FUTURE SKILLS ISSUES AFFECTING INDUSTRY SECTORS IN WALES

Agriculture and Farm Enterprise Sector

Futureskills Wales

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Introduction

This document is one of a series commissioned by the Future Skills Wales Research Forum. The overall project aims to extend and complement the work begun by the original Future Skills Wales project, which forecast future generic skills needs across Wales using forecasting and survey data. The current project adds studies of future vocational skills needs within key sectors in Wales. Each sector study is based on desk research and qualitative interviews with practitioners and employers, and aims to provide an overview of the sector, the skills issues, and current and potential actions to further strengthen the sector.

Businesses and employees in each of the sectors studied have achieved great successes; that is why these sectors have become important for Wales. Our focus on current skills issues should not obscure these achievements or the determination of all concerned to meet current and future challenges.

Sector Profile

The agriculture and farm enterprise sector is critical to the economic and social survival of rural communities throughout Wales. The sector is well represented in Wales relative to the rest of the UK. The majority of farming involves livestock, whether for meat or dairy production, while diversified activity covers a multitude of activities ranging from food processing to tourism.

The number of farm and land based businesses in Wales is estimated at over 32,000; although the majority are still small, and many are run by part-time proprietors, there is a tendency for the average size of holdings to increase. An estimated 42,000 plus people work within the sector, either as proprietors or employees. Female participation in the workforce can often be informal and may well be understated in published figures. Declining average incomes have become a feature of the sector.

Traditionally characterised by conservative attitudes, **the sector is becoming ever more competitive and fast-changing**. However, low levels of formal qualifications and training suggest that further challenges and limitations may be faced in terms of business development.

Farms are typically small enterprises and **face issues common to many small businesses** of planning and strategy, access to information and advice, access to finance and business management skills. Responsibility for aspects of business management falls across the spectrum of the farm family.

Demand for **training has traditionally been limited to short courses to comply with legislation** eg proficiency tests, and FE courses as a grounding for young people. However, a culture of lifelong learning remains a distant target. Courses, especially FE-related, need to be flexible enough to include the wide range of skills needed in small farms ie business management skills.

Key sectoral development issues include:

- **diversification** - which must continue to grow, is starting to link farm enterprises with wider sectors such as tourism, leisure and food processing. This raises a much wider set of specific skill needs, such as customer service and marketing;

- **development of a food chain approach** - requires farms to be more aware of processors/consumers expectations. There is potential here for value added and niche products;

- **organic production/environmental awareness** - growing areas related to public interest/consumer preferences - present opportunities.

Skills Issues

The sector is very wide ranging, covering a multitude of skills areas. However the following are the broad skills priorities:

- **management and business skills** are rising in importance - particularly related to the running of a small business;

- **information communication technology (ICT)** developments have the potential to overcome barriers to learning eg distance and access, although ICT skills require significant improvement;

- **marketing and understanding of customer needs** will be the most important areas for the medium term success of business, where returns from the core primary market continue to be threatened. Those with a greater entrepreneurial focus will have better chances of success;

- specific skills related to **new technology and organic methods** will become more important to achieve competitiveness and productivity.

Action on Skills

The sector as described in this report has not generally been considered in its entirety by any one organisation. Therefore responsibility for developing a coherent strategy for future skills does not easily fall to one single sector partner. A major challenge is to decide whether such a sector definition is optimal for strategy purposes and if so how skills planning can be achieved.

The articulation of a **sector skills strategy** may be the first stage to addressing the apparent variety of support packages available throughout Wales. A consistent, flexible programme of support, informed by best practice may deliver greater added value than the existing arrangements. Such a programme would need to be holistic, encompassing both business management and IT skills, together with diversification or agriculture specific skill areas.

Finally, there remains a need to **continue the development of ever more flexible approaches to training and skills delivery**. This will underpin the overall development of the sector.

The table below summarises the recommendations made in this report:

Rec. No:	Recommendations	Time-scale	Key Partners
1	Strategic lead required for skills development of the sector	From 2000	CETW
2	Review all Welsh farm development schemes for best practice and develop a consistent, flexible support programme across Wales	From 2000	NAWAD/CETW/all others
3	Improve management and business management skills	2001	CETW/Lantra/FE/ HE/providers/all others
4	Develop more flexible delivery of critical agriculture-based training to support the technical development of the sector	2001/02	CETW/NTO/FE/ HE/providers
5	Increased focus of careers advice on the nature of work in the sector eg business management, multi-job and self employment	2001	Careers/schools/FE
6	Further research to develop understanding in areas such as: • likely impact of ageing farmers; • diversification/pluri-activity.	2001/02	HE/CETW/Skills Unit

1. Introduction

1.1 This document is one of a series commissioned by the Future Skills Wales Research Forum. The overall project aims to extend and complement the work begun by the original Future Skills Wales project, which forecast future generic skills needs across Wales using forecasting and survey data. The current project aims to add studies of future vocational skills needs within key sectors in Wales.

1.2 Businesses and employees in each of the sectors studied have achieved great successes; that is why these sectors have become important for Wales. Our focus on current skills issues should not obscure these achievements or the determination of all concerned to meet current challenges.

1.3 The agriculture sector was selected for inclusion because of the fundamental restructuring taking place in a sector which covers most of Wales and which underpins the fabric of the rural communities.

1.4 Each of the individual sector reports is complemented by a report on management and information technology skills issues across the sectors studied. This reviews the situation in each sector and draws out common themes and implications.

Method

1.5 The first phase of this study involved mainly desk research (please refer to the Bibliography at **Annex A**) augmented by telephone discussions with key individuals.

1.6 In the second stage, further discussions, both face to face and telephone, were held with sector representatives. A series of employer case studies were undertaken to extend and deepen the analysis of vocational skills issues.

1.7 The overall focus of the work has been qualitative in nature, while retaining a firm quantitative grounding through making use of existing secondary research. The aim was not to conduct quantitative primary research, but to consult with sector representatives in order to identify perceived skills issues, the actions being taken in response to these, and the potential for further action or policy development. The published reports should therefore provide a clear introduction to the sector, a ‘snapshot’ of sector issues, and pointers to current and potential action.

2. The Sector

Definition

2.1 The agriculture and farm enterprise sector is relatively simple to define in words but becomes more complex to describe by reference to research data.
"The agriculture and farm enterprise sector includes all agricultural farm activity together with diversified activity which exists because of the farm's nature and location" (FSW Research Forum).

2.2 The above definition was set as the focus for our work and we have interpreted this in a similar way to the term 'pluriactivity' used by Bateman (1993). We use diversification to encompass the following specific income generating activities, in addition to conventional agricultural production:

a) non-agriculture work on the farm;

b) agricultural and non-agricultural work on other farms;

c) any other work done elsewhere (i.e. a non-farming job off the holding).

2.3 The focus of this definition encompasses the skills issues relating to farming families, as well as agricultural workers. However, analysis of skills does not cover the potentially wide range of activities included in item (c) and to a lesser extent (a). Economic activity in this sector underpins the very existence of rural communities in many parts of Wales.

2.4 A mapping of the sub-sectors within this sector definition shows the massive range of activities included. As well as agriculture and other land-based activities, covered by Lantra the National Training Organisation (NTO), the definition spectrum covers contracting agriculture services through to food processing and tourism.

2.5 The main data used for understanding the sector has necessarily come from disparate sources:

- **MAFF and NAW Agriculture Department.** This provides a basis for understanding the characteristics of farm units and their agriculture activity.
- **Lantra.** A subset of the Lantra sectors covers land-based farm activity:
  – agricultural crops;
  – agricultural livestock;
  – environmental conservation;
  – farriery;
  – fencing;
  – game conservation;
  – production horticulture.
- **Diversified activity.** The following describes the breadth of activities covered:
  – contracted out farm-based services;
  – farm woodlands and forestry;
  – food processing;
  – horticulture;
  – tourism (accommodation and leisure).

Characteristics

Number of Firms

2.6 The number of farm and landbased businesses identified by Lantra is over 32,000 (**Table 2.1**). The major constituent of this is livestock holdings. Some of these holdings actually relate to the same farm business and so this may over estimate the number of enterprises. Added to this is an estimated 46% of agricultural holdings which have at least one diversified enterprise (ATB Landbase 1996), although in many cases these are not regarded as separate businesses.

Table 2.1: Business Numbers in Wales, 2000

Sub-sector	Businesses
Agriculture (crops)	800
Agriculture (livestock)	29,800
Environmental Conservation	150
Farriery	80
Fencing	700
Game Conservation	450
Production Horticulture	500
TOTAL	**32,480**

Source: Lantra Skills Foresight Report, 2000

Farm Structure

2.7 There has been a trend for Welsh farms to become larger, however the sector is clearly dominated by small and micro businesses (**Table 2.2**). Expansion of farms tends to occur when changes take place in neighbouring farms such as retirements and sales. With the high proportion of farmers approaching retirement age the likelihood of further farm mergers and acquisitions may speed up this process.

