



# High Nature Value Farming in the Northern Upland Chain

Nidderdale AONB Agricultural Economy

2013/14



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## **Foreword and Acknowledgements**

The High Nature Value (HNV) Farming Coalition has been set up to seek recognition for, and campaign on behalf of, HNV farming businesses, thereby supporting wildlife and landscapes. It is seeking to lobby government so that policies are introduced which help to secure the future of these special farming systems which are economically vulnerable without additional support. The HNV Coalition, as part of its remit, seeks to research, identify and monitor HNV farming systems. It is intended that this report will help inform the debate about these systems.

This report on farm economics was commissioned as part of a wider project looking at the Upper Nidderdale HNV area. It is one of four case study areas selected by the Northern Upland Chain Local Nature Partnership as part of their commitment to HNV research and support.

The authors would like to convey their thanks to those farmers in the Upper Nidderdale region who completed a detailed perception survey relating to their farm and to those who provided access to their farm accounts and provided insight into their own farming situations. There was a considerable overlap between these two groups but the sample was not identical. Thanks also to all those who contributed to the feedback and discussion at the meeting held on January 23<sup>rd</sup> 2014 to present the findings from the economic survey.

Thanks are due to the officers of the Nidderdale AONB for commissioning and financing this study. In particular, we would like to express our gratitude to Marian Wilby (Farm Conservation Advisor) for enlisting the co-operation of the farmers, undertaking the farmer perception survey and generally acting as advisor to this research project.

## **1. Summary**

### **Setting the scene**

- For the period 2000-2010 there has been a 21% decline in both cattle and sheep numbers in the English LFA regions.
- In the Upper Nidderdale region, during the same period, cattle numbers have been relatively stable but sheep numbers have fallen by 22%.
- Changes in support arrangements are a key contributory factor in explaining the reasons for this decline with the decoupling of the link between production and support.
- In this region there has been a fall from 90 to 68 holdings during the same period. Approximately one-half of the holdings are classed as part-time.
- Farm incomes fluctuate considerably from year to year. Farm incomes in LFA regions are consistently considerably below average farm incomes.
- In the latest results from the Farm Business Survey (2012/13) LFA livestock farms recorded a fall in income of 33% on the previous year and an average income figure of £19500 compared to an average for all farms of £46500.
- The SPS and agri-environmental payments are significant components of farm income – without these payments farms in LFAs would generally be making losses.
- In 2012/13, income from Diversification was £1600 on LFA farms compared to £7800 average for all farms.
- Upper Nidderdale covers over 60,000 ha which is predominantly LFA with high rainfall and grade 4 and 5 soils.

### **Perception survey**

- The farms are a mixture of owner occupied and tenanted with an average size of 263ha.
- All farms run a hill sheep flock which are predominantly Swaledales, with some Lonk and Dalesbred sheep as well.
- All farms had suckler cows but numbers had declined over the last 10 years due to restrictions following the joining of environmental schemes.
- There had been a noticeable shift towards haylage in big bales in recent years and away from the conservation of small bale hay. This had been due to a combination of a series of wet summers together with the restrictions on hay making prior to July 15<sup>th</sup>.
- Profitability was perceived to have either increased or been stable in recent years and predictions were for further increases or at least stability in future years.
- Many were already receiving maximum environmental payments with the remainder actively looking at joining schemes. The majority thought that the schemes achieved their objectives and also that they would not be able to carry on without the support of the schemes unless they had an additional off-farm source of income.
- There were mixed views on the impact of CAP reform support arrangements such as the switch from production subsidies to area based support.
- All respondents thought that their farmer role was both food production coupled with biodiversity conservation and landscape management.
- Knowledge of habitats and wildlife species on the farms was very high.
- The majority of farmers thought there were little or no opportunities for new entrants to take up hill farming.

## **Farm Business Results**

- Seven farms were included in a Farm Business Survey (FBS) evaluation of their farm accounts. Their results were compared to FBS SDA farms in the Yorkshire and Lancashire region.
- Total output for the Nidderdale sample was similar to the SDA group average. However, sheep output was lower but cattle and environmental payments were higher for the Nidderdale sample.
- Variable and fixed costs were both lower on the Nidderdale farms.
- Overall profitability was similar to the group average.
- Sheep performance is considerably lower on the Nidderdale farms with an average gross margin per ewe of £20 compared to £43 for the group average.

## **Discussion based analysis**

- Farming in the area was challenging especially on farms with north or east facing land.
- Some farms were remote and some farms had restricted vehicular access which affected delivery of feed and other items.
- There were generally good relationships between tenants and landlords although there was an instance where the landlord retained the environmental scheme income which was causing cash flow issues.
- There was potential for income from tourism but this was limited by the lack of passing trade due to the nature of the road links. Relative closeness to large centres did provide opportunities for members of the family to undertake off-farm employment.
- Maintenance of stone walls and barns were noted as very important and time consuming features of farming in the area.
- Farmers saw themselves as custodians of the land and farmed sustainably.
- Concern was expressed about future income prospects if and when the current environmental schemes cease to operate.
- There was a desire to have one *joined-up* scheme rather than the current proliferation of different schemes.

## **Farmer consultation January 2014**

- A key discussion area was whether lower feed costs for sheep in the Nidderdale sample was a contributory factor to the lower productivity of sheep identified in the economic survey. It was felt that lack of buildings for sheep together with a tendency to sell more lambs as stores was the key explanation for lower feed costs.
- Lower veterinary costs per sheep might be due to a group buying scheme.
- Tourism was important in the wider economy but opportunities to earn income from tourism by farmers were limited in Nidderdale.
- A key recommendation was that farmers wanted to be more actively involved in designing schemes and also that schemes should be specific to the area. It was recognised this was more expensive but the involvement of the local AONB Conservation Officer in the Nidderdale schemes was a big factor in their success.

## **2. Setting the Scene**

### **2.1 Introduction**

There has been no shortage of reports in recent years documenting the economic situation for agriculture and the rural economy in the hill regions of the country. *'Farming's Retreat from the Hills'* was the evocatively titled report on the situation in Scotland but the trends it identifies can also be seen south of the border (1). This report highlighted the fact that where agriculture is a major component of a rural economy, such as the hill regions, any decline or contraction of the sector results in problems both for those remaining in agriculture and for the wider local economy. If there are fewer farmers this means less business for the supply industry and so there can be a vicious downwards spiral. Changes in agriculture, especially the intensity of agriculture in terms of livestock numbers, will also have an important impact on the environment. Moreover, the situation changes over time and between areas. Indeed, in some areas now it is just as likely for concern to be expressed about the impact of under-grazing as it was about over-grazing in times past.

### **2.2 Importance of the Uplands**

Upland areas are generally taken as synonymous with the Less Favoured Areas (LFAs). This was a designation established in 1975 for socially and economically disadvantaged areas. LFAs are defined as land which is suitable for extensive livestock production but not generally suitable for other types of agricultural production, although there is some dairying in LFAs. Land in the LFA is split between Severely Disadvantaged Area (SDA) and Disadvantaged Area (DA), the latter representing approximately one-third of the total. The total area of land classified as Less Favoured Area (LFA) on farms in the UK is over 9 million hectares (ha) or 53% of utilised agricultural area (UAA). England has a much smaller area of LFA compared to Scotland or Wales and it represents a much smaller proportion of UAA. Nevertheless, 2.2 m ha of land is classified as LFA in England, of which 1.8 m ha is in agricultural production representing 17% of UAA. In terms of livestock in England, nearly one-third of beef cows and 44% of breeding sheep are in the LFA areas.

