

## **How family farms in the Shropshire Hills AONB <sup>1</sup> are adapting to agricultural change**

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**Abstract.** *Family farms in the Shropshire Hills are important as food producers, but are also vital in maintaining the special landscapes of this area, as well as contributing to the rural economy and to local community development. However, managing an upland family farm as an economically sustainable business and livelihood in today's agricultural climate is challenging. Previous data collected for this area showed that: average incomes are low, succession is problematic for all as the average age of the farmers is almost 60, many farmers work very long hours without help in terms of time and labour and there is an overall sense of isolation from the local community by many.*

*The paper presents a cross section of family farm case studies in the Shropshire Hills, examining how these farms have changed, or are planning to change, their mode of action in order to address the challenge of running an economically sustainable family farm. The paper looks at six farms, examining their uptake of agri-environmental schemes and any changes in farm management that such schemes may have prompted, examples of diversification such as eco-tourism, links with local markets and consumers, and farm long-term financial viability.*

*The main conclusion from this study is that farmers adopt very different strategies and enterprises which are intended to make their livelihoods more sustainable, so there is clearly not one model that is successful in all circumstances. All farming families continue to operate in these very challenging circumstances for modest financial returns with a very positive outlook.*

### **1. Background and Local context**

Upland farming produces some of the lowest incomes of any farms in the UK and historically this has led to a support mechanism that encouraged restructuring by reducing labour or intensifying production. As a result of this, in recent times, the uplands were often overgrazed and biodiversity was degraded (Mansfield, 2011).

The Shropshire Hills Area of Outstanding Natural Beauty (SHAONB) is situated in the county of Shropshire in the West Midlands region of England and is a legal designation with the principal purpose 'to conserve and enhance natural beauty'.

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<sup>1</sup> Shropshire Hills Area of Outstanding Natural Beauty. One of 46 such designated areas in the UK

The Shropshire Hills are valued for their diversity of landscape character that spans the transition between the lowland plains of England and the uplands of Wales. The area has a great variety of geological features with representative materials from most time periods and it is recognised as having a concentration of biodiversity from the varied landscape and relatively low intensity of land management and development (AONB, 2009).

Agriculture plays a vital role in the Shropshire Hills AONB, where the farmed landscape is one of its key 'special qualities'; those aspects for which it is considered important and on which the priorities for management are based. 61% of the land within the AONB is classified as Less Favoured Area (LFA) and farming is predominantly grazing livestock with some small scale arable (mostly feed crops) and smaller amounts of dairy, pigs and poultry. The 2001 census recorded employment in agriculture at 27% in the Shropshire Hills, demonstrating the importance of agriculture to the area (AONB, 2009).

*Figure 1. Map of AONB area indicating LFA s and Case Study Farms*

Between 1990 and 2009 traditional family farms decreased by around 25%. In the same period, smallholdings and larger holdings increased considerably, as family farms were sold off and separated or incorporated into larger holdings. There has also been a marked decline in livestock numbers (Landles 2009).

## **2.Methodology**

Case studies were carried out with six family farms. The farms were approached initially as all had links with the Shropshire Hills Farming Project<sup>2</sup> and were chosen as the farmers<sup>3</sup> were willing to contribute their voices. The case studies were based on semi-structured interviews with a discussion around the main topics. Informal conversations were also held with the broader farming community within the AONB and with a range of key stakeholders such as agency and organisation staff.

### **2.1 Farm background**

All six of the farms studied are situated within the boundary of the AONB; four are partly or wholly within a Less Favoured Area (LFA). The farms range in size from 113 hectares to 405 hectares. Two of the farms also rent additional land and one farm grazes an additional 5,868 hectares of common land. All the farms are family owned and most have been in the same family for several generations. Four farms have maintained the same area since they were first established and two have bought additional land and expanded. Three farms run a sheep and beef enterprise, one runs an indoor beef bull enterprise and the remaining two are lowland mixed arable and livestock. Working patterns are variable, ranging

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<sup>2</sup> Aims to support awareness and understanding of Upland farmers in the Shropshire Hills AONB

<sup>3</sup> In this text, the term 'farmer' is used as shorthand for the family farm household.

from one farm supporting one full-time farmer to two farms supporting three full-time farmers alongside part-time help. Only one farm had no household member working off-farm, the others had spouses and extended family members who lived on-farm but worked off-farm in a full or part time capacity.

