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Strengthening the local rural economy: promoting the sustainability of rural business in Bedfordshire

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Strengthening the rural local economy: promoting the sustainability of rural business in Bedfordshire

Abstract

This research was undertaken for Bedfordshire County Council to investigate appropriate mechanisms for the promotion of sustainable rural business in Bedfordshire.

The research seeks to provide insights into the future requirements of small rural businesses in Bedfordshire and to build upon the support that Bedfordshire County Council currently provides to 'local producers' through the 'Made in Beds Directory'.

A user-friendly postal questionnaire was targeted to businesses in Bedfordshire with a rural postcode, with 25 or fewer employees and regardless of their business activity.

The survey covered: the strengths and weaknesses of the businesses; the perceived importance of those strengths and weaknesses; the barriers to improving business performance; and appropriate support provisions to enhance business performance. These were previously identified in the literature and policy review, corroborated and augmented in a pilot study.

The results were varied, illustrating the highly individual nature of the businesses and their perceived requirements. The businesses identified their strengths as: technical expertise; financial management; ability to innovate; compliance with legislation and the location of the business and weaknesses were identified as: marketing and promotional ability; training provision; I.T.; product development and logistics. The perceived barriers to improved business performance identified and future support provision requirements, resulted in the provision of valid insights into the rural businesses.

The wide scope of the research meant that despite not fully achieving the objectives, it provided useful insights enabling a series of informed conclusions. The principle recommendations were:

- Support should be directed at the agricultural sector;
- Support should address the principal areas of weaknesses: marketing and promotional activities; training provision; I.T.; product development.
- Support is directed at overcoming the perceived barriers to improving business performance, namely: lack of management time; lack of staff

skills; lack of marketing and promotional ability; access to finance; coping with competitors.

- Further exploratory research should be carried out into: methods for developing the strengths of rural companies and providing strategies for sustainable competitive advantage for the businesses; the types of staff training which rural businesses would participate in to enhance staff skills;
- Increased promotion and signposting to free local business resources available;
- Promotion of the benefits of addressing environmental issues in the business decision-making and the provision of free or subsidised membership of the Bedfordshire Green Business Network to businesses with rural Bedfordshire postcodes;
- BCC to establish a panel of businesses for the purpose of implementing the recommendations on an experimental basis. Over a period of time the panel would provide useful additional data and experiences, which could inform future support strategies for sustainable rural businesses. The use of a pilot panel would allow for the appropriateness of support measures to be assessed prior to implementation thus reducing the risk of inappropriate use of public funding and adverse public opinion.

Acknowledgements

I would like to thank my two sons Alex and Lewis and my friends for their patience, support and encouragement. For without them I would never have possessed the drive and determination required to survive the undertaking of this piece of research.

I would further like to thank my sponsors Bedfordshire County Council, in particular Alec Edgar and Paul Vann, for providing me with a challenging but interesting subject for my research.

Finally, for the endless patience and reassurance of my abilities, I wish to thank Charles Neame.

Abbreviations

BCC – Bedfordshire County Council

BLEDP – Bedfordshire and Luton Economic Development Partnership

BLSBP – Bedfordshire and Luton Sustainable Business Partnership

DEFRA – Department of the Environment, Food and Rural Affairs

DETR – Department of the Environment, Transport and the Regions

DTI – Department of Trade and Industry

EEDA – East of England Development Agency

EERA – East of England Regional Assembly

ERDP – England Rural Development Programme

GBN – Green Business Network

JEDS – Joint Economic Development Strategy

LA21 – Local Agenda for the 21st Century

LCA – Life Cycle Analysis

MAFF – Ministry of Agriculture, Fisheries and Food

RDA – Regional Development Agency

RWP – The Rural White Paper

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1 Chapter One: Introduction

This research was undertaken for Bedfordshire County Council to investigate appropriate mechanisms for the promotion of sustainable rural business in Bedfordshire.

1.1 Background

Bedfordshire County Council (BCC) currently provides support to the 'local producer' through the annual production of the 'Made in Bedfordshire' directory. Local producers are defined by BCC as those who:

' Sell any produce locally within a 30 mile radius, either direct to the consumer or to a local outlet'

The directory contains detailed listings of local producers of food, arts, crafts and farm accommodation within Bedfordshire and is widely distributed throughout Bedfordshire via libraries, Tourist Information Offices, arts and crafts outlets and Local Government Offices. The principal objective of the Made in Bedfordshire Directory is as a promotional tool for those businesses listed within it.

Through the instigation of this research project BCC is seeking to investigate the potential strategies available to BCC for the provision of further support to Local Producers and thus build upon the Made in Bedfordshire directory.

1.2 Rationale for the Research

The rationale for BCC providing support to local producers is founded in the United Kingdom's commitment to sustainable development policy. The three main pillars of the concept of sustainability encompass economic, environmental and social dimensions.

BCC have identified the following potential benefits of promoting the sustainability of rural businesses:

- Strengthening the local economy in Bedfordshire by increasing the sustainability of the businesses themselves;
- Encouraging consumers to buy local produce which can reduce the environmental impact of production and consumption by decreasing food miles;

- Purchasing from local producers helps lock in skills, knowledge and money within the local economy;
- Employment provision for the local community;
- The provision of fresher and therefore healthier food products for the local community.

Local producers, as depicted by BCC, only form part of the rural business sector within Bedfordshire. On consulting The East of England Development Agency and BCC websites (EEDA 2002 & BCC 2002 (see Appendix One)) it was found that the business activities in Bedfordshire were diverse typically comprising of:

- Manufacturing
- Tourism
- 'High-tech'
- Distribution
- Research and development
- Transport
- Finance
- Agriculture
- Construction
- Public administration
- 'Other services'

It was considered that rural business activity in Bedfordshire was likely to reflect many of these activities also. Location of the businesses was considered to be the key to the research rather than the activity of the businesses.

All rural businesses were considered to possess similar issues for sustainable business performance, which they are not always able to overcome such as access to broadband connection, provision of employment for the local economy, staff attainment, bus routes and infrastructure.

1.3 Setting the Objectives and Need for this Research

BCC, as a public body, constitutes an interface between business and people in the community. Therefore it is in a good position to consider the needs, both perceived and actual of rural businesses in Bedfordshire.

To remain objective it is also necessary to canvas the views of the rural businesses being targeted for support by public bodies.

The rationale for this research is therefore three-fold:

- To aid public authorities to improve their strategies for sustainable development;
- To implement targeted support for rural businesses;
- To invest funding wisely in ways which will improve the sustainability of rural businesses in Bedfordshire.

To provide definitive answers to all these issues would be beyond the scope of this study, yet the information gained during this research will contribute to the answers. The conclusions generated by this research will contribute to BCC's strategies for sustainable development, targeted support for rural businesses in Bedfordshire and thereby effective public spending.

1.4 The Aim

To enable the research project to precede an aim has been formulated and a set of objectives identified to achieve the aim. That aim is to provide recommendations to Bedfordshire County Council and related organisations for the provision of appropriate support mechanisms for the promotion of sustainable rural business.

1.5 Objectives

Objectives that will be pursued to achieve the aim of the research are:

1. To classify rural businesses (for example by performance, strengths and weaknesses, opportunities and requirements for sustainable business strategy implementation).
2. To determine the position of rural businesses in Bedfordshire in terms of economic, environmental and social performance.

3. To identify appropriate strategies and to make recommendations for promoting sustainable rural business available to BCC and other organisations to facilitate support provision.

1.6 Research Questions

To develop and provide a framework for the research the following research questions have been formulated.

1. What is the profile of rural businesses in Bedfordshire and how can this profile be established?
2. What conclusions can be drawn about the current environmental, economic and social performance of those rural businesses in Bedfordshire?
3. What do rural businesses in Bedfordshire consider they require to achieve sustainable business performance?
4. What significant obstacles do rural businesses in Bedfordshire face?
5. What can BCC (and other organisations) do in terms of support provision to promote the sustainability of rural business?

The above research objectives and questions have been pursued in support of the overall project aim, namely to provide recommendations to Bedfordshire County Council (and related organisations) for the provision of appropriate support mechanisms for the promotion of sustainable rural business.

1.7 Approach Taken and Results

A self-administered postal questionnaire, covering business needs, the barriers faced and potential support provisions (previously identified in the literature) corroborated and augmented by pre-testing, was targeted at small (see section 3.2.1.1) rural businesses in Bedfordshire. The sample selection was limited to businesses, which employed 25 employees or fewer. The rationale for this was a) to limit the sample size and b) that an assumption was made that larger businesses employing more people would be less likely to require support for sustainable business performance.

The results were interesting and varied and included the identification of:

- A diverse profile of rural businesses in Bedfordshire;
- The strengths and weaknesses of those businesses;
- The perceived barriers to improving business performance;
- The key changes the businesses wish to realise;
- The extent to which the businesses participate in support provision;
- Insights into the preferred areas of support.

1.8 Outline of the Dissertation

This outline provides an overview of how this research has been structured.

Chapter Two: **Literature Review:** This chapter covers the concept of sustainable development; the policy context of sustainable development and rural policy from a national to a local level; and the strategic management theory of the resource-based view.

Chapter Three: **Methodology:** This chapter provides a description of the research approach used, the sample and its selection, and how it will be presented in Chapter Four and analysed in Chapter Five.

Chapter Four: **Results:** This chapter contains the results presented in graph and chart form accompanied by explanatory text. The information presented here is analysed in the following chapter.

Chapter Five: **Discussion:** This chapter provides an interpretation and analysis of the data produced in Chapter Four explicitly linking this information to that presented in Chapter Two, to investigate the implications of the research objectives, whilst drawing out the themes and developing original arguments.

Chapter Six: **Conclusion & Recommendations:** This chapter concludes the main findings and implications for the research objectives and questions and provides recommendations for future research.

2 Chapter Two: Literature Review

The literature review encompasses the following main themes in relation to this dissertation:

- The meaning, origin and indicators of sustainability; its implementation into national, regional and local policies and strategies;
- Rurality and rural policy;
- The resource - based approach to strategic management.

Sections 2.1, 2.2 and 2.3 of the literature review relate these themes from a national and regional context to a local context within Bedfordshire.

2.1 Policy Context - Sustainable Development

There are many 'definitions' of sustainability and sustainable development; Jeffrey (2001) aptly demonstrates the diversity in interpreting the term with "*some oft quoted definitions*":

"Then I say the Earth belongs to each…generation during its course, fully and its own right, no generation can contract debts greater than may be paid during the course of its own existence" (Thomas Jefferson, September 6, 1789)'

"Sustainability is the (emerging) doctrine that economic growth and development must take place, and be maintained over time, within the limits set by ecology in the broadest sense – by the interrelations of human beings and their works, the biosphere and the physical and chemical laws that govern it…It follows that environmental protection and economic growth are complimentary rather than antagonistic processes" (William D. Ruckelshaus, Towards a Sustainable World, Scientific American, September 1989)

"The word sustainable has roots in the Latin sustinere, meaning to 'hold up' or 'to support from below'. A community must be supported from below – by its inhabitants, present and future. Certain places, through the peculiar combination of physical, cultural, and, perhaps, spiritual characteristics,

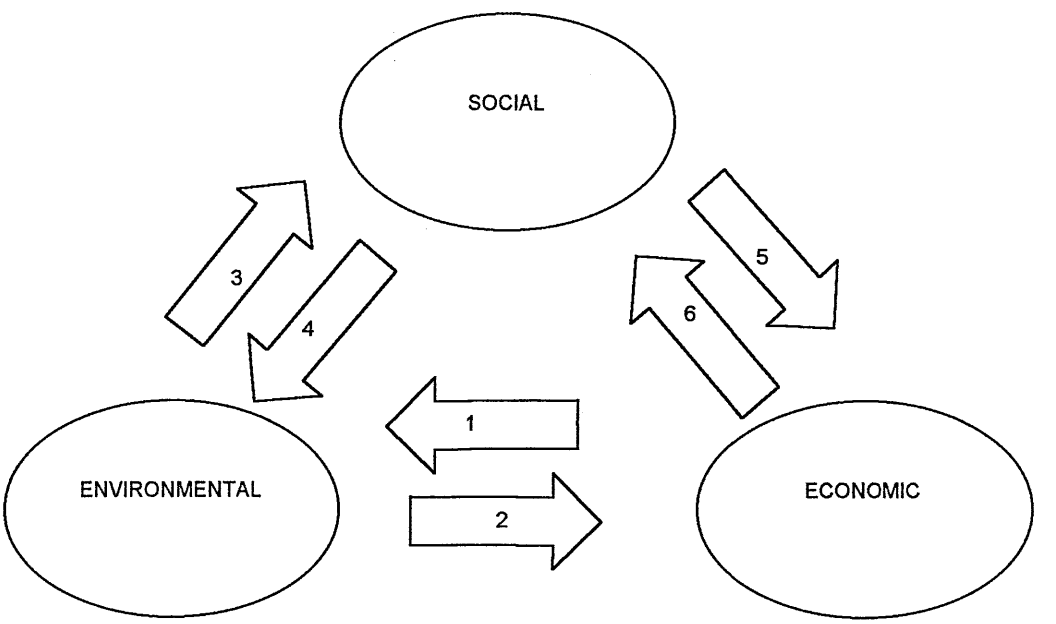
inspire people to care for their community. These are the places where sustainability has the best chances of taking hold" (Muscoe Martin, A Sustainable Community Profile, Places, 1995)

The global debate surrounding sustainability and sustainable development has been strongly influenced by environmental concerns. The main driver of sustainability and sustainable development is the realisation that everybody has an impact on the Earth through the consumption of the products and services of nature.

The environment is the basis of all economic activity, indeed life itself (Starkey & Welford, 2001). It provides us with food and water and with the raw materials for the production of goods and services, in addition, it acts as a sink for wastes and provides 'life support services' such as maintaining climate and ecosystem stability (Starkey & Welford, 2001).

In Starkey & Welford, the Organisation for Economic Co-operation and Development (OECD) model and key provide a summary of the key issues and interactions.

Figure 2.1 The Three Dimensions of Sustainable Development – Summary of Key Interactions Starkey & Welford 2001)



Key:

1. Effects of economic activity on environmental issues (resource use, pollutant discharge, waste generation); environmental protection and management activities by economic agents; implications of economic policies and market forces (production levels and patterns) for the environment.
2. Productive functions and services of the environment, (resource and sink functions); implications of environmental policies for economic efficiency.
3. Provision of environmental services (access to resources, amenities); effects of environmental conditions on health, on living and working conditions; implications of environmental policies and related instruments for society (distributional aspects).
4. Effects of demographic changes and consumption patterns on environmental resources; implications of social conditions and policies for the environment; environmental awareness and education; environmental information and participation; institutional arrangements; legal frameworks.
5. Quantity and quality of the labour force, population and household structure, education and training; information and participation; consumption levels and patterns; implications of social conditions and policies for economic growth, institutional arrangements; legal frameworks.
6. Income levels and distribution; employment; implications of economic policies and market forces for society.

2.1.1 The Present Day Concept of Sustainable Development

A turning point of the present day concept of sustainability came in 1983 when the United Nations created the World Commission on Environment and Development (WCED). Its major contribution was the Brundtland Report of 1987 *'Our Common Future'* (WCED, 1987) which was published after three years work focusing on social, economic, cultural and environmental issues. This report introduced the term 'sustainable development', which was defined here as:

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'

The Brundtland report set in motion the preparations for the 1992 United Nations Conference on Environment and Development (UNCED), more commonly known as the Rio de Janeiro Earth Summit. The heads of state or senior officials of 179 governments attended. Through the Declaration on Environment and Development (1992) more concrete initiatives were established; 'Framework for Convention on Climate Change'; 'Biodiversity Convention' and 'Agenda for Change in the 21st Century' (Howes et al, 1997). The declaration provided for the first time, a summarisation of the key problems and some direction for comprehensive global solutions (Jeffrey, 2001).

The 'Agenda for Change in the 21st Century' was an action plan, which recommended that all countries present at the Rio de Janeiro Summit produce national sustainable development strategies. In 1994 the UK became one of the first countries to produce a sustainable development strategy in response to the Rio de Janeiro Earth Summit, '*Sustainable Development: The UK Strategy' (DETR 1994).*

This was superseded by the Department of the Environment, Transport and the Regions (DETR) publication *'A Better Quality of Life – A Strategy for Sustainable Development in the UK' (1999a)* setting out the key issues and priorities at national scale. The strategy states:

"Sustainable Development means ensuring a better quality of life for everyone now, and for generations to come. It requires us to meet four objectives at the same time, here in the UK and in the world as a whole:

- *Social Progress which recognises the needs of everyone*
- *Effective protection of the environment*
- *Prudent use of natural resources*
- *Maintenance of high and stable levels of economic growth and employment"*

The 1999 strategy further endorsed the requirement for all local authorities to have Local Agenda 21(LA21) strategies by 2000 to deliver the principles of sustainability at a local level within communities (DETR, 1999a).

Through LA 21, local authorities are required to assess the impact of their decisions on the overall well being of the area and on the people who live and work within it. To enable greater coherence in the delivery of their services, local authorities are expected to work with other agencies, voluntary bodies and local communities to develop comprehensive strategies for promoting the well being of their area.

To demonstrate the Government's commitment to the integration of sustainable development into policy making, further specific initiatives were instigated through *'A Better Quality of Life'* including, relevant to this dissertation, '*Our Countryside: The Future' (DETR 2000)* referred to as the rural white paper (RWP).

2.1.2 Indicators of Sustainable Development

The provision of Indicators is central to the effective monitoring and reporting of progress towards sustainable development. They are tools, which measure, simplify and communicate important issues and trends. They provide a benchmark against which future progress can be measured. Indicators can provide people with an understanding of the breadth of sustainable development issues and the inter-relationships between them.

The indicators for sustainability cover the three pillars of sustainable development, namely social progress, economic growth and environmental protection.

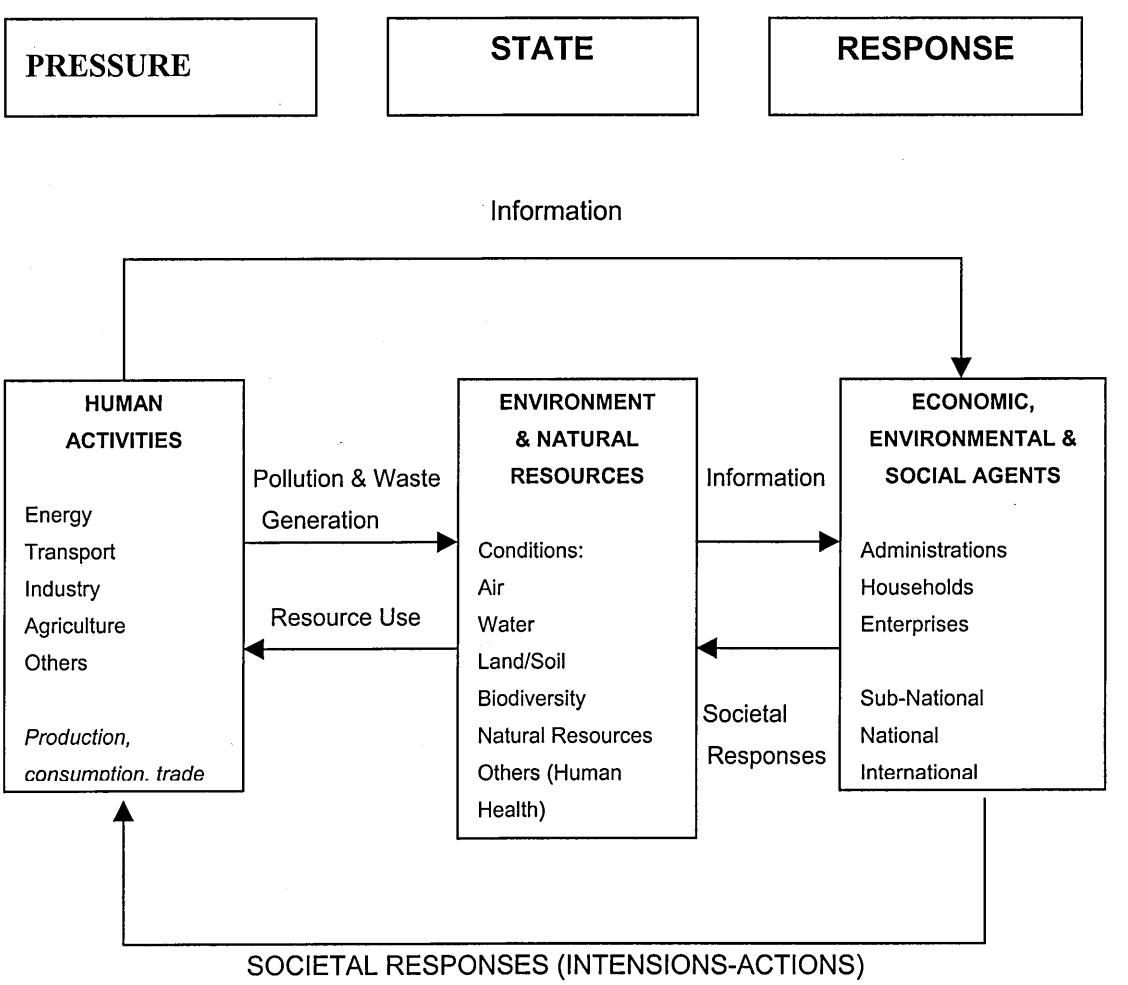
Jeffrey (2001) states that the measurement of sustainable development should be based on those indicators, which signal:

- The pressure that society puts on the environment (in the form of pollution and resource depletion);
- The resulting state of the environment (especially the incurred changes) compared to the desirable (sustainable) states;
- The response by human activity mainly in the form of political and societal decisions, measures and policies.

This summary originated in the Pressure - State – Response Model (PSR), which was developed by the Organisation for Economic Co-operation and Development (OECD) to structure its work on environmental policies and reporting. It considers that: human activities exert pressures on the environment and affect its quality and the quantity of natural resources (state); society responds to these changes through environmental, general economic and sectoral policies and through changes in awareness and behaviour (societal response) (OECD, 2002).

The model highlights the cause-effect relationships between economic activities, environmental and selected social conditions, and is a useful tool to aid decision-makers and the public identify environmental and economic issues as connected. It therefore provides a means of selecting and organising relevant indicators in a manner, which is useful for both decision-makers and the public (OECD, 2002).

Figure 2.1.2 The Pressure-State-Response Model (OECD, 2002)



The publication of *'A Better Quality of Life'* was followed by the *'Quality of Life Counts: indicators for a strategy for sustainable development for the UK'* (DETR, 1999b). This report provided some 150 indicators of sustainable development, including 15 'headline' indicators, which would be used to monitor and report on progress nationally (Table 2.1.3).

Table 2.1.3 Headline Indicators - UK sustainable development strategy (DETR 1999b)

Themes, issues and objectives	**Headline Indicators**
Maintaining high and stable levels of economic growth and employment	
• Our economy must continue to grow • Investment (in modern machinery as well as research and development) is vital to our future prosperity • Maintain high and stable levels of employment so everyone can share greater opportunities	**H1 total output of the economy (GDP and GDP per head)** **H2 total and social investment as a percentage of GDP** **H3 proportion of people of working age who are in work**
Social progress which recognises the needs of everyone	
• Tackling poverty and social exclusion • Equip people with the skills to fulfil their potential • Improve health of the population overall • Reduce the proportion of unfit housing stock • Reduce both crime and peoples' fear of crime	**H4 indicators of success in tackling poverty and social exclusion** **H5 qualifications as at age 19** **H6 expected years of healthy life** **H7 homes judged unfit to live in** **H8 levels of crime**
Effective protection of the environment	
• Continue to reduce our emissions of greenhouse gases now, and plan for greater reductions in the longer term • Reduce air pollution and ensure air quality continues to improve through the longer term • Improve choice in transport; improve access to education, jobs, leisure and services; and reduce the need to travel • Improving river quality • Reverse the long-term decline in populations of farmland and woodland birds	**H9 emissions of greenhouse gases** **H10 days when air pollution is moderate or higher** **H11 road traffic** **H12 rivers of good or fair quality** **H13 populations of wild birds**

• Re-using previously developed land, in order to protect the countryside and encourage urban regeneration	**H14 new homes built on previously developed land**
Prudent use of natural resources	
• Move away from disposal of waste towards waste minimisation, reuse, recycling and recovery	**H15 waste arisings and management**

2.1.3 Rurality

Bedfordshire is situated within the East of England and is largely rural. It is therefore; appropriate to define the term 'rural'. Rurality is defined by Morris and Bailey (2001) as;

"A relative term used to describe geographically based characteristics, circumstances and practices which are not urban. By comparison, urban refers to that commonly found in towns and cities. Rural implies landscapes characterised by open space, vegetation and natural physical features, land use characterised by farmed land and a relatively low incidence of built property and infrastructure. "

It can also be defined by utilising settlement structure, population density, land use and land cover (Countryside Agency, 2000).

