

AYRSHIRE & ARRAN WOODLANDS
THEIR PRESENT & FUTURE CONTRIBUTIONS TO THE
DIVERSIFICATION OF THE RURAL ECONOMY

A REPORT TO

THE AYRSHIRE & ARRAN WOODLANDS PARTNERSHIP

JOHN CLEGG CONSULTING LTD

LAURENCE GOULD PARTNERSHIP LTD

CAWDOR FORESTRY LTD

SEPTEMBER 2006

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Abbreviations

AAWP	:	Ayrshire & Arran Woodland Partnership
ESF	:	European Social Fund
FCS	:	Forestry Commission Scotland
FES	:	Forest Enterprise Scotland
FSC	:	Forest Stewardship Council
FWPS	:	Farm Woodland Premium Scheme
IFS	:	Indicative Forestry Strategy
ILM	:	Intermediate Labour Market
LBAP	:	Local Biodiversity Action Plan
LNR	:	Local Nature Reserve
NIWT	:	National Inventory of Woods and Trees
SFGS	:	Scottish Forestry Grant Scheme
SFP	:	Single Farm Payment
SINC	:	Sites of Importance for Nature Conservation
SNH	:	Scottish Natural Heritage
SSSI	:	Site of Special Scientific Interest
UKWAS	:	UK Woodland Assurance Scheme
WIAT	:	Woodlands In and Around Towns

AYRSHIRE & ARRAN WOODLANDS

THEIR PRESENT & FUTURE CONTRIBUTIONS TO THE DIVERSIFICATION OF THE RURAL ECONOMY

Executive Summary

1. Ayrshire's rural areas are a key economic asset and appear to offer significant potential to sustain and encourage rural business development and diversification. Improving rural Ayrshire's economic performance will be vital to improving the performance of Ayrshire's economy as a whole. Woodlands and trees cover some 21% of the land area of Ayrshire and Arran and are therefore a potentially significant part of Ayrshire's rural economy.

2. The Ayrshire & Arran Woodland Strategy was published in 2003 and in the same year the Ayrshire & Arran Woodland Partnership was formed. In 2005 the Partnership recognised that the economies of rural Ayrshire & Arran were facing a period of significant change and they also wanted to identify further practical ways in which the strategy could be advanced towards the delivery of the Strategy's vision. They therefore appointed a team, led by John Clegg Consulting Ltd, to undertake a study to identify: *how Ayrshire's woodlands and forest industry individually, or in combination with other key sectors offering potential for economic diversification – agriculture, tourism, leisure & recreation; renewable energy & services – could maximise their contribution to diversifying the economy and supporting sustainable rural development.*

3. The report looks at the structure of the rural economy, the Structure & Local Plans, and Planning Guidance provided by the Scottish Executive, and the area, location, species composition, age and ownership of the existing woodlands as they determine the contributions that woodlands and the forest industry in Ayrshire and Arran can, and do, make to the economy. If some 20% of the revenue generated, and 20% of the jobs provided by tourism are attributed to the wooded landscape through enhancing the visitor experience, then woodlands are indirectly contributing an additional £56 million per annum and 2,300 jobs to the Ayrshire and Arran economy.

4. Detailed information is given about the species composition of the 76,491 ha woods in Ayrshire & on Arran, their geographical distribution and ownership, and this is supported by maps. The age structure of the woods and their location in relation to conservation and planning designations are also examined. Based on this information it is concluded that the contributions that woodlands can make to the rural economy can be divided into three broad categories relating to:

- Existing Coniferous Woodlands
- Existing Broadleaved Woodlands
- Creation of New Woodlands

5. **Existing Coniferous Woodlands.** Ayrshire's and Arran's coniferous woods, which are in excess of 36,000 ha, already help to sustain the existing forest industry which alone provides employment for approximately 665 people and has a combined annual turnover of approximately £200 million. In addition there are at least a further 200 jobs supported in the management of woodlands. The total revenue presently generated from wood processing in Ayrshire & Arran is similar to that generated by the tourism sector. Four ways in which the existing coniferous woodlands can help to diversify the rural economy are identified and evaluated and these are by:

- Raising the impact of the existing management & harvesting operations
- Adding value to forest products

- Adding value to tourism & recreation activities
- Developing new markets for roundwood, particularly the wood energy market

6. **Existing Broadleaved Woodlands.** Pure broadleaved woods in excess of 2 ha only total about 3,600 ha and therefore their direct economic contributions are very small. Some broadleaves occur in mixtures with conifers. All these woods along with hedgerow trees make significant social and environmental contributions. Four ways in which the existing broadleaved woodlands can help to diversify the rural economy are identified, and their potential economic contributions evaluated, and these are by:

- Developing new wood markets
- Supplying a wood energy market
- Developing non-timber forest products
- Contributing to farm business diversification

7. **Establishing New Woodlands.** Some 1,650 ha of new woods were created between 2004 and 2006 with the support of grant schemes administered by SEERAD and Forestry Commission Scotland. Four opportunities have been identified where the creation of woods could contribute to the rural economy and they are in the following situations:

- Changing agricultural land use
- Diversifying farm businesses
- Improving towns & communities
- Restoring opencast mining sites & derelict land

8. Based on the information collected during the interview programme, ten reasons were identified as to why the contributions of the woodlands and the forest industry had not been greater. These can be broadly identified as falling into the following categories: a lack of information; lack of skills; no local exemplar projects in the case of wood energy; and complexity in the institutional support network and partnership working.

9. Seven potential projects have been identified:

- Southern Ayrshire recreational development project
- Encourage development of a wood fired energy plant on Arran
- Whitelee Visitor Centre
- Survey the broadleaved woodland resource
- Development of exemplar wood fired energy schemes
- Investigate the viability of setting up hardwood businesses that add value to hardwood sawn timber
- Further improvements to the environment around towns & communities

10. Specific actions suggested to overcome constraints are: the development of a leaflet identifying woodland diversification opportunities; North & East Ayrshire Councils adopt policies that support the evaluation of using wood fired boilers in public buildings similar to South Ayrshire Council; the identification of a local market development adviser in FCS; improved GIS data on footpaths & cycleways and designed landscapes, and additional work on identifying and developing the forest industry skills base in Ayrshire & Arran.

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September 2006

1. INTRODUCTION

1.1. Ayrshire's rural areas are a key economic asset and appear to offer significant potential to sustain and encourage rural business development and diversification. Improving rural Ayrshire's economic performance will be vital to improving the performance of Ayrshire's economy as a whole. Woodlands and trees cover some 21% of the land area of Ayrshire and Arran and are therefore a potentially significant part of Ayrshire's rural economy as can be seen by map 1.1 on the next page.

1.2. The Ayrshire Joint Structure Plan called "Growing a Sustainable Ayrshire" published in 2006 recognises the importance of the environment and that woodlands and trees are natural assets that make visually very important contributions to the landscape both in the rural and urban areas. They provide a backdrop to many of the economic activities that take place in Ayrshire and on Arran.

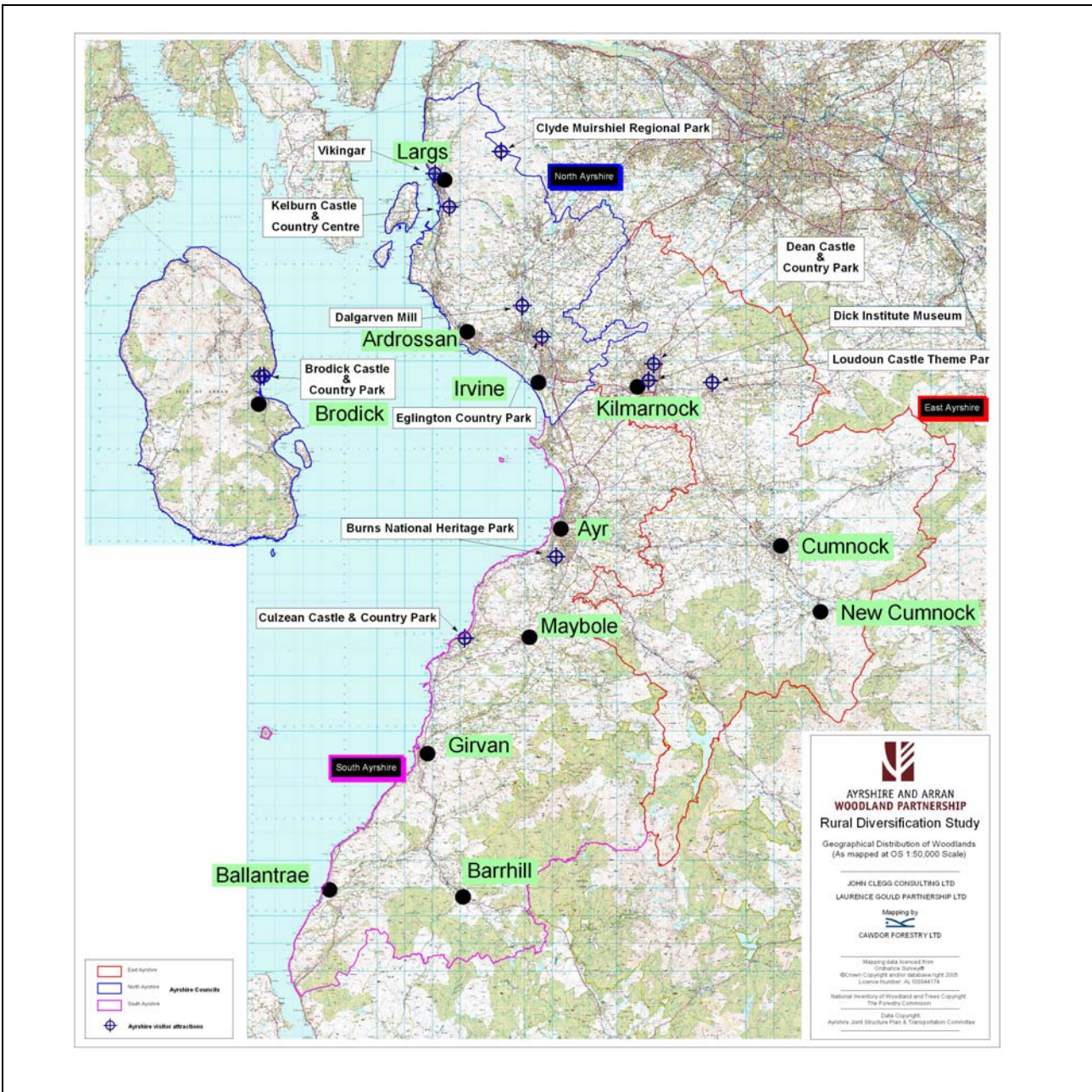
1.3. The diverse range of the economic, social and environmental contributions that woodlands can, and do make in both rural and urban areas is being increasingly recognised. Some of the most potentially significant ones are shown below, although they tend not to be widely appreciated yet because their impacts are often indirect, relatively small scale or do not have a market value:

- Access & Recreation
- Biodiversity
- Landscape & Amenity
- Water & Flood Control
- Economic Regeneration
- Carbon Sequestration
- Education
- Shooting
- Health
- Renewable Energy
- Rural Development
- Timber Production
- Sustainability
- Reducing Social Exclusion
- Mental Well Being
- Improving Air Quality

1.4. There is also an established wood processing industry in Ayrshire which draws much, but not all, of its log supplies from Ayrshire's woodlands. Additional supplies of coniferous logs are brought in from other parts of Scotland and therefore Ayrshire benefits from the value added to this material which is grown outside the region. There are three companies which have modern, internationally competitive, wood processing plants in Ayrshire, as well as a number of small family owned sawmilling businesses. Most have some value adding capacity.

1.5. The publication of "Forests for Scotland: The Scottish Forestry Strategy" by the Scottish Executive and "Roots for Growth: A Strategic Framework for Action for the Scottish Forest Industries" by Scottish Enterprise in 2000 led to the establishment of a joint working party called the Ayrshire & Arran Woodland Strategy Steering Group. The Group was formed to consider how future investment in woodland planting could be directed to secure the greatest economic, environmental and social benefit. Their report was published in 2003 and is called the "Ayrshire & Arran Woodland Strategy".

Map 1.1 Geographical Distribution of Ayrshire's & Arran's Woodlands as Depicted on an OS Map at 1:50,000 Scale



1.6. The Ayrshire & Arran Woodland Strategy has the following vision:

“To develop the woodland of Ayrshire & Arran as a model of integrated and sustainable use of land that supports the local economy, contributes to community well-being and promotes environmental excellence.”