### **2.3 Decline in livestock numbers**

A recent report by Cumulus Consultants for the RSPB has highlighted the fall in livestock numbers in the UK LFA areas (2). This report documents the data on livestock numbers in the LFA for the period 1995 to 2011. With reference to England over the period 2000-2010 there was a:

- 21.1% decrease in cattle numbers in the SDA, 36.5% increase in the DA and 12% decrease in lowland areas.
- 21.2% decrease in sheep numbers in the SDA, 36.9% increase in the DA and 34% decrease in lowland areas.

The report highlights that there is considerable variation in the rate of change in livestock numbers between LFA regions in England. For instance, within Yorkshire there has been a 33% fall in stocking density in the North York Moors compared to a 21% fall in the Dales and Bowland region. Indeed the former showed the highest decline of the nine English regions reviewed whilst the latter is the second lowest.

Within regions there have also been changes in agricultural practices with stock moving off the hills and moors (less out-wintering and length of summer grazing reduced) yet grazing on in-bye land might well have increased. With specific reference to sheep production there has been an accompanying switch to cross bred breeds which are more prolific and better able to produce a finished lamb that is more suitable for the market. However, these sheep are not able to stand the harsher conditions on the hills. There has also been more indoor lambing and even in some cases indoor finishing of lambs for the market. It is the cumulative effect of all these factors together that explain why the DA regions of the LFA have seen increases in livestock numbers whilst the SDA regions have seen dramatic falls.

## **2.4 Changes in support arrangements**

A report produced by Defra in 2010 summarises the key changes to support policies as they relate to the LFA regions (3). In summary, support for livestock farmers up to 2004 was typically through headage based systems such as the Suckler Cow Premium (SCP) or Sheep Annual Premium (SAP). In 2005 the introduction of the Single Payment Scheme and Environmental Stewardship decoupled the link between production and support. Farmers in LFA regions got extra support in terms of Hill Livestock Compensatory Allowances (HLCA). These were replaced in 2001 with the Hill Farm Allowance (HFA) which was area based rather than headage based. In other words the *additional* support that hill farmers had received for livestock was decoupled some four years prior to the introduction of the SPS.

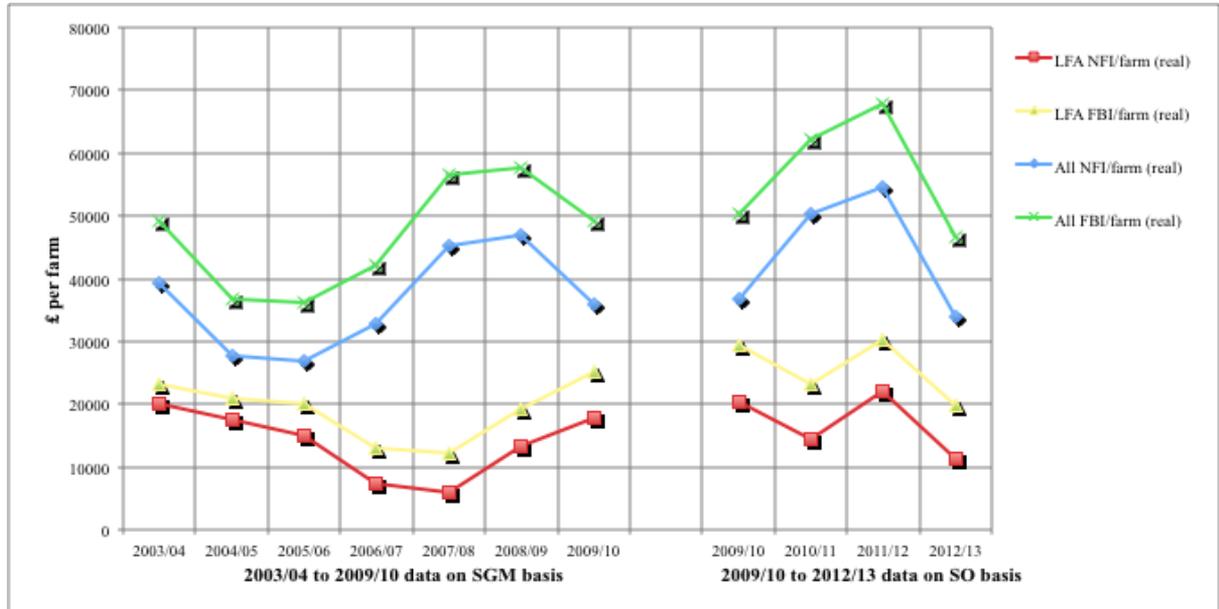
In 2010 the HFA was itself replaced by the Uplands Entry Level Scheme (UELS) and so fully integrated into the Environmental Stewardship programme. However, certain farms such as those receiving payments under Environmentally Sensitive Area (ESA) agreements or the Countryside Stewardship Scheme (CSS) were ineligible for UELS but have been able to apply for support called the Uplands Transitional payment (UTP). By July 2011, after one year of UELS, it was estimated that around 80% of farmed land in SDAs was accounted for by either UELS or UTP.

Some farmers have also been applying for support under the Higher Level Stewardship Scheme (HLS). However, HLS is restricted to priority areas and further restrictions have recently been introduced. In 2014 HLS agreements will only be available for eligible expiring 'classic' agreements plus some other high priority cases.

## **2.5 Fluctuations in farm incomes**

Data on farm incomes in England are collected under the auspices of the Farm Business Survey which is financed by Defra and undertaken by Rural Business Research. Data specific to agriculture in the LFA's in England has been published by RBR at Newcastle under a series of reports entitled farm Business Survey: Hill Farming in England (4). Figure 1 illustrates two key points:

