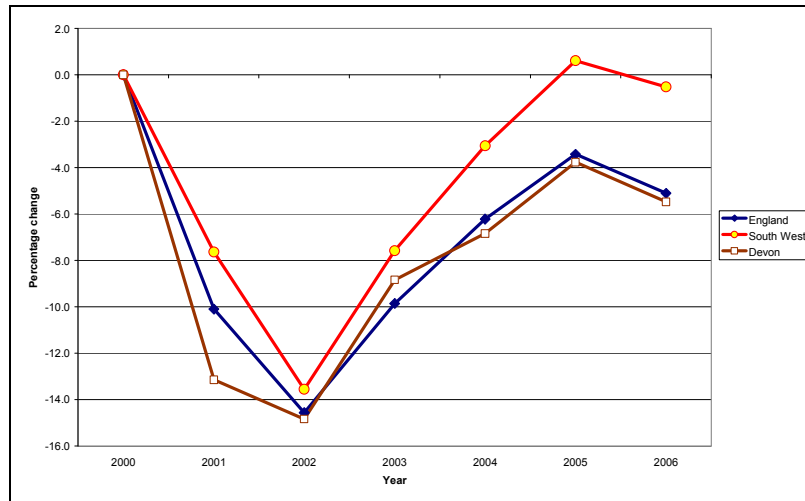
Source: Defra June Agricultural Census/Survey 2000-2006

### ***Beef and suckler cattle***

In a similar trend to holdings with dairy cattle, the number of holdings with beef and suckler cattle has generally been in decline over recent years. In 2000 there were 2,970 holdings in Devon with beef and suckler cattle but by 2006, this had fallen to 2,801, a 5.7% reduction. However, the picture is complicated by FMD. After a 13.3% decline in the number of holdings with beef cattle recorded by the 2002 June Survey, the numbers began to improve, with a 8.7% increase by 2005. As the number of holdings recovered, so the number of animals kept by farmers with beef herds also increased so that by 2005, the number of beef animals in Devon was only marginally less than the total held in 2000 (see Figure 2.3). However, in the past year there has been a downturn in the number of beef livestock, continuing the decline which began in the late 1990s. The recent change in beef cattle kept is perhaps associated with the introduction of the Single Payment

Scheme, which decoupled farm payments from the number of livestock managed. Evidence that points to this is discussed in Chapter 4. Over this period, the average herd size has remained relatively constant wavering between 24 and 26 cattle per holding. In terms of relative importance, Devon has 9.3% of the national beef herd and 34.5% of the South West beef herd.

Figure 2.3: *Percentage change in Devon's beef herd between 2000 and 2006*

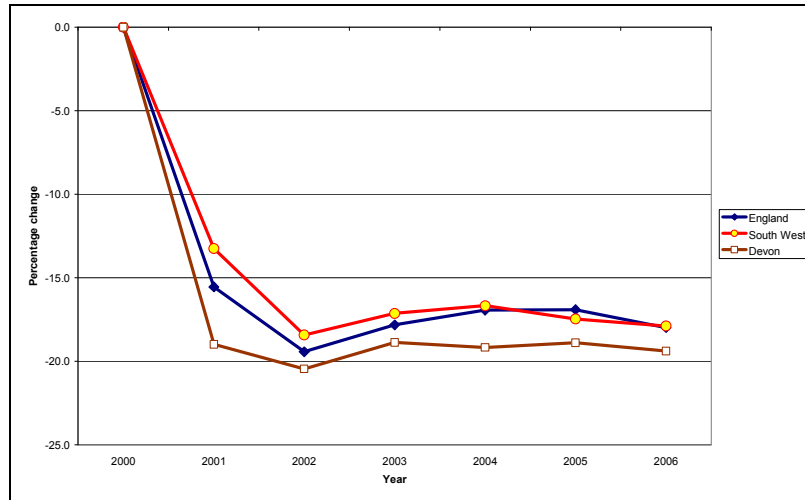


Source: Defra June Agricultural Census/Survey 2000-2006

### *Sheep*

In 2006 there were 4,993 holdings in Devon with sheep. This is an increase of 3.2% over the last six years. Furthermore, the sharp decline experienced at the beginning of the decade because of FMD showed signs of recovery in 2002, with the number of Devon holdings with sheep rising by 6.8% by 2006. The total number of sheep, on the other hand, has stabilised rather than increased in the post FMD period. As such, there were 19.4% fewer sheep on Devon holdings in 2006 compared to 2000 (see Figure 2.4). A consequence of the increase in holdings with sheep, but a stabilisation in livestock numbers, is that the average number of sheep per flock in Devon has fallen from 376 to 293, which represents a 21.9% decrease. Whilst this flock size is less than the national average of 313, it is greater than the regional average of 252. Despite the relative decline in flock size, regionally, Devon has 45.0% of the South West sheep flock and 9.3% of the English flock.

Figure 2.4: *Percentage change in Devon's sheep flock between 2000 and 2006*



Source: Defra June Agricultural Census/Survey 2000-2006

## 2.5 Land tenure on Devon's farms<sup>17</sup>

This section draws mainly on a large survey conducted in the early part of 2007 in order to establish the extent and nature of land tenure agreements across England and Wales.<sup>18</sup> From this, a small sub-sample of farms in Devon is used to explore the structure of land tenure in the county. Data from Defra's June 2006 agricultural survey, which is presented in Table 2.5, shows that nearly one-quarter of land in Devon is rented, which is less than that of both the South West region and England. However, tenurial arrangements in Devon are more complicated than merely land that is rented and owned. For example, whilst there are farms that are solely owned or wholly rented, many farms are of mixed tenure, utilising a range of both formal and informal tenurial agreements.

<sup>17</sup> Land tenure is the relationship between individuals, groups or institutions, whether legally or customarily defined, with respect to land. The land may in turn be cultivated by the owner or by a tenant under some form of agreement that may or may not be based on legislative statutes. In this section, land that is owned and farmed by the owner will be referred to as owner-occupancy; land that is defined by legal statute and farmed by someone other than the owner as formal tenure; and that which is not defined by legal statute and farmed by someone other than the owner as informal tenure.

<sup>18</sup> In 1990, the RICS published a major study of land tenure in England and Wales led by Michael Winter, then a member of staff at the Royal Agricultural College, Cirencester. The 2007 survey is a repeat study that explores tenure in present circumstances and the changes resulting from legislative and structural change.



Table 2.5: *Land tenure in Devon compared to the South West and England in 2006*

|          | % of land in<br>England | % of land in<br>South West | % of land in<br>Devon |
|----------|-------------------------|----------------------------|-----------------------|
| Rented   | 34.7                    | 31.1                       | 24.9                  |
| Owned    | 65.3                    | 68.9                       | 75.1                  |
| All land | 100.0                   | 100.0                      | 100.0                 |

Source: Defra June Agricultural Survey 2006

The various forms of land tenure arrangements in Devon are presented in Table 2.6. From this it can be seen that 82.9% of farmers have some type of formal tenurial agreement, accounting for 65.9% of the land area that is not owner-occupied. Informal arrangements, while covering less in terms of land area farmed, are nevertheless important for the 68.6% of farmers that have these type of agreements. Many farmers hold more than one form of non owner-occupancy tenure arrangement. Indeed, 31.4% of those surveyed reported having two kinds of agreements, while a further 9.8% held three different types. The number of agreements within any one category of tenure arrangement was up to four. For example, two Devon farmers reported having four separate grass keep agreements, while another two have three separate gentleman's agreements. Overall, farmers that manage land under either formal or informal tenure, on average, have 1.8 agreements each, with some respondents farming using their own land and by using seven tenurial agreements to extend their farmed area.

Separating the different types of tenurial arrangements into formal and informal distinguishes between those agreements that are more legally binding compared to those where such binds are much looser or non-existent. Two forms of formal tenure contribute to the majority of land farmed under tenure in Devon. First, Full Agricultural Tenancies, in which farmers have no share in ownership, account for 34.4% of the area farmed, with 41.2% of farmers having an agreement of this type. The second form of tenure, Farm Business Tenancies, are operated on 29.4% of farms, with nearly one-quarter of tenured land area farmed under this form of agreement. Despite the introduction of FBTs in 1996, which were intended to reduce more unconventional and informal tenure arrangements, such arrangements are still popular amongst Devon's farmers. In particular, grass keep agreements account for 22.3% of the land under tenure with 41.2% of farmers having such agreements. The most informal type of tenure, the

gentleman's agreement, has no legally-binding formalities but covers 11.8% of the land farmed under tenure, with 27.5% farmers farming some of their land on the basis of trust.

Table 2.6: *Land tenure in Devon – the land tenure survey*

|   | % of farms <sup>19</sup>         | % of area                  |
|---|----------------------------------|----------------------------|
| <b>Summary</b>                                      |                                  |                            |
| Farms with some owner-occupied land                 | 92.0                             | 61.8                       |
| Farms with some tenanted land                       | 58.0                             | 38.2                       |
|   | % of farms with tenure agreement | % area farmed under tenure |
| <b>Formal Tenure</b>                                |                                  |                            |
| Full Agricultural Tenancy (no share in ownership)   | 41.2                             | 34.4                       |
| Full Agricultural Tenancy (with share in ownership) | 2.0                              | 4.1                        |
| Farm Business Tenancy (more than two years)         | 29.4                             | 24.9                       |
| Farm Business Tenancy (less than two years)         | 2.0                              | 0.0                        |
| Contract farming                                    | 3.9                              | 1.0                        |
| Partnership with landlord                           | 2.0                              | 0.6                        |
| Share farming                                       | 2.0                              | 0.8                        |
| <b>Total Formal Tenure</b>                          | <b>82.4</b>                      | <b>65.9</b>                |
| <b>Informal Tenure</b>                              |                                  |                            |
| Sub-tenancy agreement                               | 0.0                              | 0.0                        |
| Grass keep agreement                                | 41.2                             | 22.3                       |
| Informal agreement (Gentleman's agreement)          | 27.5                             | 11.8                       |
| Other arrangement                                   | 0.0                              | 0.0                        |
| <b>Total Informal Tenure</b>                        | <b>68.6</b>                      | <b>34.1</b>                |

Source: Centre for Rural Policy Research – Land tenure survey 2007

Farmers do not only farm land under different tenure arrangements, they also let out land that they own under a range of agreements. Table 2.7 shows the pattern of land that is let to other farmers, with 19% of farmers in Devon letting land out, accounting for 8.3% of all owned land. Considering this in terms of all farmers who let land, 68.4% of farmers let it as grass keep. The importance of such letting in Devon is not surprising given the pastoral nature of the county. That said, although grass keep is common, the average area under this arrangement is only 15 hectares and most let land in Devon is under other types of agreements. On the other hand, the average area of land let as a FBT is much

<sup>19</sup> The column totals for the percentage of farms in the summary section does not sum to 100% as some farms have both land they own and land they farm under some form of agreement. Similarly, the totals for formal tenure and informal tenure do not add to 100% since some farms have both forms of tenure.

greater at 45 hectares although only 15.8% of farmers that let land out do so under this type of agreement.

