

Prepared for

BFRS

The Borders Foundation For Rural Sustainability

**THE COUNTRYSIDE MANAGEMENT INDUSTRY IN
THE SCOTTISH BORDERS
SUSTAINABILITY AND THE PURSUIT
OF NEW JOBS AND REVENUES**

***‘A STUDY OF FARM DIVERSIFICATION
AND COUNTRYSIDE MANAGEMENT IN
THE SCOTTISH BORDERS’***

Part 1

**Prepared by Scott Wilson Resource Consultants
&
Scottish Agricultural Colleges**

February 2001



Principal Project Sponsors:



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FARM DIVERSIFICATION AND COUNTRYSIDE MANAGEMENT IN THE SCOTTISH BORDERS

FOREWORD

Ross Finnie MSP, our Minister of Rural Affairs, wrote in his Forward to the Scottish Agricultural College 'Scottish Country Business Reference Book 2001', "If Scotland as a whole is to move ahead in the future, I am quite clear that our rural areas must be a full part of that. We must value them for what they are, and build on their strengths".

With the decline in Agriculture, the Borders Countryside Management Business, has much need of an audit to identify these strengths, and to provide answers to the question "What makes the Borders countryside tick in addition to the production of food and timber" ?.

Audits are an essential element of any business and farming and countryside management are no exception if we are to establish a base-line from which to develop our future strategy. The Borders Foundation for Rural Sustainability identified this need some four years ago and has initiated such an audit.

With the encouragement and financial backing of Scottish Enterprise Borders, Leader II, Scottish Natural Heritage, Scottish Borders Council, Forward Scotland and numerous organisations and individuals in the private sector, Scott Wilson Resource Consultants with Scottish Agricultural College were commissioned to undertake this pioneering and challenging task, of which 'Farm Diversification and Countryside Management in the Scottish Borders' is Part One of a three-part report of the results.

This is a very far-reaching study, which has required an innovative approach to research method and has sought to address all of the components in the Terms of Reference. The levels of response from stakeholders throughout the Borders has been generally impressive, for which the BFRS trustees are extremely grateful. Together with the good level of support and interest shown by the project sponsors this augers well for the essential discussion and design / implementation work which needs to follow the study.

Bruce Cowe MBE FRAgS
Chair Borders Foundation for Rural Sustainability
February 2001

PREFACE

The Report

- (i) This document forms Part One of a Tri-partite Report, covering the findings and analysis resulting from the Study of the Farm Diversification and Countryside Management in the Borders Region of Scotland.
- (ii) The 3 Parts deal with three distinct but related topics:
 - **Part One:** The Results of the Diversification Surveys, covering economic, social and environmental considerations;
 - **Part Two:** The Findings of the Surveys conducted into a range of potential diversification activities, including Countryside based Tourism and Recreation, along with Field Sports, and their contributions to Landscape and Wildlife Conservation;
 - **Part Three:** a short Executive Summary of Parts One and Two including pointers on the way forward.
- (iii) The Report is supported by a series of separate **Technical Appendices**, which include the Survey Questionnaires Used, together with presentation of the Survey Data in a series of spread-sheets. These Appendices will be published after the Part Three Report has been completed.
- (iv) Hard and electronic copies of the Report will be available from BFRS through the following contact point:

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The Research Methodology

Introduction

- (v) The credibility of the results of this research Study, as with all such primary research, is substantially dependent upon the methodology adopted. It is appropriate at the outset to present readers with an account of the methodology used in obtaining the results presented in this and subsequent reports.

Stakeholders

- (vi) The Study essentially involved two different types of stakeholders:
- **the owners, providers and managers of farmland and countryside resources**, both relating to the planning & management of farming activities and to the provision of facilities & access for the use of countryside resources for recreational and sporting purposes;
 - **the users of countryside resources**, for purposes additional to farming, i.e. rural tourism, farm-based recreation and countryside sports.

Survey Approach

- (vii) In order to obtain a good understanding of the ways in which these two groups of stakeholders relate to the farming and countryside resources within the Borders Region, the Study has involved undertaking a series of surveys.
- (viii) These surveys have been based upon randomly selected, representative samples of the particular stakeholders that are involved in the various components of the Study. The response rates to the sample surveys have been such as to provide a sound basis for obtaining aggregated estimates covering the whole of the Borders Region. (See Table 1).
- (ix) The function of these surveys varied according to whether or not they had been preceded by earlier studies. In the case of angling and fox hunting, studies had been undertaken respectively by Deloitte Touche, 1996 and the Produce Studies Group, 1998. The purpose therefore of undertaking further surveys as part of this Study has been to obtain greater insights into the socio-economic and environmental dimensions of these two countryside sports. This has involved determining whether or not the earlier results remained valid and, if not, the extent, nature and causes of any differences. In all other cases the surveys involved 'pioneering research'.

Survey Methods

- (x) The surveys have involved the use of a range of methods, selected according to the nature of the information sought. The methods have been as follows:
- **a series of structured face-to-face interviews and discussions** to obtain and record information about:
 - the resource use and management practices;
 - the motivations for, and attitudes to, potential changes (diversification opportunities);
 - the likely and possible future directions of change.
 - **a series of carefully designed postal questionnaires** for use in surveying:

- **the practices and inputs (labour, machinery and money) used in managing countryside resources;**
 - **the management activities and costs entailed in providing facilities, that enable the owners' and providers' countryside resources to be used for particular recreational and sporting purposes;**
 - **the characteristics and impacts of the people who participate in the countryside sports activities.**
- **a small number of telephone surveys** involving structured interviews with selected populations of particular stakeholder groups, involved either as the providers of goods and services or as participants.

The Main Surveys

- (xi) The main surveys fall into **four** principal groups:
- the present diversification practices and aspirations of farmers;
 - the activities of the countryside recreation and sports providers and the financial consequences of the activities;
 - the activities of the countryside recreation and sports participants and the expenditures that they incur;
 - the characteristics of the main trade and allied organisations involved in servicing the countryside sports providers and participants.
- (xii) Each of these is described in turn with respect to the particular groups of stakeholders covered by the surveys.
- (xiii) The Study Team's Statistical Adviser was involved in the design of all of the survey questionnaires, sample selection, analysis of the responses and aggregation.

Farmer Surveys

- (xiv) The survey populations were selected using five randomly located North-South transects and one East-West transect (the Tweed corridor).
- (xv) The survey populations were invited to attend discussion group meetings at strategic locations within the Borders Region. The meetings involved holding structured interviews based upon a comprehensive questionnaire, briefings on a postal questionnaire for subsequent completion, and the mapping of countryside features on the attendees' holdings.
- (xvi) The survey procedures that were followed are described in the Part One Report.

Provider Surveys

(xvii) The survey populations were identified and sampled with the help of the principal organisations involved in countryside-based tourism and in both overseeing each of the countryside sports and upholding the codes of conduct, namely:

- | | | |
|--------------------------|--------------------------------|--|
| <input type="checkbox"/> | Countryside/Farm-Based Tourism | <ul style="list-style-type: none">* Scottish Borders Tourist Board* Borders Farm Tourism Group,<li style="padding-left: 20px;">The Farm Holiday Bureau (UK)* SERAD (Rural Diversification Programme) |
| <input type="checkbox"/> | Angling | <ul style="list-style-type: none">* The Tweed Foundation* River Tweed Commissioners |
| <input type="checkbox"/> | Lowland Game Shooting | <ul style="list-style-type: none">* The Game Conservancy Ltd* The British Association for Shooting & Conservation (Scotland)* Game & Country Enterprises* Scottish Agricultural College |
| <input type="checkbox"/> | Grouse Shooting | <ul style="list-style-type: none">* The SLF and BFRS Trustees* The Lammermuir Owners Forum |
| <input type="checkbox"/> | Deer Stalking | <ul style="list-style-type: none">* Deer Commission for Scotland* The British Association for Shooting & Conservation (Scotland)* The British Deer Society* The Game Conservancy Ltd* The Forest Enterprise |
| <input type="checkbox"/> | Fox Hunting | <ul style="list-style-type: none">* The Secretaries of the 7 Hunts operating in the Scottish Borders |
| <input type="checkbox"/> | Falconry | <ul style="list-style-type: none">* The Scottish Hawking Club* The British Falconers Club (Scottish Group) |

Participant Surveys

(xviii) The same organisations listed above were involved in helping both to identify and to contact the sample survey populations.

Surveys of Trade and Service Businesses

- (xix) The main businesses, involved in servicing both the providers and participants of countryside sports, were identified through a combination of survey respondents and the organisations listed above, especially the BFRS.
- (xx) Samples of the main businesses involved in servicing each of the sports were identified. These were the firms, organisations and individuals most frequently cited by the survey respondents.

Chief Characteristics of the Surveys Conducted

- (xxi) The survey components of the Study, together with the response rates, are summarised in **Table 1**.
- (xxii) It will be observed that generally, with the exception of stalking participants' survey, high rates of response were obtained. These have provided a sound basis for deriving grossed-up estimates for the Borders Region as a whole.
- (xxiii) In the case of some of the surveys (lowland game shooting providers and deer stalking providers and participants) random sampling of the total populations was undertaken on a systematic basis. This enabled, for example, distinctions to be made:
 - between the angling providers in the Lower, Middle and Upper reaches of the River Tweed;
 - between three generic types of shooting: commercial kept, private kept and rough;
 - between British Deer Society and BASC members in the case of deer stalking;
 - between professional and recreational deer stalkers.

Verification & 'Ground-Truthing'

- (xxiv) Where possible verification was undertaken through the checking of questionnaire response inconsistencies, seeking the opinions of official organisations and local experts, as well as through comparisons with the results obtained from analogue studies. The latter applied in the case of both the angling survey (Deloitte Touche) and the fox hunting surveys (preliminary surveys by Produce Studies Group).
- (xxv) In the case of the mapping exercise, the information provided by the Discussion Group attendees was physically checked on the ground in the case of 17 of the individual farms. The latter were randomly selected, broadly in proportion to the numbers of responses obtained for each of the landscape types.

Aggregation Approach Adopted

(xxvi) Grossing-up of the survey results has been based on two sets of assumptions:

- the averages of the responses obtained also apply to the remainder of the total populations;
- the averages for the remainder of the total populations are half those recorded by the survey respondents.

(xxvii) This approach enabled a range of upper and lower estimates to be obtained for the total populations.

TABLE 1: STUDY OF FARM DIVERSIFICATION & COUNTRYSIDE MANAGEMENT: SUMMARY OF SURVEYS UNDERTAKEN

Surveys Undertaken	Survey Method Adopted	Size of Survey Population	Survey Responses Received	Survey Response Rate
		No.	No.	
1. <u>Farmers</u>				
1.1 Diversification Practices & Motives	Random Transect Selection & Structured Interviews	297	105	35%
1.2 Countryside Management Tasks & Costs	Postal Questionnaire	105	64	61%
1.3 Countryside Features	Mapping with farmer and with ref to IACS, CPS etc	105	97	92%
		(297)	(97)	(33%)
2. <u>Tourism, Recreation & Countryside Sports Providers</u>				
2.1 Tourism Providers	Postal Questionnaire	260 (90 Farm Based)	57 (16)	22% (18%)
2.2 Angling Providers	Postal Questionnaire	125	67	54%
2.3 Lowland Game Shooting Providers	Postal Questionnaire	135	57	42%

Surveys Undertaken	Survey Method Adopted	Size of Survey Population	Survey Responses Received	Survey Response Rate
		No.	No.	
2.4 Grouse Shooting Providers	Postal Questionnaire	26	15	58
2.5 Deer Stalking Providers	Postal Questionnaire	24	43	56%
2.6 Fox Hunting Providers	Postal Questionnaire	7 Hunts (100% of the total population)	7 Hunts	100%
<u>3. Countryside Recreation & Sports Participation</u>				
3.1 Lowland Game Shooting Participants	Postal Questionnaire	360	80	22%
3.2 Grouse Shooting Participants	Postal Questionnaire	200	57	29%
3.3 Deer Stalking Participants	Postal Questionnaire	279	25	9%
3.4 Fox Hunting Mounted Participants	Postal Questionnaire	391 Subscriber Households (100% of the total population)	207 Subscriber Households	53%
3.5 Fox Hunting Non-Mounted Participants	Telephone Interview	61 Foot/Car & Bike-Borne Followers	61 Foot/Car & Bike-Borne Followers	100%

Surveys Undertaken	Survey Method Adopted	Size of Survey Population	Survey Responses Received	Survey Response Rate
		No.	No.	
3.6 Falconer Participants	Postal Questionnaire	43	10	23%
<u>4. Main Trade & Service Organisations</u>				
4.1 Shooting Trades	Telephone Interview	26	Ongoing: 9 of 26 to-date; 17 to be completed	
4.2 Angling Trades	Telephone Interview	5	Ongoing: 1 of 5 to-date; 4 to be Completed	
4.3 Hunting Trades	Telephone Interview	57	54	94%

ACKNOWLEDGEMENTS

The consultants gratefully acknowledge the considerable help from many owner-occupiers, Estate owners and tenant farmers in assisting the comprehensive surveys undertaken in the course of this Study. The time and information that they have given, on behalf of themselves and both the farming and countryside management industries, are much appreciated.

In addition thanks are due to the Trustees and members of BFRS, together with the Study's sponsors, for their support and assistance. In this regard the inputs provided by Mr Bruce Cowe, the Chairman, and the BFRS Co-ordinator, Denise Walton deserve special acknowledgement.

Specific mention must be made of the contribution made by Scottish Borders Council in supplying copies of the base-line maps used for survey purposes.

For the components of the Study covered by this Report, the consultants' team comprised:

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GLOSSARY

ASH	Anderson, Semens & Houston
ATV	All Terrain Vehicle
AWU	Annual Work Unit
BSE	Bovine Spongiform Encephalopathy
BFRS	Borders Foundation for Rural Sustainability
CAP	Common Agricultural Policy
CMI	Countryside Management Industry
CPS	Countryside Premium Scheme
FAS	Farm Accounts Scheme
GDP	Gross Domestic Product
IACS	Integrated Administration & Control System
LANTRA	National Agricultural Training Organisation (formerly ATB)
LFA	Less Favoured Area
MLURI	Macaulay Land Use Research Institute
SAC	Scottish Agricultural Colleges
SERAD	Scottish Executive Rural Affairs Department
SWRC	Scott Wilson Resource Consultants
TIFF	Total Income From Farming

1. INTRODUCTION

The Objectives of the Study

- 1.1** This Study was commissioned by BFRS as an audit of the Countryside Management Industry in the Scottish Borders Region. Its specific objectives were to identify the nature and magnitudes of countryside management activities, in addition to the production of food and commercial forestry, throughout the Region.
- 1.2** Thus specifically the Study has involved the collection of information variously about the economic, social and environmental impacts associated with both past and present diversified uses of countryside resources. The latter include land, water, vegetation and wildlife, cultural heritage features and the aesthetic qualities of the Region.
- 1.3** The Study has also sought to identify both the interest in, and potential for, sustainable rural development through further on-farm diversification. The options open to many farmers wishing to remain on their farms have been perceived to be limited, particularly in the case of tenanted holdings. Against this background the Study has focused on identifying alternative land-based enterprises that offer the prospects of income and employment generation, together with opportunities for positive management of the Borders countryside. The latter is well recognised as an asset which serves many diverse interests and industries. A good understanding of both these interests and industries is needed if sound stewardship is to be ensured. This applies particularly in the case of the Countryside Management Industry and its many resources.

The Study in Context

General Context

- 1.4** It is widely acknowledged that, increasingly during both the late '90s and into the new millennium, the farming economy has been under duress. As a result, there has been growing recognition of the need to investigate the extent to which diversification is currently contributing both to the local economy and to the conservation of the Border Region's natural and cultural resources. For the same reasons, the Study has sought to identify the attitudes and aspirations respectively of owner-occupiers and tenant farmers, concerning the prospects for future as well as existing diversification. In short, the Study was conceived by BFRS in anticipation of the need for major changes in the foreseeable future, involving both farm businesses and rural communities. The Study was designed in full consultation with a wide range of both statutory organisations and stakeholders, involved in addressing issues concerning all aspects of the rural economy and the countryside.

Borders Region, an Overview of Agricultural Land Use

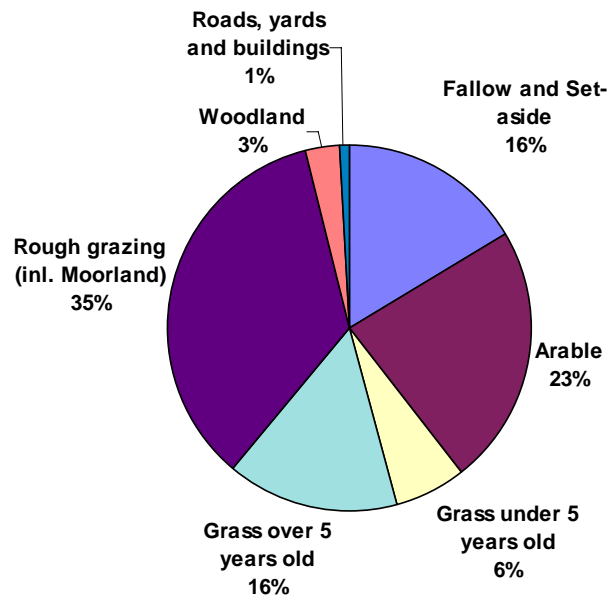
1.5 It is first important to appreciate the role of agriculture in the Scottish Borders, not only in terms of land use and land use trends, but also in an economic context.

Land Quality and Use

1.6 The Borders Region covers some 478,000 hectares in the South of Scotland of which 378,732 hectares are in agricultural or forestry use. This is equivalent to 6.6% of the total agricultural land area of Scotland. A breakdown of the use of this land is shown in **Box 1.1**.

1.7 The land area is classified under a series of categories by the Macaulay Land Use Research Institute (MLURI) on a scale of 1 to 7, with 1 being the best agricultural land, and 7 the poorest. **Box 1.2** confirms that almost 15% of Scotland's class 2 (good arable) land is located in the Borders, despite the fact that the Scottish Borders account for 6.6% of the agricultural land area of Scotland. The Borders Region has a higher proportion of land classes 1 to 5 than Scotland as a whole, and a significantly lower proportion of built-up areas than occurs nationally.

Box 1.1: Agricultural Land Use in the Borders



Source: SERAD, 2000

Box 1.2: Borders Land Class

Land Class	Borders		Scotland		Borders
	(Km ²)	(%)	(Km ²)	(%)	(% of Scotland)
1	3	0.1%	41	0.1%	7.3%
2	158	3.3%	1,059	1.4%	14.9%
3	953	20.2%	10,488	13.7%	9.1%
4	804	17.0%	8,288	10.8%	9.7%
5	1,380	29.2%	13,276	17.3%	10.4%
6	1,372	29.0%	37,454	48.8%	3.7%
7	6	0.1%	2,498	3.3%	0.2%
Built-Up	33	0.7%	1,913	2.5%	1.7%
Water	19	0.4%	1,675	2.2%	1.1%
Total	4,728	100.0%	76,692	100.0%	6.2%

Source: SERAD, 1998

- 1.8** The presence of this better quality land allows a higher proportion of arable crops to be grown in the Scottish Borders than in Scotland as a whole.
- 1.9** **Box 1.3** shows that 22.6% of the total area is under crop, whilst Scotland as a whole has only 13.0% under crop. The level of total crop has remained relatively static over the period 1993-1999 in both the Borders and Scotland as a whole. However, the total area of grassland has declined. Barley has seen the main increase in area, but the area of barley sown was heavily influenced in 1999 by poor autumn sowing conditions and high level of winter crop failures which demanded re-sowing with spring crops, most notably spring barley.
- 1.10** The total land area available for agriculture has declined from 1993 to 1999 both in the Borders (-2.3%) and in Scotland as a whole (-3.3%).
- 1.11** Rough Grazing accounts for 49.9% of the Borders agricultural area. The corresponding figure for Scotland as whole is significantly higher: 64.2% of the Scottish agricultural area is classified as rough grazing. The total area under grass and rough grazing has declined in the Borders by some 3.5% from 1993 to 1999.