2.1.4 National Rural Policy

The policy governing rural issues is set out in *'Our Countryside: The Future (DETR & MAFF 2000)* referred to as the rural white paper (RWP). The RWP provides a framework for rural and countryside policy and sets the following high level objectives:

- Objective 1 – To facilitate the development of dynamic, competitive and sustainable economies in the countryside, tackling poverty in rural areas.
- Objective 2 – To maintain and stimulate communities, and secure access to services which is equitable in all circumstances, for those who live or work in the countryside
- Objective 3 – To conserve and enhance rural landscapes and the diversity and abundance of wildlife

- Objective 4 – To increase opportunities for people to get enjoyment from the countryside. To open up public access to mountain, moor, heath and down and registered common land by the end of 2005.
- Objective 5 – To promote government responsiveness to rural communities through better working together between central departments, local government, and government agencies and better co-operation with non-government bodies.

The chapters of the RWP which are of relevance to this study are chapters 1,2, and 5.

The RWP recognises that one policy for all regions of the countryside would not be appropriate as issues and priorities vary within and between regions. Development of an approach within which the government could work with rural partners at all levels i.e. regional, area, and parish was initiated. This provided the ability to draw upon the most relevant policies, with flexibility and discretion to those partners responsible for developing solutions for their areas.

2.1.4 Headline Rural Indicators

The RWP requires the annual reporting of progress against 15 Headline Rural Indicators selected from the 147 'Quality of Life' Indicators (See 2.1.1) set out in the UK sustainable development strategy. The Countryside Agency provides this function through the publication of the annual publication of the *'State of the Countryside Report'* (See 2.2.1).

Table 2.1.4 The Headline Rural Indicators

Themes and Objectives	Indicators
A Living Countryside	
1. Equitable access to services	Geographical availability of key services in rural areas: % of households within x km of food shops, post offices, cash points, child nurseries, primary schools and GP surgeries
2. Tackling poverty and social exclusion	Low income: % of people in rural wards in low income bands
3. Better education for all	Qualifications of young people in rural areas
4. An affordable home	Proportion of rural population disadvantaged in access to housing
5. Better rural transport	Proportion of households in rural areas within about 10 minutes walk of at least hourly bus service
6. Safer communities	Recorded crime levels and fear of crime in rural areas
A Working Countryside	
7. High, stable levels of employment	Employment activity rates in rural areas, unemployment rates in rural areas
8. Prosperous market towns	Proportions of market towns that are thriving, stable or declining (based on service provision, business activity and employment)
9. Thriving rural economies	Business health: new business start ups and turnover of businesses in rural areas
10. A new future for farming	Total income from farming and off farm income Agricultural employment (full-time, part-time and seasonal)
A Restored Countryside	
11. Protecting and enhancing the countryside	Change in countryside quality including biodiversity, tranquillity, heritage, and landscape character
12. Restoring and maintaining wildlife diversity	Populations of farmland birds Condition of Sites of Specific Scientific Interest
13. Protection of natural resources	Rivers of good or fair quality

	Air quality (low level ozone) in rural areas
14. Increased enjoyment of the countryside	Numbers of people using the countryside and types of visit; kind of transport; and level and types of spend
A Vibrant Countryside	
15. Community involvement and activity	Community vibrancy: % of parishes in four categories (vibrant, active, barely active, sleeping) assessed on numbers of meeting places, voluntary and cultural activities, contested in parish elections

2.2 Key Regional Policy, Strategy and Partners

There are a number of complementary strategies both statutory and non-statutory, for the East of England region (encapsulating Bedfordshire). The strategies that govern and influence decision-making covering both sustainable development and rural issues are developed by a range of partners including:

- The Countryside Agency
- The East of England Regional Assembly
- The East of England Development Agency
- Department of the Environment, Food and Rural Affairs (managing the England Rural Development Programme)
- Bedfordshire County Council

2.2.1 The Countryside Agency

The Countryside Agency is the statutory body empowered through the RWP, to monitor and evaluate the progress of previous governmental policies and decisions, adopted at a national or regional level. To date three reports namely, *'The State of the Countryside 1999, 2000, & 2001'* have been published, reporting on the 15 headline rural indicators identified within the RWP (See 2.1.4).

The State of the Countryside Report 2001 further developed a range of 20 thematic rural indicators (including the 15 headline rural indicators), to provide

a broad overview of the main economic, social and environmental conditions experienced in and affecting, all rural areas in England (Table 2.2.1).

Table 2.2.1 The Countryside Agency's thematic indicators for the countryside

1.Change in countryside character	11. Access to affordable housing
2.Biodiversity - Wild bird populations - Area of semi-natural ancient woodland - Extent and management of SSSI's - Biodiversity Action Plan's – progress against targets - Sustainable management of woodlands	12. Rural crime - Crime levels - Fear of crime
3.State of natural resources - Rivers of good or fair quality - Soil quality - Air quality	13. ICT in rural areas
4. Traffic effects	14. Rural mobility
5. Geographical availability of services	15. Market town prosperity
6. Community vibrancy	16. Business health
7. Income levels and distribution	17. Employment characteristics
8. Education and training	18. Sustainable land management
9. Access to childcare	19. How people use the countryside
10. Health and special needs	20. Public concern for the countryside

The report is divided into chapters relating the regional areas of England thus providing area specific reporting on the rural indicators.

2.2.2 The East of England Regional Assembly

Within the strategy for Sustainable Development in the UK, the government set out the requirement for the development and adoption of regional Sustainable Development Frameworks within all Regional Assemblies. The East of England Regional Assembly (EERA) is a designated voluntary regional chamber established under section 8 (1) of the Regional Development Agencies Act (1998). This Act brought about the establishment of Regional Development Agencies (RDA's) (see section 2.2.3) in each of the English Regions. The RDA's have business led Boards, appointed by central

government and are charged with promoting economic development within the region. In order that they can be sensitive to the needs of the region, the Act allowed for the formation of "voluntary regional chambers", comprised of two thirds elected councillors from local authorities in the region and one-third from non-local authority representatives from other interest groups (hence, the formation of EERA) (The East of England Observatory Organisation, 2002).
EERA provides the over-arching guidance for encouraging the adoption of Sustainable Development principles in all Regional Strategies and Action Plans. The resulting Strategy relevant to this dissertation is the Sustainable Development Framework for the East of England (EERA 2001). The East of England Regional Assembly (EERA) and the Regional Sustainable Development Round Table developed the strategy through a joint working group, which is supported by the Government Office for the East of England and the East of England Development Agency. Through the Sustainable Development Framework for the East of England, reference is maintained to ensure National Sustainable Development principles are consistently established within regional and local strategies.
The Framework states it should:

"Influence the way in which decisions are taken, so that they reflect the principles of sustainable development. Decision makers in regional and local government, business and all walks of life should use the framework as a reference point to consider the contribution they can make to a more sustainable East of England" (EERA 2001).

2.2.3 Regional Development Agencies

Regional Development Agencies (RDAs) were formally launched in eight English regions on 1st April 1999. They aim to co-ordinate regional economic development and regeneration and enable the English regions to improve their relative competitiveness and reduce the imbalances that exist within and between regions.
They have the following statutory purposes:

- To further regional economic development and regeneration;
- To promote business efficiency, investment and competitiveness
- To promote employment;
- To enhance development and application of skills relevant to employment;
- To contribute to sustainable development.

Their specific functions are:

- Formulating a regional strategy in relation to their purposes;
- Regional regeneration;
- Taking forward the Government's competitiveness agenda in the regions;
- Taking the lead on regional inward investment;
- Developing a regional Skills Action Plan to ensure that skills and training matches the needs of the labour market;
- Taking a leading role on European Funding.

The RDA relevant to Bedfordshire is the East of England Development Agency (EEDA). One facet of its statutory purpose is to contribute to the achievement of sustainable development in the UK where it is relevant to its area to do so.

The government published the *'RDA's Regional Strategies – Building Partnerships for Prosperity'* in March 1999 as guidance to RDA's on the preparation of their Regional Economic Development Strategies. The guidance states that:

"Sustainable development is integral to the agency's work on its strategy and, *in the development of its policies and proposals, the contribution of the strategy to sustainable development will be a key factor".*

In the foreword to the EEDA strategy *'East of England 2010 – prosperity and opportunity for all'* Vincent Watts Chair, EEDA states:

"Indeed, while this strategy must be primarily about the region's economic performance and development, we realise that this must go hand in hand with social progress and environmental protection. The benefits will be evident. Business will become more profitable, wages will rise, employees will have higher skills and will achieve much more at work, the quality of our lives and environment will improve and people throughout the East of England will share in this prosperity".

The vision of the strategy for the East of England is:
"To make the East of England a world class economy, renowned for its knowledge base, the creativity and enterprise of its people and the quality of life of all who live and work here" (EEDA, 2001)

The strategy for the East of England consists of four interconnected elements for delivery in a coherent manner including:

- A target of becoming one of the top twenty wealthiest regions in Europe;
- The principles of sustainable development;
- Six main themes, for action in implementing the strategy, designed to make the East of England one of the top twenty regions in Europe by 2010;
- A set of performance indicators and targets.

There are six major themes of the strategy, based on evidence and analysis and a region wide consultation. They are reproduced in full in Appendix Two. The themes and ensuing key actions, which are of relevance to this dissertation, can be summarised thus:
Competitive businesses and organisations for a world-class region:

- Equip the workforce with vocational and generic skills that businesses need to be competitive and to respond quickly and efficiently to market changes;

- Provide business support services of the highest quality, continuously improving, co-ordinated, easy to find, and accessible to those in rural areas;
- Provide support for newly established companies;
- Seize the opportunities created where businesses collaborate and compete to improve their competitive position through key sector groups and business clusters.

Creativity, innovation and enterprise:

- Provision of leaders to harness and direct this potential;
- Promote entrepreneurs to try out new business ideas;
- World-class support structures for new and growing businesses;
- Build on existing expertise facilities to create internationally recognised and networked 'enterprise hubs' across the region that will act as a focal point for attracting investment, advice, and support and mentoring services;
- Improve the quality of technology support to business;
- Provide the opportunity for pre-competitive co-operation so that existing markets can be exploited and new markets created;
- 'Enterprise hubs' will network manufacturing centres of excellence, innovation centres, business incubators, science parks, technopoles, universities and other research and development establishments.

'Regeneration plus' – supporting our people and our communities:

- Attract new businesses and help existing businesses grow;
- Diversify and strengthen local economies through business-led sectors, clusters and the social economy;
- Encourage businesses to engage with and meet the needs of local communities;
- Base initiatives upon strong local skills base and thriving community-based businesses and assets.

Leading edge infrastructure and high-quality environment:

- Achieving broadband links throughout the region to facilitate business to business networking, the development of business clusters and the growth of e-commerce;

- Encouragement of business to recognise their responsibility to maintain and protect the environment, through embracing, advancing and applying environmental management policies and practices.

2.2.4 England Rural Development Programme

The England Rural Development Programme (ERDP) (developed jointly by the DETR and Ministry of Agriculture, Food and Fisheries (MAFF)) is the resulting UK strategy for implementing the 'second pillar' of the European Union (EU) Common Agricultural Policy – as defined by the "Rural Development Regulation[1]". The Regulation provides the foundation for a European framework in which higher levels of assistance for sustainable development in rural areas complement lower levels of direct support for agriculture.

Under the Regulation EU member states provide a range of grant-funded schemes, individually tailored to the requirements and circumstances particular to each country or region, which are part-funded by the EU.

The ERDP seeks to provide an integrated approach to support for rural areas by:

- Summarising the facts about the area;
- Analysing the strengths, weaknesses, opportunities and threats;
- Identifying the goals and objectives which have been developed with and can be shared by the stakeholders;
- Facilitating the co-ordinated use of schemes and national measures to meet those objectives.

To provide support, which recognises the diversity of rural England, the Programme contains detailed descriptions of each of the nine regions (determined by the Government Office regional boundaries) underpinned by specific regionally based proposals for supporting the rural economy of those areas.

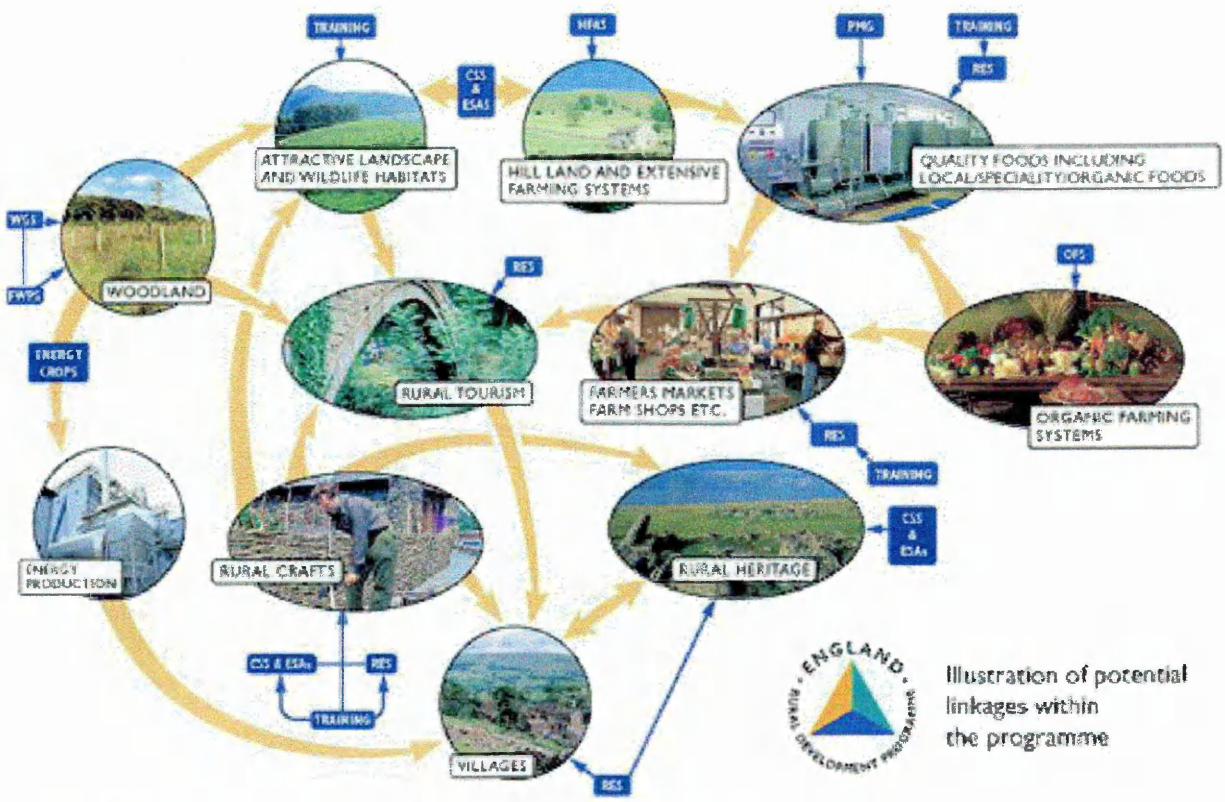
The support schemes available in the UK are divided into two categories; land based and project based. Land based schemes include the following different schemes:

- Countryside Stewardship Scheme;
- Energy Crops Scheme;
- Environmentally Sensitive Areas;
- Organic Farming Scheme;
- Farm Woodland Premium Scheme;
- Woodland Grant Scheme;

Project based schemes include:

- Processing and Marketing Grant;
- Rural Enterprise Scheme;
- Vocational Training Scheme.

The following flow chart (chart 2.2.4) demonstrates the potential linkages within the ERDP schemes.



(www.defra.gov.uk/erdp/schemes/schemesindex.htm accessed (02/09/02)

[1] Council Regulation (EC) No. 1257/1999

2.3 Local Strategies

National and Regional policy possess a strong focus (including statutory requirements) on delivery at a local level with the County Councils as the primary driving force. It is therefore necessary to outline the main strategies and policies of Bedfordshire County Council within the next section.

2.3.1 BCC's Local Agenda 21 Strategy

BCC has developed and is implementing *'A Local Agenda 21 Strategy for Bedfordshire, 2000'* (BCC, 2000) as a direct response to national policy requirements for the implementation of *'Agenda for Change in the 21st Century'* (See 2.1.1). It sets out a vision of a sustainable Bedfordshire, with the pre-requisite requirements to meet environmental, social and economic needs.

Within this section of the thesis, the relevant policy areas within the strategy for Bedfordshire are identified and summarised, to provide an overview of what BCC is seeking to achieve when addressing sustainable development.

Section 3.11 of the BCC LA21 (BCC, 2000) strategy, identifies the possible links between food and nutrition and sustainable development, in terms of the significant social, economic and environmental impacts, as:

- Food production and distribution is central to the local economy;
- Food miles (the distance food travels between production and the consumer) is a major sustainability issue in terms of fossil fuel use, pollution and supporting the local economy.

The action points raised to address the above issues include:

- Placing greater emphasis on improving access to low-cost, healthy foods for low income and marginalised groups, through initiatives such as food growing support projects, food co-operatives and community cafes;
- Developing new ways of working with local food producers and other businesses, local authorities and other agencies, as part of a wider regeneration strategy.

Section 3.15 of the strategy identifies the requirement of the local community to have accessibility to a wide range of local services. The Bedfordshire Structure Plan 2011 (BCC, 1997) provides the strategic planning framework for shops and services, the key areas of the policy are:

- Supporting proposals that assist with the retention, extension or creation of local shopping and community facilities in towns and villages;
- Ensuring economic well being which in turn can assist the viability of services;
- Assessing current service deficiencies and formulating strategies to remedy these.

The action points raised to address the above issues include:

- Greater dissemination of environmental management for businesses in the shops and services sector, incorporating good practice on such issues as energy conservation, renewable energy and green travel plans;
- Improved business support for shop and other services providers in disadvantaged and rural areas, for example promoting multi-purpose outlets (post offices within pubs) and community shops.

Section 3.16 addresses transport issues by the production of Local Travel Plans with the following underlying objectives, which are intended to contribute to making transport systems and behaviour more sustainable by aiming:

- To contribute to an efficient economy and to support sustainable economic growth in appropriate locations.

Production and jobs are addressed in section 3.17 of the strategy, which states that a thriving and responsible local economy is essential to the quality of life of those who live and work within Bedfordshire. It is further stated that it is 'businesses and those who work for them who are the most important players in the determining the future of Bedfordshire's economy'.

The links between a thriving local economy and environmental and social well-being are strong. Production uses energy and natural resources and

creates pollution and waste. For the reverse it provides jobs and incomes, which are the basis for a quality of life for most of the population. Production is ultimately the provider of income for those who do not have jobs and income spent in the local community, both directly and indirectly, has beneficial economic and social impact.

A number of key partners to the LA21 strategy also provide an important function in the Bedfordshire and Luton Economic Development Partnership, which has developed a Joint Economic Development Strategy (JEDS) (see 2.3.3), the key partners are as follows:

- Chamber Business (formerly Bedfordshire and Luton Chamber of Commerce)
- Training and Enterprise
- Bedfordshire County Council
- Bedford Borough Council
- Luton Borough Council
- Mid Bedfordshire District Council
- South Bedfordshire District Council

The principle of JEDS is to develop the local economy so that it:

- Provides sufficient jobs of a range, quality and income for all residents of the area seeking employment;
- Equips all local residents with appropriate skills to obtain satisfying employment;
- Is economically, socially and environmentally sustainable so that its benefits can be shared by future generations.

To achieve the above the strategy has five main objectives:

1. Competitiveness: To increase Bedfordshire and Luton's share of economic output through integrated assistance to improve the competitiveness of local businesses (targets relate to production, investment, employment and exporting).
2. Modernisation and Diversification: To modernise the local economy and diversify into predicted growth sectors (targets relate to

employment in new or growing sectors, quality, investment in technology and innovation, tourism, arts and culture industries).

3. Employment and Social Inclusion: To reduce unemployment, disadvantage and social exclusion, particularly within priority regeneration areas (targets relate to unemployment, youth and long-term unemployment, unemployment disparities and intensity of deprivation).
4. Employability and Workforce Development: To raise standards and attainment levels in education and training to develop a world-class workforce (targets relate to training, apprenticeships, school attainment and Investors in People status).
5. Infrastructure and Physical Regeneration: To improve the built and natural environment, access and other infrastructure, for the sustainable benefit of both the business and residential communities (targets relate to town centre quality, use of brownfield land, commuting, public transport and internet use.

The partners to JEDS have developed the following activities, which address the five strategic objectives of the JEDS strategy and emphasise the environmental and social connections:

- The Bedfordshire and Luton Sustainable Business Partnership: Steering sustainable business practices in the local area and overseeing a number of practical and research projects;
- The Green Business Network: Encouraging environmentally friendly business practice through workshops, seminars and networking;
- Envirolink and Envirowise: Services provided by Chamber Business to support business in improving their environmental impact;
- Supporting business start-ups in disadvantaged areas;
- Accessing Government and EU resources for the protection and creation of employment.

Future action points under LA21 for production and jobs included:

- A re-focus for the next JEDS publication to capitalise on local strengths (geographical position, research establishments etc.) and ensure a sufficient rate of local job growth;

- A regulatory environment more attuned to the importance of the local economy to the quality of life of those who live and work in Bedfordshire.
- A sustainability appraisal of the next JEDS (see 2.3.3);
- Development of the momentum of the green business project portfolio;
- Establish a focus in the JEDS on the green business sector already strong in the area;
- Greater involvement of business in regeneration strategies.

2.3.2 BCC's Rural Strategy

In 2001 BCC published *'Bedfordshire Rural Eye 2001: A New Approach to Rural Strategy'* which sets out BCC's new approach to rural strategy. It evolved from discussion with a range of major public service providers in Bedfordshire and is represented in full within Appendix Three.

The strategy possess three guiding principles:

- The strategy should be live and evolving, cost-effective and current;
- The approach should fit with other emerging strategies and not be the 'rural bit of another strategy';
- It will have multi-agency support and involvement.

The strategy includes the above principles and an ongoing body of materials and actions, which emerge from the following six activities:

1. Database of Services: A database of tailored rural services provided or funded by the major public service providers.
2. Annual Newsletter: An annual newsletter distributed to all rural households and businesses outlining:
    - How rural areas are compared to urban areas (in respect of employment, education, crime and access to services);
    - What public service providers are currently doing/planning to be doing to meet the rural area needs;
    - What plans are in place to identify and improve understanding of the needs of rural residents or businesses (village appraisals, plans etc. and other rural studies), identified through a brief

questionnaire/response form to help the recipients contribute to the service review processes.

3. Village Appraisals: the establishment of funds for village appraisal type work (appraisals, design statements, LA21 action plans).
4. Awareness of Rural Issues: An annual summary and dissemination of findings of appraisals, research etc. work to ensure that those who may need to respond are fully aware of the needs and wishes etc. An annual conference or a Bedfordshire Rural Forum to be held, amongst others, to disseminate the summary of appraisals and rural research findings.
5. Rural Research: An initial (2001) European Social Fund (ESF) funded research project looking at the needs and priorities for action of disadvantaged households in rural areas. This will be supplemented by the above ongoing annual assessments of the situation in rural areas.
6. Rural Projects: Support for the ongoing development of a range of rural area focused projects tackling disadvantage.

2.3.3 The Joint Economic Development Strategy

As outlined in section 2.3.1 the Bedfordshire and Luton Economic Development Partnership (BLEDP) is responsible for the formulation of the JEDS. The strategy is key to the delivery plan of the East of England Development Agency (EEDA) Regional Economic Development Strategy, through the production of complementary sub-regional strategies covering the East of England region. The sub-regional strategies can be seen as providing a channel for:

- Pursuing regional priorities at a sub-regional level;
- Dealing on a joint basis with issues of sub-regional rather than regional importance.

The vision for the Bedfordshire and Luton's economy (as stated in JEDS) is one of:

- Successful businesses providing sufficient jobs of a range, quality and income for all local people seeking work;

- A quality education and training infrastructure equipping local people with the skills required to obtain satisfying work and developing an increasingly skilled workforce that is attractive to employers;
- Excellent transport, cultural, social and other support services that add to the areas attractiveness and enable all local communities to participate;
- Widespread awareness of, and responsiveness to, what is necessary to protect the environment so that economic and social progress can be sustained and shared with future generations.

The strategy identifies objectives and priorities under nine headings (see Appendix Four for full detail):

- Innovation
- Investment
- Competitiveness
- Entrepreneurship
- Community Regeneration
- Employment Restructuring
- Learning and Skills
- Green Economy
- Infrastructure

As previously discussed in 2.3.1 one of the action points for the future within LA21 section 3.17 was the undertaking of a sustainability appraisal of JEDS. This has now been completed and is reflected in JEDS 2001. The appraisal was felt appropriate, as BLEDP had adopted the principles of sustainability as an underlying theme. The Sustainability Team within BCC carried out the sustainability appraisal and utilised the twelve features of sustainability developed by 'Forum for The Future'.