Table 2.2: Percentage Of Farm Holdings By Economic Size, 1980-97

Size Category (ESU)	1980 (% holdings)	1997 (% holdings)
Very Small <8 ESU	63	48
Small 8-40 ESU	32	33
Medium 40<100 ESU	2	16
Large and Very Large >100 ESU	2	3

Note: European Size Unit (ESU) - standard classification of farms by economic size.
Rounding errors mean totals do not all add up to 100
Source: Welsh Agricultural Statistics

2.8 A third of holdings are regarded as part-time. This means they lack the economic potential to maintain a full-time farmer. Average employment on farms employing labour is 1.5; only 3,300 holdings employ a regular farm worker (National Assembly for Wales Website, 2000). The trend is clearly towards part-time agricultural employment for both family and hired workers.

2.9 Anecdotal views of those consulted indicate that time spent away from direct farm employment is increasingly being focused on diversified activity, ranging from local authority contracts for grass verge cutting to running leisure activities such as quad biking.

Employees

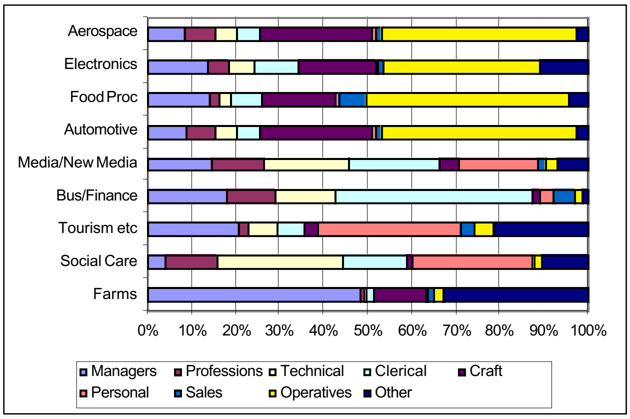
2.10 The sector is dominated by the farming of animals. Lantra estimates (**Table 2.3**) suggest over 80% of employment is related to livestock agriculture. Total employment in the combined sector is estimated to be in excess of 60,000.

Table 2.3: Forecast Workforce in Wales 2000-2005	
Sub-sector	**Employees**
Agriculture (crops)	1,200
Agriculture (livestock)	48,900
Environmental Conservation	4,000
Farriery	200
Fencing	2,000
Game Conservation	1,300
Production Horticulture	2,500
Total	**60,100**

Source: Lantra Skills Foresight Report, 2000

2.11 Recent forecasts, by Business Strategies Limited (BSL), provide an estimate of the broad occupational profile of this and the other sectors studied by York Consulting. **Figure 2.1** below compares the profiles. The sector as one might expect has a relatively large proportion of managers compared to the other sectors and also a large number of staff who are not easy to classify into a particular occupational profile.

Figure 2.1: Sector Occupational Profiles, 2000



Source: BSL Sector Forecasts.

2.12 A paper presenting an overview of the sectors selected for the study, the relative scale of the sectors involved and some idea of their relative importance in Wales can be found at **Annex B**.

2.13 Focusing on the agriculture side of the sector, BSL estimates indicate a total of 42,100 employees, excluding the wider diversified businesses. With a location quotient of 2.08 Wales has a significantly higher representation of agricultural employment than the UK. **Table 2.4** shows the ratio of employment across the regions, and highlights that Mid Wales has a third of employment compared with South East Wales which has less than 15%.

Table 2.4: Current Workforce in the agriculture sector 2000		
Region	**Employees**	**%**
North Wales	11,100	26
West Wales	11,600	28
Mid Wales	13,500	32
South East Wales	5,900	14
Wales	**42,100**	**100**

Source: BSL Forecasts, 2000

2.14 The two sources of forecast data available for the sector do not provide comparable estimates for Wales due to differences in timing and definition. However, we endeavour to utilise both forecasts as they provide different insights into businesses, employment and occupation.

2.15 The fact that 80% of the Welsh agricultural workforce are employed in areas regarded as 'rural Wales' (Strategic Marketing, 1998), is in itself no great surprise, but serves to make clear the link between this sector and the rural community.

2.16 Further workforce characteristics of the agriculture sector are outlined below:

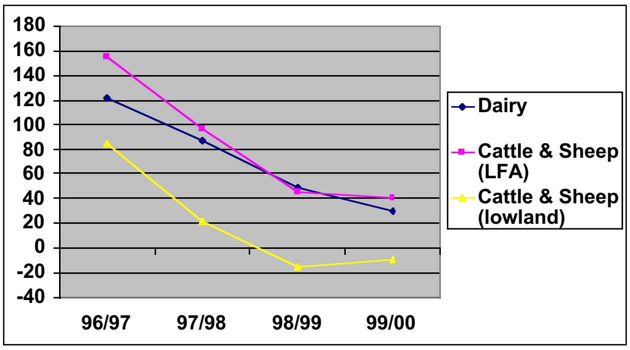
- the ratio of permanent employment is three men to every woman. While this might be expected, it is important to recognise that female employment is often understated as it is less formalised but makes an important contribution. Many farmers spouses are employed part-time in unrelated sectors, although their remaining time might involve supporting farming activity;
- an increasing proportion of farms employ contractors or seasonal staff.

2.17 These points are further illustrated by the case studies in **Section 3**.

Farm Incomes

2.18 Average net farming incomes have fallen dramatically over the past few years, and in many cases are set to continue declining in the foreseeable future. MAFF figures show a fall, in the UK, from £11,000 to £7,200 between 1998 and 1999, estimates for 2000 indicate around £6,000 per annum. For the cattle and sheep sector this may be as low as £2,500 per annum. **Figure 2.2** shows the decrease in farm incomes within Wales over recent years.

Figure 2.2: Farm incomes between 1996 and 2000



Note: Index base of 100 set between 89/90-91/92; LFA - Less Favoured Areas

Source: Farming Facts and Figures, National Assembly, 2000

2.19 The study conducted by Bateman (1993) indicated that 69% of households were involved in diversified activity, which on average represented 17% of farm income. Other sources of income came from agricultural work on the home farm (69%) and from unearned or transfer income (13%).

Output

2.20 Natural characteristics within Wales such as climate, altitude and soil quality are key factors influencing the domination by livestock production. **Table 2.5** shows that dairy, beef and sheep account for nearly 85% of the value of gross output in the Welsh agriculture sector.

Table 2.5: Gross Output in Wales

1998	(%)
Production of cereals	1
Production of potatoes and other crops	2
Production of horticulture	1
Production of livestock	54
Production of livestock products	30
Capital formation	6
Other activities	6
Total	**100**

Source: MAFF, Digest of Agricultural Census Statistics, 1998

2.21 Output of the agriculture sector in Wales is estimated as £388m (approximately 2% of Welsh GDP). This is forecast to rise by £35m to £423m by 2007 (BSL/MORI, 1998). An explanation for this forecast rise in output, compared with a decline in employment, relates to the increased use of technology to raise productivity.

Key Issues for the Sector

2.22 Significant changes have been affecting the sector over recent years. Some of these are set to continue and will need to be addressed in the short to medium term if the sector is to remain competitive. There are many complex linkages between the issues identified below:

Food Scares

2.23 Food scares such as the after-effects of the BSE crisis and the current debate on Genetically Modified Organisms (GMO) are major issues which individual farmers cannot easily influence, for example the discussion on GMOs is being debated by society and governments around the world. Farmers will need to think carefully about market positioning in respect of these issues.

Organic Production

2.24 Related to the above point organic production is becoming a more important market and one which a number of farms have already targeted. Craig Farm Organics is a prime example of this. The value of organic production is also important in the branding of Green Wales, which will be critical to future international competition.

Supermarket Domination

2.25 The purchasing power and high quality standards of supermarkets can represent both an opportunity for new products and ideas, but also a threat to those who are reluctant to change and adapt.

Consumption Patterns

2.26 Changing patterns of consumption are influenced by reduced demand for traditional products such as whole milk in favour of low fat milk, and by socio-economic factors such as:

- increased wealth resulting in more eating out;
- increased pace of life requiring more processed/ready-made meals.

Food Chain Approach

2.27 Greater integration along the food chain requires those at the primary production stages to be more aware of the final consumer demands - this may be in terms of choice or quality. This creates opportunities for increased profitability as the closer the farmer is to the end sale, the greater the potential return. However, it also brings greater demands for marketing, quality and presentation of final product.

Local Networking and Co-operation

2.28 This is a major source of efficiency which can provide collective benefits. There are many examples of these across Wales, the following three, mentioned during consultations, provide a good illustration:

- Pembrokeshire Machinery Ring where a number of farms share resources and the costs of maintenance;
- South Caernarfon Creameries - a farmers co-operative adding value to milk output from over 100 farms in the Gwynedd area;
- Graig Farm Organics where 80 farms have formed a producer group and share the overheads of marketing and selling.