Box 1.3: Cropping in the Borders

	Borders		Scotland		Borders		Scotland	
	1993	1999	1993	1999	1993	1999	1993	1999
Crops	Hectares	Hectares	Hectares	Hectares	%	%	%	%
Wheat	20,936	18,646	109,134	84,476				
Barley	29,150	34,085	276,104	338,989				
Other Cereals	3,094	3,240	25,318	24,286				
Total Cereals	53,180	55,971	410,556	447,751	14.4	15.6	8.0	11.0
Oilseeds	7,194	7,495	61,824	51,175				
Set-aside	11,586	8,685	91,153	70,725				
Potatoes	1,791	2,272	26,599	29,657				
Other Crops	7,122	6,587	55,173	45,018				
Total Crops	80,873	81,010	644,305	644,326	21.9	22.6	12.6	13.0
Grass for Mowing	25,386	24,249	330,526	310,386				
Grass for Grazing	78,535	81,600	758,919	816,992				
Rough Grazing	184,162	171,993	3,377,579	3,171,494				
Total Grassland	288,083	277,842	4,467,024	4,298,872	78.1	77.4	87.4	87.0
Total Area	368,956	358,852	5,111,329	4,943,198	100	100	100	100

Source: SOAEFD, 1994 & 2000

- 1.12 Nevertheless, livestock production remains a major agricultural activity in the Borders, with significant emphasis on beef and sheep production.

Livestock Numbers

- 1.13 The importance of livestock to agriculture in the Borders is evident from **Box 1.4**. The Borders Region contains 7% of Scotland's cattle and 16% of its Sheep.

Box 1.4: Livestock in the Borders

Livestock	Borders		Scotland		Borders	Scotland
	1993	1999	1993	1999	1993 - 1998	1993 - 1998
	Number	Number	Number	Number	% Change	% Change
Dairy Cattle	7,060	6,538	340,360	324,351	-7.4	-4.7
Beef Cattle	88,125	94,458	1,058,214	1,080,932	+7.2	+2.1
Other Cattle	52,523	50,600	663,076	603,765	-3.7	-8.9
Total Cattle	147,708	151,596	2,061,650	2,009,048	+2.6	-2.6
Breeding Ewes	557,548	551,689	3,853,270	3,729,894	-10.5	-3.2
Total Sheep	1,473,572	1,482,145	9,585,772	9,393,680	+5.8	-2.0
Total Pigs	21,402	19,395	533,754	545,309	-9.4	+2.2
Total Poultry	1,112,653	499,242	14,999,101	10,884,051	-55.1	-27.4

Source: SOAEFD, 1994 & 2000

- 1.14** Between 1993 and 1999 cattle numbers in the Borders have increased. (+2.6%), but breeding ewe numbers have declined. There has been a higher proportionate increase in beef cattle numbers in the Borders than in Scotland as a whole.
- 1.15** The sheep flock in Borders Region represents some 15% of the Scottish total sheep number, while 9% of Scotland's beef cows are kept in the Borders. Dairy cattle numbers have shown a decrease with Borders dairy cattle now only accounting for 2% of the Scottish dairy herd. The region has also noted experienced a decline in pig numbers, contrary to the national trend.
- 1.16** The main livestock enterprises in the Scottish Borders are based on beef cows and breeding ewes.

Farm Types

- 1.17** Farming businesses can be grouped into types that best reflect their enterprise mix and type of production system. SERAD classify businesses according to the relative importance of the various crop and livestock enterprises on each farm, assessed in terms of standard gross margin (an economic measure of output less variable costs). **Box 1.5** shows the distribution of total holdings in the Borders and in Scotland across 9 different farm types.

Box 1.5: Farm Types						
	Borders		Scotland		Borders	Scotland
	1993	1999	1993	1999	1999	1999
Farm Types	Number	Number	Number	Number	%	%
Type 1 Cereals	276	313	3,250	3,817	17.3	11.5
Type 2 General cropping	124	132	2,264	2,116	7.3	6.4
Type 3 Horticulture	16	13	555	455	0.7	1.4
Type 4 Pigs & Poultry	22	20	485	518	1.1	1.6
Type 5 Dairy	17	21	1,885	1,835	1.2	5.5
Type 6 LFA Cattle & Sheep	676	645	13,422	12,290	35.6	37.0
Type 7 Lowground Cattle & Sheep	106	90	1,431	1,203	5.0	3.6
Type 8 Mixed	175	149	2,854	2,273	8.2	6.9
Type 9 Other	328	428	5,946	8,861	23.6	26.1
TOTAL	1,740	1,811	32,092	33,168	100	100

Source: SOAEFD, 1994 & 2000

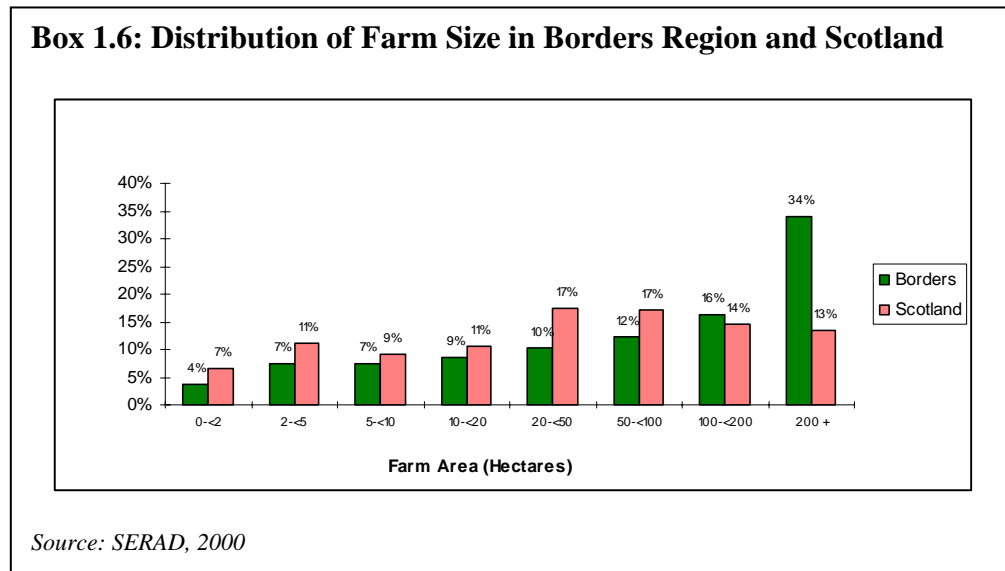
1.18 In relation to farm types, the Borders Region differs from Scotland as a whole. The most notable differences in 1999 were that:

- 17.3% of holdings were classified as cereal farms compared with a Scottish proportion of 11.5%;
- Cattle and Sheep farms (both LFA and Lowground) account for 40.6% of the holdings, the same as the Scottish figure.

There is therefore, a greater emphasis on cereal production in the Borders than in Scotland generally, but cattle and sheep production enterprises constitute nearly half of the businesses in the Borders.

Farm Size and Tenure

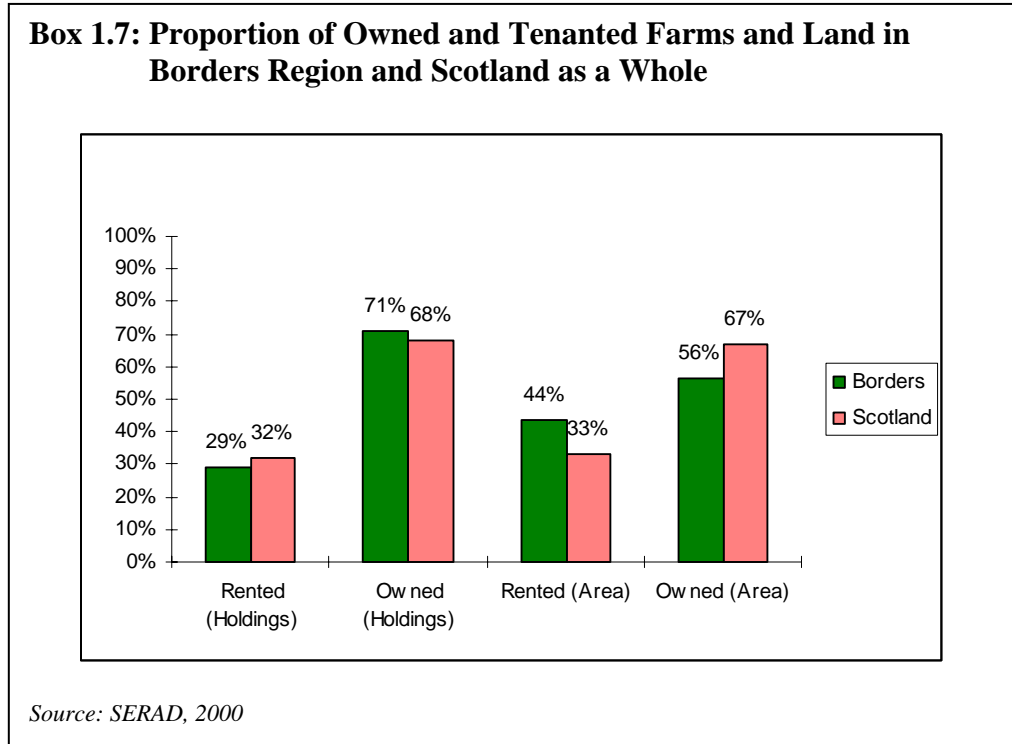
1.19 The scale of farms in the Borders differs from the Scottish average, as indicated by **Box 1.6**.



1.20 At an average farm size of 196 Ha, Borders Region farms are larger than the Scottish average of 145 Ha, by some 51 Ha. As a result the Borders has a much greater proportion of farms in excess of 200 Ha than Scotland in general. 14% of Scotland’s farms over 200 Ha are located in the Borders.

1.21 In 1999 a greater proportion of farms were owner occupied in the Borders (71%) than in Scotland as a whole (66%). When examined on an area basis, however, only 56% of the area was owned by the occupier, with the remaining 44% being occupied under a tenancy agreement. As shown in **Box 1.7**, this represents a greater proportion of the land area tenanted in the Borders than in Scotland in general, where 38% of the land area is occupied under a form of tenancy.

1.22 This is because there are significant numbers of large scale tenanted units in the Borders. Estates with large tenanted farms are a significant feature of Borders' agriculture.



Rural Employment

1.23 **Box 1.8** shows that, of the total Borders' agricultural workforce of 4,129, some 2,181 constitute the employed labour force. The latter represents 6.9% of the Scottish total agricultural workforce.

1.24 Direct agricultural employment comprises farmers and their families as well as paid employees of farm businesses. Over the last 6 years there has been a trend towards increasing the use of part-time and casual labour on farms, with a consequent reduction in the number of full-time jobs on farms.

Box 1.8: Agricultural Employment						
Agri-Employment	Borders		Scotland		Borders	Scotland
	1993	1999	1993	1999	1993-1999	1993-1999
	Number	Number	Number	Number	% Change	% Change
Occupiers						
Full-time	800	742	12,365	11,847	-0.7	-4.2
Part-time	464	522	9,397	10,641	+12.5	+13.2
Spouses						
Full-time	98	106	2,535	2,225	-8.2	+12.2
Part-time	498	578	8,182	9,120	+16.1	+11.5
Regular Full-time						
Male	1,613	1,386*	16,949	14,960	-14.1	-11.7
Female	97	83*	1,226	1,263	-14.4	+3.0
Regular Part-time						
Male	248	320*	3,317	3,928	+29.0	+18.4
Female	167	177*	2,038	2,245	+6.0	+10.2
Casual						
Male	147	169*	2,100	2,598	+15.0	+23.7
Female	31	46*	669	615	+48.4	-8.1
TOTAL	4,163	4,129	58,778	59,442	-0.1	+1.1
Full-time	2,608	2,317	33,075	30,295	-11.2	-8.4
Part-time	1,555	1,812	25,703	29,147	+16.5	+13.4

Source: SOAEFD, 1994 & 2000

1.25 **Box 1.8** also shows that total full-time personnel has fallen by 11.1% in the Borders from 1993 to 1999, whilst the Scottish total fell by 8.4%. There has been a 16.5% rise in the number of part-time personnel in the Borders and 13.4% in Scotland generally. It is likely, however, that there is a net reduction in overall labour input to businesses over this period. This fall in labour input may be viewed as a constraint to present and future on-farm diversification opportunities.

1.26 When the total numbers of personnel, featured in **Box 1.8**, are divided by the total number of holdings, Borders' businesses appear to have a greater level of labour used than the average across Scotland. However, these figures represent the numbers of staff involved in the business and include part-time, casual and seasonal labour. Therefore the figures, presented in **Box 1.9**, do not necessarily reflect a higher labour input.

Box 1.9: Farm Staffing

Item	<i>Borders</i>		<i>Scotland</i>	
	1993	1999	1993	1999
Personnel per holding	2.39	2.28	1.83	1.66

Source: SERAD, 1994 and 2000

- 1.27** The increased number of employees per farm is believed to be a reflection of the large farm size described above.

Borders Region, an Overview of the Agricultural Economy

Economic Output

- 1.28** Borders Region Gross Domestic Product per head in 1996 was £9,422. As **Box 1.10** shows this was 88.0% of the UK average. In Scotland this was the third lowest GDP performance, with only Fife and the Highland & Islands region fairing worse.

Box 1.10: Borders Contribution to Scottish GDP

Borders Region and Scotland GDP 1993 - 1996			
	Year	Borders	Scotland
Gross Domestic Product (£m)	1993	829	4,6840
Gross Domestic Product (£/head)	1993	7,870	9,148
Gross Domestic Product (£/head as % of UK)	1993	84.8	98.6
Gross Domestic Product (£m)	1996	1,000	54,430
Gross Domestic Product (£/head)	1996	9,422	10,614
Gross Domestic Product (£/head as % of UK)	1996	88	99

Source: Scottish Economic Bulletin No. 58, March 1999

- 1.29** The importance of agriculture can be assessed against this backdrop of low regional GDP. SERAD suggest that the Borders agricultural sector's contribution to Regional GDP in 1996 was 12%, £120 million. In percentage terms, only Orkney has a higher contribution to regional GDP. Information on agriculture's indirect contribution to the economy of rural Scotland is less easily measured, but Scottish Input/Output tables suggest that for every one worker employed in agriculture, a further worker is employed elsewhere in Scotland. This is largely associated with up-stream

jobs – manufacturers of farm machinery, feed merchants, etc but there are also strong links with the food and drink processing industries. In many rural areas, as in the Borders Region, the combined economic contribution of these sectors can be significant – especially where, for example, further value is added to basic agricultural commodities.

1.30 In assessing the figures above it must be recognised that 1996 was a year of high output and income for agriculture. Since then there have been significant pressures on the agricultural industry. These include:

- an exchange rate that is high by historical standards;
- weak world commodity markets; and
- the effects of the BSE crisis.

1.31 The main factor underlying the consequent steep fall in incomes has been the rise in the value of sterling, particularly in relation to the Euro. The 20% gain in the value of sterling against the Euro between 1995 and 1999 has reduced commodity prices, depressed exports and increased pressure from imports. The exchange rate has also had a direct impact on the value of CAP subsidies. BSE has resulted in the loss of export markets and increased costs to the producer and processor. The general downturn in the world economy has depressed both demand and prices in world commodity markets.

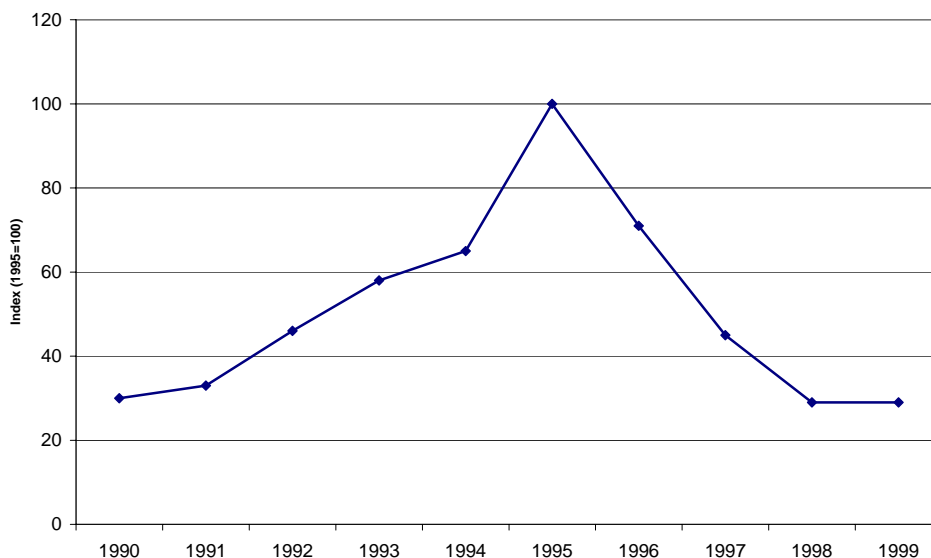
Recent Trends

1.32 Almost all sectors of the industry have faced a period of falling incomes since the peak of the mid-1990s. They have now dropped to the levels seen in the late 1980s. As in any industry, the financial performance of individual businesses is variable with some doing better than others. However, the overall trend has been one of falling prices as a result of various factors, including a weak Euro and low world prices due to oversupply in commodity markets and economic difficulties in some countries.

1.33 **Boxes 1.11** and **1.12** below show the trends in profit levels (Total Income From Farming) over the last 27 years and the effect of recent events on the industry's reliance on subsidies.

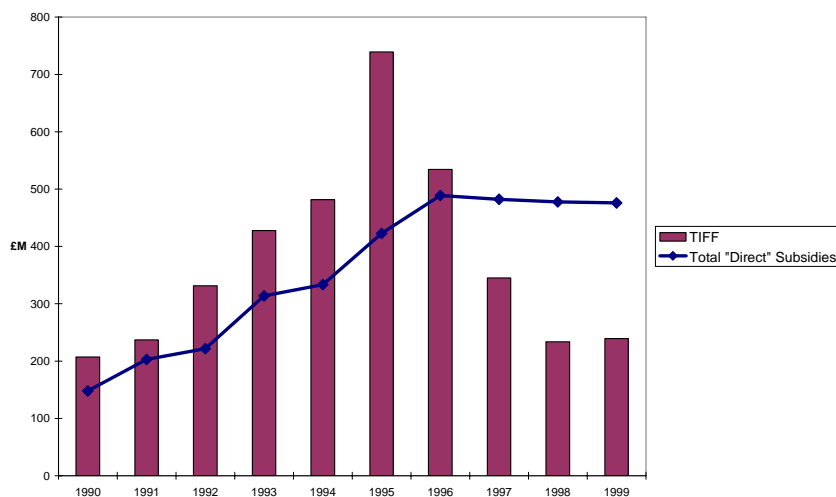
1.34 The financial and profit position varies between type and size of farm. There is evidence already emerging of businesses adjusting their product mix to reflect this and many are seeking increased economies of scale. This trend will no doubt continue.

Box 1.11: Index of TIFF per AWU



Source: SERAD, 2000

Box 1.12: Total Income from Farming and Direct Subsidies



Source: SERAD, 2000

1.35 Scottish Agricultural Gross Output at basic prices (equivalent to GDP) was £2,323 million in 1996. The 1996, £120 million agricultural contribution to the Borders GDP as a percentage of the Scottish Gross Output was therefore 5.1%. In 1999 the Scottish Gross Output was £1,916 million. Making the broad assumption that the percentage has remained the same between 1996 and 1999, it can be calculated that Agricultural Output in the Borders will

have fallen to approximately £97.7 million. As output from agricultural sources declines, farmers are looking towards other revenue generating activities to make up the shortfall. This is explained later in this chapter. Additionally many farmers are looking to reduce expenditure to ensure that their profits are not eroded. As such, expenditure for undertaking essential countryside management tasks is likely to be reduced, at least on some farms.