The results (Table 2.3.3) were overall positive impacts but there exists a need to address in particular, issues associated with resource use, waste and emissions and biodiversity.

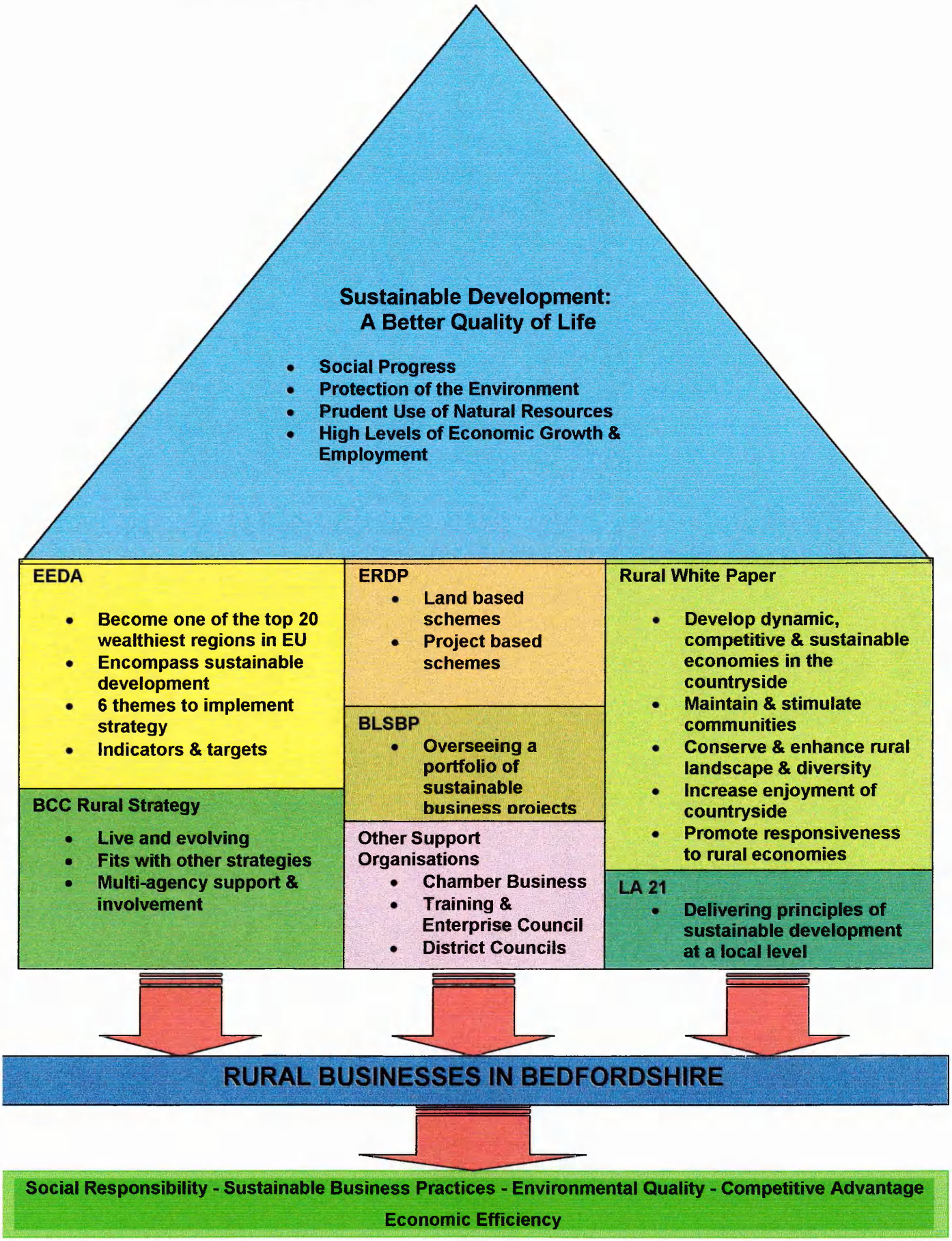
Table 2.3.3 Results of Sustainability Appraisal (BCC, 2001)

The actions identified to address the negative impacts are summarised in JEDS 2001 as:

- Achievement of a sustainable match between job growth and labour force growth i.e. avoiding development beyond need;
- A significant business development dimension in the proposed new sustainability design guide and its wide application;
- A clear statement of what is meant by 'regulatory and support services reflecting the intense competitive pressure businesses face' and its implication that economic needs may override social and/or environmental concerns;
- A widening of the focus of regeneration, with full employer/resident involvement and close attention to ensuring success;
- Sufficient resources for green economy priorities to impact significantly on all objectives.

The policy framework outlined in section 2.1 to 2.3 is summarised visually by 2.3.4.

2.3.4 Conceptual Framework of the Policy Influences on Rural Businesses in Bedfordshire



2.4 Adaptive Capacity and Resilience

The extensive literature review has identified the concept of sustainability and sustainable development and its integration into policy and strategy at an international, national, regional and local level. The means to measure and monitor progress towards sustainability and sustainable development, are provided for by indicators at all levels of policy. At this point in the study an alternative view on the concept of sustainability and its measurement is put forward. This may provide valid alternatives to the development and delivery of the objectives of sustainability as previously described.

Sustainable development has emerged as a global concern primarily due to disquiet over environmental and resource centred problems (e.g. raw materials are not infinite and should be conserved for use by future generations). There is a close association of the two issues of sustainability and of environmental and ecological integrity. Another school of thought is that this is being pursued at the expense of investigating alternative solutions. The present day problems of pollution, resource depletion and climate change are the immediate environmental challenges which dominate the sustainability debate but they are only a subset of phenomena which can challenge the sustainability of societies.

The strong focus on ecological and environmental aspects in sustainability has resulted in the identification of modes of non-sustainable behaviour. Jeffrey (2001) suggests that this is primarily because the definition of sustainability has been notoriously problematic to pin down, leading to a situation where practitioners and theorists are forced to consider the converse problem of what is not sustainable. For example, the rate of natural resource depletion since industrialisation in relation to the millions of years taken to form those natural resources, means that it is not sustainable to continue at the present rate and policy must seek to reduce the use of natural resources.

Sustainable development needs to incorporate a broad agenda, which encompasses some consideration of those human behavioural and social characteristics, which promote sustainability. Sustainability is the objective and sustainable development is the process, which leads to the achievement of the objective: survival of the human race (Jeffrey, 2001).

In striving to achieve the objective some methods in the process may contain undesirable elements such as inequitable societies or environmental destruction. There may be 'trade offs' along the pathway to sustainability, for example; the building of Manchester Airport's second runway resulted in loss of ancient woodland, historic buildings and the relocation of protected species, but as passenger demand was forecast to increase to 'almost 30 million by 2005' (Manchester Airport Plc July 1993 in Reeves, 2000) the development proceeded.

Local communities therefore need to be given the opportunity to interpret sustainable development rather than sustainability in their own terms. Sustainable development is thereby local and relative rather than global and absolute (Jeffrey, 2001).

The existing frameworks for sustainable development require some estimation of the needs of future generations (enshrined in 'Our Common Future' also know as the 'Brundtland Report', 1987). There are clearly dangers in predicting the future today, planning for it within policy and strategy and measuring progress towards it through indicators. The policies and frameworks, which are viewed as sustainable at present, may be undesirable in a decade due to improved processes and increased expertise.

Lemon and Seaton (1999) suggest that the capacity and ability to respond to continually changing 'desirable goals' may be more important than aiming for set end states at a particular moment in time (as with indicators).

Jeffrey, (2001) reiterates this view by stating that the fundamental driving force of a sustainable future is society's ability to adapt and that this is being demonstrated by scientists, politicians and communities as they work together to come to terms with today's threats. This approach implies protection of natural resources is important but it does not give the environment in its entirety, a unique status as the only possible source of future well-being. It considers that alternative scenarios are also viable options towards a sustainable future.

Striving for sustainability in a largely unknown future can be viewed as testing the resilience of a community's internal dynamics and the relationship of those within the wider environment. Community resilience through adaptability could therefore be a central component of sustainable development.

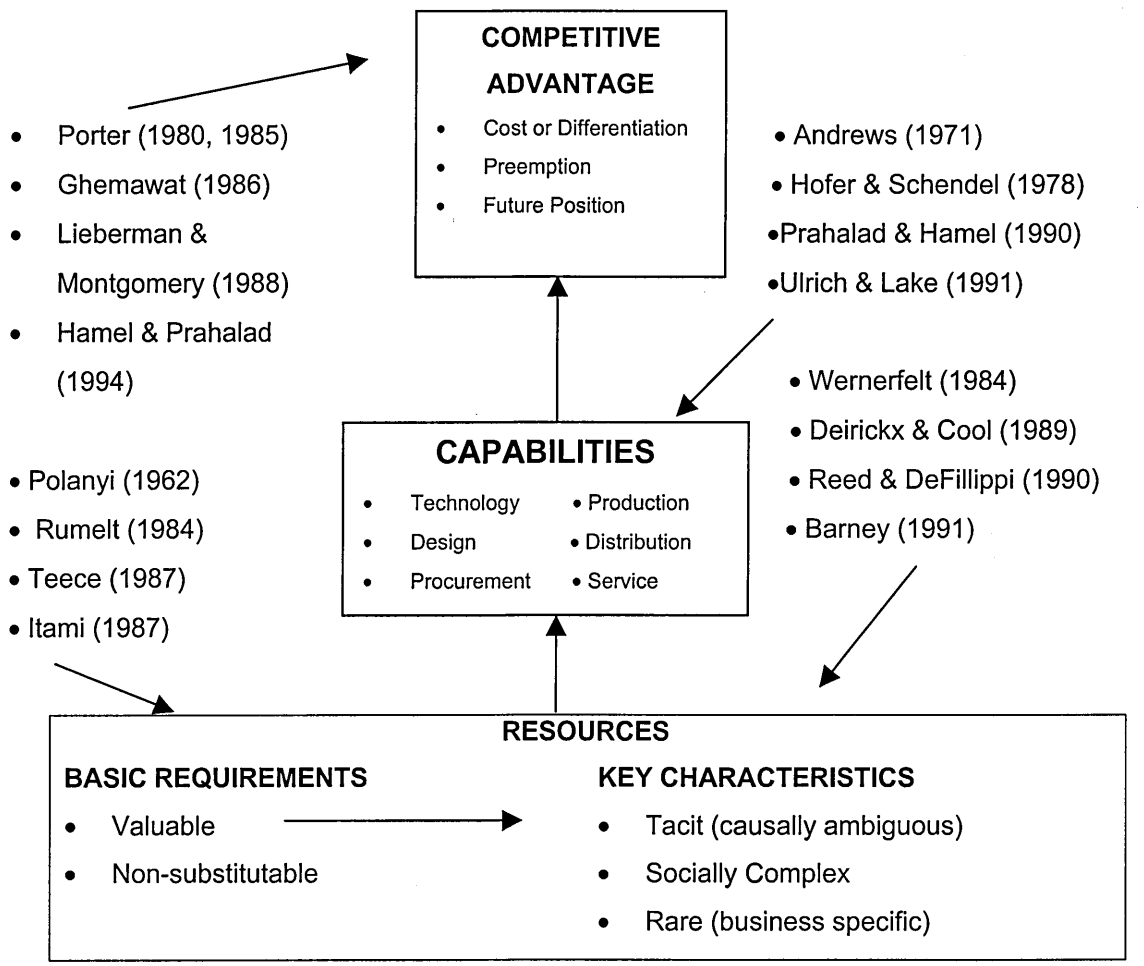
2.5 The Resource - Based Perspective

In this section of the thesis a strategic management theory is proposed to internalise external environmental factors into strategic business planning. The theory and conceptual framework that ensues provides a useful tool for application to rural businesses in Bedfordshire.

Writers in strategic management theory have demonstrated that competitive advantage depends upon the match between distinctive internal (organisational) capabilities and changing external (environmental) circumstances (Andrews, 1971; Penrose, 1959, Hart, 1995). Since the mid 1980s emerging theory known as the resource-based theory of the firm, has articulated the relationships between business resources, capabilities, and competitive advantage.

Figure 2.5 The Resource–Based View (Hart, 1995), summarises these relationships and the key authors to the theory.

Figure 2.5



Porter (1980, 1985) thoroughly developed the concept of competitive advantage through cost leadership and differentiation relative to competitors. For example, a low-cost position enables a business to use aggressive pricing and high sales volume, whereas a differentiated product creates brand loyalty and positive reputation, which facilitates premium pricing.

Other writers on competitive advantage (Ghemawat, 1986; Lieberman & Montgomery, 1988) place importance on decisions concerning timing (e.g. moving early versus late) and commitment level (entering on a large scale versus incrementally) as crucial in securing competitive advantage. Where a business moves early or on a large scale it is possible to preempt competitors by setting new standards or by securing preferred access to raw materials, locations, production capacity or customers. Preemptive commitments thus enable businesses to gain a strong focus and dominate a particular niche, either through lower costs, differentiated products or both (Ghemawat, 1986; Porter, 1980, Hart, 1995).

Hart, 1995 further cites Hamel and Prahalad (1989, 1994) as emphasising the importance of 'competing for the future' as a neglected dimension of competitive advantage. This view suggests that a business should not only be concerned with present profitability and growth in the medium term, but it should also be concerned with future position and source of competitive advantage.

The connection between a business's capabilities and competitive advantage is also well established in previous literature. Andrews, (1971), and Snow & Hrebiniak (1980) identified the centrality of distinctive competencies to competitive success. Hart (1995) views Prahalad and Hamel (1990) and Ulrich and Lake (1991) as emphasising the strategic importance of identifying, managing and leveraging core competencies rather than focusing only on products and markets in business planning.

The resource-based view moves this theory on one step further. It purports that competitive advantage can be sustained only if resources, which are not easily duplicated by competitors, support the capabilities creating the advantage. Rumelt (1985) states that a business's resources must raise 'barriers to imitation'.

Resources are the basic unit of analysis and include physical and financial assets, employees' skills and the organisational (social) processes. A business's capabilities result from bundles of resources born from particular value-added tasks such as design for manufacturing, just-in-time production (where stock is received at the same rate as goods are produced).

The characteristics of the resources, which bring competitive advantage to the business, have been summarised by the following authors as being:

- Valuable and non-substitutable (Barney, 1991; Dierickx & Cool, 1989). For a resource to have enduring value it must contribute to a business capability that has a competitive significance and it is not easily accomplished through other means.
- Rare and/or specific to a business (Barney, 1991; Reed & DeFillippi, 1990). They must not be widely distributed within an industry and/or must be closely identified with a given business, making them difficult to transfer or trade (e.g. brand image)
- Difficult to replicate because they are tacit (causally ambiguous, or difficult to observe in practice) or socially complex (Teece, 1987; Winter, 1987). Tacit resources are skill based and people intensive. They are 'invisible' assets gained through knowledge and accumulated experience and refined by practice. Socially complex resources depend on a large number of people or teams engaged in co-ordinated action of a nature that, only a few, if any, individuals have sufficient breadth of knowledge to grasp the overall phenomenon.

2.5.1 The Natural Resource View

The 'natural-resource view' conceptual framework developed by Hart (1995) is an attempt to make the resource-based view remain relevant in present day business strategy by internalising the natural environment. Hart argues that business can gain sustainable sources of competitive advantage through environmentally oriented resources and capabilities.

Russo and Fouts (1997) view Hart as expanding the resource-based view of the firm to include the constraints imposed and opportunities offered by the biophysical environment.

The conceptual framework consists of three interconnected strategies:

- Pollution prevention
- Product stewardship
- Sustainable development

The key resources and sources of competitive advantage associated with each strategy are summarised in Table 2.5.1.

Table 2.5.1 A Natural Resource-Based View: Conceptual Framework (Hart, 1995)

STRATEGIC CAPABILITY	ENVIRONMENTAL DRIVING FORCE	KEY RESOURCE	COMPETITIVE ADVANTAGE
POLLUTION PREVENTION	MINIMISE EMISSIONS, EFFLUENTS & WASTE	CONTINUOUS IMPROVEMENT	LOWER COSTS
PRODUCT STEWARDSHIP	MINIMISE LIFE CYCLE COSTS OF PRODUCTS	STAKEHOLDER INTEGRATION	PREEMPT COMPETITORS
SUSTAINABLE DEVELOPMENT	MINIMISE ENVIRONMENTAL BURDEN OF BUSINESS GROWTH AND DEVELOPMENT	SHARED VISION	FUTURE POSITION

2.5.1.1 Pollution Prevention

Business has been subject to increasing pressures to reduce or eliminate emissions, effluents and waste from its activities. This can be demonstrated by the impact of legislative requirements on businesses in the UK of the Pollution, Prevention and Control (England and Wales) Regulations (2002) and The Producer Responsibility Obligations (Packaging Waste) Regulations (1997).

Pollution reduction can be achieved through two means: a) control through capturing, storing, treating and disposal or b) prevention by reduction, alteration, or prevention through better 'house keeping', material substitution, recycling or process innovation. The first approach requires the use of

expensive and non-productive equipment for pollution control, whereas the second approach requires extensive employee involvement and continuous improvement of emissions reduction rather than the reliance on 'end of pipe' pollution control technology.

Pollution prevention can result in significant cost savings. For example, Envirowise states that waste costs UK business up to 4.5% of its annual turnover and that much of this is in hidden costs such as, labour, storage, transport and energy (Envirowise, 2002). Cost savings can therefore produce a cost advantage over a business's competitors. Pollution prevention has the capacity to increase productivity and efficiency of a business.

During the initial stages of implementing pollution prevention strategy the business can reap many 'low hanging fruit'. Relatively easy and inexpensive behavioural and material changes result in significant pollution reduction for relatively small costs. However, as time progresses it becomes increasingly difficult for the business to improve its environmental performance without significant changes to production processes or new production technology.

As a business moves closer to zero emissions, reductions in pollution are only gained at greater expenditure, thus broader changes in product design and technology are required.

2.5.1.2 Product Stewardship

The pollution prevention strategy focuses on new capability building in the production and operational functions of a business however; all activities within the value chain (from raw materials extraction through production, product use and final disposal) result in environmental impacts the costs of which require internalisation into the business to gain competitive advantage.

Product stewardship, according to Hart (1995) requires the integration of the 'voice' of the environment (external (stakeholder) perspectives) into the product design and development processes.

Virtually every major industrialised country throughout the world has developed programmes for certifying products, which are environmentally responsible (Hart, 1995). In the UK an example would be the EU Eco-labelling Award Scheme (laid down under EC regulation 1980/2000), a market-based voluntary instrument that has a two-fold purpose:

- To promote the design, production, marketing and use of consumer products and services that have a reduced environmental impact during their entire life-cycle;
- To provide the consumer with increased information on the environmental quality of a product or service which aids an informed environmental choice in purchase.

A product which meets the ecological and performance criteria as set down by the EU, is awarded the 'Flower' logo. The logo can then be displayed as a marketing tool to show consumers that a product has a superior environmental performance (Europa, 2002).

An important feature of this type of initiative is the 'cradle to grave' approach whereby the environmental burden of a product is assessed through life cycle analysis. For a product to achieve low life cycle environmental impacts product designers need to address these issues:

- Raw Materials Extraction
- Materials Processing
- Manufacturing Processes
- Use
- End Of Life
- Recovery, Recycle and Re-use at the end of useful life.

UK businesses are currently under pressure from emerging EU legislation to adopt Life Cycle Analysis (LCA) (or Ecodesign) thinking into product design. The following impending EU Directives demonstrate this:

- Waste Electrical and Electronic Equipment
- End of Life Vehicles

The EC Draft Directive for Waste Electrical and Electronic Equipment (WEEE) has possible implementation into UK legislation in 2003 (Bhamra, 2001). The Directive possesses the following over arching objectives:

- Prevent WEEE from arising
- Increase the re-use and recycling of WEEE
- To minimise the risks associated with the treatment of WEEE

The Directive places responsibility upon producers (including importers and manufacturers) to finance the collection, recycling and safe disposal of WEEE.

National Governments of member states are to set their own levels of recycled material content within new products and the use of certain materials is to be banned completely. Business within the WEEE sector will be required to set up appropriate facilities for the repair of WEEE. The Directive sets targets for recycling of WEEE at 90% by weight of large appliances and 70% by weight of others although the re-use of components can contribute to achieving the targets (Bhamra, 2001).

Under the End of Life Vehicles Directive (EOLV, due to be implemented in the UK by April 2002 but consultation is overdue) the same producer responsibility approach, as with WEEE and the Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (see 2.5.1.1), applies to the manufacturers of vehicles. Hazardous substances are to be reduced (some are banned completely from July 2002) and the design requirements of vehicles are to facilitate recycling and also to include an increased quantity of recycled material.

The implications and impacts of legislation, both current and pending, demonstrates that business has considerable incentive to learn through product design and packaging, how to manufacture products which can easily re-used, recycled or dismantled. This in turn provides the opportunity of cost reduction in the form of avoiding costly disposal and prosecution.

Hart (1995) argues that it would be reasonable to conclude that businesses in developed markets will be driven increasingly to minimise the life cycle environmental costs of their product systems. He further states that through product stewardship businesses can:

- Exit environmentally hazardous activities
- Redesign existing product systems to reduce liability
- Develop new products with lower life cycle costs

The relative importance of these activities will vary according to a businesses existing product portfolio. Hart states that large corporate organisations such as Procter and Gamble have dedicated much time to altering its core detergent and cleaning products. Other organisations for example, Church and Dwight, whose core products are based on environmentally benign baking soda, have been able to orientate its product stewardship efforts

around consumer preferences for 'greener' products. There are also opportunities for new business start-ups to base the cornerstone of their strategy in product stewardship, as they possess no pre-existing commitments to products, facilities or manufacturing processes.

An opportunity to facilitate the use of pre-emptive strategy through product stewardship has been demonstrated by BMW (Hart, 1995). BMW's product stewardship strategy in vehicle recycling aptly demonstrates the pre-emptive strategy for competitive advantage. In 1990 the company developed a 'design for disassembly' process in Germany, which would pre-empt the proposed government legislation on 'take-back' policy (as with EOLV). By acting as a first mover, BMW was able to capture the dismantler organisations as part of an exclusive recycling infrastructure. They thereby gained cost advantage over competitors by leaving them to 'fight over smaller, unlicensed operations or devote precious capital to building their own dismantling infrastructure' (Hart, 1995).

Hart finally concludes that for product stewardship, through competitive pre-emption, a business can create a base from which to build reputation and differentiate products by establishing the business as an early mover in new (green) product domains.

2.5.1.1 Sustainable Development

Pollution prevention and product stewardship strategies go some way towards severing the negative links between business and the environment but a sustainable development strategy takes this one step further.

A sustainable development strategy according to Hart requires a company to envision sustainable technologies and products (which may not yet exist) and stake them out ahead of the competition. To pursue this strategy it is a prerequisite for a business to invest in a long-term commitment to market development. This investment may not realise short-term profit for the business but the commitment to a sustainable development strategy may increase its future performance expectations in relation to competitors.

Other writers such as Bhamra (2001) have defined a sustainable development business strategy as 'seeking a pathway to a win-win situation which can achieve environmental quality, increased wealth and enhance competitive

advantage'. In the sustainable development business strategy Bhamra identifies the key driver as opportunity and states that successful businesses will recognise the challenge of change and take advantage of those opportunities, which accompany it. The strategy is implemented through the integration of sustainable development into business strategies and environmental policies, through actions that produce economic, environmental and community benefits. It considers the long-term interests and needs of the business' stakeholders. The expected results of the strategy are new business processes with reduced external impacts, improved financial performance and improved reputation among communities and stakeholders.

2.5.2 Summarising Linkages and Interconnections

The three strategies of the natural resource-based view incorporate the challenges of the natural environment into strategic management. This section identifies the links between i) the natural resource–based view and sustained competitive advantage and ii) the interconnections among the three strategies as developed by Hart.

2.5.2.1 Sustained Competitive Advantage

As discussed in section 2.5 in order for a resource or capability to contribute to sustained competitive advantage for a business it must possess certain key resource characteristics:

- Valuable
- Non - substitutionable
- Tacit (causally ambiguous)
- Socially complex
- Rare (firm specific)

Hart states that management literature suggests that a purely internal (competitive) approach may prove inadequate in that issues of external (social) legitimacy and reputation are extremely important. It has long been recognised that competitive advantage is created in a broader scope to include social legitimacy (Bozeman, 1985; Meyer & Rowan, 1977). Hart therefore suggests propositions where competitive strategy gives way to co-operative actions in the interests of social legitimacy. The three environmental

strategies developed by Hart, are based on the businesses resources and capabilities which are costly to copy by a competitor, it is therefore argued that an external (legitimacy based) orientation does not jeopardise competitive advantage and may reinforce and differentiate a business's position by the positive effects of a good reputation.