### **3. Agri-environmental scheme uptake and implications for management**

Agricultural support mechanisms in the Common Agricultural Policy of the EU have recently shifted emphasis from food production to rural development and environmental management. This is seen by some communities as a betrayal of the role of farmers as food providers but is also recognition that it is agriculture that maintains the high nature value of the uplands. (Mansfield, 2011). A recent publication of the natural history of the region in which the Shropshire Hills is situated suggests that farming in this region should be evaluated as a process, rather than solely for its products, stressing that maintaining the landscape and wildlife value of the land is a fundamental aspect of agriculture even if it requires a system of financial support to the farmer (Allott, 2011). It is inevitable that with an ongoing trend in falling incomes, farms in the AONB will increasingly depend on some form of payment for environmental management (Landles 2009).

Current levels of agri-environment scheme uptake in the Shropshire Hills are very high, figures for 2008 show that over 70% of registered farmland was managed under some form of scheme, compared to a national level of 13%. This is partly due to the presence in the area of two significant Environmentally Sensitive Areas (ESAs)<sup>4</sup>; farmers within these areas being able to enter specific ESA agreements. Participation in other schemes includes Entry level Stewardship (ELS)<sup>5</sup>, Higher Level Stewardship (HLS)<sup>6</sup> and Upper Entry Level Stewardship (UELS)<sup>7</sup>. The current Shropshire Hills AONB Management Plan contains the objective 'to optimise the uptake, targeting and effectiveness of agri-environment and woodland grant schemes' and views agri-environment schemes as being the fundamental method of delivering landscape-scale habitat restoration and creation throughout the area (AONB, 2009). However, there is presently concern that upcoming CAP reform could result in penalisation for farmers in the Shropshire Hills, due to the proposed 'greening' element of CAP reform overlapping with existing good management of features both through

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<sup>4</sup> The ESA scheme was introduced in 1987 to offer incentives to encourage farmers to adopt agricultural practices which would safeguard and enhance parts of the country of particularly high landscape, wildlife or historic value (Natural England, 2012).

<sup>5</sup> ELS is open to all farmers and landowners and requires land management that supports the good stewardship of the countryside (Natural England, 2012).

<sup>6</sup> HLS involves more complex types of management and agreements are tailored to local circumstances (Natural England, 2012).

<sup>7</sup> UELS supports hill farmers with land in Severely Disadvantaged Areas with payments for environmental management (Natural England, 2012).

traditional farm practice and agri-environmental schemes (Defra, 2011). The concern is that such greening proposals are really aimed at member states which may not have had such good uptake of schemes, and therefore discriminates against those in the UK who already have done so. The Shropshire Hills AONB partnership stresses that continued delivery of agri-environment schemes, especially Higher Level Stewardship (HLS), is crucial to delivery of AONB objectives and every step should be taken to ensure such schemes continue (AONB, 2012).

All 6 of the farms studied were participating in an agri-environment scheme; one in Entry Level Stewardship (ELS), three in Higher Level Stewardship (HLS), one with land in both Entry Level Stewardship (ELS) and Higher Level Stewardship (HLS), and one in an Environmentally Sensitive Area (ESA) scheme for the Clun area. All the farms were positive about both an economic and environmental value of participating in a scheme.

*Strefford Hall Farm* has been in HLS for 5 years, the scheme part funding a considerable amount of fencing and hedging – management that probably would not have been carried out without HLS. This farm has noticed a small percentage increase of land taken out of production under HLS, but compared this amount favourably to the policy of set-aside of the 1980's. The most obvious change in farm management due to the scheme has been no application of fertiliser can be made within a six-metre zone of any watercourse.

*Whitehouse Farm* is in ELS, with an additional parcel of land in HLS. This farm also has the grazing rights for a 14,500-acre area of common land, which is wholly in HLS. The farmer here has noticed a considerable difference through HLS on the common land; reduced stocking rates have resulted in benefits for both his stock (ewes and lambs) and the heathland habitat of the common land. There has been no need for winter-feeding of the ewes, and the lambs have been bigger and in better condition.