Table 2.7: *Land that is owned and let to other farmers*

|  | % of farms that let land | % of total farmed area let | Average area let (Hectares) |
|--|--------------------------|----------------------------|-----------------------------|
| Farms that let land                        | 19.0                     | 8.3                        | 27                          |
|  | % of farms letting land  | % of area let              |                             |
| Land let out on a FBT                      | 15.8                     | 25.9                       | 45                          |
| Land let out as grass keep (not using FBT) | 68.4                     | 37.0                       | 15                          |
| Land farmed by a contractor                | 10.5                     | 13.2                       | 34                          |
| Land let out on joint agreement            | 21.1                     | 23.8                       | 31                          |
| Total land let out                         | 100.0                    | 100.0                      | 27                          |

Source: Centre for Rural Policy Research – Land tenure survey 2007

Table 2.8 describes changes in land holdings (both owned and rented) over the last five years and changes expected over the next five years. Most farmers, 62.5%, have not altered the land that they farm and marginally more, 69.0%, do not expect to change it in the future. Of those that have changed the land they farm, 23.9% increased their farmed area in last five years, while 13.6% have reduced the size of their farm. In the near future slightly fewer intend to either add to or reduce their total land holding, which probably reflects a degree of uncertainty about the future in general. In terms of broad tenure, most increases and decreases in land have occurred on land not personally owned by the farmer. As Table 2.9 shows, 63.6% of change in the last five years occurred on tenanted land.

The factors that drive farmers to increase or decrease the area they farm are diverse, as is illustrated in Table 2.10. Given the small sample of Devon farms in the land tenure survey, only one of these factors can be shown to be statistically significant: that of opportunity, although in many instances more than one factor may influence a farmer's decision-making. Over the last five years, 54.5% of farmers changed the area that they farm at least partly as result of an opportunity arising to buy, rent or agree to manage land. Indeed, if only farmers augmenting their land holdings are considered, 81.0% suggest 'opportunity' as one factor that is particularly important in being able to do so. It

is likely given the analysis of the national land tenure data set that factors such as CAP reform, farm profitability and environmental schemes tend to influence farmers decisions to increase the land that they farm. Conversely, semi-retirement, family changes, borrowings and, to a lesser extent, market prices are factors that tend to have been considered when reducing holding size in the last five years. These factors are also likely to be influential in increases and decreases in the size of holdings in the future.

Table 2.8: *Recent and future changes in the area of land farmed in Devon*

| Change in land  | % changed in last five years | % likely to change in next five years |
|-----------------|------------------------------|---------------------------------------|
| Increase        | 23.9                         | 18.4                                  |
| Decrease        | 13.6                         | 12.6                                  |
| Remain the same | 62.5                         | 69.0                                  |
| All land        | 100.0                        | 100.0                                 |

Source: Centre for Rural Policy Research – Land tenure survey 2007

Table 2.9: *Broad tenure of land of recent and future changes*

| Change in land   | % changed in last five years | % likely to change in next five years |
|--|------------------------------|---------------------------------------|
| In land owned by yourself  | 24.2                         | 20.8                                  |
| In land not personally owned by yourself                                     | 63.6                         | 62.5                                  |
| In a combination of land owned by yourself and on land not owned by yourself | 12.1                         | 16.7                                  |
| All land   | 100.0                        | 100.0                                 |

Source: Centre for Rural Policy Research – Land tenure survey 2007

Table 2.10: *Factors behind recent and future changes in the area of land farmed*

| Factors behind change in land | % changed in last five years | % likely to change in next five years |
|-------------------------------|------------------------------|---------------------------------------|
| Opportunity                   | 54.5                         | 44.0                                  |
| Farm profitability            | 51.5                         | 60.0                                  |
| Market prices                 | 33.3                         | 32.0                                  |
| The impact of CAP reform      | 24.2                         | 36.0                                  |
| Cost of inputs                | 24.2                         | 16.0                                  |
| Family changes                | 21.2                         | 32.0                                  |
| Environmental schemes         | 12.1                         | 24.0                                  |
| Other factor                  | 9.1                          | 4.0                                   |
| Cost of borrowing             | 6.1                          | 16.0                                  |
| Farm diversification          | 6.1                          | 12.0                                  |
| Retirement or semi-retirement | 3.0                          | 32.0                                  |

Source: Centre for Rural Policy Research – Land tenure survey 2007



## **Chapter 3: Trends in farm incomes: evidence from the Farm Business Survey**

### **3.1 Introduction**

The Farm Business Survey, funded by Defra, is widely recognised as the most authoritative survey of the financial position and economic performance of farmers and growers in England and Wales. In the South West, it involves each year about 320 farmers and horticulturalists, who provide a range of management and accounting information about their businesses. The sample is structured to reflect all major farming and horticultural systems in the region and focuses on full-time businesses - those large enough to provide a living for at least one person.

### **3.2 The regional FBS results**

The Devon FBS sample is too small to be used alone to provide reliable estimates of farm incomes. However, regional results are statistically reliable and can be used as a good representation of the county level performance of individual farm sectors.<sup>20</sup>

The FBS weighted income measures for the South West Government Office Region are presented in Tables 3.1 and 3.2 for the main farm types found in Devon.<sup>21</sup> Overall, the net farm incomes (NFI) of farms in the South West were marginally higher in the financial year of 2005/06 than in 2004/05. However, it is difficult to draw direct comparisons between years as receipts from the introduction of the Single Payment Scheme (SPS) has changed the distribution of support payments between farm types and thus the income they receive. Therefore, with this caveat in mind, it can be seen from Tables 3.1 and 3.2 that the NFI of cereal farms display a marked improvement of 45.7%, the NFI of mixed farms by a modest 11.0%, whilst on lowland cattle and sheep farms NFI has increased only by 1.7%. For both Dairy and LFA cattle and sheep farms NFI has fallen by 0.4% and 10.5% respectively.

---

<sup>20</sup> A comparison between years does not necessarily mean that the same farms are contained in each farm type sample as FBS participants change over time. Detailed FBS results can be found at: [www.farmbusinesssurvey.co.uk](http://www.farmbusinesssurvey.co.uk)

<sup>21</sup> Pigs and Poultry are excluded as too few observations means that the sample gives unreliable estimates.

Table 3.1: *Net Farm Income by farm type for the South West Government region since 2002*

|                          | 2002/03 | 2003/04 | 2004/05 | 2005/06 |
|--------------------------|---------|---------|---------|---------|
| Cereal                   | £10,664 | £21,341 | £16,503 | £24,043 |
| Dairy                    | £19,498 | £27,084 | £30,961 | £30,845 |
| Cattle & Sheep (LFA)     | £15,429 | £10,195 | £9,784  | £8,756  |
| Cattle & Sheep (Lowland) | £6,070  | £5,022  | £3,379  | £3,436  |
| Mixed                    | £13,166 | £19,765 | £14,094 | £15,640 |
| All Farms                | £15,079 | £21,458 | £17,080 | £17,753 |

Source: Centre for Rural Policy Research – Farm Business Survey 2002-2006

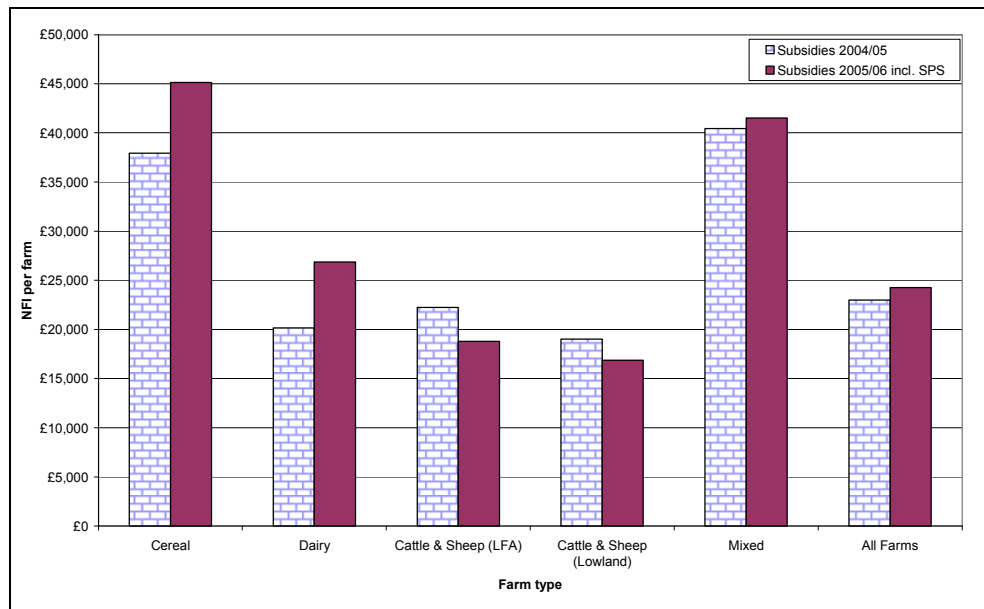
Table 3.2: *Percentage change in Net Farm Income by farm type for the South West Government region since 2002*

|                          | % change between |               |               |
|--------------------------|------------------|---------------|---------------|
|                          | 02/03 & 03/04    | 03/04 & 04/05 | 04/05 & 05/06 |
| Cereal                   | 100.1            | -22.7         | 45.7          |
| Dairy                    | 38.9             | 14.3          | -0.4          |
| Cattle & Sheep (LFA)     | -33.9            | -4.0          | -10.5         |
| Cattle & Sheep (Lowland) | -17.3            | -32.7         | 1.7           |
| Mixed                    | 50.1             | -28.7         | 11.0          |
| All Farms                | 42.3             | -20.4         | 3.9           |

Source: Centre for Rural Policy Research – Farm Business Survey 2002-2006

The difficulty in comparing NFI between 2004/05 and 2005/06 as a result of the introduction of the SPS is illustrated in Figure 3.1. From this, it can be seen that cereal, dairy and mixed farms in the FBS samples received a greater level of subsidy payments than both LFA and lowland livestock farmers. Clearly, the ending of headage payments on beef and sheep and the switch to an area based SPS has redistributed the overall level of subsidy paid to South West farmers. Given that 34.5% of the South-West's beef herd and 45.0% of the sheep flock are in Devon (see Chapter 2), this redistribution in subsidy payment is likely to have a disproportionately large affect on the county's farmers. When receipts from agri-environmental income are taken into account, the monies that livestock farms received from these sources in 2005/06 have marginally reduced whereas those for cereal, dairy and mixed farms have improved.