2.29 While there are a number of examples of this more needs to be done, especially given the predominance of small businesses identified earlier. By working together, farmers can:

- take advantage of economies of scale for bulk orders;
- sell collectively to supermarkets;
- learn from each other;
- spread the costs of marketing.

Ageing Workforce

2.30 The average age of farmers is over 50 and has been increasing over a number of years. This clearly indicates the limited entry of new younger people but also has a significant impact on attitudes and behaviours. For example, research conducted by the DfEE has shown that older males tend to have a less positive attitude to learning (National Adult Learners Survey, 1998). There is a view, held by some of those consulted, that this represents a ‘time bomb’, with significant changes expected as large numbers of farmers retire. This pessimistic view suggests the next ten years will see large numbers of sales, mergers and even dereliction in some areas.

Continuous Change And Learning From Best Practice

2.31 These are important ways of deriving competitive advantage. However, in many traditional farming areas, there is limited recognition of continuous improvement. In many areas use of modern techniques is becoming a condition of effective market entry, for example, recognising that effective management of grass production can impact on milk yield and quality of sheep meat.

Bureaucratic Burdens

2.32 The level of paperwork and bureaucracy faced by farmers is immense. Some farmers feel very intimidated by the requirements of completing forms such as the IACS forms. In some cases such forms can be completed using computer software. Unfortunately, this is of limited benefit to farmers who are not IT literate.

General Low Morale

2.33 A result of recent pressure on the industry is that younger members of farming families are discouraged from entering the farming sector, so learning is not gained through the traditional route and potential labour is lost to the industry.

Dependency Culture

2.34 The sector has been removed from the effects of free-market forces to the extent that entrepreneurial spirit is depressed. There is a high level of expectation that grants, support and training will be available. Farming enterprises need to be encouraged to be more self -motivated.

Recognition of the Farm as a Business

2.35 This is of critical importance to the success of an agricultural enterprise. Traditionally, farms were operated to maintain the family with limited attention given to modern management techniques.

Prospects for the Future

2.36 A seven percent decline is expected in the number of businesses over the next five years according to Lantra estimates (**see Table 2.6**). This is mainly explained by reduced numbers of agriculture businesses.

Table 2.6: Forecast Business Numbers in Wales 2000-2005

	2005	change 2000-2005
Agriculture (crops)	750	-6%
Agriculture (livestock)	27,600	-7%
Environmental Conservation	200	33%
Farriery	80	0%
Fencing	650	-7%
Game Conservation	500	11%
Production Horticulture	500	0%
Total	**30,280**	**-7%**

Source: Lantra Skills Foresight Report, 2000

2.37 The trend of decreased employment in the sector is set to continue. Forecast data for agriculture alone shows a further reduction of 31% between 2000 and 2010 (**Table 2.7**). While employment levels are also decreasing across the UK a reduced location quotient between 2000 and 2010, from 2.08 to 1.78, indicates a decline in the significance of the sector across Wales, in employment terms. However, it remains, relatively the most strongly represented employment sector. All areas of Wales will experience declining employment although Mid Wales will experience a slightly less severe reduction of only 26%.

Table 2.7: Forecast Change of Workforce in the Agriculture Sector

Region	Employees 2010	% Change 2000-2010
North Wales	7,200	-35%
West Wales	7,800	-32%
Mid Wales	10,000	-26%
South East Wales	3,800	-35%
Wales	**28,900**	**-31%**

Note: totals do not sum due to rounding
Source: BSL Forecasts, 2000

2.38 Lantra estimates (**Table 2.8**) support this and also indicate that some of the diversified landbased sectors will retain employment, with expansion in some cases.

2.39 Forecast increases in employment for other sectors such as tourism and leisure (see sector report in this series) indicate some expansion which will have an impact on diversified activity.

Table 2.8: Forecast Workforce in Wales 2000-2005

	2000	2005
Agriculture (crops)	1,200	1,000
Agriculture (livestock)	48,900	44,600
Environmental Conservation	4,000	4,800
Farriery	200	200
Fencing	2,000	2,000
Game Conservation	1,300	1,400
Production Horticulture	2,500	2,900
Total	**60,100**	**56,700**

Note: totals do not sum due to rounding
Source: Lantra Skills Foresight Report, 2000

2.40 Some commentators believe that the sector is just starting to turn the corner after a prolonged period of pressure. However, only the successful businesses will survive and they will need to consider the issues outlined below.

A More Knowledge Intensive Industry

2.41 Work will become increasingly knowledge intensive: both in terms of production technology and environmental management. For example in the organic sector contrary to the belief that it merely involves traditional methods there are increasingly sophisticated techniques required such as soil testing.

Legislation And Accountability

2.42 Safety, traceability, quality and environmental protection will continue to increase in importance. While these issues are often regarded as bureaucratic, successful enterprises will recognise them as opportunities for competitive advantage and long-term sustainability.

Diversification

2.43 Pressures for diversification and identification of off-farm income will continue to increase. Related industries such as food processing and leisure/tourism will show growth, although competition will focus on quality, marketing and management.

CAP Reform

2.44 The likely impact of CAP reform and Agenda 2000 is reduced intervention prices with compensation for beef and sheep farmers. Dairy farms will be more exposed to world prices and greater volatility will lead to more restructuring.

Food Prices

2.45 The trend to lowering food prices towards world market levels will continue. This will place increasing pressure on national producers and increase the need to consider alternative markets.

2.46 The following section of the report reviews the skills issues within the sector and relates them to some of the economic factors identified above.

3. Sectoral Skills Issues

3.1 In this section we start by giving a very broad overview of the skill areas generally considered important in the sector and the extent to which these are supported by formal qualifications. Skill areas which are regarded as important in the future are then identified, while accepting that some forward looking businesses are already starting to adopt these as an essential minimum requirement.

Vocational Skills In the Sector

3.2 Traditionally, the main vocational skill areas have related to the operation of the agricultural activity at a given farm. So from Table 3.1 the majority of vocational skills relate to cattle and sheep farming. Apart from mixed farms, dairying is the next major area.

Table 3.1: Farm Holdings By Farm Type, Wales

	1998 (%)
Dairying	14
Cattle and sheep	60
Cropping	2
Pigs and poultry	2
Horticulture	1
Mixed and other types	22
Total	**100**

Note: totals do not sum to 100 due to rounding
Source: MAFF, Digest of Agricultural Census Statistics, 1998

3.3 The four key occupational areas in the sector identified in **Table 3.2** account for 90% of total employment. Sub-regional figures are in line with what would be expected given their share of employment, although Mid Wales has a lower number of craft related occupations than would be expected.

Table 3.2: Key Occupations in the Agriculture Sector, by region, 2000

Occupation	North	West	Mid	S. East	Wales
Managers in Farming, Horticulture, Forestry and Fishing	4,900	5,400	6,900	2,500	19,700
Other Craft and Related Occupations NEC	1,300	1,200	1,100	700	4,400
Road Transport Operatives	100	100	200	100	500
Other Occupations in Agriculture, Forestry and Fishing	3,700	3,500	4,100	1,900	13,100

Note: totals do not sum due to rounding
Source: BSL Forecasts, 2000

3.4 Important skill areas, in addition to those of animal husbandry mentioned above, which relate to most farms include:

- growing of grasses and stock-feed crops;
- maintenance of agricultural machinery;
- farm and environmental maintenance;
- increasingly farms are recognising the need to consider management issues of resource efficiency and cost reduction.

3.5 Other broad skills within the sector relate to farm families and to diversified activity, these are outlined below.

Farm Family

3.6 Farmer's spouses and other family members perform a number of important roles in the running of the farm. As well as providing additional support for farm work during busy periods, work often includes business management areas such as filing official returns, managing farm accounts, organising stock records and purchasing.

Diversified activity

3.7 Important areas for diversification include:

- contracting and agricultural services, such as hedge cutting for local authorities or golf courses;
- leisure and tourism, such as quad biking and camping;
- accommodation and catering;
- retail, including sale of produce and garden centres;
- production of added value food products e.g. cheese-making;
- equine;
- letting and developing buildings.

3.8 These diversified enterprises have some skill areas in common and some that are very activity-specific. For example they all bring the farm enterprise closer, if not in contact with, the end customer and so require high quality customer service skills. Business development skills are also important such as business planning, marketing and selling. However, there are some specific skills, for example, relating to the operation of an equine centre which will be very different to the production of cheese.