**Figure 1 : Hill farms v all FBS farms, farm income per farm, England**



Source ; Hill farming in England and personal communication C Scott

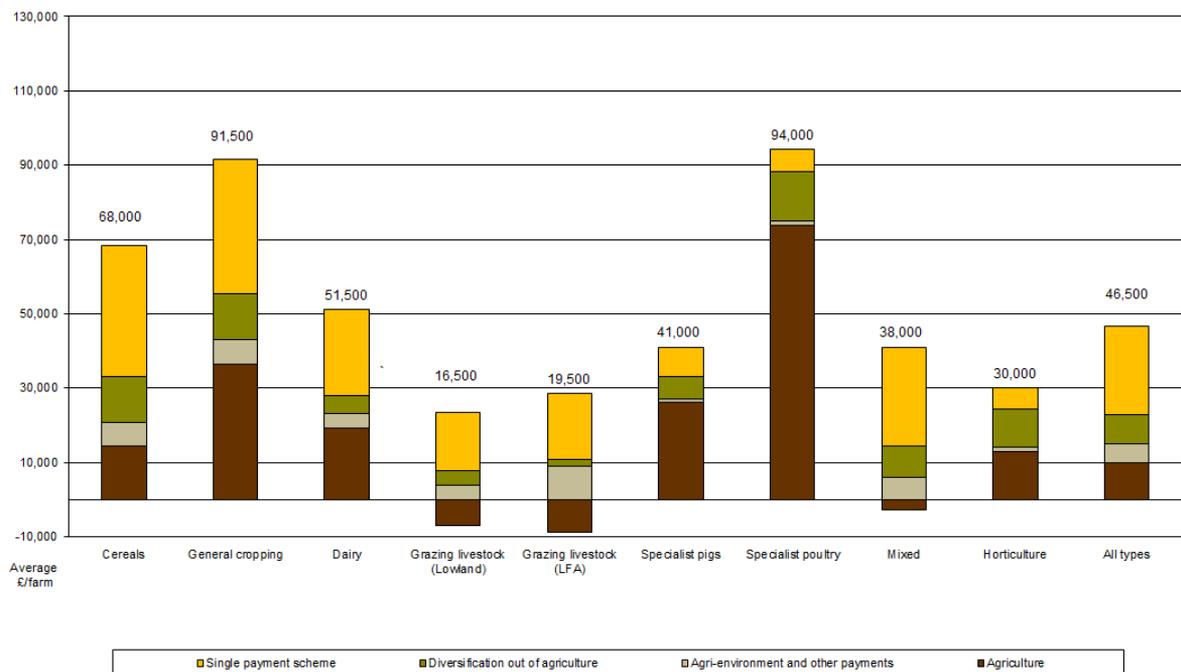
Firstly, farm incomes fluctuate from year to year. Moreover, when some agricultural sectors are enjoying a better economic return other aspects might be suffering. For instance in the period 2005/06 to 2007/08 LFA farm income levels fell whilst average farm income levels rose. In the period 2008/09 to 2009/10 the reverse happened. Secondly, farm incomes for LFA farms are consistently and considerably below the average for all farms. In real terms the level of Farm Business Income (FBI) on hill farms has never gone over £30,000 per farm since 2003/4 whereas the comparative figure for all farms has rarely fallen below £40,000 and has twice gone over £60,000 per farm per annum. The only other farm type with a record of consistently low incomes is that of lowland grazing livestock farms.

In 2012/13, farm incomes fell for nearly all farm types due to the effect of a poor growing season on crops and an increase in costs. The average fall in income across all farm types was 29%. Lowland grazing farms saw a 48% fall in income with LFA grazing farms reporting a 33% fall in income.

## 2.6 Sources of farm incomes

The SPS and agri-environmental payments are significant components of farm income, without these payments farms in LFAs would generally be making losses. In 2012/13 agri-environment scheme payments accounted for 47% of farm business income in LFAs compared to 11% elsewhere. On LFA farms SPS accounted for 91% of income compared to a 51% average for all farms. In this year the agriculture component of income on LFA farms made a loss of £8900.

**Figure 2 : Farm Business Income by cost centre 2012/13 - Defra Farm Business Survey 2012/13.**



Diversification is one option for improving incomes and profitability on farms. However, both the incidence of diversified activity and the scale of income generated from such activity is considerably less on farms in LFAs compared to farms elsewhere. In 2012/13 the income for diversification amounted to £1600 per farm in the LFA areas compared to an all farm average of £7800. Presumably, this is in large part due to obvious factors such as the remoteness of the farms from areas of population and the limitations of the land in terms of other uses for that land. For instance, one cannot locate a farm shop at the top end of a remote hill valley where there are neither the potential customers nor the opportunities to grow many of the products to be sold.

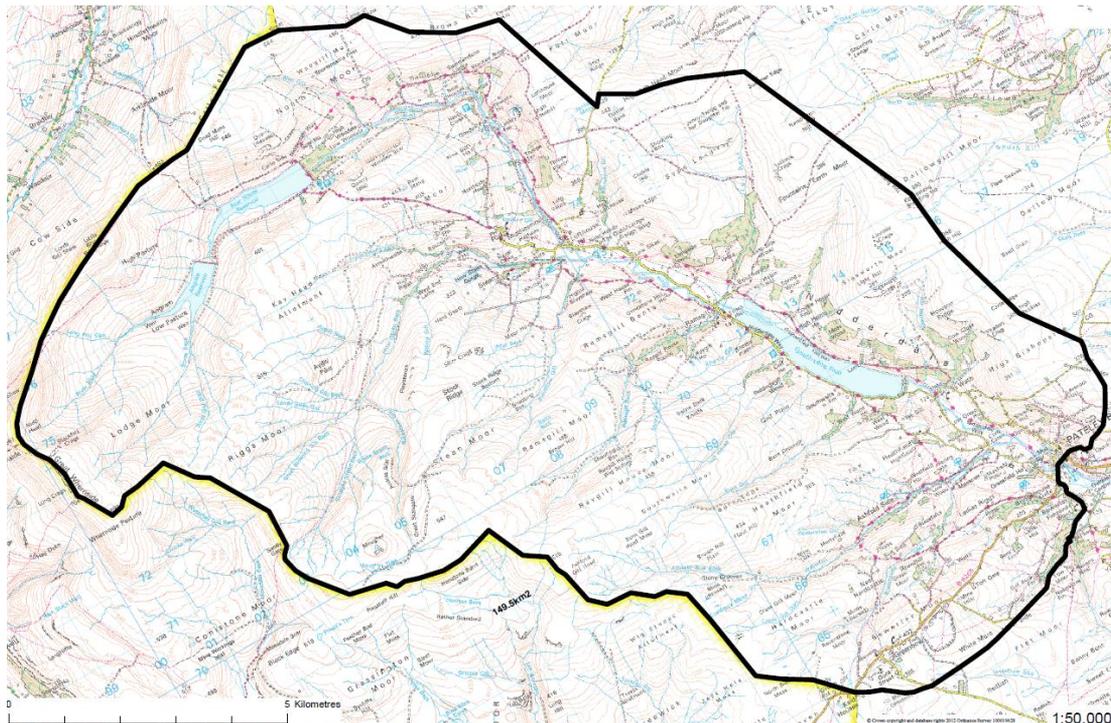
## 2.7 High Nature Value Farming – Upper Nidderdale

The Nidderdale Area of Outstanding Natural Beauty (AONB) covers 60 thousand hectares of land which is predominantly classified as LFA with high rainfall and grade 4 and 5 soils. Most farms are classified as SDA although there is some DA land in the area. According to the annual review for 2012/2013 there were some 1106 people employed on 503 farms in the area (5). The area was designated an AONB due to the presence of habitats of high biodiversity importance and high landscape value.

Within the Nidderdale AONB lies the Upper Nidderdale High Nature Value (HNV) case study area. It is located between Pateley Bridge and Great Whernside (see map below) and represents just over one-quarter of the total Nidderdale AONB region. This is an area of both upland heath and blanket bog on the tops and in-bye pasture on the valley sides together with more productive grassland in the valley bottom.

HNV farming systems support high levels of biodiversity and are characterised by low intensity, traditional land management. Concern about the future of farming livelihoods in these areas together with the wildlife it supports was a key reason for setting up the collaborative project by the Local Nature Partnership.

**Figure 3 : Map of Upper Nidderdale**



According to Defra statistics there were 68 holdings in this region in 2010 (the latest year for which information is available) compared to 90 in the year 2000. However, many of these holdings are likely to be run on a part-time or hobby basis. At the other end of the scale the number of farms over 100 ha has increased from 32 in 2000 to 36 in 2010.