2.5.2.2 Pollution Prevention Strategy

As discussed in 2.5.1.1 a pollution prevention strategy reduces emissions through continuous improvement focused on well-defined environmental objectives rather than expensive end of pipe solutions. The strategy is therefore people intensive and depends largely on tacit skill development through employee involvement. The decentralised and tacit nature of this capability make it difficult to observe in practice (causally ambiguous) and therefore hard to duplicate quickly in another business.

Hart suggests the following propositions:

- Those businesses with demonstrated capabilities in tacit skills embedded in large numbers of people will be able to accumulate the resources necessary for pollution prevention more quickly than those businesses without such prior capability.
- Businesses, which adopt a pollution prevention strategy, will evidence simultaneous reductions in emissions and capital expenditures for pollution control.

2.5.2.3 Product Stewardship

In the Product Stewardship Strategy (see 2.5.1.2) a complete LCA is integrated into the business product development process and a proactive stance taken toward raw material and component supply, which minimises the environmental impact of the product or service. It is prerequisite that a close working relationship is required between environmental staff, manufacturing and marketing staff and customers if the environmental impact of the product during use is to be minimised and the used product reused or recycled (Hunt & Auster, 1990: Post & Altman, 1991, in Hart, 1995). Product Stewardship thus implies an organisational ability to not only co-ordinate functional groups

within the business, but also to integrate the perspectives of key external stakeholders – environmentalists, community leaders, media, regulators – into decisions on product design and development (Welford, 1993).

Hart states that product stewardship should thus afford the business the opportunity for sustained competitive advantage through the accumulation of socially complex resources.

Hart makes the following propositions:

- A business with demonstrated capability in cross-functional management (socially complex skills) will be able to accumulate the resources for product stewardship more quickly than a business without such prior capability;
- A business which adopts a product stewardship strategy will evidence inclusion of external stakeholders in product development and planning processes.

2.5.2.4 Sustainable Development Strategy

As discussed in 2.5.1.3, a sustainable development strategy is fostered by a strong sense of social-environmental purpose, which provides the backdrop for the business corporate and competitive strategy.

Hart states that typically businesses pursuing this strategy possess organisation-wide dedication to a compelling long-range vision (a shared vision or intent) key to generating the internal pressure and enthusiasm needed for innovation and change. Creating such future vision requires strong moral leadership (Bennis & Nanus, 1985, in Hart, 1995) and an empowering social process, which reaches deep into the management ranks (Hart, 1995). Given the difficulty in generating such a consensus about a purpose, shared vision can be viewed as a rare or firm specific resource, therefore affording a business the opportunity of sustained competitive advantage. Hart proposes the following in respect of the sustainable development strategy:

- A business which has demonstrated capabilities in establishing shared vision (rare skills) will be able to accumulate the resources necessary for sustainable development more quickly than a business without such prior capability;

- A business, which adopts a sustainable development strategy, will evidence substantial development of new, low impact technologies and competences.

2.6 The Producer Matrix

The resource-based view argues that a business can gain sustained competitive advantage through unique assets and resources acquired and developed over time. The theory suggests that competitive advantage can be sought by the examination first of a business' existing resources and competences, followed by an assessment of it's profit potential in relation to the congruent opportunities presented by the market; strategies based upon the possibilities this reveals are then selected (Bowman & Faulkner, 1997).

It is then necessary to fill the resource or competence gap identified by the inventory taking of existing resources and competences, in relation to the perceived profit potential of a given opportunity.

The resource-based view theory suggests that above average profits can arise where a business is better able to utilise certain resources and core competences than its competitors and because these competences mesh better with the current key competences required for success in the industry than do those of its rivals.

The competences need to be deployed with an appropriate strategy in order to realise profits which may be available therefore identification of the most valued core competencies is required. The Producer Matrix utilises the principles of the resource-based view but takes into account the context in which the business is operating; it therefore provides an appropriate tool, which could be, utilised in the future assessment of rural businesses in Bedfordshire.

The identification of the core competencies/capabilities/strategic resources possessed by rural business in Bedfordshire and the strategic resource gaps could give an indication of possible future strategies for sustainable business performance.

The Producer Matrix was developed by Bowman and Faulkner (1997) and provides a means for identifying the appropriate use and development of

business competences or capabilities to achieve a superior and sustainable position. The matrix (see Figure 2.6) illustrates the relationship between relative unit cost (efficiency) and key, value creating competences (effectiveness), which can be manipulated to improve the business position. The competences on the vertical axis are called key competences, as they are most concerned with enhancing value, the horizontal axis refers to the relative unit cost position of the competing businesses.

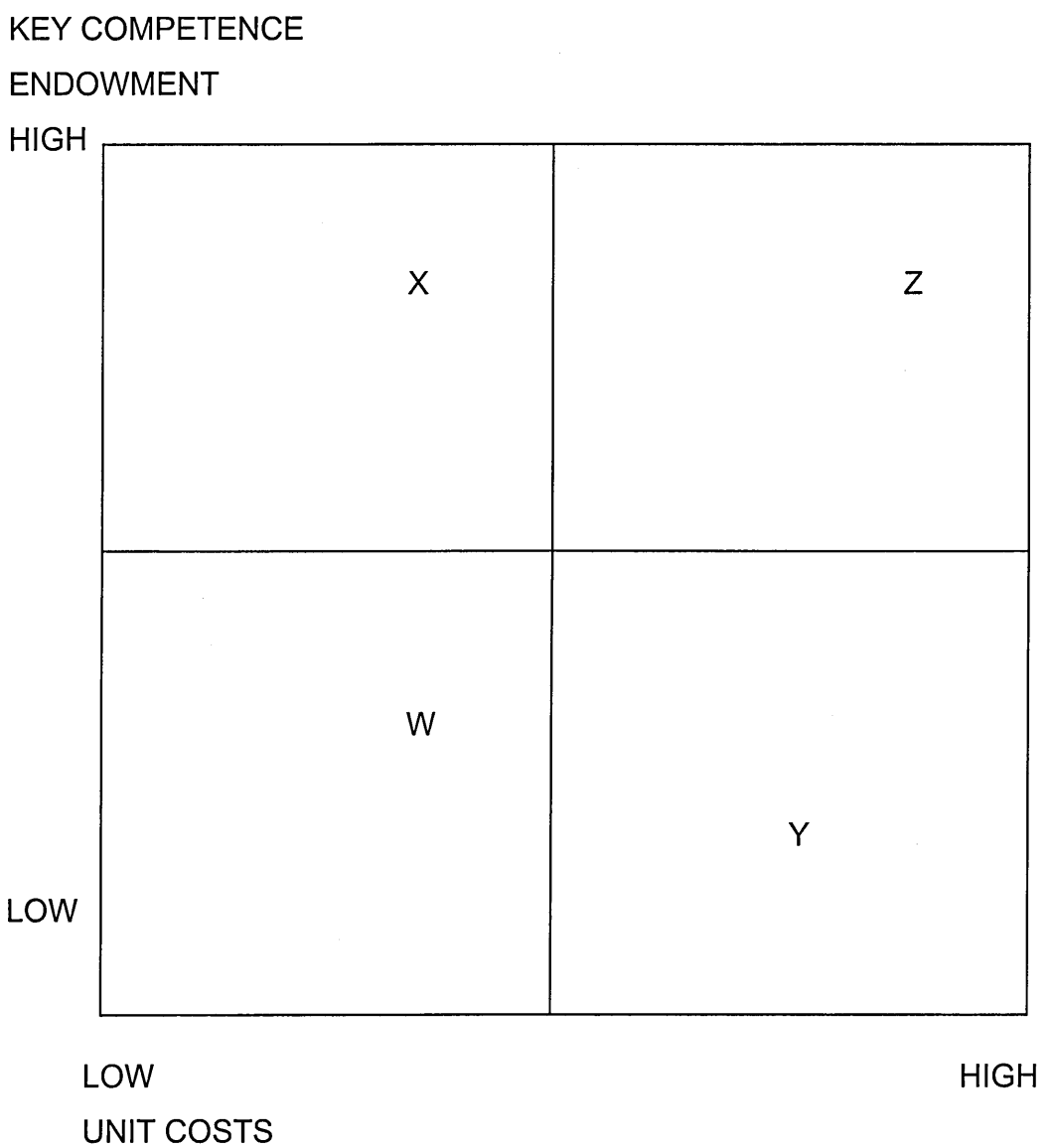


Figure 2.6 The Producer Matrix (Bowman & Faulkner, 1997)

Bowman and Faulkner distinguish between key competences and core competences possessed by a business, thus: key competences are those

required by a business to be a serious and successful player in a particular market whereas, core competences are what the business happens to be good at. Therefore key competences are derived from an understanding of the requirements to compete in a particular arena and core competences are firm specific.

Where a business's core competences coincide with the key competences required to compete in a given market it will perform well, but if its core competences are not in line with the key competences required it may perform poorly. In this situation the business may have to develop new competences or move to another market where its competences are more effective.

The method used for the producer matrix allows the assessment of a business' core competences against the key competences required to compete in the given market.

The vertical axis in Figure 2.6 rates the extent to which a business possesses the key competences required to compete in the given market. The horizontal axis refers to the business' unit costs. Where a business possessed the core competences in line with the key competences required it would be placed high up the vertical axis. If this business also has low unit costs in relation to its competitors then it would occupy position X in the matrix.

Of the four competitor positions in Figure 2.6 the business in position X is capable of delivering the highest performance (in current circumstances) at the lowest unit cost.

Bowman & Faulkner state that reductions in relative costs can be achieved in five ways:

- Economies of scale
- Economies of scope
- Advantages from experience
- Managerial efficiencies
- Factor costs

As discussed in the natural resource-based view (section 2.5.1) reductions in costs can be achieved via a pollution prevention, product stewardship or sustainable development strategy but this can only be realised where there is managerial efficiency within the business. Management commitment is

essential to the implementation of such strategies as many different resources are required for example time, money, training and competent staff.

Managerial efficiencies can also be related to the theory on adaptive capacity and resilience (section 2.4) in that the business or management within must possess the ability and capacity to adapt to the continually changing goals of a sustainable development business strategy.

Full use of the Producer Matrix will not be made in this study due to the time it would take to be effective through monitoring and reporting however an appropriate vehicle for employing the Producer Matrix will be recommended in Chapter Five, section 5.1.4.

The research will however, present the diverse profile of rural business in Bedfordshire, the strengths and weaknesses, and the resulting resource gaps which will establish a baseline and contribute to the discussion and recommendations of the research in Chapter Five.

As stated in Chapter One, the information from this literature review provided a framework for this research, whilst explicitly informing the research questions and objectives. The instigation of the research questions and objectives in the research methodology and the selection of and rationale for a specific sample frame, are elaborated on in the following chapter.

The implications of the results of the research methodology for this literature are discussed in Chapter Five after presentation in Chapter Four.

3 Chapter Three: Research Methodology

The research aimed to provide recommendations to Bedfordshire County Council and related organisations for the provision of appropriate support mechanisms for the promotion of sustainable rural business.

This section of the dissertation is intended to examine and explain the research methods, which were used to achieve the aim and objectives of the research, and stated in Chapter One, which were stimulated via the literature in Chapter Two.

3.1 Secondary Research

The secondary research included an extensive literature review of the international, national, regional, and local sustainable development and rural policy context in which rural businesses in Bedfordshire operate (see Chapter Two).

The literature review further encompassed an alternative school of thought on the concept of sustainability (adaptive capacity) and the strategic management theory of sustainable competitive advantage (resource-based view).

The research was further underpinned by the author's participation in activities, which included steering group/committee meetings (where under normal circumstances members of the public would not be in attendance). This included the Bedfordshire Green Business Network (GBN), the Rural Green Business Network sub committee (RGBN), and the Bedfordshire and Luton Sustainable Business Partnership (BLSBP).

3.2 Primary Research

The gathering of primary data to support the secondary research was achieved through a postal survey. The reasons for this method are given below in section 3.2.1.1. A research questionnaire for self-administration was designed and posted to a target segment of the rural business sector in Bedfordshire.

3.2.1 Research Population

The intention of the research was the investigation of rural businesses in Bedfordshire. Business proprietors and Managing Directors were targeted as

it was assumed that they would possess the business experience to make informed decisions when selecting an answer option or category within the questionnaire.

3.2.1.1 Sample Frame Selection

The target segment of the rural business sector of Bedfordshire was determined by the following factors.

- The classification of 'urban' and therefore rural areas in Bedfordshire by BCC
- The activity of the business (in the sense that all businesses were included regardless of sector)
- The number of employees employed by the business
- Financial constraints of the research
- Time constraints of the research

There are ten areas within Bedfordshire[2], which are classified by BCC (BCC, 2002) as being urban and thus it was assumed that the removal of postcodes relating to these areas would provide a sample of rural postcodes. This resulted in a sample of MK (Milton Keynes), LU (Luton) and SG (Stevenage) postcodes, which amounted to over 7,000 businesses.

It was determined that the specific business activity was not an important factor at the outset of the research questionnaire, and therefore would not be a factor within the sample selection. It was assumed that all businesses functioning within rural areas as defined in chapter 1 (Introduction) were rural businesses for the purpose of this study.

The sample selection was limited to businesses, which employed 25 employees or fewer. The rationale for this was a) to limit the sample size and b) that an assumption was made that larger businesses employing more people would be less likely to require support for sustainable business performance.

The financial constraints of the research project restricted the money available for the self-administered questionnaire. The costs of printing, paper, envelopes, postage and freepost return address charges were subject to

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[2] Ampthill, Flitwick, Bedford, Kempston, Biggleswade, Luton, Dunstable, Houghton Regis, Sandy and Leighton Buzzard (BCC 2002)

budgetary restrictions and thus the sample size was confined to MK postcodes solely (1065 businesses). The selection of the MK postcodes was made due to the diversity of the business activities within the area, which was perceived to be representative of Bedfordshire rural businesses (as discussed in chapter 1 and see Appendix One).

The research project was further limited by time as the organisation and undertaking of a postal survey of this size is in itself time consuming. The researcher has to further allow time for respondents to reply and to undertake data input and analysis when they do.

3.2.2 Research Method

The questionnaire was designed to reflect the main aspects of the literature review (sustainable development, adaptive capacity and the resource-based view of strategic management) and to provide insights into the present situation of the rural business sector and the perceived future requirements.

3.2.2.1 Pilot Study and Pre-testing

A pilot study was undertaken to identify any potential problems with the chosen research method. Pre-testing (Fowler, 1988; Dillon et al 1994) was carried out with six businesses representative of the target sample.

Pre-testing is indispensable to the development of a questionnaire as the effectiveness of the itemised question format can be assessed and the appropriate amount of response categories set.

The questionnaire was not self-administered at this stage in the research as the protocol analysis method, as described in Dillon et al (1994), where the respondent 'thinks out loud' whilst completing the survey form was considered to be the most effective.

The pre-testing was valuable in that it resulted in the redesign of the questionnaire to enable the respondents to better comprehend its meaning.

3.2.2.2 Research Method Design

Much time was dedicated to investigating which areas to focus on within this dissertation. The author's relevant work experience with businesses within Bedfordshire and prior knowledge of the research area provided the opportunity to construct the questions to produce more relevant answers.

Due to the large sample size and time available to undertake the research a self-administered postal questionnaire was considered to be the most viable research method.

The selection of a postal questionnaire for the research method provided the respondents with more time, permitting the answers to be more thoughtful, factually accurate and representative of attitudes (Fowler, 1988). A postal questionnaire provides little opportunity to correct misunderstandings, or to probe, or to offer explanations or help but it was considered for these reasons greater attention would be paid to the question wording to avoid ambiguity.

Response rates for postal questionnaires are considered to be generally low (Bell, 1993) but the financial impact of other methods such as, conducting face-to-face or telephone interviews would not be an economical option for the research method.

During the design of the research questionnaire consideration was given to the use of open or closed question types as reported by Foddy (1993), Fowler (1988) and Bell (1993). The use of open question types can have the ability to influence response rates, the style and content of data collected, and the subsequent analysis. According to Fowler (1988) asking would-be respondents to complete questions in their own words 'increases the difficulty of their task', thus worsening the response rate.

In the main, the design of the research questionnaire reflected the use of closed questions as it was considered that the closed questions could cover most of the possible contingencies.

However, as the research sample contained a wide variety of businesses, there was a need to include an open question element to the questions. These included 'Other (please specify)' to ensure all potential avenues of response could be accounted for.

The questions, which provided these options, were formulated with consideration to the advice given within Dillon et al. (1994) regarding question wording. Thus questions were: clear and precise; used simple language intended to have the same meaning for everyone; avoided being 'double-barrelled', leading, presuming, ambiguous, and negative; avoided creating opinion or asking for hypothetical situations; and asked for information which the respondents would likely have or have access to.

The questionnaire was kept relatively short using two sheets of A4 paper printed double sided, to avoid taking too much of the respondents' time to complete. Tick boxes were provided for the suggested answers and space at the end of the questions for an open-ended response.

3.2.2.3 Research Administration

The questionnaire was posted to all the target respondents accompanied by a 'mail merge' covering letter addressed personally to the respondent, and 'freepost' return envelope for ease of response.

The covering letter (see Appendix Five) was an important feature of the postal survey as it introduced the questionnaire thus reducing respondent suspicion often induced by receiving questionnaires.

Recommendations made in Dillon et al. (1994) regarding the major points for inclusion in a questionnaire introduction, guided the design of the covering letter. Thus the letter included: what the study was about; why the respondent was important to the study; a promise of confidentiality; a reward for participation; what to do if questions arose with the researchers' contact details; and a thank-you.

The questionnaires were posted to the target businesses on Monday 27th May 2002 with a return closing date of Friday 14th June. This provided the businesses with a possible three weeks to respond, which could have allowed for the questionnaire to be filed and overlooked but it was felt necessary as this period included two bank holiday days.

3.3 Critique of Research

This section seeks to identify any problems inherent with the chosen research.

3.3.1 Method

On the whole the questionnaire provided an appropriate methodology for the undertaking of the research.

3.3.1.1 Questionnaire

Upon review the questionnaire did give rise to some problems, although during the pilot study and pre-testing these did not arise. The primary source of problems was within question number ten (part 2 and part 3) of the questionnaire (see Appendix Six).

This question asked 'Does your company address environmental issues in its business decision making?' and the choice of responses given were 'yes', 'no' or 'don't know'. This was achieved fully but when the question evolved into 'if yes, can you rank by importance the top three reasons for including environmental issues in your business decision-making' the table design and response choices resulted in some respondents ranking all of the choices.

The same comments apply to the 'if no....' section of question number ten.

In some cases the respondents filled both sections of the question, which suggested they were not paying full attention to the task in hand or that they could see it was the last question of the questionnaire, and therefore did not read it fully.

On reflection the design of this question in particular could have been improved to reduce confusion. The use of SPSS (Statistical Package for the Social Sciences) for the analysis of the data did however, allow for modification to overcome this problem (see section 4xxx).

3.3.1.2 Sample Bias

It was assumed that the reliability and replicability of the chosen research method would provide similar results if the whole population of rural businesses in Bedfordshire had been surveyed in the same manner. Without repeating the exercise for the LU and SG postcodes this could not however be proven.

The author's experience with businesses in Bedfordshire regarding environmental issues led to an element of surprise as to the high number of respondents who reported that they did include environmental issues within their business decision-making (this would have been expected to be a lower percentage). It was therefore assumed that rural businesses in Bedfordshire could be more aware of these environmental issues due to their rural locations.

3.3.2 Administration

Questionnaires were sent to 1065 rural businesses in Bedfordshire with MK postcodes and 25 or fewer employees. A response rate of 107 valid questionnaires was achieved.

Three telephone calls were received regarding the questionnaire, one stating that they had ceased trading and two to verify that the research was valid prior

to completing the questionnaire. Five emails were received to state retirement, ceased trading, or no longer meeting the criteria of the questionnaire. A total of 16 respondents wrote back enclosing the questionnaire stating that they had also ceased trading or retired. Royal Mail returned a total of 47 questionnaires with a 'gone away' label.

The administrative problems encountered are inherent with many mailing lists, which need to be up to date and 'cleaned' regularly.

3.3.3 Data Analysis

The analysis of the data was performed using the statistical package SPSS (Statistical Package for the Social Sciences). The analysis and interpretation of this is presented in Chapter Five of the study.

For the main, frequency tests were used to analyse the data, as this was sufficient to gain an understanding of the implications without being drawn into too much detail regarding a minority of companies. Crosstabulation was undertaken when it was felt necessary to provide more insights (as in section 5.1.1).

The raw data, which was collected as a result of the above research approach, is presented in Chapter Four by a combination of tables and charts, which were prerequisite to the quantitative material compiled. The analysis and interpretation of the data is not undertaken until Chapter Five of the dissertation.

4 Chapter Four: Results

This section of the thesis seeks to present the summarised data generated by the postal questionnaire. The structure of this section follows the question ordering as it appears on the questionnaire (see Appendix Six).

A series of charts is presented below to illustrate the results. Each chart relates to the corresponding survey question and is accompanied by a descriptive commentary to clarify what is illustrated, though the implication of each chart for the research questions formulated in Chapter One is not dealt with until Chapter Five of the thesis.

Statistical manipulation of the collected data has not been undertaken in this section, which merely serves to familiarise the reader with the data created.

4.1 How many employees does your company currently employ?

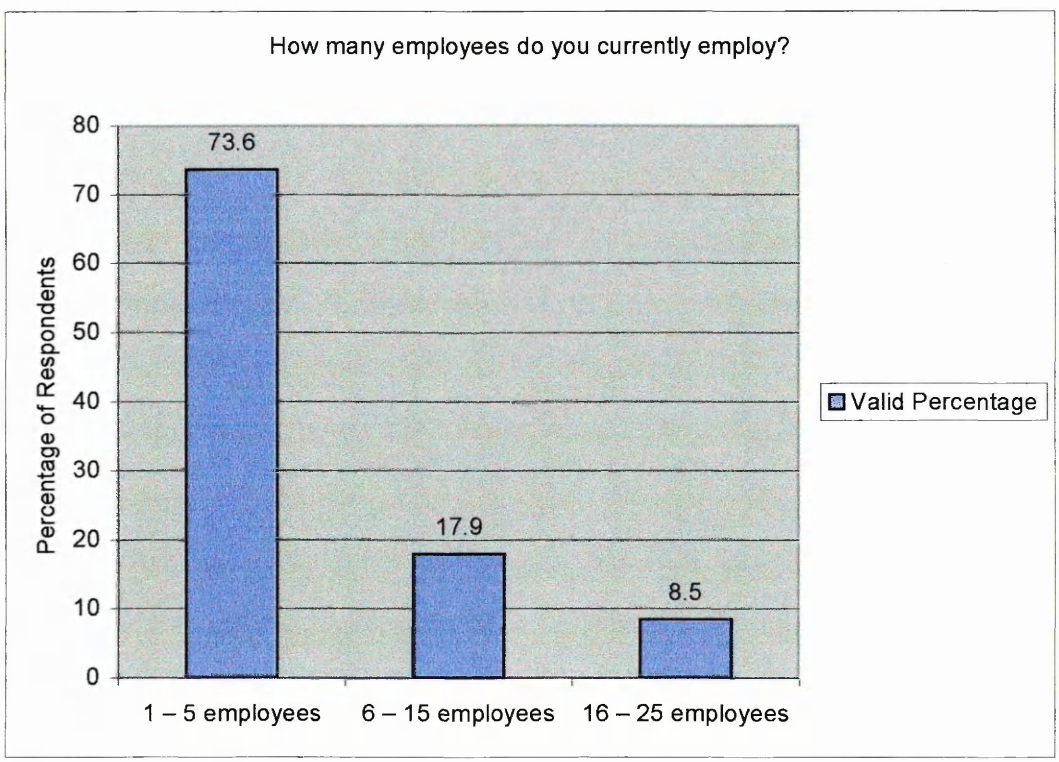


Chart 4.1

Responses	Frequency	Valid Percentage
1 – 5 employees	78	73.6
6 – 15 employees	19	17.9
16 – 25 employees	9	8.5
Missing	1	
Total	107	100

Table 4.1

The majority of respondents occupied the 1 – 5 employees category.

