Embedding Woodland Industries in the West Midlands

A Final Report
by

DTZ Pieda Consulting

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Executive Summary

1. In May, 2001, DTZ Pieda Consulting was appointed by a public sector grouping to investigate the potential for embedding woodland industries more deeply in the West Midlands economy. In essence, the study was required to identify the overarching issues pertaining to forestry and related industries in the West Midlands. The client group consists of: the Forestry Commission; the Countryside Agency; and Advantage West Midlands.

2. The main aims of the study brief can be stated as follows:

   (i) To establish the nature and characteristics of forestry and wood using businesses in the West Midlands (covering, *inter alia*, the number, type, scale and nature of such businesses and establishments in the region);

   (ii) To compare the forestry and wood-related sector to other sectors that are important to the West Midlands rural economy;

   (iii) To identify whether a cluster of forestry and related businesses can be identified in the West Midlands, together with its support and development needs;

   (iv) To describe the regional and local policy context, funds and strategies within which forestry and related businesses operate, and compare these to those affecting other key rural sectors; and

   (v) To develop a detailed methodology and approach to a potential Phase 2 study which, if commissioned, would identify a detailed activation plan for woodland related industries in the region.

3. In the UK and internationally, regional agencies – including Advantage West Midlands – have grasped the cluster concept as a means of improving the performance of regional economies. The definition used by Advantage West Midlands is that:

   > *"Clusters are defined by the common technology or end product of a group [of] companies linked through customer and supply chains and associated training, finance and research." (Agenda for Action, Spring 2001)*

4. The formation of clusters is generally driven by a number of mutually reinforcing tendencies:

   - **Globalisation** is intensifying **competition**, and firms often find that they can better utilise their specialist knowledge if they operate among a cluster of linked businesses. Inter-firm co-operation of various types, through supply chains, mentoring, or best practice sharing, can be used as the means of increasing knowledge availability and effectiveness of use

- Clusters can help create enduring **competitive advantage**. For example, companies with complementary skills can collaborate to compete for contracts beyond the scope of an individual participant. Collaboration can also generate economies of scale, by specialising activity within appropriate elements of the cluster supply chain.

- Clusters allow for the development of **specialist** physical **infrastructures** and support services, and the concentration of appropriate skills.

- By working together, cluster participants can be more effective: for example, in addressing the supply of skills, by influencing curriculum development, lobbying for infrastructure investment, de-regulation, and so on.

- Clusters can help reduce transactions costs, as trust and long-term relationships develop between participants, thereby reducing uncertainty.

5. A primary task for this study is to assess the potential for a cluster development approach for woodland related industries in the West Midlands. This task requires an assessment of the extent to which business, supply chain and customer relationships, skills and other infrastructure issues are already sufficient to describe a cluster, or have the potential to do so.

6. *Prima facie*, there are a number of reasons for considering that the West Midlands has the potential to host a woodland industry cluster:

   - The existence of significant volume of forestry resource in the region, and the location of substantial additional timber and woodland resources in neighbouring UK regions, especially Wales.

   - The presence of a regional wood-related processing and manufacturing capability in the region, and close-by in neighbouring regions, and the potential to develop business trading relationships between these companies further.

   - A significant level of production of non-timber related goods and services in the region that are associated with woodlands.

   - Presence of training infrastructure and other assets

THE IMPORTANCE OF WOODLAND INDUSTRIES IN THE WEST MIDLANDS

7. The research undertaken for this study found that woodland industries are significant in the West Midlands economy.

   - There are around 30,000 employees in employment in the sector, around 1.3% of the region's total. In addition there are an estimated 1,100 self-employed individuals in timber management and harvesting alone, and around 3,000 jobs linked to forestry-related tourism and recreation.

   - The sector is even more important to the region's rural economy, where it accounts for 1.8% of employees in employment, and where self-employment in forestry operations and tourism businesses is concentrated.

- The region has around 2,770 businesses in the sector.
- Woodland industries also help sustain the viability of the region's woodland resource, which confers a range of benefits including timber, recreation, landscape quality, water management, and biodiversity.

STRENGTHS, WEAKNESS, OPPORTUNITIES AND THREATS

8. The report identifies in some detail a range of strengths, weakness, opportunities and threats that are confronting the woodland industries in the region, currently and in the foreseeable future. These issues were identified following a series of interviews with woodlands businesses, consultations with public sector stakeholders, review of relevant policy documents and strategies, and analysis of statistical data on the industry. The key issues – which are discussed in much more detail in the main report – are set out below.

Strengths	Weaknesses
⇨ The availability of a reasonably substantial regional forestry resource ⇨ Availability of the forestry grant schemes ⇨ Transport infrastructure ⇨ Increasing customer recognition of the quality and environmental benefits of using sustainably managed hardwoods ⇨ The commitment to projects such as the National Forest, Forest of Mercia and Marches Woodland Initiative from a broad alliance of public/ private and conservation/ development interests ⇨ Presence of further education institutions with a forestry department ⇨ Proximity to the country's manufacturing heartland ⇨ Public access to forests and woodlands ⇨ Increasing commitment to develop the sector further ⇨ Proximity of urban populations as a source of short break visits	⇨ High cost production base and vulnerability to competition from imports ⇨ Industry dominated by small businesses, with few medium sized players ⇨ Financial constraints on the ability of the timber industry supply chain to invest in new equipment, processes and products Skills shortages among timber growers, harvesters and users ⇨ Shortage of business management skills Lack of efficient means of disseminating market information on timber customer needs and supply availability ⇨ Concerns (or perceptions) about timber quality ⇨ Concern that the industry is overly reliant on a small number of key users. ⇨ No university in the region has a department specialising in forestry ⇨ Lack of a large forestry tourism player in the region. ⇨ Confusion about forest policy from the point of view of businesses ⇨ Rate of failure of businesses in the sector
Opportunities	**Threats**
⇨ Increasing markets for short break tourism ⇨ Greater participation by small woodland owners ⇨ Expansion of the Marches Woodland Initiative ⇨ Collaboration with partners in neighbouring regions, especially Wales. ⇨ Integration within Advantage West Midlands' Regeneration Zone concept ⇨ Commercial energy production from wood fuel	⇨ Increasing domination of market by imports ⇨ Departure of larger players ⇨ Continuing under-investment by businesses ⇨ Declining skills base and failure to recruit ⇨ Excessive emphasis on amenity aspects of woodland management ⇨ Non-recognition by Advantage West Midlands

ASSESSMENT OF CLUSTER ACTIVATION POTENTIAL

9. In assessing the cluster activation potential for the woodland sector in the West Midlands, a four way matrix was deployed that examined current extent and scope for developing further the inter-relationships between:

- The business base;
- Vertical and horizontal supply-side linkages;
- Human strengths – particularly the enterprise and skills base; and
- Other assets and infrastructure, in particular the research and training base (including high and further education institutions).

10. The result of our assessment is set out below.

	Cluster Criteria	Assessment and Implications
Network of inter-firm relationships	*Demand-supply interactions*	⇨ The consultations undertaken for this study suggest that while micro-and smaller businesses have a greater tendency to use local material, for the larger businesses this is certainly not the case. ⇨ Unfortunately, we were not able to obtain much evidence on demand-supply relationships between local wood processing businesses or between local manufacturers of equipment and machinery and local wood processing industries. Further research on this is recommended for Phase 2 of the research programme.
	Technological spillovers	⇨ We were not able to obtain evidence on sharing of technology (product or process) in the sector. ⇨ This may be an interesting area for research as part of a larger survey of businesses in the sector.
	Collaboration and co-operation	⇨ Our consultations raise doubts about the extent of existing levels of business-led collaboration and co-operation among firms in the sector.
Other Business Characteristics	*Rate of Innovation*	⇨ Our limited programme of interviews with businesses only identified one company who had any R&D links with a higher education institution. ⇨ The other businesses interviewed displayed little evidence of an innovation culture, exemplified by low rates of investment in employee and management training.
	Constraints or barriers to competition	⇨ Consultees identified a number of barriers to business growth and expansion, but these tended to be global or national factors. ⇨ However, there was also no real indication of the emergence of regional, business-led mechanisms to enhance the competitiveness of the region's business base.

	Cluster Criteria	Assessment and Implications
	Location of investment decisions	⇨ The industry is dominated by micro-businesses, although possibly less so than is the case in other regions. There is also a shortage of larger (200+ employee) businesses. ⇨ Interrogation of business databases suggests that there are comparatively few headquarters of nationally significant players located in the West Midlands. Exceptions include Jewsons (Coventry).
	Linkage to parent firms	⇨ We were not able to obtain evidence on internal relationships between local branches of companies important in the woodlands sector and their respective headquarters. ⇨ This may be an interesting area for research as part of a larger survey of businesses in the sector.
	Sources of finance	⇨ We are not made aware of any specialist private-sector sources of finance for businesses in the sector. ⇨ Manufacturing and other businesses potentially eligible for generic grants and soft-loans administered by the DTI, Advantage West Midlands, etc. ⇨ Woodland management and planting is underpinned by incentive schemes operated by national agencies such as the Forestry Commission and the Countryside Agency. ⇨ There may be scope to develop more specialist forms of business financial support through a cluster activation mechanism (perhaps through participation in regional venture capital funds, etc.)
Human factors	*Skills base*	⇨ There is evidence of historic under-investment in the skills of employees of firms in the industry. To an extent this is a national issue, but our consultations indicated that the problem might be particularly severe in the West Midlands. ⇨ Encouragingly, there are several proposals under development for specialist training facilities to be established in the region. ⇨ However, addressing the supply side of the market for skills is only part of the answer. Any sector development strategy must also attempt to raise the demand for skills, on the part of both employers and employees (existing and future).
	Enterprise culture	⇨ The West Midlands is below average (1.3%) in the rate of new VAT registrations in the woodland industries sector. Only London and the North West have lower rates of entrepreneurship in the sector.

	Cluster Criteria	Assessment and Implications
Networks of institutions	*Business, trade and employers associations*	⇨ Overall, national trade and employer associations represent the majority of businesses within the sector with many of these bodies having dedicated regional representation in the West Midlands. Consultations with some of these associations have tended to indicate that networking amongst them is fairly well established in sharp contrast to networking at the individual firm level. ⇨ However, only larger firms seem to be represented/participate in business associations such as FIDC, perhaps due to the cost associated with membership
	Education and training institutions	⇨ There are several FE colleges in the region that have a clear rural focus and Holme Lacy college in particular has a significant strength in forestry related courses. In addition to the colleges, there are a number of private sector training providers targeting the needs of the forestry sector. ⇨ Although there are a number of established HE institutions in the region, there does not appear to be a significant focus on research relevant to woodland industries.
	Government agencies and others	⇨ The government agencies consulted all have a good understanding of the factors affecting the sector and are keenly involved in the development of the woodlands. ⇨ However, one concern has been the lack of involvement from government agencies not directly involved with the woodlands, such as leisure, recreation and economic development.

RECOMMENDATION

11. Our recommendation is that the woodland and forestry sector should be supported strategically by the client group, but not as a target cluster as in the recently list of ten identified by Advantage West Midlands. Rather, we consider that two parallel, mutually-reinforcing approaches are appropriate.

- First, that Woodland Industries be targeted as part of a sector development strategy across the region, focusing in particular on the potential to develop micro-networks based on established and emerging groupings that have arisen from the Marches Woodland Initiative and other sub-regional and local programmes. Under this approach there would also be scope to pursue the development of closer business networks among wood-using businesses in both urban and rural parts of the region.

- Second, that a woodlands sector development strategy be given high priority as a "cross-cutting" theme within the Regeneration Zone concept that has also been identified for the region.

1. INTRODUCTION

1.1 In May, 2001, DTZ Pieda Consulting was appointed by a public sector grouping to investigate the potential for embedding woodland industries more deeply in the West Midlands economy. In essence, the study was required to identify the overarching issues pertaining to forestry and related industries in the West Midlands. The client group consists of: the Forestry Commission; the Countryside Agency; and Advantage West Midlands.

THE STUDY BRIEF

1.2 The main aims of the study brief can be stated as follows:

(vi) To establish the nature and characteristics of forestry and wood using businesses in the West Midlands (covering, *inter alia*, the number, type, scale and nature of such businesses and establishments in the region);

(vii) To compare the forestry and wood-related sector to other sectors that are important to the West Midlands rural economy;

(viii) To identify whether a cluster of forestry and related businesses can be identified in the West Midlands, together with its support and development needs;

(ix) To describe the regional and local policy context, funds and strategies within which forestry and related businesses operate, and compare these to those affecting other key rural sectors; and

(x) To develop a detailed methodology and approach to a potential Phase 2 study which, if commissioned, would identify a detailed activation plan for woodland related industries in the region.

1.3 This report provides the main study output that addresses items 1-5 in the list above.

THE WORK CARRIED OUT

1.4 The work programme has essentially been a desk-based exercise supplemented by a programme of consultations. The key elements of the research programme that has led to the production of this report were as follows:

- A **baseline review** of socio-economic and other data for woodland related industries in the region. Data was collected to provide a 'top-down' overview of the sector(s) for the West Midlands region, in comparison with other English and UK regions. Sub-regional data was also gathered for five sub-regional areas: Hereford & Worcester; Shropshire; Staffordshire; Warwickshire; and the (former) West Midlands County. Sources included: Nomis (Annual Employment Survey; Annual Business Inquiry, etc.); the Inter-departmental Business Inquiry; VAT registration data; and so on. Data was also obtained from documents published by the Forest Industry Council of Great Britain, as well as data from published and unpublished sources including, *inter alia*: the Forestry Commission; Advantage West Midlands; Countryside Agency; and Heart of England Tourist Board.

- A **review** of the strategies and policy material relevant to woodland and related industries, nationally and in the West Midlands regions. Key documents included: Government rural development policy documentation; Advantage West Midlands (AWM) *Regional Economic Strategy* and *Agenda for Action* documents; Objective 2 related documentation (SPD and Programme Complement); Forestry Commission and Countryside Agency strategy material; and relevant policy material from other national and regional agencies.

- **Fieldwork** was undertaken, in terms of consultations with the key public sector agencies in the region. We also interviewed 16 companies and business networks in the region that are active in forestry related business. The purpose of the fieldwork was to provide further evidence on the appropriateness of a potential cluster activation strategy for woodland related industries in the region. The interviews were also intended to provide further messages on the scale and importance of the woodland industries, and information about: business networks; drivers for change; and relationships between business and public sector support agencies.

ISSUES THAT AROSE DURING THE RESEARCH

1.5 There were a number of key issues, largely anticipated at the start of the research, which have a bearing on the results and conclusions. Several of these issues are discussed below.

- **Definitional Issues.** A statistical and operational definition of the woodland and forestry related sectors identified in the study brief proved problematic in a number of instances. In some cases (e.g. woodland related tourism and leisure) there is no standard sector definition; in general, the standard sector definitions using the SIC codes excludes a large and closely linked supply chain.

- **Sector Data.** We have had to rely on employees in employment data as the best measure of where sectors are located and how location patterns are changing. However, self-employment is very important in much woodland related sub-sector activity (e.g. forestry management and harvesting; craft industries; tourism). However, it is difficult to detect much of this activity reliably with official statistics at the local level. In some sectors, employment may be static or declining, yet niche opportunities might exist. The shortage of useful, relevant and up-to-date information on sub-sector issues at a sub-regional level is a key gap in our knowledge of woodland industries in the West Midlands region.

- **Location Data**. Our spatial analysis is primarily at a local authority (former County); this is the lowest level where robust and meaningful sector data is available

- **Business Research Data.** As identified in our proposal, the available top-down data is not especially useful in measuring the direction and strength of business trading relationships. Knowledge of these relationships is crucial in determining whether a true cluster exists, or has the potential to be activated. Overcoming this constraint requires the deployment of a bespoke business survey, but this Option was not taken up during Phase 1 of the research programme. This imposed some limitations on the extent to which the first phase research assignment was able to provide a business perspective on the future of the industry, and the potential for cluster activation in the region. A recommendation of this report for Phase 2 is that a full business survey be deployed to counter this information weakness.

1.6 In spite of these limitations and difficulties, we believe that the conclusions presented in this report are fair and robust. The views expressed are those of DTZ Pieda Consulting and not necessarily those of any or all of the three commissioning bodies.

THE STRUCTURE OF THE REPORT

1.7 The remainder of this report is presented as follows:

Section 2	Discusses some of the issues relevant to defining woodland and related industries, and sets out what is known about the structure of this sector grouping. This section also sets out some issues that are relevant to 'clusters' as an economic development concept and, *prima facie*, how the concept might be relevant to the woodland industries sector in the region.
Section 3	Provides a summary of baseline information on woodland and related industries that is available from top-down sources for the West Midlands and other regions, as well as sub-regional areas within the West Midlands.

Section 4	Sets out the most important policy influences – at the national, regional and sectoral levels – on the potential development of a woodland and related industry cluster in the West Midlands.
Section 5	Presents the key messages from interviews and consultations with public sector agencies and organisations that may have an interest in the further development of woodland and related industries in the West Midlands.
Section 6	Presents key messages from a limited programme of consultations carried out with businesses active in woodland and related industry sectors in the region.
Section 7	Drawing from the policy review, consultations and sector benchmarking, this Section describes the key factors that are considered to be driving change in the industry.
Section 8	Brings together the key messages from the previous Sections in the form of a SWOT analysis.
Section 9	Offers our assessment of the potential for activating a woodland and related industry cluster in the West Midlands.
Section 10	Concludes by reiterating the key messages from the research. We also set out our recommended approach to the potential second phase to the research programme.

2. THE WOODLAND INDUSTRIES SECTOR AND POTENTIAL RELEVANCE OF THE CLUSTER CONCEPT

RATIONALE FOR THE CLUSTER ACTIVATION PROCESS

2.1 Industrial clusters are agglomerations of competing and collaborating industries in localities or geographical areas that network through well-developed horizontal and vertical relationships founded on strong buyer-supplier linkages and sharing a foundation of specialised institutions and needed skills. A cluster is more than a mere concentration of activity, however: a cluster is a dynamic entity, comprising a family of players that can consist of: suppliers, customers, competitors, research institutes, educational institutions, infrastructure providers, and public sector enablers.

2.2 Cluster **activation** is a critical first step towards realising the potential of a group of industries as an engine for business growth and economic development. Clusters become activated when companies in related industries come together and start working with each other and with collaborators in the education, research and public sectors. By working together cluster members become more innovative, more responsive and more productive and, therefore, more competitive and profitable.

2.3 In the UK and internationally, regional agencies – including Advantage West Midlands – have grasped the cluster concept as a means of improving the performance of regional economies. The definition used by Advantage West Midlands is that:

> *"Clusters are defined by the common technology or end product of a group [of] companies linked through customer and supply chains and associated training, finance and research." (Agenda for Action, Spring 2001)*

2.4 We present more information about Advantage West Midlands' cluster development strategy in Section 4 of this report.

2.5 As is acknowledged in the Government's recent white papers on competitiveness, the cluster concept increases its importance in a knowledge-driven economy. A number of processes reinforce the trend towards clustering:

- **Globalisation** is intensifying **competition**, and firms often find that they can better utilise their specialist knowledge if they operate among a cluster of linked businesses. Inter-firm co-operation of various types, through supply chains, mentoring, or best practice sharing, can be used as the means of increasing knowledge availability and effectiveness of use.

- Clusters can help create enduring **competitive advantage**. For example, companies with complementary skills can collaborate to compete for contracts beyond the scope of an individual participant. Collaboration can also generate economies of scale, by specialising activity within appropriate elements of the cluster supply chain.

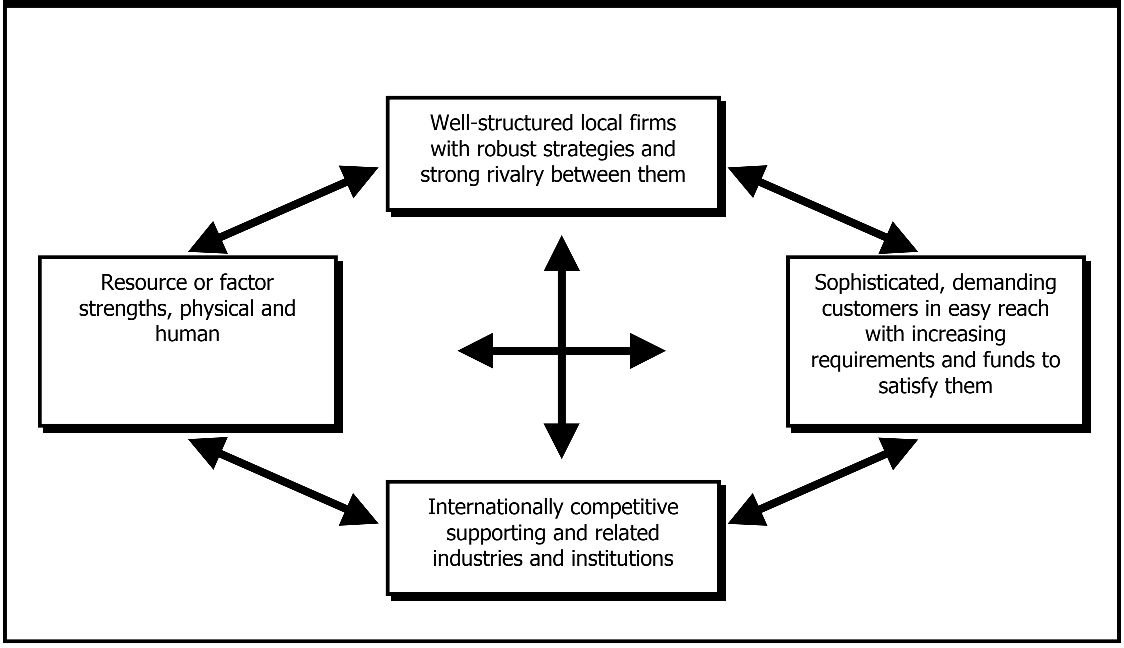
- Clusters allow for the development of **specialist** physical **infrastructures** and support services, and the concentration of appropriate skills.

- By working together, cluster participants can be more effective: for example, in addressing the supply of skills, by influencing curriculum development, lobbying for infrastructure investment, de-regulation, and so on.

- Clusters can help reduce transaction costs, as trust and long-term relationships develop between participants, thereby reducing uncertainty.

2.6 A principal champion of cluster development theory is Professor Michael Porter of Harvard Business School. Porter has developed a model explaining the characteristics of dynamic and effective clusters, reproduced in Figure 1.1 below.

Figure 1.1
Porter's Diamond



2.7 A primary task for this study is to assess the potential for a cluster development approach for woodland related industries in the West Midlands. This task requires an assessment of the extent to which business, supply chain and customer relationships, skills and other infrastructure issues are already sufficient to describe a cluster, or have the potential to do so.

A WOODLAND INDUSTRIES CLUSTER IN THE WEST MIDLANDS?

2.8 *Prima facie*, there are a number of reasons for considering that there may be some potential to develop (or enhance) a woodland industry cluster in the West Midlands. These reasons are summarised below.

➢ The existence of significant volume of forestry resource in the region, and the location of substantial additional timber and woodland resources in neighbouring UK regions, especially Wales.	*Woodland or forest covers an estimated 6.6% of the West Midlands. Excluding woods less than 2 hectares in area, in 1999 the region had around 86,000 ha of woodland cover, an increase of 6.7% since 1992.*
➢ The presence of a regional wood-related processing and manufacturing capability in the region, and close-by in neighbouring regions, and the potential to develop business trading relationships between these companies further.	*An estimated 1,100 jobs in the region are attributable[1] to woodland management activities. Around 30,000 jobs[2] are estimated to be employed in downstream processing, manufacturing and marketing of wood and wood-derived products. An estimated 3,000 jobs[3] are attributable to forestry-related recreation and tourism.*
➢ A significant level of production of non-timber related goods and services in the region that are associated with woodlands.	*The report* The Environmental Economy of the West Midlands *estimates around 38 million day visits are made to the region's woodlands annually. Non-recreation goods and services associated with woodlands include production of foods, herbs and other plant material.*
➢ Presence of training infrastructure and other assets	*This includes the presence of a significant forestry skills development asset in the form of Holme Lacy college at Hereford. It also includes the existence of wood-using manufacturing and engineering skills in the manufacturing heartland and in rural areas.*

2.9 Although the success of any cluster depends ultimately on the drive and ambition of the private sector participants, public sector support and resources are likely to be needed in the early stages to help overcome constraints and achieve a critical mass of activity. The public sector also has a vital role to play in addressing skills shortages and supporting investment in needed infrastructure.

[1] The Environmental Economy of the West Midlands, pg24
[2] See Table 3.3
[3] See Section 3

2.10 The fact that the public sector grouping that has come together to fund this study is clearly indicative of increasing interest in – and potential support for – a forestry and woodland industries cluster in the region.

HOW SHOULD THE WOODLANDS SECTOR BE DESCRIBED?

2.11 Nationally, the broadly defined woodland and related industries sector grouping is complex and fragmented. There are a number of ways that the sector could be described, but the one used for this study is to group economic activity into the following groupings.

Woodland Industry Sub-sector	Sub-Sectoral Activity (examples)
1. Wood growing and production	➢ Forestry contracting ➢ Woodland management consultancy ➢ Mobile sawyers ➢ Nurseries ➢ Timber merchants ➢ Forestry equipment and machinery (sales, maintenance, etc.) ➢ Haulage contractors ➢ Forest roads construction
2. Non-timber woodland products	➢ Apiary ➢ Other woodland foods ➢ Woodland herbs ➢ Other woodland countryside products
3. Environment and recreation	➢ Forestry-related tourism (Center Parcs; Oasis; etc.) ➢ Sport-related tourism (equine; mountain biking; etc.) ➢ Nature based tourism (birdwatching, etc.) ➢ Hunting/shooting ➢ Educational visits ➢ Informal leisure (walking, cycling)
4. Sawmilling	➢ Pallets and packaging cases ➢ Construction ➢ Flooring ➢ Furniture ➢ Fences and Gates ➢ Woodfuel (by-product)
5. Paper and board	➢ Newsprint ➢ Cartons ➢ Kitchen and wrapping papers ➢ Corrugated packaging ➢ Specialist papers
6. Wood-based panels	➢ Particle board/chipboard ➢ Medium density fibreboard ➢ Oriented strand board ➢ Cement bonded particleboard ➢ Hardboard

	➢ *Links to*: ⇨ Furniture ⇨ Construction ⇨ Flooring ⇨ Etc.
7. Other wood products	➢ Fuel/firewood ➢ Fencing/posts/rails ➢ Tool handles etc. ➢ Horticultural/garden products ➢ Toys and craft products ➢ Turnery
8. Training providers	➢ Higher and further education institutions ➢ Private sector training providers
9. Support agencies	➢ Business and training support organisations, such as the Small Business Service, local Business Links, and the Learning and Skills Council ➢ Government funded agencies (Forestry Commission; Forest Enterprise; Countryside Agency, etc.) ➢ Voluntary sector organisations (Wildlife Trusts; National Trust; Woodland Trust, etc) ➢ Business support networks (Timber Growers Association; Forestry Contracting Association; Marches Woodland Initiative; etc.)

2.12 In Section 3 of this report we quantify as far as possible the concentration of these activities in the West Midlands and its respective sub-regions.