3.9 The broad occupational structure of the sector indicates the importance of owner-managers (**Table 3.3**). Furthermore the low percentages of managers and supervisors highlights the fact that most enterprises are micro-businesses. This can have benefits of flexibility but limitations when activity increases and expansion is necessary. For example many micro-businesses find as they expand the owner-manager is under increasing pressure to both manage and deliver the business activity. As identified by Bateman 1993, ***"There is a danger that they (farmers) spread themselves too thinly".***

Table 3.3: Estimated workforce for Landbase Sector, 1999, UK

	%
Managers	8.3
Owner-managers	49.5
Supervisors	3.5
Sales and Administration	7.8
Skilled Staff	23.9
Semi-skilled/unskilled staff	7.0

Source: Lantra, 2000.

3.10 The low incidence of supervisory roles within the agricultural sector means that a number of generic skills are critical, such as:

- self reliance and self management;
- flexibility/ability to learn;
- initiative;
- problem solving;
- customer care.

Qualification Levels

3.11 The extent to which the skills of agricultural workers are supported by formal qualifications is very low, with just under a half of Welsh agriculture residents having no formal qualifications (**Table 3.4**). This confirms anecdotal information in the following areas:

- children of farmers have traditionally known that they would follow their parents footsteps, therefore motivation to achieve academic success was limited;
- learning on the job has been regarded as the best form of training;
- recent pressures of profitability on farms have seen a decline in the numbers of young people gaining formal qualifications through colleges. This is evidenced by the ending of provision at Coleg Menai in North Wales recently due to low demand. Given the likely concentration of farming in the area the likelihood is that some young people are still learning but without the benefits of working to national standards or gaining a qualification.

Table 3.4: Estimated Highest Qualifications in Agriculture Sector, 1998

	Presently working/last worked in sector (%)	All residents (%)
NVQ 4/5 or higher	12	20
NVQ3 equivalent	9	17
NVQ2 equivalent	14	22
Lower Qualifications/NVQ1	12	18
No formal Qualifications	47	26

Source: Future Skills Wales Residents Survey, BSL/MORI, 1998

3.12 Within the agriculture sector limited value is attached to formal qualifications because of the informal methods of recruitment such as family succession or social networks. The overall effect is that ***"in such circumstances, qualifications lose their usual value as tools with which people can demonstrate their competence to potential employers"*** (Mid Wales TEC 1999)

Employer Case Studies

3.13 The following employer case studies illustrate some of the issues we discuss in this report.

Case Study: Mike Plumb, Blaenffynonau Farm, Narberth

Mike runs a 44 hectare sheep farm with agriculture based diversification in a number of areas. His background, having been raised on a farm, is as an agricultural mechanic. He is an NVQ assessor (mixed and general purpose agriculture NVQs) for levels 1, 2 and 3, he works with 30 students across Cardigan and Pembrokeshire. Through the South Pembrokeshire Partnership for Action in Rural Communities (SPARC) initiative, Mike purchased a wood chipper which enables him to offer a mobile wood chipping service - this has been vital to farm diversification.

Mike's wife works part-time in a bank and while at home supports farm activity.

Views on young people/apprentices

Younger family members working on the family farm will be aware of the importance of issues such as paperwork and the accounts, but if they are employed by a farm they are less likely to know about such things. Modern Apprenticeships can work but the young person has got to want to make it work. Mike has one bad experience with a young lad who just wasn't prepared to make the necessary effort. However, this would not put him off employing an apprentice in the future.

Views on Management Skills

Yes, important but you must have the basics right in the first place. There is only limited coverage in NVQ level 3, he does not think it can be much more without detracting from the rest of the course.

Managing capacity of work on the farm is important - he does not have enough work for a permanent employee at the moment, but when work does increase he uses self employed labour from the local village.

Other diversification related skills

- Mike gained a chainsaw certificate and was able to tender for jobs, with the National Park, Dyfed Powys Police and local contracts;
- pest control course for rats, moles and squirrels has led to contracts for farm assured schemes;
- fork lift truck training and experience has been useful;
- hedge laying course through Countryside Council for Wales (CCW).

Computing skills

Mike purchased a computer recently and through the SPARC initiative accessed training for himself and his wife. He has now been on a CLAIT course. This computing expertise has been very useful for marketing, business cards, email, managing the accounts.

Case Study: Farmers First Plc

Farmers First, based in Brecon, Mid Wales, operates a ferry service to export livestock to Europe. The company, owned by a group of farmers, last year exported over 1.1 million sheep, of which over 800,000 were Welsh. The ferry, chartered by the company, now exports the majority of livestock from the UK.

The company, formed in 1998 from public donations, has recently acquired an abattoir in Kenilworth in England. They are now in the process of making a public offering of company shares. A total of 45 staff are employed by the business, of which 40 are based in Kenilworth and five are based in Brecon, Mid Wales.

The abattoir operation has had some early successes, with a French supermarket which previously only bought Irish meat now purchasing Welsh lamb from the company. The company has worked hard to overcome the marketing challenges presented to selling British meat into Europe. It is essential, therefore, to focus on quality assurance issues which countries such as France expect as the norm.

Sales and marketing are critical issues to the agriculture sector and particularly to the Farmers First business. Therefore, they have recently recruited a Group Marketing Director to the business. They recognise that marketing and customer awareness skills are particularly weak among farmers. In this context, the Welsh branding is of value to the sector, and the business, in helping to raise awareness, but ultimately individual businesses must promote their own products and services.

In the short-term, the view is that business development issues are of a greater priority than skills and training issues, particularly due to the competitive nature of the sector.

Case Study: Graig Farm Organics

The company which was originally an organic farm has diversified to act as an intermediary for organic farm produce. Graig Farm Organics is a family business employing 16 staff. 80 farmers are now part of the producer group. Graig Farm sells to about 100 retail outlets, has a farm shop and sells via the internet.

The increase in imported food means that indigenous producers must maintain high quality standards. Graig Farm works closely with its producers to develop their skills and expertise. Examples of initiatives include:

- Organising guest speakers
- Practical workshops sessions eg grading sheep

Skills which are important to the business are:

- Craft level butchery skills
- IT skills particularly for office staff
- Customer service

Experience of employing young people has not been good: “they are just not prepared to stay the pace”. They put one employee on a day release scheme through the TEC in butchery, it involved an MLC representative coming out once a month but it just did not provide enough value. When alternative courses were considered they turned out to be too far away.

Some difficulties have been experienced in terms of staff recruitment. They have very low staff turnover but finding skilled people in a rural area can be difficult. However, this is not seen as a major barrier provided expansion does not occur too quickly.

Future Skills Demand

3.14 Over the ten years to 2010 the agriculture sector is forecast to lose nearly 31% of its employment. In occupational terms this is most likely to impact on farmers, farm managers and other farm occupations, with losses of over 34% of employment (**Table 3.5**). For craft and transport occupations the decline will be smaller at 17% and 19% respectively.

Table 3.5: Forecast Change in Key Occupations in the Agriculture Sector, 2000-2010

Occupation	North	West	Mid	S. East	Wales
Managers in Farming, Horticulture, Forestry and Fishing	-40%	-37%	-31%	-40%	-36%
Other Craft and Related Occupations NEC	-20%	-18%	-9%	-23%	-17%
Road Transport Operatives	-23%	-21%	-11%	-26%	-19%
Other Occupations in Agriculture, Forestry and Fishing	-37%	-35%	-27%	-38%	-34%

Source: BSL Forecasts, 2000

3.15 In regional terms, across all the main occupational categories, Mid Wales is forecast to experience lower losses than the other regions, albeit still significant.

3.16 Lantra's analysis of qualification requirements across the sector suggests that those who might previously have required skills at NVQ Level 2 equivalent will now be expected to achieve skills equivalent to Level 3 or higher.
"Operational workers will require higher level job-specific skills, along with increased knowledge of health and safety and environmental issues" *Skills Foresight 2000, Lantra.*

3.17 Business management and ICT are probably the most talked about skills in the sector. These are particularly relevant to owner managers who need higher level business skills. When explored further there are two broad categories:

(i) **generic business and ICT skills:** these include skills areas that might be relevant to any small business, such as business planning and marketing;

(ii) **farm-specific business and ICT skills:** these include skills in the use of industry specific software for managing livestock records or generating business indicators such as cost per litre of milk production.

3.18 ICT skills are becoming recognised by some farmers as important to their business. Awareness is raised particularly through sons and daughters use of computers at school, college and work. However, it is likely that many share the following perspective: ***"I know I must start to learn how to use the computer, but I don't know where to get the training".*** The challenge is to overcome these types of barriers.

3.19 Business skills include the need to manage business information, accounts and official returns. Often regarded as secondary to the business activity itself, they have the potential to inform business decisions. This work is commonly undertaken by a farmer's spouse or by a farm secretary.

3.20 Further important future skill areas for the agriculture and farm enterprise sector are identified below. Some relate specifically to traditional farming businesses, others are more general and cover farms and diversified enterprises.