Farm incomes by Farm Type

- 1.36** Financial data for different farm types throughout Scotland is collated by SERAD under the Farm Accounts Scheme. Farms are classified according to the relative importance of the various crops and livestock enterprises and individual farm results are weighted according to the number of farms of that type, size and tenure in the population as a whole. The results presented in **Box 1.13** reflect the industry as a whole.
- 1.37** The vagaries of farming and the fluctuations in the resultant net farm income are clearly illustrated in **Box 1.14**. The downturn in Net Farm Income after 1995 is clearly evident, likewise the high dependence upon subsidies.
- 1.38** As illustrated in previous sections, the Borders has a predominance of cropping and livestock farms, all of which have seen dramatic reductions in Net Farm Income. Due to the nature of the sample, it is not possible to extrapolate any of the Net Farm Income data to the Borders in isolation and, through this process, quantify the reduction in income to agriculture in the Borders.
- 1.39** Nevertheless, it is obvious that the fall in farm incomes will have had a dramatic effect on the stability of farming in the Borders.

Challenges Ahead

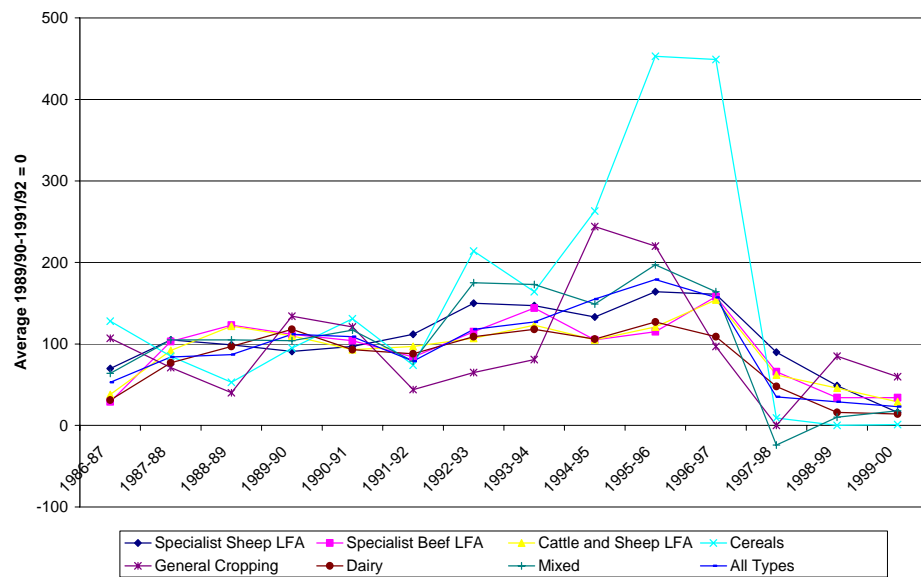
- 1.40** Over the next few years, there are several issues that are expected to present challenges to the industry, namely:
- **Agenda 2000** – the changes agreed to the Common Agricultural Policy in 1999 will come into effect over the next few years. They will provide challenges as well as some opportunities for the Borders as indicated below. There will be a reduction in the prices at which cereal, beef and milk product intervention takes place, which will result in commodity prices decreasing to nearer world market prices. These will be compensated by higher headage and area based compensation payments. However, these are set in Euro and converted to Sterling at specific times of the year. The level of subsidy is therefore greatly affected by the relative strength of Sterling against the Euro at these times. As described previously, Borders' key enterprises are crops, beef and sheep. While beef producers can expect a positive impact from Agenda 2000, it is anticipated that the cropping and sheep sectors will see a reduction in support.

Box 1.13: Net Farm Income per Farm by Farm Type: Scotland

Type of Farm	Number of Farms Scotland	Net Farm Income (all sizes) £		Subsidies as % of Output 1998/99
		1996/97	1998/99	
Specialist Sheep (LFA)	1,635	12,296	4,087	54
Specialist Beef (LFA)	3,214	17,343	3,978	43
Cattle and Sheep (LFA)	2,560	18,689	4,742	44
Cereals	2,662	25,296	224	31
General Cropping	1,963	18,172	18,450	17
Dairy	1,779	30,142	4,413	5
Mixed	1,992	17,860	1,344	31
All Farm Types	16,297	19,482	4,597	26

Source: SERAD, 2000

Box 1.14: Index of Net Farm Income per Farm by Farm Type: Scotland



Agenda 2000 also brought the introduction of the Rural Development Regulation. This allows Member States to introduce aid for, amongst other things, diversification and countryside management. This regulation will present farmers with more opportunity to develop diversified activities and manage the countryside.

- ❑ **World prices** – in recent years, world commodity markets have been increasingly volatile, but it seems likely that the long-term downward pressure on prices will continue.
- ❑ **Enlargement** – as the EU enlarges, there will be more pressure on the EU budget and possibly less money to distribute. The CAP is the EU's single largest outlay, and so there will be pressures to reduce current support levels. There is also the prospect that many of the countries joining the EU will want to sell their agricultural produce within it, putting further pressure on domestic prices.
- ❑ **World Trade Organisation** – there is pressure in these negotiations for the EU to reduce its export subsidies, increase access for imports and reduce direct production-related support. Final decisions will not be made for some time, but further changes are likely.
- ❑ **Exchange rate movements** – the sterling to Euro exchange rate has been an important determinant of the industry's profitability over the last decade. It is difficult to know what will happen to this in the coming years, but there is undoubtedly a need for the farming industry to do what it can to make its fortunes less susceptible to exchange rates.
- ❑ **Other factors** – Changes in the retail sector look set to result in a continuation of the squeeze on producers' margins and, possibly, a narrowing of the supply base from which products are sourced. The knock-on effects of the BSE crisis, together with increasing consumer concern over the safety of food, have led to additional production and processing costs. Borders' farmers and rural landowners act as direct caretakers for 378,732 Ha, of farmland (crops, grassland, moorland etc), farm woodland and forestry). This represents 78% of the total area of Borders Region excluding water and built-up areas. As such Borders' farmers have an important part to play in new initiatives designed to improve and protect the environment and in meeting the requirements of other EC legislation to protect the environment.

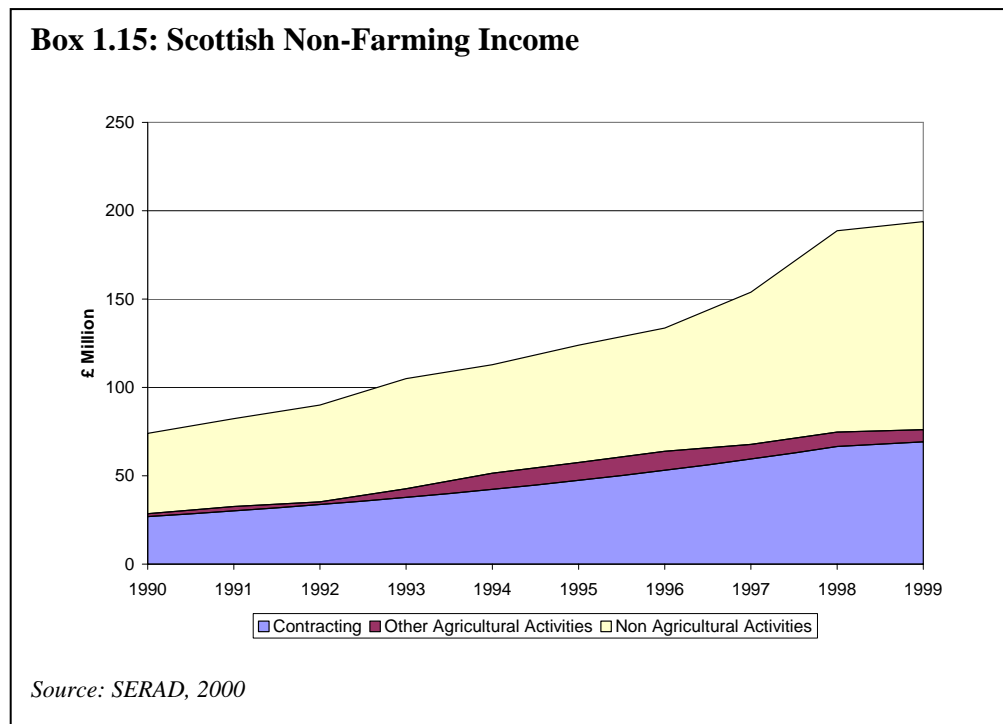
Importance of Non Farm Income

- 1.41** Some farmers and members of farm households have always had occupations or income sources other than farming. These external income sources are becoming increasingly important to maintain livelihoods as the income from agricultural activities falls. SERAD have recently reported on the importance of these sources of income. Their findings are summarised in the sections that follow.

1.42 SERAD's 1998/99 results from the Farm Accounts Survey show that 77% of farmers and spouses had non-farming sources of income. This includes income from diversification, jobs off the farm and unearned income sources. This compares with just over 60% in 1990/91 (the first year in which such data was collected through the FAS).

Levels and sources of non-farming income

1.43 For all farms, the total non-farming income of the farmer and spouse, both on and off the farm, averaged around £7,500 in 1998/99. Just over half of this was earned from employment and self-employment, with around a further 40% coming from investments, pensions and social security payments. The remainder was from on-farm activities, such as small-scale bed and breakfast businesses that use farm resources. **Box 1.15** shows that on a Scottish scale, non-farming income increased from £74 million to £193.86 million in the last 10 years. This now represents 10% of the total Scottish Agricultural Output compared with 10 years ago to only 4%.



1.44 Cereal farms (the most prevalent farm type in the Borders) tend to have the highest non-farming income, with dairy farms the least. Large farms do have higher on-farm non-farming income, presumably linked to the greater diversification opportunities which exist on these farms.

The range of non-farming income levels

- 1.45** The average levels of non-farming income given above mask considerable variation between farms. Twenty-three percent of all farms have no income other than from farming, while 22% have non-farming income of £10,000 or more.
- 1.46** There was also considerable variation in the types of sources of non-farming income farmers and spouses have, with one-third having some income from other employment, two-fifths some income from investments, and a quarter receiving social payments (this includes child benefit).

Conclusion

- 1.47** All the evidence summarised in the previous sections highlights the fact that not only Farm incomes in Scotland and the Borders have reduced in recent years, but also suggests that this squeeze on farm incomes will continue. Farmers are reacting to the situation by re-structuring their businesses through the enterprise mix and the scale of their operations. Evidence also suggests that there has been an increase in income from non-agricultural activities. However, for the most part farm businesses are still largely dependent on agriculture for income. SERAD have identified that those with other activities and sources of income tend to be younger, better qualified, have arable rather than livestock farms, and are most likely to be employed off the farm or have income from investments.
- 1.48** If profits are to be maintained and the viability of businesses is to be guaranteed, Borders' farmers will need not only to address the issues affecting their agricultural enterprise, but also look at increasing the proportion of their income from non-farming activities. Opportunities for diversification and management of the countryside will be integral to the development of non-farming activities.

2. GENERAL SURVEY APPROACH AND OUTLINE METHODOLOGY

The Transect Design

2.1 Initially in designing the methodology for this Study, it was considered that the project's success would be enhanced by the full participation of, and interaction with, local stakeholders responsible for farming, landowning, countryside and tourist management activities. The collection of accurate and reliable information, leading both to the generation of jobs and revenue and to improved countryside management depends significantly upon winning and sustaining the participation of these key interested parties. The design of the methodology for the diversification component of the Study was greatly influenced by these factors.

2.2 In order to achieve the desired participation of local stakeholders from an early stage, the novel approach of inviting farmers and their wives/partners to attend and participate in interactive meetings was adopted. This approach both enabled the broad objectives of the Study to be explained to the participants and provided a method for obtaining information which:

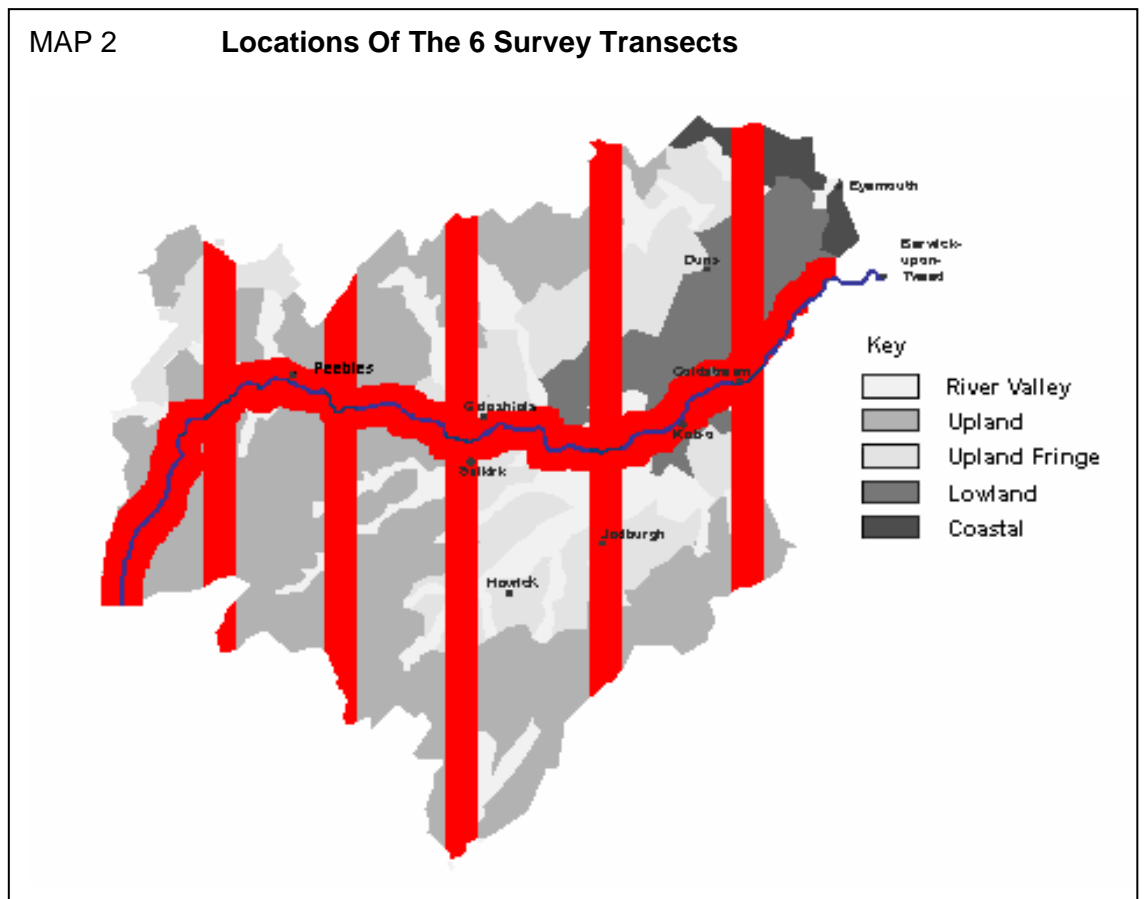
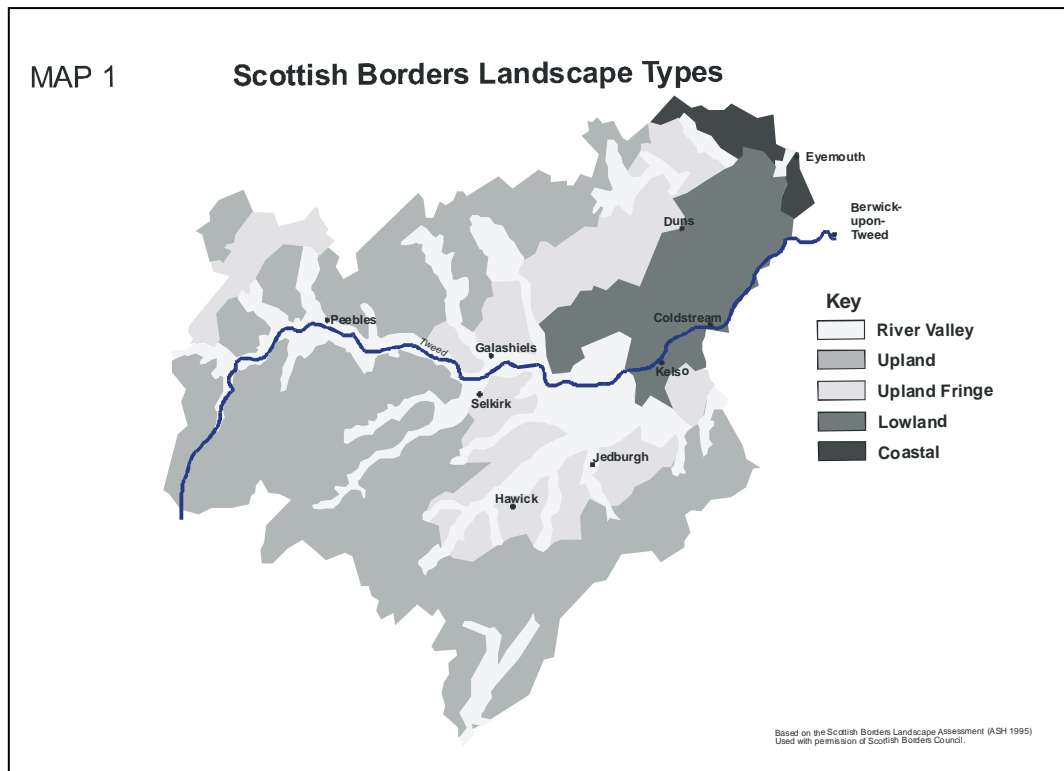
- kept the cost of gathering the information within a reasonable and agreed level;
- secured participation of the stakeholders;
- launched and explained the important and somewhat demanding questionnaires, in the interests of improving both response rates and the accuracy and quality of the data gathered.
- Provided the opportunity for informal discussions between invitees and project personnel about the project and diversification. This gave useful feedback and further insight into the thinking on diversification.

2.3 In total five, 5 kilometre wide transects were randomly selected for survey purposes, covering all of the Region's five Landscape Types, as identified by "the Scottish Borders Landscape Assessment " (ASH, 1995), i.e. River Valley, Upland, Upland Fringe, Lowland and Coastal. The distribution of these Landscape Types is shown in **Map 1**. These transects were selected on a North/South axis. The starting ordnance grid line for these five transects was selected at random to ensure unbiased coverage of the area. The following five transects were identified using this approach:

- NT 15-20
- NT 30-35
- NT 45-50
- NT 65-70
- NT 80-85

In addition, one 5 kilometre wide East/West transect was identified using the river Tweed as its mid-point. This was selected to ensure adequate coverage of the important Tweed corridor and distinctive river valley landscape type.

2.4 **Map 2** shows the approximate locations of the six transects.



- 2.5** Utilising the knowledge of the local SAC advisers, a complete list of farms within each of the transects was identified. Invitations to a series of transect meetings were despatched to all of the holdings lying within the North/South transects. A holding was determined to lie within the transect if its steading was within the five kilometre band. Due to the disproportionate number of farms with steadings lying within the riverine E/W transect, statistical methods were employed to obtain a sample from the holding list. This analysis highlighted that every third holding should be selected from the list. A random number was generated to allow selection of the first holding and each third holding was selected thereafter.
- 2.6** This methodology yielded a total of 297 invitations, 16.4% of the main farm holdings in the Borders. The area covered by the transects was approximately 30% of the Borders Region.
- 2.7** It was anticipated that this approach would yield one-third of those invited, i.e. a target figure of 100 participants (over 5% of the Borders main farm holdings).