Defra farm statistics for Upper Nidderdale show

- 4698 ha as permanent grass and 5600 as rough grazing
- 4162 cattle in 2010 compared to 4779 in 2000
- 41894 sheep in 2010 compared to 54237 in 2000 representing a fall of 22% in just 10 years
- Woodland area of 422 ha
- 151 people employed in agriculture in 2010 compared to 168 in 2000. These comprised either full or part-time farmers with just 18 employees, the majority of which were part time.

Source : Defra personal communication

### **3. Perception Survey**

Seven farmers completed a detailed HNV perception survey under the guidance of the local AONB Officer, Marian Wilby. The results for this survey are presented in this section.

#### **3.1 Farm Management**

The farms in the Nidderdale sample are a mixture of owner occupied and tenanted farms with an average size of 263 ha, with a range of 170 ha to 1000 ha. All farms either rent or own other land not attached to the main holding. The hill land on the sample farms is a mixture of common land, private open moorland and private enclosed moorland. The length of occupancy at each farm varies considerably with a range of 6 years to 152 years.

Labour on the sample farms is mainly a one person operation with part time help, with just one farm having more than two staff. The age of the farmers is predominantly in the 51-65 years range with one over 65 years. The succession plan of each farm varies with most confident children will take on the holdings, depending on tenancies. One farmer who is unsure if children would take the holding on would be keen to either let the farm out or enter a share farming agreement, with another planning to sell the farm.

All farms run a hill flock of various sizes with 60% of the farms having a second hill flock. The predominant breed is Swaledale with a proportion of Lonk and Dalesbred ewes. There has been a reduction in the number of hill sheep on the sample farms over the past 10 years, mainly due to their entry into various environmental schemes. Some farmers also suffered high sheep losses during two poor winters. All but one of the farms also has a crossbred flock which are mainly mules. Numbers in these flocks have increased on the majority of farms over the last 10 years.

All farms in the sample have a suckler herd with a variety of breeds across the farms. The number of cows on the farms has decreased in the last 10 years due again to restrictions since joining environmental schemes, plus the un-availability of labour to help with various jobs.

Stock from the sample farms are all marketed through livestock auctions. The majority of lambs are sold as stores with a small proportion taken through to fat. Cattle are sold predominately as stores. Only 50% of farms are in an assurance scheme.

Sheep management varies from farm to farm depending on the type of moorland or allotment the farm has. Of the farms, 60% run a hefted flock which are on unfenced boundaries between hefts. The grazing on these farms has changed over the last 10 years due to environmental scheme requirements for fewer sheep on the moors at different times of year. The parasite management on some farms has changed over the last 10 years with more injections and pour-ons used, however, each farm still dips or showers sheep.

All but one farm in the sample sends sheep away for wintering, all within a 22 mile radius. There are a number of reasons why farmers send their sheep away but the main one is to give the land at the home farm a rest ready for ewes after lambing. Farmers also think that gimmers, in particular, that are sent away grow much better on fresh land. Some farmers also housed fattening lambs for finishing.

Cattle on all but one farm are housed during the winter in a mixture of cubicles, byres and loose housing. Cattle management has stayed very similar on the farms over the last 10 years.

### **3.2 Land Management**

The management of the farms in the sample appears very similar from farm to farm with all having meadow land which is harvested from mid-July and aftermath grazed from late August onwards, depending on the weather. There has been a change in the type of forage conserved over the last 10 years with a shift towards haylage in big bales rather than hay in small bales. The biggest factor driving this appears to be the weather, with farmers struggling to make hay in wet summers especially after 15<sup>th</sup> July. It was also noted that the big bales can be handled more easily in the fields and back at the homestead during the winter months. Grazing of aftermath is predominately by sheep and lambs with two farms also grazing cattle. The grazing period on in-bye land was 12 months on all but one farm, whilst grazing allotments and fells varied from farm to farm. Only one farm in the sample grazed fell land all year round with the remainder ranging from 6 - 9 months.

None of the farms in the Nidderdale sample are certified organic but the fertiliser use on the farms varies considerably depending which environmental schemes the farms have signed up for. The expense of inorganic fertiliser has also been a factor in farms using less. All but one farm carry out soil testing at varying frequencies with lime applied where pH is low.

All farms in the sample imported feed and bedding with some also purchasing forage. The main purchases were straw and concentrate, with the occasional root crop.

### **3.3 Farm Profitability**

The perceived profitability of farms in the sample over the past five years varied from fluctuating to increasing steadily with no respondents seeing a downturn in profits. When asked to predict profit over the next five years 40% were hoping that profits would increase steadily with 20% predicting them to be stable. The rest of the sample predicted profits would continue to fluctuate with none predicting a downturn in profits.

When asked what had the greatest negative effect on the profitability of farms responses varied but the most common answers were weather and livestock prices, neither of which farmers had control over. Feed, fertiliser and other overhead costs were also ranked highly as having a negative effect on profitability whilst wages, contractors and loan repayments were deemed to have a lesser negative effect on farm profitability in the sample.

Farmers were asked to indicate where their main sources of income came from. On all but one farm it is deemed that the SPS payment plus the environmental payments provided the biggest source of income. Diversification and off farm income was nil on 60% of the farms and represented less than 5% of total income on the other farms.

When asked what activities farmers intended to do over the next two years in order to maintain or protect their family farms all responded that reducing input costs was a priority. Those farms that currently have no diversification income may look into it in

order to increase income. It was noted that 60% of farms were already receiving the maximum environmental payments with the other 40% hoping to enter schemes in the near future. None of the farms intended to leave the industry in the next two years.

All farms had invested in their holdings over the previous 10 years, with this ranging from new buildings to walling and drainage. All the work recorded was part grant funded. It was noted the biggest factor affecting future investment on the farms was shortage of capital.

The use of computers on farms varied across the sample with 80% having a computer but only 60% using it for business activities. The uses of the computers on these farms varied from registering livestock movements only to full farm accounts, vat returns, e-mailing and web searching. The quality of internet connections varies with only one respondent reporting good access. This posed a problem for some farmers who wanted to fill in their own SPS forms and file their vat returns.

### **3.4 Farm Support**

All farms in the sample received SPS and were asked how the change from production subsidies to land based support had affected their business, 40% recorded it had a positive effect on their business with the remainder unsure if it was better or worse. All farms were unsure of the financial impact of moving from HFA to UELS. When asked about CAP reform and pillar one and two payments farmers were again unsure about the effect on their business due to a poor understanding of what the reductions in pillar one payments would be.

When asked if there was sufficient financial support for upland farming one respondent was not sure whilst the rest were split equally between yes and no. The farmers responding no i.e. more support was needed, made the point that to maintain a hill farm properly costs a lot more than any subsidy received and profits made. The farmers who responded yes, whilst happy with their own support noted that some farmers were not receiving all the subsidies and landlords were taking large amounts of money plus a rent, which they did not feel was fair.