Figure 3.1: *Changes in subsidies between 2004/05 and 2005/06 – before and after introduction of the SPS*



Source: Centre for Rural Policy Research – Farm Business Survey 2005 and 2006

The importance of the single payment to agriculture is illustrated by Table 3.3. With the exception of dairy and mixed farms, the SPS accounts for nearly one-quarter of the value of total farm output of cereal farms in 2005/06 and approximately 30% of that of cattle and sheep farms. Furthermore, if profit and losses from the different sources of income are considered (see Table 3.4), it is apparent how the single payment supports farming in the South West. With the exception of dairy farming, all other major farm types made a loss from their agricultural enterprises in 2005/06 ranging from £11,198 for lowland cattle and sheep farms to £30,932 for cereal farms. Other useful sources of income are that from agri-environmental schemes for LFA cattle and sheep farms and cereal farms and profit from diversified activities, particularly on cereal farms. Despite these other sources of profit, the single payment provides nearly 100% of the farm business profit for cereal farms, whilst for the other main farm types, with the exception of dairy farms, it not only provides all of the profit but also offsets some of the losses. This depiction of the subsidy dependent nature of agriculture illustrates how the next few years will be critical in determining the future shape of agriculture in the South West and in the county of Devon. Significantly, as the historic element of the SPS diminishes and the area payment aspect increases (as illustrated in Figure 1.1, Chapter 1), income from



agriculture, agri-environmental schemes and diversified enterprises will need to improve in order to reduce the reliance of farm profit on the single payment.

Table 3.3: *Percentage of income from different sources 2005/06*

| Farm type                  | Income source |                         |                 |                       |
|----------------------------|---------------|-------------------------|-----------------|-----------------------|
|                            | Agriculture   | Agri-environment scheme | Diversification | Single Payment Scheme |
| Cereal                     | 54.2          | 7.1                     | 14.4            | 24.3                  |
| Dairy                      | 88.2          | 1.0                     | 1.9             | 8.9                   |
| Cattle and Sheep (LFA)     | 46.6          | 20.1                    | 2.9             | 30.4                  |
| Cattle and Sheep (Lowland) | 57.6          | 5.6                     | 7.7             | 29.1                  |
| Mixed                      | 72.9          | 3.3                     | 6.4             | 17.4                  |
| All farms                  | 78.7          | 3.1                     | 4.6             | 13.6                  |

Source: Centre for Rural Policy Research – Farm Business Survey 2006

Table 3.4: *Profit/Loss in farm businesses from different sources of income in 2005/06*

|                            | Sources of income |                         |                 |                       | Farm Business as a whole |
|----------------------------|-------------------|-------------------------|-----------------|-----------------------|--------------------------|
|                            | Agriculture       | Agri-environment scheme | Diversification | Single Payment Scheme |                          |
| Cereal                     | -£30,932          | £9,545                  | £21,558         | £42,521               | £42,691                  |
| Dairy                      | £18,603           | £1,466                  | £2,241          | £16,670               | £38,979                  |
| Cattle and Sheep (LFA)     | -£14,017          | £10,455                 | £978            | £16,662               | £14,078                  |
| Cattle and Sheep (Lowland) | -£11,198          | £2,404                  | £2,660          | £14,672               | £8,538                   |
| Mixed                      | -£19,102          | £4,917                  | £8,267          | £27,301               | £21,383                  |
| All farms                  | -£2,515           | £3,629                  | £4,849          | £18,358               | £24,320                  |

Source: Centre for Rural Policy Research – Farm Business Survey 2006

### 3.3 The Devon FBS results<sup>22, 23</sup>

Overall, farming income in Devon for 2005/06 generated approximately £102.3 million; this is a 20.4% increase in the county's agricultural income compared to 2004/05.

<sup>22</sup> In previous years, the reports on Devon NFI results have used data from the annual publication of the Farm Management Handbook. However, the Centre for Rural Policy Research no longer publishes FBS results in this format. Instead, the results are made available at the level of SWGOR. This has two effects: first, it is no longer possible to compare the base year period documented in Lobley and Butler (2004) – *The impact of the CAP reform on Devon's Agriculture* – with the current data set; and second, farm incomes detailed in the last report, Robbins *et al.* (2006) - *Agricultural change and farm incomes in Devon: an update* – have been recalculated to enable comparison.

<sup>23</sup> As data from both the Farm Business Survey and Defra's June agricultural survey are derived from samples that are not necessarily the same in consecutive years, a direct comparison between years must be treated as illustrative rather than definitive. In addition, as the Devon NFI is calculated using both Defra and FBS data, whereas the regional NFI is only derived from FBS data, the two sets of results are not directly comparable.

Critically, whilst this seems a considerable increase in incomes from the previous year, a different picture is portrayed by focusing on those farm types that epitomise most of Devon’s farming landscape (dairy, LFA cattle and sheep, lowland cattle and sheep, and mixed farms). From Table 3.5 it can be seen that in 2005/06 these farm types accounted for 93.4% of the land farmed in Devon but only produced 55.3% of the county’s NFI. Other farm types such as Pigs, Poultry and Horticulture with higher value produce in terms of NFI per hectare produced 44.7% of Devon’s NFI.

Table 3.5: *Area farmed, NFI and farm types in 2005/06*

|   | Area | NFI 2005/06 |
|---|------|-------------|
| Main Farm Types<br>(dairy, LFA cattle and sheep,<br>lowland cattle and sheep, and<br>mixed farms) | 93.4 | 55.3        |
| Other Farm Types<br>(General cropping, horticulture,<br>pigs and poultry farms)                   | 6.6  | 44.7        |

Source: Farm Business Survey 2005/06 and Defra June Survey 2006

The main farm types will be commented on in the rest of this section since this gives a clear picture of changes occurring to income on the majority of Devon’s farms. Table 3.6 illustrates that there has been an aggregate reduction of NFI by 3.6% in 2005/06. Despite this, with the exception of dairy, all main farm types experienced improvements in their NFI. NFI on Cereal farms increased by 17.6%, but rather than being due to an increase in output prices, the SPS and agri-environmental payments contributed more to overall NFI. From Table 3.6 it is clear that the overall reduction in the aggregate NFI for the main farm types in Devon was because of a 9.2% decrease in the NFI of dairy farms. This can be accounted for by increased input costs rather than a reduction in output values. Clearly, the importance of dairying to the county of Devon is reflected in those districts where it is more prominent.

Table 3.7 shows that the NFI of all districts decreased in 2005/06 compared to the previous year.<sup>24</sup> Relatively, the South Hams performed better than the other districts in terms of its main farm types, yet it still suffered a reduction in NFI. As this district has

<sup>24</sup> The exception is Exeter, although within this area there are too few farms for the results to be reliable.

relatively more hectares of cereal farms and fewer under dairy farming, the reduction in NFI is less pronounced. However, those districts with relatively few hectares under cereals and more dairy farms – East Devon, North Devon and Torridge – have seen their NFI fall by over 4%. Figure 3.2 illustrates these changes and shows, generally, a picture of marginal changes for most farm types in each district rather than anything more significant.

Table 3.6: *Aggregated net farm incomes by main farm type in Devon (£m)*

| Farm Type                | NFI in 2004/05 | NFI in 2005/06 | % Change from 2004/05 to 2005/06 |
|--------------------------|----------------|----------------|----------------------------------|
| Cereal                   | 4.41           | 5.18           | 17.6                             |
| Dairy                    | 46.79          | 42.50          | -9.2                             |
| LFA                      | 6.47           | 6.83           | 5.6                              |
| Lowland Cattle and Sheep | 5.31           | 5.63           | 6.1                              |
| Mixed                    | 6.95           | 7.23           | 4.1                              |
| Main farm types in Devon | 69.93          | 67.38          | -3.6                             |

Source: Farm Business Survey 2005/06 and Defra June Survey 2006

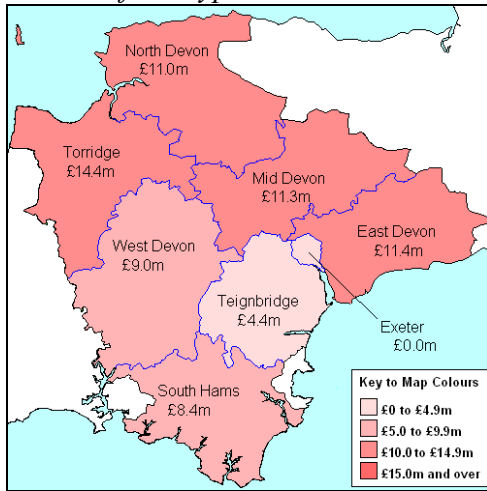
Table 3.7: *Aggregated net farm incomes at district level in Devon (£m)*

| District    | NFI in 2004/05 | NFI in 2005/06 | % Change from 2004/05 to 2005/06 (relative to base years which equals 100) |
|-------------|----------------|----------------|--|
| East Devon  | 11.42          | 10.96          | -4.0   |
| Exeter      | 0.04           | 0.04           | 2.5  |
| Mid Devon   | 11.31          | 10.82          | -4.4   |
| North Devon | 11.00          | 10.42          | -5.3   |
| South Hams  | 8.40           | 8.32           | -0.9   |
| Teignbridge | 4.40           | 4.19           | -4.7   |
| Torridge    | 14.37          | 13.74          | -4.3   |
| West Devon  | 8.99           | 8.89           | -1.2   |
| Devon CC    | 69.93          | 67.38          | -3.6   |

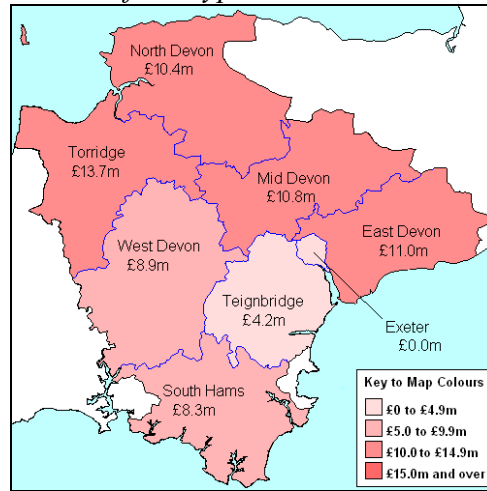
Source: Farm Business Survey 2006 and Defra June Survey 2006