The Questionnaire Design

- 2.8** Two questionnaires (1A and 1B) were specially designed for the Study. Copies are provided in Annexes 1 and 2.
- 2.9** Questionnaire 1A was used as a checklist to obtain information verbally from those attending the meeting. The questions were posed by a member of the survey team, who then recorded the respondents' answers on the questionnaire.
- 2.10** This questionnaire contained three broad sections, designed to elicit information about:
- (1) the 'vital statistics' of each holding;
 - (2) the non-farming (diversification) activities undertaken, both on and off the farm, including:
 - the countryside farm-based recreation and sports activities either already undertaken on the farm or which might take place in future;
 - the frequencies and main seasons of the activities;
 - the levying of charges for the activities (both in the past and in the future);
 - the motives for diversification;
 - the involvement of family and friends in managing/operating the activities;

- the nature of any training undertaken specifically connected with the provision and management of the activities;
 - (3) the type of, and motivations for, the main countryside/recreation management tasks undertaken on the holding with respect to its chief habitats, cultural and landscape features.
- 2.11** The check-list of questions was used in such a way as to encourage ‘attendees’ to explain not only their diversification preferences but the associated reasons. Thus the meetings included time for discussion as well as for data collection.
- 2.12** The second questionnaire (1B) was designed for the subsequent provision of information about the resources (labour, machinery and money) used by the survey respondents to manage wildlife habitat and countryside features on their holdings. The farmers were also asked about the extent of any involvement in undertaking these same activities for other farmers/holdings on a commercial basis.
- 2.13** The content of the questions was explained by the interviewers during the meeting. Those attending were then asked to complete the questionnaires in the quiet of their homes/offices and to return them in the stamped addressed envelopes provided.
- 2.14** Mapping information was also collected from the ‘attendees’. Information included landscape and habitat features and the boundary of the farm. The features were considered to be important in the context of discussions concerning the potential for on-farm diversification.

The Management of the Transect Discussion Groups

Procuring the Interviewees

- 2.15** Farmers and landowners were invited to attend the transect/discussion group meetings by letter, which explained in broad terms the objective of the Study, the format of the evening and the information that invitees were asked to bring to the meetings. The invitation was co-signed by the Chairman of the Borders Foundation for Rural Sustainability, (Bruce Cowe), the Chairman of the NFUS Borders and Lothian (Eric Forster) and the Regional Manager of the Scottish Landowners Federation (Bob Kay). This was to demonstrate support for, and participation by, recognised bodies in the project. A copy of the letter is presented in Annex 3.
- 2.16** Meetings were organised by the BFRS Co-ordinator, Denise Walton, and were held predominantly in the evenings at recognised venues conveniently located throughout the whole of the Borders. Refreshments were provided by way of a “thank you” to the participants. The number of meetings held was determined by the maximum number of participants with whom discussions could be held within a reasonable time period (45-60 minutes) during the evening. For planning purposes, a maximum attendance rate of

40% was assumed. Practically, 30 participants could be successfully handled at any one meeting, resulting in a maximum number of 70 invitees to any one meeting.

2.17 In all, seven meetings were arranged and held as follows:

1. Yarrow, 29 July 1999
2. Peebles, 5 August 1999
3. Duns, August 11 1999
4. Kelso, October 26 1999
5. Coldstream, October 27 1999
6. Peebles, October 28 1999
7. Melrose, November 4 1999

2.18 This approach yielded 65 responses, which was significantly below the target figure of 100.

2.19 To supplement the number of responses from this approach, further pre-arranged discussion groups were held with invited participants. These were selected at random (using a randomised list of the non-participants at that time) and invited to attend a small group meeting at a pre-arranged venue and time. Participants were invited from the randomised list until the target of 100 participants in total was exceeded.

2.20 In total, comprehensive information was obtained about 105 holdings (5.8% of the total population of Borders Region Main Farm Holdings).

Management of the Discussion Groups

2.21 The Discussion Group attendees were invited to participate in two main exercises:

- first, to respond to the questions listed for discussion in Questionnaire 1A (which was used solely by the survey team members and which, because of its length, was never given to the attendees) and then to be briefed on the content of Questionnaire 1B. At the end of this particular exercise attendees were invited to express their views on the scope for diversification in general;
- secondly, to provide physical information about the wildlife habitats, landscape features and cultural artefacts of the holding. This was plotted by experienced landscape surveyors onto 1:10,000 scale maps provided by Scottish Borders Council.

2.22 Although the response rates to this invitation, in terms of acceptances and attendances, were disappointing, it must be emphasised that the quality of information imparted at these meetings was high. This in part reflected the fact that invitees were primed to bring copies of their CPS and IACS forms to the meeting.

3. THE MAIN FINDINGS

Diversification Activities: Past, Present and Potential (Questionnaire 1A)

Profile of Respondents

- 3.1 The information-gathering exercise, which centred around the transect discussion groups, yielded 105 responses (5.8% of Borders Main Farm Holdings) to the Countryside Recreation and Management Activities Questionnaire.
- 3.2 In all of the Boxes that follow, the Landscapes are described by Type Number (as defined by ASH, 1995), namely:

Type 1	River Valley
Type 2	Upland
Type 3	Upland Fringe
Type 4	Lowland
Type 5	Coastal

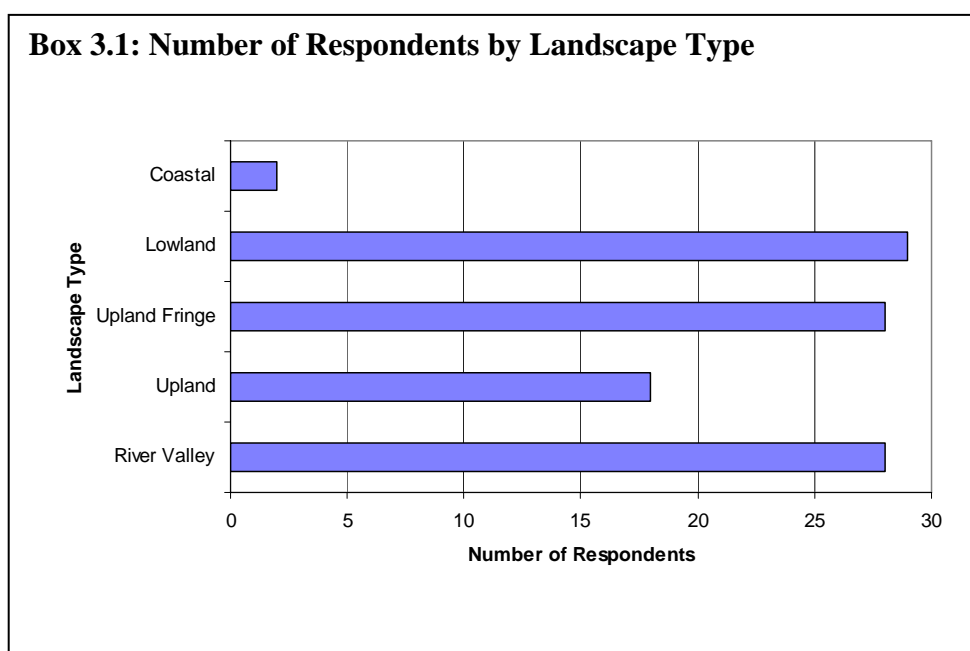
These correspond to the following broad descriptions:

- **Type 1: River Valley Landscape:** this comprises the upland, upland fringe, lowland and coastal river valley areas including farmland and woodland areas. This type of landscape is found in the valleys of the principal rivers including the Tweed (upper and middle), Ettrick, Yarrow, Liddel, Lyne, and in the smaller waters including the Biggar, Eddleston and Jed;
- **Type 2 Upland Landscape:** this is characterised by upland moorland, grassland and isolated flat land features (outliers plateaux) with areas of forest and scattered forest. This type of landscape is found in the Lammermuir Hills to the north, the Central Southern Uplands to the west, and the Cheviot Hills to the south. A small area is also found in the north-west extremity of the Study area in the Pentland Hills. The upland type is the predominant landscape type in the Study area;
- **Type 3 Upland Fringe Landscape:** this comprises rolling and platform farmland, rough and undulating grassland, and grassland in hills and with rock outcrops and some areas of fringe moorland. This type of landscape is found on the fringes of the Lammermuir Hills and Moorfoot Hills to the north, the fringes of the Central Southern Uplands to the west, and the fringes of the Cheviot Hills to the south. A small area is also found in the north-west extremity of the Study area in the fringes of the Pentland Hills;
- **Type 4 Lowland Landscape:** this consists of lowland areas characterised by drumlins, rolling lowland, platform margins and

margins with hills. This type of landscape is found in the lower valley area of the River Tweed to the east/north-east of the Study area;

- **Type 5 Coastal Landscape:** this is characterised by coastal areas of farmland, pasture and moorland. This type of landscape is exists in the Study area as a small strip in the north-east extremity, centred on St. Abb’s Head. The coastal type is the least dominant landscape type in the Study area.

3.3 The profile of the numbers of respondents by Landscape Type is presented in **Box 3.1** below.

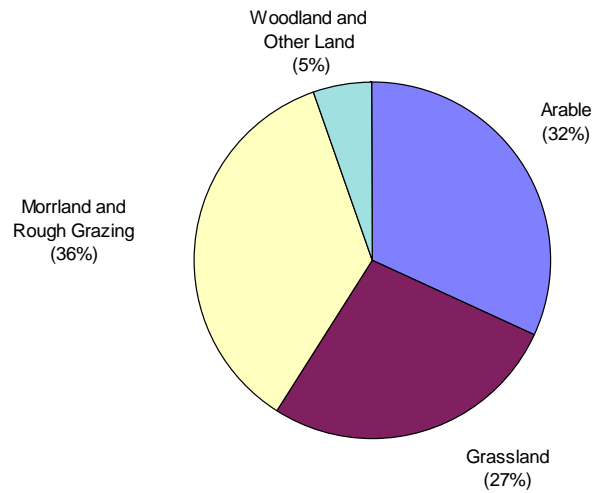


3.4 The sample covered a total of 40,507 hectares of agricultural and forestry land. This is equivalent to 11% of the total Borders agricultural area.

3.5 The profile, in terms of the land use types existing on the respondents’ farms, is shown in **Box 3.2**. Whereas the percentage area of arable ground (32%) was lower than that for the Borders as a whole (40%), the area of grass (27%) was higher than for the Borders Region (21%). The area of Moorland and Rough grazing (36%) was marginally higher than for the Region (35%).

3.6 As shown in **Box 3.3**, the average farm size for all the respondents was 413 hectares. This is significantly larger than the average farm size for the Borders (119 hectares). It indicates that the sample was biased towards larger farms than the Borders average. The area profile suggests that the sample farms were more grassland (livestock) orientated. In general these farms tend to be larger in size than those that are more inclined to arable cropping.

Box 3.2: Area Profile for All Respondents



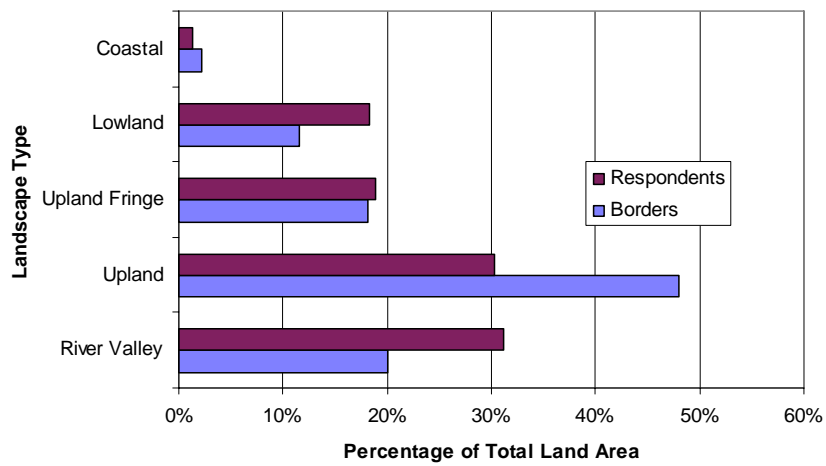
Box 3.3: Average Farm Size by Landscape Type

Landscape Type	Average Farm Size
River Valley	485 ha
Upland	720 ha
Upland Fringe	307 ha
Lowland	265 ha
Coastal	278 ha
All Types	413 ha

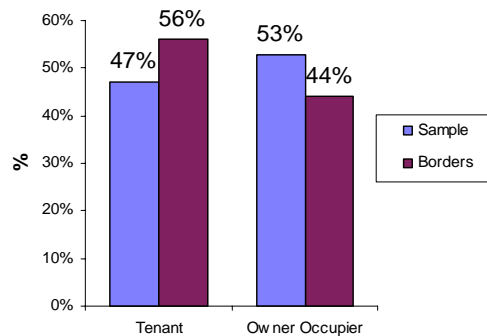
- 3.7** The high average size of the Landscape Type 2 farms (Upland Landscape Type) reflects their situation and the extensive nature of farming in the upland areas.
- 3.8** In terms of the five different landscape types, the percentage areas covered by the sample differed somewhat from the landscape typology profile for the Borders as a whole. Landscape Types 4 (Lowland) and 1 (River Valley) accounted for a significantly greater percentage of the sample than for the Borders as a whole. In contrast, the representation of Type 2 (Upland) was smaller, in percentage terms, than actually occurs for the Borders as a whole. These differences are apparent from **Box 3.4**.
- 3.9** As shown in **Box 3.5**, the tenure profile, in terms of the numbers of respondent farms, showed a higher proportion of owner-occupation (53%)

than that found in the Borders as a whole (44%). The farmers of owner-occupied farms tend to have greater scope for diversification than their tenanted counterparts. This arises in large measure because woodland areas and sporting rights tend to be excluded from farm tenancies. The tenure profile of the respondents was also atypical with respect to the proportion of the total area farmed by the survey respondents that is tenanted, namely: 43% compared with 35% for the total agricultural land area in Borders Region. Thus, in relation to the area covered by the survey respondents, the average sizes of the respondents' farms were respectively larger and smaller for tenanted and owner-occupied land than applies in the Borders Region as a whole.

Box 3.4: Percentage of Total Land Area



Box 3.5: Tenure of Respondents



Non Farming/Diversification activities associated with Landscape and Wildlife Features

3.10 Over 90 activities were reported by the Discussion Group attendees. Broadly they fall into the following categories:

- Wildlife watching
- Angling
- Shooting, Stalking and Falconry
- Equestrian
- Vehicular Sports
- Pedestrian
- Archaeological/Historic Features
- Service provision to Countryside sports/recreation
- Off farm Countryside Maintenance
- Countryside Training Provision
- Other

3.11 Within each of the broad headings, specific activities were listed. For each of these, participants were asked to indicate:

- Whether the activity was allowed on the holding and, if so whether charges were made; and
- Whether the respondent might in future allow the activity to take place on the holding and if so, whether charges would be made.

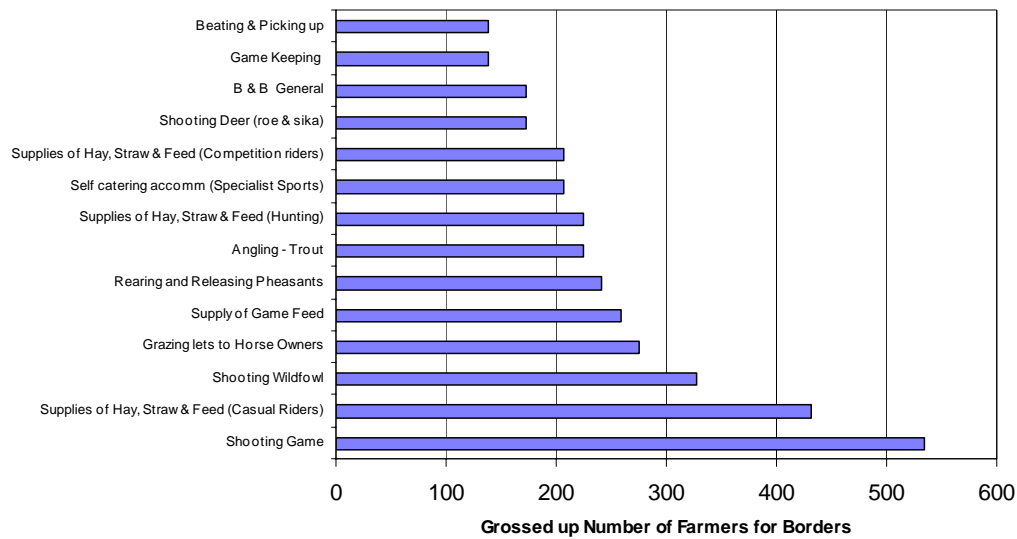
3.12 The results are summarised for all respondents and by landscape type in the sections that follow. Based upon the assumption that the respondents were representative of farmers throughout the Borders, total estimates for each of the landscape types were obtained by grossing-up. This was done by determining the numbers of farms in the Borders for each landscape type and then extrapolating the responses by landscape type to give a total for the Borders. Where a farm spanned more than one landscape type, it was classified on the basis of the dominant type.

Chargeable Activities

3.13 Using the sample survey results and grossing-up for the Borders as a whole, **Box 3.6** summarises the ten most common chargeable activities.

3.14 The most common activities reported related to the general themes of shooting, angling and the provision of services for other (especially equestrian) activities. There was no specific reference to “Green Tourism” activities, i.e. those capitalising on the wildlife, heritage and landscape features of the Borders, other than the provision of Bed and Breakfast facilities for general tourists. The latter inevitably include some visitors who engage in one or more green tourism activities.

Box 3.6: Highest Ranking Chargeable Activities

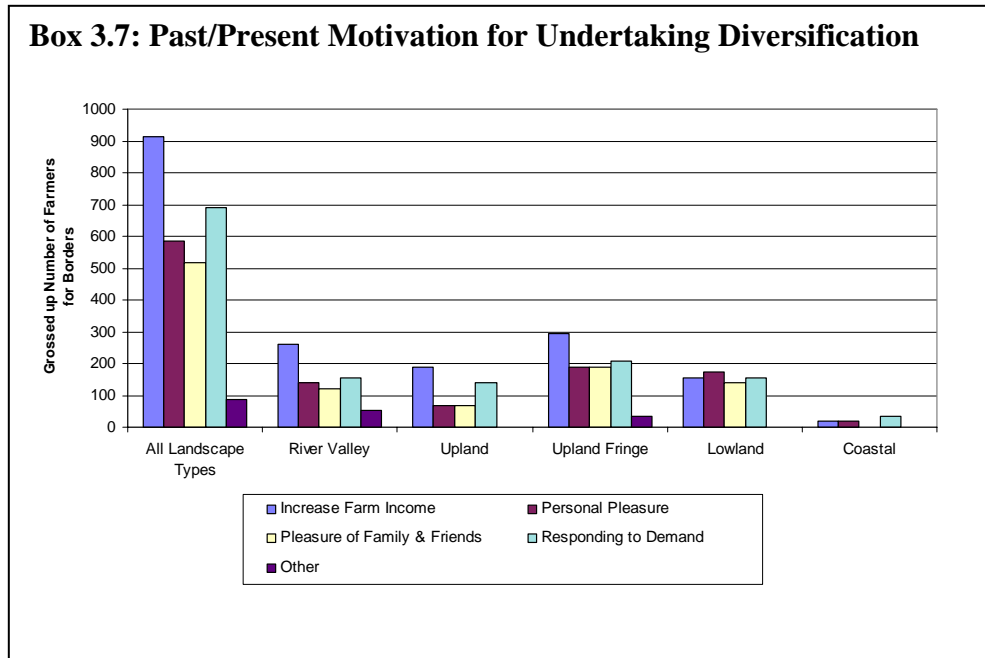


3.15 There was little difference in the diversification activity ranking by Landscape Type, other than for the very small sample for Landscape Type 5 (Coastal) where accommodation provision was most prevalent. Game shooting and the provision of feed and bedding for equestrian activities predominated. However, there were some differences in the importance of these two types of activity within the remaining four Landscape Types. Given the characteristics of the different landscape types, it was not unexpected that:

- sport shooting was prevalent in the upland and river valley landscapes, due to the presence respectively of moorland and wooded landscape features which are highly conducive to different forms of shooting activity;
- the incidence of equestrian activities was reported to be greatest in the upland fringes, due both to the proximity of conurbations and to the presence of landscape features particularly suited to equestrian activities (rough and undulating grassland and fringe moorland, from which long views of the surrounding landscapes can be enjoyed).