- **environmental awareness and appreciation.** Skills of fence laying and dry stone wall building are becoming more important with the increased focus on environmental sustainability and the need for countryside maintenance. This is often supported by the Government or European funds, through initiatives like Tir Gofal, which may become a greater part of farm incomes. Pollution and waste management are also under this heading;
- **technical farm management skills** will be required at higher levels as more knowledge-intensive farming approaches develop. This includes technology-based skills such as soil mapping which can contribute to production efficiency. This will be particularly important in dairy and intensive production. Understanding and making decisions relating to broad improvements is a further example of these types of skills;
- **legislative compliance** in health and safety, animal welfare, hygiene and produce traceability requires greater awareness of these issues and specific knowledge to support implementation.
- **traditional skills** will become more important, for example rotation systems and grass management, particularly in the organic sector. These will need to be combined with some of the modern scientific skill areas to gain maximum benefit.
- **succession planning.** This can address the problem of farmer's sons being discouraged by not having involvement in the running of the business, with the farmer reluctant to release control and introduce new ideas. Other effects of failing to do this can be that the son is intimidated by the role of running the farm when the father dies or retires.
- **cost management** is of critical importance and has the power to affect the viability of the business. Traditionally the focus on wastage and efficiency has been limited. Increased competition and price pressures will make this a priority.
- **understanding of where to go for advice** and support on training and wider business development matters. This is where training and business support start to overlap but this represents a critical point at which the doors to learning and business development can open or slam shut;
- **managing diversification.** The process of identifying and then developing a diversified business requires a complex set of skills. Areas such as effective market research are cited as often missing. This can be, and in some areas is, being supported by mentoring and discussion groups;
- **customer relationships** and understanding the requirements of customers becomes more important especially as diversified activity moves the enterprise closer to the end consumer. Linked to this **marketing** is a key area where farmers are regarded as weak. In the words of one farmer consulted, **"farmers need to get their act together and recognise who their customer is and how they are going to communicate with them"**;
- **product knowledge** is important especially in diversified enterprises, whether it relates to the product that is being produced or a service which uses other products;
- **quality control** particularly in respect of food production is critical as many supply contracts will be dependent on a minimum standard being reached. This is strongly linked to the understanding of customer requirements and expectations.

Training

Entry Routes

3.21 While provision of training has become more focused on the wider land-based sector, there will still be a need for good quality entry routes into agriculture. However, young people should not be channelled into narrow career paths. Traditionally, training has been provided through full-time National Certificates and Diplomas and part-time City & Guilds provision. National Traineeships and Modern Apprenticeships at Levels 2 and 3 represent the work-based routes. According to Lantra these are now beginning to be accepted.

3.22 However concerns remain, particularly on the farming side as opposed to the more diversified parts of the sector:

- agricultural employers are generally more interested in Proficiency Test Certificates than NVQs;
- NVQs are considered too narrow, particularly in Wales where small farms require a very wide range of skills, particularly skills relating to diversification;
- there remain concerns about the amount of paperwork involved in producing portfolios, paper-based evidence and off-the-job assessment.

3.23 Lantra suggests courses should address two key areas:

- relating courses sufficiently to practice, through exposure to workplace activities;
- 'future proofing': "equipping individuals for career-long learning and change". This includes the provision of acceptable training and education for people in a myriad of different circumstances. Adaptation of NVQs may help the sector utilising the system of Related VQs (RVQs).

3.24 Anecdotal evidence indicates that the public perception of the industry through negative publicity is starting to put off young people from entry. Although employment is forecast to fall, the importance of involving more young people is evidenced by the rising average age of farmers. While organisations such as the Wales Young Farmers' Clubs work closely with young people the impact of parental advice and public opinion represents a strong tide to turn. Improving the image of the sector could focus on two areas:

- convincing young people that agriculture can provide a viable career opportunity;
- increase the general population's perception of agriculture as providing an important contribution to society and particularly the rural community.

3.25 This could be achieved through a national campaign but at a local level through involvement of schools and Education Business Partnerships.

Adult Training

3.26 The propensity to undertake training in the agricultural industry is low; only 33% of agricultural workers had been involved in some form of learning during the previous 12 months compared with 54% of the working population as a whole (BSL/MORI 1998).

3.27 The predominance of micro businesses creates specific problems in terms of support and training for owner-managers:

- poor access to information;
- reluctance to seek assistance;
- difficulties of travel/time to access training;
- training/learning' is seen as a solution to only a limited range of needs.

3.28 This is illustrated by the case of one farmer who indicated an interest in learning to use a computer, but he had not come across an appropriate course. He remembered that the ATB used to circulate lists of courses, but now feels that he does not know where to start looking. These are genuine barriers to taking up training, but a balance must be struck between providing support and signposting and the development of self-reliance among the farming community to identify business solutions.

3.29 The importance of ICT for business use and as a tool for wider learning/training will have implications for an industry which typically has low use of computers. However, ICT provision has the potential to overcome problems of distance, timeliness and customisation. A particular example of a flexible approach to training is the 'Telecabana' mobile IT resource linked to Antur Teifi in West Wales. This is supported by the view of one farmer ***"the Telecabana allowed us to view farm specific computer software without having to travel miles away"***.

3.30 Short course training within the sector is mainly linked to health and safety and regulatory requirements. This is particularly the case where certificates and proof of training are required.

3.31 However, a large proportion of training is informal in nature. This was highlighted by one particular case study respondent covering diversified food processing. The views of the farmer who manages the farm producer group was that they cover most of the training that they require internally. The following are some examples of methods used:

- farmers are encouraged to network and discuss alternative methods;
- expert speakers are brought into present on specific topics;
- farmers are involved in grading exercises pre and post slaughter to gain an understanding of what makes good quality final product;
- on-the-job training is provided to butchery and food preparation staff.

Provision

3.32 Nearly 8,500 students aimed for agriculture further education courses according to latest figures (**Table 3.6**). These figures show a significant bias to the North Wales region. Gender representation is reasonably balanced, slightly favouring males with a 55% share compared to females at 45%.

Table 3.6: Qualification Aims of FE Students Studying Agriculture Subjects 1997/98

Region	Number	%
North Wales	3,736	44%
West Wales	1,377	16%
Mid Wales	1,563	19%
South East Wales	1,781	21%
Wales	**8,457**	**100%**

Source: FEFCW Individual Student Record, 1997/98

3.33 A summary of provision within the sector is that it is well served by colleges and providers but that post-16 training could be further improved. Work has taken place to develop more modular and flexibly delivered courses, however, a cursory review of data collected by the Wales Information Network and held on the LearnDirect database indicates that daytime courses are in the majority.

3.34 This is supported by Lantra Skill Foresight report which cites the rapid expansion of courses at HND and degree level but states that they are mainly full-time and do not cater for mature new entrants and existing workers who require part-time modules and work-based approaches.

3.35 Feedback from farmers we have spoken to indicate that courses need to be tailored more to their needs and circumstances, recognising the difficulties of release from work and the annual cycle of farming activity. Clearly colleges and training providers are under increasing pressure to improve flexibility and adapt to business requirements while some colleges have been working to address these issues, it must be progressed further to have real impact.

3.36 Anecdotal evidence suggests that agriculture and farm enterprise training is disparate across Wales, with no holistic perspective. It is difficult to gain consistent data to prove the first point, however, lack of a clear national plan towards training in the sector supports the second.

3.37 Most targeted subsidised training for farmers tends to be provided on a small localised scale, varying greatly in availability, through European Leader initiatives or Structure Funds, for example the SPARC Whole Farm Review and Development Scheme operating in South Pembrokeshire.

3.38 Key issues to be considered in the provision of training for the agriculture industry are therefore:

- the importance of farming-specific business and IT skills;
- greater peer recognition i.e. training/mentoring by people still working in the industry;
- modes of delivery.

Business support

3.39 In agriculture and other sectors characterised by small businesses the dividing line between training and business support is very thin. Business support can often be a first step to recognising the enterprise as a small business and consideration of issues such as business planning, marketing and training.

3.40 The view expressed by one farmer is that maintaining the very existence of a business is more important than just providing training. This reinforces the approach taken by SPARC where training is considered within the context of the business rather than in isolation (see box below).

3.41 A key factor identified in the SPARC work and other initiatives such as the Cwysi project operated by Menter a Busnes is the credibility and experience of those providing the advice. Unlike other industries where generic business principles can be applied across sectors, effective support of farm-related enterprises requires sector-specific knowledge. A principal reason for this is that historically farmers have not received business support or even recognised themselves as a business. Therefore, sensitivity is important together with an ability to gain the farmer's confidence through knowledge and understanding.

SPARC Whole Farm Review and Development Scheme

The scheme aims to provide advice on improving the viability of the farm and how to diversify. It was developed and is delivered by SPARC a Leader II group with funding from local agencies and the Objective 5b EAGGF programme.