Figure 3.2: NFI for farm types aggregated at the level of district for Devon 2004-06

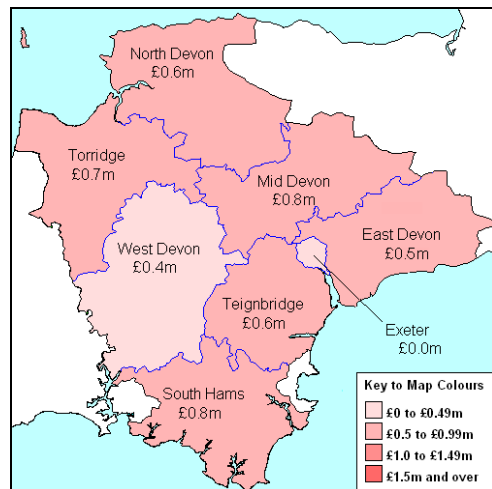
All main farm types 2004/05



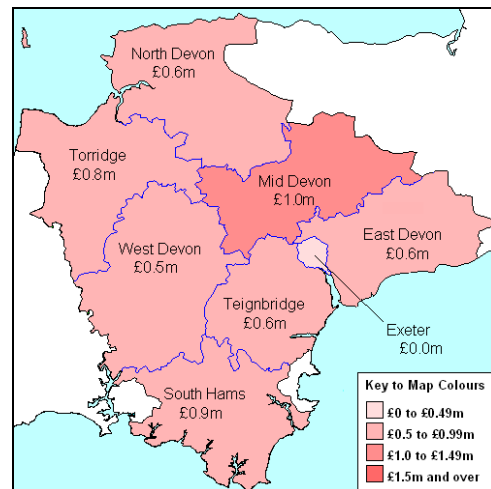
All main farm types 2005/06



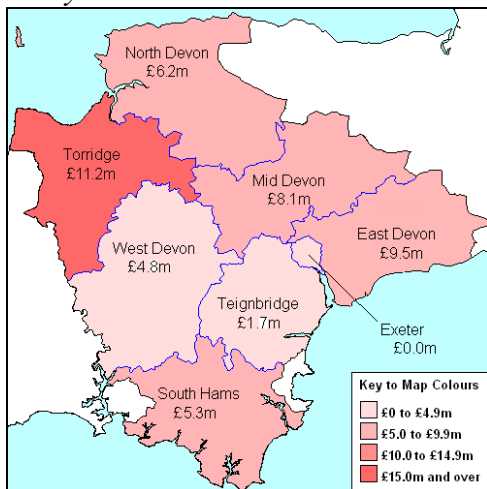
Cereal 2004/05



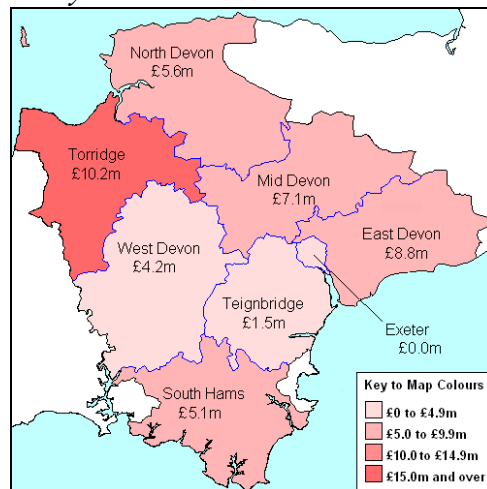
Cereal 2005/06



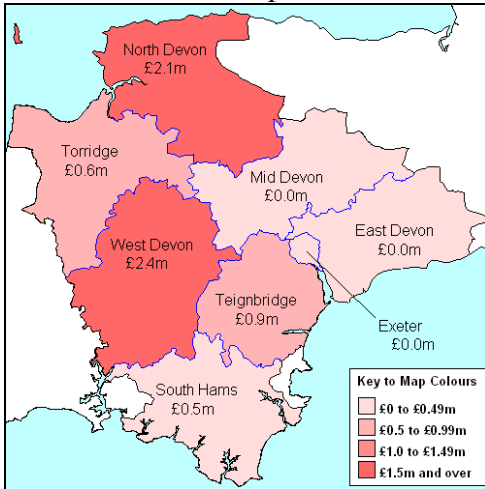
Dairy 2004/05



Dairy 2005/06



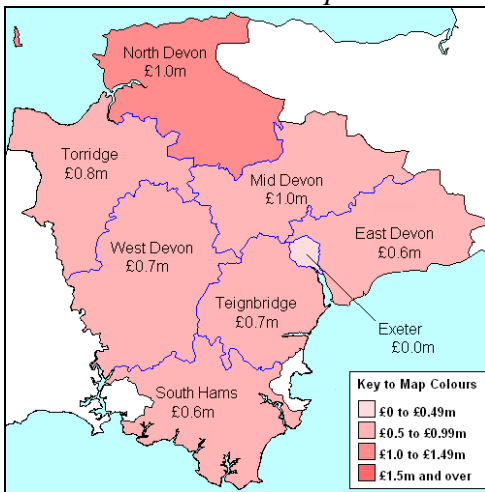
*LFA Cattle and Sheep 2004/05*



*LFA Cattle and Sheep 2005/06*



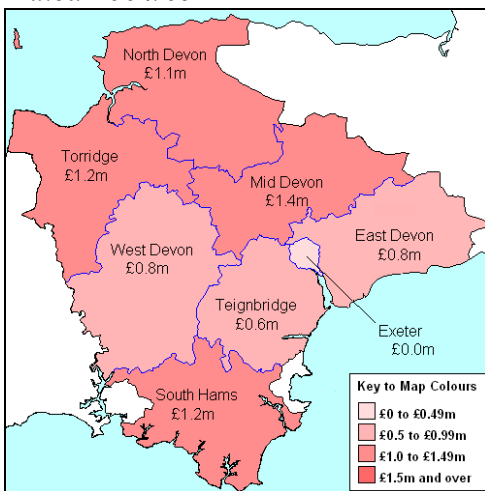
*Lowland Cattle and Sheep 2004/05<sup>25</sup>*



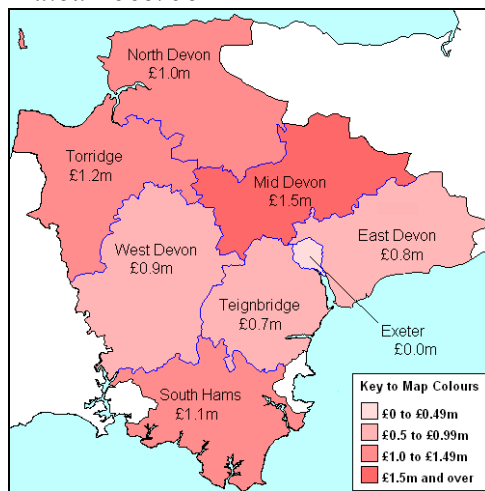
*Lowland Cattle and Sheep 2005/06*



*Mixed 2004/05*



*Mixed 2005/06*



Source: Defra June Agricultural Survey 2006 and Farm Business Survey 2006

<sup>25</sup> Whilst the values of Mid Devon and North Devon appear to be the same, the former is marginally greater than £1.0 million and the latter is marginally less, hence the different shading on the map.

## **Chapter 4: Present and future plans of farmers and the impact of the Single Payment Scheme: evidence from a survey of Devon farmers**

### **4.1 Introduction**

In late 2006, a postal survey of 3777 farmers in the South West GOR was undertaken in order to collect data on rates and patterns of succession; the impact of CAP reform on farm business performance and future plans. From this sample, 1184 Devon farmers were sent a self-completion postal questionnaire during the early winter of 2006. However, given the sampling framework, a random sample drawn from Yellow Pages and Thomson Local directory, it was necessary to make adjustments to account for farmers no longer farming or deceased. As such, the final population of the Devon sub-sample was 1123, of which 598 (53.3%) returned their questionnaires. While these respondents represent only 3.7% of holdings in Devon, they account for 11.4% of the farmed area in Devon.<sup>26</sup> From these returns, it is possible to comment on the plans and intentions of farmers in Devon with a high degree of confidence.

### **4.2 Trends in strategic plans over the next five years**

Looking to the future of farming in Devon, over the next five years, 62.9% of farmers intend to be managing their farm as they are now or with increased production or increased diversification activities (see Table 4.1). Of the remainder that intend to reduce farming activity or leave the industry entirely, 26.4% plan to retire from farming with the majority of these favouring semi-retirement rather than complete retirement. However, retirement from farming does not mean a complete exit from the industry as 39.2% of these have already identified a successor to take over the family business. As such, by accounting for farmers that have identified a successor who will take over the management of the farm business, 82.1% of farms will continue under the management of the same family over the next five years. Even when accounting for farmers that intend to reduce their level of farming by either finding extra off-farm work or semi-

---

<sup>26</sup> This is based on the number of holdings recorded by Defra. However, as the farm survey was based on 'farms' that may contain more than one holding, the figure of 3.7% of Devon farmers is likely to be an under representation. Therefore, the area of land farmed provides a better measure of survey coverage.

retiring from the industry, only 7.4% of respondents indicated that they intend to exit farming, mostly through complete retirement. This relatively small turnover indicates that despite the perceived difficulties in the farming industry, farms continually evolve through the process of retirement and succession with only a small number exiting to pursue other careers outside of the industry.