3.16 The Borders is well known both for the range and quality of shooting and horse riding available. Many Borders farms are well suited to growing oats and to making quality hay, and straw, the palatability and nutritional value of the product (related to the absence of dust and moulds) being of critical importance to horse owners. In addition there is a large equestrian market in the Borders, because many casual, as well as competitive, riders live in the area. The Borders Region also has the highest concentration of foxhound packs in Scotland and it is estimated that this accounts for the winter use of some 800-900 horses (BFRS, 2000). Indeed, the Borders have more horses per head of population than any other area in Scotland (SAC, 2000).

3.17 The survey allowed analysis of the main motivations of those farmers involved in undertaking diversification activities. As expected, the need to improve farm income and to capitalise on opportunities predominated (see **Box 3.7**).

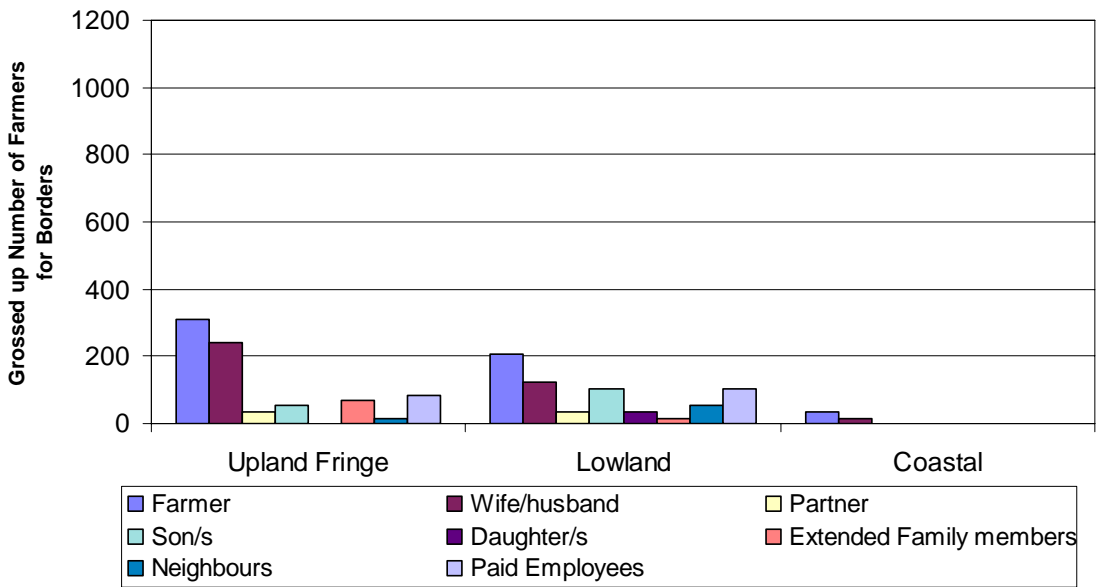
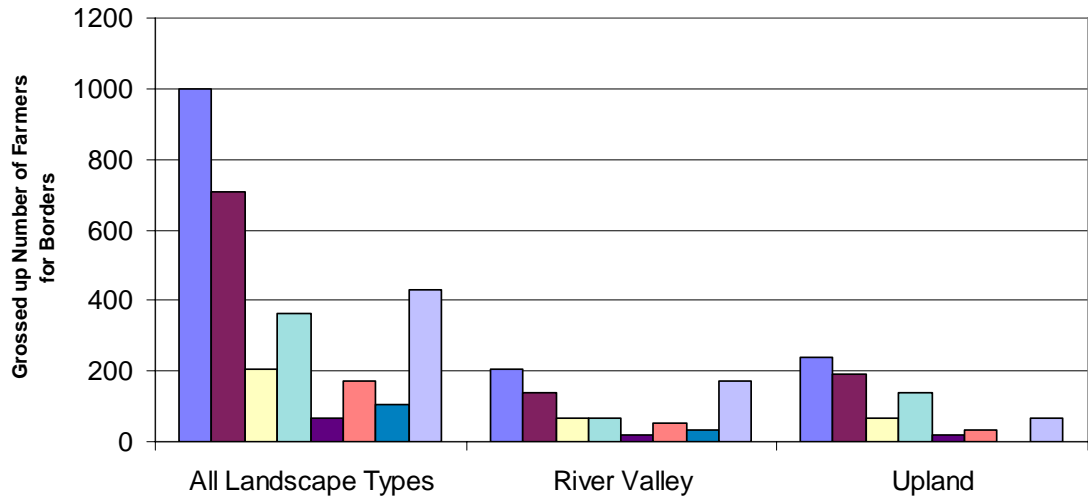


3.18 However, personal pleasure also ranked highly. Diversified activities tended to be conceived from an idea or opportunity generated from the personal experience and interest of the diversifier. It is not surprising that the enterprise was often found to be dominated by family members, as indicated by **Box 3.8**.

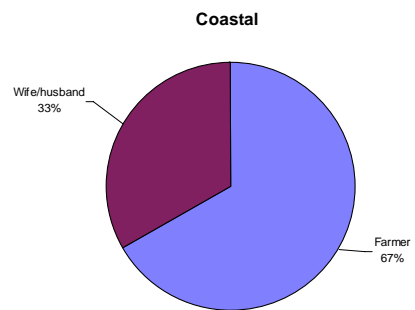
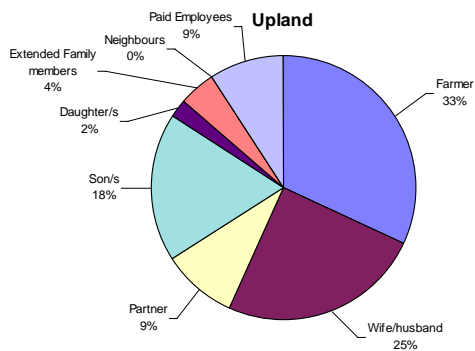
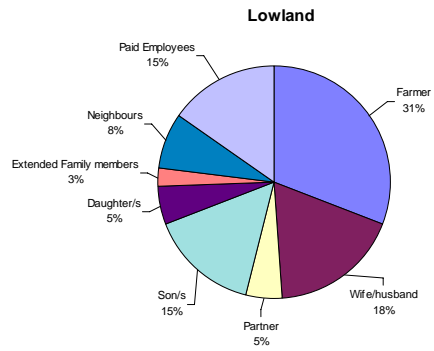
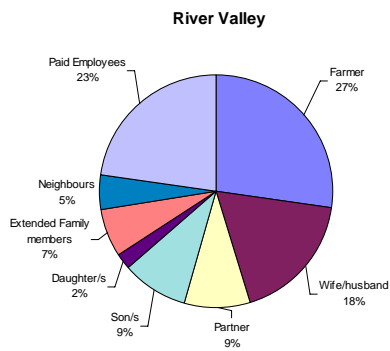
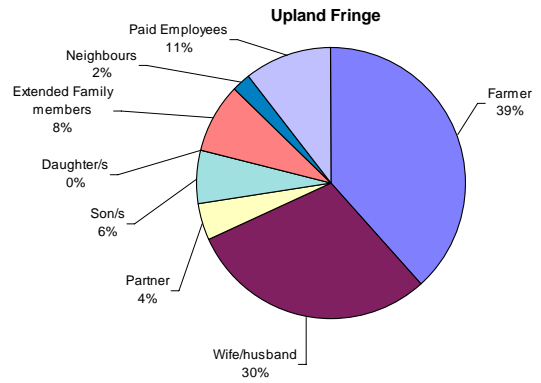
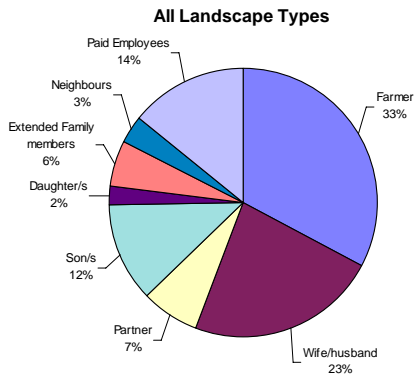
3.19 One of the critical success factors for any new diversified activity is the knowledge and drive of the individual behind the project. Therefore it was not surprising that personal pleasure, in combination with the interest of family members, within the activity, featured strongly as a motivating factor.

3.20 The other main motivation reported by those interviewed was the generation of additional revenue.

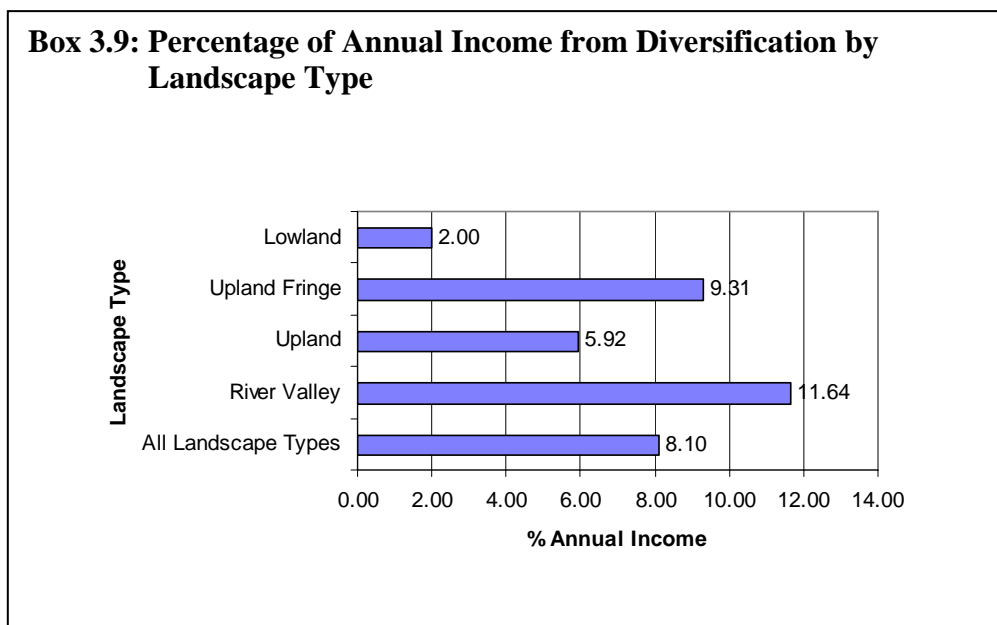
Box 3.8: Numbers of People Involved in Diversification (according to Landscape Type)



Box 3.8: Profile of People Involved in Diversification (according to Landscape Type):%



3.21 **Box 3.9** shows that income generation capacity varied according to Landscape Type, with the highest proportion of income coming from farms within the River Valley Landscape Type and the lowest from the Lowland Landscape Type. The River Valley Landscape Type farms have been able to take advantage of many of the activities ranking highly as charged activities, i.e. shooting and provision of feed and bedding for equestrian activities. This has been due to the landscape character and the nature of farming (grass dominated) in the area. This was also the case in the Upland Fringe Landscape. The proximity of the River Tweed to these Landscape Types was an additional bonus. It was not surprising therefore, that the highest and second highest incomes from diversification activities were found to occur within these two landscape types.

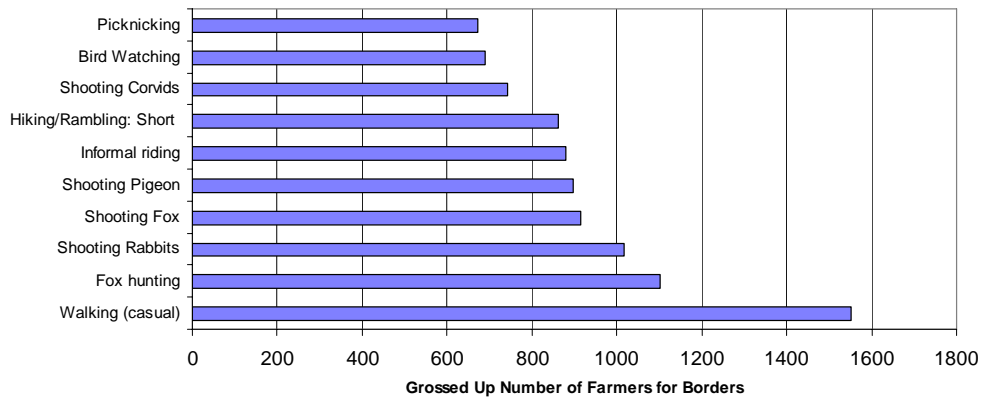


Non Chargeable Activities

3.22 As expected and as shown in **Box 3.10**, pedestrian, equestrian and shooting activities for which charges cannot normally be made, dominated the list of non-chargeable diversification activities identified by the survey. Nevertheless, it was revealed that there has been scope to link these activities to other chargeable activities and, albeit indirectly, to increase the revenue-generating potential.

3.23 Some of the activities, such as fox hunting, game shooting, rabbit and corvid shooting, generated returns in-kind. These activities represent a valued form of pest control, the financial return from which is very difficult to quantify. Nevertheless, the costs saved on professional pest control and the income gained from better yields of crops and livestock, should not be ignored.

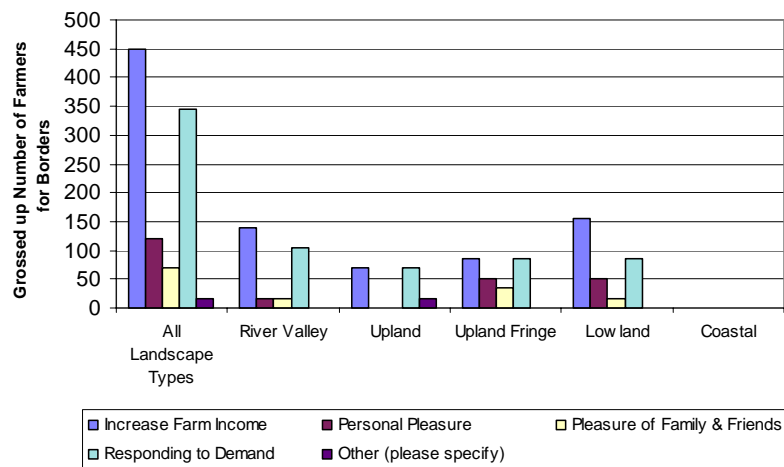
Box 3.10: Highest Ranking Non-Chargeable Activities



Future Diversification Activities

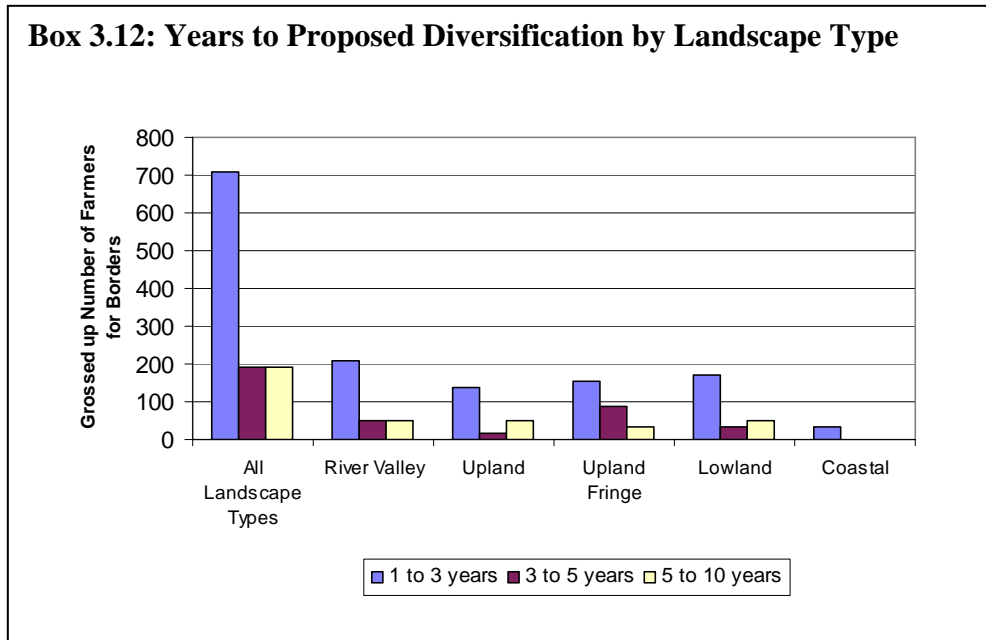
3.24 The motivating factors behind adoption of future diversification activities mirrored those found for past/current activities. Not surprisingly, increasing farm income was stated to be the dominant motive, as shown in **Box 3.11**.

Box 3.11: Motivation for Future Diversification

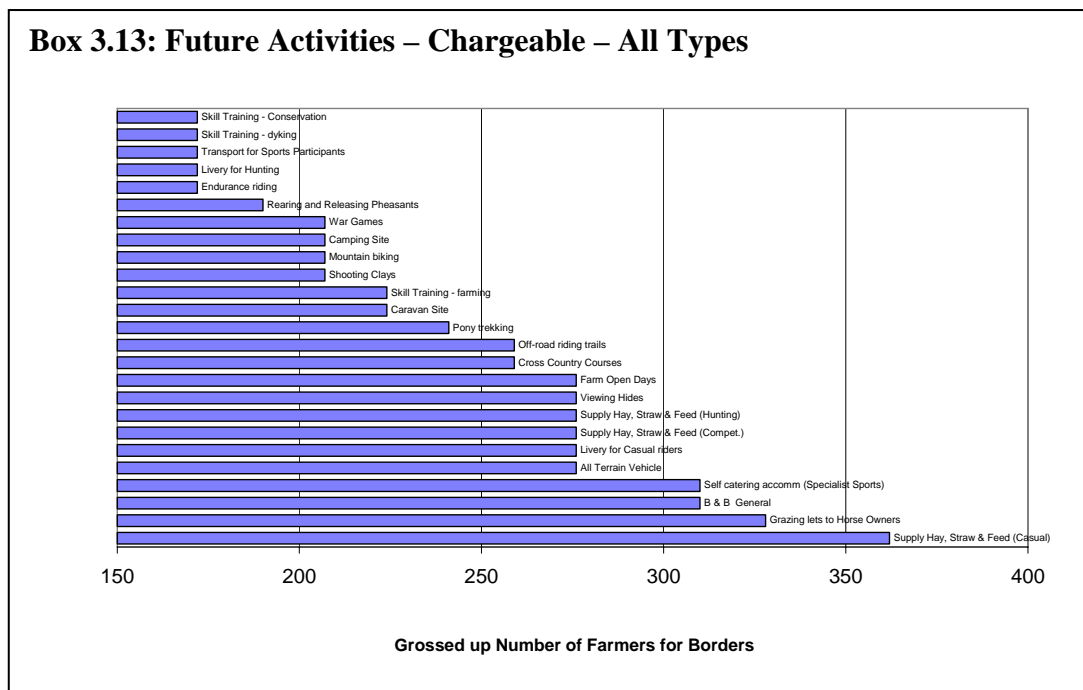


3.25 The dominant motives for future diversification were found to lie in the combined potential for increasing farm income and capitalising on a market opportunity. The success of any venture depends upon the existence of both a feasible market for the service or product and a sustainable return, sufficient to fund expansion.

3.26 Before establishing a new venture it is important to assess the feasibility of the proposal. The success of the venture is closely linked to meeting market demands. However, success can be compromised by saturation of the market depressing overall returns (e.g. bed and breakfast facilities). As summarised in **Box 3.12**, the research has indicated that there are large numbers of farms proposing to undertake a diversification project in the near future.