All farms were part of an environmental scheme with participation in these varying from 5-10 years to 10-20 years. All respondents stated that being part of a scheme was vital to their farm business with the guaranteed regular payment a real benefit. Other benefits mentioned were that entry into the scheme resulted in fewer livestock on the farm which lead to fewer inputs and reduced the need for additional labour, thus saving money. Some schemes help with capital works which improves the appearance of the farms. The weaknesses of being in an environmental scheme included restriction on cutting dates, which was a problem in a wet summer, and schemes do not reward good existing management. It is also difficult to set up an agreement with moorland partners.

When asked what would happen to the farms if environmental payments were reduced all respondents stated that the farms would suffer financially with 80% noting they could not carry on and would have to have an additional source of income off-farm. Others commented they would have to try and become more intensive or just ranch the farm. Whilst 80% thought the schemes have achieved their objective of protecting species rich meadows and increasing wildlife 50% thought scheme requirements were too restrictive from a farming perspective.

### **3.5 Perceptions of farming and the environment**

All farmers in the sample were asked what their role was as a farmer, with all indicating that food production coupled with biodiversity conservation and landscape management was very important. Farmers thought their roles less important in protecting water supply and renewable energy production, with flood protection and sporting activities very low priority.

Perception of farmers by the general public was believed to be high in the area although it was thought more could be done by having better links with schools.

When farmers were asked why they farm the way they do various answers were given with a number stating tradition as their main driver and the need to keep the farm and the Dale looking as it has been for the past 100 years. Other responses included that the weather and altitude directed the way the farms in the area are farmed. One farmer commented that on the hills you cannot do what you want, you do what you can.

All farmers were very aware of habitats and wildlife species on their farm and produced extensive lists. It was thought that less intensive farming methods have increased the number of habitats on the farms and led to an increase in wildlife species. All farmers thought that the Environmental schemes provided good value for money for the public; however, it was thought that the public need to be educated on how the landscape would look if it were not for farming.

When asked if the farmers considered themselves high nature value (HNV) farmers all but one thought they were, with one respondent not sure. The benefits of being a HNV farmer included the satisfaction of maintaining the environment/landscape and seeing all the wildlife. The challenges of being an HNV farmer included trying to stay in business and being profitable.

Farmers were asked what the prospects were for new entrants into hill farming, 60% thought there were no opportunities for new entrants to take up hill farming whilst the remainder thought there were limited opportunities. All agreed there were young people in the area who wanted to take up hill farming. Some respondents would not influence their children, while some would encourage their children to take over the family farm.

## **4. Nidderdale Farm Business Results**

A total of seven farm accounts were collected and analysed as part of the Nidderdale HNMF (High Nature Value Farming) project. The farm accounts were compared to the Farm Business Survey (FBS) specialist sheep group which comprised of twenty two farms situated in Yorkshire and Lancashire. The Nidderdale farms are also compared against the premium average which is the top 30% of the specialist sheep group and consists of seven farms. The results are shown in Tables 1 to 3.

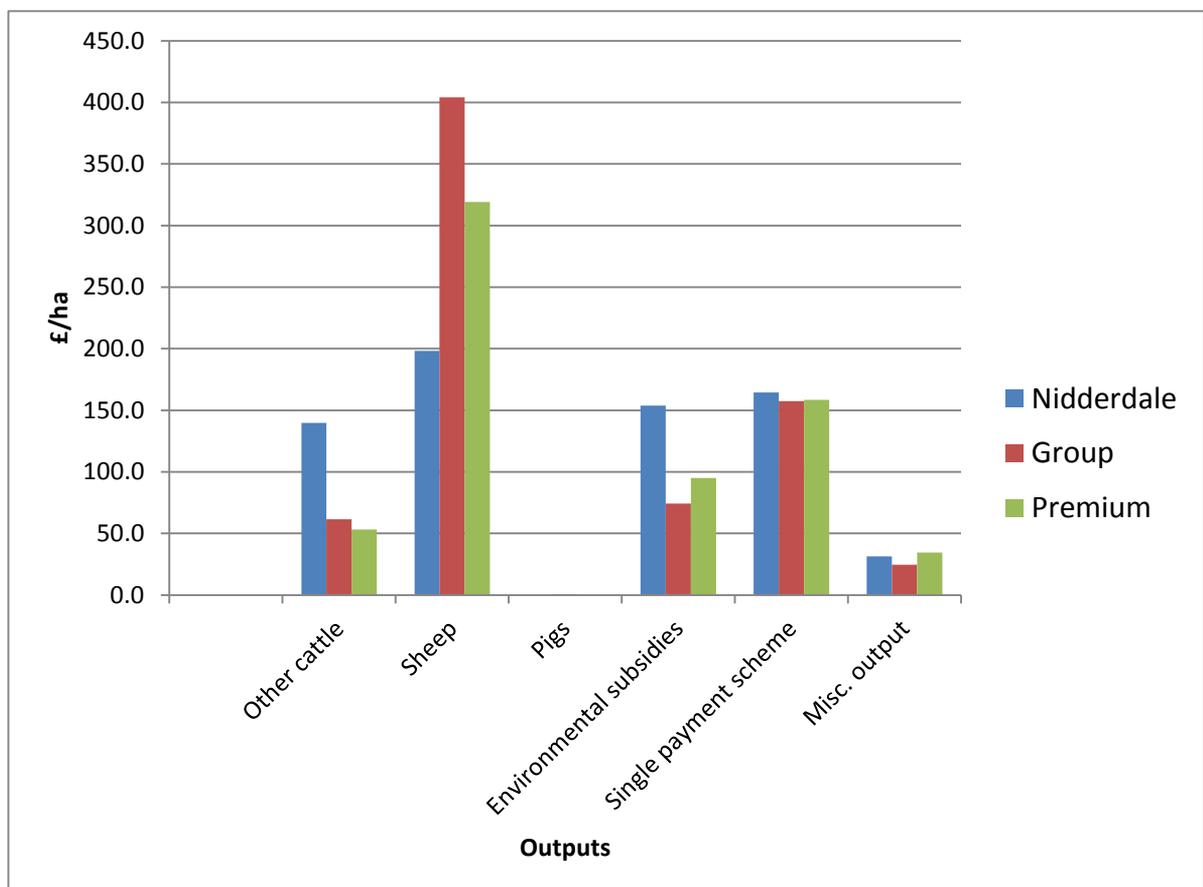
Farms were compared using an adjusted area which is standard practice in the FBS. An adjusted area is where the rough grazing on farms is converted to its permanent pasture equivalent on the basis of effective stocking capacity, for example 3:1, 4:1 etc. For example, a 250 hectare area of rough grazing with a stocking capacity of 5:1 would have an adjusted area of 50 hectares.

Financially all farms were compared using Management Investment Income (MII) and Farm Business Income (FBI). MII is defined as the return to the farmer and spouse for their management and the tenant-type capital of the business. FBI is the financial return to all unpaid labour and capital invested in the farm business.

The average size of Nidderdale farms after adjustments was 161.6 hectares (399 acres) which was smaller than the group average of 186.6 hectares (461 acres) and significantly smaller than the premium average of 264.7 hectares.

Output on the Nidderdale farms was £30/ha lower than the group average but higher than the premium average. There are a number of differences in the outputs on the Nidderdale farms compared to group averages with the most notable being sheep output, cattle output and environmental payments. Environmental payments received by Nidderdale farms are significantly higher than both the premium and group average. On the Nidderdale farms it makes up 22% of total output compared to just 10% on the average farm. The combined SFP and environmental payments make up 46% of total output whilst livestock output makes up 49%. Combined SFP and environmental payments on the average farm make up 32% of total output.