2.13 In Section 9 we also use this information – along with the messages from consultations and the document and strategy review – to 'map' the woodland and related industry sector in the West Midlands.

3. BENCHMARKING THE SECTOR

BENCHMARKING THE FORESTRY AND WOOD USING SECTORS IN THE REGION

3.1 This sub-section provides a statistical analysis of woodland and related industries in the West Midlands. In benchmarking the industry, we have compared data in the West Midlands to that of England and its other regions.

Woodlands in the West Midlands

3.2 The 'Woodland Industries' are defined by Standard Industrial Classification (SIC) codes[4]. Figure 3.1 shows the SIC codes, their definitions and which SIC codes are grouped together to define the broad definition.

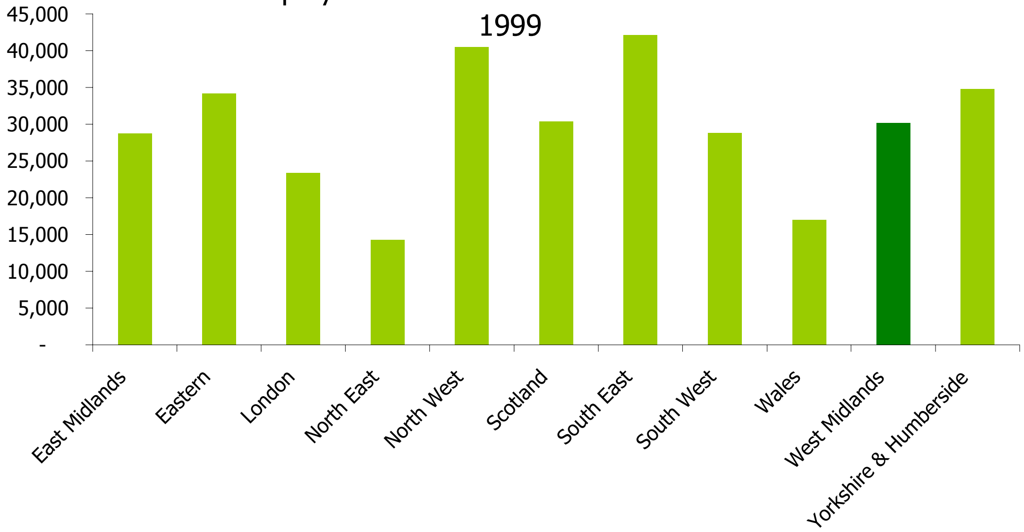
Table 3.1
SIC Codes Used to Define the Wood Using Sector

SIC Codes	Definition	Broad Definition
0201	Forestry and logging	Forestry, logging and related service activities
0202	Forestry and logging related service activities	
2010	Saw milling and planing of wood	Manufacture of wood and wood products
2020	Manf of veneer sheets, plywood, boards	
2030	Manf of builders' carpentry and joinery	
2040	Manf of wooden containers	
2051	Manf of other products of wood	
2052	Manf of articles of cork, straw & plaiting materials	
2111	Manf of pulp	Manufacture of pulp, paper and paper products
2112	Manf of paper and paperboard	
2121	Manf of corrugated paper and paperboard	
2122	Manf of household and sanitary goods	
2123	Manf of paper stationery	
2124	Manf of wallpaper	
2125	Manf of other articles of paper and paperboard	
2932	Manf of other agricultural & forestry machinery	Manufacture of agricultural and forestry machinery
3614	Manf of furniture	Manufacture of furniture
5153	Wholesale of wood, construction materials	Wholesale of wood, construction materials & sanitary equipment
Source: SIC Index		

[4] SIC codes are defined by ONS and are an attempt to classify business establishments by the type of economic activity in which they are engaged. One of the weaknesses of SIC codes is that they categorise a business/organisation by its main activity only.

3.3 Figure 3.1 shows the total employment in woodland and related industries for each region in the UK. The West Midlands is about average compared to the other regions having 1.3% of its employment base (a total of 30,200 persons) employed within wood using industries.

Figure 3.1
Total employment in woodland and related industries
1999



3.4 We have also used **location quotient** analysis to gauge the relative importance of the wood-using sector. A location quotient is a numerical index – based on employment – that describes the importance of a sector in a given area, such as the West Midlands, relative to a GB average. The location quotient compares the proportion of employees for a given area in a certain industry sector with the GB average proportion of employees working in the same industry sector. A location quotient figure of substantially more than 1.0 implies that the area has a specialism in that activity, compared to GB. A location quotient above, say, 1.5 implies a degree of concentration, and a figure greater than, say, 2.5, when accompanied by high (absolute) levels of employment, implies an absolute and relative specialisation.

3.5 The location quotient figure for wood-using industries in the West Midlands (compared to the England reference area) is around 1.0, indicating that the sector has very much an 'average' representation. The regions with the highest spatial concentration (that is, the greatest location quotient figures) are Yorkshire and the Humber (1.29) and the East Midlands (1.28). Economists usually regard a location quotient of 1.5 or greater as implying a significant relative concentration of activity in any sector. It is significant, therefore, that no English region can be said to have a significant specialisation in the wood using industry sector.

Size Structure of Businesses in the Sector

3.6 Table 3.2 sets out data on the number of wood using businesses – and the proportion of total employment – for four company size-bands for the English regions[5]. The data indicates that there is a total of 2,771 wood using businesses are located in the West Midlands, of which 2,147 (4.9%) are micro-businesses (that is, have between 1 and 10 employees). Compared to the situation for all-of-England, there is a slightly smaller proportion of micro-businesses (74.9% compared to 79.0% for England) and also a slightly smaller proportion of large businesses with more than 200 employees (0.2% compared to 0.5%). It is worth noting, however, that for all businesses in the GB economy, 83.3% of businesses are 'micro' in nature – i.e. have between 1 and 10 employees. In other words, wood-using businesses have significantly less tendency to be micro in nature.

Table 3.2
Distribution of Employment by Size of Firm
Wood Using Businesses, 1999

	1-10 employees		11-49 employees		50-199 employees		200+ employees	
	No[1]	%[2]	No[1]	%[2]	No[1]	%[2]	No[1]	%[2]
East Midlands	1,747	21	401	30	97	32	*	16
Eastern	2,550	23	494	32	111	31	*	13
London	2,180	34	449	40	47	17	*	9
North East	656	16	161	26	45	32	*	27
North West	2,314	22	553	29	144	34	*	15
South East	3,501	24	643	32	113	26	24	18
South West	2,332	25	474	33	93	30	*	12
West Midlands	2,147	25	503	36	114	33	*	6
Yorkshire & Humberside	1,866	21	439	29	116	31	*	20
Total England	**19,293**	**23**	**4,117**	**32**	**880**	**30**	**130**	**15**
Wales	*1,209*	*20*	*249*	*33*	*53*	*30*	*	*16*

[1] Number of wood using businesses
[2] Percentage of employees in wood using businesses
* indicates that there are less than 21 business units
Source: Annual Business Inquiry, ONS © Crown Copyright

3.7 Table 3.2 also shows the proportion of total employment in the sector by size of business for each of the regions. For the West Midlands, 25% of employees are in micro-businesses (1-10 employees), compared to 23% for England as a whole. Perhaps most significantly, only 6% of employees are in businesses employing more than 200, compared to the England average of 15%. This is a lower proportion than any England region. This statistic clearly indicates that the West Midlands has significantly fewer larger businesses in the wood using sector compared to the other England regions.

3.8 Table 3.3 below shows the employment in wood using industries in relation to the main sub-regions (that is, the former county areas) within the West Midlands.

[5] The data referred to in this sub-section covers "employees in employment". Data on the self-employed – an important group in timber management and harvesting – are not covered by the dataset.

Table 3.3
Woodland-Related Employment in the Counties, 1999

SIC Code	Hereford & Worcester -shire	Shropshire	Stafford-shire	Warwick-shire	West Midlands County	Total
Forestry/logging	100	*	100	*	*	**200**
Manf of wood/wood products	1,800	1,300	1,700	600	3,100	**8,500**
Manf of pulp,paper	900	500	1,400	300	3,600	**6,600**
Manf of other agricultural machinery	200	300	*	300	300	**1,000**
Manf of furniture	500	500	700	400	2,200	**4,300**
Wholesale of wood	1,400	800	1,800	1,000	4,500	**9,500**
Total	**4,800**	**3,400**	**5,700**	**2,600**	**13,600**	**30,200**

Note: * indicates that the numbers employed are less than 50 persons
Source: NOMIS

3.9 The data in Table 3.3 show that:

- Almost all employment in the forestry/logging sub-sector is located in just two areas - Hereford & Worcestershire and Staffordshire.
- The manufacture of wood and wood products is concentrated in the (former) West Midlands county urban area, with 37% of the region's employment in that area. However, Hereford & Worcestershire (21%) and Staffordshire (20%) are also important.
- Pulp and paper is highly concentrated in the West Midlands county area (54%) with Staffordshire (21%) also important.
- Manufacture of machinery is fairly evenly distributed, apart from Staffordshire (only 4%).
- Furniture manufacture is highly concentrated in the West Midlands county area (51%) with Staffordshire (17%) also important.
- Wholesaling is concentrated in the West Midlands County (45%).

3.10 Table 3.4 below shows the business units in wood using industries in relation to the main sub-regions within the West Midlands.

Table 3.4
Woodland-Related Business Units in the Counties, 1999

SIC Code	Hereford & Worcester-shire	Shropshire	Stafford -shire	Warwick -shire	West Midlands County	Total
Forestry/logging	102	73	28	*	*	232
Manf of wood/wood products	170	97	181	76	342	866
Manf of pulp,paper	44	22	57	22	147	292
Manf of other agricultural machinery	39	26	*	*	26	128
Manf of furniture	82	47	80	46	241	496
Wholesale of wood	124	73	153	83	324	757
Total	561	338	516	259	1097	2771

Note: * indicates that the number of business units is less than 21
Source: NOMIS

3.11 The data in the Table 3.4 reveals a similar pattern as the employment distribution does in Table 3.3, although there a several slight differences

- The business units in the forestry/logging sub-sector are concentrated primarily in Hereford & Worcestershire and Shropshire. Comparing this with the employment distribution suggests that the average size of these businesses in Shropshire is smaller than those in Staffordshire.

- The distribution of businesses involved in the manufacture of wood and wood products is similar to the distribution of employment in this sub sector

- Businesses units involved in manufacturing Pulp and paper are concentrated in the West Midlands county area, although Staffordshire and Hereford & Worchester are also important.

- Business units involved in the manufacture of machinery is more concentrated in Hereford & Worchester, which suggests that businesses are slightly smaller in the sub region given that employment is fairly evenly distributed across the region.

- Furniture manufacture is highly concentrated in the West Midlands county area with Staffordshire and Hereford & Worchester also important. Again this suggests that since Hereford & Worchester does not display the same level of concentration in terms of employment, there is a concentration of micro businesses within this sub sector in the county.

- As with employment, businesses involved in wholesaling are concentrated in the West Midlands County.

The Sectors Importance to the Region's Rural Economy

3.12 One of the requirements of the brief was to compare the importance of the sector to others that are important to the rural economy of the West Midlands. The first step, obviously, is to arrive at a suitable definition of the region's rural area. We have defined the region's rural economy using the Countryside Agency's definition of districts that are predominantly rural.

3.13 We have already said that for the West Midlands in its entirety, the woodland industries employ 30,200 people, which represents 1.3% of the total employment in the region. Table 3.5 below provides the relevant data for the main SIC-defined groupings in the region's rural area.

3.14 The data illustrates that, within the rural economy in the West Midlands, woodland industries are of slightly greater-than-average significance. Within the context of the rural economy, the sector is slightly more important, representing 1.8% of total employment within rural districts.

Table 3.5
Employment in the West Midlands Rural economy, 1999

	Employment in rural districts	%	Employment in all districts	%
Agriculture hunting and forestry	16,400	3.8%	39,600	1.7%
Mining and quarrying	1,600	0.4%	3,300	0.1%
Manufacturing	80,400	18.5%	516,900	22.4%
Electricity gas and water	1,200	0.3%	13,400	0.6%
Construction	22,600	5.2%	97,200	4.2%
Wholesale etc	78,700	18.1%	406,600	17.6%
Hotels and catering	34,500	7.9%	133,900	5.8%
Transport storage and communication	25,300	5.8%	121,400	5.3%
Financial intermediation	10,000	2.3%	72,000	3.1%
Real estate renting and business activities	47,300	10.9%	280,400	12.2%
Public administration	15,600	3.6%	99,900	4.3%
Education	34,600	8.0%	194,400	8.4%
Health and social work	45,500	10.4%	229,200	9.9%
Other community	21,400	4.9%	96,900	4.2%
Total	**435,100**	**100.0%**	**2,305,200**	**100.0%**
Wood Using industries	**7,800**	**1.8%**	**30,200**	**1.3%**

Source: NOMIS
Note: Rural districts in the West Midlands as defined by the Countryside Agency are: Bridgenorth, East Staffordshire, Hereford, Malvern Hills, North Shropshire, North Warwickshire, Oswestry, Shrewsbury and Atcham, South Shropshire, South Staffordshire, Staffordshire and Moorland, Stafford-on-Avon and Wychavon.

3.15 Earlier in this sub-section, we introduced the concept of the location quotient to compare the importance of wood using industries collectively in the West Midlands region. Table 3.6 below sets out the location quotients for the individual sub-sectors that comprise the industry.

Table 3.6 Employment and Location Quotients for Wood Industry Sub-sectors in the West Midlands, 1999			
Sub-sector	**Jobs**	**LQ**	**Significance**
Forestry and logging	200	0.41	
Forestry/logging related service activities	*	*	
Saw milling and planing of wood	1,300	1.20	♥
Manf of veneer sheets, plywood, boards	400	0.56	
Manf of builders' carpentry and joinery	3,600	1.00	♥
Manf of wooden containers	900	1.21	
Manf of other products of wood	2,200	2.12	♣
Manf of articles of cork, straw & plaiting materials	100	1.20	
Manf of pulp	*	*	
Manf of paper and paperboard	800	0.36	
Manf of corrugated paper and paperboard	3,300	0.83	♥
Manf of household/sanitary goods	500	0.72	
Manf of paper stationery	1,200	1.32	♦
Manf of wallpaper	*	*	
Manf of other articles of paper and paperboard	800	0.73	
Manf of other agricultural & forestry machinery	1,000	1.05	♦
Manf of furniture	4,300	1.10	♥
Wholesale of wood, construction materials	9,500	1.18	♥

KEY: ♣ **Significant in absolute and relative terms;**
♥ **Significant in absolute terms only**
♦ **Significant in relative terms only**
Source: NOMIS

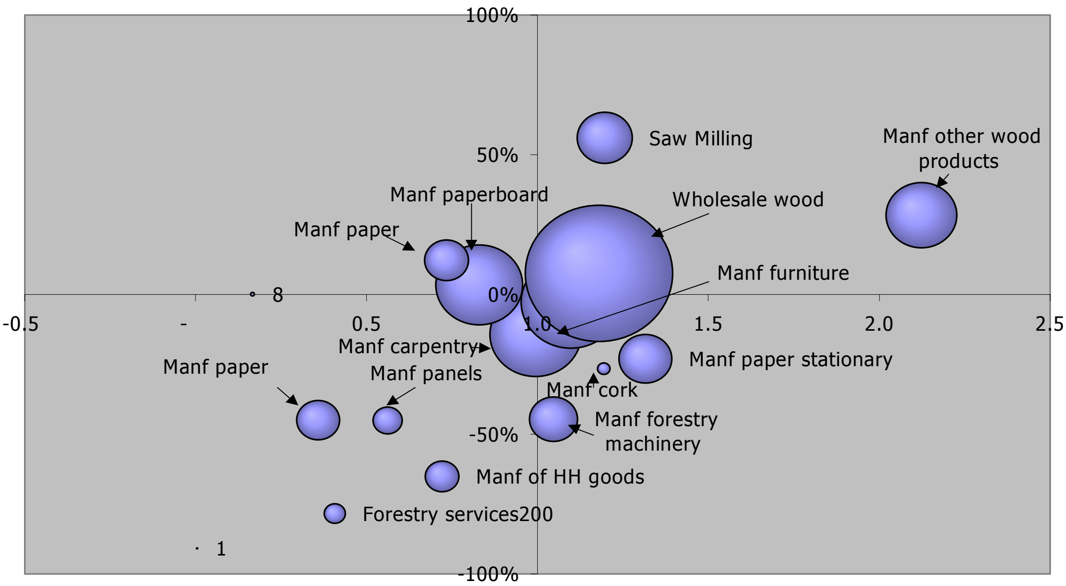
3.16 The messages from Table 3.6 are that only three sub-sectors have a (relatively) significant presence in the region. These are:

- Wholesale of wood, etc. (LQ = 1.18; 9,500 employees);
- Manufacture of 'other' wood products (LQ = 2.12; 2,200 employees); and
- Manufacture of paper stationery (LQ = 1.32, 1,200 employees).

3.17 Across the full range of sectors, the relative and absolute concentrations of employment in the sub-sectors are illustrated on the 'bubble' chart (Figure 3.2) below. The chart captures three dynamic concepts for the wood industry sub-sectors:

- The relative scale of the sub-sectors (the size of the bubble)
- The relative specialisation that the West Midlands has in the sector (the position of the bubble on the x-axis: the more specialised, the further to the right the bubble lies)
- The growth of the sector between 1995 and 1999 (the further away from the origin the more significant has been the rate of growth).

Figure 3.2
Woodland Industries Bubble Chart



3.18 The bubble chart illustrates that the manufacture of other wood products; saw milling; and wholesale of wood are all growing in employment terms and have a high employment concentration in the West Midlands. The wholesale of wood has the largest number of people employed within it indicated by the size of the bubble. The manufacture of paper and paperboard are growing sub-sectors, whereas the manufacture of forestry services and household goods are declining in both employment concentration and growth terms.

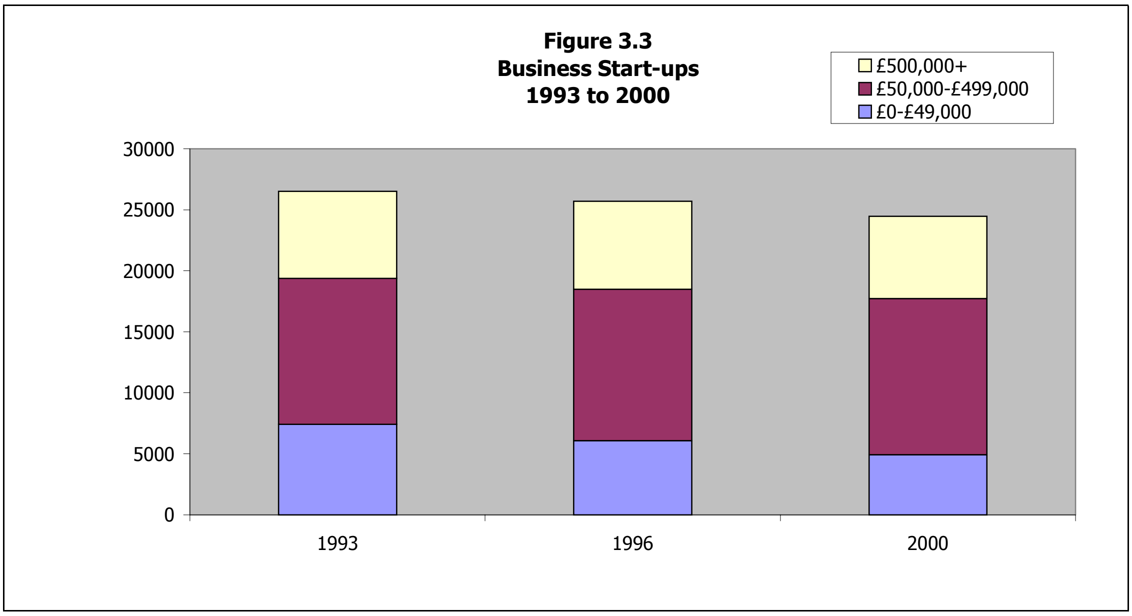
3.19 Figure 3.3. below illustrates the number of business start-ups in the wood using industry sector in the West Midlands. The data is for 1993 to 2000, and is grouped by business size band (turnover).

3.20 Overall, the annual de-registration of businesses has been greater than the registrations each year. Indeed, there has been an 8% fall in woodland businesses from 1993 and 2000.

3.21 The data shows that it is the smallest-sized businesses which are declining. Since 1993, there have been continuous falls in the number of businesses in the smallest turnover size band. Over the relevant time period there has been a 33.5% decline in the number of these businesses.

3.22 By contrast, the medium-sized businesses are most successful in the woodland sector. In particular, businesses with a turnover band of £50,000-499,000 have grown by 19.7% change between 1993 and 2000.

3.23 The larger businesses have tended to remain fairly constant.



Source: ONS © Crown Copyright

BENCHMARKING FOREST RECREATION AND LEISURE IN THE REGION

3.24 The benefits of the region's forests for recreation and leisure include the four million visits to Forestry Commission woodlands each year. Including non-Forestry Commission woodlands, it is estimated that 38 million day trips were made in the West Midlands region in 1998 (Source: ERM – the Environmental Economy of the West Midlands, page 24).

3.25 As well as providing benefits to local recreational users, woodlands bring benefits to local economies by attracting visitors to rural and urban-forested areas. Tourism is a significant economic activity in many woodland areas. For example, a recent study identified that the value of forestry-related tourism revenues in Deeside, Scotland, at £16 million per annum, compared to revenues of £2.7 million in the forestry sector (Forestry Commission Native Woodlands Advisory Panel for Scotland, 1999). These figures suggest that, at a local level, the influence of forestry on tourism output has the potential to exceed the value of output from the forestry sector itself.

3.26 The UK day visit survey by the Countryside Recreation Network, 1997, estimated a total of 1450 million day visits to the countryside each year, of which more than one in five are to woodlands. The survey estimated average spending of £3.20 per visit. This result implies that the 38 million day trips reported to be attributable to West Midlands's woodlands could be producing expenditure of around £120 million per year (1997 prices). Research for other studies undertaken by DTZ Pieda Consulting has indicated that visitor expenditure of around £40,000 is required to support a full-time equivalent job in the tourism sector. On this basis, the woodlands-related visitor expenditure that may be accruing to the West Midlands might be supporting 3,000 jobs in the region. This is in addition to the 30,000 or so employees in wood-using industry in the region.

BENCHMARKING FOREST TOURISM NATIONALLY

3.27 Despite the benefits associated with informal and formal recreation and leisure in its woodland areas, the West Midlands region lacks a significant asset in the forestry tourism sector. For the purpose of this study, we define forestry tourism as 'an overnight stay in a forestry setting'. In the UK there are two significant players in forestry tourism: Center Parcs UK; and Oasis. Neither of these operators have a base in the West Midlands. Center Parcs operate from three locations: Sherwood Forest (Nottinghamshire); Elveden Forest (near Newmarket on the Norfolk/Suffolk border); and Longleat, near Warminster, Wiltshire). Oasis operates from a single location near Penrith, Cumbria.

3.28 Forestry tourism is primarily orientated towards short break holidays. The target market is primarily family, particularly in groups A, B and C1. Accommodation is in fully furnished, self-catering villas set among the forest. Activities are a key selling point. The focus of each complex is a modern aquatic complex under a giant transparent dome. Other indoor sports and outdoor sports and outdoor activities are also offered.

3.29 The key business drivers for forestry tourism is high levels of customer satisfaction; high rates of repeat bookings (around 60%); high levels of occupancy (around 90%); and high rates of on-site spend (restaurants; activity rentals, etc.). For example, turnover at Center Parcs has increased at a rate of 5% per annum since 1996/97, to just over £100 million in 1999/2000. Operating profit at Center Parcs was around £26 million in 1999/2000.

3.30 The opportunity for the West Midlands in forestry tourism derives from the strong growth that is expected to continue nationally in markets for secondary holidays. Short-breaks account for 30% of total holiday expenditure (Source: Mintel). Short-break expenditure is expected to grow at 5% p.a. over the next five-to-ten years (Source: English Tourist Board). Breaks at UK holiday centres account for 9% of all UK holidays and 7% of all holiday spend (Source: Mintel).

3.31 The areas of growth in this market are in better quality short-breaks at all times of the year. Business tourism (small conferences, team building, etc.) is also seen as a key opportunity. The following messages provide reason for optimism about the prospects for the sector:

- Forecasts predict an 11% real-term growth in expenditure on short breaks in the UK (Source: Mintel);
- The short break market has great potential for innovations: if this can be harnessed, the market will be set for greater growth than forecast on current trends; and
- Short breaks will continue to account for an increasing proportion of holidays taken in the UK by UK residents (Source: English Tourist Board).

3.32 The following data, sourced from Mintel, sets out the forecasts for UK short break trips by volume and value.

	Exp at current p's £m	Exp at 2000 p's £m	No. of breaks m
2000	3,628	3,628	38.4
2001	3,852	3,721	38.5
2002	4,097	3,858	38.6
2003	4,307	3,934	38.8
2004	4,524	4,011	39.6

3.33 The fact that the West Midlands lacks a presence in the forest tourism sector – and that the nearest competing facility is the ageing Sherwood Forest complex at Nottingham (built 1987) – might suggest a significant business investment opportunity for the region.

OTHER ECONOMIC IMPACTS OF THE WOODLANDS RELATED SECTOR

3.34 It is widely acknowledged (see Policy Context, Section 4) that that forestry can provide a range of non-market traded benefits, such as recreational benefits, enhancement of landscape and biodiversity, and carbon sequestration. These benefits have economic value, but this value is often difficult to quantify.

3.35 A framework for assessing the overall economic returns from forestry in the UK was developed by Pearce[6] in 1991. He noted that:

- forestry provides multiple benefits;
- studies assessing purely commercial rates of return tend to show forestry to be "uneconomic", but wider economic analyses tend to demonstrate higher rates of return; and
- there may be trade-offs between different benefits of forestry - timber, recreational, environmental benefits.

3.36 Woodlands provide a range of non-market benefits, including:

- use values - e.g. providing recreation, and acting as carbon sinks; and
- non-use values - such as the existence and bequest values associated with forest biodiversity.

[6] Forestry Expansion – a Study of Technical, Economic and Ecological Factors: Forestry Commission Occasional Paper, 1991

3.37 Pearce described a typology of benefits provided by forestry comprises a combination of use and non-use values, as follows:

Total Economic Value of Forestry				
Forest Features	**Direct Use**	**Indirect Use**	**Option**	**Existence & bequest**
Timber	✓			
Recreation	✓		✓	
Community integrity		✓	✓	
Economic security	✓			
Landscape	✓		✓	✓
Air/ water pollution		✓		
Biodiversity	✓	✓	✓	✓
Greenhouse impact		✓		
Watershed/ecosystem function		✓		
Microclimate		✓		

3.38 The table shows that while timber production may be the main commercial purpose of woodland, the total economic value of a forest also includes a large number of other features. Forest features can have a range of different types of value. For example, biodiversity has value from: direct use (e.g. game shooting); indirect use (e.g. as an indicator of environmental quality); and a range of non-use benefits, including option values (being available to us in the future), existence values (being valued for the fact that it exists, even by people who are unlikely ever to see it) and bequest values (as an endowment to future generations).