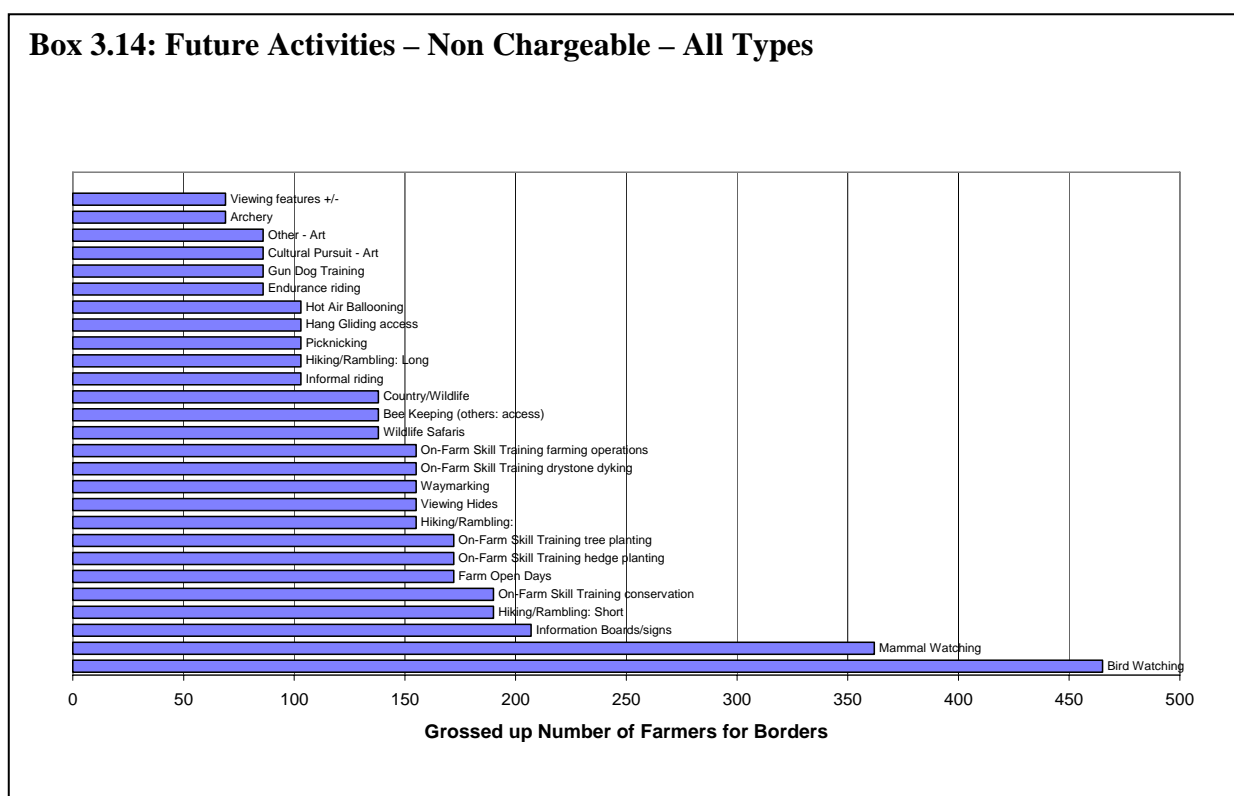
3.27 If the level of interest shown by the survey is translated into new ventures, as indicated in **Box 3.13**, certain sectors may well be affected and the success of both existing and new ventures compromised.



- 3.28** High levels of interest were shown in the provision of services to the Equestrian Sector, including the provision of both feed and bedding, grazing and livery, and riding trails and courses. Of the 105 farmers participating in the survey, 66% indicated that they would look to involvement – directly and indirectly - in equestrian activities as a component of their diversification plans. It is recognised that these are intentions rather than firm plans.
- 3.29** A lower, but still high (33%), level of interest was also indicated in the additional provision of accommodation facilities, principally General Bed and Breakfast and specialist sporting facilities. Increasing the revenue in the Bed and Breakfast sector will come from extending the season rather than increasing the number of beds available. An increase in the number of beds available will cause displacement, increase competition, reduce prices and threaten the viability of not only new ventures, but also established businesses. However, there remains the opportunity of adding value to the provision of Bed and Breakfast facilities by linking the provision with other activities (e.g. specialist sports in particular: golf, shooting, angling and hunting). Indeed, nearly 50% of the interest in providing additional accommodation was associated with specialist sports.
- 3.30** A high level of interest was also indicated in the provision of facilities for All Terrain Vehicles (ATV). An ATV trail has been set-up across the uplands of West and Central Borders. It is linked with existing accommodation, activities and points of interest along the route. A guide with wide knowledge of the local area leads the route. Opportunities both for extending and developing the route further and for covering other areas of the Borders remain possible.
- 3.31** Direct interest in shooting-related activities focused on shooting clays, war games, rearing and releasing pheasants. There was indirect interest in the provision of self-catering accommodation, some of which may be used by participants in these activities
- 3.32** If realised in practice, the interest expressed in expanding both equestrian and shooting activities would be likely to generate increased training requirements, involving both riding and shooting schools.
- 3.33** The provision of training for those interested in acquiring farming, dyking and conservation skills ranked relatively highly. At the time of writing, Scotland is undergoing a review of training provision following the reorganisation of LANTRA. The review is charged with examining the practical vocational training needs in agriculture, horticulture, forestry, environmental conservation and landscaping sectors. Recommendations will be made by the end of 2000. In addition, the new Rural Development Regulation and the Modulation proposals will mean that money will be directed towards training.
- 3.34** There is likely to be scope for providing resources for skills training in rural pursuits and countryside management activities. However, the income

generating capacity is likely to be limited. Indeed many participants viewed this type of activity as being non-chargeable.

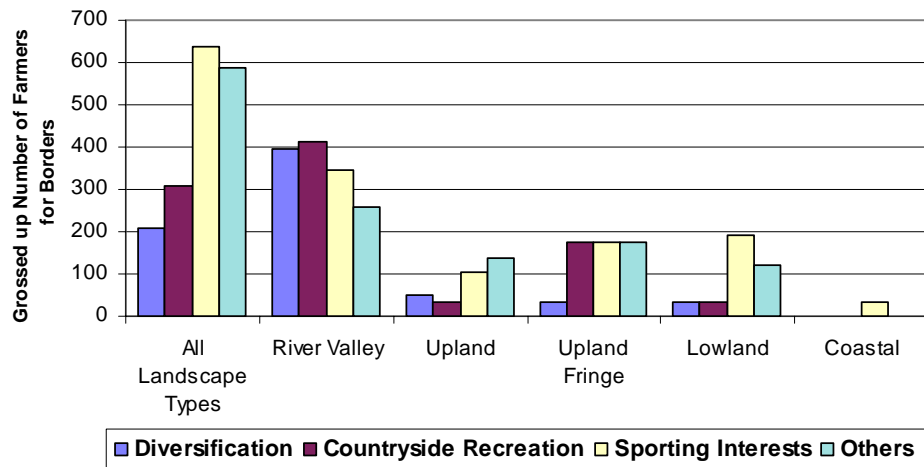
3.35 Other existing and potential activities, for which charges are currently either not made or not contemplated, were discussed. They are displayed in **Box 3.14**. They are predominantly “Green Tourism” related. Potentially charges could be made for quite a number of these activities. However, such charging opportunities have traditionally not been considered appropriate or feasible by the farming community. Further investigation is clearly merited.



Landscape and Habitat Improvements

3.36 When asked for what purpose participants had actively improved the landscape or habitat features on the farm, the dominant response was for sporting interests. 33% of the respondents indicated that country sports were the principal motivation for creating new landscape and habitat features. Diversification ranked lowest for all types except within Landscape Type 1 and 2. The survey found that chargeable shooting related activities were most prevalent in the Upland and River Valley Landscape Types (Type 1 and Type 2). There is some correlation between the sporting motive for improvement illustrated in **Box 3.15** and the level of shooting chargeable activity.

Box 3.15: Motive for Landscape/Habitat Improvements by Landscape Type



3.37 Information was also sought from attendees (ref Section C, Questionnaire 1A) about the Countryside and Recreation Management activities undertaken on their farms. The results are presented in the second column of **Box 3.16**, which indicates on how many of the 105 farms involved in the survey the main management tasks are undertaken. It will be observed that hedge cutting, the planting of areas with mixed species, woodland management and dyke maintenance were principal tasks undertaken.

3.38 The dominant motive for most tasks, as recorded in **Box 3.16**, was the maintenance of an efficient and clean farm. However, as expected, there was a high degree of correlation with specific tasks e.g. Field Corner Planting with *Wildlife*, Managing Lochs with *Angling*, Managing Game Crops with *Shooting*, and Maintaining Footpaths and Dykes with *Recreation*.

3.39 The priority countryside management tasks were found to vary between the different landscape types. Some tasks were common to all landscapes e.g. grassland and woodland management; others were landscape specific e.g. heather management in the upland landscapes. However, there was an overall degree of consistency as indicated in **Box 3.17**.

Box 3.16: Selected Countryside Management Tasks

				Dominant Motive Marking for Performing the Task All Landscape Types 1= Highest Motive; 6= Lowest Motive					
	Landscape Features/Tasks	No. of Farms on which Task is Performed	Dominant Landscape Type	Farm	Wildlife	Angling	Hunting	Shooting	Recreation
1	Woodland								
	Woodland Management	81	Lowland	1	2	6	5	3	4
	Conifer Planting	36	Lowland	1	2=	6	4=	2=	4=
	Broadleaved Planting	51	Lowland	1	2	6	5	3	4
	Mixed Planting	82	Lowland	1	2	6	5	3	4
	Field Corner Planting	39	River Valley	2	1	5=	5=	3	4
	Protection Natural Regeneration Trees etc	46	Upland	1	2	5=	5=	3	4
2	Hedges								
	Hedge Cutting	91	Lowland	1	2	6	5	3=	3=
	Hedge Planting	64	River Valley	1	2	5=	5=	3	4
	Hedge Gap Filling	50	Lowland	1	2	6	5	4	3
3	Grassland								
	Managing Rough Grass	58	River Valley	1	2	4=	4=	3	4=
	Managing Wetland	46	River Valley + Upland Fringe	2	1	4=	4=	3	4=
	Managing Perm Pastures	77	Upland fringe	1	2	4=	4=	4=	3
4	Wetlands/Rivers								
	Tree Planting to Prevent Bank Erosion	13	Upland	1	2	3	4=	4=	4=
	Use of Structures to Prevent Bank Erosion	19	River Valley	1	2	3	4=	4=	4=
	Fencing Buffer Zones	43	River Valley + Upland Fringe	2	1	3	6	4	5
	Creation of Ponds	30	Upland fringe	3=	1	5	6	2	3=
	Managing Lochs	17	River Valley	3=	1	2=	6	3=	2=
5	Feature Specific Management								
	Game Crops Food	14	Lowland	2=	2=	5=	5=	1	4
	Game Crops Cover	21	Lowland	3=	2	5=	5=	1	3=
	Bracken Control	32	Upland	1	2	4=	4=	3	4=
	Managing Archaeological Sites (ESA)	19	Upland	1	2=	4=	4=	4=	3
6	Access Facilities								
	Maintaining Footpaths etc	30	Upland Fringe	1	3	4=	4=	4=	2
	Maintaining Dykes	89	River Valley	1	3	4=	4=	4=	2
7	General Management Practices								
	Rotational Cropping	74	Lowland	1	2=	3=	3=	2=	3=
	Set-Aside Natural Regeneration	52	Lowland	1	2	4=	6	3	4=
	Set-Aside Bird Cover	22	Upland Fringe	2=	2=	5=	5=	1	4
	Set-Aside Grass Cover	45	Lowland	1	2	4=	4=	3	4=

Box 3.17: Countryside Management Priorities; Tasks by Landscape Type in Order of Priority

Landscape Type	Priority Task
All Landscape Types	<ul style="list-style-type: none"> ➤ Cutting Hedges ➤ Maintaining Dykes ➤ Mixed Woodland Planting ➤ Woodland Management ➤ Managing Permanent Pastures
River Valley	<ul style="list-style-type: none"> ➤ Maintaining Dykes ➤ Mixed Woodland Planting ➤ Hedge Planting ➤ Introduction of Rotational Cropping Practices ➤ Managing Permanent Pasture
Upland	<ul style="list-style-type: none"> ➤ Maintaining Dykes ➤ Mixed Woodland Planting ➤ Woodland Management ➤ Burning Heather Moorland ➤ Bracken Control
Upland Fringe	<ul style="list-style-type: none"> ➤ Managing Permanent Pasture ➤ Maintaining Dykes ➤ Cutting Hedges ➤ Introduction of Rotational Cropping Practices ➤ Woodland Management
Lowland	<ul style="list-style-type: none"> ➤ Hedge Cutting ➤ Introduction of Rotational Cropping Practices ➤ Woodland Management ➤ Mixed Woodland Planting ➤ Managing Permanent Pasture

***Countryside Management Tasks and Resources
(Questionnaire 1B)***

The Survey Population

3.40 In total 64 completed questionnaires were received from the 103 owner-occupiers and tenant farmers, located in Landscape Types 1-4 inclusive, that participated in the transect surveys. The composition of these returns, in terms of the four main Landscape Types, was as shown in **Box 3.18**:

3.41 Many of the tasks covered by the survey are either not undertaken on the farms of the respondents or the levels of labour and machinery inputs are very low. The principal landscape features and tasks, for which management inputs were made, are summarized later in this section.

Box 3.18: Characteristics of the Survey Population

Landscape Type	Survey Population: No. of Farms Participating in the Interviews & providing Questionnaire 1A responses	Respondents to Quest'aire 1B: No. of Farms	Respondents to Quest'aire 1B: Farm Area Hectares Av/farm)
1. River Valley	28	15	5,510 (367/farm)
2. Upland	18	12	7,917 (660/farm)
3. Upland Fringe	28	17	5,339 (314/farm)
4. Lowland	29	20	5,161 (258/farm)
Total	103	64	23,972 (374/farm)

Physical Inputs

3.42 In relation to the main features and management/ maintenance tasks covered by the survey, the total labour inputs that were contributed are summarised below in **Box 3.19** for the combined landscape types.

3.43 Particular aspects which emerged from the analysis included:

- the relative importance of dry stone dyke maintenance and the management of woodland and permanent pastures;
- some form of woodland/copse management was undertaken on approximately 40% of the farms;
- the relatively low levels of inputs contributed for woodland planting;
- no inputs were devoted to the creation of boundary thickets;
- the labour inputs involved in hedge maintenance was less than that contributed to woodland and tree work; 18% of the hedging activities related to gapping-up;
- the importance of shooting as a motive for managing and planting woodlands, for planting new hedges, for managing wetlands, for creating ponds, for heather burning, for game crops and for Set-Aside. Both angling and hunting were also cited as motives, but to a much lesser extent.

Box 3.19: Physical Inputs

Quest'aire Task Ref No.	Landscape Feature	Task	Labour: Days per Year
1	Woodland of which:	All tasks	332.0
1.1	Woodland/Copse	coppicing, thinning etc	264.0
1.3 c)	Mixed spp	planting	77.0
2	Spinneys & Other Plantings	All tasks	30.0
1 & 2	Woodland & Spinneys	All plantings	111.0
3	Hedges	All tasks	160.75
4	Field Margins	All tasks	9.0
5	Grassland of which:	All tasks	358.0
5.2	Permanent Pasture	Management	294.0
6	Upland Area of which:	All tasks	76.5
6.3	Reducing pressure on heather	Winter Feeding	55.0
7	Wetlands	All Tasks	77.5
8	Specific Features of which:	All tasks	305.75
8.6	Ancient Monuments & Historic Buildings	Management	253.25
9	Access Facilities	Maintenance	84.0
10	Dry Stone Dykes	Maintenance	472.0
11	General Management Practices of which:	All tasks	359.0
11.1	Rotational cropping practices		276.0
12	Other	All tasks	371.5

Management Inputs Purchased from Contractors

3.44 The main countryside management and maintenance tasks, for which contractors were employed, were as follows:

- | | |
|--|----------------|
| <input type="checkbox"/> Hedge Cutting | 20 of 64 farms |
| <input type="checkbox"/> Maintaining Stone Walls | 19 of 64 farms |
| <input type="checkbox"/> Woodland/Copse Management | 13 of 64 farms |
| <input type="checkbox"/> Woodland Planting | 12 of 64 farms |
| <input type="checkbox"/> Wetland Management | 7 of 64 farms |
| <input type="checkbox"/> Bracken Control | 7 of 64 farms |

Differences in Physical Inputs Between Landscape Types

3.45 It was expected that, whereas some features and management tasks, such as woodland and grassland, would be common to all of the four main landscape types, the levels of inputs would vary significantly between landscape types. The survey results confirmed this as summarised below.

River Valley Landscape Inputs

3.46 The features and tasks which were more important in this landscape type were the creation of woodland rides, the planting of mixed woodlands and spinneys, the maintenance of footpaths, bridle ways, green lanes, stiles and gates, the practice of rotational cropping and the management of Set-Aside for grass cover. Although the maintenance of stone walls was also important in upland landscapes, it featured as requiring slightly more inputs in river valley landscapes.

3.47 In addition, the landscape is more complex in river valley areas. There is a much greater mix and range of landscape elements such as hedges, grass verges, single trees, shelter belts and woodlands, as well as river side vegetation, all of which requires maintenance work.

Upland Landscape Inputs

3.48 As expected, the traditional activities particular to this landscape were the management of both heather moorland and rough grassland in favour of grouse and wildlife, the winter feeding of livestock to protect the heather, and the maintenance of grouse butts.

3.49 In addition, the Countryside Premium Scheme requires farmers specifically to consider the conservation of landscape features that need to be actively managed for protection, enhancement or extension. This calls for management inputs from contractors.

3.50 In addition, and in some cases surprisingly, the other aspects for which this landscape required more than average labour inputs were the management of traditional parkland, the protection of natural regeneration, the dredging of wetlands and the maintenance of access.

Upland Fringe Landscape Inputs

- 3.51** In this landscape type, the establishment and maintenance of mixed plantings, the protection of natural regeneration, the management of permanent pasture, the control of erosion in wetland habitats and the creation of new ponds were the prominent tasks. This landscape type is evident where the transition from unenclosed areas to the improved, more intensively farmed and fertile land areas occurs. The latter areas usually involve more intensive management regimes than in the case of Upland Landscapes.

Lowland Landscape Inputs

- 3.52** This landscape type dominated with respect to the provision of management inputs for woodlands, copses and spinneys and for all forms of woodland planting. Not unexpectedly, the same applied in the case of all tasks relating to hedges: cutting, planting and gapping-up. The fencing of buffer zones to protect wetlands, the planting of game crops and the management of Set-Aside, in the case of natural regeneration and provision of cover for birds, were also dominant tasks.

Overall Physical (Labour & Machinery Inputs)

- 3.53** In total, the respective inputs for the 64 farms for which responses were received, were as follows:

Annual Labour Inputs	2,640 days
Annual Machinery Inputs	1,424 days

- 3.54** If the respondent farms were representative of all farms in the Borders Region, then the “Countryside Management Industry”, in terms of landscape tasks, represented approximately **311 Full Time Equivalent** plus 170 machinery years. Because of the nature of the work involved, i.e. some of it was undertaken as a part-time activity, the numbers of jobs involved was probably greater than 311.

Financial Inputs

- 3.55** The financial inputs associated with the physical inputs reported above, plus the associated materials, but excluding any overhead costs, are summarised in **Box 3.20** below. The average expenditure levels per farm were broadly similar for three of the four landscape types. It should be noted that in the case of the Uplands Landscape, the number of respondents was relatively low.