**Figure 4 : Summary of Outputs**



Sheep output on the Nidderdale farms was £206/ha lower than average and is the main reason why overall output is lower. The reason for the lower sheep output is due to the performance of the Nidderdale flocks with a gross margin of £20/ewe compared to an average of £43/ewe. A lower lambing percentage of 110 and lower lamb sale price contributed to the lower margin. The lower lambing percentage is possibly due to the Nidderdale flock comprising of more hill type ewes compared to more crossbreds in the average flock. Nidderdale lamb sale price is significantly lower than the average and premium farms, with more being sold fat on the latter.

This again could be a consequence of more hill bred and mule weather lambs being sold as stores on the Nidderdale farms compared to cross bred lambs in the average sample. Depreciation on the Nidderdale flocks is also higher than average with more gimmer lambs being retained for replacements than the average farm. This is possibly due to heavy ewe losses in the previous winter and the need for more replacements. Variable costs of the ewes are well managed on the Nidderdale farms at £34/ewe which is £16/ewe lower than the average farm.

Cattle output in the Nidderdale group is higher than both the group average and premium average. This is due to the Nidderdale farms having more suckler cows than the average specialist sheep farm which could be a consequence of environmental scheme requirements to have mixed grazing. Six farms in the average group have no cattle output at all.

Variable costs on the Nidderdale farms are £60/ha lower than the average and well managed. Feed costs are £35/ha lower than average, due to other farms finishing more lambs. The other feed, which includes fodder and fodder roots, is significantly higher on the average farm indicating the Nidderdale farms are more self-sufficient. Vet and other livestock costs are both lower than the group average and similar to the premium average.

Fixed costs on Nidderdale farms are £79/ha lower than the average farm but £122/ha higher than the premium. This is an area where the premium sheep farms perform much better than the group and Nidderdale farms. Unpaid labour on the Nidderdale farms is very low at £171/ha, £81/ha below the average. This would agree with findings from the perception study that most Nidderdale farms are one man operations with low labour costs. Contract costs are slightly lower than the average, at £18/ha, indicating that most ground and harvest work on the Nidderdale farms is carried out by the farmers themselves. Occupiers repairs are significantly higher than both the average and premium farms and seem to be a consequence of Nidderdale farmers undertaking work as part of an environmental agreement, with a large amount of walling completed. The rents on Nidderdale farms appear lower than the average and could be a consequence of some farms in the average group not having any fell or moorland therefore paying more rent per hectare. All other costs are very similar to the group averages.

In terms of business indicators the Nidderdale farms compare well to the average with a MII of £-35. FBI on Nidderdale farms is very similar to average at £143/ha, but falls below the premium average.

**Table 1 : SDA Specialist Sheep Farms - Summary of Financial Results 2012/13**

**SDA Specialist Sheep Farms**

**Summary Of Financial Results 2012/13**

	Nidderdale average	Group average	Premium average
Average farm size (ha)	161.6	186.6	264.7
	£/ha	£/ha	£/ha
<b>Enterprise outputs</b>			
Byproducts, forage & cultivations	5.3	1.0	-2.1
Dairy		-0.2	
Other cattle	139.9	61.6	53.2
Sheep	198.3	404.2	319.2
Pigs		0.5	
Environmental subsidies	153.7	74.2	95.1
Single payment scheme	164.6	157.5	158.6
Misc. output	31.4	24.6	34.5
<b>Total output</b>	<b>693.2</b>	<b>723.4</b>	<b>658.5</b>
<b>Variable costs</b>			
Seed	0.3	0.5	0.6
Fertiliser	24.6	31.6	21.6
Sprays	1.3	1.5	1.8
Other crop costs	0.6	1.5	0.3
Feed: Purchased concentrates	105.6	117.9	69.7
Homegrown concentrates			
Other feed	9.3	31.6	27.5
Vet & medicines	30.8	38.4	28.4
Other livestock costs	41.3	50.3	42.1
<b>Total variable costs</b>	<b>213.7</b>	<b>273.3</b>	<b>192.1</b>
<b>Gross margin</b>	<b>479.5</b>	<b>450.2</b>	<b>466.4</b>

## Analysis Of Cost Items

	Nidderdale average £/ha	Group average £/ha	Premium average £/ha
<b>Fixed costs</b>			
Labour: Paid (incl. casual)	3.5	27.9	34.2
Unpaid (incl. farmer & spouse)	170.8	252.2	131.3
Power & machinery costs:			
Contract	17.7	22.7	16.8
Depreciation	61.9	58.5	32.4
Machinery repairs	37.5	23.3	16.8
Fuel & oil	37.0	30.5	16.5
Occupiers repairs	63.3	27.3	25.2
Rent & rates (incl. imputed rent)	64.8	97.6	78.7
General farm costs:			
Electricity, water & heating fuel	10.2	6.4	4.8
Insurance	19.5	21.6	15.1
Professional fees	13.0	14.1	11.0
Other farm costs	15.7	12.3	10.0
<b>Total fixed costs</b>	<b>515.0</b>	<b>594.4</b>	<b>392.9</b>
<b>Management &amp; investment income</b>	<b>-35.5</b>	<b>-144.2</b>	<b>73.5</b>
Minus: Management salaries			
Plus: Unpaid labour (farmer & spouse)	154.3	213.8	119.4
<b>Net farm income</b>	<b>118.8</b>	<b>69.6</b>	<b>192.9</b>
Minus: Interest charges	14.5	9.8	5.9
Ownership charges	2.9	16.0	10.9
Farmhouse rent		1.0	2.6
Plus: Rental value & imputed rent	24.6	52.4	36.9
Imputed labour	16.5	38.3	12.0
Interest received	0.1	0.1	
<b>Farm Business Income</b>	<b>142.5</b>	<b>133.7</b>	<b>222.4</b>

## Group Characteristics

	Nidderdale average	Group Average	Premium average
No. of farms in group	7	22	7
<b>Land use</b>	%	%	%
Temp. grass & forage	1.9	3.0	
Permanent grass	98.1	97.0	100.0
Other	100.0	100.0	100.0
<b>Output</b>	%	%	%
Other crops, straw & forage	0.6	0.1	-0.3
Dairy cows			
Other cattle	17.8	9.5	9.2
Sheep	28.9	52.6	44.9
Pigs & poultry	1.0	0.1	
Single payment scheme	24.5	22.6	24.7
Miscellaneous	27.2	15.1	21.4
	100.0	100.0	100.0
<b>Stocking</b>	Livestock Units (LU)		
Dairy cows			
Other cattle	29.6	24.1	28.8
Sheep	69.0	95.5	118.2
Pigs		0.1	
Poultry	0.1	0.1	
Stocking rate (LU/ha)	0.7	0.7	0.6
Lamb rearing percentage	110	136	129
<b>Tenants capital</b>	£/ha	£/ha	£/ha
Crops and tillages	13	20	11
Livestock	522	641	550
Stores	5	17	6
Machinery and equipment	401	337	186
SPS entitlement	206	222	222
Other	300	274	185