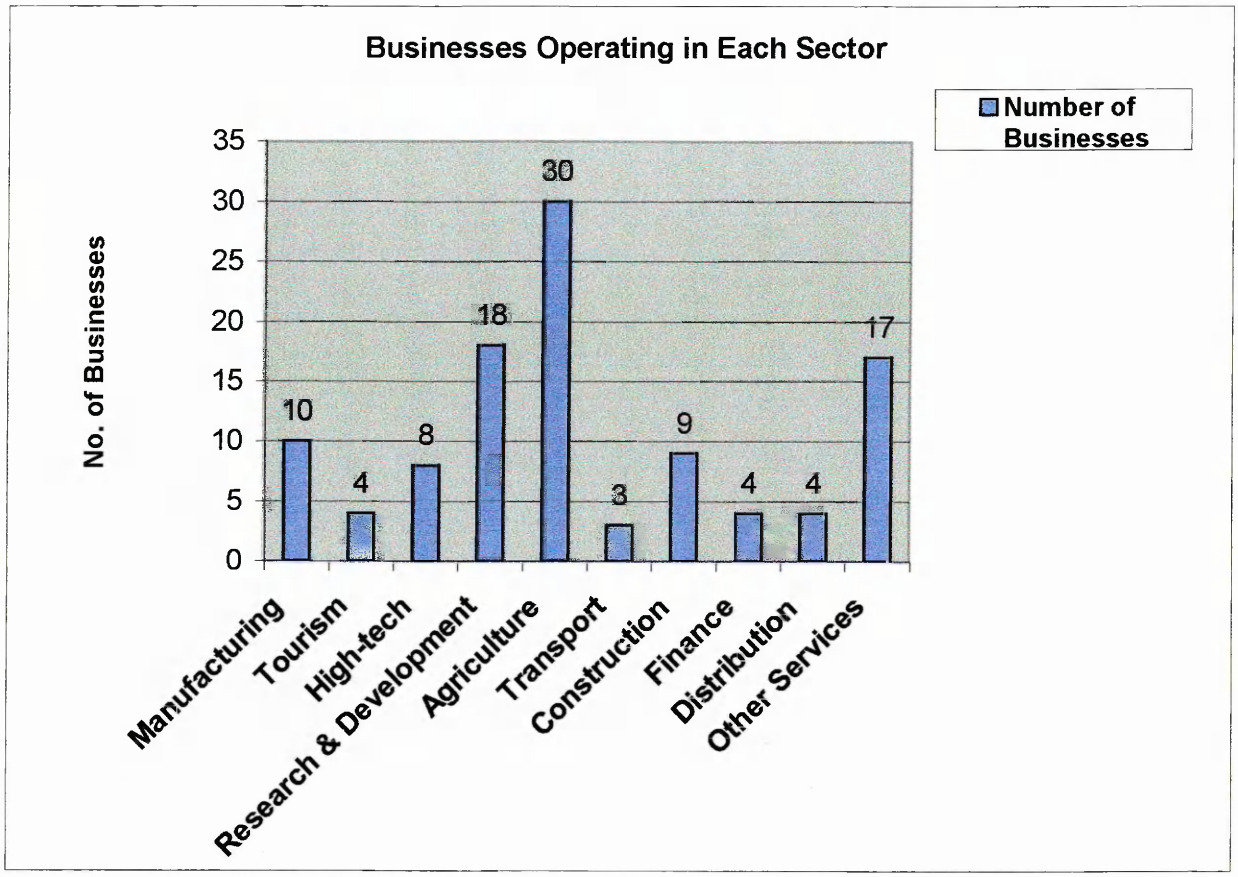
4.2 What is the main business activity of your company?

A wide range of business activities was stated. The following table and chart (Table 4.2 & Chart 4.2) summarise them within the categories stated by EEDA and BCC 2002 (see Appendix One).

Table 4.2

Activity	Number of Businesses
Agriculture	30
Research & Development	18
Other Services	17
Manufacturing	10
Construction	9
High-tech	8
Tourism	4
Finance	4
Distribution	4
Transport	3

Chart 4.2



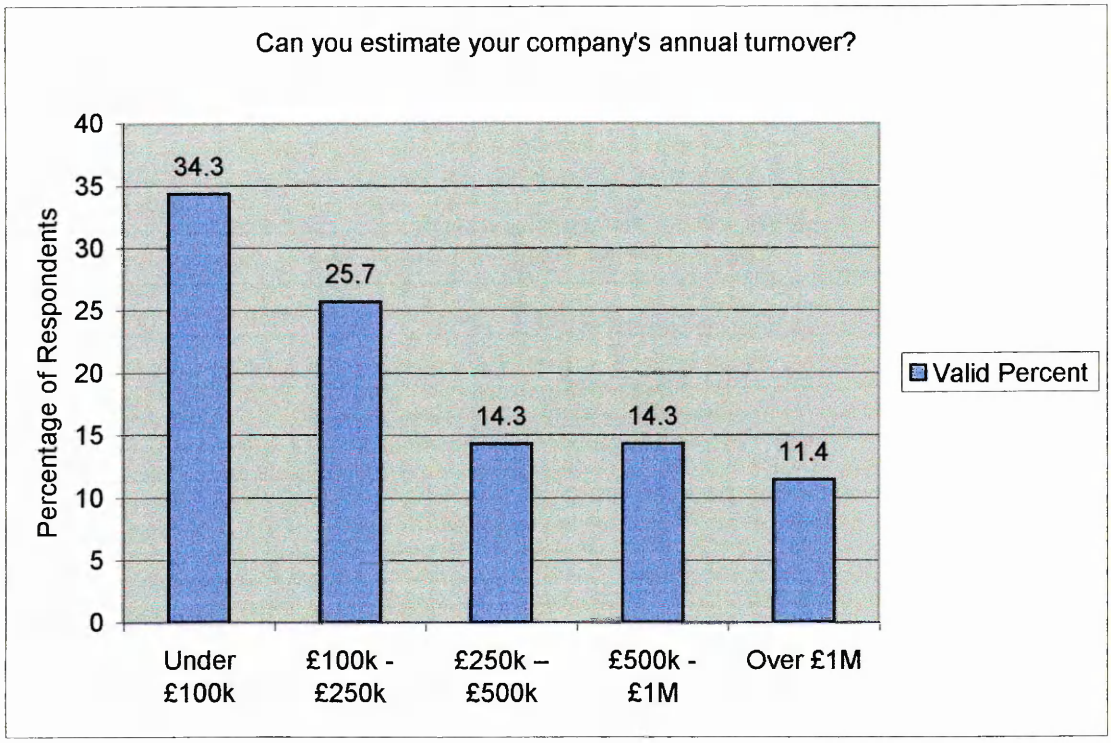
The largest areas of business activity were in agriculture, research and development and manufacturing sectors.

4.3 Can you estimate your company's annual turnover?

Table 4.3

Responses	Frequency	Valid Percent
Under £100k	36	34.3
£100k - £250k	27	25.7
£250k – £500k	15	14.3
£500k - £1M	15	14.3
Over £1M	12	11.4
Missing	2	
Total	107	100

Chart 4.3



Most of the respondents were within the "under £100,000" category with approximately a quarter within the "£100,000 to £250,000" category the remaining companies fell into the over "£250,000" annual turnover categories. Only two of the respondents chose not to respond to this question.

4.4 What do you see as your company's medium term objectives?

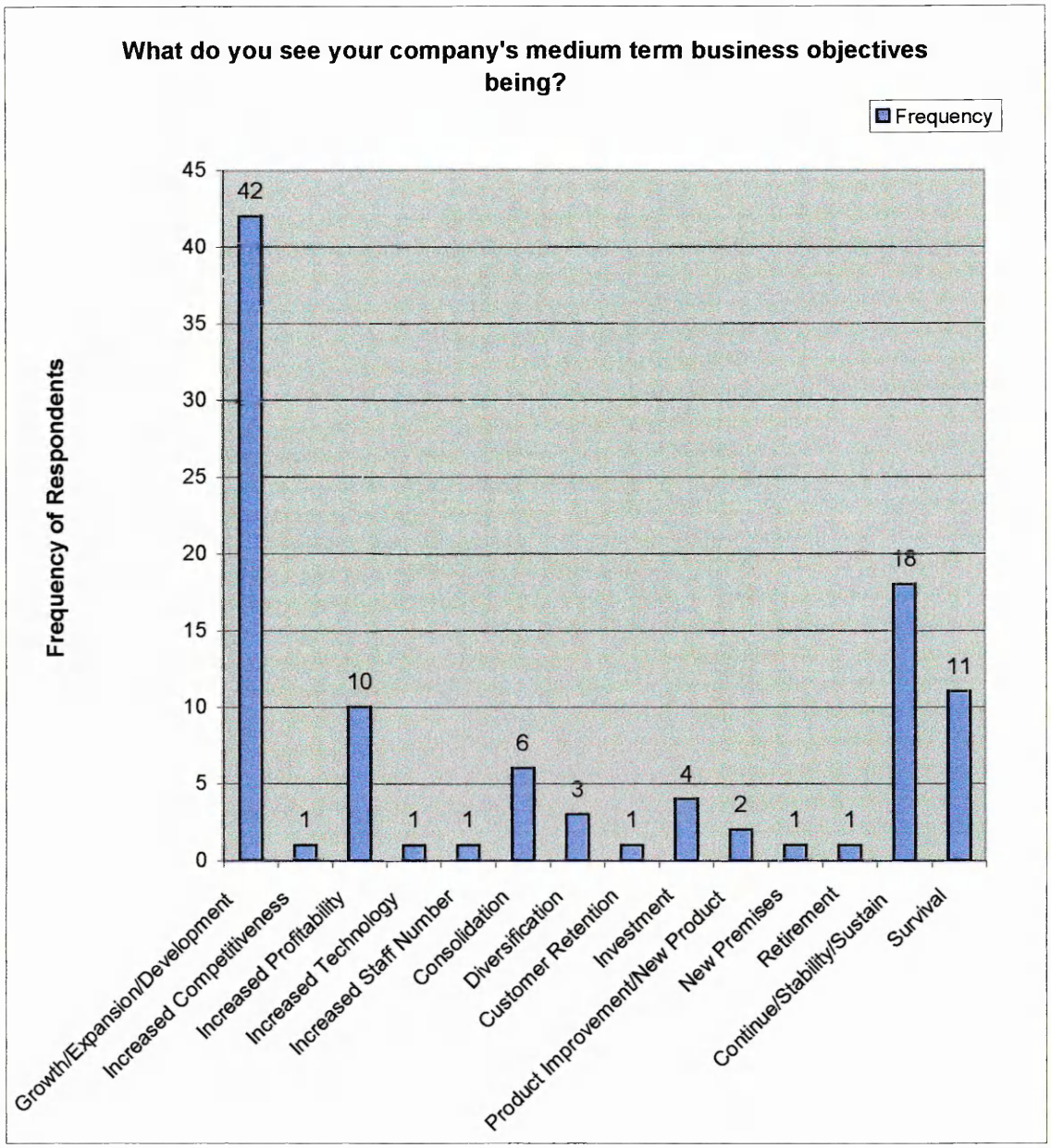
As with the question in 4.2 many differing responses were acquired, table 4.4 and chart 4.4 summarise the responses received.

Table 4.4 - Objectives

Response	Frequency
Growth/Expansion/Development	42
Continue/Stability/Sustain	18
Survival	11
Increased Profitability	10
Consolidation	6
Investment	4
Diversification	3
Product Improvement/New Product	2
Increased Competitiveness	1
Increased Technology	1
Increased Staff Number	1
Customer Retention	1
New Premises	1
Retirement	1
Total	102

Five respondents failed to complete this question.

Chart 4.4 - Objectives

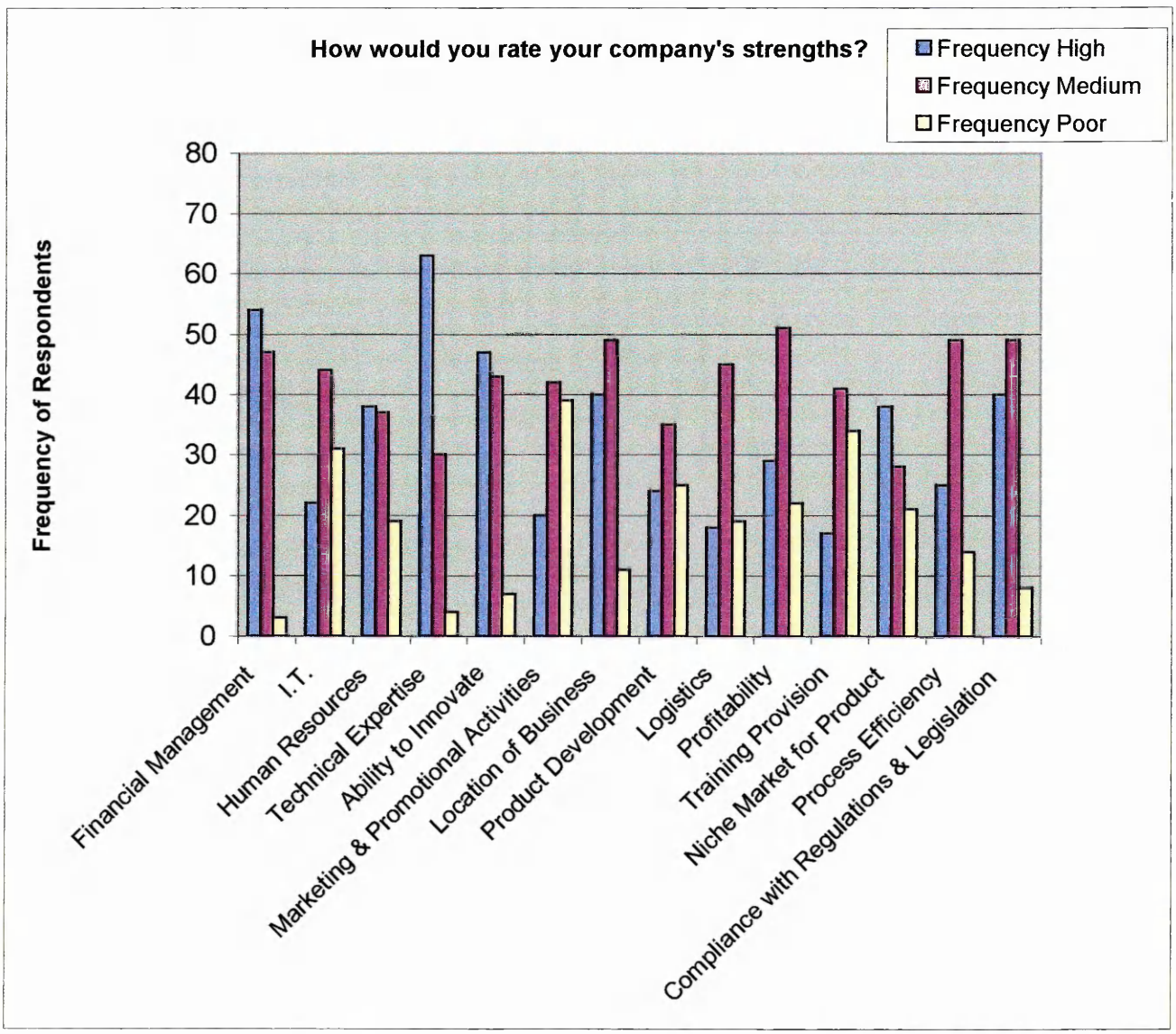


Growth, expansion and development of the business were the most frequent responses. The ability to continue as they are, to increase stability, to sustain present levels and to increase profitability, were the subsequent most frequently stated answers.

4.5 How would you rate your company's strengths in respect of the following?

For the purpose of this study 'poor' strength will be considered a weakness and conversely a 'high' strength will be considered strength.

Chart 4.5



The main strengths by frequency were:

- Technical expertise
- Financial Management
- Ability to Innovate
- Compliance with Legislation & Regulation
- Location of the Business

Table 4.5 - Strengths

Responses	Frequency		
	High	Medium	Poor
Technical Expertise	63	30	4
Financial Management	54	47	3
Ability to Innovate	47	43	7
Compliance with Legislation	40	49	8
Location of Business	40	49	11
Human Resources	38	37	19
Niche Market for Product	38	28	21
Profitability	29	51	22
Process Efficiency	25	49	14
Product Development	24	35	25
I.T.	22	44	31
Marketing & Promotional Activities	20	42	39
Logistics	18	45	19
Training Provision	17	41	34

The main weaknesses by frequency were:

- Marketing & Promotional Ability
- Training Provision
- I.T.
- Product Development
- Profitability

4.6 Which of these factors are important for the success of your business?

Chart 4.5.1

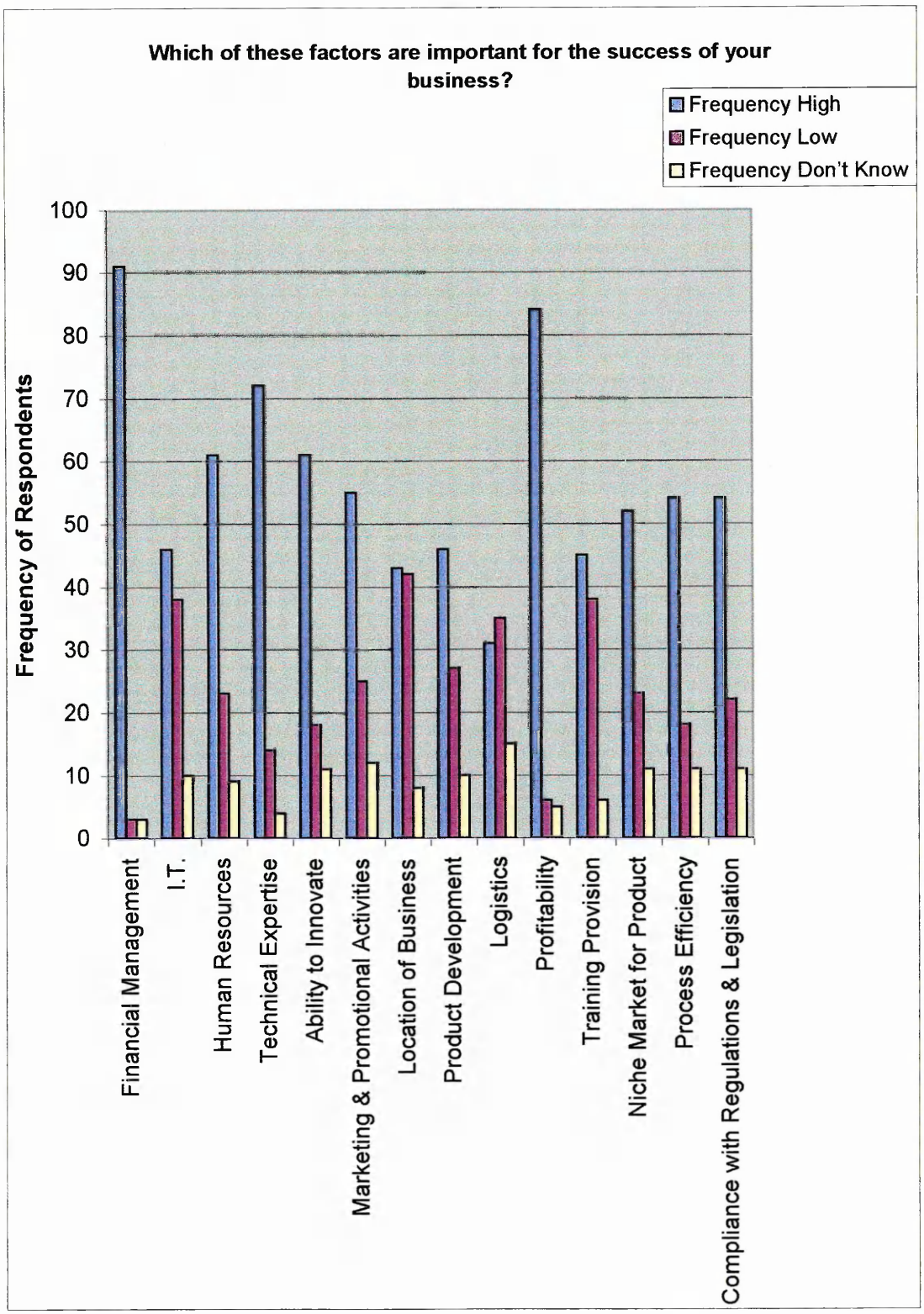


Table 4.5.1- Importance

	Frequency		
	High	Low	Don't Know
Financial Management	91	3	3
Profitability	84	6	5
Technical Expertise	72	14	4
Human Resources	61	23	9
Ability to Innovate	61	18	11
Marketing & Promotional Activities	55	25	12
Process Efficiency	54	18	11
Compliance with Legislation	54	22	11
Niche Market for Product	52	23	11
Product Development	46	27	10
Training Provision	45	38	6
Location of Business	43	42	8
Logistics	31	35	15

The five most important factors for the success of the businesses by frequency were:

- Financial Management
- Profitability
- Human Resources
- Technical Expertise
- Ability to Innovate

The five most frequent responses stated for 'low' importance to the success of their business were:

- Location of the Business
- Logistics
- Training Provision
- I.T.
- Product Development

It is interesting to note that although location of the business was of low importance to 45% of the sample it was of high importance to 46% of the businesses.

4.7 Can you rank from the following list the most important barriers to improving your company's business performance?

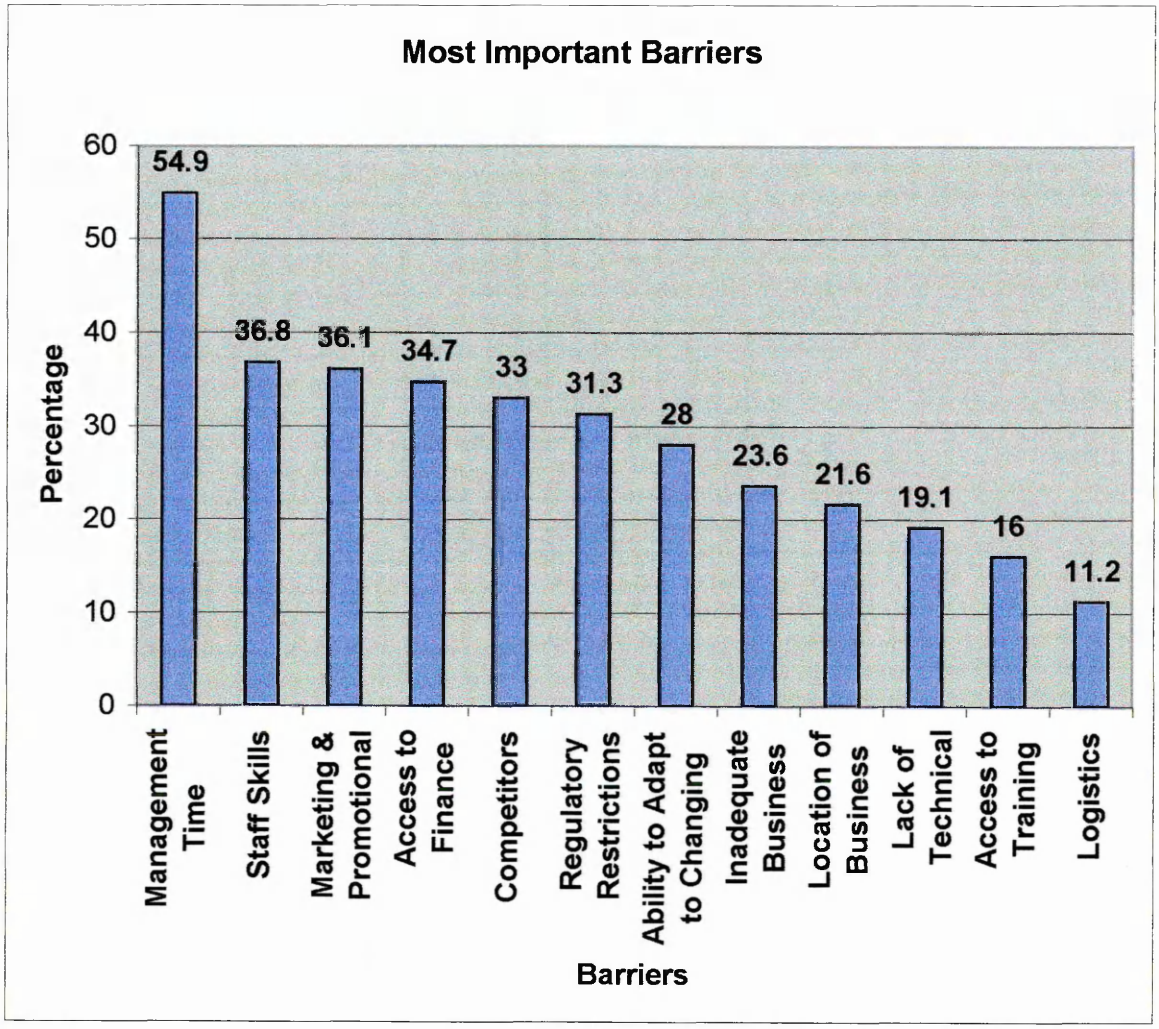
The following table and chart show the percent of the companies who said for them the following barriers were 4 (medium/most) or 5 (most).