3.39 As Pearce (1991) noted, some of the attributes of forestry can contribute to both use and non-use values. For example, part of the value of landscape and biodiversity is that visitors can enjoy them. However, people also value forest landscape and biodiversity for their existence, and may express positive values for these attributes even if they do not experience them personally.

3.40 These benefits tend to be more difficult to quantify and value than the market benefits of forestry. As a result, there has been a tendency to under-value them in the past. Failure to take account of the full value of woodlands is likely to mean that they are under-supplied, or that types of woodland particularly rich in terms of their non-market benefits are under-provided.

3.41 For example, recreation can also have a range of knock on-benefits by producing **health benefits** and savings on health care. Evidence suggests that mortality is 50% less in those retired men who walk more than 2 miles per day, while exercise considerably reduces the incidence of strokes, bowel disease and Alzheimer's disease. This has led to the Government promoting a network of Health Walks across the UK (New Opportunities Fund, 2001).

3.42 **Carbon storage** is another external benefit that arises from forests, and its validity as a policy goal is strengthened by the limited supply of alternative actions to reduce global CO_2 budgets. A study undertaken by Macmillan[7] (1993) found that values used for carbon storage had a significant impact on estimates of the overall economic viability of commercial forestry. His study employed a wide range of different values, between £33 and £590 per hectare. The advent of global carbon markets, as mooted in the negotiations following the Kyoto protocol, would produce a more certain market price.

3.43 Forestry can help to protect **water catchments** and improve water quality. It can also cause water quality problems. Forest cover provides a benefit to water catchments, as woodlands absorb rainfall and therefore reduce runoff and downstream flooding events in comparison with lower biomass landuses.

3.44 The **non-use value** of woodlands is comprised of several features. Some relate to human desires for resource use in the future - such as bequest value and option value, while existence value relates to the desire for wildlife and landscapes to prosper for their own sake. Landscape values arise for internal and external users of the forest, to indirect users and to some extent for non-users, and biodiversity provides external benefits for recreational users.

3.45 While travel costs have been used to assess use values, techniques such as the contingent valuation method (CVM) are needed to capture **passive use** values. Macmillan and Duff[8] estimated annual willingness to pay (WTP) to restore native pinewoods in Affric and Strathspey at £69 million and £47 million among Scottish households, equivalent to £765/ha and £432/ha respectively, after taking account of the need to compensate some individuals who prefer open landscapes.

3.46 In terms of **biodiversity**, a report by consultants ERM for the Forestry Commission (1996) estimated that the public was willing to pay £20-30 per household per year for wildlife friendly management of existing forests. Support for wildlife friendly management should be justified through contributions to biodiversity action plan objectives. Biodiversity value can arise either as a by-product of other management objectives, such as community/recreational benefits, or as the central purpose of woodland management.

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[7] Journal of Agricultural Economics, 44:1, 51-66
[8] Forestry, vol. 71, No. 3, 1998

4. POLICY CONTEXT AND REVIEW

OUR COUNTRYSIDE: THE FUTURE, RURAL WHITE PAPER 2000

4.1 The Rural White Paper is set in the context of the difficulties facing many rural communities in England. The White Paper sets out a vision of building sustainable rural communities in an improved countryside environment. The key themes of the White Paper are:

- Investing in, and delivering better quality services.
- Providing affordable homes for local people.
- Better transport connections.
- Rejuvenating market towns and creating a thriving modern economy with a new future for traditional industries.
- Ensuring everyone enjoys the countryside – tourism related businesses including forestry-related businesses are expected to provide increased sources of rural income with distinctive local products.
- Protecting the countryside.
- Giving rural communities a voice and listening to local people.

4.2 Conserving and enhancing the environment is a key idea in the White Paper. Forestry is seen as playing an increasing role in the rural economy, with more woodland for people to visit and an increase in the extent of semi-natural and native woodlands.

4.3 The White Paper makes specific reference to woodlands and forestry and the roles they have to play. In particular, emphasis is made on the fact the forests are immense assets in terms of landscape, nature conservation and recreation, as well as a commercial asset.

4.4 A specific objective is to reverse the national, long-term decline in the proportion of land that is covered by woodlands, by encouraging tree planting. The main priorities of afforestation are in landscape, environmental and recreational terms, as well as commercial opportunities.

4.5 The White Paper also sets the Government's aim for forestry to be used for rural development, economic regeneration, for the environment and recreation. Enhancing access to the public is to be a key measure. The Forestry Commission will seek to increase the area of woodlands under its control open for public access by purchasing the freeholds of leasehold properties when opportunities arise.

4.6 Financial commitment comes in the shape of increasing the budget of the Woodland Grant and Farm Woodland Premium schemes to £216m over the 7 years of the ERDP.

ENGLAND RURAL DEVELOPMENT PROGRAMME, WEST MIDLANDS REGION 2000-2006

4.7 The West Midlands chapter of the England Rural Development Programme (RDP) outlines objectives for rural development in the region and the activities needed to implement them. The Plan provides an overview of the region in geographic and socio-economic terms, as well as more thorough overviews of the environment, social issues and rural businesses, including forestry. In the second part, the plan proposes a series of objectives and priorities for action.

4.8 The plan states that in the West Midlands region there are 86,100 hectares of woodlands over 2 ha, 45% of which are ancient or semi-natural. One of the major issues is that only 6.6% of the region is covered by woodland, compared with a national average of 7%. A significant proportion of the region's woodlands are not currently being managed, however, and are therefore producing little or no current financial return, despite considerable latent potential.

4.9 The Plan recognises that woodlands and forestry provide an important land use in the region. The woodland estate provides considerable benefit to the rural economy and the environment that is disproportionate to the low overall woodland acreage. Forestry potentially has an important role to play through woodland expansion and hence timber production, especially as the West Midlands is a large net importer of timber. It is acknowledged that forestry also has an important role to play in terms of economic regeneration, conservation and recreation.

4.10 The Plan also provides a SWOT analysis of the region in environmental, social and economic terms. Forestry features in the SWOT with the diverse and important woodlands seen as a key strength, with opportunities offered by targeted woodland expansion and increased production and demand for regionally grown wood products. One of the weaknesses identified is the below national average woodland cover.

4.11 The regional aspiration for the RDP is:

> *"to help support, create and enhance a competitive and diverse economy, strong communities and a healthy environment which uphold the principles of sustainable development"*

4.12 To achieve this aspiration a number of environmental, social and economic goals have been devised:

- To protect and enhance existing environmental assts and create new opportunities for environmental capital.
- To improve people's understanding and appreciation of, access to and involvement with their environment
- To achieve economic and community benefits from the sustainable use of the region's assets.
- To promote and develop sustainable rural communities and businesses.
- To develop innovative solutions to meet the access needs of rural communities and businesses.
- To stimulate community integration by greater ownership and understanding of the social, physical and economic environment.
- To provide and environment conducive to start, grow, adapt and develop business competitiveness.
- The provision of ICT and transport infrastructure that supports local development.
- To foster a well advised, flexible and highly skilled workforce.

4.13 A large number of objectives have been identified under each of the goals above. A number of them are of particular relevance for the woodlands. In particular, the objective of maintaining and protecting designated sites and landscapes; ensuring that they are managed properly; increasing standards of land management; and increasing the areas of targeted habitats such as woodlands. Social objectives include promoting the use of local materials.

4.14 A number of interventions are also identified in the West Midlands RDP including: targeting forestry and woodland establishment and management grants; initiatives to support businesses which produce, process, and market regionally grown wood products; and the development of targeted recreation and tourism initiatives.

CAP Reform – A Policy For The Future, European Commission

4.15 Reforms to the Common Agricultural Policy (CAP) now include the new policy for rural development which seeks to establish a coherent and sustainable framework for the future of Europe's rural areas. It has three main objectives:

- To create a stronger agriculture and forestry sector – forestry sector now being recognised for the first time as an integral part of rural development policy.
- To improve competitiveness of rural areas.
- To maintain the environment and preserve Europe's rural heritage.

4.16 To help deliver the strategic objectives, the new policy for rural development has a number of strategic themes to achieve the broad objectives. Within these, sustainable forest development is a key aim and element of the policy. The new CAP regulations providing support for forestry, where it can contribute to the maintenance and development of the economic, ecological and social functions of forests in rural areas.

4.17 Support will only be granted for privately owned forests (or by their associations) or by municipalities (or their associations) at a rate between EUR40 and 120 per hectare. The strategy embraces the measures listed below.

- Afforestation of land, provided that such planting is adapted to local conditions and is compatible with the environment.
- Investment in forests aimed at significantly improving their economic, ecological or social value.
- Investment to improve and rationalise the harvesting, processing and marketing of forestry products; investment related to the use of wood as a raw material will be limited to all working operations prior to industrial processing.
- Promotion of new outlets for the use and marketing of forestry products.
- The establishment of associations of forest holders that are set up in order to help their members to improve the sustainable and efficient management of their forests.
- Restoring forestry production potential damaged by natural disasters and fire and introducing appropriate prevention instruments.

4.18 In addition, CAP also provides support for the afforestation of agricultural land and may include in addition to planting costs:

- An annual premium per hectare afforested to cover maintenance costs for a period of up to five years; and

- An annual premium per hectare to cover loss of income resulting from afforestation for a maximum period of 20 years for farmers (or associations thereof) who worked the land before its afforestation or for any "other private law person". Premiums to cover losses from afforestation will be EURO 725 per hectare for farmers or associations and EURO 185 per hectare for any "other private law person".

ENGLAND FORESTRY STRATEGY

4.19 The England Forestry Strategy was published in December 1998. The strategy describes how the Government will deliver forestry policy in England, and sets out the Government's priorities and programmes for the next five to ten years. The Government is proposing to establish an English Forestry Forum to advise on the implementation of the Government's key programmes. The overall emphasis is on partnership working, with overall co-ordination and leadership provided by the Forestry Commission. The Forestry Commission does not have its own strategy *per se*, but is charged with overseeing and implementing forest strategy in England on behalf of Government.

4.20 England's forestry policy has two main aims:

- The sustainable management of the existing woods and forests; and
- A continued, steady expansion of woodland areas to provide more benefits for society and the environment.

4.21 England's Forestry Strategy is based on an integrated approach around four key programmes:

- ***Forestry for Rural Development***: setting out forestry's role in the wider countryside, focusing on the role of new woodlands, and on how existing woodlands can be managed to deliver more benefits to the local economy, and to create jobs both upstream and downstream. Actions under this programme include:

  - Influencing policies for agricultural reform;
  - Supporting strategy development of woodland resources;
  - Developing understanding of the rural economy; and
  - Encouraging diversification.

- ***Forestry for Economic Regeneration:*** this strand deals with opportunities for woodlands to play a positive role as effective land-use after the restoration of former industrial land. Actions under this programme include:

  - Promoting forestry for land regeneration;
  - Supporting regional programmes;
  - Promoting forestry through land use planning; and
  - Promoting environmental improvements.

- ***Forestry for Recreation, Access and Tourism:*** this strand aims to provide more and better quality access to woodlands, including opportunities for ensuring that wood and forests are continued to be used for a wide range of recreational pursuits. Actions under this programme include:

  - Increasing access to woodlands;
  - Improving the quality of information about access;
  - Enhancing the nation's forest estate; and
  - Promoting better understanding.

- ***Forestry for the Environment and Conservation***: embracing the role that woodlands can play in conserving and enhancing the character the environment and cultural heritage. It also considers the impact of woodland creation and management on other environmental resources and land uses. Actions under this programme include:

  - Protecting existing woodlands;
  - Promoting the environmental benefits of trees and woodlands;
  - Using the Biodiversity Action Plan to guide nature conservation; and
  - Protecting cultural heritage.

4.22 It is envisaged that the strategy will be implemented through a series of initiatives including:

- management of the Forestry Commission's national forest estate (through Forestry Enterprise);
- support for partnership initiative such as Community Forests;
- the National Forest and the National Urban Forestry Unit; and
- through targeting of the grants, programmes and initiative developed to implement forestry policy (by working closely with RDAs).

4.23 Progress of the strategy will be monitored against the UK Forestry Standard and the government will work in partnership with the English Partnership Forum.

COUNTRYSIDE AGENCY

4.24 The Countryside Agency's current strategy is set out in its Towards Tomorrow's Countryside document, published January 2001. Three key aims are identified.

- To conserve and enhance the countryside;
- To enhance social and economic opportunity for countryside residents; and
- To help improve access to and enjoyment of the countryside.

4.25 The strategy recognises that the rural economy of the future will be more broadly based than is the case now, but that traditional rural businesses – including farming and forestry – still have an important place. A number of threats are also identified, including the crisis facing modern, intensive agriculture.

4.26 The strategy identifies eight activity areas for the Countryside Agency, a number of which are potentially relevant to a nascent forestry and woodland industry cluster.

Countryside Agency Activity Areas	Relevance to Woodland Industries
1. Putting the countryside first	The Countryside Agency recognises that it is important to act in concert with other organisations and businesses to ensure that the countryside is enhanced and the needs of rural residents met. Developing the potential of the West Midland region's woodland and allied industries offers the prospect of meeting both of these objectives: by creating additional local opportunity for business and employment growth; and by bringing a greater proportion of the region's woodland cover (especially broadleaf woods) back under sustainable management.
2. Making the most of the countryside	The Countryside Agency will help influence policymakers to reform policies and rules so that farming, forestry and other rural enterprises can operate viably. Participation by the Agency in an emerging woodland and allied industry cluster is one way that this objective can be met in relation to forestry and related activities.
5. Widening recreation opportunities	The Countryside Agency states the aim of establishing more areas for countryside recreation, in particular on foot, horse or cycle, while also benefiting rural businesses. Developing in full the potential of woodland areas for formal and informal recreation offers significant opportunity to meet this strategic aim.

Countryside Agency Activity Areas	Relevance to Woodland Industries
	Business opportunity arises from increased provision of accommodation, providing recreation activity (bike hire, etc.), and hosting special events.
6. Better countryside around towns	The objective of creating more attractive, accessible green space around urban areas can be met through support for urban forestry, and by protecting/enhancing existing woodland areas that are located near cities, towns and villages.
7. Securing the quality of landscapes	The contribution that woodlands make to landscape quality is out of proportion to their actual land coverage, in part because many woods and forests are located on hillsides and other hard-to-farm land. Ensuring the ecological and economic sustainability of this woodland asset base, however, will often require the extraction of timber and other woodland products.

4.27 The Countryside Agency has also set out its vision for sustainable land management in its June 2001 document *A strategy for sustainable land management in England*. The strategy identifies four principles to guide the development of policy and practice.

Sustainable Management Principles	Relevance to Woodland Industries
1. Multi-functionality – land should be managed to deliver a wide range o benefits beyond food and fibre production.	Sustainable management of woodlands can deliver a wide range of public goods, beyond timber products and timber derivatives. These include: landscape character and distinctiveness; water conservation; public access and recreation; wildlife conservation and biodiversity.
2. Sustainability – land management should reflect the principles of sustainable development.	It should: ⇨ Maintain and enhance the quality of primary resources of air, soils and water. ⇨ Secure robust and adaptable economies based on local strengths ⇨ Maintain and enhance landscapes, countryside character, biodiversity, historic and cultural values
3. Integration – land management must be integrated with rural development	Rural land management underpins other parts of the rural economy. For example, woodland management sustains downstream production industries, as well as tourism and recreation businesses.
4. Subsidiarity – a framework which can reflect regional and local needs and aspirations	People should have a greater voice in shaping land management to deliver public benefits. This principle is reflected in increasing interest in community forests and woodlands managed by the private sector and voluntary sector groups to produce a range of benefits.

GOVERNMENT'S COMPETITIVENESS WHITE PAPER

4.28 The Government's 1998 White Paper on Competitiveness sets out the competitive challenge facing the UK, as well as the flagship programmes to promote enterprise and innovation. The report identified a substantial – 20%-40% – productivity gap compared with main competitors, and stated that the principal challenge for the UK is to close the performance gap and enhance prosperity. Four key areas for government/public sector intervention were identified;

- To strengthen capacity for innovation and risk-taking among businesses.
- To invest in the knowledge base, particularly science and engineering.
- To improve the skills and competitiveness of the workforce.
- To help business make the most of opportunities created by research and development and information technology.

4.29 An important aspect of the White Paper – and of direct relevance to this study – is the emphasis given to the concept of business "clusters" as a tool of economic development. The Paper provided a commitment from Government to work with the regional development agencies to help develop national and regional clusters. Among the advantages of clusters identified in the Paper are the following.

- Few companies have all the skills to develop globally competitive products and to market them effectively.
- Businesses increasingly involve suppliers and allies in product design, development and delivery.
- Networks which link businesses to universities, research institutes and training organisations are an increasing source of innovation and competitiveness.

ADVANTAGE WEST MIDLANDS: SECTOR DEVELOPMENT POLICIES

4.30 A sectoral approach to regional economic development in the West Midlands was announced in the 1999 *Regional Economic Strategy* (RES) produced by Advantage West Midlands. The RES acknowledged the need to attract new growth industries to the region, while helping to strengthen traditional sectors. The RES identified eight new and established industrial sectors that will drive the West Midlands economic growth in the future.

1. Engineering design;
2. Food & drink;
3. Medical technology;
4. The creative industries;
5. Tourism & leisure;
6. The motor industry;
7. Engineering; and
8. Ceramics.

4.31 The RES also identified the need to create sector-specific business sector task groups for each priority sector. It was envisaged that each task group would recruit from large and small businesses within each sector and links to existing support services. Each Task Group was to be strongly business-led and will develop a strategy to develop their specific sector. The Task Groups were also to spread knowledge and best practice throughout the sectors targeted for the economic development of the West Midlands.

4.32 More generally, the RES identified a number of principles relevant to promoting a diverse and dynamic business base and a more skilled regional workforce. These strategic objectives are relevant to all businesses, including those involved in woodland industries and timber-related industrial production. Objectives particularly relevant to businesses included a commitment to:

- Enhanced access to business finance, especially risk capital for small and medium-sized businesses.
- Management training.
- Support of new business starts.
- Export promotion.
- Business networks and technology links between firms.

4.33 More recently, Advantage West Midlands has published a new document, *Agenda for Action* (July 2001) that sets out a new agenda for cluster (rather than sector) development in the region. Ten clusters have been identified in the Agenda. The clusters are described as businesses and other assets "*defined by common technology or end product…linked through customer and supply chains and associated training, finance and research [infrastructures]* ". The ten clusters are classified as established, growing or aspirational, as follows.

Cluster Types	The Identified Clusters
Established	➢ Transport technologies (including automotive, engineering, design, materials, rubber, plastics, polymers, etc.) ➢ Building technologies (including ceramics, engineering, architecture, materials, recycling) ➢ Food and drink ➢ Tourism and leisure ➢ High value consumer products (tableware, jewellery, glass, leather)
Growing	➢ Information and communications technology ➢ Specialist business and professional services ➢ Environmental technology
Aspirational	➢ Interactive media for education and entertainment ➢ Medical technologies

4.34 Forestry is not, therefore, explicitly identified as a target cluster. However, it may be possible to argue that the industry (or elements of it) are embraced by the 'building technologies' established cluster.

ADVANTAGE WEST MIDLANDS: RURAL REGENERATION ZONE

4.35 The West Midlands rural regeneration zone covers the rural wards in Hereford, Shropshire and Worchester. The Herefordshire, Shropshire and Worcestershire partnerships have jointly developed the prospectus that will act as the regeneration strategy for the area. To drive the activity of the regeneration zone, a three-year action plan has been developed. The draft action plan is built on four pillars:

- Economic Regeneration
- The Environment
- Learning and Skills
- Community Regeneration.

4.36 Under the economic regeneration strategy, the draft plan highlights a number of traditional sectors (agriculture and forestry, retail and manufacturing and engineering) that are to be supported. The objectives under this pillar are to support key sectors, encourage sustainable and competitive businesses, improve business networks, develop and improve business premises and site, improve physical infrastructure, sustain and develop market towns and key villages and to promote the zone as a high quality destination for business and tourism.

4.37 It must be noted that at this stage, the rural regeneration zone prospectus is in draft form, and is therefore subject to change.

OBJECTIVE 2 PROGRAMME

4.38 The Objective 2 Programme 2000-2006 seeks, within the first decade of the new century, to address the problems of the most needy areas in order to make the West Midlands a premier location in Europe to live and work.

4.39 The West Midlands Objective 2 Plan is based on, and is complementary to, the West Midlands Economic Strategy (WMES). As such, the SPD Plan identifies three strategic priorities which overlap with the WMES priorities (developing a diverse and dynamic business base; creating the conditions for employment growth; and regenerating communities). It also identifies three horizontal themes (promoting sustainable development and the environment; valuing equality of opportunity; and encouraging an innovative culture) and the links between them. It also identifies the following economic impact that it seeks to achieve:

- Over **28,000** net jobs created,
- Over **14,000** net jobs safeguarded
- More than **£1.5 billion** net Value Added to the region's economy, and
- Over **8,000** targeted beneficiaries into employment.

SDP Strategic Priorities	SDP Horizontal themes
Developing a dynamic and diverse business base	Innovation
Creating the conditions for employment growth	Environmental Sustainability
Regenerating communities	Equality of Opportunity

4.40 Woodland industries are considered in both Priority 3 *Regenerating Communities* and the *Environmental Sustainability* theme. Priority 3 recognises that due to the declining agricultural base, the social and economic fabric of rural areas in the west of the region is at risk. As such, development of such communities is dependent on developing a range of new local employment opportunities and community based services.

4.41 Two particular measures within this theme – Measure 3 *Building Sustainable and Connected Neighbourhoods* and Measure 4 *Upskilling Communities* – make more specific reference to the forestry sector. An indicative action identified for Measure 3, for example, is to improve the natural and built environment for the benefit of the community. Reference is also made to Community forests as a good example of best practice in this area. Actions under Measure 4 include training in environmental skills to enable community led projects including training in forestry management.

4.42 In addition, one of the measures that will be introduced locally is targeted assistance for training activities. This is intended to help broaden the skills base of the forestry workforce, to enable it to meet the challenges of reorientating of the forestry sector.

4.43 Under the horizontal theme of *Developing a Sustainable Environment*, training in forestry management is identified as being able to help in the diversification of the rural economy. Additionally under this theme, increasing the area of woodlands, managed woodlands and access to woodlands is seen as a key objective. Using forestry/woodlands projects to increase economic activity, improve timber utilisation and marketing regionally will attain this.

4.44 The SDP also has strong links with the West Midlands Rural Development Programme. The latter identifies the need for a redirection of support towards enabling agriculture and forestry to adapt to changing markets. The SPD emphasises that the key priority of developing competitive, collaborative and modern agriculture and forestry sectors will only be attained if farmers and foresters can gain a greater share of the price paid for their products by consumers. Where appropriate they must be able to extend their business beyond primary production acquiring, as necessary, new skills to do this.

4.45 The SPD also provides a framework for the support and development of wood-using businesses in the region. Priority 1 - *Developing a Diverse and Dynamic Business Base* contains a sub-priority *Supporting SMEs in Established Sectors*. Within this sub-priority there are seven measures of relevance to wood producing and using industries, including:

Measure 1	Support for product and process development
Measure 2	Support for supply chain development, including networking and sharing of best practice
Measure 3	Support for SMEs to prepare for new markets
Measure 4	Management development and entrepreneurial skills in SMEs
Measure 5	Generic and ICT skills linked to business development and new working practises in SMEs
Measure 6	Retraining and upskilling of employees in SMEs and supply chains faced with adaptation to industrial change
Measure 7	Support for higher- level skills to improve the transfer of technology between education and business

WOODLANDS INITIATIVES

4.46 Although there is a shortage of precise data on the number and area of small woodlands in the West Midlands, it is clear that the woodlands provide an important element of the region's landscape and distinctiveness. Broadleaf woods occupy only a small proportion of the region's area, but have a disproportionate effect on overall visual quality. The conservation value of the woods is also important, especially where they are ancient or semi-natural.

4.47 Small blocks of broadleaf woodland face particular threats. They are less likely to be managed, reflecting a perceived low economic value. They face pressure from the decline of traditional markets, loss of traditional management skills and threats from neglect, overgrazing and clearance. The constraints on small woodland management include the following:

- their small size and often difficult-to-access location means that less viable harvesting and extraction processes must often be deployed;
- the small volumes of timber that can be harvested precludes efficient marketing and sale;
- a shortage of skills to harvest, convert, season and sell material for use in higher value markets; and
- the decline of local markets in the face of increasing use of imported hardwoods, softwoods and substitution for non-timber products.

4.48 However, significant markets do exist for timber and wood products derived from responsibly managed woodlands. In some parts of Britain – notably Scotland, Wales, Cumbria and the South West – local or regional woodland initiatives have been instrumental in re-establishing local markets for local timbers across a variety of product types.

Marches Woodland Initiative

4.49 In the West Midlands, the Marches Woodlands Initiative is a five-year project set up to redress this imbalance and increase the value of woodland in real terms to the communities of the borderlands. The initiative operates in the (former) Marches Objective 5(b) area, and is co-funded from the EAGGF European structural fund.

4.50 The aim of the MWI is: -

> *To expand and improve the management of woodlands in the Marches, in order to develop their economic potential and enhance their environmental value*

4.51 Another aspect is to assess the environmental value of local woodlands and their importance in terms of ecology and conservation. The MWI is targeted at woodland owners, farmers, contractors, timber businesses, machinery suppliers and craftspeople.

4.52 The uses developed for timber and non-timber output from woodlands managed through projects such as MWI include:

- on-farm uses for timber (such as fence posts, hurdles, stiles, the repair of buildings, etc.);
- seasonal markets for firewood and timber;

- timber for countryside and street furniture;
- outdoor and indoor furniture;
- timber for joinery, floorboarding, window frames and laminates;
- crafts, toys, giftware, etc; and
- non-timber benefits, such as informal and formal recreation, educational visits, etc.

4.53 The success of regional woodland initiatives demonstrates that it is possible to both enhance the conservation value of broadleaf woodlands and increase the economic value of the woods to their owners. Woodland initiatives of this type have tended to provide the following types of service delivery to woodland owners and intermediate industries:

- woodland management advice, training and demonstration of best practice;
- advice on accessing woodland management grants;
- networking woodland owners with harvesting contractors and wood users;
- raising customer awareness of the availability and benefits of timber obtained from sustainable sources (and developing/promoting schemes to verify provenance); and
- product research, design and development.

4.54 The general experience from a number of woodland initiatives appears to be that:

- the most effective solutions are those that are developed and promoted by local partners, but supported by national agencies and regional bodies;
- very clear objectives, priorities and targets need to be set, and progress monitored through the discipline of a formalised business plan; and
- a pro-active approach is required to identify potential participants all along the supply chain, involving woodland owners, contractors, processors and the users of timber.

The National Forest – The Strategy

4.55 The National Forest Strategy sets out a vision for the National Forest and how this could be achieved. Its principal aim is to create a new forested landscape covering about 502 km^2 of the Midlands. The National Forest project development phase commenced in 1991 and earnest planting started in 1995. The overriding theme is to create genuinely multi-purpose woodlands, which produce good quality timber, enhance the landscape, enrich wildlife interest and create opportunities for recreation and access.