**Table 2 : LFA Sheep Gross Margins**

	<b>Nidderdale Farms</b>		<b>Average of all flocks</b>		<b>Premium average</b>	
<b>Number of flocks</b>	7		71		21	
Average number of rams and ram hogs	13.7		14.4		14.4	
Average number of ewes	624.2		593.0		576.5	
Average number of ewe hogs	97.0		110.7		89.0	
Rearing %	110		144		164	
<b>Sheep sales &amp; purchases</b>	<b>No.</b>	<b>£/head</b>	<b>No.</b>	<b>£/head</b>	<b>No.</b>	<b>£/head</b>
Fat lambs sold	201	58	510	69	615	75
Store lambs < 1 year sold	243	46	247	57	299	64
Breeding ewe hogs sold	236	84	154	96	197	104
Store lambs bought			82	45	121	56
Breeding ewes bought			63	162	87	155
Breeding ewe hogs bought	70	80	50	111	75	108
<b>Gross output</b>	<b>£/ewe</b>		<b>£/ewe</b>		<b>£/ewe</b>	
Lambs	68.9		101.8		123.7	
Flock depreciation	-16.1		-11.3		-8.2	
Wool	1.6		2.7		2.9	
<b>Total gross output</b>	<b>54.3</b>		<b>93.2</b>		<b>118.4</b>	
<b>Variable costs</b>						
Concentrates	16.0		21.1		18.5	
Coarse fodder	1.7		4.4		5.7	
Forage variable costs	4.4		7.6		6.1	
Vet & medicines	5.5		7.0		6.6	
Other livestock costs	6.7		10.1		10.5	
<b>Total variable costs</b>	<b>34.2</b>		<b>50.2</b>		<b>47.4</b>	
<b>Gross margin</b>	<b>20.1</b>		<b>43.0</b>		<b>71.0</b>	

**Table 3 : Suckler Cow Gross Margins**

	<b>Nidderdale Farms</b>		<b>Average of all herds</b>		<b>Premium average</b>	
<b>Number of herds</b>	5		75		23	
Average number of suckler cows	33.7		44.5		47.1	
Average number of calves	18.8		28.7		34.4	
<b>Cattle sales &amp; purchases</b>	<b>No.</b>	<b>£/head</b>	<b>No.</b>	<b>£/head</b>	<b>No.</b>	<b>£/head</b>
Beef bulls sold	1	950	1	1476	1	1099
Beef cows sold	6	661	7	862	9	882
Unweaned calves sold			14	353	14	278
Beef bulls bought	1	2557	1	3023	1	3425
Beef cows bought	3	608	4	1111	3	1217
Unweaned calves bought	2	253	3	232	3	341
<b>Gross output</b>		<b>£/cow</b>		<b>£/cow</b>		<b>£/cow</b>
Calves		406.7		452.9		544.4
Herd depreciation		-54.4		-43.5		-22.8
<b>Total gross output</b>		<b>352.3</b>		<b>409.4</b>		<b>521.6</b>
<b>Variable costs</b>						
Concentrates		28.2		66.0		40.7
Coarse fodder		3.8		26.3		23.3
Forage variable costs		44.9		58.7		66.0
Vet & medicines		17.6		27.3		20.1
Other livestock costs		28.5		69.1		51.2
<b>Total variable costs</b>		<b>123.0</b>		<b>247.4</b>		<b>201.3</b>
<b>Gross margin</b>		<b>229.3</b>		<b>162.0</b>		<b>320.3</b>

## 5. Individual Farmer Discussion

During analysis of individual farm data farmers were engaged in conversation to determine their opinions and to explore the issues associated with farming in the Nidderdale AONB.

Challenges of farming in the location included dealing with the high rainfall, which means management of grazing is often dictated by the weather. This leads to a shorter growing season in which farms have to produce any additional forage. Farms with mainly North or East facing land spoke of the lack of sunshine, which causes a problem in wet years with many farms having issues with drainage and the peaty soils retaining moisture which meant access and management proved difficult.

Some of the moorland in Nidderdale is fairly remote, and mobile phone signal was highlighted as an area of concern on more than one occasion. When work had to be undertaken on the moor communication was difficult.

Access to local markets was raised and there was a good utilisation of both the local Pateley Bridge market and ones further afield, including Skipton Auction Mart. Some farmers showed a preference to one market due to either being known or the better prices received there.

Individual farm access from the main highway varied hugely between farms with some feed firms refusing to deliver to certain farms due to restricted access. Farm vehicular access in extremes of weather including snow also caused problems on some farms.

Farms with moorland rights generally reported that access was straightforward and this was seen as a positive by the farmers in terms of management. There are relatively few public rights of way through the farms. Those farms with fenced moorland found it much easier to manage, and could keep stock in certain areas which allowed for better management.

The town of Pateley Bridge lends itself well to tourism, with many well established tourist attractions in the local area. There was potential for some farms to take advantage of this to supplement their farming operation, with more than one farmer actively seeking diversification opportunities, however, with very limited passing trade further away from Pateley Bridge there is limited potential for "standard" tourism opportunities. Despite the relative feel of isolation further up the valley, the relative closeness to cities such as York, Harrogate and Leeds provides opportunities for employment for other members of their families.

Many wholly tenanted farms or those with parcels of rented land spoke highly of their landlords and the positive relationships between land owner and tenant. Equally the farmers were proud of how the moor is run, in conjunction with the land owners, tenants, and game keepers. Tenants on limited duration tenancies saw this as a hurdle to long-term planning and decision making within their own farm businesses. The over-riding impression was that on all farms the balance between farming, sporting and environmental interests worked well, with all parties working together on more than one occasion.

Working directly with livestock in particular was an area of work enjoyed the most. Several farms invested a substantial amount of their time into showing their livestock to promote the breeds, and they were clearly passionate about their livestock. A theme of continual improvement was evident with one farm currently trying to devise a sustainable winter feeding programme.

The excellent wildlife in the locality, especially the bird populations made a few of the farmers particularly proud that they were contributing to maintaining them in the current landscape.

As with many farms, current priorities included improving herd and flock health, improving rearing percentages, maximising returns from the land, and improving efficiency within their farming operation. Other challenges to the farmers in the area include opportunities for expansion or diversification, and combining the challenges of farming with an acceptable family life balance.

Of those farms with sheep, facilities varied between farms and nearly all the farms utilised buildings to one degree or another during lambing, and the routines often varied each year depending on the weather conditions. Most of the buildings are traditional stone barns, adapted to accommodate livestock when needed rather than new purpose built sheds.

Stone walls and field barns are a particular feature of the area and the task of maintenance were highlighted on more than one occasion as hugely time consuming. Spring rain and snow often brings down walls and the task of repair and upkeep to these was emphasised by many of the farmers interviewed. Several farmers employed contractors to do routine maintenance and repairs to traditional stone walls due to the specialist nature of the work. Vermin control for rabbits and moles featured heavily as an area of concern, keeping on top of these was difficult due to the weather affecting the opportunity to control using conventional methods.

Farms in the area had lots of family connections and family involvement, however, succession was seen as an area of concern, with the issue of children not wanting to continue to farm and pursuing careers away from farms being common on more than one occasion. There were also farms with interested sons and daughters keen to continue the family tradition; however, even on these farms the farmers were aware of neighbours encountering similar issues. It was also clear from some farmers that facilitating new blood to enter the industry was difficult due to the nature of existing long-term tenancies and farmers unwilling to move from the farm and retire due to the financial pressures involved.