Table 4.6

Barrier	%
Management Time	54.9
Staff Skills	36.8
Marketing & Promotional Ability	36.1
Access to Finance	34.7
Competitors	33
Regulatory Restrictions	31.3
Ability to Adapt to Changing Circumstances	28
Inadequate Business Support	23.6
Location of Business	21.6
Lack of Technical Expertise	19.1
Access to Training	16
Logistics	11.2

Approximately a fifth (21.6%) of the businesses thought that the location of their business did represent a barrier to improving their business performance.

Chart 4.6



The five most important barriers to improving the business performance of the respondents were:

- Management Time
- Staff Skills
- Marketing & Promotional Activities
- Access to Finance
- Competitors

4.8 What changes to your company would you wish to see?

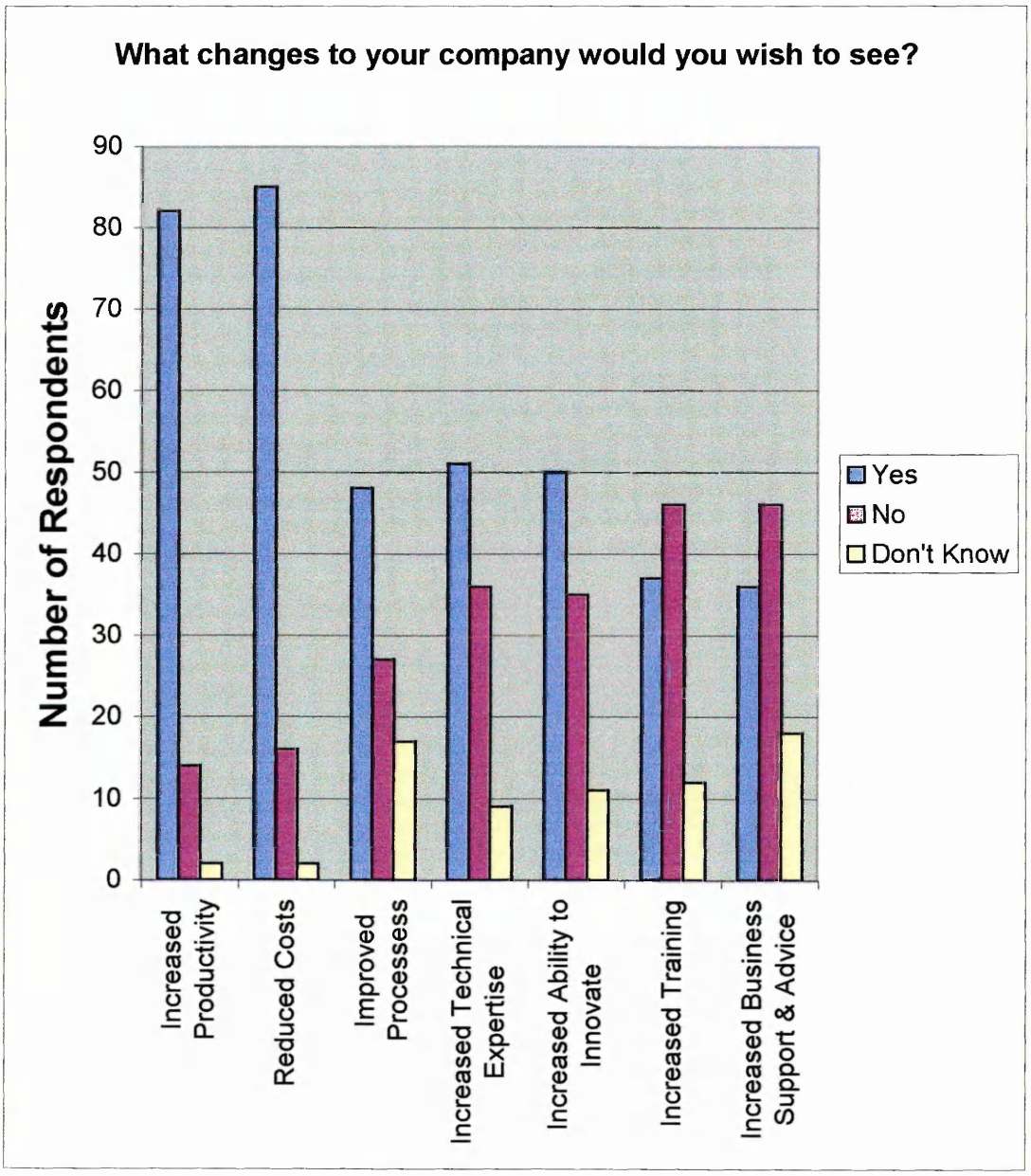
Table 4.7

Changes	%
Increased Productivity	83.7
Reduced Costs	82.5
Increased Technical Expertise	53.1
Improved Processes	52.2
Increased Ability to Innovate	52.1
Increased Training	38.9
Increased Business Support & Advice	36

The five most frequently desired changes were:

- Increased productivity
- Reduced costs
- Increased technical expertise
- Improved processes
- Increased ability to innovate

Chart 4.7 - Changes



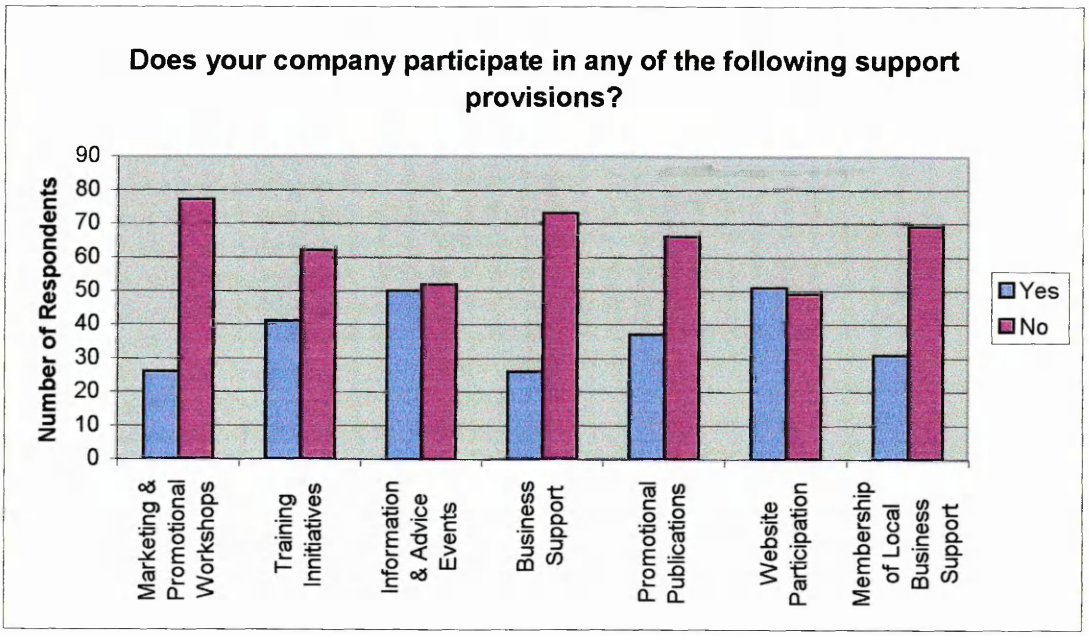
4.9 Does your company participate in any of the following support provisions to enhance its business performance?

Table 4.8 and chart 4.8 summarise the responses received for this question.

Table 4.8 – Participation

	Yes	No
Website Participation	51	49
Information & Advice Events	50	52
Training Initiatives	41	62
Promotional Publications	37	66
Membership of Local Business Support Groups	31	69
Marketing & Promotional Workshops	26	77
Business Support	26	73

Chart 4.8 – Support Participation



The most participated in support provisions were:

- Website participation
- Information & advice events
- Training initiatives
- Promotional publications
- Membership of local business support groups

4.10 What kind of support provisions would most interest your company?

The percentage of businesses scoring a support provision 4 (medium/most) and 5 (most) with respect to being of most interest to them are shown below in Table 4.9 and Chart 4.9.

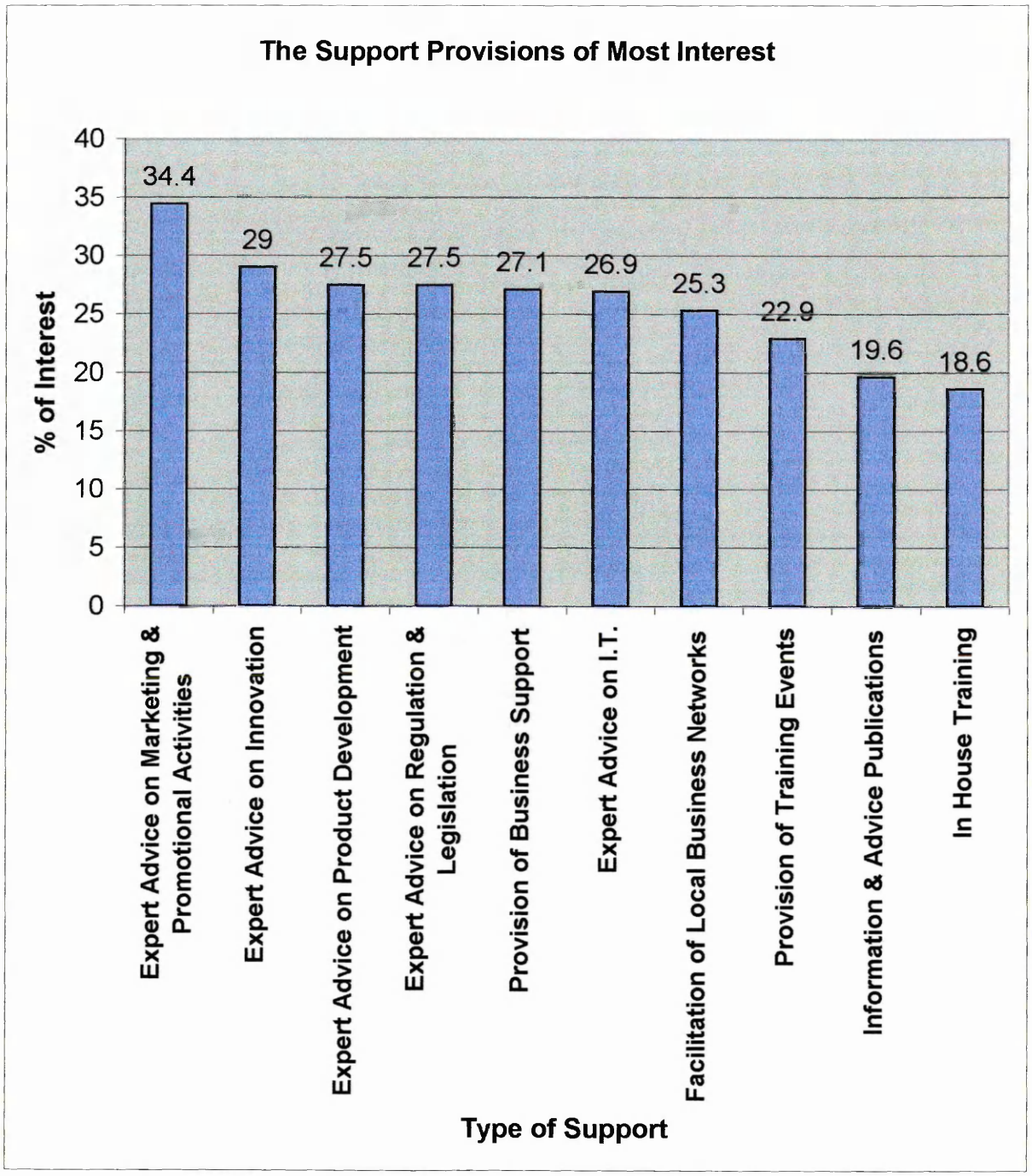
Table 4.9 Support Provisions of most interest to business

Support Provision	%
Expert Advice on Marketing & Promotional Activities	34.4
Expert Advice on Innovation	29
Expert Advice on Product Development	27.5
Expert Advice on Regulation & Legislation	27.5
Provision of Business Support	27.1
Expert Advice on I.T.	26.9
Facilitation of Local Business Networks	25.3
Provision of Training Events	22.9
Information & Advice Publications	19.6
In House Training	18.6

The five most interesting support provisions to businesses are:

- Expert advice on marketing & promotional activities
- Expert advice on innovation
- Expert advice on product development
- Expert advice on Legislation & Regulation
- Business Support

Chart 4.9

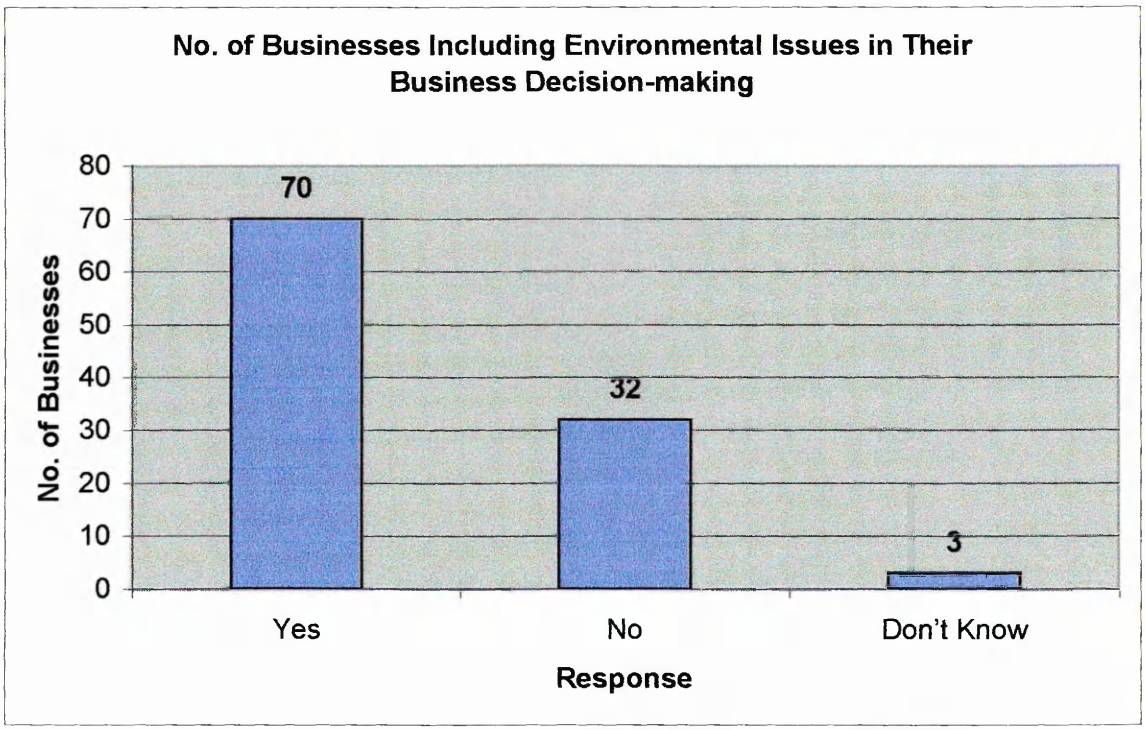

The Support Provisions of Most Interest
% of Interest
40
35
30
25
20
15
10
5
0
34.4
29
27.5
27.5
27.1
26.9
25.3
22.9
19.6
18.6
Expert Advice on Marketing & Promotional Activities
Expert Advice on Innovation
Expert Advice on Product Development
Expert Advice on Regulation & Legislation
Provision of Business Support
Expert Advice on I.T.
Facilitation of Local Business Networks
Provision of Training Events
Information & Advice Publications
In House Training
Type of Support

4.11 Does your company address environmental issues in its business decision-making?

Table 4.10

Response	Frequency	Percent
Yes	70	66.7
No	32	30.5
Don't Know	3	2.9

Chart 4.10



A total of 70 out of 107 respondents considered that they did include environmental issues in their business decision-making.

4.12 If yes, can you rank by importance the top three reasons for including environmental issues in your business decision-making?

Table 4.10.1

Reason	1st	2nd	3rd	Total
Compliance with Regulations	32	13	8	**53**
Cost Savings/ Increased Efficiency	7	8	16	**31**
Corporate Responsibility	9	5	7	**21**
Pressure from Customers	3	7	7	**17**
Response to Competitors	1	6	7	**14**
Increased Competitiveness	1	8	2	**11**
Supply Chain Pressure	2	4	4	**10**
Pressure from Stakeholders	1	2	0	**3**

Table 4.10.1 records the frequency for responses as to why companies included environmental issues into their business decision-making. The top three reasons, which most frequently gained 1st, 2nd or 3rd scores, were:

- Compliance with regulations
- Cost savings/increased efficiency
- Corporate responsibility.

4.13 If no, which of the following do you see as the main barriers preventing the inclusion of environmental issues in your business decision-making?

Table 4.10.2

Barrier	Yes	No	Don't Know
Lack of Capital for Investment	6	6	8
Lack of In-house Expertise	9	6	5
Lack of Time	11	5	4
Uncertainty of Environmental Legislation	11	5	4
Poor External Sources of Information & Advice	11	5	4
Lack of Commitment from Senior Management	5	10	4
Lack of Demand from Customers	11	6	3

The most frequently cited reasons for not including environmental issues in the business decision-making of the respondent companies were:

- Lack of time
- Uncertainty of environmental legislation
- Poor external sources of information and advice
- Lack of demand from customers.

The implication of the data contained within this section of the thesis for the research objectives and questions specified in Chapter One, will be dealt with in the following section. The literature reviewed in Chapter Two will be employed in Chapter Five's analysis to indicate how this research and its associated results sit in relation to what has been written on the subject.

The additional implications the above have on further research topics will also be addressed before a conclusion is provided in Chapter Six to bring together the literature and results to the overall intentions of this examination of the rural business sector of Bedfordshire.

5 Chapter Five: Discussion

This section of the study is intended to synthesise the material presented in Chapter Four with the policy and management frameworks explored in the literature presented in Chapter Five. The information collected will be analysed in light of the theoretical framework explored in the literature review. Original arguments will be developed to evaluate the significance of the data generated by the survey and options for appropriate responses will be proposed. Implications for further research will be highlighted.

The study has been aimed at the investigation and provision of insights, if not answers, to the research questions and objectives stated in Chapter One. This section will follow the structure of Chapter Four i.e. the order of the questions within the questionnaire. The extent to which the research has provided insights or answers will be ascertained in the concluding section of this Chapter.

Data created from the questionnaire was input and analysed by use of the statistical package SPSS. This process resulted in an overwhelming amount of data therefore selectivity, with reference to relevance to the research was necessary.

5.1 The Profile of the Rural Businesses in Bedfordshire

The research has enabled the identification of a diverse profile of rural businesses in Bedfordshire. The diversity is demonstrated in the following terms:

- Employment provision and annual turnover
- Business activity
- Medium-term business objectives
- Strengths or weaknesses of the businesses
- Importance of those strengths or weaknesses for the businesses

5.1.1 Employment Provision and Annual Turnover

- 73.6% of businesses employ 1 – 5 people
- 17.9% of businesses employ 6 – 15 people
- 8.5% of businesses employ 16 – 25 people
- 34% of businesses have an annual turnover of less than £100,000
- 25.7% of businesses have an annual turnover of between £100,000 and £250,000
- 14.3% of businesses have an annual turnover of between £250,000 and £500,000
- 14.3% of businesses have an annual turnover of between £500,000 and £1m
- 11.4% of businesses have an annual turnover of above £1m

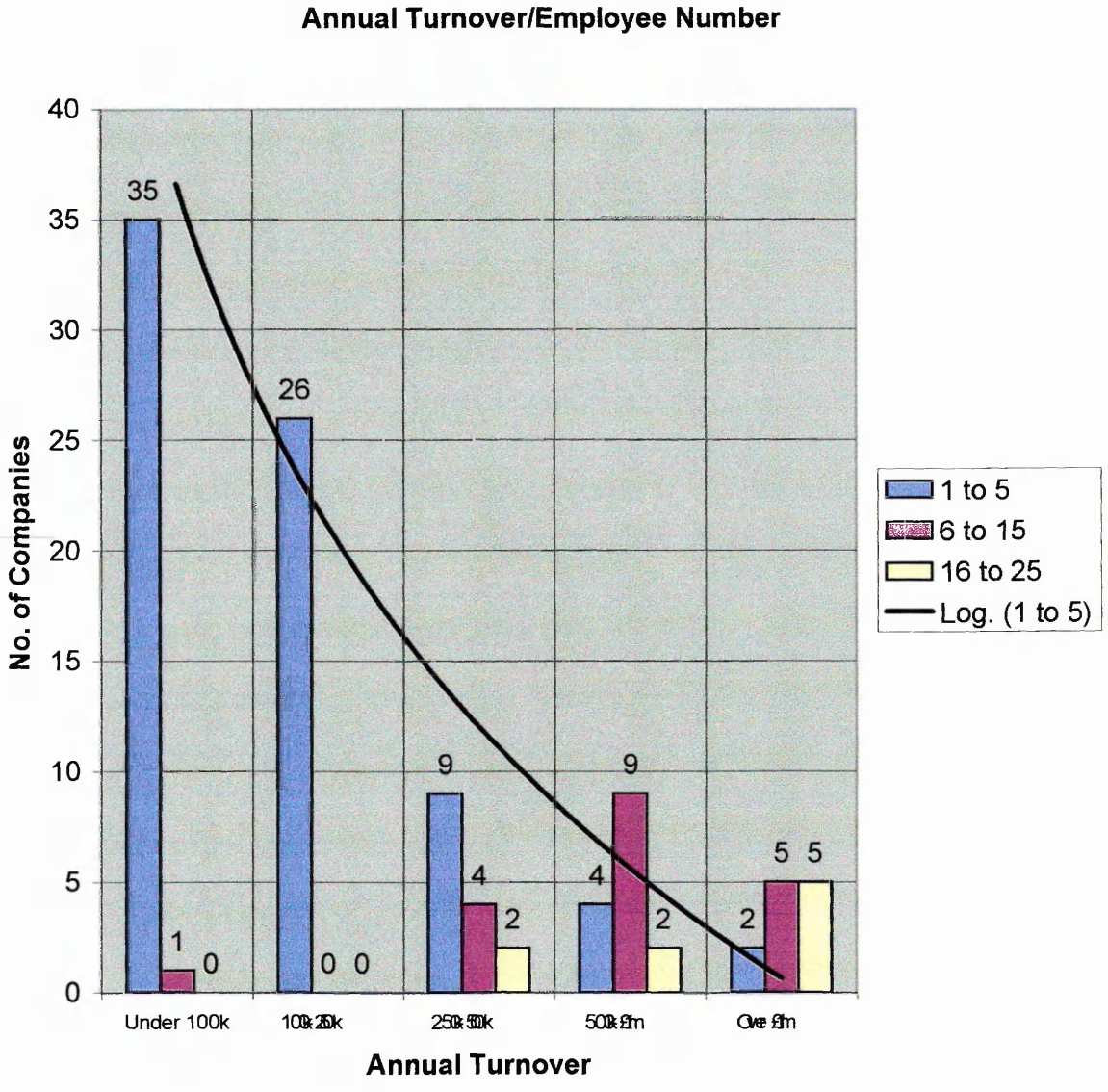
Further analysis using crosstabulation of employee numbers and annual turnover showed that:

- 46.1% of businesses which employed 1 – 5 people, had an annual turnover of under £100,000 and 53.9% of them had annual turnover above £100,000
- 55.6% of businesses which employed 16 – 25 people had an annual turnover of above £1m
- No businesses employing 16 – 25 people had a turnover of less than £250,000.

The relationship between annual turnover and number of employees is demonstrated in chart 5.1.1. A trend line was invoked to demonstrate the decrease in companies employing 1 to 5 people as annual turnover increased.

It was assumed that due to the scoping of the questionnaire the percentage of businesses employing 1 – 5 people and having an annual turnover of less than £100,000, contains a high percentage of 'sole traders'.

Chart 5.1.1


Annual Turnover/Employee Number
No. of Companies
40
35
30
25
20
15
10
5
0
35
1
0
26
0
0
9
4
2
4
9
2
2
5
5
Under 100k
Annual Turnover
1 to 5
6 to 15
16 to 25
Log. (1 to 5)

5.1.2 Business Activity

The business activities mirrored closely those stated for the region by BCC and EEDA (2002) (see 4.2 & Appendix One) namely:

- Agriculture
- Research and development
- Other services
- Manufacturing
- Construction
- High-tech
- Tourism
- Financial
- Distribution
- Transport

Agriculture was the most frequent business activity accounting for 28% of the rural business sector, with research and development accounting for 16.8% and other services 15.8% (See 4.2).