4.56 The strategy divides the forest into six broad landscape zones allowing for the development of a strategic approach for each activity in each zone. Nevertheless, the intention of the forest is that it will be a major local and national resource for sport, recreation and tourism and from the outset this is how the forest is being developed, as a leisure forest.

4.57 The target for the National Forest is to achieve wooded cover on around one-third of the area and to achieve 70% of this within the first 10 years. Different types of planting are envisaged, including commercial plantations where the main objective is the plantation of high quality, marketable timber, farm woodlands and recreation and amenity woodlands.

Forest of Mercia

4.58 The Forest of Mercia is a landscape improvement programme set up in 1990 as part of the Community Forest Programme. The forest covers 92 square miles of south Staffordshire, Cannock Chase, Lichfield and Walsall in the West Midlands. The forest covers a diamond shaped area bounded by Lichfield, Walsall, Codsall and Penkridge. The aim is to develop a patchwork area of environmental assets including woodland, hedgerows, heathlands, wetlands and grasslands making a varied area for recreation and commercial opportunity.

4.59 The mission statement of the Forest of Mercia is: "*to enable and assist local communities to achieve permanent landscape improvement to their area through the introduction of tree planting and woodland creation, more environmentally friendly farming and care for the countryside. These improvement will lead to the creation of well-wooded landscapes for wildlife, work, recreation and education*".

4.60 The main thrust of the Forest of Mercia is the planting and management of woodlands. However, other schemes have also been pursued such as the building of the Forest of Mercia Innovation Centre which will provide ten business incubator units.

HEART OF ENGLAND TOURIST BOARD STRATEGY

4.61 The Heart of England Tourist Board – the agency with responsibility for much of the Midlands, including all of the West Midlands – is the largest of the English tourism regions. The strategy for the Heart of England seeks to build on the above-average rate of growth experienced by the region in the second half of the 1990s, and sets targets for visitor expenditure and resultant jobs. The strategy is driven by five principles, including:

- Enhancing competitiveness, by increasing spend per head, reducing seasonality and improving employment opportunities and conditions;

- Developing more distinctiveness in the local product;

- Strengthening co-ordination between tourism support agencies and other economic development organisations;
- Ensuring the sustainability of tourism in the region; and
- Ensuring that facilities are accessible to all visitors.

4.62 The tourist board has also embraced six strategic aims, some of which provide a clear linkage with the ambition of creating a woodland industry cluster in the West Midlands. These include:

Strategic Aim	Relevance to Woodland Industries
Aim 1: To strengthen leadership, partnership and expertise	The tourist board recognises the need for partnership with agencies responsible for heritage, leisure and economic development in a wide sense. The tourist board, therefore, are potential partners in any cluster activation process.
Aim 2: To refocus and rationalise tourism marketing	Greater emphasis is to be given to developing tourism segments with growth potential. This includes short breaks and activity holidays, both highly relevant to the tourism and leisure potential of the region's woodlands and forests (for example, activities such as mountain biking; equine; birdwatching, etc.)
Aim 4: To enhance the appeal of local destinations	The strategy recognises that more should be made of existing initiatives such as the **National Forest**.
Aim 5: Improving accessibility	The strategy recognises that there is scope to develop further (and market) the region's network of walking and cycle paths. The region's woodland estate offers good opportunities to meet this objective.

5. CONSULTATIONS WITH PUBLIC SECTOR AND OTHER SUPPORT ORGANISATIONS

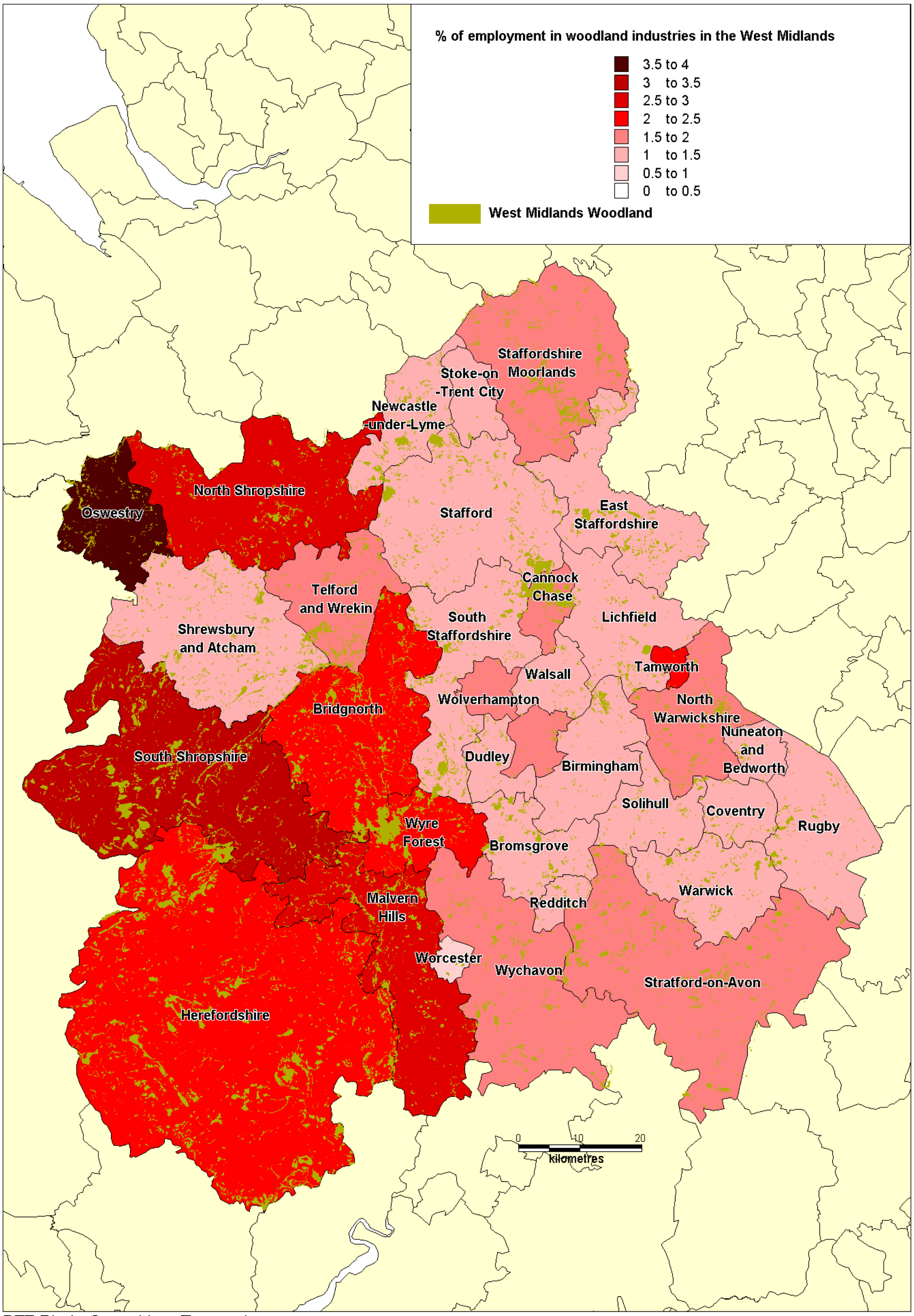
5.1 This Section summarises a series of discussions with the following organisations that represent and support woodland industries.

- Forestry Commission
- National Forest
- Forest of Mercia
- National Urban Forestry Unit
- Forest Industry Development Council
- Marches Woodland Initiative
- Marches Wood Energy Agency
- Wyvern Training Services
- English Nature
- UK Forest Products
- Countryside Agency
- Advantage West Midlands
- Small Woods Association
- Heart of England Tourist Board
- Holme Lacey College
- Harper Adams University College

5.2 From a public sector viewpoint, the sector is seen as an extremely diverse and covers a wide variety of business activities. Firstly, it must be noted that there are differing opinions within the public sector in terms of how the sector is actually defined. This ranges from those organisations, such as the local woodland initiatives, defining the sector as those industries involved in timber harvesting and production, to those such as the Countryside Agency that broaden the definition to include aspects of wholesale, tourism, training and links with other manufacturing sectors (such as automotives). One of the issues that must therefore be dealt with is the need to develop a common definition of the 'woodland industries' that is acceptable to all organisations and businesses involved in the sector.

5.3 The public sector is integrally involved in the woodland sector. Indeed, the Forestry Commission owns 60% of the woodland resource in the region. In addition, the planting of new woodland and the impetus to bring unmanaged woodland into management is encouraged through a number of public sector initiatives. The public sector is also involved in two defined geographical areas, the Marches Woodland Initiative and the Forest of Mercia, in the West Midlands in supporting industries involved in small-scale timber production such as small sawmills and wood product manufacturers. These initiatives were described briefly in Section 4.

5.4 The geography covered by woodland is concentrated in the west of the region, but there are also strong concentrations of both the natural resource and businesses processing the resource in the neighbouring counties in Wales see map. Therefore, there is a strong argument to suggest that any sector strategy might not just cover the West Midlands, rather it could also encompass woodland and related industries in Wales (and possibly also the East Midlands). There are concerns that on its own, the West Midlands does not have the critical mass of woodland industries to successfully pursue a cluster activation strategy. The potential for including significant, high order wood-using businesses located just over the border in Wales would have the potential to provide this critical mass.



DTZ Pieda Consulting, Economics

ISSUES FACING THE SECTOR

The natural resource

…There is a large segmented underused woodland resource in the West Midlands…

5.5 The majority of the woodland resource in the UK is on farmland, and 84% of woodland in the West Midlands is located in woods less than 10 hectares in size. It is also the case that the majority of agricultural land owners with woodland do not currently exploit their resource and of those who do, it is generally not their main source of income. It has been suggested that we are currently only harvesting 10% of the sustainable timber from the woodland in the West Midlands per annum and therefore, there is significant scope to increase production.

5.6 However, there are a number of issues arising out of any attempt to encourage diversification into using woodland as a source of income. Firstly, the landowners are often reluctant to establish woodland due to the current planning regime, in that value of land will be decreased if trees are on it. In addition to this, the landowners that decide to plant trees on agricultural land are likely to lose some agricultural support grants. Therefore the focus is needed to be on those who have existing woodland that are under managed and supporting a greater exploitation of the resource.

5.7 This also raises the issue of the economic viability of diversifying into woodland uses. There is therefore a need for small woodland owners to add value to the wood once it has been harvested for it to be a worthwhile business venture.

…It is increasingly difficult for UK timber producers to compete with imported timber…

5.8 There is a consensus that, in general, the UK has got a relatively low quality woodland resource. This is partly attributed to the climate, but is also a result of poor, or the lack of management of a large proportion of the woodland. The West Midlands is no exception with, as already mentioned, a significant proportion of the woodland area being under-managed. The result is that the production of good quality timber is often relatively expensive and suffers from strong competition from imported timber, such as from the Baltic States and North America.

5.9 Transportation is seen as a significant cost for the sector when competing with businesses outside the region. For UK grown timber, the further it is transported, the higher the cost. However, in terms of imported timber, transportation costs appear to be less of an issue, at least in terms of transporting the timber to the UK. It has been suggested by the Forestry Commission that this is due to the fact that cargo boats are delivering products from the UK to the Baltic States and rather than the boats returning empty, the timber is transported at a low cost.

5.10 In general, timber importers are not seen to be an integral part of the woodland sector by the majority of consultees. Importers act as agents, importing timber to the UK and selling it onto users, primarily in the construction industry. However, there have been suggestions that due to the reliance of the UK on imported timber, it is essential for the industries that use wood products that there is a good understanding of the importers needs. However, it must be noted that the experience from the forestry cluster work in Scotland has been that timber importers were initially reluctant to get involved in networking with other woodland industries and those that did get involved have had little to do with networking as time has gone on.

…Improved woodland management is the main ways of improving the resource…

5.11 In terms of the natural resource in the region, there are several public sector initiatives aimed at improving the timber product. The Marches Woodland Initiative aims to bring under-managed woodland into active management, which involves providing advice and grants, to assist landowners to better manage and use their woodland. The community forest, the Forest of Mercia, provides grants to landowners to increase the area of woodland and the National Forest programme also provides grants to landowners to plant and manage woodland. Therefore, there are local area based initiatives in place aimed at improving the quality of the natural resource. The view is that these programmes are helping to strengthen the West Midlands timber product, but that there is further investment required in technology and management techniques.

5.12 Those who manage woodland typically manage five or six woodland areas. There are only a small number of major players in forestry management. The majority of management companies are micro businesses with low cost bases, other than the machinery required for extracting timber. These groups are well represented by the Forestry Contractors Association. They are the key link between the woodland owners and those buying timber and by-products as raw materials. There has been much discussion about their role within the industry. Although an intermediary is essential, there is a concern that they may hinder competition within the industry by not allowing information to flow freely. For example, those who own woodland are not told what other buyers are looking for wood, presumably in case they opted to sell their produce elsewhere (and for a higher price). In practice this system appears to stifle growth in the industry, particularly within the smaller businesses.

The non-timber benefits of woodland

…Potential to use woodlands as a leisure resource…

5.13 There has been a wide range of non-timber benefits identified by the consultees. Firstly, the recreation aspect of forests was frequently mentioned. There is a range of leisure uses that do not generate income – such as public access woodland for walking, etc. It is difficult to measure the actual benefits of these woodland uses, although a number of studies have been undertaken in order to estimate the value (see Section 3). In terms of recreation or leisure activities that can generate income for the woodland owners, there is a range of activities currently taking place in the West Midlands, including paint balling, mountain biking etc. However, in terms of a diversification option for agricultural land-owners, it has been found that the capital cost of installing the infrastructure needed for a recreation resource such as paint balling is too great for the majority of small woodland owners. The Forestry Commission suggested that there is an opportunity to market the woodland as a recreation resource abroad.

5.14 In the West Midlands, there are views from the National Forest Company that the timber industry will never be the major focus on the forests. Rather, in rural areas, woodlands are seen as a support for agricultural; activities and the tourism product is just as important. The aim may be to ensure that the management and maintenance of woodland is financed, through the sale of timber or tourism in the form of mountain biking for example.

…Potential to use woodlands as an education resource…

5.15 The education sector can benefit of the woodland resource, in particular, with local school involvement. There have been suggestions about how to improve the use of woodland as an environmental education resource. For example, the Conkers centre in the National Forest has established a range of education programmes aimed at fitting in with the national curriculum, covering a wide range of subjects such as geography, music and maths.

…Potential to use woodlands for regeneration…

5.16 There is acknowledged potential to use forestry in regeneration and environmental improvement projects. For example, the urban forestry programme has been planting woodland on derelict sites, which is improving the area and assisting with regeneration objectives. There is also the possibility to develop 'green' business parks using woodland as noise/visual barriers. This will allow areas to absorb a larger amount of industrial activity that would have otherwise been possible.

Processing, manufacturing and wood using businesses

…The wood-processing sector is divided into two relatively fragmented sub-sectors, with a divide between large and small businesses that may be more perceived than real…

5.17 Several consultees made the comment that small operators processing local timber and wood material are finding it increasingly difficult to compete with the imported market and also with the larger in-region establishments. The majority of sawmills generally employ five or six people and many are family owned. These companies may lack either capital or ambition to expand their businesses. There has been a move by the MWI to try and encourage businesses expand their operations into other parts of the supply chain, for examples, encouraging sawmills to start manufacturing products.

5.18 The larger wood processing businesses such as the multi-national paper and panel mills provide significant employment in the sector. However, in the eyes of a number of the organisations consulted, with labour becoming increasingly mobile and a customer base that is distributed across the UK, this is a sector that is arguably weakly embedded in the region, as these establishments are not dependent on locally sourced timber. The availability of local labour, and the capital cost involved in relocation is likely to be the main factor retaining such companies, but of course the latter factor can be offset by investment incentives offered by national and/regional agencies elsewhere. Therefore, further action to embed these industries more deeply into the regional economy would be potentially worthwhile.

5.19 The view from the Countryside Agency is that there is currently the appearance of a divide between businesses that use imported timber and those that use locally grown timber. Generally, this divide is also on size. The perception is that the larger manufacturers and construction companies tend to source their timber from abroad, due to the availability, cost, quality and characteristics of imported timber.

5.20 However, it was noted that businesses operating in the wood manufacturing sector face similar issues regarding skills, technology and manufacturing techniques and that there would be advantages to greater communication. Therefore, the barriers and differences between the two groups is possibly more perceived than real.

… The importance of craft industries to the woodland sector is often overemphasised…

5.21 Craft producers face difficulties in terms of selling their produce. It is difficult for customers to obtain finance to buy products produced by crafts people and hence the producers face barriers that are not faced by larger companies producing comparable products, for example, furniture manufacturers. However, it must be noted that craft industries represent a very small proportion of the sector. Perhaps their importance to the economy should not be over emphasised (although in terms of profile and links to other rural businesses in the tourism sector, they can provide a significant benefit for an area).

…There is a need for bulk users of wood by products to sustain a woodland economy…

5.22 It is essential to have a market for the bulk waste that cannot be used for timber. However, paper companies and others that use pulp and wood by products are viewed with some scepticism within the traditional woodland industries. The price which they pay and the fact that they source most of their raw material from outside the region are factors which suggest that other more indigenous businesses find it difficult to consider that they are part of the same sector.

5.23 The development of woodfuel and wood energy within the region could have several positive benefits for the woodland industry. Firstly it provides an alternative market for the by-products from locally harvested and processed wood. This would potentially offer a higher price for wood chip than can currently be obtained and wood will be sourced locally for the small-scale wood fuel projects. There is also the option that if wood as a fuel became more popular energy crops may become a more viable income source. Woodfuel also has the benefit of increasing the profile of wood as a sustainable resource, which can only benefit the sector's image.

…Survey of wood use by woodworking businesses in the Marches…

5.24 A survey of 61 hardwood using businesses in the Marches undertaken by the Marches Woodland Initiative found that the average number of employees was seven, although the most common situation was that of self-employment and that there were only five companies that employ over 15 people. In term of turnover, the average was £430,000 although half of the businesses had a turnover of under £35,000 and only five companies had a turnover of over £1 million.

5.25 The findings of the survey were that:

- Small businesses undertook a range of functions, for example combining cabinet making with joinery, while the larger firms tended to be more specialist producers.
- Over half of users purchase small quantities of wood sourced locally on a regular basis, although the majority (over 80%) purchase principally from timber merchants or importers.
- Price and quality are the main influences on purchasing timber, although respondents also commented that choice, availability and credit facilities are also limited if sourcing locally.

- Businesses are in favour of local timber and 27% are willing to pay a premium to source locally. However, slightly more are willing to pay extra for certified timber.

- However, many wood users are unaware of what local wood suppliers can provide.

Skills and training…

…There appears to be skill gaps within the sector but more research is required…

5.26 There appears to be an increasing issue regarding skills within the industry. There are concerns that although there will be an available pool of labour emerging from changing land-uses, they lack the skills to operate within the woodland sector. There also appear to be a lack of entrepreneurs and a general need for business skills within the woodlands sector. The woodland industries sector is facing the problems of an ageing workforce and a reluctance of younger people to enter the industry. However, there is a need to audit the skills that are existing in throughout the sector, as there is currently little knowledge of the relevant skills base. This would be of particular benefit for small businesses that would in terms of providing knowledge of what other skills are held in the local area.

5.27 Within the processing part of the industry, similar skills will be required for small and large companies particularly in the use of machinery. However, large companies such as Kronospan have their own training programmes and it is unclear how small processing companies obtain training.

…A significant proportion of training is currently focussed on woodland management…

5.28 Training provision is currently confined to woodland management should be widened to include processors, building, distribution, machinery. However, it is clear that there is a need for more training to be delivered to those who have currently own under-managed woodlands, providing them advice on the feasibility of managing their resource.

5.29 Forestry is covered within some college courses but the wider woodland industries receive very little recognition and it is not seen as an important sector within further education and there are currently no explicit links between woodland management courses and recreation/education. There is a need for greater awareness of the needs to be fed through to colleges.

5.30 The current policy drive within the UK is to encourage the take-up of NVQ qualifications. However, within the forestry sector there are many occupations that are no given professional recognition. Therefore, there is a need to identify the various occupations within the sector and develop nationally accredited courses that lead to recognised qualifications. There is also a need to deliver tailored packages to individuals, in particular those who are self-employed, in terms of business management skills as well as the practical skills needed for the business.

…A large proportion of training is to meet statutory requirements…

5.31 Industry focussed training currently being delivered is mainly focussed on providing staff with the necessary qualifications in order to meet regulations. Qualifications are required for handling chainsaws etc. that is needed to meet safety requirements. There is an issue for small businesses in relation to the costs involved in obtaining the relevant licensing and this acts as a barrier to entry into the labour market.

5.32 There is a need for industry and the training providers to plan provision more to meet future needs. This is currently hindered as a lot of businesses are operating in low profit markets and are therefore unable to invest in training. There is, therefore, a need to possibly develop training courses through alternative funding sources.

5.33 There is a need to develop a skill base for operating wood cutting machinery that would be relevant to a wide range of woodland industries. There are also suggestions of a need for a revised apprenticeship scheme, since Modern Apprenticeships are currently not tailored particularly well for the forestry sector.

5.34 However, it has also been recognised that within the small local markets, qualifications are often less relevant than reputation, therefore, it may be less relevant for some occupations, particularly in the craft businesses for qualifications to be developed.

…Research is focused on the physical attributes of wood and needs to be expanded to cover uses of wood…

5.35 Research currently takes place into physical wood products and associated technology, although there are no principal woodland related research institutions in the West Midlands. However, there is less research currently undertaken into the various business uses of wood, such as the use of wood in construction, which should be improved nationally.

Communication and networking…

…As expected, communication between large companies is good, while it is less apparent between smaller businesses…

5.36 There are mixed views regarding networking and the flow of information within the sector. For larger companies, the majority are involved in trade organisations and the flow of information seems to work effectively within the sub-sectors. Flow of information between the sub-sectors has been highlighted as a problem, as has the flow of information to the small businesses, of which there are many in the West Midlands.

5.37 The Marches Woodland Initiative has established a timber forum bringing together businesses and foresters within the (former) Objective 5b area. There has been difficulty in getting the smaller businesses to engage with others in the industry, as they have not seen benefits in sharing information with their competitors. However, with further effort, there is scope to encourage the group to operate together more effectively.

5.38 There is a need identified by the Forestry Commission to provide people within the industry with greater awareness of the technology that is available. Within most elements of the woodland sector, there are industries using outdated, less efficient and expensive techniques and machinery.

…The number and range of industry organisations means that they could hinder networking rather than enhance it…

5.39 A range of trade associations covers the industry, and the only companies that appear to not belong to trade bodies are the very small businesses, in which the cost of membership is an issue.

5.40 There could be a number of lessons to be learned from other strategic initiatives the Scottish Forestry Cluster. They have established leadership groups to consider specific topics that are relevant to the industry in Scotland. Similar development forums could be established in the West Midlands.

Selling the products…

5.41 The construction industry is the main customer for timber. However, there is concern that the industry is reluctant use timber of UK origin. Therefore, there is a need to educate the construction sector about UK timber. The Countryside Agency has also highlighted a need to identify new market opportunities for wood products and encourage wood to be used in industries currently not using wood products.

…Joint marketing is needed to raise the profile of the product…

5.42 There is potential for the UK wood industries to market the wood products together. The 'wood for good' marketing campaign is sponsored by the Nordic Timber Council, the Forestry Commission, the Timber Growers Association, the UK Sawn Wood Promoters, the Timber Trade Federation and the Northern Ireland Forest Service. This provides a good example of how the sector can work together in order to raise the profile of the product which will benefit all sectors of the industry. There is also a need for a general increase in awareness of wood products and the UK sector.

5.43 The marketing of New Zealand wood has been extremely successful in the eyes of the Forest Industries Development Council and it could be a model to follow. The marketing could be based on promoting wood the sustainable product – emphasising the national certification system.

5.44 Also, there may also be scope to use local branding to enhance the profile of the product, there is a need for more research to investigate this, in particular using the "West Midlands" or the "Marches" brand.

Industry support…

5.45 There are a number of organisations that provide support to the industry at various levels. However, it appears to be the smaller businesses and the woodland owners that require additional support. The support that is being provided to small businesses is delivered on a localised basis, involving working intensively with individual businesses.

…Two major area based initiatives are supporting small business development…

5.46 The Marches Woodland Initiative is a significant programme established in the West Midlands Objective 5b area. The aim of the project is to bring under managed woodland back into use, increasing the supply of timber and also increasing the number of jobs and businesses in the area. In practice this has involved working with individual businesses and landowners to establish their needs and provide advice on the best way forward. They have aimed to be strategic in terms of identifying gaps in the supply chain and attempting to support businesses that will fill the gaps.

5.47 The Forest of Mercia innovation centre provides a useful case study into the potential to develop this type of support mechanism in other parts of the region. The project will provide hot-desking facilities, workshop units, distance leaning work stations and also provide on-site specialist advice. The innovation centre is part of the wider community forest initiative with the aim of increasing tree cover and forestry management in the area and encouraging increased public access to woodland. However, in order to increase woodland cover there is a need to prove its worth to the land owner.

…Suggestions for public sector future involvement…

5.48 A number of suggestions were made on how public sector and other support organisations could become more effectively involved in promoting the interests of the sector.

- To get involved as an intermediary to help build links between buyers and sellers of timber. Buyers are not always aware of what the timber suppliers in the area are able to provide and similarly, sellers are not aware of all the markets open to them.

- To establish information dissemination networks for businesses involved in similar markets, possibly by encouraging use of the Internet.

- To get involved in the quality control of timber, assessing the water content and size of timber produced within the region.

- More involvement from economic development and other public agencies. The sector is seen by many as an environmental issue, rather than an economic production sector. There needs to be efforts made to combine the two issues and to involve the tourism and education public sector in woodland strategy development and possible steering groups.

- To take the lead in using wood as an alternative fuel source.

- To provide assistance with marketing to small businesses.

6. PRIVATE SECTOR CONSULTATIONS

6.1 This Section presents the key messages that have arisen from our consultations with private sector organisations involved in the forestry and forestry related industries. The purpose of these consultations has been to gain an overarching view on major issues affecting the forestry sector in the West Midlands. In total, 13 firms were interviewed representing different sub-sectors and company sizes. A list of consultees is provided in Annex A.

THE FORESTRY SECTOR FIRMS IN THE WEST MIDLANDS

6.2 The firms consulted varied from small, local companies employing between 1 and 5 employees, and medium to large ones employing up to 600 employees. Business areas ranged from contracting, harvesters, woodland managers, and sawmillers through to manufacturers and board and paper-making companies. Most of these firms were located within the West Midlands. However, two of the firms interviewed were located just outside the region. The latter were interviewed because of their scale and potential to draw in timber and labour from the West Midlands, and also their potential to provide intermediate goods for manufacturers in the West Midlands. That is, they are potentially important players in the wider regional timber industry supply chain.

6.3 Timber sourcing varied dramatically. Smaller, local firms tended to obtain their timber from local sources, whilst larger firms had a much wider supply base with West Midlands timber actually representing a small proportion of their total supply. In fact, one of the consultees indicated that if the West Midlands forestry sector were to disappear, the impact on his business would be next to none.