1.7. The Ayrshire & Arran Woodland Partnership was subsequently established in 2003 to deliver the strategy. In 2005 the Partnership recognised that the economies of rural Ayrshire & Arran were facing a period of significant change and they also wanted to identify further practical ways in which the strategy could be advanced towards the delivery of the Strategy’s vision. They therefore commissioned this study with the overall aim of identifying:

“How Ayrshire’s woodlands and forest industry individually, or in combination with other key sectors offering potential for economic diversification – agriculture, tourism, leisure & recreation; renewable energy & services – could maximise their contribution to diversifying the economy and supporting sustainable rural development?”

Further background to the study; the detailed terms of reference and the methodology that has been used in undertaking this study are all given in Annex A.

1.8. We have met and benefited from discussions about the rural diversification opportunities offered by woodlands and the forest industry with staff from the three Councils. However this report covers the whole of Ayrshire and Arran without specifically analysing the situation in the three Council areas separately. This is in line with the approach taken with the Woodland Strategy.

1.9. The study’s aims have meant that it has focused solely on identifying the economic contributions that woodlands and the forest industry can make to the rural economies of Ayrshire & Arran both vertically along the wood supply chain and horizontally through links with other sectors. It has therefore not tried to identify or evaluate any of the existing or potential social and environmental contributions that the woodlands and trees make. These are potentially significant and are identified in paragraph 1.1.

ACKNOWLEDGEMENTS

1.10. The assignment team would like to thank and acknowledge the numerous people who we talked to while undertaking this study and for the very helpful information and advice they have all given us. A full list of all the people is provided in Annex B.

1.11. We would also like to specifically thank the members of the Steering Group for their help and especially the project manager, Niall Finnie, for his support throughout the course of the study.

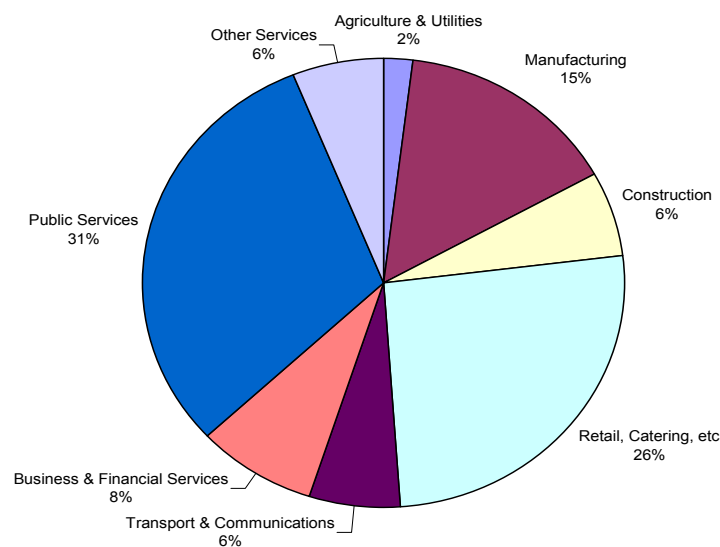
2. FRAMEWORK FOR WOODLAND DIVERSIFICATION

2.1. The contributions that woodlands and the forest industry in Ayrshire and Arran can, and do, make to the economy are determined by the structure of the rural economy, the Structure & Local Plans, and Planning Guidance provided by the Scottish Executive, and by the area, location, species composition, age and ownership of the woodlands themselves. This section therefore looks briefly at the economy of Ayrshire and Arran, at the planning environment, and at the region's woodlands so as to provide a framework and basis for identifying what the diversification opportunities are for woodlands in the following sections.

AYRSHIRE & ARRAN'S ECONOMY

2.2. Ayrshire & Arran have a total population of slightly in excess of 367,000 and 60% of them live in the area between Kilmarnock, Ayr and Irvine. This leaves approximately 146,800 living in the small towns and rural areas in the rest of Ayrshire. An overall snap shot of Ayrshire's economy can be obtained from an analysis of sectoral employment in 2003 given in Chart 1.

Chart 1: Breakdown of Employment in Ayrshire in 2003



Source: Scottish Enterprise Ayrshire, 2006

2.3. Manufacturing accounts for the largest number of jobs in the private sector in Ayrshire. Tourism is not identified as a specific sector in Chart 1 as it falls across a number of sectors, but it is the next highest source of employment and is perceived as a particular growth opportunity with some 11,500 people employed in it in 2003 which represents about 9% of the work force.

2.4. The main focus of the tourist industry promotion in Ayrshire at present is golf, Burns and the Ayrshire coast line. It is estimated that tourism generated £284 million for the Ayrshire economy in 2003 (Scottish Enterprise, 2006). It could be argued that woodlands make a major contribution to the tourist industry by providing a backdrop to the positive visitor experience of visiting Ayrshire and Arran. If some 20% of the revenue generated, and

20% of the jobs provided by tourism are attributed to the wooded landscape then woodlands are indirectly contributing £56 million per annum and 2,300 jobs to the Ayrshire and Arran economy.

2.5. Visit Scotland also has a generic market promotion theme for Scotland relating to the outdoors and walking and there is a developing network of cycle ways and footpaths throughout Ayrshire and Arran. In 2003 17% of the holiday trips to Ayrshire & Arran involved field / nature study and 33% involved a walk of more than 2 miles, whereas the percentage involving golf was only 11% (Visit Scotland, 2006).

2.6. The rural (non-urban) land area may be broadly defined as occupying some 75% or more of the land area of Ayrshire and therefore what happens to it is of significant importance to the growth and sustainability of Ayrshire's economy. Agriculture is a major activity in Ayrshire's rural areas but employment accounts for only about 2% of the jobs in Ayrshire [Nomis 1991 Population Census]. The SEERAD 2005 June Census figures identified that there were 2,746 agricultural holdings in Ayrshire (947 < 10Ha) with some 1,613 occupiers in 2005. The average area per occupier was given as 145.0 hectares which gives a total agricultural area of some 233,903 hectares (including 7,616Ha of mapped woodland). By comparison woodlands over 2 ha occupy some 76,490 ha. In Ayrshire, there were some 1,021 full time jobs created by farming in 2005, with a further 704 part time and casual positions, This is alongside the 2,530 occupiers and spouses employed either full or part time on their own holding.

2.7. The opening of the M77 has made it very easy to reach Ayrshire from Glasgow. As a result an increasing number of people are looking to buy a house in Ayrshire and commute to Glasgow as house prices have been much lower in Ayrshire. This has prompted a demand for land for housing or for farm buildings that can be converted.

2.8. The rural economic base, and particularly agriculture, is undergoing a period of considerable change and it is therefore essential strategically that rural areas increase their capacity to adjust to, accommodate and exploit this change while protecting and enhancing the environmental quality which will increasingly underpin future economic development. This will be essential if local benefits in the form of new and higher quality jobs and additional sources of income are to be created to underpin the sustainable regeneration of rural communities.

2.9. While many traditional rural activities, primarily in agriculture and forestry, will continue to develop and diversify, adding value locally to their outputs, many new business opportunities are expected to be either in the service sector, such as tourism, or have an increasing knowledge content. Although these activities could be accommodated with limited visual impact, there are likely to be benefits from locating within those settlements that are already providing services and where accessibility and opportunities for linkage and shared infrastructure and other support services are highest.

THE PLANNING FRAMEWORK

2.10. The Local Plans for North, East and South Ayrshire recognise the importance of the rural areas as does the Ayrshire Structure Plan. North Ayrshire Local Plan identifies these areas as 'Countryside' and is supportive of proposals that are likely to result in sustainable economic development. The East Ayrshire Local Plan divides the rural area into two: defining the northern part as an area for 'Rural Protection' and the southern part as a 'Rural Diversification' Zone. A similar approach is taken by South Ayrshire Council in their Local Plan. The existing

Local Plans are therefore broadly supportive of rural diversification. The East Ayrshire Local Plan is currently being reviewed and a draft will be put out for public consultation shortly. The review includes looking at existing planning policies and designations relating to sustainable rural economic development.

2.11. The Scottish Executive is keen to encourage sustainable diversification of Scotland's rural economy and they have issued the following relevant planning documents:

- SPP2 Economic Development
- SPP15 Planning for Rural Development
- PAN 72 Housing in the Countryside
- PAN 73 Rural Diversification
- NPPG 14 Natural Heritage

2.12. While the implications of some of these documents are not all expressed in the Local Plans yet, and no local formal public consultations on the implications of SPP 15, PAN 72 and PAN 73 have yet taken place, they provide a positive framework for rural diversification and for increasing the contributions that woodlands and the forest industry make to the rural economy of Ayrshire and Arran.

AYRSHIRE & ARRAN'S WOODLANDS

2.13. There are an estimated 76,491 hectares of woodlands with individual woodland areas in excess of 0.25ha according to the 2002 National Inventory of Woodlands and Trees which is based on 1988/89 monochrome aerial photographs. Since 2002 there has been a small amount of additional planting amounting to approximately 2,000 ha of which 1,600 ha were planted between January 2000 and March 2006. The breakdown of the woodland area in 2002 between Ayrshire & Arran was as follows:

Ayrshire: 65,660 ha

Arran: 10,831 ha

GEOGRAPHICAL DISTRIBUTION OF WOODLANDS

2.14. The geographical distribution of woodlands in Ayrshire, and on Arran, with areas of 0.25ha and larger, based on National Inventory of Woodlands and Trees information is shown on Map 2.1 on the next page.

2.15. The map shows that the majority of the coniferous woodlands are in the south and east of Ayrshire and Arran and they often adjoin one another to form contiguous woodlands. The broadleaved woodlands are very small and are scattered through much of the rest of the region. This distribution reflects to a large extent the suitability of the prevailing site conditions for the two different types of woodlands. Both types of woodlands make very important contributions to the landscapes in their areas.

SPECIES COMPOSITION

2.16. The species composition of the woods in Ayrshire & on Arran, based on information collected during the National Inventory of Woods and Trees, is shown in table 2.1.

Table 2.1 Species Composition of Woodlands in Ayrshire & on Arran

Description	Ayrshire (ha)	Arran (ha)
Broadleaved Woods	2,810	773
Coniferous Woods	29,427	6,355
Mixed Species Woods	3,756	309
Other	29,667	3,394
Total	65,660	10,831

Source: NIWT, 2002

2.17. The "Other" category for both Ayrshire and Arran includes: felled areas (1,306 ha), ground prepared for planting (8,311ha), native woodlands (1,134 ha), shrub (497 ha), and young trees (21,813 ha). As this information was originally taken from 1988/89 aerial photos much will have changed since then.

2.18. There is almost no information about the broadleaved woodlands other than their location (Map 2.1) and ownership (Map 2.2).

AGE OF WOODS

2.19. No analysis of the age structure of the woodlands in Ayrshire and on Arran has been carried out because the data is not very readily available, particularly for woods that are not managed by Forestry Commission Scotland. Most of the larger scale commercial coniferous woodlands were planted prior to 1988 and therefore they are mainly semi-mature or mature and will be at or near the roundwood production phase. Some will have been felled and re-stocked.

2.20. The broadleaved woodlands, which occur on farms and estates, or form policy woodlands, are mainly mature or over-mature. The quality or form of the trees is usually relatively poor from a commercial point of view due to lack of management and many owners' interest in meeting non-commercial objectives.

WOODLAND OWNERSHIP

2.21. Information on the ownership of the woodlands in Ayrshire and on Arran can be obtained from the National Inventory of Woods and Trees. This has been summarised in table 2.2.

Table 2.2 Woodland Ownership in Ayrshire & on Arran

	Forest Enterprise Managed Land (ha)	Land in Other Ownerships (ha)	Total Area (ha)
Ayrshire	31,360 (47.8%)	34,300 (52.2%)	65,660
Arran	8,131(75.1%)	2,700 (24.9%)	10,831
Total	39,491	37,000	76,491
	51.6%	48.4%	100.0%

Source: NIWT, 2002

2.22. The data in the table shows that the area of woodlands in Ayrshire managed by Forestry Commission Scotland is very similar in area to the woodlands in 'Other' ownerships, while on Arran Forestry Commission Scotland manages almost 75% of all the woodlands on the island. Although the area totals are very similar, the major difference is that Forestry Commission Scotland is a single organisation, but within the 'Other' category there are a multitude of different owners with a variety of different management objectives.

2.23. Forestry Commission Scotland also own a significant area of open hill ground within the Galloway Forest Park and on Arran which they are active in managing and map 2.2 shows the distribution of the woodlands and land managed by Forestry Commission Scotland, and the woodlands in the 'Other' ownership category.