*High Farm* has recently come to the end of an ESA agreement, has entered ELS, and is waiting to hear if they are eligible for HLS. Their income from ELS is only a third of the income received under ESA and the farmer here is concerned that he would not be able to maintain the same level of environmental management, in particular hedge management under ELS as under ESA.

*Chapel Lawn Farm* is currently in an ESA agreement that is due to end in 2013, the farmer is then hoping to enter Upper Entry Level Stewardship (UELS). This farm has also been able to carry out a considerable amount of hedge maintenance and restoration under ESA.

*Brynmawr Farm* has perhaps witnessed the biggest changes in management under HLS, including hedges restoration, cutting hay meadows late and creating wetland scrapes for birds. Both *Brynmawr Farm* and *Lower Farm* are in HLS and have an educational access element within their HLS agreement, entitling the farmer to receive a payment for each educational visit. Perhaps more importantly,

HLS has also provided both of these farms with additional capital payments for improving or creating educational facilities, such as shelters, indoor classroom areas and toilets. However, there is some concern that when their existing agreements expire, the same level of educational funding may not be available under a new HLS agreement.

Without exception, the farmers cited their ability to maintain and enhance existing hedges through their agreements and all admitted that they would not have had the time or the financial ability to carry out hedging work to such a high level if it were not for participating in a scheme. When looking at the percentages contribution to farm income, there seems to be no doubt that agri-environment schemes also provide welcome extra income for the farm. However, one case study farmers said:

“Whether the farm stays viable does depend what happens with the schemes in the future, as well as commodity prices of course, but we would look after the countryside anyway, we have to, otherwise it wouldn’t be there for the future.”

In addition, conversations with the wider farming community who are currently in an ESA agreement demonstrate that some upland farms do rely to some extent on the additional income from participating in a scheme, and there is considerable concern over what will happen to the farm when their current agreement expires. One farmer said:

“We don’t know what’s going to happen after ESA. It looks like there isn’t enough money for us all to get into HLS and if we don’t get in the payments in ELS are a lot less and that will make a big difference to the farm.”

#### **4. Diversification<sup>8</sup>**

Diversification can improve the economic viability of the farm business whilst reducing dependency on production, especially when markets and commodity prices remain volatile. However, it is worth considering that diversified business can in itself be less stable than production. For example, in the 2001 foot and mouth outbreak in the UK, farmers who had diversified suffered more significant financial losses as they received no compensation for the loss of revenue from non-agricultural activity (Mansfield, 2011). However, managing complex systems and building farm resilience implies spreading risks and creating buffers and not putting ‘all the eggs in one basket’. Indeed, farms need to be managed so as to live with and shape change, and need to be managed for diversity and flexibility. (Darnhofer et al., 2008). In areas like Shropshire where 85% of the land area is

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<sup>8</sup> Diversification is defined here as “the entrepreneurial use of farm resources for a non-agricultural purpose for commercial gain.”(Defra, 2004).

dedicated to agriculture, diversification can play an important role and can also bring other benefits to the local economy (Harper Adams, 2010).

For this area, figures show that 40% of farms in the West Midlands area have diversified enterprises, lower than the national average of 51% (Harper Adams, 2010). The AONB management plan includes an objective 'to improve integration of environmental practices, wildlife and farm conservation with business development' with diversification given as an example, especially in the Less Favoured Areas (AONB, 2009).

Levels and types of diversification across the case studies varied somewhat but the emphasis is on tourism, with 3 out of the 6 (Strefford Hall, Chapel Lawn and Brynmawr) offering holiday lets in converted buildings. Chapel Lawn Farm has a high specification barn conversion with high occupancy levels. The decision to convert this building only occurred because of the sale of another farm property, thereby freeing up funds for the capital costs involved. In addition, there is a small (five pitch) caravan site on the farm. The farmer admitted that he is only able to run both enterprises alongside the running of the farm itself because they require little farmer input, the cottage booking and management being carried out by an employee and the caravan site requires minimal management.