6.4 Consultees emphasised that the higher quality timber from private estates tends to be sold either internationally or to other parts of the UK with the lower quality timber being sold locally. Furthermore, it is also very unusual for timber to be grown, converted *and* manufactured locally.

6.5 The forestry industry was considered to be quite fragmented not only in terms of the different sectors within it, but also in physical terms as it lacks big expanses of forest, especially compared to Wales and Scotland.

ISSUES FACING THE SECTOR

The natural resource…

6.6 All of the businesses consulted agreed that the quality of local (and national) timber was an issue of concern. Years of mismanagement and the 'wrong planting policies' were blamed for this situation. As a result, production of good quality timber is often relatively expensive and suffers from strong competition from imported timber, currently coming from the Baltic States and France, which is cheaper and perceived to be of better quality. UK suppliers are particularly being affected as timber prices are being pushed down by this trend. They are also not in a position to compete as Baltic countries in particular have lower production costs.

6.7 The current high value of the pound in relation to the Euro in particular was also considered by a significant proportion of consultees as an issue that is driving this trend towards cheaper imports.

Skills…

6.8 Availability of a skilled workforce was considered an important issue affecting the forestry sector by some of the consultees. Specifically, there were three areas of concern:

- The lack of young people entering the industry. This is perceived to be a result of a general move away from manual labour occupations towards service sector ones, and a perception of relatively poor levels of pay offered by the industry;
- Declining number of skilled people in the forestry sector who have been driven away by increased legislation and the small margins involved; and
- Skill shortages in the areas of business management, especially amongst the very small firms and family owned businesses. There is no immediate prospect for these skills improving as the small margins involved in the forestry mean that investment in skills development is limited.

Changing business base…

6.9 Increasing globalisation is leading to rationalisation and consolidation in the industry. As a result, many small companies are going out of business, as they are adversely affected by exchange rates fluctuations. This is particularly the case with smaller contractors who are finding it increasingly difficult to survive in the current environment of cheaper prices and increased legislation. The inherent lack of continuity in contracting work is also a factor.

6.10 Some specialist sawmills are also experiencing a declining trend, as less common species such as poplars, which they used to deal with, are now more difficult to market.

6.11 The increasing policy trend away from timber growing activities towards amenity and recreation uses for the forest was cited by some consultees as a long-term threat. This trend was not considered to be sustainable in the long term as in order to have good forests you need good trees and this can only happen if they are grown commercially.

6.12 The increasing shift towards recycling of wood products, due to cost and environmental policy drivers (and consumer preferences) also presents a long-term challenge to commercial timber production.

Lack of a training and innovation culture…

6.13 Consultees reported an extremely patchy situation in terms of links with research institutions. The smaller firms tended to have neither links with the HE/FE sector nor undertake training either externally or internally. The reason given for this is that they "had all the skills needed". Medium and large size companies undertook far more training, although this was done mainly internally, as it was not considered that the local colleges provided suitable courses that met their needs. Only one firm, the largest in our sample, was involved in any kind of collaborative research with the higher education sector.

NETWORKING

6.14 Overall, none of the small-to-medium sized companies consulted reported high levels of networking. This was somewhat different for the larger firms, which tended to network, although in a loose fashion, through their membership of trade associations such as the UK Forest Product Association. Smaller firms on the other hand did not appear to network with other forestry sector firms at all, with the exception of one consultee who reported engaging on innovative partnership working practices with timber producers.

6.15 This point was reinforced by the trade associations consulted who felt that, at strategic level, networking was fairly well established, i.e. many of the bodies representing forestry sector firms liased on a regular basis. However, this is not being replicated down the supply chain with processors on one end and manufacturers on the other not really communicating.

6.16 The general view amongst consultees was therefore that networking is not a common feature of the forestry sector in the West Midlands. Those firms with branches elsewhere in the country particularly felt this was the case, especially compared to Scotland where networking between different firms is more of a characteristic.

POTENTIAL FOR CLUSTER DEVELOPMENT

6.17 In terms of cluster activation, opinions were divided on whether or not this could happen with the forestry sector in the West Midlands. Larger firms tended to be more sceptical about cluster development potential than either smaller firms or the industry associations contacted. Nevertheless, even those who believed that there was potential for a cluster to be activated, felt this would only be possible if companies in Wales were also part of it, as the large operators are mainly based there, as are some management companies. In addition, any cluster development would need to be pump-primed as the forestry sector lacks the initiative to implement any strategy.

6.18 Factors such as increased competition between firms in the sector and increasing exports to the United States by West Midlands furniture manufacturers were seen as providing a good basis for cluster development. The unusual concentration of forestry businesses competing with one another, and the existence of some major firms in the region competing internationally were also mentioned, as was the availability of a large customer base in the West Midlands

6.19 In contrast, there were those who felt that there was no likelihood of a cluster either developing or succeeding due to a number of factors. The forestry sector in the West Midlands for example, was considered to be polarised with larger firms either tied to importers because of cheaper prices or buying from elsewhere in the UK, and smaller companies using local timber but operating in very niche markets using specialist timbers. In addition, resources are a major problem, both in terms of the physical resource and the human resource. Quality of trees remains a key issue, with not enough tress of the right quality being grown. A shortage of skilled people was also cited.

Particular strengths…

6.20 Only a small minority of the firms consulted felt that the sector in the West Midlands had an abundance of significant strengths. By contrast, many considered that the sector did not have many advantages compared with other regions in the UK or abroad.

6.21 Nevertheless, some strengths were identified including relatively good transportation networks and environmental assets which result in a good quality of life. In addition, the large number of operational skills that have been retained in the West Midlands were also seen as a particular strength of the sector regionally, as was the relative diversity of species that woodlands can grow. This has helped many traditional estates to remain profitable.

6.22 Furthermore, local forestry firms in the West Midlands tend to be quite innovative and serve niche markets. This is because the competitive pressure of cheap imports has meant that for local businesses to offer something distinctive they have to provide innovation and good service. They are also forced towards niche markets.

INDUSTRY SUPPORT

6.23 All of the consultees appear to be aware of the organisations which exist at both the local and national level to provide support to the industry. This awareness included the trade associations like the UKFPA, TGA and FCA. Some consultees were also aware of more specific, targeted programmes like the Marches Woodlands Initiative. Overall, however, it was considered that not much help was available to the forestry sector from government agencies.

6.24 Interestingly, few consultees were either members of these support organisations or had accessed support to help develop their business. Those who were members tended to be the larger national companies.

IMPACT OF THE SECTOR ON THE ECONOMY

6.25 The impact of the forestry sector on the regional economy was considered, almost unanimously, to be very small. At the very local level however, the impact was thought to be more significant because of the sector’s contribution to the local economy, especially in terms of employment. The fact that the farming industry is going through a period of crisis has also meant that forestry is providing useful employment for the agriculture industry. Nevertheless, a significant proportion felt that there was scope for increasing this impact if incentives for better forest management practices were introduced.

6.26 The impact of the sector in terms of sports and recreation was also mentioned by many of the respondents, although opinions were divided about whether this represented a positive impact or not. Overall, the impact of the forestry sector was considered to be more and more environmental rather than economic given the current thrust of Government policy.

Alternative uses…

6.27 All of the consultees recognised that woodlands provide a wider benefit than just timber producing. However, whilst usage of the forest for sport and recreation was considered to be inevitable and in some cases economically advantageous, especially for forest owners who now rely much more on staging sport and recreation events than they do on timber selling for their income, there were concerns that people were losing sight of the primacy of the commercial aspect of forest. There are also issues about how to ensure that woodland owners capture a greater proportion of the benefit from passive or formal recreation use.

6.28 However, it was also suggested that many of the woodlands were driven 'by the shoot' because of the decreasing returns associated with commercial timber. One consultee mentioned that in some estates woodland management is only carried out because of shooting.

6.29 Other recreational uses such as paintballing or four-wheel drive motor-sport, quad-trekking etc. were considered to be fairly small scale and with little potential for expansion.

6.30 Overall, consultees were of the opinion that amenity uses for the forest need to be paid for somehow, and the only way this is to happen is if large forest areas remain commercial. It was, therefore, considered important not to isolate timber growing from other parts of the forestry industry.

6.31 Improving links with other sectors such as construction could result in alternative, commercial uses for wood products. However, in order for this to happen there needs to be more marketing and promotion of the uses of wood, as well as its sustainability advantage over other materials such as metal.

6.32 Using wood products as a fuel alternative could also present an option opened to the forestry industry. However, firms seemed sceptical about the widespread impact that this could have given that it would be quite a long-term strategy (as lower quality timber would be used in wood energy in order to generate income that would then pay for better timber growing). Nevertheless, it was suggested that this would not happen in a large scale if people were not educated about the forestry sector, in particular regarding the view held by many that cutting trees is 'bad'.

6.33 Farmers are also moving towards better use of their farm woodlands. The NFU for example, through the provision of advice and support, tries to encourage the diversification of farm woodlands as well as better management of the woodland itself. Two streams appear to be pushed forward. First, the utilisation of farm wood as alternative energy and, second, using farm woodlands for recreation purposes such as paintballing. NFU recognises however that these are fairly low scale initiatives and although some farmers have diversified into providing recreation activities, for example, this is relatively expensive to make available.

FUTURE PROSPECTS

6.34 Nowhere were opinions more divided as when considering the growth prospects for the industry. Those firms who engaged in manufacturing, especially furniture manufacturing, considered that prospects were good because of increasing customer demand. The trade associations were also optimistic, and emphasised the sustainability aspect of the industry. Timber growers and sawmillers on the other hand, were much more cautious about the future or even pessimistic about it.

6.35 There was a widespread feeling that unless the quality of local timber is improved, the outlook for the forestry sector in the West Midlands is relatively bleak. Some considered that the only way to prevent decline from happening is to engage on more research into wood engineering and innovative ways of using the timber grown locally. One consultee indicated that moving away from general sawmilling towards placing a greater emphasis on technical improvements was the one key opportunity available to the sector in the West Midlands.

6.36 On the other hand, some of the consultees also felt that even improving the quality of the timber would not do much for improving growth prospects for the sector, given that European imports were here to stay and they are not only better in terms of quality but also cheaper. Competing with Baltic countries for example was considered unrealistic as they have more raw material and lower production costs than the UK.

6.37 In addition, simply increasing the supply for timber, especially hardwood, would not increase growth prospects unless parallel measures were taken to develop local and regional markets. The largest of the companies interviewed, who is the biggest consumer of hardwood timber in the UK, considered that even if the West Midlands increased its hardwood timber production, they would not buy it as this would mean displacing some of their established suppliers at a time when they have more suppliers than they need.

6.38 A number of solutions were suggested regarding ways in which to aid growth. For example, it was felt that too much emphasis was being placed on stimulating the market from the supply-side when what is needed is stimulation from the demand-side. That is, to stimulate the market itself. A potential way of doing this is by encouraging other sectors like construction to use local timber. However, three factors need to be taken into account before this happens. First, the quality of local timber needs improving (an example was mentioned of a large timber company which tried to develop alternative uses for timber by using it in housebuilding – however this failed as the wrong species was used). Second, people need to realise that construction companies are led by price and that they will buy the cheapest timber that suits their needs. Finally, construction companies, architects and so on need educating regarding what can be achieved with native timber and this will only take place with a targeted 'educational' campaign.

6.39 Mainly, it was considered that growth prospects for the sector depend to a large extent on government policy. Overwhelmingly, the message from growers and processors seems to be that if there is no shift towards supporting the economic aspects of the forest, prospects for the industry are rather limited. The shift in policy towards more green forestry was mentioned specifically as having resulted in increased costs, especially in the lowland species.

6.40 If this shift takes place, together with an embracement of technological advances and increased marketing of wood and wood products, then the sector may have a future.

7. DRIVERS FOR CHANGE

7.1 From the review of baseline data on the sector, the public and private sector consultations, and the review of relevant policy and strategy documents, it has been possible to identify a series of drivers for change that provide major influences on the potential for cluster activation in woodland and related industry. The most important of these drivers are set out below:

Business and Market Drivers

…methods of production will continue to evolve…

Increased competition will drive ever-greater use of highly adaptive production techniques. Increasingly, technology will allow production processes that are far less localised and businesses will search for less expensive production locations.

…and the implications for the forestry sector in the West Midlands might be…

These drivers threaten profitability and employment in sectors and regions that are slow to adapt. The West Midlands forestry sector will miss out on business investment opportunities if the business base and workforce fail to adapt sufficiently.

…as a response, industries will increasing form into highly competitive clusters…

Another implication of the increasing competitive environment will be the greater tendency for the formation of clusters. Increasing location-sector specialisations will occur as a result of both horizontal and vertical disaggregation processes among businesses.

…and the implications for the forestry sector in the West Midlands might be…

The regional-sector must improve its performance in business investment, management capacity and workforce skills. The interface between business and the education and public agency sectors must also be enhanced in an effort to develop comparative advantage.

…competition from imports will become more intense…

Prospects of the expansion of the European Union to encompass heavily forested, low-wage but well-skilled countries like Poland, Slovakia and the Baltic States will increase the intensity of competition for the UK forest products sector.

…and the implications for the forestry sector in the West Midlands might be…

Increased competition for local companies. The need for increased investment in productive plant and equipment to enhance local firm's productivity and competitiveness. A parallel need for investment in business management capacity and workforce skills.

…potential employment losses from re-structuring…

As a relatively flexible labour market, the UK has benefited from investment from foreign players (such as Kronospan) in the forest products sector. A potential downside to this flexibility is the relative ease with which UK-based operations can be down-sized or closed compared to rival locations on the continent.

…and the implications for the forestry sector in the West Midlands might be…

There may be a danger that important overseas owned business establishments may be rationalised or closed (or seek greater proportions of non-UK sourced inputs) in order to maintain competitiveness. The result may be job losses in-region, or at key nearby plants such as at Chirk or Newport.

Social Drivers

…pressures of modern living will result in demand for anxiety-reducing consumption patterns…

There is increasing recognition on the part of the public and of policy makers about the amenity and wider benefits associated with forestry and woodlands. The report The Environmental Economy of the West Midlands estimated that 38 million trips to woodlands in the region are made each year.

…and the implications for the forestry sector in the West Midlands might be…

There will be increasing demand for short break holidays and near-urban destinations for formal and informal leisure opportunities. Investment in the National and local community forests will be repaid in enhanced amenity, leisure and recreation benefits, which themselves will deliver economic opportunities for local businesses and their employees.

…consumer awareness of environmental issues will change patterns of demand…

Consumers will become increasingly aware of the environmental consequences of the goods and services they purchase. Businesses will increasingly be forced to take into account changes in consumer preferences, and be required to prove that their products and processes are benign in terms of their impact on the environment, and the health and well-being of workers and consumers.

…and the implications for the forestry sector in the West Midlands might be…

The forestry industry is potentially vulnerable to these shifts in consumer sentiment, but producers that can demonstrate (through qualification for certification schemes and the like) superior processes may be able to charge a premium for their products. Partners in the region should attempt to ensure that a greater proportion of the regional industry's output qualifies for these schemes. There is an increased tendency to certify production from forests and woodlands – for example, through the UK Woodland Assurance Scheme (UKWAS) – as a means of ensuring environmental sustainability of production.

…demographic forces may cause recruitment difficulties…

Demographic and lifestyle changes may influence the ability of the industry to recruit new employees.

…and the implications for the forestry sector in the West Midlands might be…

There may be a need to develop stronger business-education linkages in order to help promote the forestry and processing sector as career destination for school and college leavers.

Technology Drivers

…opportunities exist for small-scale, technology developments in timber production and use…

Advances in product and process design and innovation will be required if competitive advantage is to be obtained and smaller, fragmented farm woodlands be brought back under management.

…and the implications for the forestry sector in the West Midlands might be…

The focus of the strategy could include building productive relationships between businesses, research organisations (such as TRADA) and higher/further education institutions and public agencies such as the Forestry Commission.

…information technology will continue to be a key area for development…

There is a need to improve the quality and availability of market information, particularly on the types, volumes and prices of timber parcels that are available. ICTs offer great scope for enhancing the quality of market information available to different segments of the supply chain.

…and the implications for the forestry sector in the West Midlands might be…

Developing e-commerce in the forestry sector could be important in overcoming an important area of market inefficiency. E-commerce could also be developed to increase the awareness of local timber and derived products among intermediaries (such as timber merchants, architects, etc) as well as consumers.

Environmental Drivers

…increasing recognition of the environmental benefits of farm woodlands brought back under management…

The balance of forestry policy has continued to shift in favour of landscape, amenity and environmental benefits, to the potential long-term disadvantage of timber and residue production.

…and the implications for the forestry sector in the West Midlands might be…

Bringing woodlands back under sustained management can produce financial and timber as well as environmental benefits. But the long lead in times for woods bought back under management to yield large volumes of high value material is a disincentive.

...there will be an increasing emphasis on farm woodland management as a means of income diversification...

The crisis in British agriculture following BSE, FMD and long term, secular decline in farm income means that there will be even greater emphasis on farm woodland management and farm tourism as means of generating additional sources of on-farm income for farming households.

...and the implications for the forestry sector in the West Midlands might be...

Most farm woodlands are unmanaged and at risk. Timber values in unmanaged woodlands are typically low, discouraging active management. The price signal needs be restored if woods are to be brought back under active management, but to an extent it is a case of chicken and egg.

...environmental legislation will be an increasing influence...

Introduction of the fossil fuel levy and other environmental legislation may create opportunities for further diversification for wood producers into energy markets.

...and the implications for the forestry sector in the West Midlands might be...

Opportunities may be enhanced for regional and local biomass energy projects.

Policy Drivers

...world economic liberalisation will increase capital and trade flows...

The drive for world trade liberalisation will increase capital and trade flows. Policy makers are likely to accelerate these processes, but they may also be attention to curbing the adverse environmental and social consequences of economic activity, through climate conventions, etc.

...and the implications for the forestry sector in the West Midlands might be...

The region and sector must work hard at enhancing its competitive position. Particular attention must be placed on upgrading business capacity and employee skill levels.

...the effects of environmental controls and policy will be felt increasingly ...

Business, commercial and household activity will be increasingly influenced by international and pan-European environmental treaty obligations.

...and the implications for the forestry sector in the West Midlands might be...

Energy intensive and potentially polluting industries will be under even greater pressure to clean up their acts.

...continuing shift in emphasis away from supporting agricultural production...

There will an increasing focus on the ecologically sustainable use of agricultural land, and on providing incentives for landowners to move to organic and environmentally friendly, less-intensive farming methods.

...and the implications for the forestry sector in the West Midlands might be...

This trend provides opportunities for promoting the production of 'countryside products' and local branding to strengthen attractiveness to tourism and the basis for marketing food and other countryside products as premium produce.

…the viability of farms will be policy priority…

Safeguarding the traditional character and culture of the countryside requires that farming families be supported in the effective running of their businesses with advice on how to develop and diversify. Agriculture must become more economically viable. To achieve this, the region's agriculture needs to be linked more effectively to markets with an emphasis on premium branding and a positive image.

…and the implications for the forestry sector in the West Midlands might be…

Adding value to farm timber and associated products, as well as non-timber goods/services associated with timber, offers a potentially important diversification route.

7.2 One source of short-term forecast for the forestry sector is Lantra's LMI database model[9] (Lantra is the National Training Organisation for land based industries in the UK). The key messages are that, nationally, the forecast numbers of employees in the sector is expected to stay more-or-less static between 2000 and 2006 (a fall of 0.7% is expected). The number of firms in the industry is also expected to stay fairly constant. There is no strong reason for thinking that these broad trends will not also apply for the West Midlands.

[9] Skills Foresight 2001, LANTRA

8. SWOT ANALYSIS

8.1 Further messages concerning the issues, challenges and opportunities that are expected to be relevant to the West Midlands woodlands industry sectors over the next five to ten years can be distilled from the previous research and relevant European, national and sub-regional policy documents.

8.2 The key messages – set out in the table below – from the SWOT assessment of the West Midlands woodlands industry will have a direct bearing on the evolution of any cluster activation strategy that may be developed in the future.

Strengths		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
The availability of a reasonably substantial regional forestry resource	• The region has an estimated an estimated 86,100 ha of forest area • The woodland area expanded by 5,300 ha (6.6%) over the period 1992-1999 • The annual sustainable increment is around 350,000-400,000 $m^{3.}$	The region has woodland cover slightly below the national average (6.6% vs. 7.0%). For a comparative advantage to emerge, the region needs to manage this resource and add greater value to it.
Availability of the forestry grant schemes	Over the period 1991/92-1999, a total of 20,215 ha of woodland was supported under the Woodland Grant scheme. Over the same period, a total of 2,133 ha was supported under the farm woodland premium scheme.	The WGS and FWPS have been very successful in encouraging the establishment of small broad-leaved woodlands throughout the region. It is important, however, that these (or similar) incentives continue to be available, because the majority of the region's hardwood resource is still unmanaged.
Transport infrastructure	The region has one the densest concentrations of motorway and rail-freight infrastructure in the UK. The Marches area is less well served, although the M50 and M54 penetrate this area.	A good communications network is a double-edged sword. On the one hand it means that users of wood products can readily transport their final products to end-users in-region or beyond. On the other hand, imports of timber or wood material can be easily and efficiently transported, providing ready competition for local woodland producers.
Increasing customer recognition of the quality and environmental benefits of using sustainably managed hardwoods	The interest of consumers in 'green' locally sourced wood products has been demonstrated by piloting of local charcoal sales through the B&Q chain by the British Charcoal Group, led by the Anglian Woodland Project. Initiatives such as Coed Cymru in Wales have developed a range of wood-related products using different quality material, exploiting local branding (Welsh wood) and the sustainability of the extraction process.	The availability of the Forest Certification scheme provides a major opportunity to raise the image and profile of products derived from sustainably managed woodlands in the region.
The commitment to projects such as the National Forest, Forest of Mercia and Marches Woodland Initiative from a broad alliance of public/ private and conservation/ development interests	• The Forest of Mercia project aims to achieve significant landscape improvement in its 238 square kilometres. The project will also develop recreation facilities; nature conservation benefits; and business and employment opportunities through the development of leisure opportunities and markets for timber and wood-related products.	The existence of these initiatives offers great potential to expand significantly the size and quality of the region's forestry cover. In the short to medium term, opportunities to develop recreation and tourism linked business activity will grow significantly. Longer term, the potential exists to develop further local supply chains in terms of wood producing and wood using activities.

Strengths		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
	• The National Forest project aims to create a large new forested area in the Midlands, including parts of Staffordshire centred on Burton-on-Trent. • The Marches Woodland Initiative aims to bring more woods in the (former) Objective 5(b) area of Herefordshire, Worcestershire and Shropshire back into active management, creating business and employment opportunity en route.	
Presence of further education institutions with a forestry department	Three colleges in the region – Holme Lacy; Harper Adams; and Wolford – each have a department that provides training in forestry related disciplines. A number of other institutions have courses that are relevant to tourism and leisure.	These institutions are a significant asset that would, potentially, be important players in any forestry-related cluster. There roles would be to help in addressing skills shortages and skills development needs in the sector, as well as helping in the process of technology transfer and the dissemination of improved management expertise for the industry.
Proximity to the country's manufacturing heartland	Within the region, manufacturing accounts for some 29.5% of GDP, compared to 21.3% for the UK as a whole.	The proximity of a good proportion of the country's manufacturing base creates significant in-region opportunities for wood products, and for the producers of products that can be used as intermediate goods by others.
Proximity of urban populations as a source of short break visits	Evidence from Center Parcs suggests that a forest tourism centre such as at Sherwood Forest requires a catchment of 7-8 million within a two-hour drivetime. The West Midlands region can provide this catchment, in terms of its own population centres and proximity to other centres such as Manchester, Liverpool, Bristol, Cardiff etc.	There is an opportunity to develop a new tourism attraction in the West Midlands along the lines of an Oasis or Center Parcs development. Such a development would need to be located in or near a forest environment (or offer the possibility of this environment being created) and be well served by road links. However, there may be an issue about to the extent to which it is possible to 'embed' such a self-contained tourism asset in the region's economy.
Public access to forests and woodlands	It is estimated that around 38 million visits are made to the region's forests and woods each year. In addition to recreation value, forests and woodlands provide an asset in terms of health benefits, land value and regeneration.	The amenity and recreational value of woodlands is a significant benefit to the region's residents. Opportunities for developing further formal leisure and recreation in woodlands (sports and other activities) also creates opportunity for small businesses in the region.
Increasing commitment to develop the sector further	The decision by Forestry Commission, Countryside Agency and Advantage West Midlands to commission this study is evidence of an increasing interest in the woodlands and related industry	The purpose of this study is to identify whether further investment by the client group partners in activating the forestry and related industries sector has the potential to deliver commensurate returns.

Strengths		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
	sector.	