Three stages are involved:

1. Three audits are undertaken: a **business/diversification audit** (private consultant); an **environmental audit** (SPARC Agriculture Officer); and a training audit (Pembrokeshire Training Providers).
2. **Implementation Programme** where the audits are reviewed with the farmers, including opportunities for group seminars, to produce a farm implementation plan.
3. **Identifying grants and opportunities** access to grants for specific aspects of the plan is supported to develop the business.

3.42 There is a generally agreed view that the current mechanism for providing business support, branded as Business Connect, needs to be more responsive to the agriculture sector. Therefore the proposed development of more dedicated support for the agriculture sector will be welcomed. However, the biggest challenge will be raising awareness of this and ensuring farmers utilise it. The crucial test will be whether it works for farmers - the strong social networks will transmit such information very quickly.

3.43 Farmers tend to be conservative in nature and if they have developed a personal relationship with, for example, an NFU representative then they will use that person or organisation as a primary contact. The challenge to the business support community is to ensure that while organisations have different objectives a farmer can be confident of receiving good quality, consistent advice, wherever the first point of contact.

4. Action on Skills

Existing Strategy/Policy

4.1 A number of strategic policy developments have taken place in recent years which have an influence on the direction of the sector:

Agriculture Directorate at the National Assembly for Wales

4.2 The existence of a dedicated department within the NAW ensures that the interests of the sector remain a political priority. The Agriculture Directorate works closely with the other public bodies to ensure a consistent approach to the development of the sector. Two initiatives are discussed below.

4.3 The **JIGSAW** (Joint Initiatives for Government Services Across Wales) project is an important development which aims to improve the administration of the Common Agricultural Policy (CAP) in Wales. It brings together Government services in rural Wales under the network of existing accessible local offices, providing an effective "one-stop" service to farmers and others in rural areas. The main objectives of the project are to:

- provide local accessibility to information and services;
- improve service delivery;
- reduce running costs;
- develop joint working with other Government organisations;
- provide a high quality bilingual service to all customers.

4.4 **Tir Gofal** is a whole farm initiative similar to the Environmentally Sensitive Areas Scheme run by the Agriculture Department. Priority will be given to applications which have the highest environmental value. Details of the assessment system are being designed so as not to disadvantage small farms. Payments will be at a level which compensate farmers for income foregone and for costs incurred in carrying out environmental works.

4.5 By embracing all of these initiatives into a single scheme, the main objectives of Tir Gofal will be to:

- protect and improve wildlife habitats on farmland by promoting the positive management of existing habitats, and encouraging the habitat restoration and recreation of new wildlife habitats;
- protect characteristic rural landscapes and to promote the management and restoration of important landscape features;
- protect the historic environment, including historic landscapes and archaeological features and to encourage farming practices compatible with their conservation and enhancement;
- provide opportunities for access to the countryside.

WDA Food Directorate

4.6 The WDA Food Directorate gives focused support to the economic development of the food sector throughout Wales, across the food chain. Its principal focus is investment and developing businesses and products. In addition it promotes the food sector across Wales both internally and externally. Its work is facilitated by a series of co-ordinators in each of the regions of Wales who are able to work closely with individual businesses.

4.7 The work of the Food Directorate is particularly relevant to the agriculture and farm enterprise sector through its work with food related diversification activity.

Agri-Food Partnership

4.8 The Agri-Food Partnership was formed to focus on the importance of a food chain approach to the Welsh agriculture sector. The vision is to link the primary produce of Welsh agriculture to profitable markets with much more added-value food processing. Four working groups were established to draw up action plans. Three of these groups were sector specific and one is more general, focusing on the importance of farm development itself.

Skills Related Priorities For Each Of The Working Groups

Lamb and Beef Sector

- understanding market requirements;
- business skills and IT skills;
- better management of improved grassland and dissemination of advice;
- organic production.

Dairy Sector

- improved take-up of grassland management;
- improved farm management and cost minimisation;
- adoption/compliance with farm assurance standards;
- improved animal husbandry (animal breeding, milk recording, feeding practices).

Organic Sector

- securing relevant training, advice and support;
- developing market co-operation;
- enhancing and promoting brand image.

Farm Development Strategy Group

4.9 The Farm Development Strategy Group (FDSG) was established to focus on three specific areas:

- develop plans for a Wales-wide network of demonstration farms;
- develop plans for strengthening training provision, linked to the demonstration farms;
- develop better signposting of consultancy/advisory services that are available.

4.10 The importance of IT and management skills is clearly stated in the FDSG's desire to "develop plans for complementing the network of demonstration farms by strengthening the provision of training to enable adults who are already busy farming to adopt best practice techniques and gain the business and IT skills to manage their businesses more effectively". A feasibility study is currently in progress to look at possible approaches to delivering programmes for IT and management skills development.

Lantra

4.11 As the National Training Organisation (NTO) for the landbase sector, Lantra has responsibility for representing employers on training issues. It is principally a UK-wide organisation working to a DfEE remit, although due to the importance of the sector a dedicated officer liaises with organisations across Wales.

4.12 Lantra has recently produced a Skills Foresight report highlighting some of the important skills areas within the industry. They have been tasked, as have all NTOs, to produce a sector workforce development plan which will articulate the key requirements of the industry and how they can be met. This is likely to be produced over the next year.

Impact of Policy and Strategy

4.13 The organisations and partnerships described above are principally addressing issues of competitiveness and efficiency within the sector. Their work is starting to generate a clearer focus for the industry as a whole, although issues related to training and business support are considered to be more fragmented. While the Farm Development Task Group are pursuing these areas there are some major hurdles to be overcome including changing attitudes and co-ordinating a wide range of support organisations.

European Funding

4.14 European structure funds represent a major opportunity to finance necessary support activity. Objective 1 money is the major source available to West Wales and the Valleys with Objective 2 and Objective 3 money available in other areas. The major drawback is the lack of consistency across Wales, which has been a major problem for the support of the agriculture sector in recent years. Case study farmers were quick to cite examples of situations where particular farmers cannot access grants or funding due to their postcode location.

5. Conclusions

5.1 The conclusions we draw here are necessarily general to the agriculture and farm enterprise sector. Some of the wider skills issues relating to diversified areas such as food processing and tourism will be covered in other sector reports.

5.2 Probably the single most important issue for the sector is recognition and understanding of the customer. If farmers are not responding to customer preferences then business success will be limited. Most areas of diversification bring the farmer into more direct contact with the customer.

5.3 The two broad areas of future skills needs identified in the research are:

- technical agriculture skills;
- business management skills (including IT).

Technical Agriculture Skills

5.4 Within the context of farming this is really about lifelong learning and recognising the need to continually update skills and understanding. Many technological and scientific developments have been and continue to take place which can improve the quality of the final product from farms.

5.5 This covers a wide range of areas such as grassland management, animal husbandry, organic production, environmental awareness to name but a few.

5.6 The need for improved access to such knowledge is paramount. The network of demonstration farms and improved business support mechanisms will help but changing farmer attitudes to learning and ensuring college/provider flexibility in provision are also required.

Business Management Skills

5.7 Business management skills are regarded as a priority area for agriculture and farm enterprises.

5.8 Skills ranging from accounts management and IT to marketing can help to manage the business more effectively and facilitate decision-making. Improved business management skills can also be used to assess potential diversification ventures and effectively operate a business. Such skills are particularly relevant to farm families as well as the principal farmer.

5.9 Important feedback from the farming community is that training in these areas needs to comply with the following criteria:

- be specific to a small agriculture based business;
- be tailored to the level and specific need of the individual.

5.10 There is a feeling that private providers and colleges often oversupply with broad-ranging courses when a more focused approach would be best.

5.11 Effective IT skills are a particular priority as they can not only improve time efficiency for tasks such as storing records but can unlock the door to further information (through the World Wide Web) and communication (through email). It is generally regarded that developing fairly low level IT skills are a priority in the first instance, however there are clearly some who wish to progress to more advanced stages.

Careers Implications

5.12 The changing nature of work within the agriculture and farm enterprise sector has implications for the way people view careers in farming. It is important that this is conveyed to young people making career choices. Key messages include:

- a wider range of skills are required to sustain a farming business;
- portfolio self employment is becoming a standard working practice.

Provision of Support to the Sector

5.13 There are a number of issues pertinent to the provision of support which can have a major influence on skills development.

Business Support

5.14 Overcoming barriers to information and signposting is critical to a sector where a feeling of isolation and not knowing who can help is common. However, this must be balanced against the need to foster greater self-reliance rather than an expectation of government support. Many farmers feel that business support issues are more important than training - although this view is not shared by most ‘experts’ who feel that the issues are integral to one another.

5.15 The challenges of delivering business support to the sector require a sector-specific approach. For example, it is crucial that advisors gain the confidence of farmers through informed experience. Furthermore, the development of effective relationships with farmers in order to fully understand the issues they are facing is a feature of successful programmes.