Box 3.20: Financial Inputs Associated with Countryside Management Tasks

Type of Expenditure by Landscape Type	No. of Farms Involved	Expenditure: £	Av £ Contributed/year per Farms involved	All Farms (rounded)
<u>Capital</u>	48 of 64	£82,430	£1,717	£1,288
1. River Valley	10 of 15	£16,090	£1,609	£1,073
2. Upland	9 of 12	£34,290	£3,810	£2,858
3. Upland Fringe	13 of 17	£15,650	£1,204	£ 921
4. Lowland	16 of 20	£19,200	£1,200	£ 960
<u>Contract Services</u>	42 of 64	£88,890	£2,116	£1,389
1. River Valley	10 of 15	£23,160	£2,316	£1,544
2. Upland	8 of 12	£31,690	£3,961	£2,641
3. Upland Fringe	7 of 17	£14,390	£2,056	£ 864
4. Lowland	17 of 20	£20,230	£1,190	£1,016

3.56 The 64 farms, which responded to the survey, represent 3.5% out of the total number of holdings in the Region (1,881). When grossed-up, the estimates of total expenditure range between the following totals:

Capital Expenditure £1.25 and £2.42 million

Contract Expenditure £1.35 and £2.61 million

The lower estimates were based on the ‘conservative’ assumption that on average the remaining 96.5% of the total number of holdings incurred expenditure at half the levels expended by the 64 survey respondents. The upper estimates reflect an assumption that the total population incurred average annual levels of expenditure identical to those reported for the 64 farms. Although relatively modest in size, the estimates suggest that, in relation to the total population of farmers within the Region, there are good grounds for recognising the existence of a countryside management industry as a discrete entity. This conclusion allows for the fact that on some farms countryside management tasks entail low inputs of labour, money and management time.

3.57 For all of the respondent farms, the average level of expenditure on countryside management and maintenance tasks represented approximately 7 % of total farm/estate expenditure. The average varied quite considerably between the different landscape types, as displayed in **Box 3.21**:

Box 3.21: Levels of Annual Expenditure

Landscape Type	Countryside Management Annual Expenditure as % of Total Annual Farm/Estate Expenditure
1. River Valley	7.0%
2. Upland	6.8%
3. Upland Fringe	5.1%
4. Lowland	3.3%

Sources of Labour Inputs

3.58 The sources of the various labour inputs are summarised in **Box 3.22**.

Box 3.22: Sources and Scales of Labour Inputs

Source of Labour	No. of Farms Involved	Labour Inputs: Days on these Farms	Av Days Contributed/ year Per Respondent Farm involved	Av Days Contributed/ year All Respondent Farms
Family members (paid)	20	732	36.6	11.4
Family members (voluntary)	22	463	21	7.2
Farm/Estate Staff (paid)	26	825	31.7	12.9
Off-farm persons (paid)	27	647	24.0	10.1
(voluntary)	2	71	17.8	1.1
TOTAL	43	2,738	131.1	42.7

- 3.59** On approximately two-thirds of the respondent farms, either paid or voluntary labour was involved in undertaking countryside management tasks. As **Box 3.22** indicates, family members (paid and voluntary combined) were the main source of labour inputs. Whilst paid farm and estate staff were the largest single source of labour inputs, the inputs from off-farm sources were also important. This suggests that the management and maintenance of countryside features already rely upon wide sources of inputs. This is encouraging for those interested in developing a Countryside Management Industry (CMI) as a basis for sustainable rural employment.
- 3.60** The total of 2,738 days shown in **Box 3.22** broadly equates with the estimate of 2,640 days presented in **paragraph 3.53**. This confirms that the CMI in Borders Region currently supports labour inputs amounting to between 311 and 342 Full Time Equivalent Jobs. Such estimates need to be seen in perspective, for they are only one component of the CMI. The others include employment associated with countryside recreation provision and management, as well as with traditional countryside sports plus the allied rural trades and services.
- 3.61** The provision of contract labour inputs by the farmers, who responded to the survey, was low: only 7 of the 64 farmers reported receiving financial remuneration from the provision of landscape management and maintenance contracting services. 5 of the 7 were involved in servicing municipal authorities. The total time inputs for contracting services was 271 days for the year.
- 3.62** The tasks undertaken were:
- Planting Woodland
 - Maintaining Rough Grasslands
 - Burning Heather Moorland
 - Dredging Wetlands
 - Planting Game Crops
 - Controlling Bracken
 - Maintaining Dry Stone Dykes

Management of Countryside Sports, Recreation Facilities & Activities

- 3.63** The amount of time spent by respondent farmers and their families on these types of activities was 381 days in the year. Almost 70% of these days involved inputs on farms located in the River Valley Landscape. Interestingly, this time exceeded the inputs involved in the provision of contracting services by the survey respondents: 271 days. This reflects the fact that the level of interest in managing countryside sports and recreation facilities is greater than in undertaking contract maintenance operations. The reasons for this merit further investigation.

The Countryside Management Industry

- 3.64** On the basis of the data derived and analysed alone (and there are other indicators), it is clear that, with respect to the provision of countryside management and maintenance tasks, an Industry does exist. However, it is clearly highly fragmented and therefore, unlike the farming and forestry industries, may not yet be widely recognised as such. ‘Countryside recreation’ is a recognised branch of the land management profession. However, the concept that this is an industry, involving both managers and those responsible for the wide range of physical maintenance tasks, needs to be promoted. Only then will it be possible for it to receive the recognition that it deserves, in the context of the acute difficulties facing its ‘parent’, the farming industry. Furthermore, when treated as an industry, the scope for introducing financial and other forms of government/regional incentives and interventions is likely to be enhanced. As an industry it would also be more likely to attract the attention of local government organisations, public agencies and institutions such as ILAM, the Institute of Leisure and Amenity Management, etc.
- 3.65** It is suggested that the execution of countryside management tasks under contract to, for example, local authorities, other public bodies and commercial organisations, represents opportunities for increasing diversification. These should be vigorously explored by SERAD, Local Government Organisations, Unions, NGOs and voluntary bodies.

External Assistance

- 3.66** In total, 24 of the 64 farmers (almost 38%) reported receiving grant aid associated with countryside management and maintenance. In contrast only 2 farmers (3%) received grants for the provision of countryside sports and recreation activities and facilities.
- 3.67** Overall 20 of the 64 farmers (31%) said that they had sought advice on the provision/management of countryside and recreation activities.
- 3.68** Clearly some Government support is already provided for those involved in managing the countryside. However, it is suggested that if there is genuine interest in developing a Countryside Management Industry, as one of the vehicles for achieving farm diversification, then there are strong grounds for exploring the ways in which the support could be cost-effectively increased. Whilst training is one of the ways in which support can be increased, it would seem appropriate to investigate a range of additional interventions, including capital grants, fiscal reliefs etc.

The Mapping of Landscape, Wildlife & Heritage Features

Main Aims

- 3.69** From a number of different perspectives, this part of the Study has focused upon the landscape, wildlife and heritage features recorded in the case of the sample of holdings, investigated through the Transect Discussion Groups. The

main aims of this part of the Study were at least in outline to undertake the following:

- ❑ an assessment of the main characteristics of the 5 generic landscape types and features of the farms covered by the survey;
- ❑ an audit of the countryside features (habitats, visual and cultural heritage features) existing on the farms. The results of these components of the Study are presented later in **Boxes 3.25 to 3.30** inclusive, and are summarised in **Box 3.32**;
- ❑ an analysis of the extent to which these features contribute to the character of each landscape type and to the existence of statutory and non-statutory designations (see **Box 3.31**);
- ❑ an appraisal of how the landscape types influence on-farm diversification activities;
- ❑ an audit of the existing and expected future diversification activities for each of the landscape types (see **Box 3.33**);
- ❑ an analysis of the influence of farm size upon existing and expected future diversification activities (see **Box 3.34**);
- ❑ an assessment of the existing landscape and wildlife features on the survey farms with potential for diversification;
- ❑ an initial assessment of the positive and beneficial ways in which future diversification activities are likely to affect landscapes and wildlife features in the Borders.

The Landscape Assessment

3.70 The landscape is a key component of the Borders region and provides the physical framework for all economic and environmental activities. ‘The Borders Landscape Assessment’ study, commissioned by Scottish Natural Heritage and the then Borders Regional Council in 1995, defined the character of the Borders landscape and identified five landscape types which were used to provide the framework for selecting farms for inclusion within the CMI landscape survey. Descriptions of the five landscape types were provided at the outset of this Chapter.

3.71 Although ‘The Borders Landscape Assessment’ study identified both landscape types and landscape character areas, it was decided to base the mapping exercise on **landscape type**, because it represented groupings of character areas which provided a sufficient level of detail for the purposes of the CMI Study and was more likely to relate to countryside management land uses and activities. The landscape character areas were considered to be too detailed for the Study and the additional category of regional landscape areas was rejected on the grounds of being too general. It is important to understand

the definition (taken from ‘The Borders Landscape Assessment’) of both landscape character areas and landscape types as follows:

- ❑ Landscape Types: are generic groupings of the landscape character areas. They represent distinct categories or ‘families’ of similar map units, united by common characteristics at the detailed scale;
- ❑ Landscape Character Areas: represent the most detailed level of description, and constitute the individual map unit as identified from synthesis of field and desk study.

3.72 The location of all five landscape types was shown earlier in **Map 1**. In order to determine/confirm the landscape type and to ground truth the mapping exercise, a site visit was made to each landscape type in which the respondent farms were located

The Landscape Mapping Exercise – Survey Design

3.73 The same farmers responding to Questionnaires 1A were asked to identify countryside features, which were found within their farm unit. This information was provided at the Discussion Group Meetings or at a separate appointment and the information was marked on 1:10,000 scale plans. The countryside features that farmers were asked to identify within their farm comprised landscape (visual, archaeological & historic) and wildlife habitat features, which were managed or could be used for countryside recreation and sports activity. Information on these features provided by each farmer was recorded onto the 1:10,000 maps within the 5km wide transect by surveyors at the meetings. The range of countryside features identified included the following:

- ❑ Woodland (conifer, broadleaved and mixed areas);
- ❑ Other Planting (field corners, spinneys and coverts);
- ❑ Black grouse tree planting;
- ❑ Areas of protected natural regeneration, including gorse and scrub;
- ❑ Hedges or dry stone dykes;
- ❑ Field Margins (margins, strips and buffer zones);
- ❑ Grassland (unimproved grassland, improved grassland and wetland);
- ❑ Heather moorland;
- ❑ Water Features (rivers/burns, buffer zones along banks, lochs and ponds and drainage ditches);
- ❑ Game Crops;

- Bracken Areas;
- Cultural, Sporting & Other Artefacts (Scheduled and Unscheduled Ancient Monuments, Listed and unlisted Historic Buildings, grouse butts, footpaths, bridleways, old droving roads, disused railway tracks and Quarries);
- Other Designations (including, Countryside Premium Scheme areas, Areas of Great Landscape Value, Inventory of Historic Gardens and Designed Landscapes, Ramsar Sites, Candidate Special Protection Areas, Candidate Special Areas for Conservation, Sites of Special Scientific Interest, National Nature Reserves, Tree Preservation Orders, Sites of Interest for Nature Conservation, and Ancient, Long Established and Semi-Natural Woodland areas);
- Farm Boundaries.

3.74 The Landscape Type (river valley, upland, upland fringe, lowland, and coastal) was cartographically identified at a later stage, centred on the location of the farm steading.

3.75 It should be noted that mapping information was supplied for only 97 of the total 105 farms responding to the CMI surveys and questionnaires.

The Landscape Mapping Exercise – the Habitats

3.76 Each of the five landscape types is made up of different combinations of habitats, which are characteristic of that landscape type. A site survey was undertaken to identify the habitats which were found to exist within the transects included in the Study. The habitats identified are described in **Annex 4**. The Annex also contains examples of cultural and sporting features found within the transects.

The Landscape Mapping Exercise – Verification

3.77 In order to verify the description, features and landscape of the farms provided by respondents, a randomly selected, representative sample of farms from each of the five landscape types was visited. These site visits, together with photographic evidence, confirmed that each farm had been correctly described by the respondent farmers. In total, the ‘ground-truthing’ exercise involved visits to 17 farms (17.5% of those holdings for which verifiable information was provided for the Study). The distribution of the 17 farms, covering the different landscape types, is shown below:

- River Valley 4 No.
- Upland 5 No.
- Upland fringe 2 No.
- Lowland 4 No.
- Coastal 2 No.

The Landscape Mapping Exercise – The Main Findings

3.78 Information on the countryside features was obtained for 97 respondent farms and is displayed in **Boxes 3.23 to 3.33**. **Box 3.23** below shows that the farms comprised a total of 33,351 hectares within the six transects. The average size of the farm unit area was 350ha, with the largest and smallest sizes of farms occurring respectively in the Upland landscape type (599ha) and in the Lowland landscape type areas (213ha). The total farm area grossed up from the respondent farms was 6228 km² for the whole of the Borders area. By way of comparison, it should be noted that the area of land shown on the Landscape Classification Hierarchy illustration in the SNH ‘The Borders Landscape Assessment’ study (ASH, 1998) totals 5004 km².

Box 3.23: Farms by Landscape Type

Landscape Type	No. of Farms	Total Farm Area (ha)	Average farm size (ha)	Grossed-Up Farm Area for Borders (km ²)
1. River Valley	25	8,967	359	1,675 (1,003*)
2. Upland	16	9,589	599	1,792 (2,405*)
3. Upland Fringe	26	8,307	320	1,550 (907*)
4. Lowland	28	5,970	213	1,115 (579*)
5. Coastal	2	518	259	96 (110*)
Total	97	33,351	350	6,228 (5,004*)

* The figures in brackets have been based on the landscape types for the whole Borders as measured from ‘The Borders Landscape Assessment’ study, commissioned by Scottish Natural Heritage and the then Borders Regional Council in 1995

3.79 In order to compare the difference between the areas in this study and the SNH ‘The Borders Landscape Assessment’ study, the standard error was obtained. In the case of the total estimate of 6228 km², the standard error was estimated to be 394 km². When applied, this suggests that the true value lies between 5440 and 7016 km² although this is subject to uncertainty. However, it has not been possible to estimate a standard error for the ‘The Borders Landscape Assessment’ Study estimate, for the simple reason that no actual figures were provided in the Study. There is nothing to suggest that the accuracies of the two studies were either similar or significantly different. However, it is likely that any biases that exist in the case of the present Study would apply to all landscape types. Estimates of the proportion of the total land area, identified for each of the five landscape types, are considered to be an appropriate way of comparing the two studies, as indicated in **Box 3.24**.

Box 3.24: Comparison of Landscape Study Analyses

Landscape Type	% area this study	% area 'Borders Landscape Assessment' study
1. River Valley	26.9	20.0
2. Upland	28.8	48.1
3. Upland Fringe	24.9	18.1
4. Lowland	17.9	11.6
5. Coastal	1.5	2.2

3.80 Although there are differences, it is considered that they are not significant. For example, this study identified a lower proportion of the total area as upland, which may have been due to the exclusion of non-farm upland areas by 'The Borders Landscape Assessment' study,

3.81 **Box 3.25** describes the different types of woodland found on the respondent farms. As would be expected on a farm, woodland was not a significant feature in terms of the total farm area. Coniferous woodland, normally associated with forestry activities, was found to be the predominant category (631ha) and this was followed by 327ha of mixed woodland. Both of these categories were observed to be relatively well spread between all of the landscape types. There were no areas on the farms which were specifically managed for black grouse tree planting. Whilst not specifically identified in the mapping exercise, it was noted that tenant farmers were not generally involved in the management and development of woodland areas, this being the responsibility of owners and owner-occupiers.

3.82 **Box 3.26** describes the different types of grassland areas found on the respondent farms. Apart from heather moorland, grassland was the most significant of all the features identified in the mapping exercise, both in terms of land area occupied and dominance across the range of landscape types with the exception of the coastal type. There was a relatively even distribution between improved grassland (17.5%) and unimproved grassland (14.04%) within the respondent farm units. Improved and unimproved grassland is regarded as being a substantial landscape asset in the Borders.

3.83 A considerable range of other habitats was also identified. These are summarised in **Box 3.27**. Heather moorland was by far the most predominant type (12.9%) and, perhaps as to be expected, this was principally found in the Upland type of landscape. Very few of these habitats were found in the coastal areas, due to the importance of arable and grassland farming activities.

Box 3.25: Woodland Areas on Farms

Landscape Type	Total Farm Area (ha)	Broad-leaves (ha)	Conifer (ha)	Mixed (ha)	Field Corners (ha)	Black Grouse Tree Planting (ha)	Protected Natural Re-generation (ha)
1. River Valley	8,967 (100%)	48 (<1%)	156 (1.7%)	72 (<1%)	3 (<1%)	0 (0%)	22 (<1%)
2. Upland	9,589 (100%)	13 (<1%)	219 (2.3%)	45 (<1%)	2 (<1%)	0 (0%)	45 (<1%)
3. Upland Fringe	8,307 (100%)	28 (<1%)	123 (1.5%)	85 (1%)	1 (<1%)	0 (0%)	8 (<1%)
4. Lowland	5,970 (100%)	71 (1.2%)	117 (2%)	115 (1.9%)	24 (<1%)	0 (0%)	68 (1.1%)
5. Coastal	518 (100%)	21 (4%)	16 (3.1%)	10 (1.9%)	0 (0%)	0 (0%)	0 (0%)
Total	33,351 (100%)	181 (<1%)	631 (1.9%)	327 (<1%)	30 (<1%)	0 (0%)	143 (<1%)

Box 3.26: Grassland Areas on Farms

Landscape Type	Total Farm Area (ha)	Improved Grassland (ha)	Unimproved Grassland (ha)
1. River Valley	8,967 (100%)	1,527 (17%)	1,079 (12%)
2. Upland	9,589 (100%)	1,003 (10.5%)	2,090 (22.8%)
3. Upland Fringe	8,307 (100%)	1,988 (23.9%)	1,266 (15.2%)
4. Lowland	5,970 (100%)	1,296 (21.7%)	222 (3.7%)
5. Coastal	518 (100%)	24 (4.6%)	13 (2.5%)
Total	33,351 (100%)	5,838 (17.5%)	4,670 (14.0%)

Box 3.27: Other Terrestrial Habitats on Farms

Landscape Type	Total Farm Area (ha)	Wetlands (ha)	Heather Moorland (ha)	Bracken (ha)	Game Crops (ha)
1. River Valley	8,967 (100%)	42 (<1%)	778 (8.7%)	418 (4.7%)	9 (<1%)
2. Upland	9,589 (100%)	22 (<1%)	3,097 (32.3%)	710 (7.4%)	0 (0%)
3. Upland Fringe	8,307 (100%)	135 (1.6%)	416 (5%)	173 (2.1%)	5 (<1%)
4. Lowland	5,970 (100%)	14 (<1%)	3 (<1%)	3 (<1%)	23 (<1%)
5. Coastal	518 (100%)	0 (0%)	0 (0%)	1 (<1%)	4 (<1%)
Total	33,351 (100%)	213 (<1%)	4,294 (12.9%)	1,305 (3.9%)	41 (<1%)

3.84 Water-based features in the Border farms are shown in **Box 3.28**. These were noted as not being significant features in the Borders landscape. They represented less than 1% of the total area of the respondent farms. However, given the significance of the River Valley landscape type, rivers, burns and ditches were not surprisingly recognised as being much more important as linear features in the landscape. Over 550km of rivers and burns and 91 km of ditches were identified.