2.24. The map shows that the majority of the woodlands managed by Forestry Commission Scotland are in the southern part of Ayrshire and part of this area, known as Carrick Forest, is designated by Forestry Commission Scotland as being in the Galloway Forest Park. Woodland areas in 'Other' ownerships are spread throughout Ayrshire & Arran.

2.25. The sustainable management of many of the woodlands in the private sector depends on this remaining financially viable. Over the last 5 to 10 years the price of standing coniferous trees has almost halved which has made the management of many woods only marginally viable.

DESIGNATIONS

2.26. There are a number of important planning designations (SACs, SSSIs and SPAs) relating to conservation and the landscape and these are shown on map 2.3 on the page after next.

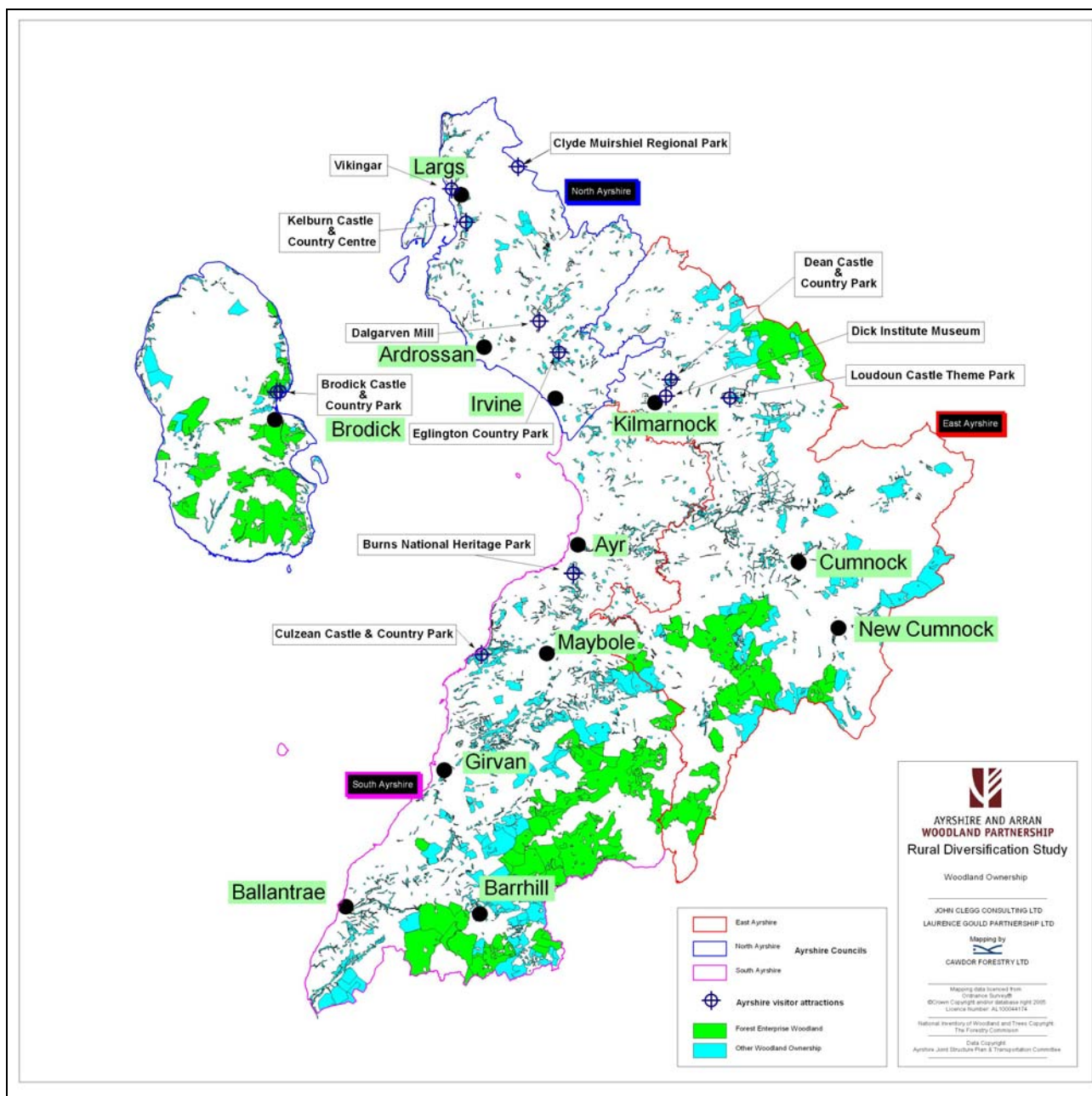
2.27. Woodlands do not presently fall directly within any of the statutory planning designations, although some do adjoin them.

2.28. Woodlands form an important part of the landscape for those living in and visiting Ayrshire and Arran. In northern Ayrshire where there are less trees than in some other parts of the region, woodlands are mainly found along the coastline where many people spend their holidays.

2.29. The woodlands in the grounds of a number of estates, county houses and castles are recognised as being of particular significance to the unique landscape character of Ayrshire. These have traditionally been known as 'Policy' woodlands, but are more widely defined as woodland areas within 'Designed' landscapes. Many of these originated in the 18th century,

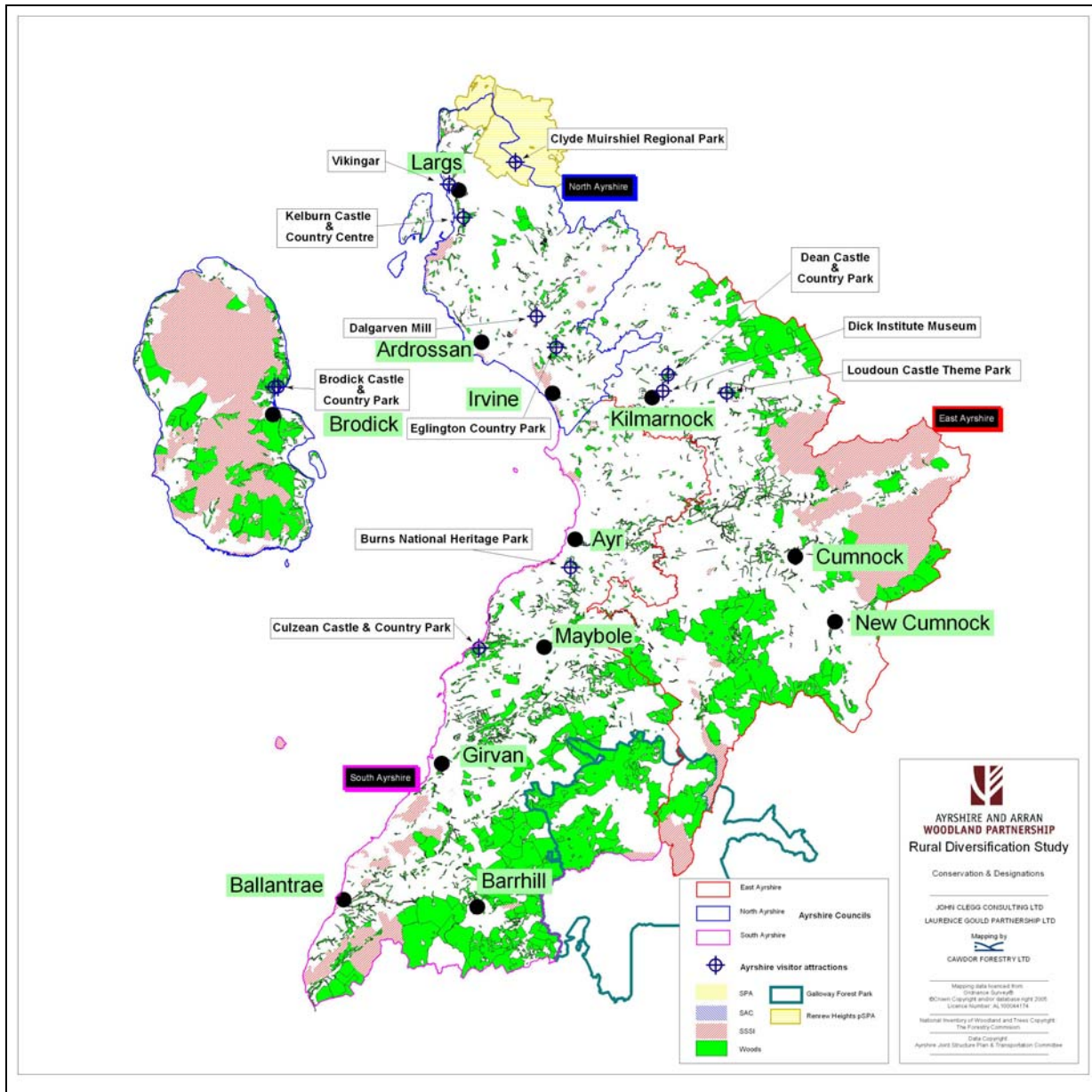
but have since suffered from changes in ownership; lack of management; and encroachment from developments and have thus become degraded. Some of these woodlands form an important part of the visitor experience for those visiting Ayrshire's top ten visitor attractions, but others, which may be of significant heritage value, are in need of positive management and financial support if they are to be maintained for the benefit of future generations. Further work is needed to identify, map and assess these areas so that a conservation and management strategy can be prepared for them as this will help to support the tourism industry in Ayrshire & on Arran.

Map 2.2 Geographical Distributions of Land & Woods Managed by Forestry Commission Scotland & Woods in the 'Other' Ownerships



Source: National Inventory of Woodlands & Trees, 2002 based on 1988 aerial photos

Map 2.3 Conservation & Landscape Designations Covering Rural Ayrshire & Arran



Source: Ayrshire Joint Structure Plan & Transportation Committee, 2006

ACCESS & RECREATION

2.30. External access to woodlands, and internal roads and rides, have always been important for commercial timber management and harvesting operations. More recently there has been increasing interest from the public in visiting woodlands as they have more leisure time, a greater interest in the environment and see the health benefits of regular outdoor activities such as walking, horse riding, and mountain biking.

2.31. Ayrshire has a number of National Cycle Network (NCN) routes and major paths such as the recently opened River Ayr Way, the Doon Valley Network, the Irvine Valley Trail and the proposed Carrick Way. There are in addition a large number of more local walks and trails

within Ayrshire and on Arran. A significant amount of work has also been done on developing and linking cycle routes from urban areas to the national network and there is potential for linking these cycle routes to the major forest areas at Carrick & Kyle and Whitelees.

2.32. The Galloway Forest Park, which covers about 70,000 ha and includes the Carrick & Kyle Forests, has, for example, 40 formal way-marked walks, 20km of mountain bike trails, 3 visitor centres and 180 km of cycle routes and has about 800,000 visitors a year. Forestry Commission Scotland has plans to double the number of visitors over the next 9 years and to focus some of the future developments in the North of the Park.

2.33. The three Ayrshire Councils are presently working on establishing Core Path Plans in association with SNH and the Paths for All Partnership. In addition there are plans for developing an Ayrshire coastal footpath. It will be important for forest managers to be involved in the discussions and planning of the core path plans wherever possible to maximise the linkage opportunities.

2.34. The importance of the main strategic paths is that it is in the areas surrounding them that there is the greatest potential for rural economic development as these are likely to attract the most visitors and therefore there should be opportunities for tourist related developments such as B & B and other farm diversification businesses. At present the existing core paths have not yet been digitised for the whole of Ayrshire so it is not possible to obtain a strategic overview of the ones that presently exist and to identify potential links and establish develop priorities for new paths. Digitisation of the paths will be addressed by North & East Ayrshire Councils through the core path planning process and the Outdoor Access Toolkit. However complete digitisation of all the core paths in Ayrshire is unlikely to be completed until 2008. This could merit some greater priority as it would help farmers and landowners to explore the opportunities for diversifying their businesses.

3. STRATEGY FOR EVALUATING ECONOMIC DEVELOPMENT OPPORTUNITIES

3.1. This section sets out the approach taken for identifying and evaluating the woodland and forest industry diversification opportunities in Ayrshire & Arran and the criteria that have been used for evaluating them.

3.2. Defining what constitutes the rural economy; woodlands and the forest industry is potentially of importance in analysing the opportunities, but in order to try and identify all the possible options all three terms have been very broadly interpreted for the purposes of this report. Although the two major wood processing plants and the major sawmill are dependent on roundwood from rural areas, the plants are located in areas that can probably be best described as urban rather than rural. In the case of woodlands and wood products these have been broadly defined to include such things as woodland crafts, furniture making, arboriculture, fencing and footpath construction and maintenance as well as more conventional activities such as timber harvesting and wood processing.