5.16 Support needs to encourage consideration of training and skills development within the context of the overall business direction. Building in careers advice is an important part of making the right personal decision for the farmer and family, as well as for the business.

5.17 Evidence exists that farmers are confused as to which organisations can help them. Greater cohesion between the range of providers of advice (such as unions and Lantra) would help generate more confidence and interest.

Diversification

5.18 Large numbers of farmers have diversified their core farm business and there are many who are considering doing so. However, diversification alone does not necessarily deliver success. The skills mentioned above of business management and careful market research are critical to any small business.

5.19 Sustaining a diversified business and selecting the right mix of diversified activities are as important as making the decision in the first place. Therefore support needs to be balanced between encouraging non-diversified farms and working with those who have developed their business.

Networking and Communication

5.20 Facilitating communication between farmers to learn from each other and recognise best practice is an important area of provision which can raise expectations and change attitudes. Real benefits can accrue as networking and stronger links develop between farmers.

5.21 Initiatives such as the demonstration farms can initiate this type of activity, but must be built upon to progress initial interest.

Access to Capital

5.22 One of the major barriers to starting or expanding a small business is access to capital. The purchase of a computer and associated equipment is a major investment for a farm where income and profitability are low. Beyond this the sizes of capital outlay required to invest in diversification activity can be a major barrier.

5.23 Clearly this is a difficult area for public support as demand would be unlimited. The challenge is to find optimal one-off support schemes which can achieve leverage and additionality while not generating a climate of dependency on public support.

Towards a Skills Strategy for the Sector

5.24 The first point to note is that a skills strategy does not currently exist for the sector as a whole. **Table 5.1** identifies organisations, partnerships and documents that would contribute to such a strategy. However, it is unclear who would lead on this exercise and whether it could sensibly cover all the sub-sectors identified in this report.

5.25 A clear view needs to be taken on the value of a skills strategy and if it is considered beneficial how it could be developed.

Recommendations

5.26 A summary of the key recommendations for the sector is as follows:

- **there needs to be a strategic decision about where responsibility for skills development of the sector belongs.** Lack of a coherent strategy has led to a fragmented approach spread across many organisations. The national Council for Education and Training in Wales would be an appropriate body to take this forward, through partnership, provided sufficient resource is available.
- at a programme level there are a wide variety of activities taking place across Wales, such as those funded by Leader groups. This is a timely opportunity to **review all these schemes for best practice and develop a consistent, flexible support programme across Wales**.
- **the need to improve management and business management skills will continue**, especially as average farm size and diversification activity increases. This also encompasses IT skills, which can have a profound affect on individuals and businesses but are only optimal if they are part of an holistic approach to developing the overall business.
- developing **more flexible delivery of critical agriculture-based training to support the technical development of the sector** needs to be considered by all delivery organisations.

Table 5.1: Potential Contributors to a Welsh Agriculture and Farm Development Skills Strategy

Lantra Workforce Development Plan

- main focus will be the UK as a whole, although a focus on Wales may be possible
- Lantra does not cover diversified areas such as food and tourism

Agri-Food Partnership Strategies

- the three sector specific reports indicate some broad skills priority areas
- the Farm Development Strategy Group is focusing on some specific skills areas such as business support, management and IT skills

Four regional skills action plans

- developed by each of the TECs following the original Future Skills Wales Project

The table below summarises the recommendations made in this report:

Rec. No:	Recommendations	Time-scale	Key Partners
1	Strategic lead required for skills development of the sector	From 2000	CETW
2	Review all Welsh farm development schemes for best practice and develop a consistent, flexible support programme across Wales	From 2000	NAWAD/CETW/all others
3	Improve management and business management skills	2001	CETW/Lantra/FE/ HE/providers/all others
4	Develop more flexible delivery of critical agriculture-based training to support the technical development of the sector	2001/02	CETW/NTO/FE/ HE/providers
5	Increased focus of careers advice on the nature of work in the sector eg business management, multi-job and self employment	2001	Careers/schools/FE
6	Further research to develop understanding in areas such as: • likely impact of ageing farmers; • diversification/pluri-activity.	2001/02	HE/CETW/Skills Unit

Annex A: Bibliography

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Annex B: Welsh sectors in context

A Brief Overview of the Relative Size and Importance of Welsh Sectors

This paper presents an overview of the sectors selected for study within the Future Skills Wales Sectoral Skills project. It aims to give the relative scale of the sectors involved and some idea of their relative importance in Wales.

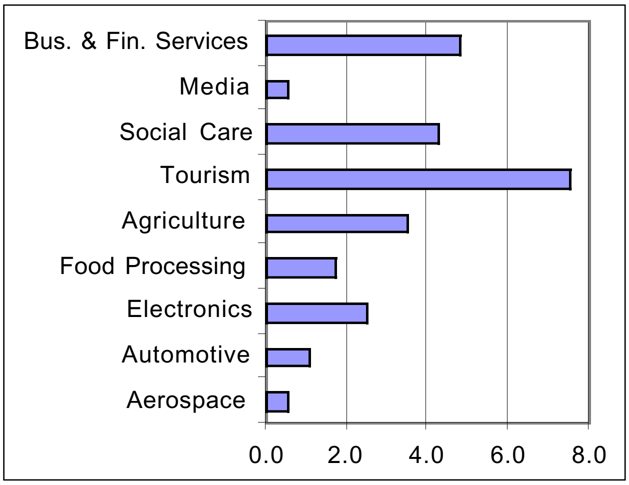
The data on employment used in this section is taken from the latest estimates from Business Strategies Limited (August 2000). Data on business units are taken from NOMIS. Some of the values given (for example for the number of businesses within Wales, or the size of the workforce, for a given sector) will not agree with estimates or calculations from other sources. This is due to differences in the detailed definitions of sectors, or in methods of estimation. However by using one source in this discussion, consistency in measurement or estimation is established, and better comparability is ensured. This is appropriate since here we are concerned with the relative sizes of sectors and their workforces, as much as with absolute numbers.

Sector Size: Workforce Numbers

Figure B.1 shows the employment figures for each of the sectors (employees and self employed) as a percentage of the total for Wales. By this measure Tourism, Leisure and Hospitality is the largest of the selected sectors, followed by Business and Financial Services, Social Care, and Agriculture and Farm Enterprises.

Together, the nine sectors selected for study in this project provide work (either as employees or in self employment) for around 26% of people working in Wales. This indicates the scope and potential importance of the exercise for the understanding of skills issues in Wales and the formulation of policy responses. (The rest of employment in Wales is accounted for by a large public sector, including government, education and public sector healthcare, and by the primary, construction, transport and distribution sectors, including retail).

Figure B.1: Employment as a percentage of Welsh Employment: by Sector

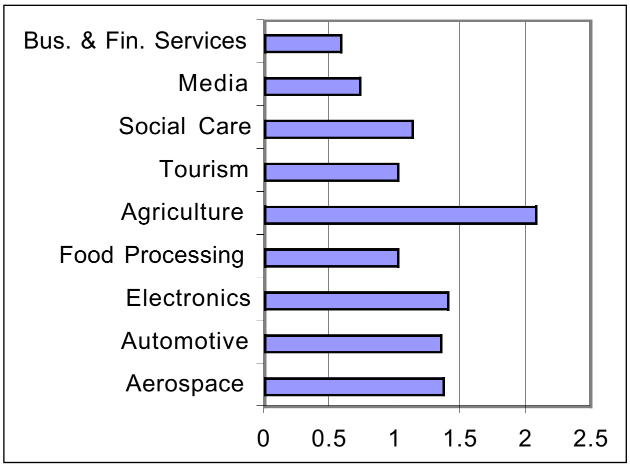


Source: BSL FSW Sector Forecast

Employment Location Quotients

Figure B.2 provides a different view of the sectors, in terms of their importance within Wales relative to the UK as a whole. It does this by comparing the employment location quotients for the sectors. Employment location quotients are used to express the degree to which employment in a given sector is located in a selected region. To calculate a location quotient, an average percentage is first calculated for all employment in the region. Using the BSL estimates, for example, one finds that 4.3% of all employment in the UK is located in Wales.

Figure B.2: Employment Location Quotients for Wales: by Sector



Source: BSL FSW Sector Forecast

Therefore, if employment in a given sector is distributed evenly over all regions of the UK, one would expect 4.3% of its employment to be in Wales. The sector's Welsh employment percentage, at 4.3%, will be equivalent to the average employment percentage for Wales.

To calculate the employment location quotient, the sector's percentage is expressed as a ratio of the Welsh average percentage. For example if a sector has 5.2% of UK employment, the employment location quotient will be the ratio of 5.2 to 4.3, or 1.2. Quotients of more than 1 therefore indicate over-representation of employment in the Welsh sector relative to the UK as a whole. Quotients of around 1 indicate that employment in the sector in Wales is much as one would expect given the overall distribution of employment across the UK; and quotients below 1 indicates that the sector in Wales is relatively under-represented in terms of employment.