The tourism enterprises at Strefford Hall Farm are entirely run by the farmer's spouse and began 25 years ago when B&B was developed in the main farmhouse. This was necessary in order to raise the capital needed to buy out a family member, but since the original investment it has always maintained a relatively stable income that pays for the upkeep and maintenance of the farmhouse itself. 12 years ago the enterprise expanded to include a self-catering let in a converted stables building. Eco-tourism in particular may be an option for marketing at a premium and to a specific target market.

Brynmawr farm converted an old smallholder's cottage on the farm into an eco-tourism self-catering cottage. This cottage is marketed specifically as an environmentally friendly holiday let, with local sustainable products used in the conversion, its own electricity generated through a wind turbine and hot water through solar panels and bicycles and a vegetable garden for clients' use.

A second type of diversification is providing health, social and educational services. Farmers are increasingly diversifying into sectors such as providing social services, as demands from society towards agriculture grow (Darnhofer et al., 2012). As already discussed, both Brynmawr and Lower Farms have an educational element through their HLS agreements. For Brynmawr this presently involves hosting educational visits for local schools and community groups. However, the farmer here plans to develop this area into 'Care Farming', providing care services on-farm for a range of vulnerable groups of people. He has recently received a capital grant under HLS for developing an educational building; an eco-friendly build that uses straw bale construction and will contain

composting toilets. At present, the income from education is minimal, but it is hoped that this will increase in the future. The farmer says:

“I see the education as some extra income but it’s all about showing other people how we farm, and the eco-cottage, the education work and selling locally are all part of the whole thing.” This is a good example of the intuitive, systemic thinking that all the case study farmers exhibited.

Lower Farm is an example of a farm that has been involved in Care Farming since 2004. The farm initially started by contacting a local special school and encouraging them to visit on a weekly basis to use the woodland areas as a forest school type of experience. Currently, the same school visits on average 11 times a week, along with visits from other schools and groups, all of which are led by the school or group and not the farmer. The farm can claim for a maximum of 50 educational visits under its HLS agreement, therefore the majority of visits do not offer any financial incentive to the farm, although the farm has just begun to ask for voluntary contributions for visits. The farmer views the enterprise as a fairly slow growing long term project, believing that such a project must be sustainable at base level (the farm does not invest a vast amount of time or money into the visits), and then any extra funding or income can be re-invested into the project. To an extent it is also an altruistic attitude, the farmer here stated:

“There is some physical benefit to the farm<sup>9</sup> but it’s also a more intrinsic benefit that’s not money, it’s about feeding into the spiral of the farm and the community.”

Other diversification included letting out a farm cottage on a permanent let (Low Farm) and focusing on rare breed sheep and cattle to sell at a premium (Brynmawr). Another example of innovative management is that of High Farm; this is an upland farm which runs a traditional sheep and cattle enterprise alongside an indoor barley bull system. Five years ago the farmers began to invest in a range of renewable energy measures to help cut running costs in the long term. This included a hydraulic ram that pumps water from a spring at the bottom of a hill to a reservoir built near the farm buildings. The contributions from the hydraulic ram, along with rainwater harvested from the farm buildings’ roofs, needs to be topped up only occasionally with mains water in order to supply all the water for farm use. This has reduced the farm water bill by 50%. Since then, solar panels and photo voltaics have been installed, providing all the hot water for the main farmhouse, the barley bull enterprise and also feeds electricity into the National Grid for which the farm is paid. The final measure was to install a wind turbine on a separate meter specifically to dry grain produced by the farm to feed the calves. The farm has seen a significant reduction in running costs and all the capital outlay has been paid back, except for the turbine.

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<sup>9</sup> one group of ex-offenders are coppicing areas of the woodland

Interestingly, all the farms engaging in diversification viewed it as a valuable extra income stream but not as the main farm income, or even as important enough to be keeping the farm afloat financially. Our case studies and conversations with other farmers have shown that most farmers still see their fundamental role as production from the land. One farmer said:

“I don’t want to do anything like that on my land. I’m a farmer, not a tourist operator.”

*Figure 2 Summary of the relative returns from the range of enterprises that the case study farms exhibit .*

## **5. Links with local markets and consumers**

Localised agro-food systems can create opportunity to add value to local resources and facilitate the sustainable development of rural areas. There is a strong link between sustainability and local production so direct selling emerges as a diversification strategy emphasizing the value of local production (Aguglia and Salvioni 2010).