Box 3.28: Water Features on Farms

Landscape Type	Total Farm Area (ha)	Lochs/ponds (ha)	Bank Buffer Zones (ha)	Rivers/burns (km)	Drainage Ditches (km)
1. River Valley	8,967 (100%)	19 (<1%)	14 (<1%)	104 (1.2%)	16 (<1%)
2. Upland	9,589 (100%)	4 (<1%)	6 (<1%)	275 (2.9%)	10 (<1%)
3. Upland Fringe	8,307 (100%)	20 (<1%)	1 (<1%)	111 (1.3%)	26 (<1%)
4. Lowland	5,970 (100%)	6 (<1%)	4 (<1%)	54 (<1%)	35 (<1%)
5. Coastal	518 (100%)	0 (0%)	0 (0%)	6 (1.2%)	4 (<1%)
Total	33,351 (100%)	49 (<1%)	25 (<1%)	550 (n/a)	91 (n/a)

3.85 Boundary features were noted to be a significant linear component in the landscape. Their incidence is summarised in **Box 3.29**. Dry stone dykes and hedges were found to be much more important features on the Border farms than were field margins. More hedges featured in the lowland areas than in any of the other landscape types, whereas dry stone dykes were found in all landscape types.

Box 3.29: Boundary Features on Farms

Landscape Type	No. of Farms	Field Margins (km)	Hedges (km)	Dry Stone Dykes (km)
1. River Valley	25	2 (<1km/farm)	90 (3.6km/farm)	118 (4.7km/farm)
2. Upland	16	1 (<1km/farm)	12 (<1km/farm)	109 (6.8km/farm)
3. Upland Fringe	26	2 (<1km/farm)	80 (3.1km/farm)	199 (7.6km/farm)
4. Lowland	28	13 (<1km/farm)	224 (8km/farm)	58 (2.1km/farm)
5. Coastal	2	0 (0km/farm)	6 (3km/farm)	13 (6.5km/farm)
Total	97	18 (av. <1km/farm)	412 (av. 4km/farm)	497 (av. 5km/farm)

3.86 **Box 3.30** records the cultural, sporting & other artefacts identified through the mapping exercise. Scheduled and unscheduled ancient monuments were the most frequently found built cultural features in the countryside, especially in the river valley and upland landscape types. The existence of important linear features was also noted. These included footpaths, old droving roads and disused railway tracks, particularly as features in the river valley, upland and upland landscape types.

3.87 **Box 3.31** summarises the statutory and non-statutory designations found on the respondent farms. Apart from the two Environmentally Sensitive Areas which cover over a third of the Borders and for which detailed information was not obtained, the predominant designations which applied most extensively to farms in the Study area were found to be Countryside Premium Scheme areas and Sites of Special Scientific Interest. These designated areas were found to occur predominantly in the upland, upland fringe and lowland landscape types.

Box 3.30: Cultural, Sporting & Other Artefacts

Cultural, Sporting & Other Artefacts	SNH Landscape Type					Total
	1 River Valley	2 Upland	3 Upland Fringe	4 Lowland	5 Coastal	
Footpaths (km)	21	6	13	6	0	46
<i>Bridleways (km)</i>	3	0	1	0	0	4
Old droving roads (km)	6	31	5	0	0	42
Disused railway tracks (km)	6	4	27	4	0	41
Ancient Monuments – Scheduled (No.)	20	21	9	3	0	53
Ancient Monuments – Unscheduled (No.)	7	23	6	2	1	39
Historic Buildings – Listed (No.)	1	0	3	5	0	9
Historic Buildings – Unlisted (No.)	2	0	1	0	0	3
Grouse Butts (No.)	3	0	0	0	0	3
Quarries (No.)	8	1	5	3	1	18

Box 3.31: Statutory and Non-Statutory Designations

Designation	SNH Landscape Type					Total (No.)
	1 River Valley (No.)	2 Upland (No.)	3 Upland Fringe (No.)	4 Lowland (No.)	5 Coastal (No.)	
Countryside Premium Scheme areas	1	2	5	3	0	11
Areas of Great landscape Value	0	1	0	0	0	1
Inventory of Historic Gardens and Designed Landscapes	0	0	0	0	0	0
Ramsar Sites	0	0	0	0	0	0
Candidate Special Protection Areas	0	0	0	0	0	0
Candidate Special Areas for Conservation	0	0	0	0	0	0
Sites of Special Scientific Interest	1	2	8	5	0	16
National Nature Reserves	0	0	2	0	0	2
Sites of Interest for Nature Conservation	0	0	0	0	0	0
Ancient, Long Established and Semi-Natural Woodlands	0	3	2	0	0	5
Tree Preservation Orders	0	0	1	0	0	1

3.88 **Box 3.32** summarises the main countryside features identified through the mapping exercise. The ‘other areas’ on farms, such as arable land, roads and buildings were noted to be far the largest countryside feature in the Borders, occupying nearly 47% of the countryside areas identified. This was followed by grassland areas, which comprised over 31% of the countryside. The water and boundary features were also a significant visual linear component in the landscape. The coastal areas provided the lowest range and extent of countryside features.

Box 3.32: Summary of Countryside Features on Farms

Landscape Type	Total Farm Area (ha)	Other Areas (e.g. arable, roads, buildings) (ha)	Woodland Areas (ha)	Grassland Areas (ha)	Other Terrestrial Habitats (ha)	Area Water Features (ha)	Linear Water Features (km)	Boundary Features (km)
1. River Valley	8,967 (100%)	4,743 (52.9%)	338 (3.8%)	2,606 (29.1%)	1,247 (13.9%)	33 (<1%)	120 (1.3%)	210 (2.3%)
2. Upland	9,589 (100%)	2,333 (24.3%)	324 (3.4%)	3,093 (32.3%)	3,829 (39.9%)	10 (<1%)	285 (3%)	122 (1.3%)
3. Upland Fringe	8,307 (100%)	4,058 (48.9%)	245 (3%)	3,254 (39.2%)	729 (8.8%)	21 (<1%)	137 (1.7%)	281 (3.4%)
4. Lowland	5,970 (100%)	4,004 (67.1%)	395 (6.6%)	1,518 (25.4%)	43 (<1%)	10 (<1%)	89 (1.5%)	295 (4.9%)
5. Coastal	518 (100%)	429 (82.8%)	47 (9.1%)	37 (7.1%)	5 (<1%)	0 (0%)	10 (1.9%)	19 (3.7%)
Total	33,351 (100%)	1,5567 (46.7%)	1349 (4.0%)	10,508 (31.6%)	5,853 (17.6%)	74 (<1%)	641 (n/a)	927 (n/a)

3.89 From the mapping exercise, it was clear that there were a number of key features which influenced the landscape and its management. These included the existence of:

- extensive areas of improved grassland in the upland fringe (17.5% of the the overall mapped farm area) and unimproved grassland especially in the upland areas (14.0% of the overall mapped farm area);
- coniferous forestry: this was noted to be the most extensive woodland feature (but it only represented 2% of the overall mapped farm area) particularly in the upland areas. This was followed by broadleaved woodland in the lowland areas (but only representing 1% of the overall mapped farm area);
- heather moorland: this was found to be a very important feature of the Borders, especially in the upland areas (occupying 12.9% of the overall mapped farm area);

- hedges in the lowland areas: these were noted to be important habitat features (with an average of 4km per farm surveyed);
- lochs and rivers: these, despite occupying less than 1% of the farm area surveyed, were found to be important water features and habitats. They were identified as featuring predominantly in the upland, upland fringe and river valley landscapes;
- footpaths, ancient monuments and old droving roads: these were identified as important man-made features throughout most of the landscape types.

3.90 In order to determine to what extent the landscape influenced the diversification of farm activities, an analysis was undertaken of on-farm activities by landscape type. This was based on information provided by respondents to Questionnaire 1A. The results are summarised in **Box 3.33**.

Box 3.33: Respondents by Landscape Type Offering Diversified Activities Now and in the Future

ON-FARM DIVERSIFICATION ACTIVITY	LANDSCAPE TYPE									
	River Valley		Upland		Upland fringe		Lowland		All	
	No.	%	No.	%	No.	%	No.	%	No.	%
Wildlife Watching Currently and in future offering activity	22	79%	11	61%	28	100%	19	66%	82	78%
Angling Currently and in future offering activity	17	61%	7	39%	16	57%	13	45%	53	50%
Shooting, Stalking & Falconry Currently and in future offering activity	20	71%	15	83%	23	82%	26	90%	86	82%
Equestrian Currently and in future offering activity	19	68%	13	72%	24	86%	28	97%	86	82%
Vehicular Sports Currently and in future offering activity	14	50%	10	56%	16	57%	10	34%	52	50%
Pedestrian Currently and in future offering activity	28	100%	18	100%	26	93%	26	90%	99	94%
Archaeological/historic features Currently and in future offering activity	9	32%	7	39%	4	14%	4	14%	25	24%
Countryside Recreation Sport Facilities & Support Services Provision Currently and in future offering activity	28	100%	16	89%	27	96%	29	100%	102	97%
Off-Farm Countryside Maintenance (contracting) Currently and in future offering activity	5	18%	1	6%	8	29%	9	31%	24	23%
Countryside Skills Training/Participation Currently and in future offering activity	24	86%	12	67%	21	75%	23	79%	81	77%
Other Currently and in future offering activity	18	64%	13	72%	15	54%	21	72%	67	64%
BASE	28		18		28		29		105	

3.91 It should be noted that the coastal landscape type has been omitted from this analysis, because the number of respondent answers were so small as to be statistically insignificant. The responses included both respondents currently offering a farm activity, which it was assumed will continue to be available in the future, and those who indicated that they would offer activities in the future. No distinction was made between respondents who have and have not charged for activities offered in the past nor with respect to the future.

3.92 The on-farm diversification activities offered now and in the future by landscape type by more than 51% of respondents are as follows:

- River valley landscape: wildlife watching, angling, shooting, stalking and falconry, equestrian, pedestrian, countryside recreation sport facilities and support services (e.g. activity hospitality services and farriery), maintenance (e.g. contracting, countryside skills training/participation) and other activities. This indicates that the river valley landscape has been able to support a wide range of farm diversification activities, with pedestrian and countryside recreation sport features and support services being the most common;
- Upland landscape: wildlife watching, shooting, stalking and falconry, equestrian, vehicular sports, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and other activities. The upland landscape has also been able to support a wide range of farm diversification activities, with pedestrian activity being the most common;
- Upland fringe landscape: wildlife watching, angling, shooting, stalking and falconry, equestrian, vehicular sports, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and other activities. The upland fringe landscape has also been able to support a comprehensive range of farm diversification activities, with wildlife watching being the most common activity;
- Lowland landscape: wildlife watching, shooting, stalking and falconry, equestrian, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and other activities. The lowland landscape has supported a range of farm diversification activities, although this has not been as extensive a range as the other landscape types. Countryside recreation sport features and support services were the most common activities.

3.93 Across all landscape types the most common on-farm diversification activities (i.e. those offered by more than 51% of respondents) available in the past and for the future appeared to be wildlife watching, shooting, stalking and falconry, equestrian, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and other activities. The activity most frequently offered was the combination of countryside recreation sport facilities and services (accommodation, etc.). The activities found to be less common with respondents (i.e. those offered by less than 51%

of respondents) were angling, vehicular sports, archaeological/historic features, and off-farm countryside maintenance (contracting). Of all the activities, the one least frequently offered was off-farm countryside maintenance (contracting).

3.94 The main variations between the activities offered by landscape type were noted to be as follows:

- Wildlife watching in the upland fringe areas was particularly common. This was most probably due to the larger areas of grassland habitats available to support a range of bird species and the ease with which bird watching can be undertaken over long distances;
- Angling, not surprisingly, was most frequently offered in the river valley areas. This was obviously due to the extensive water habitat available in this landscape type;
- There was a large range between equestrian activities offered in river valley areas (68%) and in lowland areas (97%). This was associated with the linear character of the river valley, which perhaps is not as conducive a landscape for equestrian activities as the more expansive landscape type that is available in the lowlands or it could be due to the fact that there is easier access by a population to lowland areas;
- Vehicular sports were not readily offered in the lowland landscape. This was due to arable farming limiting the availability of suitable land for this activity. There appeared to be greater opportunities to offer visitors access to archaeological/historic features in the upland and river valley landscapes. This could simply have been due to the greater number of features present in these two landscape types or to the willingness of respondents to facilitate access;
- Off-farm countryside maintenance (contracting) was the least frequently offered activity of all. This applied especially in the upland landscape areas. It is possible that there was a limited demand for this service in the upland areas.

3.95 In order to determine to what extent the size of farm holding has influenced the diversification of farm activities, an analysis was been made of the relevant information provided by respondents to Questionnaire 1A. The results are presented in **Box 3.34**. The responses included both respondents currently offering a farm activity, which it is assumed will continue to be available in the future, and those who indicated that they would be prepared to offer activities for the first time in the future. No distinction is made between respondents who charged and those who did not charge for activities previously offered. The same applies in the case of potential activities. It was noted that the size of the farms has tended to influence the range of activities offered.

Box 3.34: Respondents by Farm Size Offering Diversified Activities Now and in the Future

ON-FARM DIVERSIFICATIONACTIVITY	FARM SIZE (Hectares)							
	0-49		51-199		200+		ALL	
	No.	%	No.	%	No.	%	No.	%
Wildlife Watching Currently and in future offering activity	2	67%	23	68%	57	84%	82	78%
Angling Currently and in future offering activity	2	67%	17	50%	34	50%	53	50%
Shooting, Stalking & Falconry Currently and in future offering activity	1	33%	29	85%	56	82%	86	82%
Equestrian Currently and in future offering activity	0	0%	28	82%	58	85%	86	82%
Vehicular Sports Currently and in future offering activity	0	0%	13	38%	39	57%	52	50%
Pedestrian Currently and in future offering activity	2	67%	31	91%	66	97%	99	94%
Archaeological/historic features Currently and in future offering activity	0	0%	9	26%	16	24%	25	24%
Countryside Recreation Sport Facilities & Support Services Provision Currently and in future offering activity	3	100%	34	100%	65	96%	102	97%
Off-Farm Countryside Maintenance (contracting) Currently and in future offering activity	0	0%	11	32%	13	19%	24	23%
Countryside Skills Training/Participation Currently and in future offering activity	2	67%	25	74%	54	79%	81	77%
Other Currently and in future offering activity	0	0%	23	68%	44	65%	67	64%
BASE	3		34		68		105	

3.96 In relation to farm size, the farm activities on offer both in the past and in the future by more than 51% of respondents were identified to be as follows:

- Small farms (0-49 hectares): wildlife watching, angling, pedestrian, countryside recreation sport facilities and support services, and countryside skills training/participation. This suggests that small farms have only been able to offer a limited range of farm diversification activities, with countryside recreation sport facilities and support services being the most common;
- Medium size farms (51-199 hectares): wildlife watching, shooting, stalking and falconry, equestrian, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and

other. Medium size farms were noted as having been able to offer a reasonably wide range of farm diversification activities, with countryside recreation sport facilities and support services being the most prevalent;

- Large size farms (200+ hectares): wildlife watching, shooting, stalking and falconry, equestrian, vehicular sports, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and other activities. Perhaps to be expected, the large farms appeared to have been able to offer the widest range of farm diversification activities, with pedestrian activities being the most common. Most of these farms are located in the upland areas.

3.97 Across all farm sizes the farm activities (i.e. those offered by more than 51% of respondents) most frequently available in the past and for the future were wildlife watching, angling, shooting, stalking and falconry, equestrian, pedestrian, countryside recreation sport facilities and support services, countryside skills training/participation and other activities. Of all activities the one most commonly offered was countryside recreation sport features and support services. This was identical for all of the landscape types. The least common activities (i.e. those offered by less than 51% of respondents) were vehicular sports, archaeological/historic features and off-farm countryside maintenance (contracting). The activity least frequently offered was off-farm countryside maintenance (contracting). Again this was common to all of the landscape types.

3.98 The main variations between the activities offered by farm size were as follows:

- The medium and large size farms were able to offer the widest range of farm activities, this being due to the greater availability of land and landscape types to accommodate diversification;
- Small farms offered the smallest range of farm activities. This was because of the limited availability of land to accommodate diversification;
- Shooting, stalking and falconry, equestrian, vehicular sports, archaeological/historic features, and other activities were particularly under represented especially on small farms.

Landscapes for the Future

3.99 Coniferous forestry and ongoing changes in farming practices continue to remain the main forces responsible for change to the landscape, wildlife habitats and access in the Borders. It is likely to be the management regimes adopted for these practices that will offer the greatest opportunities to enhance the scope for farm diversification.

3.100 The CMI has the potential to contribute to future changes made to the landscape and wildlife habitats found in the Borders in a positive and beneficial manner. Each landscape type provides a range of landscape and

wildlife diversification opportunities involving the extension of areas of countryside established/managed for wildlife, recreation and sporting activities, as follows:

- River valley landscape:
 - extending river burn zones and banks to improve aquatic habitats for game fishing, especially salmon and trout;
- Upland and upland fringe landscapes:
 - providing additional tree planting and mixed cropping for black grouse;
 - managing and consolidating existing heather moorlands for grouse and other games species;
 - controlling bracken to improve the habitat quality and visual appearance of the rural landscapes;
- Upland, upland fringe and lowland landscapes:
 - culling deer to encourage natural regeneration;
- Upland fringe, lowland and coastal landscapes:
 - extending areas of natural vegetation regeneration;
- Lowland and coastal landscapes:
 - increasing field corners, spinneys and coverts;
 - protecting existing hedgerows and creating new ones as wildlife corridors;
 - providing incentives for planting game crops and creating new habitats;
- All landscape types:
 - extending funding opportunities to manage and develop landscape and wildlife habitat features;
 - extending range of guidance and advice for landscape and wildlife diversification projects.

3.101 All landscape types also provide a range of cultural heritage diversification opportunities to increase and extend responsible recreation and access to countryside areas by:

- ❑ developing policies to protect built cultural features, which do not benefit from statutory protection. These include unscheduled monuments and unlisted buildings;
- ❑ providing incentives to repair built cultural features which do not benefit from existing heritage funding;
- ❑ developing access strategies for maintaining and managing footpaths, bridleways, old droving routes and disused railway tracks;
- ❑ extending the range of guidance and advice for cultural heritage diversification projects.

3.102 Improvements to specific habitats will further help to maintain, enhance and develop the richness of biodiversity and in particular Local Biodiversity Action Plan species, which is important not only for farming practices and the landscape, but also for countryside industry activities and tourism. Under-utilised habitats, offering particular scope for improvement, which could be harnessed in the interests of diversification, include:

- ❑ coastal wildlife habitats, which are important for a range of species including breeding waders and wildfowl;
- ❑ farmland habitats including wooded areas and single trees, shelter belts, scrub, farm ponds, and boundary features such as hedgerows, water margins and arable field margins, all of which support a broad range of native flora and fauna species including game;
- ❑ grassland, both improved and unimproved, which provides wildlife habitats that occur in a range of landscape types, especially upland areas. Examples include acid grassland heather mosaics which are important for ground nesting upland birds;
- ❑ upland moorland which is essential for grouse;
- ❑ wetland habitats, including rivers, which are especially valuable for salmonids, otters and water vole;
- ❑ woodland habitats, particularly native woodlands which attract red squirrel.

3.103 However, these potential aids to diversification are only likely to materialise if and when they form part of a coherent and wider Strategy for Sustainable Development of the Countryside Management Industry. In the light of both the difficulties continuing to be experienced by the farming industry and the opportunities revealed by this Study, the need for such a Strategy is compelling.

Concluding Comments

- 3.104** The findings of this Study clearly indicate that, amongst farmers in Borders Region, there is considerable interest in undertaking further diversification across a wide range of activities. This is gratifying. However, the fact that on-farm diversification opportunities are substantially greater for owner-occupiers than for tenant farmers deserves special consideration in the formulation of any Strategy.
- 3.105** The need for both Estate owners and landowners' organisations to play a proactive role in exploring the scope for new collaborative development initiatives between landlord and tenant is increasingly appreciated. However, the realisation of that need into tangible solutions requires intensified action. More particularly, exploration of the ways forward should feature prominently in the follow-up to this Study.