ANALYSING THE POTENTIAL CONTRIBUTIONS OF WOODLANDS & THE FOREST INDUSTRY

3.3. The potential diversification opportunities arise either directly or indirectly from the existing woodlands or through the creation of new ones. One of the most important

determining factors of what the opportunities are for the existing woodlands is their species composition i.e. whether they are coniferous or predominantly coniferous, or whether they are broadleaved or predominantly broadleaved. The species composition of the woodlands also shapes the wood utilisation opportunities up the wood chain and the horizontal linkages with other sectors.

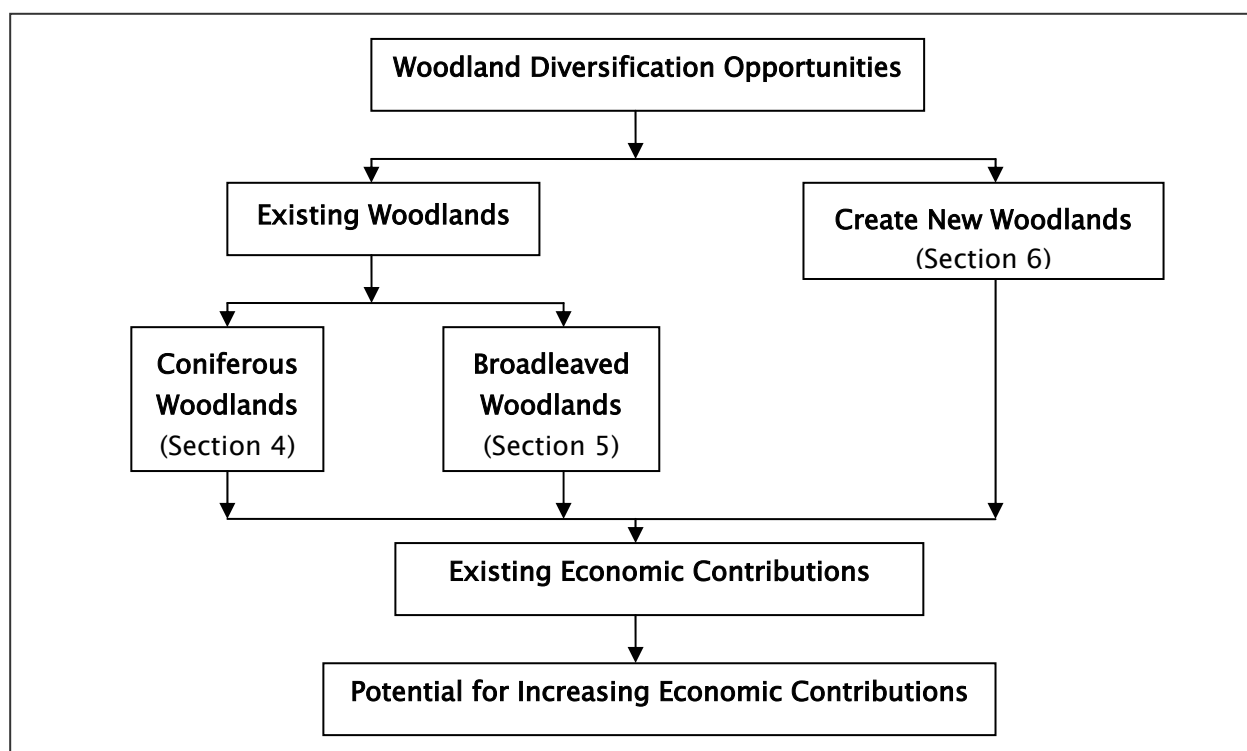
3.4. Other important factors are the size of the woodlands and who owns them. The smaller the size of a woodland, the less the diversification opportunities tend to be. Ownership of woodlands is important because an owner's interest in diversification will depend on their personal interests and their financial circumstances. The woodland management objectives of Forestry Commission Scotland and the Councils generally tends to be more focused on the delivery of the public benefits that woodlands can offer i.e. biodiversity, landscape, footpaths and car parks for recreation, although income from timber sales helps to fund the delivery of the public benefits. Environmental NGOs tend to have similar woodland management objectives. Other woodland owners who personally own their woodlands, or own them through a privately owned company or trust, are usually more concerned with ensuring the woodlands provide them with the landscape they seek; quiet private enjoyment; achieving some financial or sporting objective or a combination of one or more of them. Many have relatively little interest in managing their woods for the delivery of public benefit unless the woods adjoin an urban area. Coniferous woodlands in Ayrshire and on Arran are in both public and private ownership, whereas most, but not all of the broadleaved woodlands are in private ownership.

3.5. The opportunities for new planting will be determined by who owns the land and what its present use is. Most of the land in rural areas that has no trees is privately owned and is primarily used for intensive farming; upland grazing; open cast or potential open cast mining; conservation or brings landscape benefits to the owner.

3.6. The potential size of future diversification opportunities will depend on the scale of the contributions that the woodlands and forest industry are, or have been making, and therefore these are also broadly analysed in this report before proceeding to look at the size of the potential economic contributions.

3.7. The approach to analysing the opportunities is illustrated in diagram 3.1.

Diagram 3.1 Approach to Identifying Woodlands & Forest Industry Contributions to the Rural Economy



RURAL ECONOMIC DEVELOPMENT & LINKAGES

3.8. The number of people that can be defined as living in rural areas in Ayrshire cannot be easily identified. Some are living on farms, others are living in small communities and towns. Some of these communities and towns reflect an historical time when there was a much larger active mining industry in Ayrshire than there is today. Regeneration of some of these areas is therefore now of considerable importance.

3.9. The rural economy in more remote areas in particular tends to be very fragile and especially at the present time when agriculture is going through a period of rapid change in relation to the financial support it receives under the Common Agricultural Policy. The more diverse the economy the more robust and sustainable it is likely to be.

3.10. There are potential economic linkages between Ayrshire's and Arran's woodlands and forest industries and other rural sectors. Woodlands and the forest industry appear to have the greatest potential to establish horizontal linkages with the following:

- Agriculture & Food
- Tourism
- Renewable Energy
- Retail & Other Services

These are identified and evaluated in subsequent sections of this report.

EVALUATING ECONOMIC CONTRIBUTIONS

3.11. The economic criteria that have been used to evaluate the opportunities are as follows:

- The estimated aggregate number of jobs created.

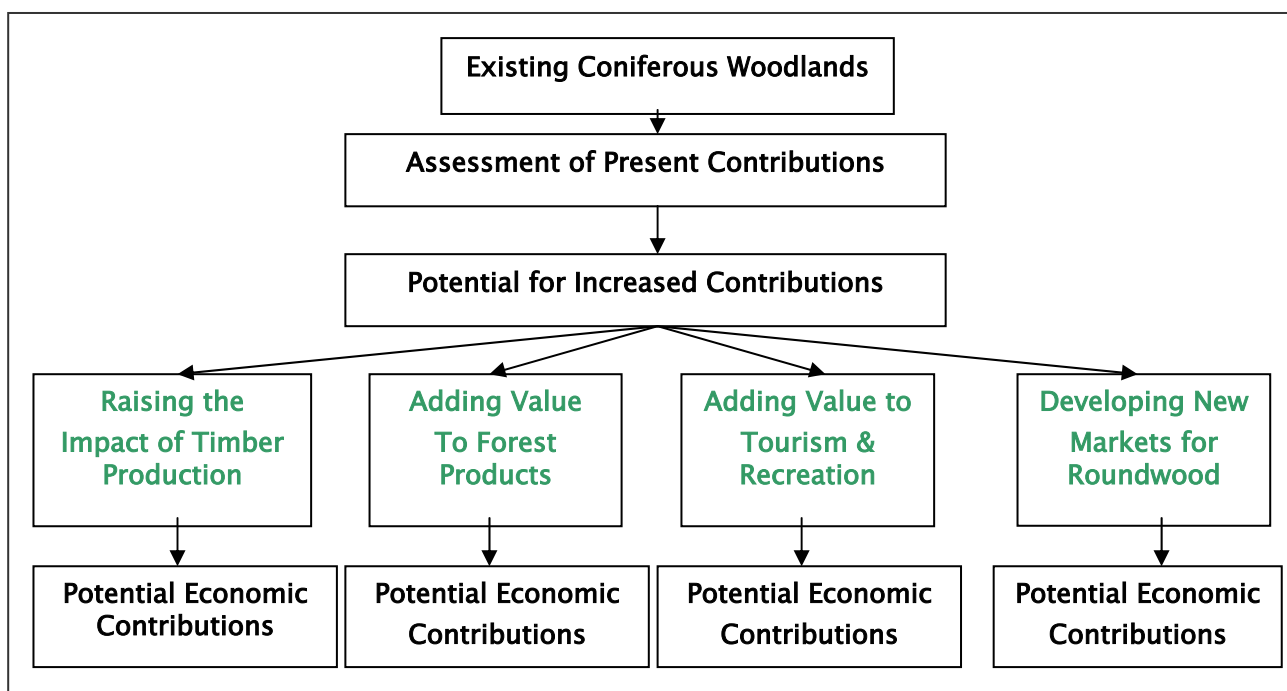
- The potential sustainability of the activity which means that more attention has been given to 'market' driven rather than 'grant' driven activities. Where there appears to be 'market failure' there is a potential case for piloting activities or providing short term grant support and therefore these opportunities have been included.
- They are practically feasible with a realistic amount of financial support e.g. there are reasonable grounds for believing that it will be a financially attractive opportunity for private investors, or it is likely to be supported financially because it meets Scottish Executive policy priorities.

The results of the evaluation are described in the following three sections.

4. OPPORTUNITIES FOR EXISTING CONIFEROUS WOODLANDS

4.1. The strategic approach that was taken to analysing the opportunities for woodlands and the forest industry to make greater contributions to the rural economy was described in the previous section and was shown schematically in diagram 3.1. A similar approach has been taken in presenting the results. In this section the opportunities for increasing the contributions that coniferous woodlands and the related forest industry can make to the rural economy are identified and these fall into five broad categories. For each of these categories there is a brief assessment of the present contributions that the economic activities in the category are making and then the potential future opportunities are described. This is shown schematically in diagram 4.1 along with the four main categories. The fifth, 'Other', category covers a number of other opportunities which are described at the end of the section.

Diagram 4.1 Opportunities for Coniferous Woodlands & Related Activities to Increase Their Contributions to the Rural Economy



Each of the opportunities is now examined in more detail

PRESENT ECONOMIC CONTRIBUTIONS OF CONIFEROUS WOODLANDS

4.2. There are approximately 32,821ha of coniferous woodlands in Ayrshire and on Arran and there is a small group of well established internationally competitive forest industry using much of the coniferous roundwood that is produced. The forest industry group comprises the following three companies:

- Adam Wilson & Sons Ltd located at Troon which is a sawmilling company. The company also owns Alexanders Sawmill Ltd in Ayr which is a timber merchants and timber frame house supplier.
- Caledonian Paper at Irvine which makes light weight coated paper and is owned by UPM Kymmene.
- Egger (UK) Ltd, which makes particleboard and related value added products, and has a plant at Barony on the outskirts of Auchinleck.

In total these three companies provide employment for approximately 665 people and have a combined annual turnover of approximately £200 million. In addition there are a further 5 small family owned sawmills using coniferous roundwood that are located in Ayrshire and there is a small one on Arran. The largest of these five mills is Auchengate Sawmill which is owned by Alexander Mair & Son and is located at Irvine. The total revenue generated from wood processing in Ayrshire & Arran is similar to that generated by the tourism sector (para 2.4).

4.3. In total the wood processing companies use approximately 800,000 tonnes per annum of roundwood and this is in excess of the potentially sustainable wood supply from Ayrshire & Arran's coniferous forests and woods when they have a balanced age class structure. Therefore Ayrshire's economy benefits from the additional value added that comes from the coniferous roundwood that is brought into the area from outside Ayrshire.

4.4. A recent survey by the South Scotland Forest Industry Cluster (2006) has provisionally estimated that the forest industry is providing a total of about 860 jobs and it is expected that this total may be further increased to over 900 jobs. A breakdown of the jobs that have so far been identified across the wood chain from the woodlands to primary wood processing in Ayrshire and on Arran is shown in table 4.1.