Table 4.1: *Future plans over next five years in rank order*

|   | Number | Percentage of all farmers |
|---|--------|---------------------------|
| Continue farming with no significant changes          | 191    | 32.4                      |
| Semi-retire from farming                              | 121    | 20.5                      |
| Continue farming but with increased diversification   | 92     | 15.6                      |
| Continue farming with increased production            | 88     | 14.9                      |
| Reduce farming and take up/ increase off-farm working | 42     | 7.1                       |
| Completely retire from farming                        | 35     | 5.9                       |
| Leave farming and take up/ increase off-farm working  | 9      | 1.5                       |
| Don't Know  | 11     | 1.9                       |
| All farmers   | 589    | 100.0                     |

Source: Devon sample from SW farm survey CRPR 2006

In 2005, the SPS replaced eleven previous subsidy schemes with one new single payment. Its intention is to give farmers greater ‘freedom to farm’ to the meet the demands of the market (Defra 2004). Given this end, the SPS is likely to have an influence on the strategic planning of Devon farmers. Yet, the relatively short period between the introduction of the scheme and farmers reaction to it means that its likely impact can only be partially determined at this stage. Since the survey of Devon farmers was conducted in late 2006, it is expected that some of the repercussions of the SPS will not be fully reflected, although early indications should provide a guide to the direction of change. Indeed, if the switch between the historic verses area payments is considered (Figure 1.1), it will not be until after 2007 when the area payment element becomes a more significant factor in decision-making, particularly if this switch means farmers ability to use the payment to ameliorate losses from agricultural enterprises is reduced. Given these caveats, the survey nevertheless provides an early indication of how farm businesses are reacting to the introduction of the SPS. From Table 4.2, it can be seen that

one-third of farmers report that their plans have not at all been influenced by the introduction of the SPS. While this seems a considerable number, placing these ‘non-reactors’ into context illustrates that the SPS is not a major issue for all farmers. For example, it is statistically significant that 42.6% of ‘non-reactors’ are farmers that manage less than 50 hectares. Given this, their ability to claim large amounts of the historic element is limited. Furthermore, some farm types are unlikely to have been eligible for the historic element such as pigs and poultry, unless they had other applicable enterprises on their farm. If, in addition to the ‘non-reactors’, those that expect their plans to be only slightly influenced are considered, then 69.9% of all respondents will carry on with their strategic plans largely unaltered.

Table 4.2: *The influence of the SPS on plans for the next five years*

|                       | Number | Percentage of all farmers |
|-----------------------|--------|---------------------------|
| Not at all            | 196    | 33.4                      |
| Slightly influenced   | 214    | 36.5                      |
| Largely influenced    | 137    | 23.4                      |
| Completely influenced | 39     | 6.7                       |
| All farmers           | 586    | 100.0                     |

Source: Devon sample from SW farm survey CRPR 2006

Examining more closely the extent to which plans are affected by the SPS (Figure 4.1), reveals that farmers who intend to continue but with increased diversification, and those who propose to reduce the level of their farming activity either through semi-retirement or increasing off-farm work, are statistically more likely to be influenced by the change in payment scheme. In the first case, 26.3% of farmers intending to increase the level of their diversification are more likely to be “completely influenced” by the introduction of the SPS. It is statistically significant that 80.2% of farms that plan increased diversification already manage a diversified enterprise. In other words, the SPS appears to be stimulating an expansion of existing diversified businesses rather than the creation of newly diversified enterprises. However, the specifics of how the SPS will be used for diversification are far from clear. Indeed, only 27.9% of farmers that intend to increase diversification indicate that they already have a plan to do so. Furthermore, the ability to diversify may not always be straightforward, as one farmer expressed:



*‘Looking into diversification because of bad returns on finished stock - diversification is not easy situated in a national park as tourism is already over done. i.e. lots of vacancies in holiday lets, etc.’*

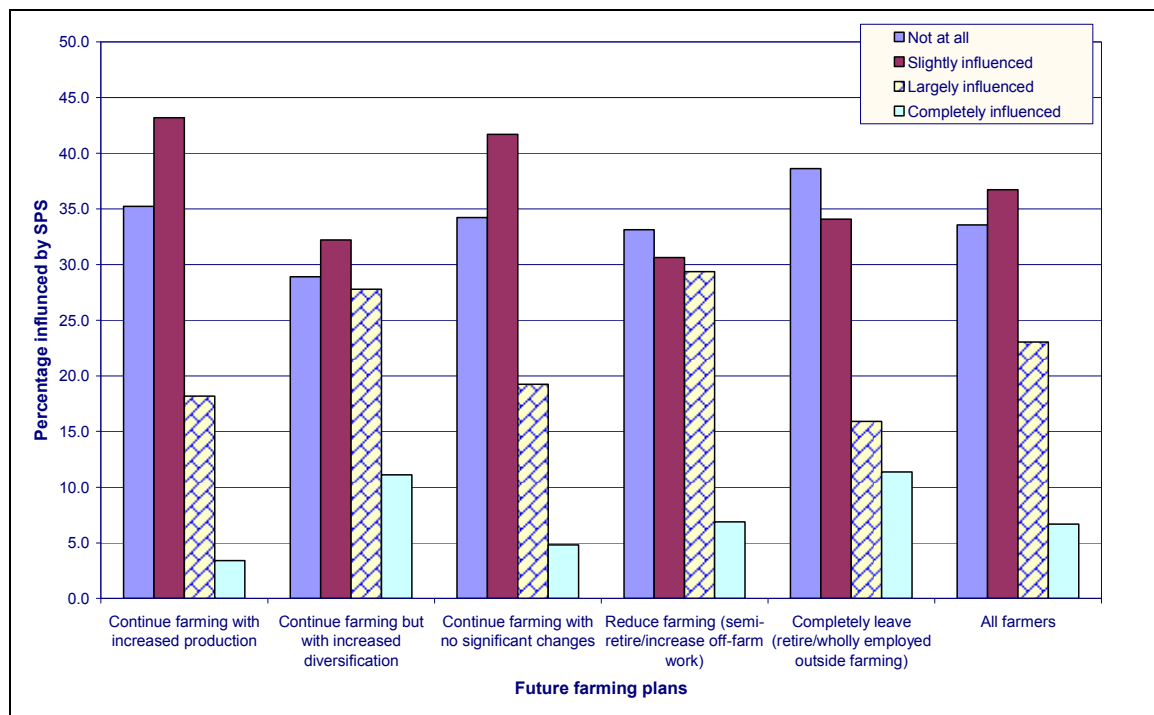
For other farmers, it will be the continued expansion of existing enterprises:

*‘Education and Arts centre exists here and will expand’*

or

*‘Improving my campsite, maybe’.*

Figure 4.1: Influence of the Single Payment Scheme (SPS) on future farming plans<sup>27</sup>



Source: Devon sample from SW farm survey CRPR 2006

In the case of farmers planning to reduce the level of their farming activity, 35.9% have been largely influenced by the SPS. In some cases, where the farmer intends to semi-retire the introduction of the SPS has:

<sup>27</sup> Given the low number of respondents in the categories of ‘reduce farming and take up/increase off-farm working’ and ‘leave farming and take up off-farm working’ given in Table 4.1, they have been respectively amalgamated with the categories of semi-retirement and completely retire. This makes two new categories: ‘reduce farming’ and ‘completely leave’. Collapsing these categories enables results to be reported as statistically significant where  $p < 0.1$ .

*‘Allowed us to semi-retire from farming’.*

This has been achieved using a variety of strategies:

*‘Get single farm payment and let out ground’*

*‘Modernised the dairy facilities and increased production of milk by 50% in order that the younger members of our family can survive in farming’.*

Another farmer planning to reduce farm work by increasing off-farm opportunities to earn additional income has his strategic plan already in place:

*‘I am part way through a brick-laying course and have to work an average of two days a week on this type of work in the future’*

Despite the wish to reduce the level of farming activity either by semi-retiring or taking up/increasing off-farm work, the ability to make such plans concrete may be not always easy, as these farmers comment:

*‘Reduction in income will mean retirement will be delayed and curtailed as income falls. The need for an outside source of income increases’.*

*‘Something that utilises existing skills that can be fitted around farm work’*

Of the minority of farmers that intend to leave farming completely, either through complete retirement or by taking up or increasing the level of off-farm work, 72.7% have at most been only “slightly influenced” in their plans by the introduction of the SPS. Instead, age is a much more important factor as 75.8% of farmers that intend to retire completely over the next five years are over 60 years old. Those intending to leave farming for other careers however, are younger, tending to be between 40 and 50 years of age.

In most cases in the immediate future, farming would seem to be largely ‘business as usual’ by those continuing to farm, whether or not they plan an expansion of production, a diversified enterprise or a reduction in the level of farming activity. However, by considering strategic plans in terms of farm characteristics such as farm size and farm type some important differences are identified. In terms of main farm type, it is statistically significant that 64.4% of plans to increase production are likely to occur on dairy farms, but this only accounts for 29.6% of all dairy farms. In other words, a minority of dairy farms account for the majority of expansion plans of all farmers in the survey. On the other hand, over one-third (36.5%) of cattle and sheep farmers intend to reduce their level of farming either through semi-retirement or increasing off-farm work, which may be partly due to the removal of headage payments and historically low livestock prices of recent years.

There may be several reasons why dairy farms are more likely to continue than those who are reliant on cattle and sheep. In particular, the switch from headage payments to the SPS will have a much greater impact on farmers whose greatest turnover is from beef than farmers with other enterprises. In this context it is significant that 43.8% of farmers with beef as their principle enterprise report that their plans for the future are influenced “largely” or “completely” by the introduction of the SPS, compared to 17.1% of farms with dairying as the major enterprise. As these three beef farmers expressed in response to the change in subsidy system:

*‘Have considered numbers of stock held now payments not on headage i.e. likely to keep less.’*

*‘Due to ending of all production subsidies it is no longer viable to have beef suckler herd. So a big reduction in herd size has taken place 50%.’*

*‘I have cut my stocking rate in favour of increasing area payments.’*

In addition to the expansionary tendencies of a minority of dairy farms, it is the largest farms that plan to increase production in the next five years. In terms of farm size, 68.2% of farmers that plan to increase production operate farms in excess of 100 hectares but in particular, 50.0% of this increase is likely to occur of farms that are between 100 and 199 hectares. Importantly, most (72.0%) farms in this size category are highly dependent on income from agriculture. This points not only to a further polarisation, as the largest farms continue to grow and to increase production, but also suggests that the largest farms are perhaps 'locked in' to an expansionary trajectory. Expansion is a tried and tested means of increasing income and it is statistically significant that 68.3% of farms that plan to farm at an increased scale are associated with being highly dependent on agricultural income. Smaller farms (those less than 50 hectares) are conversely, more likely to be reducing the scale of their farming operation. For example, of the farmers that intend to leave farming altogether in the next five years, 48.8% operate farms of less than 50 hectares compared to 21.0% of farmers with farms of over 100 hectares. Furthermore, the majority of these smaller farms (62.5%) derive at least three-quarters of their income from outside of agriculture (although this factor is only marginally associated with plans to reduce scale or completely leave the industry).

### **4.3 Trends in management plans over the next five years**

The execution of strategic plans requires that management decisions be made about enterprises and factors of production, particularly land and labour. Examining how farmers intend to carry out plans in these terms suggests that Devon's farming sector will perhaps subtly change in the *near* future rather than being subject to any dramatic shift.