There has been a recent upsurge in demand for local food across the UK. There are currently many local food initiatives such as Community Supported Agriculture, Food for Life and Growing Communities (Soil Association, 2012). Direct selling from the farmer to the customer is a way of re localising and socialising agri-food systems that can have a multitude of benefits to the farmers, consumers and the rural community as a whole, both environmentally and socially as well as economically. Within the AONB’s Management Plan, a priority is to keep the area’s countryside thriving by finding a balance between economic, social and environmental factors where one is not sacrificed at the expense of another. It is also the essence of farming systems thinking. Objectives that relate to this priority are to increase the local supply of food, especially meat from grazing livestock, and to stimulate local demand by raising awareness among consumers, especially with regard to their connection with the landscape. (AONB, 2009). Current local projects include the National Lottery and LEADER funded project; Grow, Cook, Share; the Soil Association’s School Farmers’ Markets and the Farming Project itself. There is also support for a network of Shropshire Farmers markets.

Out of our case studies, only two out of the six farms sold direct to the customer. Strefford Hall Farm sell direct to the customer through 3 weekly farmer’s markets and an on-site farm shop. The shop was set up originally with funding from the European 5b scheme. It consists of a butchery, kitchen and shop area, selling their own beef, lamb, pork, eggs and homemade cakes. The farmers here would like to expand to include a café and toilets but concern was expressed by the Highways Authority that further expansion, and therefore traffic, was not appropriate for the existing access off a busy main road. Initially both shop and markets contributed to the farm income reasonably for the first few years, with 30% annual growth in the first two years. The enterprise has since plateaued and

in the last two years has made a significant loss, perhaps partly due to local competition and recession. However, the farmer feels they have a good relationship with their customers, with many regulars at both the shop and the markets and are hopeful that things will improve. They have also recently expanded into making ready meals as a method of using cuts of meat that haven't been selling well, and otherwise may have been wastage.

Brynmawr Farm, a registered organic farm, also sells direct to customers, both through one regular farmers market and an organic community co-operative, formed with three other local farms. The farmer saw the co-operative as a method of small organic enterprises sharing skills and costs. The co-operative sells through its own website and various local farmers markets, and Brynmawr farm also markets its meat through its own website.

Those farms that didn't sell direct either stressed that they wanted to farm and not to 'sell', or they viewed direct selling as taking up far too much time in an already busy work life. One farmer stated:

"Most of us farmers just want to farm. The trouble nowadays is we're expected to be good at everything just to keep the farm going but we haven't got time to do it all."

Lower Farm had also tried direct selling some years ago but had found it extremely time consuming and not worthwhile for the return. Interestingly, both farms that did engage in direct selling also stated how much time was involved, especially in preparing for and attending farmers markets, and it is worth noting that Strefford Hall Farm has one full-time family member working entirely on this side of the farm business.

There appear to be several reasons why local farmers are not encouraged to sell direct, but perhaps there is also another reason. The Soil Association have been running a school farmers' markets initiative in the area and have not always attracted as many local farmers, as was originally hoped, to sell at the markets. The Project's Co-ordinator stated:

"Many of the farms currently selling direct have secured their local markets, but there is still a demand from parents. This suggests that perhaps more support needs to be made available to new entrants into direct selling to learn about processing and marketing, and to encourage novel opportunities for farmers to sell produce direct to the public."

## **6. Financial viability**

A survey carried out in 2007 in the south west of the AONB recorded that 87% of farmers were concerned about their economic viability and 60% were concerned about the survival of the family farm (Greenall and Whithouse, 2007). Anecdotal evidence also seems to suggest that farmers in the area are concerned about economic issues. One farmer said:

“My family built the farm up and I’d like to think my boy will farm it but the way things are now it isn’t much of a job is it?”

One agency worker believes that for traditional family farms to stay financially viable they either have to diversify into other enterprises or expand considerably. However, diversification options in very remote rural areas are limited and tend to be small scale. In his experience, many farmers who were farming full-time are now working part-time off-farm to support the business. However, perhaps the concept of pluriactivity can also be beneficial to the local area. A study in Greece emphasized the importance of pluriactivity to allow the family farm to continue and to aid the preservation of the local community and economy (Gidarakou et al., 2004).