Table 4.1 Provisionally Estimated Number of Jobs Provided by the Forest Industry in Ayrshire & on Arran in 2005/06 by Job Category

Job Description	No of Jobs
Ground Preparation	1
Road Building/ Maintenance	5
Establishment & Maintenance	3
Fencing	2
Arboriculture	36
Wildlife/Recreation/ Conservation	1
Plant & Machinery Supply & Maintenance	8
Forest Management / Consultancy	9
Harvesting Mechanical	46
Harvesting Manual / Animal	1
Timber Haulage	40
Timber Processing	703
Other	1
Unknown	4
TOTAL	860

4.5. An initial assessment of the survey results suggests that the numbers of people involved with fencing, silviculture, plant hire, and wildlife/recreation, grounds and access maintenance, conservation and education and training may be significantly underestimated.

4.6. Some of the woodland establishment, maintenance and management jobs will be associated with broadleaved woodlands and in addition about 10 of the timber processing jobs are probably associated with the hardwood industry.

4.7. Some of these jobs are provided by organisations and companies directly employing people, but many of the others are offered through sub-contracts. Because many of the jobs are put out to tender they can go to companies and organisations located outside Ayrshire and Arran and in which case they would not provide any local employment.

4.8. Overall there is relatively little recreation taking place in the larger areas of commercial coniferous woodlands that are stocked with Sitka spruce at present; mainly because the recreation facilities have not been developed. Taken individually many of the coniferous

woods are too small to offer anything of interest. There is also awareness amongst woodland owners and woodland managers that allowing access to the public does not bring in any income and at the same time it results in increased expenditure because any paths or facilities have to be maintained by them. The main and most obvious exception is the coniferous woods managed by Forestry Commission Scotland and in particular the Galloway Forest Park where public money is available to develop and maintain facilities and to encourage recreation.

4.9. **Conclusion:** The coniferous woodlands and the associated forest industry presently make a very significant direct contribution to the rural economy of Ayrshire & Arran through commercial timber production. Sustaining these contributions will depend on the ownership and management of the coniferous woodlands being financially viable. Without this financial viability owners will also find it very difficult to increase the social and environmental contributions their woodlands make, unless they are able and willing to use capital earned outside their woodland activities.

RAISING THE IMPACT OF TIMBER PRODUCTION

4.10. Provided sustainable forest management of coniferous woodlands remains financially viable there are four areas where the local economic impact of timber production in coniferous woodlands could be increased in future and these are:

- **Increasing Timber Production.** Some increase in the quantity of roundwood that is harvested from the coniferous woodlands, particularly on Arran, can be expected in the next 10 years as a result of increasing maturity of the coniferous woods. It has been forecast that there may be up to 200,000 tonnes per annum becoming available on Arran by 2010 (Deltix/IBI Group (2006)). This should result in a few more jobs being created in harvesting, transport and re-stocking after the trees have been felled. This should have a small positive impact on the economy and might increase local employment opportunities by up to an estimated 10 jobs by 2015.
- **Encouraging Local Employment.** On the basis of a small interview sample, it appears that owners and managers of coniferous woodlands in the private sector prefer, where possible, to employ local people for forestry work. They feel it builds up a relationship with the local community. Cassillis Estate, for example, works with a Maybole based training group to train young people in forestry related activities. Forestry Commission Scotland, which is the largest single manager of coniferous woodlands in Ayrshire, has a number of criteria that it uses when awarding contracts for work. Only 10% of the weighting is presently awarded on whether the person or organisation is locally based. Obviously if a higher weighting was given then there is potential to increase local employment which in turn would bring increased benefits to the local economy. Such an approach could possibly result in the creation of up to 20 jobs if priority was given to employing people who live in Ayrshire and on Arran.
- **Contract Size & Terms.** For reasons of administrative efficiency there is a tendency for organisations to offer larger longer term contracts wherever possible when putting work out to tender. This tends to favour the larger longer established businesses who can handle scale. The terms attached to tenders are often relatively detailed and complex and require such things as: a track record, Health & Safety, environmental and employment policies, operator certificates, a significant level of Insurance cover. While the reasons for requesting these are understandable, they tend to discourage younger

people from entering the industry and as a result the age profile of the labour force is increasing. Smaller contracts and positive assistance in helping tenderers meet the contract terms and Modern Apprenticeships could all have a small impact on the local economy. This is not expected to create many new jobs but it could help to provide a more balanced age profile for the work force.

- **Expanding the Skills of the Local Labour Force.** The preliminary labour force survey results given in table 4.1 indicate that there are relatively few people in Ayrshire, and possibly on Arran, presently able to undertake work or have the skills to undertake work involving ground preparation, drainage, establishment / maintenance, wildlife / recreation, fencing and manual harvesting. This requires further investigation as the survey data may be incomplete, or people may have the skills in Ayrshire but are not known to organisations in the forest sector. This might possibly create a further 10 to 20 jobs. The issue of training is also of potential significance to existing businesses as they are facing the situation of an aging labour force and they will need to maintain a skilled and experienced labour force if they are to survive. However this will not result in the creation of any new jobs other than through training.

ADDING VALUE TO CONIFEROUS WOOD PRODUCTS

4.11. Adding value to products and services is recognised by the major wood processing industries, and by most other businesses, as being an important way of further developing their businesses. No discussions have taken place with businesses concerned with woodland maintenance and management, or wood processing, to see if there are any immediate opportunities for them to add value to their present activities. However it is known that UPM Kymmene already have a high value added product in light weight coated paper, Egger (UK) Ltd are planning further value added production at their panelboard plant at Barony, and Adam Wilson & Sons Ltd also have already invested in a number of value added operations. The realisation of future opportunities will depend amongst other things on how markets develop so there seems little further that can be done in the short term. Any increase in value added will bring benefits to the local economy.

4.12. **Rural Roads & Coastal Shipping:** Although it is debateable if taking costs out of the wood chain 'adds value', reducing roundwood transport costs should allow woodland owners to look for higher timber prices which would add value to the timber they produce. Some of the transport cost savings are also likely to be manifest in lower wood cost delivered at a mill and therefore the mills would have higher value added on their processing activities. Improvement to rural roads in Ayrshire and developing the facilities for coastal shipping on Arran so that the forecast increase in coniferous roundwood can be shipped for processing on the mainland would all appear to offer significant economic benefits. There will be some short term jobs created from improving local roads and coastal shipping facilities as well as bringing environmental improvements. Many of these issues are identified and addressed in Ayrshire Timber Transport Strategy.

ADDING VALUE THROUGH RECREATION & TOURISM

4.13. **Southern Ayrshire:** There is a significant area of coniferous woodlands in both public and private ownership in southern Ayrshire (Map 2.2). There are external accesses to most of these woods as well as some internal roads and rides which have been mainly constructed for commercial forest operations. As a result relatively few people visit these woodlands for recreation activities as they are perceived to be uninteresting.

4.14. This study has identified that there is significant potential to develop the recreational potential of the coniferous woodlands and that a number of separate individual initiatives are being discussed, planned or are underway. The key elements of the potential development are:

- Loch Doon is the largest loch in southern Scotland and it is a major asset.
- The Loch is surrounded by significant areas of coniferous woodlands.
- A major part of the coniferous woodlands is known as Carrick Forest and is managed by Forestry Commission Scotland.
- Forestry Commission Scotland are interested in establishing a visitor centre somewhere in the northern part of the Galloway Forest Park and in developing walks, horse riding trails and mountain biking courses in the surrounding area.
- Carrick Forest (although it lies in Southern Ayrshire) forms part of the Galloway Forest Park which is a recognised and well established marketing brand.
- Managers of a significant area of privately owned coniferous woodlands in the area have indicated that in principle their clients may agree to the construction of formal footpaths through their woods although they are concerned about any costs and future maintenance liabilities.
- The owner of Craigenjillan estate, which adjoins Loch Doon, has planning permission and funding to build and operate an outdoor Activity Centre with accommodation for up to 80 people. The estate already has established a successful livery stables business and it is possible to ride to Newton Stewart without going on public roads.
- There is a caravan park and campsite located along part of the western shore of Loch Doon. It is not particularly attractive at present, but the Dalmellington Partnership has advanced plans to substantially upgrade it.
- A small business involved in rural crafts, called Sustainable Designs, is established in the area near the loch.
- A locally driven initiative known as the Carrick Way is planning to establish a number of longer distance footpaths in and around Girvan. They have already established an annual South Carrick Walking Festival. The paths they have identified do not link up with the area around Loch Doon, but there is potential to do so to form longer distance walks.
- There are plans to build a seabird observation centre at Girvan where visitors will be able to watch birds on Ailsa Craig.
- There are on-going discussions taking place on whether a UNESCO Biosphere should be created covering parts of Dumfries & Galloway and Southern Ayrshire.
- Work has started on identifying a strategic Network of paths and cycleways, as well as a Core path network for Ayrshire and it is likely that further footpaths may be established in the area which will make it more attractive for walkers to visit this part of Ayrshire.

4.15. Together they have the potential to offer the scale and geographical focus to provide the critical mass of quality recreational facilities that are needed to attract people to southern

Ayrshire; to be marketed nationally and internationally, and to bring a number of indirect benefits to the rural economy.

4.16. Part of this area of southern Ayrshire is in the Ayrshire Joint Structure Plan's 'Preferred Area of Search' for large scale wind farm development. Without knowing the scale, nature and location of any wind farm development, it is difficult to forecast what their impact might be on the woodland related recreation proposals identified above.

4.17. We have therefore made no provision for the impact of wind farm developments in calculating what the rural economics of woodland related tourism in the area might be. The Galloway Forest Park Strategy (FCS, 2005) envisages increasing annual visitor numbers by 800,000 by the end of 2015. It is therefore possible that the area in southern Ayrshire might attract some 100,000 (12.5%) of them by the end of 2015. These are likely to be a mix of visitor types that might perhaps be 30% day visitors, 30% overnight Scottish, and 40% overnight non-Scottish visitors.

4.18. The location of the visitor centre that Forestry Commission Scotland plan to establish in the area and the branding of the area will both be critically important decisions. The branding of the area will be challenging as the Galloway Forest Park is an established brand but to maximise the wider economic benefits and image for Ayrshire it may need to develop some form of parallel identity.

4.19. **Arran:** The island is a well established tourist destination for those interested in recreation, particularly walking and golf. More recently there has been greater promotion of opportunities to see wildlife. It has also been identified in the Ayrshire Joint Structure Plan as a potential site for a UNESCO Geopark, although discussions are only at a very early stage. There is a developing partnership of interests seeking to improve and develop the visitor experience which has involved local owners of hotels and B & Bs, local landowners, Forestry Commission Scotland, Visit Scotland and North Ayrshire Council.

4.20. Coniferous woodlands occupy a significant percentage of the land area of the island, especially at the southern end where they are a major component of the landscape. A high proportion of the coniferous woodlands are managed by Forestry Commission Scotland who have a long term plan of felling them and converting them to broadleaved and native woodlands to maximise the environmental benefits. This is an important strategic development that should open up further opportunities for eco-tourism on the island over time and might specifically result in an increase in visitor numbers of perhaps 2,000 per year by 2015. In terms of economic impact these numbers are potentially significant as most will probably require overnight accommodation rather than being day visitors; although at present there can be a shortage of available accommodation in mid summer which would have to be overcome. However these developments may help to spread visitor numbers throughout the year rather than adding to numbers in mid summer.

4.21. **Whitelee:** This area of coniferous woodland in East Ayrshire, East Renfrewshire and South Lanarkshire is managed by Forestry Commission Scotland. Recently planning permission has been given for the development of a major wind farm on part of the area which will result in a significant proportion of the trees being felled. The wind farm developer is required to build a visitor centre on the site to explain about the wind farm. There may therefore be an opportunity to use part of the centre for woodland and environmental education as well. If a broadly based high quality environmental education centre was developed at Whitelee with good access, it might attract perhaps an additional 5,000 day visitors per annum because of its

close location to Kilmarnock, the Irvine Valley towns, East Kilbride and Strathaven.

ECONOMIC IMPACT & DRIVERS

4.22. The increase in visitor numbers from these three developments by 2015, ignoring any impact from wind farm developments, could be as follows:

- **Southern Ayrshire:** 100,000 per annum additional visitors of which 30% are day visitors, 30% Scottish visitors and 40% non-Scottish visitors.
- **Arran:** 2,000 additional visitors per annum requiring overnight accommodation of which 50% are Scottish and 50% non-Scottish.
- **Whitelee:** 5,000 day visitors per annum.

Assuming the average spend of a day visitor is £5, an overnight Scottish person £25 and an overnight non-Scottish person £40, then the additional expenditure these developments could provide in the rural areas by 2015 will be £2.5 million for southern Ayrshire; £65,000 for Arran and £25,000 for Whitelee.