From Table 4.3 it can be seen that, in the near future, the majority of farmers in Devon (70.7%) do not intend to change the area of land that they farm although a substantial minority (22.6%) intend to increase their area. Over half of this enlargement (56.0%) is likely to be carried out on dairy farms, whilst 71.6% is associated with farms that are 100 hectares or more in size. This expansion of land will probably be conducted by a younger generation of farmers, with 60.0% being carried out by farmers under 50 years old (and 21.1% by those under 40). One of the drivers for this change may be the wish to build

the farm up for future generations. Analysing expansionary plans alongside the expectation of passing the farm on to a successor reveals that 40.4% of those planning to increase scale through land acquisition currently have a successor, and this increases to 75.5% if those farmers for which it is too early to identify a successor but who hope to have one are included.

Table 4.3: *Changes planned on Devon farms in the next five years*

| Changes to               | Change in level |            |             |
|--------------------------|-----------------|------------|-------------|
|                          | % Increase      | % Decrease | % No change |
| Land                     | 22.6            | 6.7        | 70.7        |
| Livestock                | 30.7            | 24.8       | 44.6        |
| Family labour            | 8.6             | 13.2       | 78.2        |
| Employed labour          | 8.6             | 11.5       | 79.9        |
| Contractors              | 15.2            | 11.9       | 72.9        |
| Diversification          | 36.9            | 0.8        | 62.3        |
| Off-farm work            | 25.3            | 3.3        | 71.4        |
| Environmental management | 43.2            | 2.2        | 54.6        |

Source: Devon sample from SW farm survey CRPR 2006

Livestock numbers in Devon will be subject to a complex pattern of change over the next five years, with 30.7% of farmers intending to increase livestock numbers and 24.8% proposing to decrease their level of stock. As would be expected, farmers that plan an expansion in the scale of their farming are statistically most likely to increase the number of their livestock (82.4%). The reduction in stock numbers on the other hand, is strongly associated with plans to semi-retire from farming, as 65.6% of farmers planning this strategy also intend to reduce livestock. In terms of farm type, 43.9% of dairy farmers are likely to increase livestock numbers, while just over one-third (34.5%) of cattle and sheep farmers indicated that they will cut their stock numbers.

In addition to considering the role of radical policy change, in the form of the SPS, the complexity of changes in livestock numbers and land areas needs to be viewed in terms of life-cycle changes that occur as a natural process of farming. For instance, farmers with successors or the desire for a successor are statistically more likely to increase both land area and livestock numbers. As Table 4.4 illustrates, when no successor has been identified or there is no hope for a successor, plans to reduce the scale of farming are

more apparent. A further complication is perhaps the transition of farmers from full-time farming into semi-retirement before finally entering full retirement. Arguably, evidence from the survey suggests that younger farmers, those who are 50 and under, are more likely to be associated with dairy farming whilst older farmers that are nearing retirement (aged 60 to 70) are associated with cattle and sheep rearing. Therefore, the greater loss in livestock numbers for this latter type of farmer may have as much to do with an easing out of farming as the farmer heads towards semi- and then full-retirement, as it does to a radical exit strategy resulting from CAP reform.

Table 4.4: *The association between succession and changes in land area and livestock numbers*

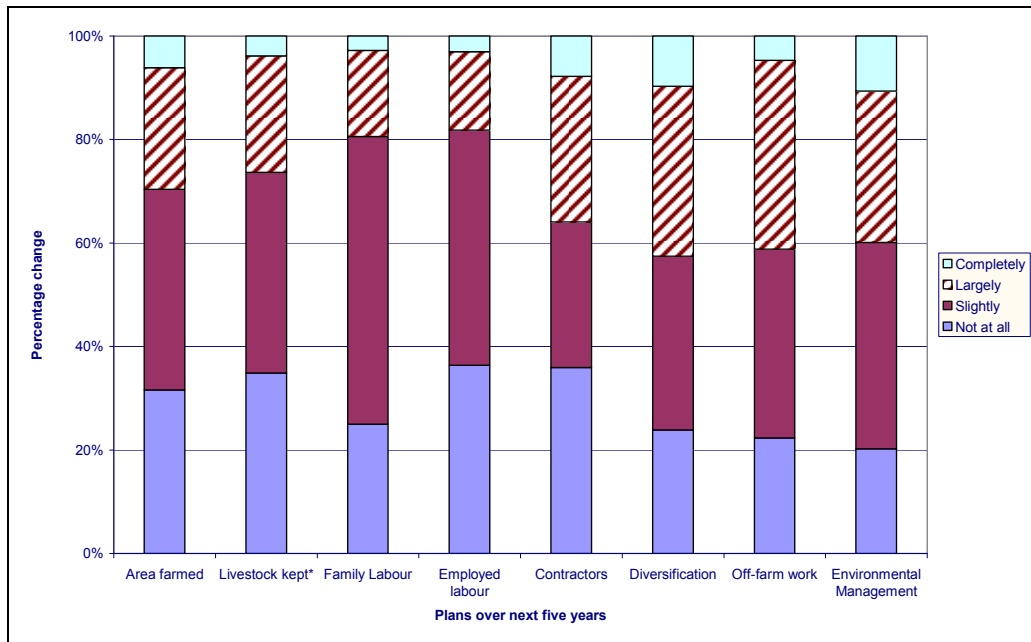
|                                     | Land area |          | Livestock Numbers |          |
|-------------------------------------|-----------|----------|-------------------|----------|
|                                     | Increase  | Decrease | Increase          | Decrease |
| No successor and would not like one | 21.1      | 74.1     | 26.2              | 55.6     |
| Yes, have successor                 | 42.2      | 14.8     | 42.6              | 18.2     |
| Too early but would like one        | 36.7      | 11.1     | 31.1              | 26.3     |
| All farmers                         | 100.0     | 100.0    | 100.0             | 100.0    |

Source: Devon sample from SW farm survey CRPR 2006

Planned changes in land area and livestock numbers will inevitably impact on family labour and employed labour. Indeed, in terms of family labour there is a statistical association between increases and decreases in land area and livestock numbers and the level of labour use. For example, 51.0% of those planning to reduce livestock numbers also expect to reduce family labour and this increases to 67.4% if employed labour is also included. Furthermore, 41.0% of the decrease in employment is likely to occur on farms with beef as the principle enterprise. These plans, with regards to employed labour in particular, are closely associated with the strategic plans of Devon’s farmers. In addition, the use of labour on farms may reflect the economic outlook of farmers as 39.1% of planned increases in employed labour is statistically associated with economic conditions that are described as “good”, whereas 41.9% of the decrease in farm labour is likely to be from farms that describe their economic conditions as “poor”. Similarly, 57.1% of the intended reduced use of contractors is associated with farms with a “poor” economic outlook.

Farmers' intentions over the next five years may also include plans for increased diversification, taking up more work off-farm, or increasing the level of environmental management on the farm. Each of these may create additional income streams. While it may be unclear how the SPS will be used to assist the process of diversification, 32.8% of those that plan to increase diversification and 36.5% of those that intend to take on more off-farm work report being 'largely influenced' by the introduction of the SPS. Figure 4.2 demonstrates that the SPS has greater influence on the plans to increase the level of diversification, off-farm work and environmental management. Furthermore, the absolute number wishing to decrease their level of diversification, off-farm work and environmental management is minimal at 3, 11 and 9 respectively. This confirms that the trends of expansion of diversified enterprises, more off-farm working and increased engagement in environmental management will continue to progress over the next five years.

Figure 4.2: Plans to increase and the influence of the SPS



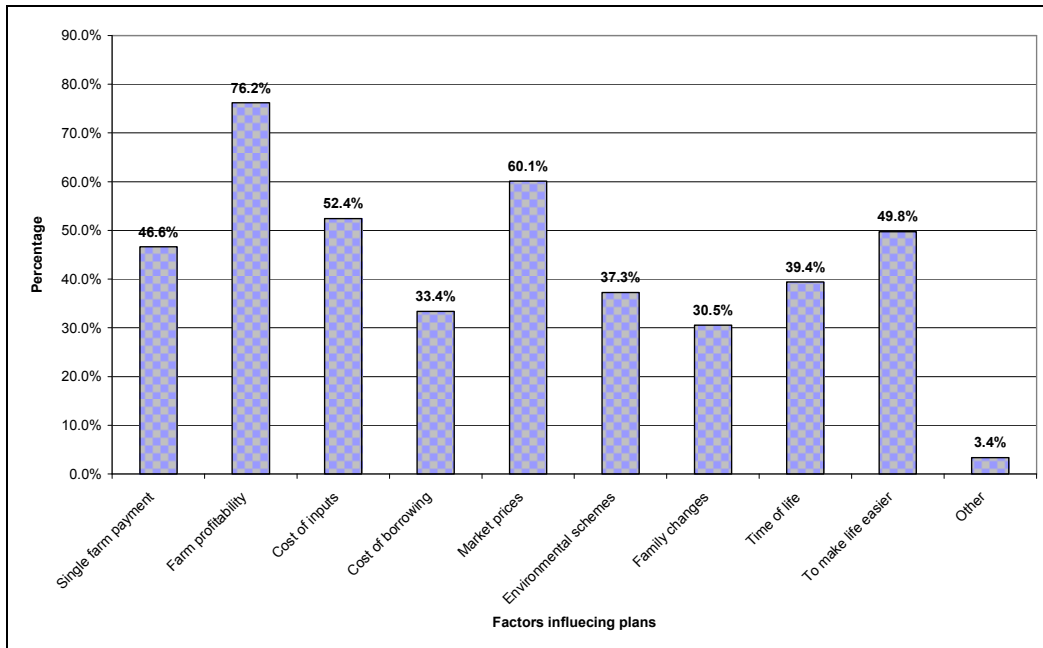
Source: Devon sample from SW farm survey CRPR 2006

#### **4.4 Factors that influence management plans**

The implementation of the single payment scheme, as noted already, is only one factor that influences the management plans of farmers. Figure 4.3 illustrates a range of factors that can affect the decisions that alter the direction of developments in enterprises and how factors of production (land, labour and capital) are utilized. Clearly, the main factor that the majority (76.2%) of Devon farmers consider influential is that of farm profitability. As was highlighted in Chapter 3, it is not only agricultural enterprises that contribute to farm profit but rather a combination of this, the single payment, profit from diversification, and income from agri-environmental schemes. In terms of the SPS, 46.6% of farmers indicated this as being influential which, interestingly, is fewer than those who mentioned the cost of inputs (52.4%), market prices (60.1%) and 'to make life easier' (49.8%). The lower rate at which the single payment is identified as an influential factor can be understood in terms of some of the reasons already explored: the farm is too small to claim much in the way of subsidy or the farm type did not historically benefit from subsidy payments. Indeed, when these explanations are subject to statistical testing, the SPS and farm size emerge as being significant influences for larger farms (over 100 hectares but particularly those in excess of the 200 hectares) and for cattle and sheep farms and arable farms. Further analysis also reinforces an earlier argument that, when farmers reach 50 years old and beyond they are more likely to make decisions that enable them to 'make life easier'. In particular, that 65.7% of farmers who plan to semi-retire also plan decisions to 'simplify their life', provides support for the notion of a long wind down from the full intensities of farming by moving into a less intensive semi-retirement phase.