The rise in beef and lamb prices in the last two years seems positive but if hidden costs such as unpaid family labour, rental values of farms and interest on working capital are taken into account, a third of LFA farms in Shropshire would have negative net margins (EBLEX, 2009). The importance of the area’s land based economy makes it particularly sensitive to current changes and challenges in farming. Farm businesses can be adaptable to an extent but farms now have to compete in a fluctuating global market with rising input costs (Harper Adams, 2010).

Conversations with farmers have shown that many believe that long-term viability relies on investing in the farm when times are good in order to try and improve efficiency and reduce running costs for when times are bad. A good example of this is High Farm investing over the last five years in renewable energy sources and now seeing reduced costs. This also demonstrates strategic thinking in planning for future uncertainty and change. However, current uncertainty over CAP reform is not helpful to farmers making long-term plans. A representative from the National Farmer’s Union suggested recently that farmers should not make any changes in their business until 2014 without taking sound advice.

It does seem crucial to long term viability that farms are viewed in systemic terms. Perhaps even more crucial with the family farm is to develop intergenerational systems thinking, investing now for future generations.

Landles (2009) believes that it is inevitable that many Shropshire Hills farms will increasingly depend on environmental payments, but agri-environment schemes will only succeed if they are allied to profitable agricultural production.

## **7. Co-operation**

Anecdotal evidence suggests that farmers are not adverse to working co-operatively, but there is little current advice or support for this. Landles (2009) stresses that farmers should not wait until government produces a clear strategy, they can take an active role now, including working together to lower costs and improve efficiency. This may be through methods such as sharing skills, labour, marketing or machinery. Several of our case study farms (Whitehouse and High)

showed examples of this in terms of shared labour and machinery, although not in any structured or formal arrangement. Brynmawr is the only example of a farm engaging in a more formal arrangement through a local marketing co-operative.

There may also be scope for farms to participate collectively in agri-environment schemes. In Wales there has been more formal support for this and a study into the evaluation of key factors that lead to successful agri-environmental co-operative schemes identified a diverse range of benefits for participatory farms. These included accessing funding that would not be available to an individual farm, an increase in business confidence, sharing of knowledge and skills and social capital (Mills et al.,2008). Until now in England there has been no option for groups of farmers being able to apply jointly for agri-environment schemes, but this is currently a proposal under CAP reform after 2013 (Defra, 2011). This could have positive impacts for farmers in the AONB and potential benefits for landscape-scale conservation and restoration of habitat networks (AONB, 2012)

## **8. The Future**

The Shropshire land based assessment suggests that there may be potential opportunities for further diversification in local food supply, renewable energy and non-agricultural crops (Harper Adams, 2010). However, as we have already seen from the case studies, selling direct locally will not necessarily increase farm profit and will certainly involve a considerable amount of additional labour.

Structural change in agriculture will continue to have a significant impact on the special qualities of the AONB, with the future of grazing livestock being especially important (AONB,2009)

In order to survive, farmers in this area need to have a stable economic base and to receive a fair market value for their products. Premium marketing could aid this, as customers grow more demanding in terms of not just what they eat but where and how their food is grown. In addition, financial value could to be attributed to ecosystem services produced by upland agriculture, such as landscape, carbon sequestration and biodiversity. There is currently much debate over ecosystem services and yet there seems to be no agreed method of measuring or evaluating such services. The Shropshire Hills, like many other areas, are valued for their landscape and that very landscape has been shaped and is maintained by the upland farmers of this area. From this perspective, it would seem that if the public value such landscapes so highly, they might be prepared to pay to maintain them. Buckmaster et al. (2010) suggest that if agricultural payments were linked to the provision of ecosystem services, hill farmers could be rewarded for their contribution to managing natural resources such as water and soil.

The strong message from these case studies is that there is no “model farm” solution for greater farm systems sustainability in this area, but farmers are continuing to adopt diverse and multiple enterprise systems in order to spread risk and maximize new opportunities for alternative income streams, even though

this does not result in substantial additional gains above the returns from current CAP options.

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