4.23. This increase in economic activity will result in a supplier and an income effect. If a standard multiplier of 1.32 is used for rural areas (Scottish Tourism Multiplier Study. ESU Research Paper No 31, 1993) then the total annual economic impacts of the three potential schemes identified would be: southern Ayrshire: £3.3 million, Arran: £85,800, and Whitelee: £33,000.

4.24. The greatest challenge will be to successfully achieve the implementation of the variety of potential developments in southern Ayrshire as there are a number of different parties involved and major wind farm developments may limit the recreation potential. There will be a need for close partnership working and for an individual or organisation to take on a leadership and administrative role. It may also be an appropriate project for the Ayrshire & Arran Tourism Partnership to include in their tourism work plan.

DEVELOPING NEW MARKETS FOR ROUNDWOOD

4.25. The major potential new market for coniferous roundwood that has been rapidly emerging over the last 5 years or so is as a fuel for energy production. This has been driven internationally by concerns about climate change and within Britain by the policies of the UK and Scottish parliaments to increase the amount of energy generated from renewable energy sources.

4.26. A major electricity generating plant is being constructed at Lockerbie by E.ON which will require nearly 500,000 tonnes per annum of wood fibre and it is understood that plans are being developed for two others in Ayrshire. There are also a number of large scale plants that are being planned elsewhere in Scotland, but have not yet been formally announced.

4.27. The use of forest based wood fibre for co-firing in power stations is not presently permitted under the Renewable Obligation Certificate (ROC) regulations, but if the regulations change it could substantially increase the size of the market for wood for energy production. Some small district heating schemes have now started working such as the one at Fyne Homes which is leading to larger schemes at Campbeltown and Oban. Some wood processing plants already use wood fibre for providing the heat needs and others have plans to do so or to increase wood fibre use further. Planning permission was given for the building and operation of a wood fired boiler on Arran, but the company behind the scheme went into liquidation

before any work started.

4.28. The greatest potential market in Ayrshire and on Arran, other than the two possible larger scale plants that industry is considering, but which have not reached the planning application stage, would appear to be small scale district heating schemes; small Combined Heat and Power (CHP) plants or home heating schemes. These smaller scale plants can be more appropriate at the local level because they require smaller quantities of wood fibre which do not have to be transported over very long distances and so are more environmentally friendly. There still appears to be a good theoretical case for the development of a wood fired energy plant on Arran as it is expensive to transport any poor quality coniferous roundwood to the mainland. Such a development would appear to be in keeping with the recreational and environmental market branding of the island. The extent of rural energy poverty in Ayrshire is not known but could be significant.

4.29. Plants that have the greatest potential for entering the heating market are when 'non-gas' fuels are being used e.g. oil, LPG etc. These opportunities can occur in the public sector, particularly where heating has to be provided in buildings owned or managed by local authorities, the NHS, Education Departments, prisons and military establishments as well as in the social housing sector. Similar opportunities can occur in the private sector where businesses can often make decisions more easily and quickly than the public sector.

4.30. Wood fired energy plants, particularly the smaller ones, can be relatively flexible in the type of wood fibre they require which means that they are often able to take the smaller dimensioned poor quality material that cannot be used for other existing commercial uses. There are also potential opportunities for using forest residues after logging, and recycled wood.

OTHER OPPORTUNITIES

4.31. **Affordable Rural Housing.** The development of affordable rural housing in woodland settings in Ayrshire could bring in a number of benefits to the rural economy, especially if the houses were built using sustainable materials and to a very high standard of energy efficiency. If they were also linked to a wood fired local / district heating scheme this would bring further local economic benefits. This type of development would also bring important social benefits.

4.32. **Energy Trail.** The development of a number of wood fired energy plants would open up the opportunity to establish an 'Ayrshire Energy Trail' to attract more visitors as Ayrshire would then have a complete range of ways of generating energy from both renewable and non-renewable sources

4.33. **Wind Farms.** The establishment of wind farms in woodland areas could bring in some income to the rural economy during the construction phase, result in the creation of new or improved access and result in extra income for the woodland owner which could be used to fund other activities if the owner so decides. Evidence from elsewhere suggests that wind farm developers often seek to fell some trees to prevent interference with wind flows and if that is necessary it would reduce the contributions that the woodlands make to the rural economy.

ECONOMIC IMPACT & DRIVERS

4.34. It is very difficult to forecast the economic impact that the development of a wood fired energy market might have on the rural economies of Ayrshire & Arran. There will be the direct employment benefits from any installation work and the other benefits will come mostly from the development of the wood fibre supply chain. If a total of 20 wood fired boilers are

installed in Ayrshire and on Arran by 2015 and each results in the additional employment of 1 person, either through new businesses being started up or additional jobs being created by existing businesses, then the total number of extra jobs created could be 20.

4.35. South Ayrshire Council has a policy of considering wood fuel as a heating system in Council owned properties and installing them where it is technically and economically feasible. The further development of this market would be greatly assisted if North and East Ayrshire adopted similar policies.

4.36. The market needs to be stimulated by some commercial demonstrations projects to show how the systems operate in practice and these could possibly be supported by one or all of the Ayrshire Councils.

4.37. Forestry Commission Scotland already employs a Wood Fuel Officer, based at their Hamilton Office, to promote these opportunities in Ayrshire & Arran and other parts of south west Scotland, and grants are available to help meet some of the wood fuel supply chain and boiler costs.

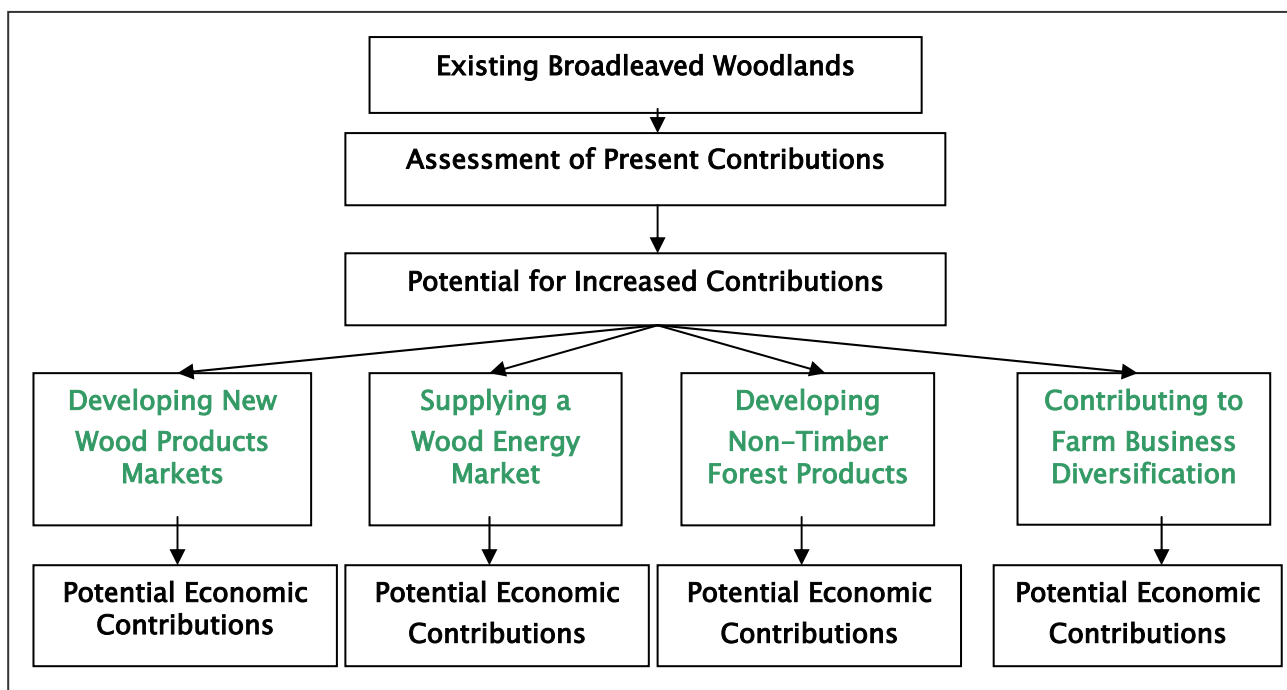
4.38. A further potential benefit of developing this market is if it stimulates demand for roundwood from small woodlands because of shorter transport distances and smaller scale equipment, and results in wood gate prices that are sufficient to encourage their longer term sustainable management.

5. OPPORTUNITIES WITH EXISTING BROADLEAVED WOODLANDS

5.1. The strategic approach that was taken to analysing the opportunities for woodlands and the forest industry to make greater contributions to the rural economy was described in section 3 and was shown schematically in diagram 3.1. A structured analytical approach has been taken in this section which is similar to the one used for coniferous woodlands in the last section.

5.2. In this section a brief assessment of the present contributions that broadleaved woodlands and related processing activities are making to the rural economy is given and then the potential future opportunities are identified. These fall into four broad categories. This is shown schematically in diagram 5.1 along with the four categories.

Diagram 5.1 Opportunities for Broadleaved Woodlands & Related Activities to Increase Their Contributions to the Rural Economy



Each of the opportunities is now examined in more detail

PRESENT ECONOMIC CONTRIBUTIONS OF BROADLEAVED WOODLANDS

5.3. There were approximately 2,810 ha of broadleaved woods in Ayrshire and 770 ha on Arran with an area in excess of 2ha at the time of the last national inventory of woods and trees. There are also a further 3,756 ha of mixed species woodlands where broadleaves could make up a significant percentage. The actual area of broadleaved woods will be greater than these areas as there are broadleaved trees in the many small woods which are less than 2 ha in size. The rural areas also have a large number of single hedgerow trees that shape the character of the countryside.

5.4. Broadleaves provide an important part of the visitor experience for people coming to Ayrshire and Arran. Broadleaved trees and woods are found around Ayrshire's top ten visitor attractions and in the grounds of the major castles and country houses. If the landscape contributes just 10% of the visitor experience then these woods are contributing some £28 million annually to the rural economy and to the employment of some 1,150 people.

5.5. There are two small businesses in Ayrshire that use domestically grown hardwoods, and there are also some small furniture and craft businesses – Ayrshire Hardwoods and Fairlie Sawmill. The potential for greater commercial utilisation of broadleaved woodlands will depend on many factors such as landscape and planning issues, the owner's shooting interests and the accessibility of the woods particularly access.

5.6. Broadleaved trees either alone or in mixtures with conifers make a small but locally significant contributions to the rural economy through B & Bs, hotel occupancy and cottage lets when people come to stay in the area to take part in shooting activities, but there are no figures available on the size of these contributions to Ayrshire's economy.

5.7. **Conclusions:** The broadleaved woodlands are making significant environmental and

social contributions in Ayrshire and on Arran, but the direct economic contributions associated with them, and with related wood processing activities, are presently very small largely because the area of broadleaves is small. Indirectly the economic benefits are very significant.

DEVELOPING NEW WOOD PRODUCTS MARKETS

5.8. The area of broadleaved woods is small but there are a number of hedgerow roadside and urban trees which slightly increases the potential volumes of timber that could potentially be utilised. Very little detailed information exists about these woodlands, but it is thought likely that the quantities will be small, the quality probably relatively poor, and they will have relatively poor accessibility for extraction. This means the opportunities for increasing the contributions that broadleaved woods, and any related processing activities, make to the rural economy through developing new markets are limited.

5.9. Given this situation, the options are:

- **Assist Existing Hardwood Sawmills.** There are two mills successfully operating in Ayrshire and it would therefore be appropriate to discuss with them whether there are any opportunities for expanding their businesses which would increase their local economic impact.
- **Encourage the setting up of craft and furniture outlets.** These should ideally be sited in areas where they can attract visitor attention such as West Kilbride, Ayr, Irvine, Prestwick Airport or where golfing visitors stay. It might also be worth considering the possibility of locating one or more at the forest visitor centres proposed in southern Ayrshire and at Whitelee. The actual volumes of hardwood used in these types of activities are small.
- **Obtain Further Information about the Timber Content of the Broadleaved Woodlands.** Very little information exists on the broadleaved woodlands and it is therefore not possible to assess at this stage what area of these woods could be harvested because of landscape and planning restrictions, and where harvesting is possible and there is access, what the quantity and quality and species composition of the timber is. Without this information it is not possible to make any specific recommendations on which hardwood markets could be further developed.
- **Encourage the start-up of perhaps 1 or 2 new small sawmilling businesses to utilise some of the better quality hardwood logs that may be potentially available depending on the findings of the proposed broadleaved woodland survey.** Elsewhere in Scotland markets have been found for utilising Scottish grown hardwoods as flooring, indoor furniture, rural signs and outdoor furniture. Start up costs for new businesses are relatively high if premises have to be bought or rented and equipment purchased, particularly if young people are considering doing it. They may therefore need initial business and financial support. These activities might be linked into a farm diversification scheme involving a building conversion or to an environmental education centre. If a more detailed analysis of the market shows opportunities exist, then they will need to be actively promoted to attract suitable people.