Weaknesses		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
High cost production base and vulnerability to competition from imports	Exposure to high fuel and transportation costs, and concern about increasing timber prices were identified as major concerns by business consultees.	One of the most significant challenges facing firms in the sector is the increasing cost of doing business. However, these are external factors largely beyond the control of regional agencies and business networks. The role of a cluster activation strategy should be to address issues such as increasing productivity and developing higher value products and markets that allow businesses to operate successfully within an environment of higher costs and increasing competition.
Industry dominated by small businesses, with few medium sized players	The industry is dominated by small, undercapitalised businesses, often managed by operators with few if any business management qualifications. Over 60% of businesses in the sector are reported to lack a formal business plan. There is little tendency for businesses in the industry to access business advice and counselling from publicly funded business support networks	There is a need for business support networks in the region to make themselves more relevant and approachable to forest sector businesses. The advent of the Small Business Service and the availability of business development funding through the Objective 2 programme provide a means of achieving this objective. The role of a cluster activation strategy would be to co-ordinate the efforts of private sector, public sector and HE/FE advice and support to players in the industry.
Financial constraints on the ability of the timber industry supply chain to invest in new equipment, processes and products	The recent Firn Crichton Roberts (FCR) industry survey for the Forestry Commission[10] indicated that for nearly 5% of businesses in the industry, obtaining access to capital was a concern. Cash flow management was identified as a problem by 9% of businesses.	Interventions worth exploring further include: • Focused business advice and support for the sector, including greater focus on the needs of smaller businesses; • Subsidised loans or capital grants for equipment; • Financial support for management development; • Greater participation by firms in initiatives such as TCS; • Financial support for employee training.
Skills shortages among timber growers, harvesters and users	The recent FCR survey for the Forestry Commission indicated that the majority of the industry's workers held no technical or professional qualifications. Nearly 60% of businesses	There is a major training requirement for the sector if it is to progress to being more high value and high productivity. The need is particularly acute among smaller forestry sector businesses, as

[10] Monitoring the Health and Vitality of Forest Industry Businesses, Firm Crichton Roberts (FCR), August 2000

Weaknesses		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
	interviewed lacked a training plan. Our business consultees identified that the image of the industry as being low-skill and low-paid militates against recruitment of needed labour. A number of consultees also identified the problem of a lack of a training culture among businesses in the sector. In the tourism sector, the problem is likely to be more acute: seasonality and prevalence of part-time employment in the tourism sector compound the problem.	the proportion of skilled employees in businesses declines with firm size. There is a particular need to develop stronger links between the region's business base and local further education training institutions.
Shortage of business management skills	A number of business consultees mentioned the poor quality of business management skills as a significant constraint. In the recent Firm Crichton Roberts (FCR) national survey (see footnote reference) of forest industry businesses, around 6% of businesses identified this as a problem for the industry. A number of studies have also identified this as a problem for tourism and leisure businesses nationally.	In an increasingly competitive global economy, creation and translation of knowledge into competitive products, processes and services is vital to prosperity. Further investment in business management capacity will be an essential requirement if the region's forestry-related industries are to progress towards higher value markets and enhanced profitability.
Lack of efficient means of disseminating market information on timber customer needs and supply availability	A number of business consultees mentioned the poor communications between wood producers and manufacturers. The situation is perhaps particularly acute in the emerging markets for local hardwoods. The NFU told us that many farmers are interested in bringing their farm timber resources back under management, but there is a shortage of information on what their timber may be worth and how they should go about it. Users of local hardwood timbers reported considerable difficulties in obtaining reliably adequate stocks of local material.	One of the major areas for potential activity for a cluster activation strategy may be to address information shortages and discontinuities in the marketplace. Obviously, use of information technology offers considerable further potential in terms of disseminating information about timber prices and availability to potential users. It also offers great potential for marketing products and services (including training, consultancy and recreation/leisure) to end-users.
Concerns (or perceptions) about timber quality	Local softwoods and hardwoods appear to have something of an image problem among local processors and users. Some businesses report that local material is inferior to imports, and too often is difficult to obtain. There are also higher costs of dealing with a fragmented and varying-quality resource.	The response would appear to be a combination of: • Continuing efforts to raise standards in silviculture and timber harvesting; • Better handling & treatment whilst timber is being seasoned; • Targeted marketing, aiming to enhance the image and

Weaknesses		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
		perception of local material among intermediate and end-users; • Better information on timber availability.
Concern that the industry is overly reliant on a small number of key users.	Major markets for thinnings and residues are for panelboard and pulp paper. These markets are dominated by a small number of players in the UK market, who effectively act as 'pricemakers' in the market.	This is a factor beyond the control of the regional partners. The best response would be to look to woodland management, harvesting and production technology and market development to ensure that as great a proportion of timber material as possible is diverted to medium and higher value markets. It is also possible to develop higher value local markets for residues and thinnings: for example, local markets for lumpwood charcoal and garden mulches.
No university in the region has a department specialising in forestry	None of the region's universities have a specialism in timber technology and research. A number of consultees mentioned relationships with out-of-region HEIs such as Bangor and Oxford.	The lack of a regional research and development base is a significant disadvantage. In the medium term, there may be scope to develop greater capacity in-region, through Advantage West Midlands funding for the development of research capacity relevant to the 'building technologies' established cluster (identified in the *Agenda for Action* document).
Lack of a large forestry tourism player in the region.	There are four major forest tourism sites in the UK, but none in the West Midlands. The nearest is at Sherwood Forest in Nottinghamshire, operated by Center Parcs, who also have sites in Wiltshire and on the Norfolk Suffolk border. The other operator is Oasis, who has a facility near Penrith, Cumbria. Oasis has plans for a second resort, to be located in Kent. Each of the existing resorts has average 90% occupancy.	Part of a cluster activation strategy might include marketing the region as a destination for a major inward investment by a leisure operator. Developing an equivalent to Oasis in Cumbria would require investment in the vicinity of £60-£80 million.
Confusion about forest policy from the point of view of businesses	Some of the businesses that we spoke to held the view that technical and environmental regulations had continued to become progressively more onerous, and that the 'strategy' for the sector was confusing and poorly communicated.	Uncertainty and confusion on the part of business is perhaps due to changes in Government and Forestry Commission policies in recent years, but is more likely due to a failure to communicate policy effectively. The desire on the part of some businesses to see a forestry sector strategy developed is positive, and provides some indication that a woodland sector 'cluster activation' strategy would be welcomed by business.
Bureaucracy and legislation	A number of businesses mentioned that excessive red tape was a major constraint on their operations and profitability. In the recent FCR report on the viability of forest businesses, 'technical	Legislative regulation is an external factor largely beyond the control of regional agencies and business networks. The role of a cluster activation strategy should be to address issues such as increasing

Weaknesses		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
	regulation' was the second most frequently cited concern by business (11.3%), and 'general business regulations' was cited eighth (7.2%). For forest management and consulting businesses, regulation was the chief concern.	productivity and developing higher value products and markets that allow businesses to operate successfully with adequate regulatory (environmental) requirements.
Rate of failure of businesses in the sector	The data indicates an overall 8% decline in the number of VAT registered businesses between 1993 and 2000. The majority of de-registrations are among micro-businesses in the sector.	There may be a need for more targeted enterprise development support and business development activity targeted at the needs of micro-businesses in the sector.

Opportunities		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
Growth of demand for forest products	The demand for timber-derived products is expected to continue to increase, For example: • Demand for paper and board will increase by 75% over the period 2000-2025 • Wood-based panel products will increase by 65% over the same period • Demand for short-break holidays will increase by an average 5% per annum for at least the next five years.	The scale and future growth of timber products consumption in the UK offers clear opportunities for: producers of timber; suppliers of timber products and by-products; providers of forestry based tourism.
Development of a cluster activation strategy for the sector	A number of public and private sector consultees identified a desire for a much more co-ordinated approach to developing the potential of the forestry and woodland related sector.	Cluster activation is a critical first step towards realising the potential of a group of industries as an engine for business growth and economic development. Clusters become activated when companies in related industries come together and start working with each other and with collaborators in the education, research and public sectors. By working together cluster members become more innovative, more responsive, more productive and therefore more competitive and profitable.
Funding opportunities	A number of consultees identified opportunities for co-financing of sector development potential. Sources cited included: Advantage West Midlands (inward investment; support for individual businesses, etc.); Objective 2 (business support); Small Business Service (business support); Objective 3 (skills development); New Opportunities Fund (recreation); etc.	To present a compelling case for funding support, the strategy (or its individual components) must be able to demonstrate the ability to deliver outputs and benefits at least commensurate with the funding required. It will be important that the 'cluster activation' strategy set out clearly targets and performance indicators, and attempt to quantify the potential direct, indirect and wider benefits of its implementation.

Opportunities		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
More vertical integration in the industry	A number of private and public sector consultees identified opportunities for greater vertical integration in the industry.	The increasing tendency towards vertical disaggregation – the outsourcing of a firm's inputs into its supply chain – can reinforce tendencies towards spatial clustering in regions. In the West Midlands, the challenge is to more closely integrate potential participants into an integrated network of business collaborators. Given the location of large forest industry players just outside the region (Shotton Paper; Kronospan; St Regis Paper) it will be important to embrace key businesses in adjacent counties in neighbouring regions as well.
Use of appropriate technologies	The consultations identified demand for activities such as: machinery demonstrations; research on extraction methods; development of portable milling equipment; feasibility studies for commercialisation of equipment and techniques; and product development across a range of market segments (including construction, joinery and other higher value uses). Technological development across these areas would also need to be accompanied by subsequent dissemination and training support.	There may be scope for the partners to encourage research and development (and dissemination of results and other good practice) in a number of areas: • Woodland management and harvesting; • Development of small scale harvesting and kiln-drying equipment; • Glu-lamination and other timber technologies. • Greater use of information technology as a cheap means of overcoming information shortages, such as by developing a hardwood supply chain intranet (i.e. business-to-business eCommerce) • Use of the internet to market and promote forestry related products to a global audience A priority would be to develop stronger relationships – based on specific R&D opportunities and needs – with organisations such as TRADA and university departments, such as at the University of Wales, Bangor.
Greater use of information technology to overcome market failures	Information shortages were identified as a weakness (see above) preventing the efficient operation of timber markets in the region. The market for timber (especially hardwoods) is hampered by a shortage of up-to-date data on the types, volumes and location or material that is wanted or is available.	There is scope to build on the efforts on MWI and develop information tools to foster more efficient market operation. Information technology offers great potential: development of on-line databases carrying information on timber prices, timber lots wanted or available, etc. would be a useful development. There is

Opportunities		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
		also scope to use ICT to foster greater awareness among intermediate and end-users of the availability and benefits of locally sourced timber products.
A skills development strategy for the sector	Skills gaps among employees – and poorly developed business management capability – were each identified as major constraints on the timber related and forest tourism sectors (see Weaknesses, above).	One of the key challenges to determining long term competitiveness is the ability to develop, attract and retain a highly qualified workforce. Success is contingent on an appropriately skilled workforce and effective business management.
Develop markets for new and innovative products	Traditional markets that are being explored by MWI include poles and stakes, hurdle fencing and fuelwood. Bulk markets for residues and thinnings include particleboard, chemical fluting and charcoal. There are opportunities to develop further markets for better quality timber, including: joinery; conservation-related uses (countryside furniture; fences); street furniture; indoor and garden furniture; toys and crafts.	Value can be added through good product design, and there is considerable potential to develop relationships with in-region designers and architects to encourage greater use and specification of local timbers and timber products. Elsewhere in the country, Woodland Initiatives and Leader groups have developed local/regional timber product development and marketing initiatives. We understand that the emerging Leader Plus bid for the Shropshire area includes a local timber development theme, and this sort of local initiative can be encouraged within a regional or sub-regional strategy.
A marketing strategy, including regional and sub-regional branding	A number of consultees considered that a marketing strategy for the region's wood-related products should be a priority.	A co-ordinated marketing strategy would focus action on developing awareness of the merits and attractiveness of local timber products. The targets of the strategy might include manufacturers of intermediate products; architects; and consumers. Related actions might include the development of branding, emphasising (1) the ***local*** timber aspect and (2) production from ***sustainably managed*** timber resources. Encouraging greater use of the Certification Scheme would be helpful. Another possibility would be to develop partnerships with retailers (possibly collaborating with other Woodland Initiatives to help guarantee volumes and reliability of supply).
Further development of community and urban forestry and the National Forest	• The Forest of Mercia project aims to achieve significant landscape improvement in its 238 square kilometres. The project will also develop recreation facilities; nature conservation benefits; and business and employment opportunities through the development of leisure and markets for timber and wood-related products.	Accelerated development of these initiatives would potentially deliver a number of short, medium and long term benefits: • Enhanced land values and regeneration benefits; • Opportunities for formal and informal recreation; • Raising the profile of the region as a forest tourism destination;

Opportunities		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
	• The National Forest project aims to create a large new forested area in the Midlands, including parts of Staffordshire centred on Burton-on-Trent.	• Health and amenity benefits for nearby residents; and • Increasing the supply of thinnings and residues and, ultimately, higher value timbers.
Forest tourism	There are four major forest tourism sites in the UK, but none in the West Midlands. The nearest is at Sherwood Forest in Nottinghamshire, operated by Center Parcs, who also have sites in Wiltshire and on the Norfolk/Suffolk border. The other operator is Oasis, who has a facility near Penrith, Cumbria.	There is an opportunity to attract a major forest leisure player into the region. DTZ Pieda Consulting has recently undertaken a market assessment for this sector, and has concluded that there is scope for round four additional developments of this type – in the West Midlands; Yorkshire; the South East; and Scotland. There is also scope for smaller, niche developments, perhaps themed as 'only for adults' (akin to the Warner concept) or focusing on corporate tourism, for example. Another implication is the need to develop mechanisms to ensure that the benefits of woodland recreation and tourism are more strongly embedded in local economies, in part by ensuring that woodland owners are able to capture a greater proportion of benefits that accrue from formal and informal recreation in woodlands.
Increasing markets for short break tourism	The English Tourist Board predicts that the market for short break holidays will grow at 5% per annum for at least the next five years. Activity holidays are a particularly strong market segment.	The regional partners should encourage the development of forestry tourism businesses and assets. This might include attempting to attract a large leisure operator to develop a Center Parcs or Oasis type product, but it should also include smaller scale, high value niche products, possibly focusing on the potential of the National Forest among others.
Greater participation by small woodland owners	A number of consultees highlighted the opportunity of encouraging greater involvement of woodland owners in managing, harvesting and converting their hardwood resources.	The continued availability of incentives such as Woodland Grant Scheme; Farm Woodland Premium Scheme; and the Countryside Stewardship Schemes is obviously crucial in ensuring that woodland owners (and land owners generally) have an incentive to bring greater proportion of their woodlands (land) under management and woodland cover.
Expansion of the Marches Woodland Initiative	The Marches Woodland Initiative aims to bring more woods in the Hereford & Worcester area back into active management, creating business and employment opportunity en route. The project has been successful in its early years, but Objective 5(b) funding runs out this year.	Continuation of the MWI or an equivalent is a pre-requisite for bringing back under productive management a large proportion of the region's hardwood resource and broadleaf woodland asset. Priority areas for activity should continue to be: advice on woodland management; market development activity; dissemination of information to woodland owners and wood users; signposting for

Opportunities		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
		skills development and management training; etc.
Collaboration with partners in neighbouring regions, especially Wales.	Many potentially useful cluster activation assets were identified during the research as being located just over the border with Wales. These are primarily business assets (such as major players in paper, board and sawmilling) but also include training and R&D infrastructures. As far as business and the workforce is concerned, the border is a non-factor. But the remit of public organisations (and funding opportunities) depends on regional boundaries.	It will be worth exploring the potential of a joint approach with the Welsh Development Agency and/or private businesses located in Wales, such as BSW; Shotton Paper; St Regis Paper; and Kronospan – as well as HEIs such as the University of Wales, Bangor. It is understood that Leader Plus groups in Shropshire and North East Wales are currently jointly developing a thematic strategy which includes developing the potential of local natural resources, including broad-leaved woodlands. Such local co-operation offers a good example to regional and sub-regional agencies and organisations about what can be achieved through dialogue and closer working.
Integration within Advantage West Midlands' Regeneration Zone concept	Consultees were strongly supportive of the Forest of Mercia and National Forest projects.	Encouragement for urban forestry will remain important as a regeneration instrument. The National Forest and the Forest of Mercia will do much to help enhance the image and quality of life experienced in their locations, to provide local business opportunities, and to provide local recreation resources.
Commercial energy production from wood fuel	Advantage West Midlands in particular identified the possibility of generating electricity or combined heat and power from timber residues and/or short-rotation coppice fuels.	One of the factors that appears to constrain the move towards higher value markets is the relatively poorly developed market for timber by-products. One potential market worth exploring further is the market for energy from the combustion of timber industry residues or short-rotation energy crops. The introduction of a wood fired power station (along the lines of the project in the Scottish borders) would provide a much stronger market for local timber residues and help underpin the move towards higher value markets. The potential of this development could be explored in more detail in Phase 2 of the study programme.

Threats		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
Increasing domination of market by imports	Because of the relatively small area of the country given over to timber production, the UK is one of the world's leading importers of timber material. Imports currently meet about 85% of demand. Threats to domestic production include the strength of Sterling (or, rather, the weakness of the □). Other threats cited by consultees included EU enlargement (in particular, accession of countries such as Slovakia and the Baltic States).	These are external factors largely beyond the control of regional agencies and business networks. The role of a cluster activation strategy should be to address issues such as increasing productivity and developing higher value products and markets that allow businesses to operate successfully within an environment of higher costs and increasing competition.
Departure of larger players	Regional markets for thinnings and residues are dominated by comparatively few players located just over the border with Wales: e.g. Newsprint (Shotton Paper plc); Semi-chemical fluting (St Regis); MDF and Particleboard (Kronospan). A few regional players (Henry Venables; Charles Ranford; Forest Fencing; Pontrilas Timber; Kronospan; ETC Sawmills) dominate Sawmilling.	The loss of one or more of these major players would represent a considerable loss of market. Short term, while management procedures are re-introduced that can raise the quality of timber output, secondary markets for residues and thinnings are likely to remain important. It will be important to continue the efforts of MWI and others in developing alternative, higher value markets for these products.
Continuing under-investment by businesses	The FRC survey (see reference above) identified evidence of under-investment by business in the sector. The survey indicated that 40% of forest industry businesses have less than £30,000 invested, and 56% have less than £75,000 invested. Only 15% of businesses have business capital of more than £500,000. Related to the above issue is the reported poor level of technology transfer and good-practice dissemination among processors of timber and derived products.	Market conditions and the structure of the industry (domination by smaller businesses) seem to be encouraging under-investment in capital employed by businesses. This trend is likely to prevent opportunities for productivity growth being realised by participants in the industry, to the longer-term detriment of profitability and employment growth.
Declining skills base and failure to recruit	A number of consultees cited the declining skills base and the poor record of the industry in recruiting skilled or semi-skilled employees and entrepreneurs. Lantra estimates that, nationally, around 36% of forestry businesses report recruitment difficulties. Also, 29% of forestry businesses report internal skills gaps within their businesses. The main skills gaps are among owner-managers (33%) and skilled staff (40%).	We have already said that one of the key challenges to determining long term competitiveness is the ability to develop, attract and retain a highly qualified workforce. The sector-development partners should consider a skills development strategy for the industry, to help overcome existing and expected skills shortages. Stronger business-education linkages may help to promote the sector as a career destination for school and college leavers. Relationships with the region's FE institutions will play an important part in this.
Excessive emphasis on amenity aspects of woodland management	A number of consultees made the point that there is a danger that an excessive focus on the amenity aspects of forestry and	This response may indicate there is a need for clearer communication on the objectives of national and regional forestry

Threats		
Strategic Issue	**Underpinning Evidence**	**Strategic Implications**
	woodland management could jeopardise the future delivery of felled-timber and its by-products.	and countryside management policy. In the medium term, the expansion of woodland cover through the National Forest and urban forest schemes should help ensure an increased supply of local timber and thinnings, as will efforts to bring a greater proportion of the farm woodland resource back into sustainable management.
Non-recognition by Advantage West Midlands	Several consultees were concerned that the identification of 10 priority clusters by Advantage West Midlands would mean that forestry and allied industries would continue to be neglected.	The purpose of this current research, clearly, is to help identify whether there is a case for additional, co-ordinated action on the part of the client group partners. However, even if at a regional level, forestry cannot be convincingly shown to merit the status of a 'cluster' in Advantage West Midlands terms, we are convinced that the sector will play an important part in the Hereford and Worcester Regeneration Zone strategy.

9. ASSESSMENT OF CLUSTER ACTIVATION POTENTIAL

9.1 This Section draws out the key messages on the potential for a forestry and woodlands industry cluster for the West Midlands and its sub-region. To reiterate, by cluster we mean:

- A regional **specialism** – where a relatively high proportion of England's employment or output is concentrated in the West Midlands; or
- A regional **critical mass** – where compared to other areas there may be no relative specialism, yet the scale of activity and the availability of other assets provides a platform for future growth.

9.2 In Section 2 (Page 6 of this document) we identified Porter's diamond, a four-way matrix for looking at clusters. According to Porter:

> *Clusters take varying forms depending on their depth and sophistication, but most include: end-product or service companies; suppliers of specialist inputs, component machinery, and services; financial institutions; and firms in related industries. Clusters can also include firms in downstream industries; producers on complementary products; specialised infrastructure providers; government agencies and other institutions providing specialist training, education, research and technical support; and standard-setting agencies. Government agencies that significantly influence a cluster can also be considered a part of it.*

9.3 The matrix emphasises the inter-relationships between:

- The business base;
- Vertical and horizontal supply-side linkages;
- Human strengths – particularly the enterprise and skills base; and
- Other assets and infrastructure, in particular the research and training base (including high and further education institutions).

9.4 In the remainder of this Section, we use this typology to help ascertain the extent to which woodland and related industries in the West Midlands can be considered as a cluster in the sense of Porter.

Size and Importance of the Business Base

9.5 We presented some information about the size and structure of the region's woodland and forestry industry in Section 3. There, we focused on both sub-sectoral activity and the extent of sub-regional specialisation. In this Section, we 'cut' similar data – obtained from interrogation of national business datasets – to obtain a slightly different slant on cluster activation potential from the point of view of the region's business base.

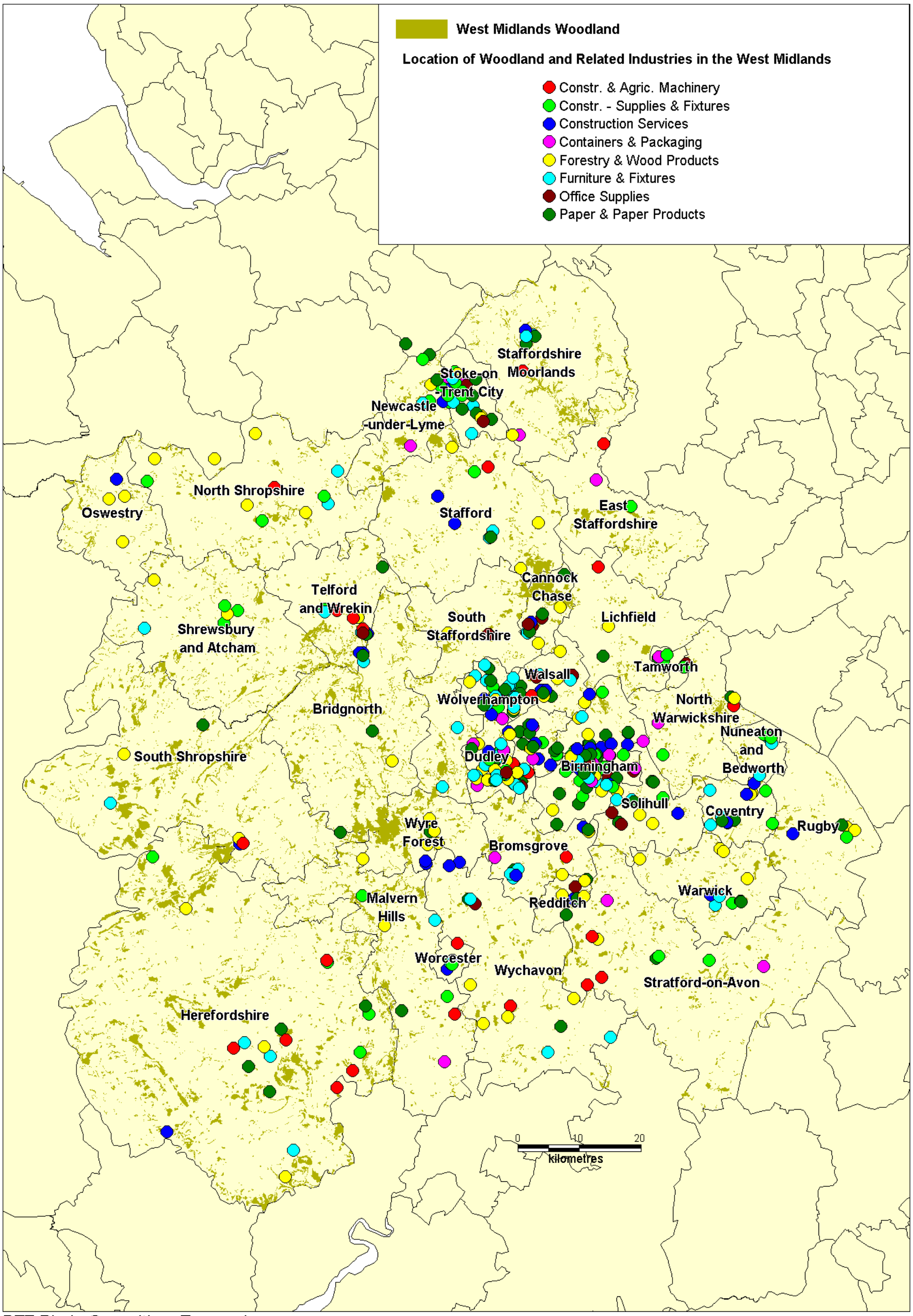
9.6 Many of the West Midland region's more obvious specialisms in forestry-related industries relate to long-standing regional specialisation in manufacturing activity that has been undertaken in the region. Broadly, we have identified ten potential sub-sectoral groupings that are relevant to the broader forestry and related industry definition we have used in this study. The sub-sectoral groupings are set out below.

9.7 It should be noted that the statistical data used in the following table is obtained from information reported by firms to Companies House, and is not necessarily directly comparable to the data reported in Section 3 that is sourced from the Annual Employment Survey (up to 1998) or the Annual Business Inquiry (since 1999). In particular, the data in the following table may not correspond to that in Table 3.3.