Figure B.2 shows that the strongest Welsh sectors, in these terms, are Agriculture, plus three of the manufacturing subsectors - Automotive, Aerospace and Electronics Manufacturing. UK employment is relatively concentrated in Wales for these sectors, despite the fact that some of them are small in relation to Welsh employment as a whole (Figure B.1). The Social Care sector also shows employment strength, while Food Processing and Tourism, Leisure and Hospitality are approximately in line with the Welsh share of UK employment.

Media and New Media, and the Business and Financial Services sector, are both under-represented in Wales in employment terms, with employment location quotients well below 1.

Sector Size: Number of Businesses

An alternative method of comparing sectors is by the number of business units in each sector. This can be less straightforward than the employment location quotient method used above. Here we are using data on business units in Wales and for Great Britain as a whole, provided in NOMIS. The main difficulty is the definition of a business unit within the published figures. This does not make a distinction between separate businesses, and locations representing branches or sites within one business. It also omits small 'one-person' business sites without formal employees.

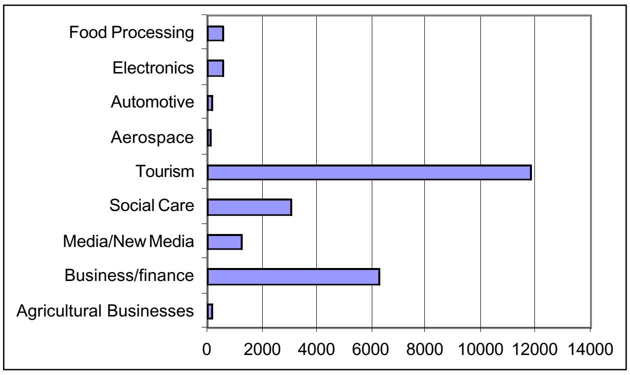
This means, in particular, that these figures are apt to be misleading as applied to the agricultural sector, since they represent agricultural businesses with employees, rather than all farms. They therefore greatly under-represent the number of agricultural enterprises in Wales. Although the business unit figures for agriculture have been included in the following analysis, they are therefore **not a reliable guide to agricultural sites in Wales**.

Figure B.3 shows the sectors studied in terms of the number of business units in Wales. It shows that, by this measure, the Tourism, Leisure and Hospitality sector is by some way the largest. According to the NOMIS figures, this sector contains 12.4% of all Welsh business units, - around 1 in every 8.

A further 6.6% of Welsh business units are in the Business and Finance sector, and 3.2% in Social Care. The next largest sector, Media and New Media, includes a large number of businesses classified under 'Other computer related services'. Many of these may be 'New Media' businesses within our study definition. Others, however, may be providing services which are not relevant within this definition. As explained above, the figures for agriculture do not represent the farming sector accurately.

In total the sectors covered by the study account for over 25% of business units located in Wales.

Figure B.3: Number of Business Units - `Selected Sectors



Source: NOMIS

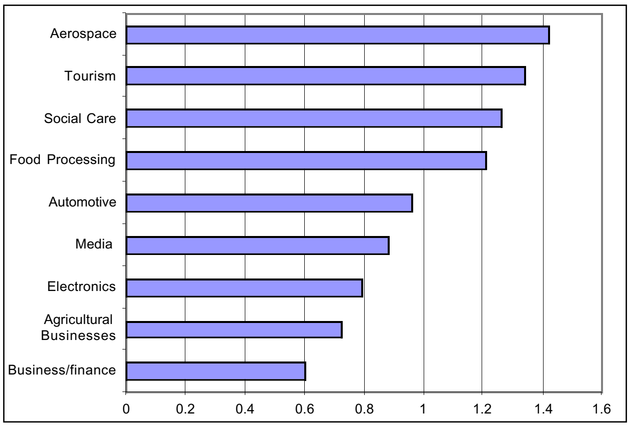
Site Location Quotients of Welsh Sectors

Figure B.4 shows the site location quotients calculated for the sectors covered by this study. These are calculated as for the employment location quotients used earlier, but using business unit figures instead of employment numbers. Four of the sectors have quotients greater than 1. In other words, these sectors are 'over-represented' in Wales relative to what one might expect taking Great Britain as a whole. These quotients represent a degree of concentration of business units in these sectors within Wales. These sectors are Aerospace, Tourism, Hospitality and Leisure, Social Care, and Food Processing.

The Automotive Manufacturing sector in Wales, with a location quotient of 0.96, is close to the size one might expect (in terms of numbers of business units). In other words, Wales has 'a fair share' of business units in this sector, according to these NOMIS figures. At the other end of the scale, the Business and Finance sector, with a site location quotient of only 0.6, is under-represented within Wales - confirming the findings of the first Future Skills Wales study in 1998.

Again, the quotient for 'Agricultural Businesses' reflects the limitations of the method, although it may indicate that Welsh farms and agricultural businesses tend to be smaller than the average for Great Britain, inasmuch as fewer of them are large enough to be included as business units.

Figure B.4: Site Location Quotients



Source: NOMIS

Selection of Sectors for the Study

The above discussion sheds light on the reasons for selecting this set of nine sectors. The reasons vary, but can be simply expressed as follows (some sectors are selected for more than one reason):

- sectors with significant proportions of Welsh businesses and/or workforce (Tourism, Business and Finance, Social Care);
- sectors which are important components of manufacturing industry within Wales (Aerospace, Electronics, Automotive, Food Processing);
- sectors which are relatively strong in Wales (Aerospace, Tourism, Social Care, Food Processing);
- sectors which are relatively weak in Wales, but are important for future growth (Business and Finance, Media/New Media);
- sectors with particular significance for Welsh culture and communities (Agriculture, Media/New Media).

The Manufacturing Sector

Manufacturing has been more important in the Welsh economy than for the UK as a whole. In 1998 employment in manufacturing (including but not limited to the sectors studied in this project) accounted for 19.7% of Welsh employment. This contrasted with 16.6% for the UK - a difference of 3.4 percentage points. Projections for 2004 show manufacturing employment as a lower percentage of employment in both cases - 17.3% in Wales, against 14% for the UK. Although the percentages are smaller, the difference between Wales and the UK, at 3.3 percentage points, remains almost unaffected. (DfEE, Skillsbase/IER, June 2000).

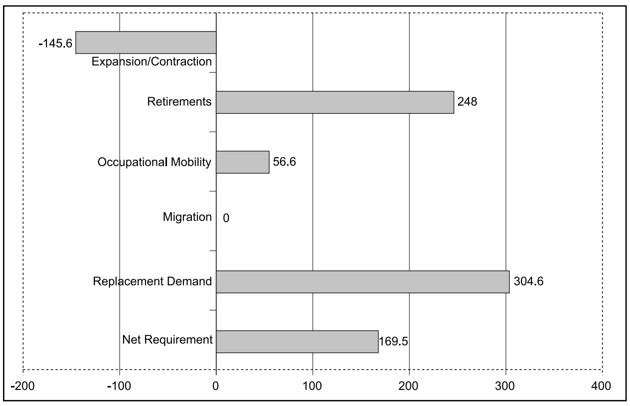
Although these projections show a fairly significant decline in the size of the manufacturing sector as a percentage of overall Welsh employment, the absolute numbers involved change less significantly. This is due to a projected rise in the total numbers employed in Wales over the period 1998-2004. Thus, the figure of 227,000 for those employed in manufacturing in 1998, becomes 205,000 in 2004 - a decline of 22,000, or just under ten percent.

When considering the future demand for skills it is important to keep in mind that, as illustrated above, relative decline in the manufacturing sector does not imply lack of future demand for manufacturing skills. This was one of the insights behind the original Future Skills Wales project methodology.

This point is further illustrated by the replacement demand projections for occupations associated with manufacturing. **Figure B.5** shows the replacement demand projection for skilled metal and electrical trades (SOC 52) for the period 1998-2004, across the UK. In this period, 145,600 jobs in these trades are expected to disappear - part of the overall decline in employment in manufacturing noted above. However, losses from these trades are projected consisting of 248,000 from retirement, and 56,600 from occupational mobility (movement into other jobs), a total of 304,600 workers to be replaced. This more than offsets the effects of declining employment, leaving a net requirement figure of 169,500. This represents the requirement for new, trained entrants to these trades in these six years. These may be new entrants to the workforce, or existing workers who have upgraded or added to their skills and qualifications.

Based on the assumption that Wales would require about 4.5% of this number (this being the approximate size of the Welsh workforce relative to that of the UK), this implies a net requirement for some 7,600 skilled metal and electrical tradespeople over this period for Wales.

Figure B.5: Replacement Demand: Skilled Metal and Electrical Trades, 1998-2004 (UK)



Source: DfEE Skillsbase/IER

Notes

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