A number of spouses sought employment away from the farm and provided additional income to the household, some farmers also worked off farm in various roles to supplement the income from farming. During busy periods of the year such as lambing family members will often help out on the farm to reduce the need for additional paid labour. With many farms operating with limited labour resources the lack of time to make changes and investigate opportunities properly meant many planned changes simply didn't happen.

An overriding sense of pride and being privileged to farm the landscape, together with the quality of life derived from farming were the positives of farming in such a location, and all spoke of the enjoyment of farming in the area. The theme of being custodians of the land also shone through, with the farmers having an over-riding sense of having to farm both sustainably and responsibly to maintain the environment for future generations. The challenge of being their own boss yet working well with neighbours was also apparent. Farmers were also conscious that they farmed sustainably both environmentally, economically and socially.

One farmer alluded to the problems associated with cross-compliance and the issues surrounding ensuring things are up to date, which distracted them from farming and took a disproportionate amount of their time, which they felt was detrimental to the farming operation.

An aversion to get into debt was seen on more than one farm and as a result those farmers would describe themselves as cautious and risk averse, including one farm that operates a “no borrowing policy”. There were, however, farms with long term borrowings used either to invest in the business or to support existing overdrafts. Tenant farmers also alluded to the fact it was more difficult to borrow money and relatively new-entrants to the industry found it even harder to fund projects that will potentially generate an income.

A long-term worry for farms in this area is what will happen at the end of the current Stewardship Schemes such as the HLS. The schemes currently provide a substantial income to farms in the area and should this support cease then there is a concern from some farms about how they will be able to continue to find the same income. One farmer stated their personal objective was to be less reliant on government support and be more self-sufficient in terms of profitability, and have the ability to hand over the farm as a viable business when he chooses to retire. The embracing of new technology should be encouraged, according to two farmers, and enhances the farming operation. Not all farms visited received the income from stewardship schemes, with the landlord retaining the money from any scheme income, which has affected cash-flow in individual farm cases.

Most farms appeared to have a good working relationship with advisors with regard to their stewardship schemes and speak highly of the positives associated with being involved in such schemes. However, it was mentioned on more than one occasion about the lack of a joined up, holistic, agri-environment scheme that incorporates CSF, HLS, and EWGS or their successors.

## **6. Group Discussion during Yorkshire Dales Farmer Network January 2014 Meeting**

Results were presented to the Yorkshire Dales Farmer Network, many of whom took part in the financial analysis for this project, there was a discussion following the presentation of results.

### **6.1 Feed related issues**

The discussion centred around the philosophy of feeding ewes hard during the winter in order to get an improved return in the form of lambs, many factors were discussed including breed selection and that fact there are now a lot more cross-bred sheep in the area compared to 20 years ago. Many of the farms who scan reported that they only provide supplementary feed to ewes expecting twins. The concept of feeding moorland sheep was aired, although in Nidderdale some sheep don't get supplementary concentrate feed on the moor between the end of December and February due to stewardship agreements.

Following presentation of the Nidderdale results dialogue focussed on the correlation between low feed costs and the low rearing percentages seen on local farms. Also, due to lambing later (April onwards) the ability to fatten lambs during the summer is restricted if there is high summer rainfall, as in recent years. Other options include sending lambs away to fatten (20+ miles) or to bring cake up to feed them.

Farmers had various views on whether to sell lambs as stores or put time and effort into supplementary feeding to sell the lambs as finished animals. Some farmers will creep feed gimmers to make them bigger to sell rather than creep feeding the stores. This is linked to the fact that land in Nidderdale is un-improved therefore there is no new pasture each year to fatten lambs off.

More cattle are present on Nidderdale farms than the average SDA Specialist Sheep farm, therefore the cattle are more likely to be utilising the buildings during the winter months and there is perhaps less shed space available for the sheep flock.

## **6.2 Other livestock related issues**

A number of sheep disappear each year from the moor, farmers estimated up to 2% will disappear down holes on the moor, some never to be found.

Within the Yorkshire Dales Farmer Network there is the opportunity to purchase veterinary medicines as part of the group therefore saving farms money. In terms of vet costs one farmer suggested it may save £1/£2 per ewe due to buying items as a group. It was discussed whether this has an impact or not in terms of comparative data as it was thought that many farms in the SDA Specialist Sheep group would also have access to similar schemes, but non the less it was an effective cooperation between the farms in Nidderdale.

Making use of vets was discussed in relation to farm access in the area. Due to the poor accessibility up the valley most agreed that vets were called only in an emergency due to the poor access many farms had from the main highway.

## **6.3 Are farmers park keepers?**

Farmers should realise that tourism contributes a large amount to the economy, it was felt that helping this by maintaining the landscape makes receiving subsidies easier to justify. In Nidderdale there is not much diversified tourism income due to lack of number of walkers.

The outcome of the discussion was that farmers in the region perceive themselves as both park keepers and farmers, therefore the farmers should support advisors, e.g. those from the AONB or similar organisations, to continue to support the Uplands.

Farms changing to "Park Role" have had to change feeding on the moor, they have just moved where they feed animals rather than not feeding at all. Now there is a problem with the public coming onto land with dogs and scaring wildlife away. Very few grouse are now present on the moor, which is a target species they are aiming for. Walkers have the 'right to roam' which causes problems and they often don't adhere to no dogs on the moor. Lack of wading birds and wildlife is not always due to farming but is often linked to public access, roaming dogs and an increase in raptors taking chicks.

## **6.4 Stewardship discussion**

The perception that schemes have been set up with a 'blanket approach' was sometimes seen as a hindrance to farms in the area. It was suggested that there need to be specific schemes for specific areas, and paid appropriately for the features present in the individual areas, or a basic scheme with an element of added flexibility.

The issue of how stewardship money comes into agriculture was talked about and the outcome was that the application process for schemes needs to be simplified, with farmers consulted when the schemes are first instigated. The issue of landlords

retaining shoot and stewardship income was discussed; the money needs to go to the farmer who is farming the land. The mentality of having to 'keep the farm in good agricultural order' needs to be enforced more.

On schemes as a whole, the more successful ones have been where the farmer has been pro-actively involved. The over-riding message was that there are good advisors in Nidderdale, and the farmers would like to see the Natural England model of advisors be applied to the RPA advisors.

It is also important to look at the environment in the Rural Development Package, there are still options and people with ideas to pursue for diversification. This need not be to the detriment of farming, for example with shooting, with cutting rushes and controlling vermin the bird populations are improving and there is also improvement of habitat management for sheep. Therefore conservation and shooting and improved pasture are going hand in hand.

## References

1. SAC (2009) Farming's Retreat from the hills. Report for the Scottish Government.
2. Cumulus Consultants Ltd (2012) Changing livestock numbers in the UK Less Favoured Areas – an analysis of likely biodiversity implications. Final report for the Royal Society for the Protection of Birds.
3. Defra Agricultural Change and Environment Observatory (2010) Farming in the English Uplands.
4. Harvey D and Scott C (2013) Farm Business Survey 2011/2012 Hill Farming in England. Rural Business Research.
5. Nidderdale AONB Annual Review 2012/2013



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