Embedding Woodland Industries in the West Midlands

Sub-Sector	Activities	Jobs	No. of Companies	Larger Companies	Where?
Forestry & Logging	➢ Consultancy ➢ Tree Growing ➢ Nurseries ➢ Forestry Services	32	14	n/a	n/a
Sawmilling, etc	➢ Joinery ➢ Pallets ➢ Packing Cases ➢ Fencing ➢ etc.	3,450	81	➢ Richard Burbridge ➢ Palmer Timber ➢ Forest Garden ➢ ETC Sawmills	➢ Oswestry ➢ Birmingham ➢ Worcester ➢ Ellesmere
Manufacturer of Builder's Carpentry & Joinery	➢ Joinery ➢ Turned Wood Components ➢ Wood Partitions ➢ Flooring ➢ etc.	9,824	38	➢ Manage tech	➢ Worcester
Manufacturer of Other Wood Products	➢ Pallets ➢ Coffin Manufacturers ➢ Crafts & Packing Cases	420	24	➢ Smith Brothers	➢ Oldbury
Manufacturer of Wood Products	➢ Display Units ➢ Frames ➢ Doors ➢ Wood Shavings ➢ etc.	2,003	73	➢ Olivers Pine ➢ Mintpage	➢ Walsall ➢ Birmingham
Manufacturer of Paper & Paperboard	➢ Paper ➢ Packaging Material ➢ Corrugated Paper	8,500	127	➢ David Smith Packaging ➢ First Carton ➢ Kruger Tissue	➢ Rugby ➢ Birmingham ➢ Shropshire
Manufacture of Wooden Containers	➢ Pallets ➢ Coffin Manufacturers ➢ Crafts & Packing Cases	420	24	➢ Smith Brothers	➢ Oldbury

Sub-Sector	Activities	Jobs	No. of Companies	Larger Companies	Where?
Manufacture of Forestry Machinery	➢ Chopping & Shredding Machines ➢ Timber Cutting Machines	33	2	➢ Greenwich ➢ Kayder	➢ Alcester ➢ Leek
Manufacture of Other Furniture	➢ Kitchen Cabinets ➢ Wooden Furniture ➢ Pine Furniture ➢ Office Furniture ➢ Pub/Restaurant Furniture ➢ etc.	3,903	90	➢ Mereway Limited ➢ Froyling Furniture ➢ Hostess Furniture	➢ Birmingham ➢ Stoke ➢ Bilston
Timber Merchants	➢ Joinery ➢ Turned Wood Components ➢ Wood Partitions ➢ Flooring ➢ etc.	8,755	41	➢ Jewson Limited ➢ Bison Group	➢ Coventry ➢ Tamworth
Total		**37,309**	**514**		

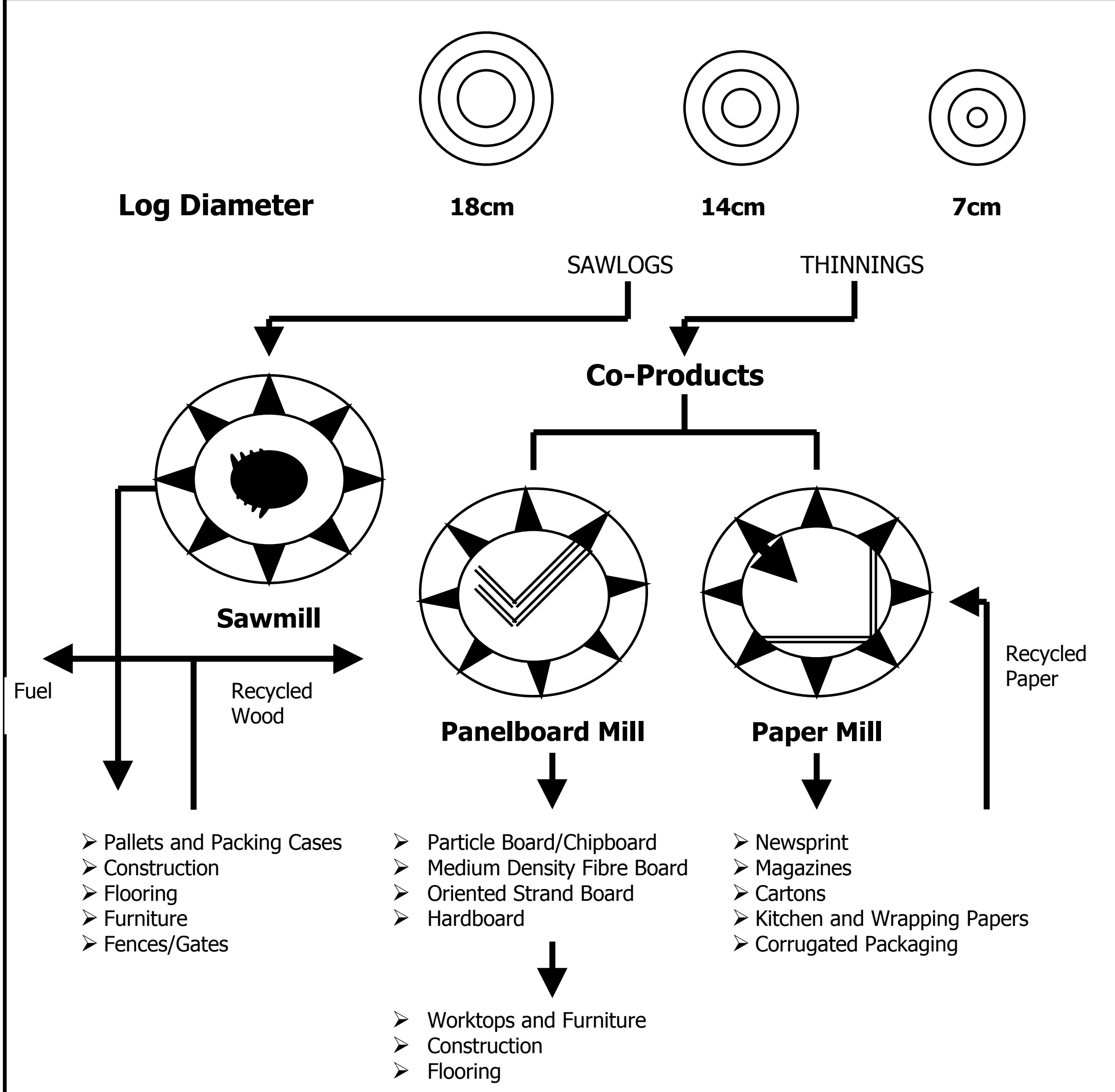


DTZ Pieda Consulting, Economics

Business Inter-relationships

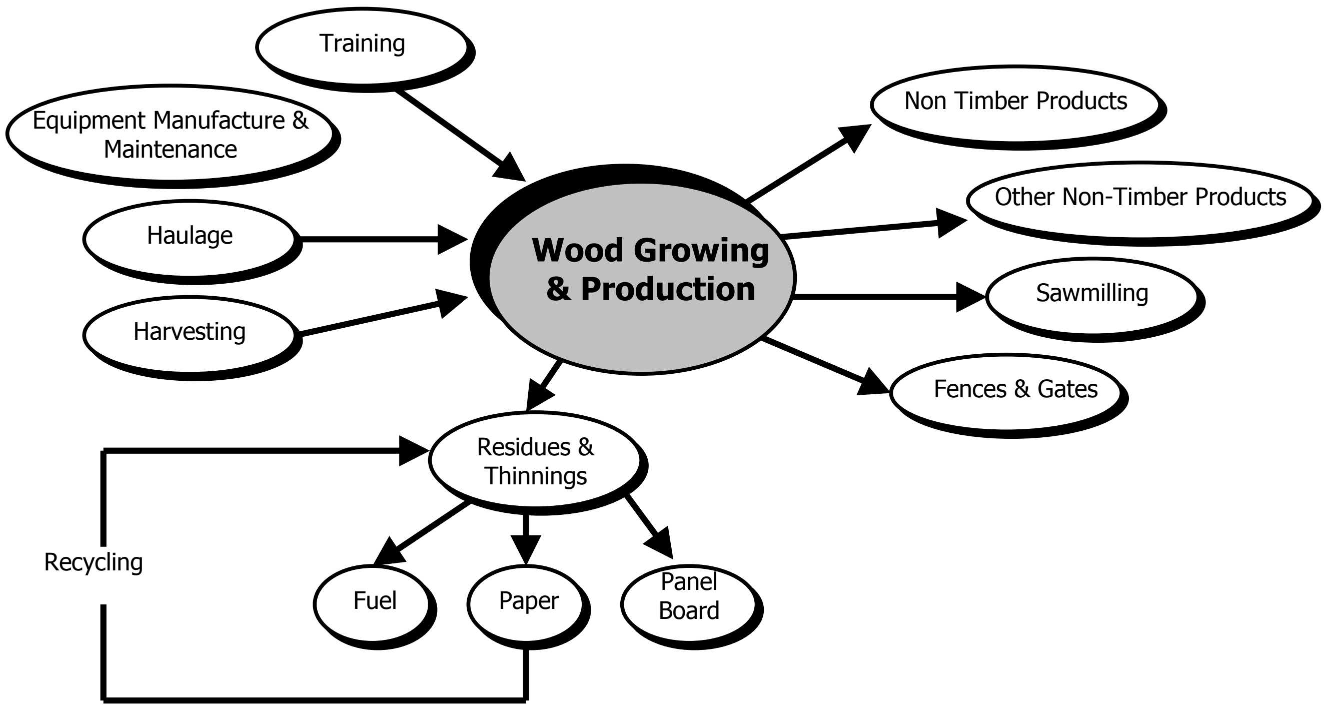
9.8 Obviously, it has to be recognised that there are considerable overlays in the sectors we have set out in the above. Just as importantly, the sectors in the industry are linked and, to a degree, inter-related. The following diagram sets out one interpretation of the sector's dynamics.

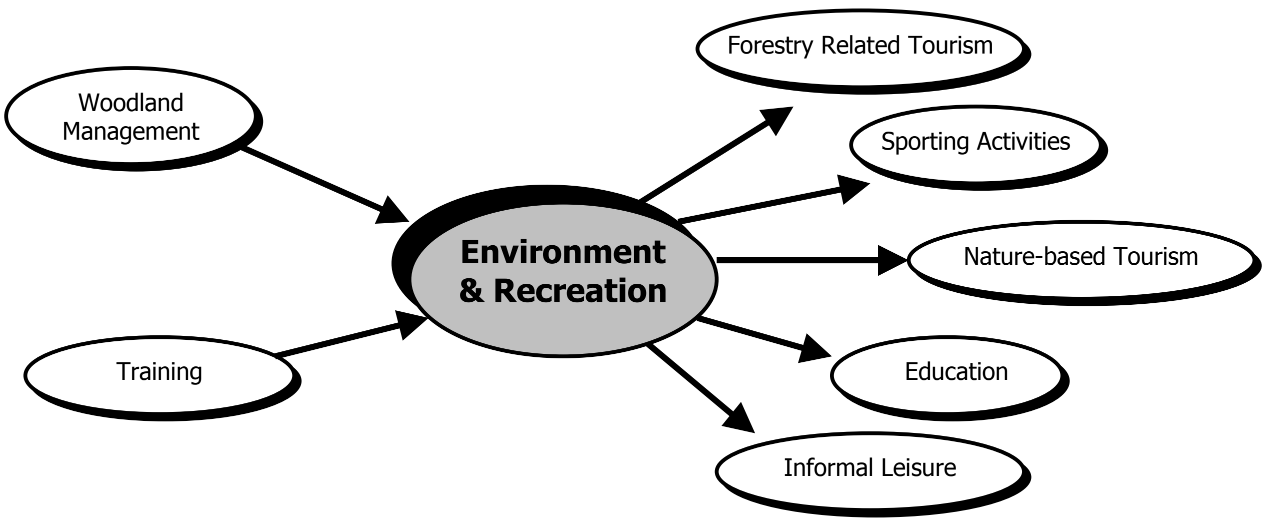
Figure 9.1
Industry Inter-Relationships

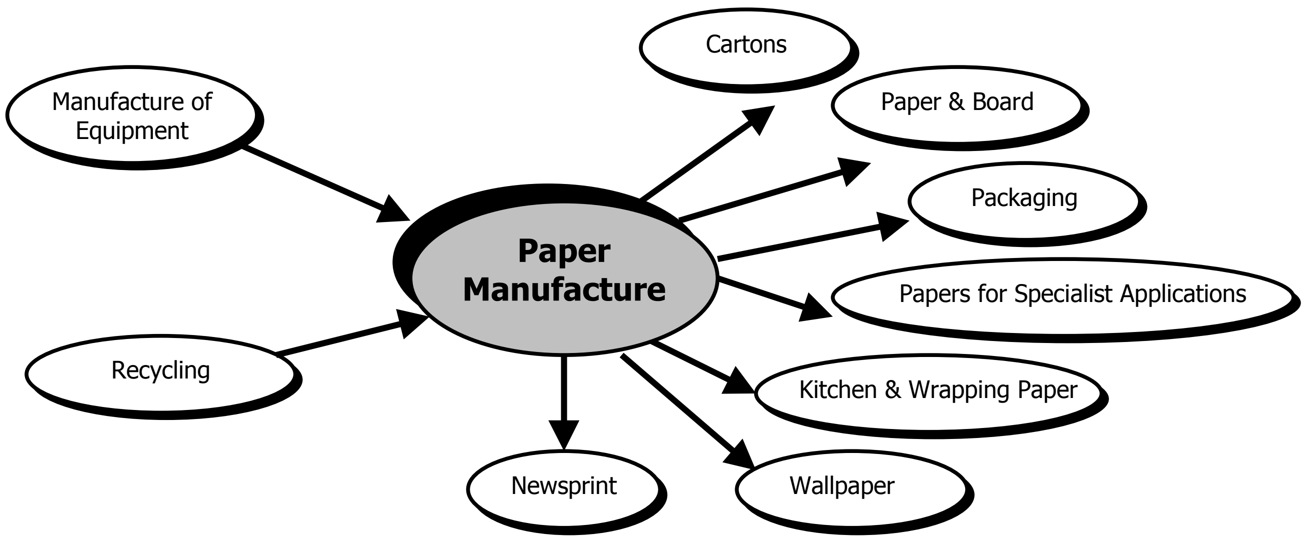


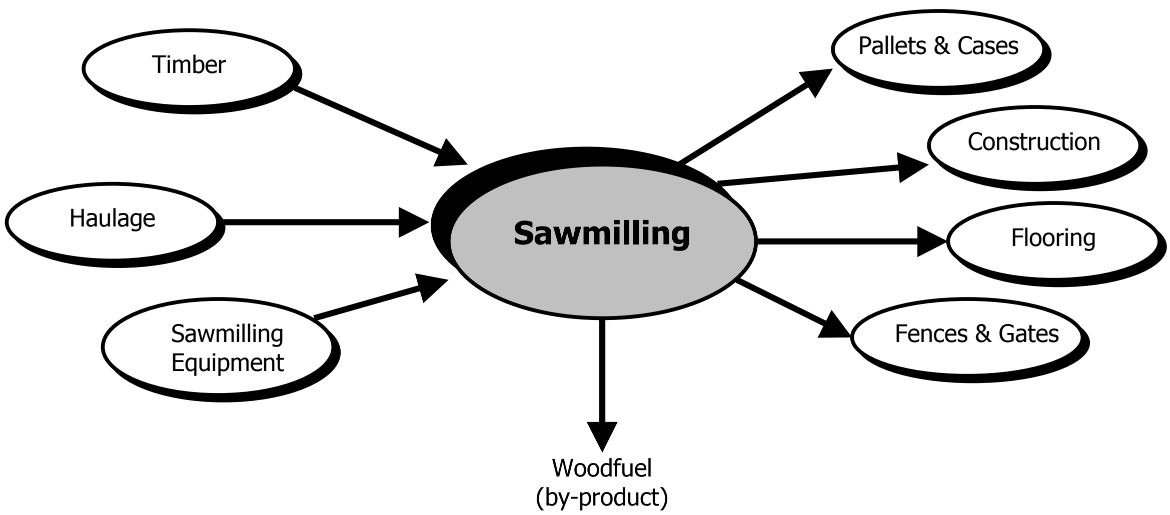
Source: FICGB

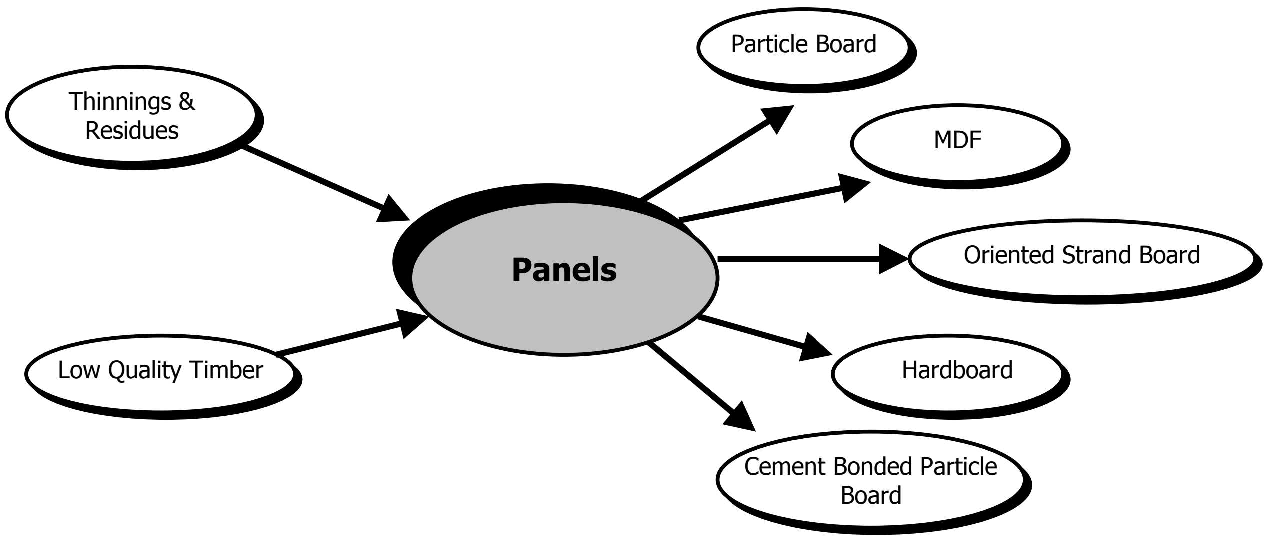
9.9 The main sub-sectoral groupings in the industry are characterised by a hierarchy of inter-relationships. We have attempted to 'map' some of these relationships in the diagrams below.

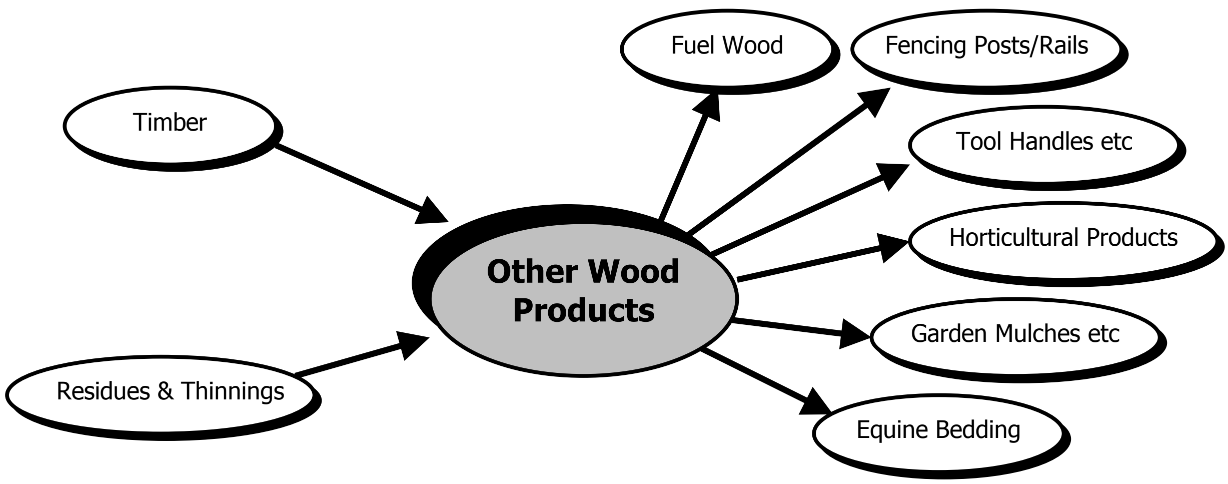





Cartons
Manufacture of Equipment
Paper & Board
Packaging
Paper Manufacture
Papers for Specialist Applications
Recycling
Kitchen & Wrapping Paper
Newsprint
Wallpaper


Pallets & Cases
Timber
Construction
Haulage
Sawmilling
Flooring
Sawmilling Equipment
Fences & Gates
Woodfuel (by-product)


Thinnings & Residues
Low Quality Timber
Panels
Particle Board
MDF
Oriented Strand Board
Hardboard
Cement Bonded Particle Board


Timber
Residues & Thinnings
Other Wood Products
Fuel Wood
Fencing Posts/Rails
Tool Handles etc
Horticultural Products
Garden Mulches etc
Equine Bedding

9.10 Unfortunately, so far we have not been able to test in any rigorous way the direction and strength of these business relationships in the West Midlands. To do so would require primary research, probably in the form of a bespoke business survey with sufficient representation among the candidate sub-sectors.

9.11 However, useful messages on part of the sector can also be obtained from the national Census of Production (latest, 1997). Two forestry-related sub-sectors are identified in the Census – 'Manufacture of Wood and Wood Products' and 'Manufacture of Pulp, Paper and Paper Products'.

9.12 For Wood Products, the Census of Production identifies that the West Midlands provides:

- 12.7% of England's employment in this sub-sector;
- 12.6% of England's net output in this sub-sector;
- 12.4% of England's gross value added in this sub-sector; and that
- Gross Value Added per West Midlands employee in the sub-sector (in 1997) stood at £21,129, which was 96.9% of the England average.

9.13 There is some implication from these figures, therefore, that production in the sub-sector is slightly 'lower value' than is the case for production in England as whole.

9.14 For the manufacture of pulp, paper and paper products, the Census of Production identifies that the West Midland provides:

- 6.1% of England's employment in this sub-sector;
- 4.7% of England's net outputs in this sub-sector;
- 4.9% of England's gross value added in this sub-sector; and that
- Gross Value Added per West Midlands employee in this sub-sector (1997) stood at £28,528, which is only 80.4% of the England average.

9.15 There certainly appears to be an implication that production in the pulp and paper sub-sector is significantly lower value than is the case for England as a whole. In fact, gross value added per head for this sector in the West Midlands is lower than for any UK region except Northern Ireland.

The Sector's Skills Base

9.16 What about concentrations of forestry and woodland industry related skills? Our assessment of the occupational breakdown for the woodland and related industry is set out below. Table 9.1 below sets out some key data for the sector.

Table 9.1
Occupational Breakdown for the Woodland Industries, 2000

Occupation	West Midlands Forestry		UK All Sectors		Occupational Quotient
	Number	%	Number	%	
Managers and Administrators	5,600	16.5%	3,948,700	16.8%	0.98
Professional Occupations	1,300	3.8%	2,637,000	11.2%	0.34
Associate professional and Technical	1,300	3.9%	2,574,500	11.0%	0.35
Clerical and Secretarial	3,100	9.2%	3,494,500	14.9%	0.62
Craft and Related	12,700	37.3%	2,545,500	10.8%	3.44
Personal & Protective	-	0.0%	2,545,500	10.8%	0.00
Sales Occupations	500	1.4%	1,990,300	8.5%	0.16
Plant and Machine Operatives	6,800	19.9%	2,006,100	8.5%	2.33
Other Occupations	2,700	8.0%	1,728,600	7.4%	1.08
Total	**34,000**	**100%**	**23,470,500**	**100%**	

Source: Labour Force Survey, 2000

9.17 Table 9.1 also provides data on the distribution of occupations for the UK economy as a whole. The "occupational quotient" is a numerical index that describes the importance of an occupational grouping for a given industry – such as forestry-related industries – relative to the economy as a whole. A figure for an occupational quotient of more than one means that the occupation is 'over-represented' compared to the overall situation for all sectors. A figure of less than one means the occupation is under-represented.

9.18 The distribution of occupations in the West Midlands forestry industry grouping is, unsurprisingly, heavily skewed towards the manual occupations. In particular, the occupational groupings 'craft and related' (37.3%) and 'plant and machine operatives' (19.9%) are very important in the region.

9.19 As can be seen from the table in the West Midlands forestry sector, only two occupational groups - accounting for a total of some 19,300 employees – have an occupational quotient significantly greater than 1.0. Clearly, the concentration of skills in occupational groups 'craft and related' and 'plant and machine operatives' is important for the region-sector grouping, in both relative and absolute terms.

9.20 There are several other messages:

- The sector is relatively under-represented in more highly paid professional and technical occupations;
- Within the 'craft and related' grouping for the West Midlands, there is a particular skew towards 'wood working trades' (3,600 persons) and 'metal machine operatives' (3,000 persons);

- Within the 'plant and machine operatives' group, there is a particular skew towards 'assemblers' and 'routine operatives'.

9.21 The National Training Organisation (NTO) with responsibility for skills development in the forestry sector is Lantra. According to Lantra[11], the main skills issues facing the forestry sector are as follows.

- The potential for long-term expansion in demand for additional labour as the UK plantation forest sector 'matures' (the annual domestic production of timber is expected to peak in 20-30 years time, and decline thereafter). This cycle will also generate additional demand for establishment and maintenance skills.

- Short-to-medium term re-skilling needs, driven by increasing mechanisation and advances in technology. Specific training needs are in harvesting operations, where there is considered to be a shortage of skilled machine operators and supervisors.

- An increasing need for formal training (with certification) driven by regulatory requirements, mechanisation, use of ICT and the need for enhanced business skills.

- Other areas of need include: contract management; job planning and costing; and knowledge of incentive systems such as woodland grant schemes.

9.22 Previously, the harvesting sector has been able to thrive despite under-investing in developing the skills of its employees. This was partly because there has been a reservoir of Forestry Commission trained staff for private industry to draw upon. But this supply will fall in lock-step with the decline in the number of Forestry Commission directly employed in this area. The sector, therefore, must start to invest more in meeting its own skills needs.

9.23 A key issue for the forest sector in the West Midlands, then, is to address the expected longer term gaps and shortages in general, technical and management skills areas. It will be important, therefore, to drive forward the delivery and development of proposed training centres to serve the forest (and other land based) sectors in the region. We are aware of at least two such proposals: at Holme Lacy college (Project Carrot); and the proposal for a training facility to be located at the Three Counties Showground, Malvern. These new assets have the potential to be crucial in any cluster activation strategy. Obviously, there facilities could also be important in developing skills that are relevant to developing further the potential of non-timber woodland activity, including countryside products, recreation and tourism.

[11] Source: *The Environmental Economy of the West Midlands*, Advantage West Midlands and the Environment Agency, 2001.

9.24 Another National Training Organisation with a key interest is the Construction Industry Training Board (CITB). Key issues for the CITB – many of which are relevant to other downstream, wood processing industries – include the following[12].

- The construction industry relies on craft skills and technicians and is not highly dependent on low-skilled workers. However, there may be a possible increase in less-skilled manual workers if pre-fabrication techniques become more widespread.
- The up-skilling that has been evident in the economy as a whole has been less pronounced in construction.
- The increasing emphasis is on modern supply chain principles and integrated production management techniques to meet more stringent customer demands and quality control.
- Managers will account for an increasing share of employment and skilled crafts a declining share.
- There is a growing need for customer-focused staff.

9.25 In engineering and manufacturing, recent research[13] has identified a number of management skill deficiencies, including:

- Professional engineers with design, development, project management and manufacturing system skills.
- Technicians and technical skills.
- People management and co-ordination skills.

9.26 In terms of 'shop floor' skills, the same research identified a trend away from traditional manual skills towards additional soft skills associated with a knowledge management economy, including:

- Team leader and motivation skills.
- Administrative, communication and manufacturing data handling skills.

[12] Source: *An assessment of skills needs in the construction and related industries*, Business Strategies Limited, 2000.
[13] Institute for Employment Research - *Employers Skill Survey: Engineering*, 2000.

- Skills in setting and achieving productivity targets and improvements

- Forward thinking and planning.

OTHER INFRASTRUCTURES RELEVANT TO THE SECTOR

HEI Research

9.27 Harper Adams University College is the higher education institution in the West Midlands that is focussed on land based research and education. Some research has been undertaken into the use of the woodland resource although the institution does not offer any courses solely focussed on woodland industries. Courses offered in countryside management include a module on forestry.

9.28 There are also a number of other HE institutions in the West Midlands that have departments specialising in the wider realm of environmental research. These are:

Institution
▪ Harper Adams University College
▪ Aston University
▪ University of Birmingham
▪ University of Coventry
▪ University of Central England
▪ Warwick University
▪ University of Wolverhampton

9.29 However, it is outside the region that the majority of research relevant to the woodland industries takes place.

Institution	
▪ Bangor University	Timber technology
▪ Abertay University	Timber technology
▪ Buckinghamshire Chilterns University College	Forest products research
▪ UMIST	Paper Science
▪ Oxford University	Post graduate research
▪ Aberdeen University	Post graduate research
▪ Edinburgh University	Post graduate research

9.30 Other national organisations involved in research which is relevant to the woodlands industries are:

Research Organisation
▪ Agroforestry Research Trust
▪ British Hardwood Improvement Programme
▪ Forestry & Arboriculture Safety and Training Council
▪ Farm Woodland Research Project
▪ TRADA

- Building Research Establishment
- Forestry Commission
- AEA Technology

FE Training Assets

9.31 Holme Lacy College is the further education college in the West Midlands specialising in providing rural training. The college offers two courses specifically tailored for individuals considering a career in forestry, a one-year BTEC first diploma in forestry, which offers both practical and technical training, and a two-year National Diploma in forestry which is more academic based.