ECONOMIC IMPACT & DRIVERS

5.10. The economic impact that these developments have in terms of direct job creation will be very small and may only perhaps amount to up to 10 jobs. The main value lies in the

indirect benefits they would provide for the tourist sector and in the image of Ayrshire as an attractive and environmentally pleasing place to visit.

5.11. The main drivers for obtaining further information about the broadleaved resource and in subsequently developing these new markets are likely to be the Councils, Forestry Commission Scotland and SNH.

DEVELOPING WOOD ENERGY MARKET

5.12. The opportunities offered by the emerging wood energy market are similar to those that exist for coniferous roundwood and were described in section 4. The major difference between coniferous and broadleaved roundwood as a fuel is that broadleaved roundwood is more attractive as the wood has a higher calorific value per unit volume. Where the quality of broadleaved trees is good there are opportunities for sawing them and converting them into value added products. At present there are few outlets for the poor quality material other than firewood. Much of it therefore finds its way into landfill sites or is left to rot. The quantity of broadleaved material that may be available for the fuel wood market is not known because of the absence of information on the existing broadleaved woodlands.

5.13. As most of the broadleaved woods are on estates or farms there are theoretically opportunities for setting up:

- **Own on-farm and estate wood fired heating schemes.** These require only small volumes of material and are therefore potentially well sized to the availability of material that may exist on the property.
- **Supply contracts for wood fired boilers in local public buildings.** These buildings could be a local school, library or hospital for example.

The extent of these opportunities is not known at this stage as little detailed information is available on the broadleaved woodlands. These can be assessed better when information is available (para. 5.9).

ECONOMIC IMPACT & DRIVERS

5.14. The direct economic impact from such developments will be small, but it would help to diversify activities on estates and farms and it may therefore protect existing jobs rather than create new ones. It also would help in the sustainable management of Ayrshire's woodlands that are such an important part of the landscape and are a backdrop for the tourist industry.

5.15. The main drivers for these developments will be the Councils, who have the opportunity to install wood fired heating systems in public buildings, and Forestry Commission Scotland who are promoting such schemes. The establishment of some exemplar projects in Ayrshire or on Arran would assist in promoting the opportunities.

DEVELOPING NON-TIMBER FOREST PRODUCT MARKETS

5.16. These markets are very small but are often of considerable public interest as a result of their increased environmental awareness. These markets include:

- Mushrooms, nuts and fruits.
- Craft products such as hurdles, walking sticks, basketry, hedging.
- Organically grown leaves and needles

- Grazing for organically produced animals such as pigs
- Burial grounds

ECONOMIC IMPACT & DRIVERS

5.17. The development of these markets will have potentially very little direct impact on the rural economy in terms of job creation although the diversity of the activities and their linkages can help to strengthen it in a small way. They will also bring little or no income for woodland owners. The major benefit is probably one of psychological well being and interest for local people and for enriching the experience of people visiting Ayrshire.

5.18. These markets probably do not merit any specific promotion or support from an organisation other than awareness that they exist. Where woodland owners develop an interest in becoming involved in them they should be supported.

CONTRIBUTING TO FARM BUSINESS DIVERSIFICATION

5.19. Existing broadleaved woodlands and conifer ones can assist the rural economy through contributing to the diversification of farm businesses by providing:

- A 'setting' for other farm business diversification activities.
- Wood products.
- Off-farm employment.

These are described in more detail below.

5.20. **A 'Setting' for Other Farm Business Diversification Activities.** The presence of woodlands can help to provide a setting that will contribute to the financial success of other activities. A number of farms have diversified into offering Bed & Breakfast and the presence of woodlands on the farm can often improve the visual appearance of the farm and the views for visitors. Other farm business diversifications in Ayrshire and on Arran have involved the conversion of redundant farm buildings for residential or office use, or into farm shops, visitor centres, livery stables, dog kennels or restaurants where a natural and attractive setting helped by the presence of trees has contributed to their success. Some farm businesses, such as the Otterburn Activity and Farm Centre, have used their land to offer a range of active sports such as quad biking, horse riding, assault courses, clay pigeon shooting and paint balling and woodlands can again contribute to the setting in which these are undertaken and enjoyed.

5.21. **Wood Products.** The management of woodlands can generate some intermittent income for farms through timber sales, but the greatest potential, since the woods are probably small and the timber may be of low quality, is probably through the development of a market for wood energy. This was described in paragraph 5.10.

5.22. **Off-Farm Employment.** With farm incomes under pressure, there are potential opportunities for farmers and members of their family to supplement the farm income through seeking work off the farm connected with the forest sector. In many cases farmers are already multi skilled and have the experience to undertake certain jobs such as fencing, and using herbicides. Table 4.1 indicated that there might be certain skill shortages in Ayrshire and other new opportunities that are developing are in relation to footpath construction and maintenance. As the wood energy market develops there may be opportunities to take on, or become involved with, wood fuel supply contracts.

ECONOMIC IMPACT & DRIVERS

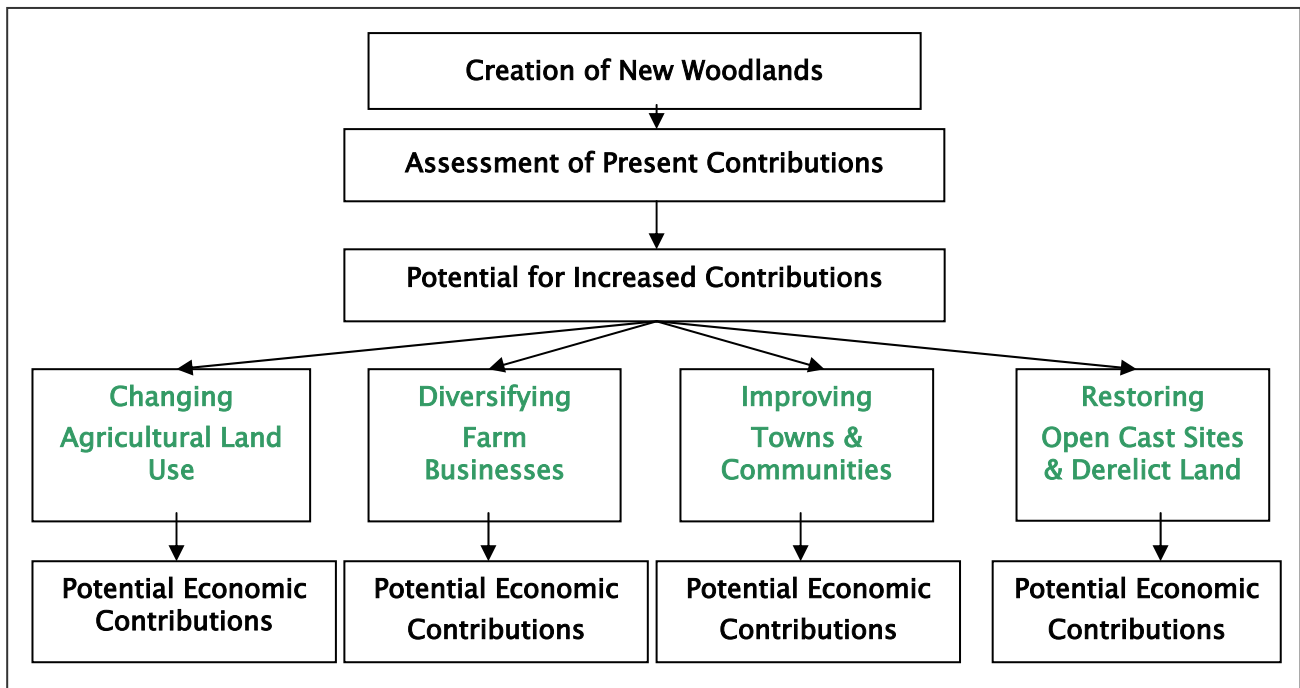
5.23. As there are some 2,746 farm holdings covering approximately 234,000 hectares of land in Ayrshire and on Arran, the role of woodlands in helping with farm diversification is an important, but indirect one. The existing woodlands will not help to create more than a few new jobs if, for example, a small local wood energy market develops, otherwise woodlands and the forest sector can only help to stabilise farm employment which in turn will strengthen an otherwise fragile, rapidly changing, rural economy.

5.24. The profitability of the farming sector will be the main driver for the development of woodland related farm diversification activities, but the farming community may need more information about what role woodlands might have in farm diversification; what the opportunities are and what skills are needed if the contribution from woodlands is to be increased.

6. OPPORTUNITIES WITH NEW PLANTING

6.1. The third category of opportunities where woodlands could contribute to the economy of rural Ayrshire and on Arran is through establishing new woodlands. A similar approach to presenting the opportunities in sections 4 and 5 has been followed in this section. They are shown schematically in Diagram 6.1.

Diagram 6.1 Opportunities for the Creation of New Woodlands to Contribute to the Rural Economy



Each of the opportunities is now examined in more detail.

PRESENT ECONOMIC CONTRIBUTIONS FROM CREATING NEW WOODLANDS

6.2. Grants offered through SEERAD and FCS has encouraged the creation of new woodlands. The principal schemes were: the Scottish Forestry Grant Scheme, the Farmland Premium Scheme and the Locational Premium Scheme. A total of 116 applications for grant aided tree planting in Ayrshire and on Arran were approved by Forestry Commission Scotland on behalf of SEERAD between January 2004 and March 2006. These applications covered a

total of 1,643.15 ha, with applications ranging in size from 0.42 ha to 40 ha, with an average of 14.2 ha. An indication of the types of woodland that have been established can be obtained by analysing the type of grant assistance that has been provided by FCS. The results shown in table 6.1 have been provided by FCS.

Table 6.1 Analysis of the Types of Woodlands Created in Ayrshire & on Arran According to FCS Grant Type between January 2004 & March 2006

Woodland Type	Area (ha)
Well Designed Productive Woods	740.61
Native Woods	262.35
Riparian Woods	182.41
Environmentally Enhancing & Urban Woods	417.14
Farmed Woods	40.64
TOTAL	1,643.15

Source: Forestry Commission Scotland, 2006

6.3. The results in the table show that woodlands have been created to achieve economic, social and environmental objectives. The majority of those applying for grants were farmers and their precise reasons for deciding to plant trees on their land are not known, but over the period that these statistics were recorded there was an additional locational premium grant available through FCS to support the delivery of the Ayrshire & Arran Woodland Strategy.