Figure 4.3: *Factors that influence farm planning*



Source: Devon sample from SW farm survey CRPR 2006

A detailed examination of the factors that influence farm management plans is presented in Figure 4.4. From this, it can be seen that certain factors are statistically associated with driving farm plans in a particular direction. For example, the influence of the single payment is most likely to reduce both the level of livestock numbers and the level of employed labour. Market prices on the other hand, only have a weak association with a reduction in family labour. While the importance of market prices may seem surprising, the factors that influence farmers' plans are interrelated. For instance, market prices are strongly associated with farm profitability, the cost of inputs, the cost of borrowing, the single payment scheme and environmental schemes. Clearly, while certain factors may have a bearing on the direction of change in farm planning it is a combination of key factors that determines the fruition of plans.

Figure 4.4: *The direction and significant associations between farm plans and influencing factors.*

| Factor                | Changes in management of |                   |                 |               |             |                              |               |                          |
|-----------------------|--------------------------|-------------------|-----------------|---------------|-------------|------------------------------|---------------|--------------------------|
|                       | Area farmed              | Livestock numbers | Employed labour | Family labour | Contractors | Diversification <sup>+</sup> | Off-farm work | Environmental management |
| Single farm payment   |                          | ↓*                | ↓**             |               |             |                              |               |                          |
| Farm profitability    | ↑*                       | ↑**               | ↑**             |               |             | ↑                            | ↑*            |                          |
| Cost of inputs        |                          |                   |                 |               | ↓**         |                              | ↓**           |                          |
| Cost of borrowing     | ↑*                       | ↑*                | ↑*              |               |             |                              |               |                          |
| Market prices         |                          |                   |                 | ↓**           |             |                              |               |                          |
| Environmental schemes |                          |                   |                 |               | ↓**         | ↑                            | ↑*            | ↑*                       |
| Family changes        |                          |                   |                 | ↑*            |             |                              |               |                          |
| Time of life          | ↔*                       |                   |                 | ↔*            | ↔*          |                              | ↔**           |                          |
| To make life easier   |                          | ↓*                |                 |               | ↔**         |                              |               |                          |

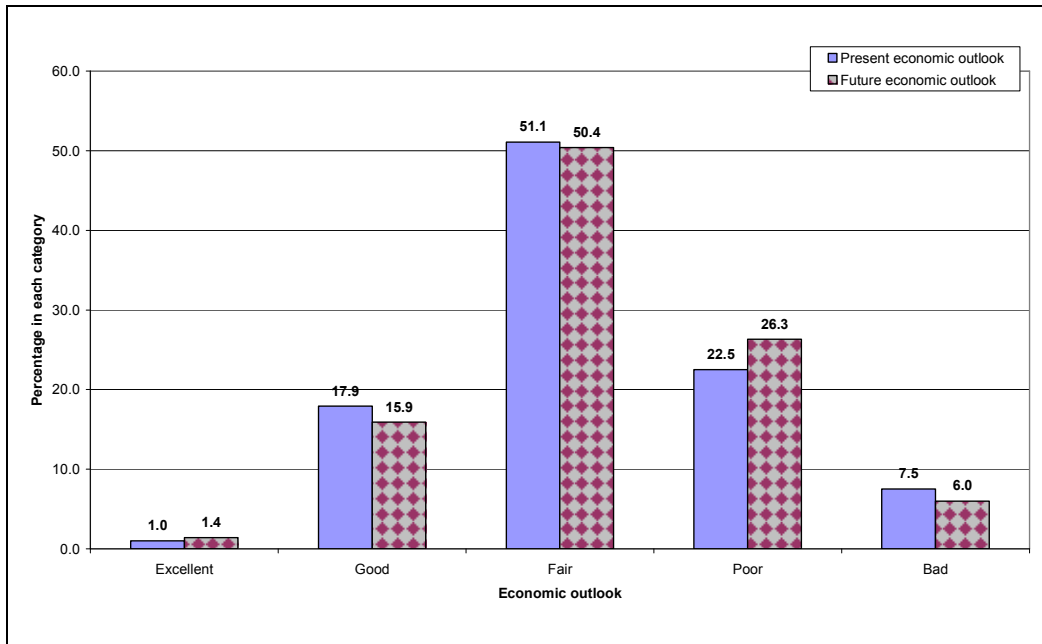
**Key**  
 ↑ Plans to increase  
 ↓ Plans to decrease  
 ↔ Plans no change  
 \* Statistically significant association between plan and factor when p<0.05.  
 \*\* Statistically significant association between plan and factor when p<0.1.  
<sup>+</sup> No statistical significant association present because there are too few farms intend to decrease their level of diversification.

Source: Devon sample from SW farm survey CRPR 2006

#### 4.5 Trends in the economic outlook of Devon’s farmers

Examining the economic outlook of Devon farmers shows that most believe their present economic situation is at least “fair” when they consider all their income. However, as Figure 4.6 shows, a relatively large minority (30%) consider their present circumstances as either “poor” or “bad”. In contrast, only 18% described their economic conditions as either a “good” or “excellent”. In terms of their future economic outlook, the majority of farmers (70.6%) believe their economic situation will not differ in the next five years. However, 16.1% of farmers feel that in the future their economic outlook will worsen, while only 13.3% consider an improvement will occur.

Figure 4.6: *The economic perceptions of Devon farmers in 2006*



Source: Devon sample from SW farm survey CRPR 2006

In terms of farmers' strategic plans over the next five years, there is an association with future economic outlook rather than their assessment of their current economic condition; i.e. plans are more strongly influenced by future expectations than by an assessment of current conditions. Indeed, it is more likely that farmers who intend to increase the level of production believe their future economic circumstances to be good<sup>28</sup>, presumably as an outcome of increasing production. On the other hand, farmers who believe their future position will be "poor" are more likely to plan to reduce their level of farming or leave farming completely to take up new or additional off-farm work. Indeed, 50% intending to reduce the level of their farming activity describe their future economic outlook as poor, while this increases to two-thirds of those intending to leave.

There may be many factors that influence how a farmer feels about their economic position. Clearly, one of these is the recent CAP reforms in general and specifically the introduction of the SPS. It is significant that approximately 60% who suggest that their strategic plans have been completely influenced by the introduction of the SPS are

<sup>28</sup> The categories of 'excellent' and 'good' and 'poor' and 'bad' have respectively been collapsed into 'good' and 'poor' for statistical reasons: the 'excellent' and 'bad' categories contained too few observations to be statistically useful.

associated with both a present and a future economic position that is described as “poor”. However, the SPS is not the only factor associated with how farmers’ perceive their present economic and future conditions. Of particular significance is the type of farm that the farmer operates. Dairy farmers are more likely to consider their economic conditions both presently and in the future to be “poor”. Indeed, 40.5% of dairy farmers considered their future circumstances in these terms compared to 13.7% of them who thought it would be “good”. While this may seem inconsistent with the notion that some dairy farmers are expanding their farming operations, it is significant that 71.2% of dairy farms that intend to increase the area of land that they farm, and 73.1% of those that intend to expand the number of livestock kept, perceive their future as either being either “fair” or “good”. As such, those dairy farmers with a “poor” outlook are less likely to take this expansionist trajectory but instead remain as they are or even reduce the level of their farming activities. If arable farmers are considered, only 25.7% considered that their future economic conditions to be “poor” while 34.3% were more optimistic, expecting the circumstances will be “good”. It is likely that other influences such as prices or opportunities that are available to certain types of farmers may be just as important in terms of how farmers perceive their economic circumstances as the introduction of the SPS.

The management plans of farmers are also associated with how they feel about their economic conditions. For example, farmers that feel positive about their present economic circumstances are more likely to plan to increase their level of employed labour. This likelihood intensifies when their future economic outlooks are considered, as 45.5% of farmers that intend to increase their level of employed labour also believe their future economic conditions will be “good”. On the other hand, farmers that intend to reduce their level of both family (48.1%) and employed labour (51.2%) over the next five years believe their economic outlook to be “poor”. In addition, farmers with this outlook also plan a reduction in the use of contractors. Clearly, there is a complex pattern of cause and effect, although it is reasonable to suggest that when farmers perceive their economic outlook to be “poor” one option is to reduce labour costs.

A farmer's perception of their present economic conditions and outlook are significantly associated with dependency on agricultural income. For instance, 60.9% of farmers who feel that their current economic circumstances are "poor" are also highly dependent on agricultural income, whereas 49.1% of farmers who perceive their outlook to be "good" have relatively low dependency on agricultural income. This association is strengthened when farmers consider their future economic outlook.

#### **4.6 Discussion**

Despite the perceived difficulties in the farming industry, the turnover of businesses is relatively small as farms continually evolve through a process of retirement and succession, with only 7.4% expected to exit the industry completely within the next five years, mostly through complete retirement. For most farmers in Devon, the immediate future is largely 'business as usual' as they aim to continue farming. Within this model however, there are a divergent range of strategic trajectories from those that intend to diversify their businesses further, to those that prefer to expand their agricultural enterprises. The trends for dairy farming in the county are particularly interesting in this context. Although there has been much media coverage about the difficulties in dairy farming in recent years and indeed, a large proportion of dairy farmers describe their present and future economic outlook as "poor", a sizable minority are more optimistic about their circumstances and intend to increase both the area they farm and the number of livestock they manage. Whilst most farmers are content to continue in farming, in some cases, the introduction of the SPS has prompted plans to retire. However, for many farmers, either because their farms are too small or because the types of enterprises they have historically managed have not been dependent on previous subsidies, the change in policy will have little short term affect on their businesses. Others though, particularly those in the beef sector, are likely to be greatly influenced as the SPS replaced former headage payments. As such, the decoupling of support from production has allowed some livestock farmers to reduce the number of animals they keep. Furthermore, those that have taken this option may use the payment to semi-retire by letting their land and keeping the SPS as a retirement income.