9.32 The college also offers training to those already within the industry. This includes offering courses that will lead to certification of competence required to operate within various occupations in the industry, for example operating a chainsaw. The college works with various companies to customise courses to their needs and also works with a number of woodland associations. In addition to running short courses, the college also helps to facilitate work-based training by developing a network of training providers. Apprenticeships have been taken up through the Modern Apprenticeships scheme in sector such as forestry contractors, fencing, saw milling and arboriculture.

9.33 The college has also started to find interest from the local community in training and is delivering courses in basic business management skills to a number of local small companies, including a number of woodland industries. There are plans to develop this form of training further, delivering more training in-situ.

9.34 Project Carrot is a major £16 million project planned in partnership with the college, with the aim of establishing Europe’s leading Centre for Sustainable Agriculture and Land Management in Herefordshire. The project “is aimed at putting woodlands, people and business at the heart of a replicable regional sustainability project”and will have a woodlands dimension.

9.35 Holme Lacy College also offers courses in Land Management, as does Walford College, which has a woodland aspect to the course.

9.36 In addition to the FE colleges, there is a number of private training providers in the region. They primarily work with businesses involved in the management of the woodlands, providing tailored training courses to meet the business needs. Training includes using chainsaws, tree felling, bench courses, tree identification and managing neglected and young woodlands.

Business Networks

9.37 The following table outlines the wide range of national organisations representing businesses within the woodland industries sector.

National Organisations

- Forestry Contractors Association
- Timber Growers Association
- Forestry Industry Development Council
- Small Woods Association
- Timber Trade Federation
- British Wood Turners Association
- Arboriculture Association
- Horticultural Trade Association
- UK Forest Products
- Association of Professional Foresters
- Wood Panel Industries Association
- Woodworking Machinery Suppliers Association
- Timber packaging and Pallet Confederation
- British Christmas Tree Growers Association
- Institute of Chartered Foresters
- The Woodland Stewardship Company
- Royal Forestry Society
- Paper Federation of Great Britain

9.38 There are also several regional networking groups within the West Midlands.

Regional Organisations

- Marches Wood Energy Network
- Forest of Mercia
- Marches Woodland Initiative

9.39 An interesting message from the Phase 1 work was that there may well be extensive local business networking on the part of micro and small businesses in the woodland sector. This message came through particularly through consultations with organisations such as the Marches Woodland Initiative. Testing this consultation evidence would require a larger business survey than resources permitted during Phase 1 of the research. This may well be an area for additional investigation during Phase 2 of the research programme.

Overall Implications

9.40 In the remainder of this Section, we use the material presented so far in this report to help assess the extent to which a 'woodland industries' cluster is meaningful in the context of the West Midlands. The result of our assessment is set out below.

	Cluster Criteria	Assessment and Implications
Network of inter-firm relationships	*Demand-supply interactions*	⇨ The consultations undertaken for this study suggest that while micro-and smaller businesses have a greater tendency to use local material, for the larger businesses this is certainly not the case. ⇨ Unfortunately, we were not able to obtain much evidence on demand-supply relationships <u>between</u> local wood processing businesses or <u>between</u> local manufacturers of equipment and machinery and local wood processing industries.
	Technological spillovers	⇨ We were not able to obtain evidence on sharing of technology (product or process) in the sector. ⇨ This may be an interesting area for research as part of a larger survey of businesses in the sector.

	Cluster Criteria	Assessment and Implications
	Collaboration and co-operation	⇨ Our limited programme of consultations raises doubts about the extent of existing levels of business-led collaboration and co-operation among firms in the sector.
Other Business Characteristics	*Rate of Innovation*	⇨ Our limited programme of interviews with businesses only identified one company who had any R&D links with a higher education institution. ⇨ The other businesses interviewed displayed little evidence of an innovation culture, exemplified by low rates of investment in employee and management training.
	Constraints or barriers to competition	⇨ Consultees identified a number of barriers to business growth and expansion, but these tended to be global or national factors. ⇨ However, there was also no real indication of the emergence of regional, business-led mechanisms to enhance the competitiveness of the region's business base.
	Location of investment decisions	⇨ The industry is dominated by micro-businesses, although possibly less so than is the case in other regions. There is also a shortage of larger (200+ employee) businesses. ⇨ Interrogation of business databases suggests that there are comparatively few headquarters of nationally significant players located in the West Midlands. Exceptions include Jewsons (Coventry).
	Linkage to parent firms	⇨ We were not able to obtain evidence on internal relationships between local branches of companies important in the woodlands sector and their respective headquarters. ⇨ This may be an interesting area for research as part of a larger survey of businesses in the sector.
	Sources of finance	⇨ We are not made aware of any specialist private-sector sources of finance for businesses in the sector. ⇨ Manufacturing and other businesses potentially eligible for generic grants and soft-loans administered by the DTI, Advantage West Midlands, etc. ⇨ Woodland management and planting is underpinned by incentive schemes operated by national agencies such as the Forestry Commission and the Countryside Agency. ⇨ There may be scope to develop more specialist forms of business financial support through a cluster activation mechanism (perhaps through participation in regional venture capital funds, etc.)
Human factors	*Skills base*	⇨ There is evidence of historic under-investment in the skills of employees of firms in the industry. To an extent this is a national issue, but our consultations indicated that the problem might be particularly severe in the West Midlands. ⇨ Encouragingly, there are several proposals under development for specialist training facilities to be established in the region. ⇨ However, addressing the supply side of the market for skills is only part of the answer. Any sector development strategy must also attempt to raise the demand for skills, on the part of both employers and employees (existing and future).
	Enterprise culture	⇨ The West Midlands is below average (1.3%) in the rate of new VAT registrations in the woodland industries sector. Only London and the North West

	Cluster Criteria	Assessment and Implications
		have lower rates of entrepreneurship in the sector.
Networks of institutions	*Business, trade and employers associations*	⇨ Overall, national trade and employer associations represent the majority of businesses within the sector with many of these bodies having dedicated regional representation in the West Midlands. Consultations with some of these associations have tended to indicate that networking amongst them is fairly well established in sharp contrast to networking at the individual firm level. ⇨ However, only larger firms seem to be represented/participate in business associations such as FIDC, perhaps due to the cost associated with membership
	Education and training institutions	⇨ There are several FE colleges in the region that have a clear rural focus and Holme Lacy college in particular has a significant strength in forestry related courses. In addition to the colleges, there are a number of private sector training providers targeting the needs of the forestry sector. ⇨ Although there are a number of established HE institutions in the region, there does not appear to be a significant focus on research relevant to woodland industries.
	Government agencies and others	⇨ The government agencies consulted all have a good understanding of the factors affecting the sector and are keenly involved in the development of the woodlands. ⇨ However, one concern has been the lack of involvement from government agencies not directly involved with the woodlands, such as leisure, recreation and economic development.

10. RECOMMENDATIONS ON THE WAY FORWARD

STUDY FINDINGS AND IMPLICATIONS

10.1 The research undertaken for this study has produced a number of messages about whether it might be worthwhile to more greatly embed woodland industries in the West Midlands region. On the one hand:

- The sector is a reasonably significant employer for the West Midlands.
- Policy instruments such as the Marches Woodland Initiative are doing good work in helping bring semi-natural woodlands back under management. The Initiative is also helping to stimulate the development of local markets for higher value timber-derived products, and to encourage local businesses (including farmers and other landowners) to capture these opportunities.
- Schemes such as the National Forest and Forest of Mercia are raising the profile of woodlands in the region, and are creating local business opportunities (especially in leisure and recreation). They are also increasing the contribution of woodlands to other objectives, such as urban regeneration, enhancing health and quality of life, biodiversity, etc.
- There are proposals to create important forest industries training facilities at Holme Lacy College, Hereford, and at the Three Counties Showground, Malvern.

10.2 On the other hand:

- The region lacks obvious concentrations of activity in all except one sub-sector (the exception is the catch-all "manufacture of other wood products grouping").
- Rates of growth in the sector (size of the employment base, business turnover, etc.) appear to be no better than average, and for some indicators (the numbers of businesses in the sector) performance appears to be worse than average.
- There appears to be evidence of lower than average levels of new company formation in the sectors that make up the woodland industries grouping.
- There is also evidence that output in the sector may be, on average, lower value than is typical for the sector as a whole in England.
- The region lacks specialist research and development function that is directly relevant to woodland industries. There are however, several universities in the region (Coventry and Wolverhampton) which have a research rating of 3b for Built Environment that may be indirectly relevant.

- US experience shows that successful clusters are business-led. It is something of a concern that during consultations with businesses in the region we were not able to detect much appetite for a sector development strategy on the part of the sector's business base.

10.3 One of the key questions in the terms of reference for this study was "*to identify whether a cluster of forestry and related businesses can be identified in the West Midlands*". Based on our interpretation of Advantage West Midlands's definition of an industrial cluster (*"Clusters are defined by the common technology or end product of a group [of] companies linked through customer and supply chains and associated training, finance and research." (Agenda for Action, Spring 2001)* we **do not** consider that a woodlands related cluster exists at present in the West Midlands.

10.4 Nor have we been able to detect the existence (or imminent emergence of) a woodlands related 'micro-cluster' in any of the five main sub-regions of the West Midlands. This assessment is based on an examination of sub-region data on employment, entrepreneurship and business turnover for the sector, as well as consultations with relevant public sector agencies and business support networks.

10.5 It is possibly worth making the point that, to a large extent, the spatial concentration of woodland industries in the West Midlands has been driven far less by the drivers for 'true' clustering (such as collaboration between producers and the component parts of the supply chain). Rather, where close location among businesses within the broadly defined woodland industry sector does exist, has been driven far more by the coincidence of historical production advantages with a spatial dimension. This is especially the case for wood/timber using manufacturing industries.

10.6 However, it is also reasonably clear from the data that there is no English region that can claim a particular specialisation in the sector. And, given that virtually every regional development agency in England (and Wales and Scotland) has virtually the same list of target sectors (new media, biotechnology et al), there may be some merit in attempting to do something different in the West Midlands.

10.7 At this point, however, despite the current fashion for cluster strengthening and cluster activation among economic development agencies (not least of which is the UK Government/DTI), it is worth mentioning a cautionary note about the cluster concept. In our view, cluster activation policy has a number of inherent limitations at a regional or sub-regional level, as follows.

- There is a certain risk attached to encouraging economic over-specialisation. By seeking to "lock-in" a given sector, regions (or sub-regions) may be making themselves vulnerable to the rise of demand and/or supply-side shocks, or competition from new technologies or more successful centres of specialisation.
- Different types of cluster need different types of strategy and action to strengthen them or embed them more deeply.

- Cluster-focused strategy may do little or nothing for localities that have historically done less well (such as the identified regeneration zones in the West Midlands), and may indeed accentuate uneven development between districts and sub-regions.

- Cluster development is not the only model for regional development. In the West Midlands, the Regeneration Zone concept is equally important.

10.8 Clusters can be activated from relatively modest beginnings. This has been demonstrated, for example, for new media industries in Brighton, semi-conductors in central Scotland and biotechnology in Cambridge. However, the scope for cluster development intervention in an industry – such as the woodland and forestry related sector – that, nationally and globally, is mature and characterised by low rates of growth and new company formation, is probably quite limited.

- The fact remains that most clusters emerge independently from public sector action. Policy and intervention should, therefore, focus on strengthening and upgrading existing clusters, rather than attempting to build new ones more or less from scratch.

- To justify efforts to activate new clusters, some elements of a cluster should be able to pass a (market-based) test of fitness and potential.

10.9 The second of these points is the really crucial one. It is difficult to be sure without the benefit of sufficient data on the direction and strength of business relationships (both within and between the sub-sectors), but our suspicion is that the woodlands related sub-sectors in the West Midlands do not pass the required market test of relevance.

10.10 Given this conclusion, what (if anything) should the partners be doing about the woodland industry sector?

10.11 Our recommendation is that the woodland and forestry sector should be supported in a strategic way, but not as a target cluster as in the recently list of ten identified by Advantage West Midlands. Rather, we consider that two parallel, mutually-reinforcing approaches are appropriate.

- First, that Woodland Industries be targeted as part of a sector development strategy across the region, focusing in particular on the potential to develop micro-networks based on established and emerging groupings that have arisen from the Marches Woodland Initiative and other sub-regional and local programmes. Under this approach there would also be scope to pursue the development of closer business networks among wood-using businesses in both urban and rural parts of the region.

- Second, that a woodlands sector development strategy be given high priority as a "cross-cutting" theme within the Regeneration Zone concept that has also been identified for the region.

Developing Stronger Business Networks

10.12 The first strand is the recommendation that the development of woodland industries be taken forward as a business development objective within the region. There are two sub-strands to this thinking, set out below.

For the emerging integrated micro-groupings, especially in the Marches Woodland Initiative area:	Building on and enhancing further the emerging "micro-cluster" groupings will potentially generate a number of benefits: ⇨ Encouraging small businesses to come together, share market information and collaborate of production processes and final products; ⇨ Increased use of local sources of timber; ⇨ Developing new and niche market opportunities for existing businesses, and new market entrants; ⇨ Collaborative approaches to training and skills development issues; ⇨ Raising the profile and customer awareness of products and services deriving from West Midlands woodlands; ⇨ Provision for workspace (managed or otherwise) – such as the Whitney Sawmill project – that can act as 'incubators' for new and existing micro businesses in the woodland sector; ⇨ Disseminating information on the attributes and availability of timbers and woodland material sourced from West Midlands woodlands; and ⇨ Exploring opportunities for developing woodland craft industries and stronger links with rural tourism generally.
For networks of wood using businesses, particularly those in the more industrialised areas of the former West Midlands County and Staffordshire:	Focusing on local supply chains and business networks may require project development activity in a number of key areas. ⇨ Promoting the formation of integrated timber and timber material supply chains by raising awareness of best practice in supply chain management. ⇨ Identifying development needs of the timber-using processes and suppliers. Assisting local companies to meet the needs of major procurement programmes. ⇨ Helping purchasers to focus on their procurement processes to achieve cost and lead-time reductions, quality improvements, security in supply, and value chain enhancement and development. ⇨ Liasing with partner regional support agencies in finding firms qualified to respond to purchasing opportunities. ⇨ Promoting 'energy from wood' supply chain opportunities. ⇨ Identifying firms needing to improve their business capabilities, and sign-posting them to Business Connect and other business support organisations for assistance.

Woodland Industries as a Theme within the Regeneration Zone Concept

10.13 The second strand is the recommendation that the development of woodland industries be undertaken as a theme within Advantage West Midlands's Regeneration Zone initiative. This thinking is based on the following.

For the **urban** regeneration zones:	The further development of woodlands and forestry activity will provide substantial benefits, in terms of: ⇨ Addressing the legacy of derelict and contaminated land in the region; ⇨ Helping to change the image and perception of urban deprived locations, as places to invest, live, and visit; ⇨ As a consequence, helping to improve the rate at which the urban areas can capture (and retain) footloose investment projects; ⇨ Promote enterprise in deprived areas, by creating new opportunities for small and micro-businesses (for instance in providing leisure activities and events); ⇨ Providing significant health and quality of life benefits for local residents; ⇨ Providing venues for local educational activity (school trips etc.) ⇨ And so on.
For the **rural** regeneration zone:	The further development of woodlands and forestry activity will provide substantial benefits, in terms of: ⇨ Helping local farmers and landowners find and exploit a significant income diversification route, by adding value to an underused asset; ⇨ Encouraging greater enterprise and growth of existing businesses in forestry contracting, timber converting and the use of timber products; ⇨ Working to ensure that a greater proportion of the sub-region's timber resources are used sustainably and for higher value uses; ⇨ Encouraging innovative in forestry processes and product design; ⇨ Linking the sustainable production of timber and woodland derived goods and services with other efforts to promote the concept of 'countryside products'; ⇨ Enhancing the quality of rural landscapes and ecosystems; ⇨ Establishing greater synergy between the woodland industries and other sectors that are important to rural areas, such as tourism, by enhancing local branding. ⇨ Helping to capture a substantial inward investment project, in the form of a major forest tourism asset; ⇨ Also, helping to develop opportunities for smaller, niche market opportunities in forestry tourism and leisure; ⇨ Helping to promote the use of local timber and wood products among local wood-using businesses;

	⇨ Promoting the development of specialist forest skills development infrastructures; ⇨ Helping to create greater demand for skills among local businesses and the local workforce; ⇨ Where appropriate, establishing joint activity with forestry businesses and support networks elsewhere in the West Midlands and in other regions, especially Wales.

WHAT SHOULD BE THE NEXT STEPS?

10.14 Our main recommendation is that any further investment in time and resource by the study steering group should focus on developing the forestry and woodland sector in two respects. First, as a business network development project focusing equally on timber production and processing, as well as downstream processing. Second, as a cross-cutting theme relevant to the spatially-focused regeneration zone concept.

10.15 Such an approach, if accepted, would probably in any case share a lot of ground with a cluster activation strategy. Elements that would be similar could include an emphasis on, *inter alia*:

- Embedding businesses sub-regionally/locally;
- Business network development;
- Support for individual businesses and (would-be) entrepreneurs;
- Local innovation, including technology transfer in product and process;
- Developing (regional, sub-regional, local) institutional capacity;
- Investment in appropriate infrastructures; and
- Skills development (management, technical and generic skills).

10.16 We still consider, therefore, that a strategy to embed woodland industries in the West Midlands is still legitimate and relevant. However, we consider that the strategy should focus on enhancing business networking and the sector's relevance to the regeneration zones concept, rather than attempting to become an eleventh sector within Advantage West Midlands' cluster portfolio.

10.17 Under our proposed approach there would perhaps be less emphasis on innovation and R&D led by large firms, and the development of relationships with national and international centres of excellence in higher education.

SPECIFICATION FOR THE PHASE 2 RESEARCH PROGRAMME

10.18 A number of findings in the Phase 1 research programme have implications for the potential approach that may be undertaken as part of the second phase of the research. The main issues and implications are set out below.

Recommended Approach to Phase 2 of the Work Programme

Issue identified in Phase 1	Implication for Phase 2	Study Tasks Required
The need/opportunity to strengthen timber industry micro-networks	The successful embedding of timber industry micro-networks is a key opportunity. During Phase 2 of the research, it will be necessary to undertake more intensive consultations with network organisers and business participants than was possible during Phase 1. For example, it will be useful to undertake interviews with the participants of the Whitney Sawmill project and other examples of micro-cluster development activity carried out under the aegis of the MWI. Equally, it will be important to identify new opportunities for micro-cluster development, and to consider whether there is scope to develop an overarching 'network of micro-networks'.	⇨ Additional consultations with micro-network participants. ⇨ Identification of constraints/obstacles to further growth, and how these may be overcome ⇨ Interviews with public sector stakeholders to identify additional opportunities ⇨ Review of scope for an overarching micro-cluster mechanism ⇨ Review of funding opportunities, outcome targets, etc.
Need to develop stronger regional markets for timber and wood users' requirements	The Phase 1 research identified that more data is required on regional wood use flows and linkages, in particular on how and from where timber users' supply needs (for timber) are met. There is also a need to investigate more thoroughly where regional advantage in woodland industry might exist, and what can be done in the West Midlands to enhance this.	Investigation of this issue requires a full business survey. Key issues to be covered by the survey and other elements of the Phase 2 research programme includes: ⇨ Business procurement, particularly in terms of supply of timber material, processing machinery, etc. ⇨ Skills issues, especially in terms of management skills and entrepreneurship, but also employee skills ⇨ Identifying problems and constraints facing businesses in the supply chain (especially those that are over and above generic issues facing SMEs in most business sectors) In terms of the Action Plan it is anticipated that a number of projects will need to be identified that together can: ⇨ strengthen timber stock-holding and distribution networks; ⇨ help overcome market information shortages and gaps; ⇨ enhance the competitiveness of business at all points in the supply chain; ⇨ enhance business management skills; and ⇨ provide focused business support targeted at the needs of businesses in the supply chain.

Recommended Approach to Phase 2 of the Work Programme		
Issue identified in Phase 1	**Implication for Phase 2**	**Study Tasks Required**
Addressing information shortages in the industry	To enable market opportunities to be realised in full there is a need for a much more responsive and real-time availability of information on stock availability (supply) and customer opportunities (demand). Gaps between supply and demand continue to cause frustration and impose costs on producers and users of timber.	The Phase 2 study will need to consider a mechanism to bring together market information. In particular, on the demand and supply side of the market and to how overcome information deficiencies and reduce transaction costs. For example, a proposal for a regional wood users' extranet could be developed to provide up-to-the-minute information on the types, qualities and sought prices of available material. This might also be a highly effective means of disseminating information on marketing events, research developments, collaborative projects and other news.
The need to embed forestry-related tourism more deeply in the rural economy	Consultations with public sector stakeholders during Phase 1 identified the development of forestry-related tourism and recreation as a key strand of any future strategy. The role of Phase 2 should be to identify specific projects and actions and specify a way forward.	⇨ Additional consultations with regional agencies involved in tourism development and marketing ⇨ Identification of market opportunities and how these may be realised ⇨ Interviews with tourism businesses (as part of the wider business survey) to identify additional opportunities, and also obstacles and constraints to performance ⇨ Attention to be given in particular to business development and skills development issues, and closer linkages with the relevant publicly-funded support networks ⇨ Review of scope for mechanisms to ensure that woodland owners are able to capture the benefits of tourism development ⇨ Developing a sub-strategy to ensure that forestry-related tourism is more firmly embedded in the region ⇨ Working up project ideas into specific action plan proposals ⇨ Review of funding opportunities, outcome targets, etc.
Identifying a way forward for niche market opportunities, such as energy from wood	Phase 1 consultations and policy review identified a desire on the part of public agencies to develop 'energy from wood' as a market opportunity. The hope is that developing this market will develop higher prices for forest residues, underpinning the move towards higher value markets for better quality timber. The role of Phase 2 will be to investigate this opportunity more thoroughly.	⇨ Briefings from the public sector stakeholders on the progress with feasibility investigations in terms of bio-fuel/bio-energy proposals. ⇨ Additional consultations with industry and public sector agencies ⇨ As appropriate, working up proposals to take ideas further towards fruition.

Recommended Approach to Phase 2 of the Work Programme		
Issue identified in Phase 1	**Implication for Phase 2**	**Study Tasks Required**
Identifying a strategy for meeting the sector's skills needs	Phase 1 consultations and policy review identified a need to upgrade the technical and business management skills of supply participants. This is required so businesses can respond better to changing market needs, product and process innovation, and the need to run businesses more efficiently in a more competitive economic environment. In Phase 2, specific actions need to be identified and developed so that partners' actions can address these problems and opportunities.	⇨ Investigation of wood industries training needs as part of a comprehensive business survey (training needs analysis) ⇨ Additional consultations with training providers ⇨ Identification of constraints/obstacles to achieving further investment in skill development, and how these may be overcome ⇨ Review of funding opportunities, outcome targets, etc.
Enhancing Links with community forestry and regeneration	Phase 1 research identified community forestry and urban forestry as important areas of development. The proposed Phase 2 research programme will need to consider how such initiatives can be taken further and more deeply embedded in regional sector development and regeneration strategy.	The Regeneration Zone concept is central to this idea. The Phase 2 work programme would need to consider whether specific mechanisms are required to ensure closer integration of the woodland industry development proposals with emerging ideas for both the urban and rural Regeneration Zone concepts.
Inter-regional co-operation	Considerable woodland resources and assets lie just over the regional boundaries, especially in Wales. These factors include woodland resource, upstream and downstream supply chain capability, higher education assets and timber industry business networks. Exploiting this asset base may make faster and more effective progress in the West Midlands, especially where key gaps are filled in the West Midlands network. The Phase 2 programme needs to identify which are the most relevant opportunities, and recommend a means to deliver progress.	⇨ Consultations are required with appropriate representatives of relevant inter-regional organisations. ⇨ Examples might include: the University of Wales, Bangor and TRADA; interviews with neighbouring development agencies; interviews with business networks (such as Coed Cymru); and key wood using businesses located in neighbouring counties in the North West and Wales. ⇨ Development of recommendations regarding any specific projects or mechanisms required to foster collaborative action ⇨ Review of funding opportunities, outcome targets, etc.
How to deliver the strategy	The Phase 2 research will have to identify how the overall strategy will be delivered. Key elements will include: consideration of funding opportunities; development of performance indicators; detail of delivery structures and mechanisms, etc. It will also be necessary to identify outputs and other performance indicators that are commensurate with the scale of the potential public sector investment in the Action Plan.	A detailed Action Plan will be required, covering: ⇨ Key objectives ⇨ Partnership and administrative arrangements ⇨ The roles and responsibilities of key stakeholders ⇨ Details of main projects (include rationale; description; costs; outputs; linkages with other projects; etc.) ⇨ Financial details for the first three years of the strategy ⇨ Targets for outputs, outcomes and impacts. ⇨ Monitoring arrangements ⇨ Risks and uncertainties, and the required contingency arrangements

10.19 Given the implications set out above, the suggested research programme to take forward the strategy and action plan is set out in outline below.

Inception and Mobilisation	Study Week
⇨ **inception meeting with the client group**	1
Regeneration Zone Assessment	
⇨ consultations with regeneration partnerships	2-4
⇨ local business data assessment	2
⇨ consultations with SBS/Business Link managers, etc.	2-4
⇨ skills profiling and labour market issues	3-4
⇨ consultations with local training institutions, etc.	4
Detailed Assessment of the Business Base	
⇨ structured survey of wood industry businesses	3-5
⇨ mapping of timber industry flows – the sourcing of material by end users	6
⇨ assessment of links with economic and social objectives	7
Strategy/Vision	
⇨ developing a vision, strategic framework and objectives for the sector	8
⇨ long-list of potential programmes/activities	8-9
⇨ **workshop seminar with client group**	10
Action Plan Development	
⇨ refinement of candidate programmes and activity areas	11
⇨ project proformas	11
⇨ development of a costed business plan (2001-2004)	12
⇨ development of a longer term Strategy (2001-2010)	13
⇨ targets and performance indicators	13
⇨ implementation mechanisms and partners' roles and responsibilities	13
⇨ advice on how to promote the concept to the region's business audience	13
⇨ estimates of potential wider economic impacts	13
Final Reporting	
⇨ Action Plan document (draft)	14
⇨ **Presentation to the client group**	15
⇨ Final Action Plan (addressing client comments)	16
Launch of the Strategy/Action Plan	
⇨ **Presentation to a regional/sectoral audience**	To be agreed

10.20 We estimate that a 16-week study programme should be sufficient to undertake the required research to address these issues. It is essential that time be devoted to consulting adequately in the early stages. The business survey is strongly recommended.

APPENDIX A
BUSINESS CONSULTATIONS

List of Business Consultees

James Gwyther	-	Harvester/Contractor
Patrick Faulkner	-	Wood Manufacturer
Willie Bullough	-	Sawmiller Manufacturer
Judith Webb	-	Timber Growers Association
Roger Thomas	-	BSW Harvesting
Gordon Walsh	-	Ransfords
Troels Carlsen	-	Forest Fencing
Robin Clarke	-	Robin Clarke Furniture
Paul Maryan	-	AEA Technology
Sara Roberts	-	Forestry Contractors Association
Mike Henderson	-	St Regis
Graham Taylor	-	Pryor & Rickett Silviculture
Claire Robinson	-	NFU