This reiterates the definition of rurality given by Morris and Bailey, 2001 (See 2.1.3) where 'rural land use is characterised by farmed land'.

The agricultural activity accounted for 33.3% of the businesses, which also had an annual turnover under £250,000.

For the higher turnover categories the percentage of agricultural business activity dropped to between 6% and 8%. This demonstrates that there is a difference between the frequency of the business activity and the economic activity of the rural businesses.

Therefore BCC or other organisations can expect the agricultural sector to represent a high proportion of those needing to benefit from any support provision.

5.1.3 Medium-term Objectives

The primary medium-term objective of rural businesses in Bedfordshire was growth/expansion/development accounting for 41.2% of responses (also one of the four objectives of the UK Sustainable Development Strategy, see section 2.1.1). 17.6% of businesses wished to continue as they are with stability, sustaining their market position. 10.8% of rural business in

Bedfordshire stated rather poignantly that they just wished to survive (See section 4.4). Of this 10.8% wishing to survive 77.7% were agricultural businesses. The 10.8% wishing to survive can be summarised by annual turnover bands thus:

- 22.2% had an annual turnover of less than £100,000;
- 11.5% had an annual turnover of between £100,000 and £250,000;
- None of the remaining higher turnover categories stated they merely wished to survive.

The results have shown that the agricultural sector represents 28% of all business activity in rural Bedfordshire and nearly 80% of the businesses, which stated they wished merely 'to survive'. Therefore, BCC or other support providers would be justified in concentrating support provisions within this sector (see section 6.3).

Appropriate support could be in the form of assistance with applications to the ERDP land based or project based schemes (see section 2.2.4).

5.1.4 Strengths and Weaknesses

As can be seen from section 4.5 the businesses identified they possessed the following strengths:

- Technical expertise (64.9%)
- Financial Management (51.9%)
- Ability to Innovate (48.5%)
- Compliance with Legislation & Regulation (41.2%)
- Location of the Business (40%)

Weaknesses were identified as:

- Marketing & Promotional Ability (38.6%)
- Training Provision (37%)
- I.T. (32%)
- Product Development (29.8%)
- Logistics (23.2)

Section 4.6 identified the following strengths being of most importance to the businesses:

- Financial Management (93.8%)
- Profitability (88.4%)
- Technical Expertise (80%)
- Ability to Innovate (67.8%)
- Human Resources (65.6%)

These strengths were considered to be of least importance:

- Location of the Business (45.2%)
- Logistics (43.2%)
- Training Provision (42.7%)
- I.T. (40.4%)
- Product Development (32.5%)

As can be seen from the above, of the strengths least important, 4 out of the 5 were also the ones perceived to be weaknesses.

Therefore if a company perceives itself to be weak in an area it may on the whole consider this area to not be of importance to it. This may also arise if for instance a company does not use I.T. then this will be a weakness they can admit because it is perceived to be of no importance or relevance to its business activity.

Where training provision is both a weakness and of little importance to the company it could merely be that this company is a sole trader; an electrician for example, who is adequately trained and has no employees.

Table 5.1.4 represents a summary of the diverse profile of the businesses.

Table 5.1.4 The Diverse Profile of Rural Business

Strengths	Weaknesses	Most Important Strengths	Least Important Strengths	Annual Turnover	Employment	Activity	Objectives
Technical Expertise	Marketing & Promotional Activities	Financial Management	Location of the Business	Under £100k 34.3%	1 to 5 employees 73.6%	Agriculture 28%	Growth
Financial anagement	Training Provision	Profitability	Logistics	£100,000 to £250,000 25.7%	6 to 15 employees 17.9%	Research & Development 16.8%	Continue/ Stability/ Sustain
Ability to Innovate	I.T.	Technical Expertise	Training Provision	£250,000 to £500,000 14.3%	16 to 25 employees 8.5%	Other Services 15.8%	Survival
ompliance with egislation	Product Development	Ability to Innovate	I.T.	£500,000 to £1m 14.3%		Manufacturing 9.3%	Increased Profitability
Location	Logistics	Human Resources	Product Development	Over £1m 11.4%		Construction 8.4%	Consolidation

The results of the diverse profile of the businesses have however, identified 'gaps' which are the weaknesses they perceive they have. These could be turned into strengths by focusing appropriate support provision in following areas:

- Marketing and promotional activities
- Training provision
- I.T.
- Product development
- Logistics

As the research has demonstrated that rural businesses in Bedfordshire are diverse and therefore their needs are diverse, concentrating support in these areas may be an inappropriate use of funding on the basis of this investigation solely.

One approach to overcome the diversity and establish appropriate support mechanisms without the risk of inappropriate use of funding is to establish a panel of businesses from the sample companies.

This would provide the opportunity to gather more detailed information and ensuing experience through the experimentation of different activities over a period of time (one to two years) with the panel of companies, on an extended case-study basis.

The pilot panel would enable on-going information and analysis which would allow more exploratory research to be undertaken than if a traditional case study method were pursued, as case studies tend merely to provide a 'snap-shot' in time.

This would further contribute to one of the three guiding principles of the BCC's rural strategy namely that the strategy should be 'live and evolving, cost-effective and current' (BCC, 2002).

The panel could furthermore be used as the vehicle to utilise the exploratory methods of Bowman & Faulkner as discussed in section 2.6 (the producer matrix). These methods helped the formulation of the questioning in the survey and could furthermore inform follow on work from this research. Building on both the resources the rural business possess and identifying those required for competitive advantage could then identify strategies for sustaining competitive advantage.

The use of effective monitoring and measurement during the pilot panel period would allow for BCC to make informed decisions for future strategies to support rural businesses in Bedfordshire.

5.2 Barriers to Improving Business Performance

The frequency tests in SPSS showed that between 45% and 89% of the businesses did not consider the barriers to be important constraints on their business performance.

However, between 11% and 55% did find certain barriers to be important constraints on their business performance.

The most five most important barriers to improving business performance were lack of:

- Management Time (54.9%)
- Staff Skills (36.8%)
- Marketing & Promotional Activities (36.1%)
- Access to Finance (34.7%)
- And competitors (33%)

From these findings support provisions concentrated within these areas would contribute towards the needs of between and third and a half of the businesses targeted in the research.

This would further overcome the perceived weakness in marketing and promotional activities and training provision stated by the companies in section 5.1.4.

To address the most frequently perceived barrier, lack of management time, the appropriate types of support provision may gain a higher participation rate if available out of normal office hours or at weekends.

Staff skills as both an important barrier to improving business performance and the perceived weakness in training provision shows that the businesses are weak at providing training but do recognise the importance of staff skills to their business performance.

In the resource-based theory of strategic management discussed in Chapter Two, (section 2.5) Hart, 1995 stated that sustainable competitive advantage could be achieved through tacit resources, which are skill based, and people intensive. Furthermore, they are 'invisible' assets gained through knowledge and accumulated experience and refined by practice. This theory therefore emphasises the importance of staff skills.

The businesses may consider that training to develop their staff skills should be provided by an organisation other than them. Existing training available may not be of relevance or in the appropriate form, or they may be unaware of the availability of such training.

The provision of training to increase staff skills would be a justified support measure in both reducing a barrier to improved business performance and promoting a perceived weakness into strength. To ascertain an appropriate form would require further research, which could be incorporated into the pilot panel of businesses (section 5.1.4).

Where competitors were stated as a barrier to improving business performance, utilising the views of Hart, 1995 (see section 2.5.1) may provide the businesses with sustainable sources of competitive advantage through environmentally oriented resources and capabilities. This is discussed more fully in section 5.6.

5.3 The Changes the Companies Wished to See

The most frequent changes the businesses would like to see were:

- Increased productivity (83.7%)
- Reduced costs (82.5%)
- Increased technical expertise (53.1%)
- Improved processes (52.2%)
- Increased ability to innovate (52.1%)

Reduced costs, improved processes and increased productivity can be realised by the adoption of environmental strategies as stated by Bhamra 2001), Hart (1995), Starkey and Welford (2001) (see section 2.5.1) within the business. This will be discussed in more detail in section 5.6.

5.4 Current Support Provision Participation

Establishing which types of support provisions the companies participate in and to further identify those which would be of most interest to them will provide further indication of the areas in which support should be focused.

Frequency tests for current participation in support provisions showed that between 46% and 72% of the companies in the survey said they did not participate in the support provisions. However, between 25% and 50% did

currently participate. The most frequently participated in support provisions were:

- Website Participation
- Information & Advice Events
- Training Initiatives
- Promotional Publications
- Local Business Support Groups

It was interesting to establish when selecting the companies (using case selection then the frequency test function), which perceive they are weak at training provision 71% of those companies did participate in training initiatives. This may suggest that they recognise their weaknesses and are addressing them through the participation.

It is recommended that to establish which companies participate and why, further research be undertaken. This could be incorporated in the pilot panel of businesses previously discussed in section 5.1.4.

5.5 Support Provisions of Most Interest to the Companies

The frequency tests for support provisions of most interest to the companies showed that between 65% and 81% of the companies were not particularly interested in the support provisions, ranking them between 1 (least) and 3 (medium).

However, between 19% and 35% of the companies did consider the support provisions of interest to their company. The support provisions of most interest to them were:

- Access to expert advice on Marketing & Promotional Activities
- Access to expert advice on Innovation
- Access to expert advice on Legislation and Product Development
- Provision of Business Support
- Access to expert advice on I.T.

Each of the support provisions of most interest to the businesses will now be summarised and commented on individually.

5.5.1 Marketing and promotional activity

- It is perceived to be a weakness

- It is perceived to be one of the most important barriers
- It is a support provision of most interest

The results have shown that more than a third of the businesses considered marketing and promotional activities to be a weakness, a barrier and of most interest as a support provision. Therefore, provision of support in this area is recommended.

5.5.2 Innovation

- It is perceived to be a strength
- It is perceived to be of high importance
- It is a support provision of most interest

The strength and importance may reflect that the second largest area of business activity in the sample was Research and Development. The presence of such companies in Bedfordshire may have influenced the interest or awareness of the remainder of the sample (knowingly or unknowingly). This may have resulted in expert advice on innovation being expressed as of most interest or the existence of Research and Development companies enabled these results to be produced.

This could also have occurred if the respondents did not fully understand the meaning of the word innovation when undertaking the questionnaire.

5.5.3 Compliance with Legislation & Regulation

- It is a strength
- It is a support provision of most interest

Companies are probably unlikely to admit that their compliance with legislation and regulations is weak for fear of recrimination it was therefore considered a strength by the respondents. The companies may also be unaware of legislation, which may be relevant to them and therefore will consider itself to be compliant in ignorance. Incorporating outline legislative audits within those companies participating in the pilot panel (section 5.1.4) could test these assumptions further.

The increasing legislative requirements placed on companies (as discussed in 2.5.1) and the apparent interest as a support provision provides an indication of the degree to which the companies are aware of this issue. This demonstrates the views of Bhamra (2001), Hart (1995), Starkey and Welford

(2001) that legislative pressure is increasingly felt by businesses (although their emphasis is on environmental regulation in particular).

5.5.4 Product Development

- It is a weakness
- It is considered of low importance
- It is a support provision of most interest

As stated in 5.1.4 where a weakness is disclosed it was probable that it was also considered of less importance to the business. However, it was considered a support provision of most interest to the businesses.

Their was no opportunity within this study to establish whether those companies which stated product development a weakness and therefore not of importance, were producers of a product or if providers of a service therefore having no views on product development.

It was also of interest to note that if product development is a weakness of low importance then why is it one of the support provisions of most interest? Due to the research method there is no opportunity to answer this question, it could however be investigated further within the pilot panel suggested in section 5.1.4. Or the identification of three those companies who responded as above for product development could be approached and questioned as to why they gave these responses.

5.5.5 Business Support

- It is a support provision of most interest

Business support is already available (delivered by Chamber Business, BCC and other organisations) to the majority of the companies in the survey. This support includes; marketing, finance, I.T., training and specialist advice such as innovation or environmental. The companies are either unaware of the availability of such support or consider that it does not at present fulfil their needs.

Therefore, the promotion and signposting of business support, which is currently available, should be undertaken.

5.5.6 I.T.

- It is a weakness
- It is considered of low importance
- It is a support provision of most interest

As previously stated in 5.1.4 as I.T. is considered a weakness it will probably also be considered of little importance to the companies. However, it does represent a support provision, which would be of most interest to the respondents. Furthermore, the most frequently participated in support provision was a website. Therefore, the provision of expert advice on I.T. could be focused on establishing, maintaining and enhancing websites.

5.6 Environmental Issues

The results showed that 66.7% of the companies said they included environmental issues in their business decision-making.

The high percentage of companies that stated they did include environmental issues in their business decision-making would, in the author's experience of providing environmental advice to businesses in Bedfordshire, appear high. This could be due to some of the criticisms of the chosen research method (postal questionnaire).

Dillon (1994) stated that postal questionnaires could result in situations where the respondent can answer without the opportunity for the researcher to further explore or that they provide no opportunity to follow-up on incomplete or unclear responses. Therefore the extent to which they consider (and what they mean by 'consider') environmental issues in their business decision-making has not been established, as this was beyond the scope of this study.

To establish the extent of inclusion of environmental issues further analysis of the companies by the face-to-face interview or case study methods could be undertaken. This would allow for more in depth probing taking place and to question whether they merely perceive they do include environmental issues or have they established formal environmental management systems. This could provide one element of the pilot panel previously described in section 5.1.4.

5.6.1 Reasons for Addressing Environmental Issues

The most frequently stated reasons for companies to include environmental issues in their business decision-making were:

- Compliance with legislation and regulation
- Reduced costs or increased efficiency
- Corporate responsibility

This reiterates the views of Hart (1995) and Envirowise (2002) that incorporating environmental issues into the business can increase its productivity and efficiency.

The views of Bhamra (2001) with respect to the impacts on business of current and pending EU Directives and legislation are also confirmed. Bhamra further stated that a sustainable business strategy results in improved reputation among communities and stakeholders, which the businesses appear to have recognised by stating corporate responsibility.

In section 5.3 the changes the respondent companies would wish to see included reduced costs and increased efficiency (and therefore possible increased productivity through improved processes). The companies, which have included environmental issues, have demonstrated through these results that they have experienced the benefits of the literature on the subject. These companies could therefore be a source of knowledge and information for other companies wishing to achieve the same changes in their companies.

The opportunity for the exchange of experience and ideas between the different organisations could be provided for by free or subsidised membership of the Bedfordshire Green Business Network (GBN). This could be included for the companies in the pilot panel (5.1.4).

5.6.2 Reasons not to Include Environmental Issues

The most frequent reasons for not addressing environmental issues were: lack of time

- Uncertainty of environmental legislation
- Poor external sources of information and advice
- Lack of demand from customers
- Lack of time

As stated in section 5.6.1 encouraging the inclusion of environmental issues in the business decision-making would provide benefits for the respondent companies. The benefits specific to the results of this study would be:

- Enabling the changes the companies wish to see, with respect to, reduced costs and increased efficiency, increased productivity through improved processes;

- Promoting the use of local business support groups (in particular the GBN) which is a type of support provision most participated in;
- Helping to overcome the perceived barrier of competitors by achieving competitive advantage;
- Providing expert advice on legislation and regulation a support provision of most interest to the companies.

To address the issue of poor external sources of advice and information an increase in the marketing and promotion of existing free or low cost resources available should be undertaken. The existing free or low cost local resources available include:

- EnvirolinkUK (a web based source of environmental legislation and fact sheets);
- The Bedfordshire Green Business Network (providing information, support and advice, training and opportunities for the exchange of experience and ideas between organisations);
- Chamber Business (for access to free environmental business support);
- BLSBP (overseeing a wide spectrum of environmental projects which business can participate in for example, the Bedfordshire Environmental Training Initiative).

When addressing the perceived lack of time, which prevents the companies from including environmental issues, information and advice is available out of normal office working hours in the form of Internet resources. The companies are either unaware of the existence of such resources or not inclined to consider the associated benefits of the inclusion of environmental issues in their business decision-making.

This reiterates the recommendation to increase awareness, through marketing and promotional activities, of the local resources available.

When considering the lack of demand from customers it would first be necessary to establish who their customers are and the extent to which the

customers could demand (as seen in supply chains where a manufacturer places pressure on a supplier to comply with their corporate policies). Establishing who the company's customers were was beyond the scope of this study but could be undertaken in further research.

This completes the analysis and discussion of the data presented in Chapter Four in relation to the research objectives and questions specified in Chapter One. The extent to which the research objectives have been met and their contribution towards the overall aim of this study, will be presented in the next Chapter and mark the conclusion of this investigation. A summary of the research findings is presented in table 5.6.

Table 5.6: A summary of the findings of this research

Strengths	▪ Technical Expertise ▪ Financial Management ▪ Ability to Innovate ▪ Compliance with Legislation & Regulation ▪ Location of the Business
Weaknesses	▪ Marketing & Promotional Activities ▪ Training Provision ▪ Product Development ▪ Logistics
Most Important Strengths	▪ Financial Management ▪ Profitability ▪ Technical Expertise ▪ Ability to Innovate ▪ Human Resources
Least Important Strengths	▪ Location of the Business ▪ Logistics ▪ Training Provision ▪ I.T. ▪ Product Development
Barriers	▪ Management Time ▪ Staff Skills ▪ Marketing & Promotional Ability ▪ Access to Finance ▪ Competitors
Changes Required	▪ Reduced Costs ▪ Increased Productivity ▪ Increased Technical Expertise ▪ Improved Processes ▪ Increased Ability to Innovate
Support Participated In	▪ Websites ▪ Information & Advice Events ▪ Training Initiatives ▪ Promotional Publications ▪ Local Business Support Groups
Support of Most Interest	▪ Expert Advice on Marketing & Promotional Activities ▪ Expert Advice on Innovation ▪ Expert Advice on Legislation & Regulation ▪ Business Support ▪ Expert Advice on I.T.

6 Chapter Six: Conclusions and Recommendations

This research was established to investigate appropriate mechanisms for the promotion of sustainable rural business in Bedfordshire. This was in order to provide recommendations to Bedfordshire County Council and related organisations for the provision of targeted support.

The research sample was selected on the basis of its being representative of rural businesses in Bedfordshire as discussed in Chapter One, and therefore likely to provide valid input to the research.

The research objectives formulated in Chapter One were:

1. To classify rural businesses (for example by performance, strengths and weaknesses, opportunities and requirements for sustainable business strategy implementation).
2. To determine the position of rural businesses in Bedfordshire in terms of economic, environmental and social performance.
3. To identify appropriate strategies and to make recommendations for promoting sustainable rural business available to BCC and other organisations to facilitate support provision.

The extent to which the research objectives have been met will now be considered.

6.1 Research Objective One: To classify the rural business groupings for example by performance, strengths and weaknesses, opportunities and requirements for sustainable business strategy implementation.

The diversity of rural businesses in Bedfordshire have been profiled in terms of the following:

- Employment provision and annual turnover;
- Business activity;
- Medium-term business objectives;
- Strengths or weaknesses of the businesses;
- Importance of those strengths or weaknesses for the businesses;

The sample has displayed diversity but allowed for conclusions to be drawn as discussed in Chapter Five.

These can be summarised as highlighting the areas in which to focus support provisions, which turn weaknesses into strengths, reconcile the barriers to improving business performance and are of interest to the businesses.

The companies within the sample each have their own individual profile, which may not necessarily match the profile of all rural businesses in Bedfordshire. The profile does however provide a more detailed view of the companies and further highlights their individuality.

The research identified the weaknesses the companies perceive themselves to possess which have provided an indication of their requirements for improved business performance. This in turn gives BCC and other support organisations the opportunity to direct support provisions in a more informed manner.

By identifying the perceived barriers to improving the business performance of the companies, the research has established areas of support, which could help meet the needs of between a third and a half of the businesses in the target population.

For these businesses the research has demonstrated opportunities to be realised by including environmental issues in their business decision-making. These opportunities have been recognised by nearly three-quarters of the respondent companies.

Although a high percentage of companies reported that they were not particularly interested in support provisions, up to a third did indicate such an interest, and furthermore in three areas which were previously identified as weaknesses. This provides further evidence for BCC and other support organisations to make informed decisions for appropriate support without inappropriate use of public funding.

The apparent lack of awareness of local free and low cost resources has underlined the need for increased promotion, marketing and signposting to these resources or sources of support.

Questions addressing more detailed business information could have been included in the questionnaire but the overall size of the questionnaire had to

be taken into consideration. The inclusion of more demographic information would have allowed more detailed statistical analysis to be undertaken. The researcher was however concerned that this would result in a level of detail that may become irrelevant to the majority of the sample.

More in depth analysis of the businesses utilising the methods referred to in Chapter Two, was not undertaken as for these methods to be effective would require monitoring and reporting over a period longer than allowed for in this study. It does however remain a useful exercise, which could follow on from the baseline set by this piece of research.

6.2 Research Objective Two: To determine the position of rural businesses in Bedfordshire in terms of economic, environmental and social performance.

The extent to which this research objective has been met was limited with respect to economic and social performance. However, for environmental performance, extensive information established the perceived inclusion of environmental issues in business decision-making, the benefits of doing so (which reiterated the literature in Chapter Two) and the reasons for non-inclusion.

The economic position of the rural businesses was established, in a limited manner, by annual turnover and by the number of people they employed but with no use of performance indicators or trends. A link was established between annual turnover and employee numbers. Further insights could be established through the inference made in their business objectives. A quarter of the companies wished to expand and grow which would imply they have the resources to do so. On the downside nearly 80% of the agricultural sector, which accounted for nearly a third of the rural businesses in the research, stated survival as their medium-term business objective, which suggests that support provisions targeted at this sector would be well placed.

The research established that nearly three-quarters of the businesses did consider they included environmental issues in their business decision-making. The extent to which they did was not established however as this was

beyond the scope of the study and the chosen research method provided no opportunity to follow up or further explore.

The reasons for the businesses to include environmental issues verified the literature in that the companies recognised the benefits of its inclusion. The main reasons were reduced costs, increased efficiency, compliance with legislation and corporate responsibility. This demonstrated that the businesses recognised the opportunities and were aware of the penalties of non-compliance but it also provided further indications of a social nature.

The inclusion of environmental issues can provide some of the changes, which the companies stated they would like to see. Increasing the opportunity to share knowledge and experience gained by those businesses including environmental issues would help other companies to also make the changes they require. Inviting those companies, which consider environmental issues in their business decision making to join the Bedfordshire GBN, (perhaps at no cost or at a subsidised rate, could instigate this.

A third of the sample did not include environmental issues in its business decision-making. The reasons stated for non-inclusion provided an understanding of the companies' views and insights into methods of raising the rate of inclusion.

The main reasons for not including environmental issues in the business decision-making were due to uncertainty of environmental legislation, a perception of poor external sources of information and advice, lack of time and a lack of demand from their customers.

An increase in awareness of the resources available on environmental issues, through promotional activities, would help overcome both the uncertainty of environmental legislation and the views regarding the availability of information and advice.

This activity could furthermore help with regard to lack of time. If increased signposting to sources of information available on the Internet were undertaken this would provide the information required outside of normal office hours. The delivery of environmental support or training could also be provided out of normal office hours to help accommodate issues concerning time.

The extent to which businesses in Bedfordshire contribute to social capital was not fully established. Some social issues were reflected in the form of staff skills, training provision and a sense of corporate responsibility.
Training provision was considered by a third of the sample to be a weakness and staff skills was recognised as one of the most important barriers to improving business performance for a third of the sample.
Corporate responsibility was stated as a reason for the inclusion of environmental issues into the business decision-making, indicating a possible commitment by the respondents to the wider issues surrounding the environmental and social debate. Citing this as a reason for inclusion infers that they are considering the needs of other members of the community.

6.3 Research Objective Three: To identify appropriate strategies and to make recommendations for promoting sustainable rural business available to BCC and other organisations to facilitate support provision.

The research itself has enabled recommendations to be formulated for BCC and other support organisations promoting the sustainability of rural businesses in Bedfordshire through appropriate support provisions.

The recommendations of this piece of research, based on the principle findings of the discussion, are that:

1. Support should be directed at the agricultural sector as this represented a third of this sample of the rural businesses;
2. The provision of support should specifically address the principal areas of weakness established namely:
    - Marketing and promotional activities;
    - Training provision;
    - I.T.;
    - Product development.