## 5: Summary and recommendations

Devon's farmers, like those elsewhere in the country, have experienced a difficult period of adjustment in recent years. This period of transition is not over yet and there will be more change to come. No doubt some will decide that it is time to end their career on the land (although others may well replace them) but, as this report has indicated, most changes currently in place and those planned are part of well established trends. Devon's agriculture has yet to reach a 'tipping point', a point of no return in terms of agricultural decline. Indeed, our evidence continues to suggest that, for the near future, the trend is largely 'business as usual'. That is not the same as saying that there has been and will be no change. There will be and this report has highlighted some interesting patterns of change that are often obscured by headline grabbing figures and a general tenor of 'doom and gloom'.

A good example of this is the figures relating to agricultural labour. It is true that the number employed in farming continue to decline, but the fall in absolute numbers employed masks some subtle but interesting patterns of change. For instance, while the number of full time farmers has declined, the number of part time farmers has increased. While *some* of this increase will be associated with new entrants to the sector, much will be accounted for by those winding down their farming activities as they enter what may be a prolonged period of semi-retirement, as well as those scaling back farming activity in order to increase economic activity elsewhere in the economy as part of a strategy to remain on the farm. Others are putting managers in charge of their holdings and, while numbers are small, managerial labour is the only employed labour category to have expanded in recent years. In this context, the resourcefulness and tenaciousness of farming families should not be underestimated.

One of the other areas to have received considerable attention in recent years is the dairy sector. Popular commentary on the plight of dairy farmers could give the impression that the sector is in freefall. However, behind the headline figures of fewer dairy farmers (most of whom leave dairying to pursue other farming enterprises and **do not** leave

farming completely), this report has shown that the decline has been slower in Devon and that, as a consequence, Devon's dairy sector is now relatively more important, accounting for over 28% of the region's dairy herd. Moreover, while the number of dairy cattle has fallen, along with a reduction in the number of holdings with dairy cattle, average herd size has increased by close to 16% since 2003. In other words, the dairy sector is becoming concentrated on fewer, larger holdings, a trend that has been apparent for a considerable period of time. Dairy farmers also emerge as the most expansionary in terms of their future plans. Our evidence suggests that a relatively small proportion of younger, dynamic dairy farmers will account for much of the expansionary change in Devon's agriculture in the next few years.

In the recent past, much expansion has occurred through a variety of tenure arrangements other than the acquisition of owner occupied land and it seems that this pattern will continue into the future. Despite the introduction of FBTs in 1996, relatively informal arrangements are still very popular in Devon. Grass keep arrangements remain very common, as are 'gentleman's agreements'. However, the individual areas of land under such agreements are often small compared to those let under FBTs for instance. Thus, the ownership of Devon's core agricultural land may not change much but it may move between different people in terms of its day to day management. The wider implications of a growing separation between ownership and management of agricultural land are as yet unclear.

So far we have argued that Devon's agriculture has not reached a 'tipping point' and that, moreover, much of the evidence suggests a 'business as usual' approach. The SPS introduced in 2005 was intended, amongst other things, to promote "dynamic adjustment" in the sector. In other words, a process of restructuring and exit that would leave a leaner, more market-facing farming sector. This adjustment has yet to occur. The SPS currently provides almost 100% of profit on Devon's cereal farms and, with the exception of dairy farms, also offsets some of the losses. Other things being equal, this high level of subsidy dependence must at some point influence the future shape of agriculture in the county, particularly post 2007 when the historic element of the payment diminishes and the area based element becomes more prominent. At this stage income

from agriculture, agri-environmental schemes and diversification will need to grow in order to reduce reliance on the SPS as the source of farm profit. Although aggregate farm income in Devon rose by some 20% in 2005/06 this was largely as a result of improvements in the general cropping, horticulture and Pigs and Poultry sectors. Other sectors experienced modest increases in income, while the dairy sector saw income fall, largely as a result of increasing costs.

Despite the apparently powerful driver of policy reform in the shape of the SPS, survey evidence suggests that relatively few farmers plan to give up farming and that most of those that plan to do so expect to hand the farm on to a family successor. Less than 2% of those who took part in our survey of Devon farmers indicated that they planned to leave farming to do something else. The vast majority plan to stay, either making adjustments to their farm business or other economic interests to allow them to do so, or simply making no changes other than in the longer term.

More detailed analysis of the pattern of response to the introduction of the SPS reveals a complex interaction between farm type, size and farmer age. For instance, farmer age emerged as a more important factor than the SPS in the decision to leave farming. In addition, the SPS has less influence on the decisions of small farmers as the payment they receive is lower and they often have alternative income sources (or are already occupying 'retirement holdings'). On the other hand, there is evidence that those already highly dependent on farm income are 'locked' into a business trajectory that focuses on the farm as a business and actively seeking further opportunities to expand the core farming business. The future is likely to see an increasing polarisation between large farms highly dependent on agriculture as an income source and groups of smaller farms where agricultural income is supplemented by a variety of sources such as pensions, rental income and income from diversification and off-farm working.

Although generally the SPS does not appear to have triggered radical change, a significant minority of those planning future diversification and off-farm working reported that they had been "largely influenced" by the introduction of the SPS. In the absence of the counterfactual, 'policy-off' situation (where the SPS does not exist) we



cannot test the strength of this effect, but perhaps more significant is the fact that many farmers are planning diversification and/or off farm working without, it seems, much idea of what to do. Others will inevitably require guidance and support in developing business plans, applying for planning consent, etc.

The impact of CAP reform seems to have been to reinforce existing well established trends. However, given the very marked degree of subsidy dependence outlined in this report, the 'business as usual' approach cannot continue in the longer term. The early years of the next decade are likely to see the emergence of lagged effects as farmers come to terms with the new policy regime and prevailing market conditions. It is also inevitable that more change is yet to come to the policy regime and it is vital that DCC continues to monitor change, for instance in the beef sector, which appears particularly vulnerable at present. It will also be important to ensure that the appropriate advisory and information resources are in place to assist those wishing to diversify and develop alternative but parallel careers alongside farming. It is inevitable that some who feel 'forced' into diversifying in order to stay on the farm would, in reality, be better off leaving farming altogether. For this group, it will be important to provide counselling on their decision options and the opportunity to make a dignified exit.

In the longer term, Devon's agriculture may well be characterised by a large number of part time farmers who often employ a professional manager or who use contractors to undertake much of the day to day work of farming. New opportunities will develop such as bio-fuels and there may be a need to consider the balance of land use for food production and energy use. Although there may be only limited opportunity for farmers in the county to grow cereals for conversion into bio-fuels, there is greater scope for the development of biomass crops. Much of lowland Devon has the potential to attain high yields of miscanthus,<sup>29</sup> while for short rotation coppice (SRC) there is the potential of attaining medium yields of the crop (Defra 2007a). Biomass crops are carbon neutral so,

---

<sup>29</sup> Miscanthus is a tall perennial grass (grows up to 3.5m) that can be harvested using a sugar cane harvester. The crop stem is used as a fuel for the production of heat and electricity, but can also be converted into ethanol.

in theory, their replacement of fossil fuels to create heat and energy may reduce society's carbon footprint or, if developed at a farm-scale, the carbon footprint of the farm.<sup>30</sup>

Opponents to an expansion of energy crops often point to the potential competition for land between food and feed production and fuel and energy production, simply arguing that the growing of energy crops displaces food crops thus endangering food security and self sufficiency. However, this discussion often fails to reflect the full complexity of factors that determines food security at any given time and place (United Nations 2007). In Devon, the development of energy crops is likely to be dependent on many factors. For example, the willingness of farmers to grow new crops that require land to be tied into a production system over a relatively long period;<sup>31</sup> the financial capital investment to develop bioenergy chains that give farmers an avenue to market their produce; government support; and compliance with various environmental designations. DCC (and partner organisations) should consider the feasibility of biomass production and its impacts on the environment and economy of the county.

Assuming that the current interest in the provenance of food continues, there will also be further opportunities for agricultural entrepreneurs to develop and supply local food outlets as well as other means of direct sales initiatives that help farmers gain more control over the food supply chain. It will be important for DCC to remain well briefed on such developments and on the potential of the agricultural sector of the county to develop innovative new ways of staying on the land while also delivering the kind of food and environment that is demanded by consumers and supported by the new policy environment.

---

<sup>30</sup> Biomass are carbon neutral in terms of their biological cycle. However, once energy used in its production, harvesting, transportation and processing is considered it is not 100% neutral.

<sup>31</sup> Miscanthus can be harvested annually for up to 15 years while SRC is harvested on a 2-5 year period.

## References

Defra (2004) *Farming: Single Payment Scheme / CAP Reform*.

<http://www.defra.gov.uk/farm/capreform/index.htm>

Defra (2005) *Environmental stewardship*.

<http://www.defra.gov.uk/erdp/schemes/es/default.htm#1>

Defra (2006) *Guide to the Regulatory Reform (Agricultural Tenancies) (England and Wales) Order 2006*. <http://www.defra.gov.uk/farm/working/tenancies/pdf/tenancy-rroguide.pdf>

Defra (2007a) *Opportunities and optimum sitings for energy crops within the South West Region*. <http://www.defra.gov.uk/farm/crops/industrial/energy/opportunities/sw.htm>

Defra (2007b) *About the June agricultural survey*.

[http://www.defra.gov.uk/esg/work\\_hm/publications/cs/farmstats\\_web/Census/introduction.htm](http://www.defra.gov.uk/esg/work_hm/publications/cs/farmstats_web/Census/introduction.htm)

Lobley, M., A. Butler, D. Barr, M. Turner, M. Fogerty, M. Winter (2003) *The State of Agriculture in Devon: A report for Devon County Council*, Centre for Rural Research, University of Exeter

Lobley, M. and A. Butler (2004) *The impact of the CAP reform on Devon's Agriculture*, Final Report to Devon County Council, Centre for Rural Research, University of Exeter.

Robbins, K., A. Butler, M. Turner and M. Lobley (2006) *Agricultural change and farm incomes in Devon: An update*, Centre for Rural Research, University of Exeter.

United Nations (2007) *Sustainable bioenergy: A framework for decision makers*.

<http://esa.un.org/un-energy/pdf/susdev.Biofuels.FAO.pdf>

Winter, M., C. Richardson, C. Short and C. Watkins (1990) *Agricultural Land Tenure in England and Wales*. Royal Institute of Chartered Surveyors, London.



Centre for Rural Policy Research  
Department of Politics  
Amory Building  
Rennes Drive  
Exeter EX4 4RJ

Telephone: +44(0)1392 263836

[www.exeter.ac.uk/crpr](http://www.exeter.ac.uk/crpr)