3. The provision of support should be directed at overcoming the perceived barriers to improving business performance for between a third and a half of the businesses in Bedfordshire, namely:
    - Lack of management time;
    - Lack of staff skills;
    - Lack of marketing and promotional ability;
    - Access to finance;
    - Coping with competitors.
4. Further exploratory research should be carried out into methods for developing the strengths of rural companies and providing strategies for sustainable competitive advantage for the businesses;
5. Further exploratory research should be carried out into the types of staff training which rural businesses would participate in, to overcome the perceived barrier of a lack of staff skills;
6. Increased promotion and signposting to free local resources available to businesses in Bedfordshire;
7. Support provisions should take into consideration the issues of time, and where appropriate should be available out of normal office hours or in a web based format;
8. The promotion of the benefits of addressing environmental issues in the business decision-making, which were realised by nearly three-quarters of the sample;
9. The provision of free or subsidised membership of the Bedfordshire Green Business Network to businesses with rural Bedfordshire postcodes;
10. BCC to establish a panel of businesses for the purpose of implementing the above recommendations on an experimental basis. Over a period of time the panel would provide useful additional data and experiences, which could inform future support strategies for sustainable rural businesses. The use of a pilot panel would allow for the appropriateness of support measures to be assessed prior to implementation thus reducing the risk of inappropriate use of public funding and adverse public opinion.

6.4 Further Research

The research objectives stated in section 1.5 are reiterated here:

1. To classify rural businesses (for example by performance, strengths and weaknesses, opportunities and requirements for sustainable business strategy implementation).
2. To determine the position of rural businesses in Bedfordshire in terms of economic, environmental and social performance.
3. To identify appropriate strategies and to make recommendations for promoting sustainable rural business available to BCC and other organisations to facilitate support provision.

The diverse profile of rural businesses in Bedfordshire established in this research has provided insights as to the classification of the rural business groupings. One of the most interesting and valuable insights that have been drawn from this piece of research is that it has demonstrated the diversity of the businesses. One set of facts relating to the business profile cannot be assumed to apply or be transferred directly to another sample of rural businesses in Bedfordshire.

The economic position of the rural businesses in Bedfordshire was established in relation to annual turnover and number of employees and further insights were revealed within their business objectives. A clear and encouraging picture was established with respect to their environmental performance. Social performance was only established in a limited form by the provision of employment, training provision, perceived staff skills and a commitment to corporate responsibility.

The final objective of this research was achieved through the recommendations made. However, these are not exhaustive and there remain many avenues to investigate this further, thus building on the base line that this piece of research has established.

This research has therefore not fully answered all the research objectives set out in Chapter One but has, however, provided an insight into how to develop strategies to support rural businesses in Bedfordshire thus promoting their sustainability.

The limitations of the research were mainly due to the period of time available to undertake the research project and the availability of funding.
Many possible avenues for further research have arisen as a result of the limitations. The most prominent of these are listed below:

1. To establish a more detailed view of rural businesses in Bedfordshire using further exploratory methods (section 5.1.1);
2. To investigate the provision of specific support for the agricultural sector of rural businesses in Bedfordshire (section 5.1.3);
3. To further explore the tailoring of specific support provisions (section 5.1.4)
4. To investigate which types of training to enhance staff skills would be appropriate for the businesses (section 5.2);
5. To investigate which individual companies participate in support provisions and why (5.4);
6. To investigate whether businesses in Bedfordshire are more innovative or would like to be as suggested in this research or do they understand the word 'innovation' (section 5.5.1);
7. To investigate where businesses do go for business support at present and whether these places could then be used to signpost to other forms of support (is it banks for example) (section 5.5.5);
8. To investigate to what extent the businesses include environmental issues in the business decision-making. Is it a passing thought or do they possess formal environmental management systems? (Section 5.6).

All of the above areas for further research generated within this study could be incorporated within the pilot panel of rural businesses in Bedfordshire as discussed in section 5.1.4 and further recommended in section 6.3. This approach would seek to overcome the diversity of the businesses and establish appropriate support mechanisms without the risk of inappropriate use of funding.
The pilot panel would provide useful experience and the opportunity to gather more detailed information, by experimenting with the recommendations made and research avenues proposed over a period of time (one to two years).

6.4.1 Suggested Methodology for Further Research

- The selection of a panel of 15 rural businesses within Bedfordshire displaying the diversity identified in this study with respect to:
    - Turnover;
    - Employees;
    - Activity;
    - Business Objectives.
- The profiling and analysis through face-to-face interviews, of the strategic resources or strengths and weaknesses the companies possess using the methods of Bowman & Faulkner (1997). This will lead to the identification of appropriate business strategies for sustainable competitive advantage.
- The undertaking of face-to-face interviews to establish a more informed view of:
    - What type of specific support would be required by the agricultural businesses;
    - Which types of training provision for employees are perceived to be most appropriate;
    - Which companies participate in support provisions and why;
    - Where the companies go at present for support and the extent to which they are aware of such support. Is current signposting sufficient or could there be more appropriate places for the signposting to be;
    - To what extent do they consider environmental issues in the business decision-making and are they aware of the benefits of doing so. Do they possess formal management systems or does 'consider' mean a mere passing thought.
- The participation of the companies on training provisions to include the Bedfordshire Environmental Training Initiative and the Green Business Support Seminars. Monitoring and feedback to establish the usefulness to the companies of participating in such training.

The suggested methodology provides the opportunity to investigate further on an ongoing basis to determine appropriate methods of support provision. The fact that they are ongoing and provide the opportunity to obtain feedback means that the outcome will be in a form, which is required by the businesses themselves and not entrenched in policy decisions.

This concludes this piece of research.

7 Appendices

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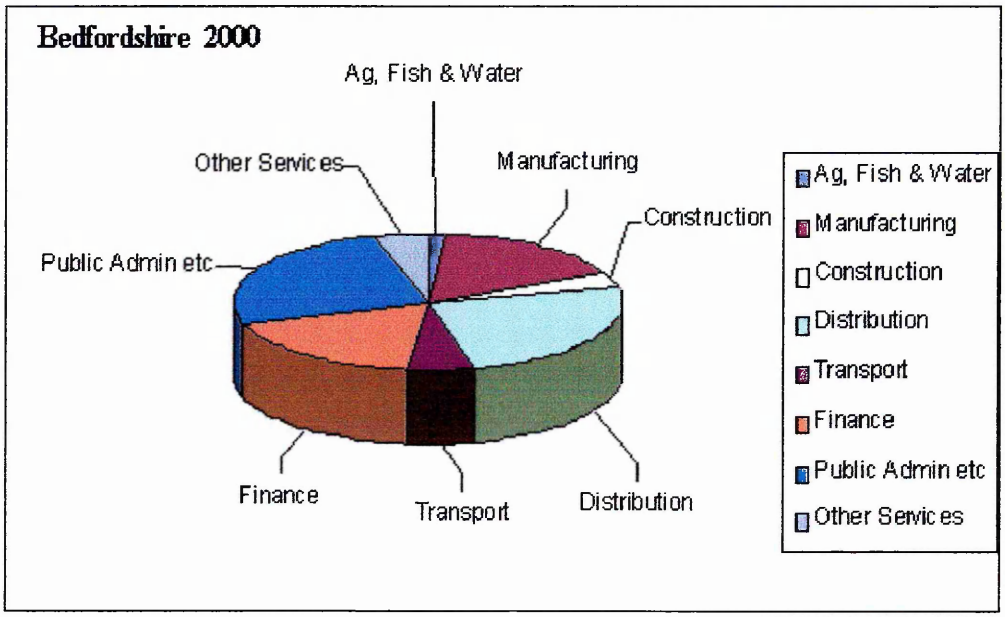
Appendix One: The Diversity of Business Activity in Bedfordshire 2000



BCC, 2002

Appendix Two: EEDA Themes

- Sympathetic reuse of existing building stock and sustainable building design and construction.
- A constant supply of high quality sites that satisfy modern business needs
- Housing that is affordable to key sector workers and others on low income
- Achieving broadband links throughout the region to facilitate business to business networking, the development of business clusters and the growth of e-commerce.
- ICT and getting individuals on-line to deliver skills training throughout the region
- Encouragement of business to recognise their responsibility to maintain and protect the environment, through embracing, advancing and applying environmental management policies and practices.

Appendix Three: BCC Rural Strategy

In 2001 BCC published *'Bedfordshire Rural Eye 2001: A New Approach to Rural Strategy'* which sets out BCC's new approach to rural strategy. It evolved from discussion with a range of major public service providers in Bedfordshire. This included:

- BCC
- Bedford Borough Council
- Mid and South Bedfordshire District Councils
- Bedfordshire Rural Communities Charity (BRCC)
- Chamber Business
- Bedfordshire Health and Primary Care Groups (now Trusts)
- Bedfordshire Police

The new strategy possesses three guiding principles:

1. The strategy should be live and evolving, cost effective and current, not a large report overlapping in coverage with a range of other strategies, expensive to prepare and 'gathering dust on a shelf apart from occasional monitoring'
2. The approach should fit with emerging Community Strategy proposals and should not 'try to be the rural part of such strategy/strategies'
3. The approach should have multi-agency support and involvement.

The title 'Rural Eye' was to reflect the desire of the service providers to care for rural areas and to take a rural perspective.

BCC undertook research into disadvantage in Bedfordshire (published in April 2000). Disadvantage demonstrates strong correlations between those who have no access to transport and the effect on the rural economy. For example, if a resident has no car and the availability of public transport is poor then they will be prevented from the benefits that other residents may take for granted such as jobs, housing, education, healthcare, shops and post offices, entertainment and support organisations.

The results of the research for disadvantage in both urban and rural areas are summarised below in Table 2.3.2.

Disadvantage Measure	**Disadvantage Score (out of 10 – low scores = low levels of disadvantage)**	
	Urban	**Rural**
Unemployment	5	3
People on Council Tax Benefit	4	2
People on Housing Waiting List	8	5
Children Not Achieving Key Stage 1 Standard	5	3
Crime	6	3
Social Service Referrals	5	3
Health	6	4
Lack of Access to Services	0	4
Traffic	5	2
Lack of Environmental Quality	7	7
Total (Out of 100)	**52**	**37**

Table 2.3.2 Disadvantage in Bedfordshire in 1998, BCC 2000

The results demonstrate that disadvantage is more an urban problem than rural but poverty and disadvantage do exist in rural areas too. The results suggested that for five rural areas namely, Blunham, Clapham, Old Warden, Eastcotts and Roxton, levels of disadvantage were greater than the County average. Small pockets of disadvantage exist and possibly in other areas too but these can be masked by the overall levels of affluence.

The strategy includes the above statements and an ongoing body of materials and actions emerging from the following six strands/themes:

- Database of Services: A database of tailored rural services provided or funded by the major public service providers.
- Annual Newsletter: An annual newsletter distributed to all rural households and businesses outlining:

1. How rural areas are compared to urban areas (in respect of employment, education, crime and access to services)
2. What public service providers are currently doing/planning to be doing to meet the rural area needs
3. What plans are in place to identify and improve understanding of the needs of rural residents or businesses (village appraisals, plans etc. and other rural studies) identified from a brief questionnaire/response form to help the recipients contribute to the service review processes.

- Village Appraisals: the establishment of funds for village appraisal type work (appraisals, design statements, LA21 action plans)
- Awareness of Rural Issues: An annual summary and dissemination of findings of appraisals, research etc. work to ensure that those who may need to respond are fully aware of the needs and wishes etc. An annual conference or a Bedfordshire Rural Forum to be held, amongst others, to disseminate the summary of appraisals and rural research findings.
- Rural Research: An initial (2001) European Social Fund (ESF) funded research project looking at the needs and priorities for action of disadvantaged households in rural areas. This will be supplemented by the above ongoing annual assessments of the situation in rural areas.
- Rural Projects: Support for the ongoing development of a range of rural area focused projects tackling disadvantage.

Appendix Four: Objective and Priorities of JEDS

The following objectives and priorities were identified to promote and guide local action:

Innovation: Objective: To establish the image and reality of Bedfordshire and Luton's economy as knowledge rich, innovation and leading edge.

Priorities:

- Take forward the Oxford-Cambridge arc[3] both as the central theme of this strategy and as a contribution to EEDA's enterprise hubs and on-line communities initiatives.
- Develop an appropriate spread of innovation/incubation units providing a geographical spread but also including locations linked to Higher Education and other knowledge based facilities, with room for expansion.
- Provide additional support for inventors and innovators.
- Develop links between businesses and innovation, Higher Education, research and other knowledge-based facilities to encourage the formulation and growth of innovation clusters.
- Support innovation through effective technology transfer initiatives.
- Engage development planning and control processes, including regional and sub-regional strategies, guidance and studies in support of this core objective.

Investment: Objective: To increase the numbers of appropriate businesses moving into Bedfordshire and Luton and to retain mobile businesses within the area.

Priorities:

- Develop an improved approach to encouraging inward investment in which the maximum use is made of Regional Selective Assistance and which successfully pulls together and co-ordinates action on promotion, planning and land provision, handling enquiries, site development and skills development.

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[3] 'an initiative to combine the strengths of Oxford and Cambridge in the knowledge based business sectors, in a way which benefits Oxford and Cambridge but also appropriate adjacent localities for the economic and social benefit of UK plc – a super cluster'.

- Maintain a clear picture of the scale and nature of business land and premises availability including an assessment of the appropriateness for business, of some brownfield sites.
- Develop an effective strategy for keeping in touch with expanding or other potentially mobile businesses to encourage their continued local investment.
- Keep in touch with as many other key local businesses as possible to ensure a full range of support to their continued operation is available.

Competitiveness: Objective: To increase the competitiveness of businesses.
Priorities:

- Ensure that regulatory control and support services (e.g. planning control) reflect the intense competitive pressure businesses face.
- Develop support to tackle identified competitiveness issues, i.e. in respect of management communication skill needs, application of new technologies and exploitation of ICT potential to the full.
- Develop links between Higher Education, business support agencies and businesses.
- Maximise the take-up of evidently effective management techniques (Business Excellence Model)
- Facilitate supply chain and other cluster developments.
- Develop an effective mentoring programme.

Entrepreneurship: Objectives: To develop a strong and effective entrepreneurial culture.
Priorities:

- Develop an integrated approach to the provision of premises and business support for entrepreneurs
- Extend the current start-up training programme to cover all of Bedfordshire and Luton.
- Co-ordinate activity between business start-up agencies.
- Improve outreach into disadvantaged areas, and among widely spread disadvantaged groups.
- Review and evolve entrepreneurship development arrangements in schools, colleges, universities and other education and training venues.

Community Regeneration: Objective: To reduce the relative disadvantage of Bedfordshire and Luton's more deprived communities.
Priorities:

- Improve joint working between all partners on area regeneration in line with the approach advocated by the National Strategy for Neighbourhood Renewal.
- Ensure the successful implementation of existing urban regeneration programmes accessing the Single Regeneration Budget, New Deal for Communities, Sure Start, EU and other funds.
- Continue to research and develop responses (with all relevant partners) to other patterns of disadvantage affecting communities that are not necessarily geographically concentrated e.g. rural deprivation.

Employment Restructuring: Objective: To minimise the impact on communities of company closures, rationalisations or relocations.
Priorities:

- Early warning of major redundancies
- The availability throughout Bedfordshire and Luton of a broader integrated package of support for affected employees.
- Activation of especially co-ordinated programmes where justified by the scale and impact of change.
- Development of an approach to quickly bring forward the appropriate reuse of sites and buildings becoming available.

Learning and Skills: Objective: To develop a highly skilled and adaptable workforce.
Priorities:

- Contribute to the resolution of specific skills need problems both implicitly and explicitly elsewhere in the strategy.
- Achieve the areas 2002 National Learning Targets
- Tackle issues of learning and skills underperformance across the age ranges including basic skills, participation in further and higher

education, vocational learning, IIP take-up, recognition of the value of employee training and participation generally in lifelong learning.

Green Economy: Objective: To develop widespread knowledge of and responsiveness to the environmental impacts of business.
Priorities:

- A concerted development of an already strong focus on sustainability for business through partnerships, networks, higher education links, training, technology etc. including actions to minimise both direct adverse impacts and indirect adverse impacts.
- Use this strong local focus on sustainability to wider advantage for attracting inward investment, developing the green economy etc.

Infrastructure: Objective: To ensure that infrastructure in Bedfordshire and Luton continues to be seen as a positive business location factor.
Priorities:

- Concerted lobbying through the Local Transport Plan and other processes (e.g. multi-modal studies) for resources to tackle major infrastructure 'bottlenecks', including those most likely to be exacerbated by additional housing growth
- In particular, improvements to Luton's Eastern Corridor and to the A421 between St. Neots and Milton Keynes, the Bedford Western, Luton Northern and Dunstable A5 Bypasses.
- The further development of economically and environmentally beneficial public transport including, Translink in Luton Dunstable and the East-West Rail route but also other investment that will enable those for whom public transport is the best option to access employment.
- Make the most of important local air transport facilities such as London Luton Airport and Cranfield Airfield as employment generators both directly and indirectly.
- Review the relative position of Bedfordshire and Luton in respect of broadband telecommunication networks and its impact on businesses

and location of competitiveness, and encourage action where necessary.

- Support in principle the construction of the proposed Bedford to Milton Keynes Waterway for its direct and indirect economic roles.

Appendix Five: Questionnaire Covering Letter

Name
Company
Address
Address
Address

Dear .....,

Strengthening the local rural economy – an investigation into effective approaches for promoting the sustainability of rural businesses in Bedfordshire.

I am undertaking a project as part of my research with Cranfield University. The research seeks to identify barriers to enhancing the business performance of local rural business in Bedfordshire. On completion, the research will make recommendations for effective approaches for promoting the sustainability of Bedfordshire's rural businesses.

Your company's contribution as a rural business is very important - by completing the enclosed questionnaire you will help establish the current rural business situation. Identifying your company's future needs will contribute to the research by enabling appropriate recommendations to be made both to private and public Sector organisations. *All information supplied will be treated in strict confidentiality.*

I am a Business Support Co-ordinator with experience in business and environmental advice and support specifically for small and medium sized enterprises within Bedfordshire.

Should you wish to discuss any aspect of the research or the questionnaire then please contact me on 07970 110833 or email to a.j.reeves.s01@cranfield.ac.uk or in writing to Amanda Reeves, Cranfield University at Silsoe, Silsoe, Bedfordshire, MK45 4DT. Please return completed questionnaires using the enclosed freepost envelope by **Friday 14th June 2002.**

With many thanks for taking the time to complete the questionnaire, and good luck for the prize draw.

Yours sincerely,

Amanda Reeves

*A **FREE** half- day Business Consultancy will be awarded to the first completed questionnaire drawn from a hat following the closing date.*

Appendix Six: Sample of the Research Questionnaire

Identifying the current situation and future needs of rural businesses in Bedfordshire

Company Name:	
Address:	
Contact Name:	
Position:	
Telephone Number:	
Fax Number:	
Email:	

Please Tick

1. How many employees does your company currently employ?

1-5	
6-15	
16-25	

2. What is the main business activity of your company?

3. Can you estimate your company's annual turnover?

Under 100k	
100-250	
250-500	
500-£1M	
Over £1M	

4. What do you see your company's medium term business objectives being?

5. How would you rate your company's strengths in respect of the following? Which of these factors are important for the success of your business?

	Company strengths *Please tick*			Importance *Please tick*		
	High	Medium	Poor	Don't know	High	Low
Financial Management						
I.T.						
Human resources						
Technical Expertise						
Ability to Innovate						
Marketing & Promotional Activities						
Location of Business						
Product Development						
Logistics						
Profitability						
Training Provision						
Niche market for product						
Process Efficiency						
Compliance with Legislation & Regulations						
Other (please specify or continue on another sheet if necessary)						

6. Can you identify from the following list the most important barriers to improving your company's business performance?

	Least important barriers = 1, Most important = 5				
Please tick all that apply	1	2	3	4	5
Access to Finance					
Management Time					
Lack of ability to adapt to changing circumstances					
Staff skills					
Marketing & Promotional Ability					
Access to training					
Lack of Technical Expertise					
Competitors					
Regulatory Restrictions					
Inadequate Business Support					
Location of your Business					
Logistics					
Other (please specify or continue on a separate sheet)					

7. What changes to your company would you wish to see?

Please Tick	Yes	No	Don't know
Increased Productivity			
Reduced Costs			
Improved Processes			
Increased Technical Expertise			
Increased Ability to Innovate			
Increased Training			
Increased Business Support & Advice			
Other (please specify or continue on separate sheet)			

8. Does your company currently participate in any of the following support provisions to enhance its business performance?

Please Tick	Yes	No	Don't know
Marketing & Promotional Workshops			
Training Initiatives			
Information & Advice Events			
Business Support			
Promotional Publications			
Website Participation			
Membership of Local Business Support Groups			
Other (please specify or continue on a separate sheet if necessary)			

9. What kind of support provisions would most interest your company?

	Least interesting = 1; Most interesting = 5,				
Please tick	1	2	3	4	5
Provision of Training Events					
In House Training					
Provision of Business Support					
Information & Advice Publications					
Facilitation of Local Business Networks					
Access to Expert Advice on:					
• I.T.					
• Innovation					
• Product Development					
• Marketing & Promotional Activities					
• Regulation & Legislation					
Other (Please specify or continue on a separate sheet)					

10. Does your company address environmental issues in its business decision-making?

Yes	No	Don't know

If yes, can you rank by importance the top three reasons for including environmental issues in your business decision-making?

Please tick one in each column	1st	2nd	3rd
Compliance with Regulations			
Cost Savings / Increased Efficiency			
Response to Competitors			
Pressure from Stakeholders			
Increased Competitiveness			
Supply Chain Pressure			
Corporate responsibility			
Pressure from Customers			
Other (please specify or continue on a separate sheet)			

If no, which of the following do you see as the main barriers preventing the inclusion of environmental issues in your business decision-making?

	Yes	No	Don't know
Lack of Capital for Investment			
Lack of In-House Expertise			
Lack of Time			
Uncertainty of Environmental Legislation			
Poor External Sources of Information & Advice			
Lack of Commitment from Senior Management			
Lack of Demand from Customers			
Other (please specify or continue on separate sheet)			

Thank-you for taking the time to complete this questionnaire, please return using the freepost envelope by Friday 14th June 2002.

Appendix Seven: Example of Frequency Tests

How many employees does your company currently employ?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	one to five employees	78	72.9	73.6	73.6
	six to fifteen employees	19	17.8	17.9	91.5
	sixteen to twenty-five employees	9	8.4	8.5	100.0
	Total	106	99.1	100.0	
Missing	9	1	.9		
Total		107	100.0		

Can you estimate your company's annual turnover?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 100k	36	33.6	34.3	34.3
	100 k- 250k	27	25.2	25.7	60.0
	250k-500k	15	14.0	14.3	74.3
	500k- £1M	15	14.0	14.3	88.6
	Over £1M	12	11.2	11.4	100.0
	Total	105	98.1	100.0	
Missing	99	2	1.9		
Total		107	100.0		

Appendix Eight: Crosstabulation Output for number of employees and annual turnover

How many employees does your company currently employ? * Can you estimate your company's annual turnover? Crosstabulation

			Can you estimate your company's annual turnover?					
			Under 100k	100 k-250k	250k-500k	500k- £1M	Over £1M	Total
How many employees does your company currently employ?	one to five employees	Count	35	26	9	4	2	76
		% within How many employees does your company currently employ?	46.1%	34.2%	11.8%	5.3%	2.6%	100.0%
	six to fifteen employees	Count	1		4	9	5	19
		% within How many employees does your company currently employ?	5.3%		21.1%	47.4%	26.3%	100.0%
	sixteen to twenty-five employees	Count			2	2	5	9
		% within How many employees does your company currently employ?			22.2%	22.2%	55.6%	100.0%
Total		Count	36	26	15	15	12	104
		% within How many employees does your company currently employ?	34.6%	25.0%	14.4%	14.4%	11.5%	100.0%

Appendix Nine: Frequency Tests for Perceived Strengths

Technical Expertise Strength

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	63	58.9	64.9	64.9
	Medium	30	28.0	30.9	95.9
	Poor	4	3.7	4.1	100.0
	Total	97	90.7	100.0	
Missing	9	10	9.3		
Total		107	100.0		

Financial Management Strentgh

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	54	50.5	51.9	51.9
	Medium	47	43.9	45.2	97.1
	Poor	3	2.8	2.9	100.0
	Total	104	97.2	100.0	
Missing	9	3	2.8		
Total		107	100.0		

Ability to Innovate Strength

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	47	43.9	48.5	48.5
	Medium	43	40.2	44.3	92.8
	Poor	7	6.5	7.2	100.0
	Total	97	90.7	100.0	
Missing	9	10	9.3		
Total		107	100.0		

Compliance with Legislation and Regulation Strength

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	40	37.4	41.2	41.2
	Medium	49	45.8	50.5	91.8
	Low	8	7.5	8.2	100.0
	Total	97	90.7	100.0	
Missing	9	10	9.3		
Total		107	100.0		

Location of Business Strength

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	40	37.4	40.0	40.0
	Medium	49	45.8	49.0	89.0
	Poor	11	10.3	11.0	100.0
	Total	100	93.5	100.0	
Missing	9	7	6.5		
Total		107	100.0		

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