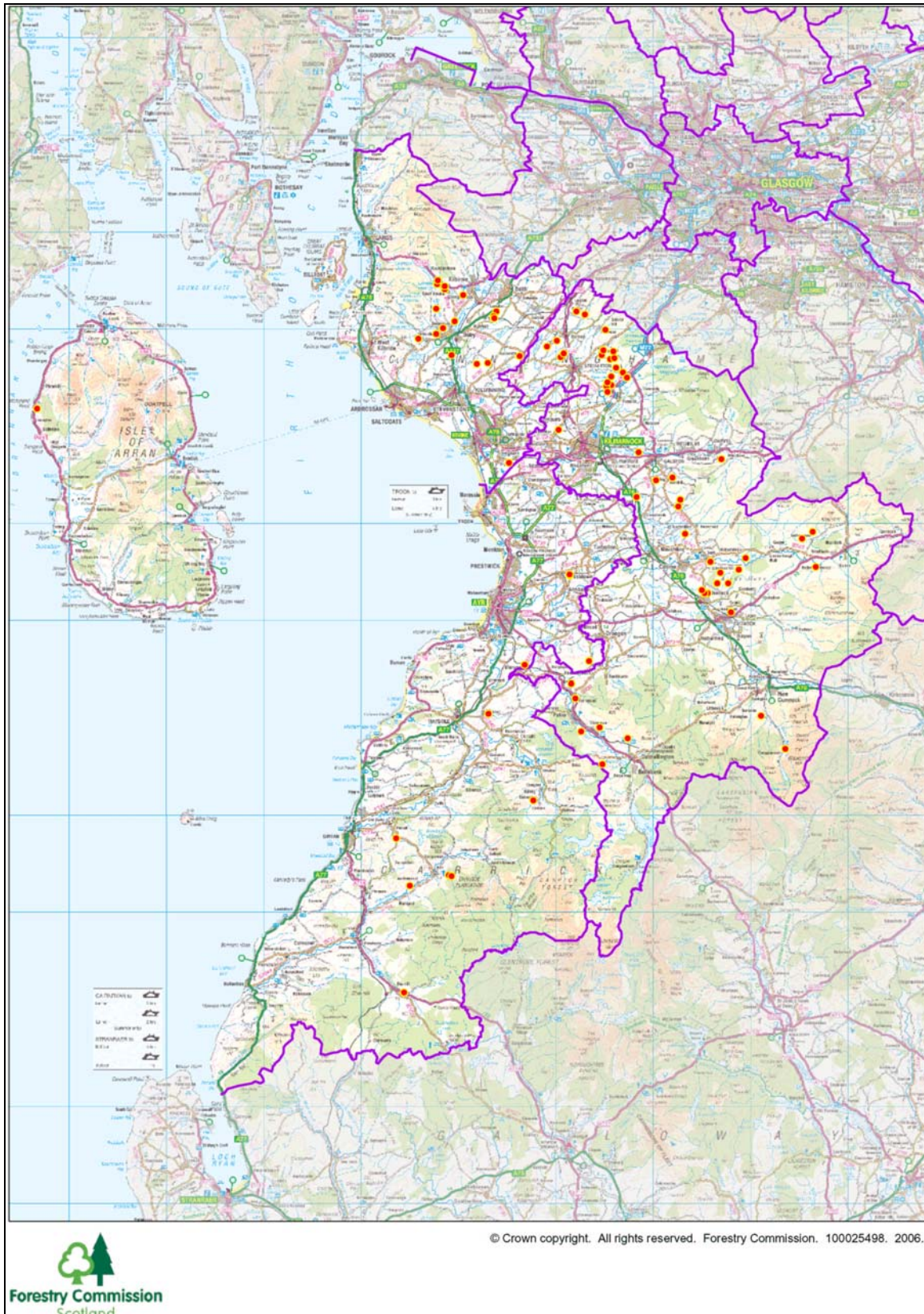
6.4. The availability of this premium undoubtedly helped to make woodland creation a more attractive financial option for farmers, but the local NFU feel strongly that it distorted the local land market, and that too much good quality agricultural land was planted during the lifetime of the scheme.

6.5. East Ayrshire Woodlands is an organisation that operates through East Ayrshire Council. It operates an Intermediate Labour Market (ILM) training scheme for 18 trainees per annum through which it also establishes and manages native woodlands; undertakes projects that deliver biodiversity and public benefit objectives such as planting near communities in East Ayrshire. Between 1996 and 2006 the organisation planted and managed some 500 ha of woodlands on 68 different sites. Many of these have been in and around towns and communities and have been supported with grant funding through Forestry Commission Scotland's Woodlands In & Around Towns Scheme (WIAT).

6.6. Although these areas have been created, their sustainable management is important. At present there is little funding that is reliably available on a continuing basis to fund the necessary on-going management and maintenance work of these woodlands as they get older.

6.7. The geographical locations of the woodlands that have been created between January 2004 and March 2006 are shown on map 6.1.

Map 6.1 Geographical Locations of Woodlands Created in Ayrshire & on Arran between January 2004 and March 2006



6.8. The map shows that a cluster of new woodlands have been created over the two year period in the northern part of Ayrshire and the statistics show that most have been on farmland. This area is close to Glasgow and the easier accessibility may open up more farm

diversification opportunities and perhaps the purchasing by lifestyle investors who can commute to Glasgow. There is another cluster of woodlands that have been created in East Ayrshire which may reflect the work of East Ayrshire Woodlands who have a variety of social and environmental objectives that include woodland creation.

CHANGING AGRICULTURAL LAND USE

6.9. There are major pressures on farm incomes at present and considerable uncertainty about the long term viability of farming brought about by changes in the way it is supported through the Common Agricultural Policy. Much will depend on what financial support is offered to farmers under the new Scottish Rural Development Programme which will start in 2007. One of the alternative ways that farmers could use the land is to create woodlands or establish short rotation coppice (SRC) crops. It is not possible to predict what interest farmers will show in doing this at this stage as all the existing forestry grant schemes were closed to new applications on 31st August 2006 and new grant schemes for forestry will only be announced when the new Scottish Rural Development Programme has been finalised.

6.10. There are still important opportunities for further tree planting in order to restore copses and shelter belts throughout Ayrshire in order to sustain the overall landscape character of the region and there is a large area of land that could potentially become available for woodland creation if farm incomes fall significantly, although there are likely to be landscape and biodiversity constraints in practice on any major land use changes and they are unlikely to take place unless they make financial sense to the farmer or land owner. This land could well be classed as 'marginal land' i.e. land in the uplands that is limited in quality. The development of a wood fuel market could encourage farmers to plant short rotation crops which would give them a much more attractive pattern of cash flow than woodland creation.

6.11. The move to the Single Farm Payment Scheme (SFP) across the European Union has meant that farmers no longer require to maximise their agricultural production in order to claim farm subsidies. As a result farmers are able to assess alternative approaches to 'farming without subsidy', one of which could include planting additional areas of woodland on farms. The decision of SEERAD to allow 'consolidation' of entitlement has been very helpful (i.e. a farmer farms 100ha and has 100 entitlements. He decides to plant 10ha of land, meaning he only has 90ha of land remaining in farmland. He cannot claim the woodland as part of his SFP claim but SEERAD will consolidate his 100ha of entitlements onto his remaining 90ha, meaning that he does not lose any SFP as a result of planting trees). At the moment, this derogation is in place up to 2008, assuming the planting is undertaken as part of a SEERAD funded grant scheme.

6.12. Despite this, a number of farmers are wary about planting trees on their land because:

- It may reduce their potential subsidy available under any scheme introduced following the SFP in 2012.
- They would be tying up their land for the longer term. This is less of a problem on larger units (typically Estates), but it is a major issue for the smaller, more intensive farms typically seen in parts of Ayrshire. Here, particularly where land quality is good, farmers are reluctant to lose land area for trees.
- It could affect the value of their land, particularly round the urban areas where development for housing may be a possibility in the longer term.

- The uncertainty over the future direction of rural policy post CAP Reform also makes farmers wary of committing to change at the present time. The lack of information on the new Scottish Rural Development Plan and the closing of the existing FWPS have effectively put a block on planting at the present time.

6.13. Furthermore, farmers are unlikely to commit to further planting unless they see a specific economic benefit over and above that from remaining in agriculture i.e. if the cost/benefit analysis shows any planting to be economically neutral compared to remaining in farming they will not plant. A further incentive is required.

6.14. Despite all this, farmers are still willing to commit to planting small areas if they can see that the activity will be revenue neutral. These areas are likely to be on poorer land, in riparian habitats and for shelter belts. There is some anecdotal evidence to suggest that farmers will plant small / medium scale woodlands on their land when they are nearing retirement and are aiming to reduce their work load while remaining on the farm. They will plant the more peripheral fields and let out land closer to the steading.

ECONOMIC IMPACT & DRIVERS

6.15. The creation of woodlands provides jobs in the short term and these might offer off-farm employment for other farmers who wish to remain farming. As many farmers are firmly committed to farming as a way of life it is thought unlikely that any land use changes will create more than perhaps up to 20 new jobs over the period to 2015. The number could be greater if there were significant relative changes in the levels of support given to the agricultural and forestry sectors, but this does not seem likely at this stage.

6.16. The main driver of any land uses changes over the next 5 years will be the level of financial support given to the rural sectors under the new Scottish Rural Development Plan and the rules that have to be applied in receiving that support. The new plan has yet to be announced, but initial indications are that it is unlikely to bring about any changes that will lead to the creation of a significant area of new woodland.

DIVERSIFYING FARM BUSINESSES

6.17. The ways in which the creation of new woodlands on farms can contribute to farm diversification are very similar to those where some woodlands and trees already exist and they were described in section 5. These can be summarised as being:

- Improving the environment and landscape for new or existing farm businesses. (see Box 1)
- Creating a new source of farm income through growing SRC crops as the wood energy market develops.
- Providing off-farm employment for one or more members of the family.
- Adding capital value to the property. This may allow them to re-capitalise their business

6.18. The variety of situations where woodlands may contribute to farm diversification were described in para 5.1. One example is given in Box 1.

Box 1. Auchengree was formerly a dairy farm which has recently gone through a complete diversification programme resulting in the development of a farm shop and a picnic area. The farm has also planted 60 acres of broadleaved woods and developed 2,000 metres of paths for visitors to enjoy when they come to the farm shop.

6.19. There could be opportunities for farmers and estate owners to grow SRC crops to supply the energy market as it opens up. They could do this as an alternative crop using their own finance or under contract to an energy supply company. Much will depend on where the boilers are installed and the quantity and type of wood fuel they require. For example, it is understood that Scottish Biofuels is presently looking to contract out the growing of up to 10,000ha of SRC in Ayrshire and other companies may also have plans to do this as well. If Scottish Biofuels plans are successfully implemented this could create up to 10 full time specialist jobs in addition to work for farmers.

6.20. A number of farmers questioned, particularly the larger Estate owners, felt that there may be opportunities to develop a local network that would supply woodchips to local families to run their own woodchip boilers. This would clearly require some co-ordination and some 'priming' and perhaps could be best achieved by a commitment from the local Councils to heat at least some of their facilities by woodchip. This would then give local farmers the confidence to commit to some investment in the medium term.

6.21. There are potential opportunities for off-farm employment in managing and maintaining the existing woodlands; creating new woodlands and re-stocking the existing ones as well as in the associated recreational development projects such as footpath construction and maintenance. These and other opportunities were described in paragraph 5.20

6.22. Farmers getting close to their retirement might consider creating woodlands on their farms if they think that it will add capital value to their farm, and there is some evidence to support this action. A number of farmers have established the woodlands themselves rather than using outside contractors which has saved them money.

ECONOMIC IMPACT & DRIVERS

6.23. Any activities that are related to farm diversification are likely to result in the stabilisation of the farming community rather than the creation of any new jobs.

6.24. The main drivers of farm diversification are likely to be falling farm incomes and the amount of financial support that SEERAD can provide through the new Scottish Rural Development Programme.

IMPROVING TOWNS & COMMUNITIES

6.25. There are opportunities for further tree planting to take place round the towns and communities in rural Ayrshire, although it is difficult to provide an estimate of the area or cost. Tree planting in association with the provision of greenspace and footpaths around communities will bring a number of social and environmental benefits to the residents and this may encourage them and their children to continue to live there. Another benefit of planting trees in and round communities and towns in rural areas is that their visual appearance will be improved and, over time, this may encourage small businesses to set up their offices there which would then give the people living in these communities and towns the opportunity of

getting employment locally. If this work is done through an ILM organisation like East Ayrshire Woodlands there are the added benefits of providing training to people in the towns and communities.

6.26. Discussions with East Ayrshire Woodlands about further tree planting in and around towns and communities has led us to conclude that in:

- **East Ayrshire.** The number of new sites for establishing amenity woodlands on urban fringes is limited but opencast sites may offer up 20–50ha per annum over the next decade.
- **North Ayrshire, apart from Arran and Irvine.** There are opportunities for establishing recreational woodlands close to communities. Based on FCS' figure of requiring 500 people/ha for assessing grant level awards for public access, and a population of 75,000, approximately 150 ha of community woods could be established.
- **South Ayrshire.** 175ha of new woodlands could theoretically be established based on a population of 88,000 and a 500 people /ha guide.

In total there could therefore be between 525ha and 825ha of new woodlands to be established in and around towns and communities over the next decade. Funding will also be required for the subsequent management of these woods.

ECONOMIC IMPACT & DRIVERS

6.27. This scale of programme is similar to the one that East Ayrshire Woodlands has been delivering and if the future programme up to 2015 delivered similar economic benefits then it would provide direct employment for about 10 people per annum and training for 162 people. The other benefits that would be provided in the short term are predominantly social and environmental ones, but over the long term the work could result in greater economic prosperity for the towns and communities as they become more attractive places in which to live and work provided there is the necessary subsequent funding to manage the woods.

6.28. The main driver for establishing more woods around towns and communities will be the interest of the Councils and the priority they attach to this. The main delivery mechanism for new woodland and greenspace development on peripheral urban sites may be through Councils entering Section 75 agreements with developers. The WIAT funding might be more appropriately used for restoring and augmenting existing degraded woodlands (e.g. Ancient Woodland and historic designed landscape) in peripheral urban locations.

RESTORING OPEN CAST COAL SITES & DERELICT LAND

6.29. One of the major open cast coal mining operators in Ayrshire has estimated that some 5,000 ha may need to be restored over the period to 2015 after they have finished their operations. Other mining companies may well have additional areas that need to be restored. There are therefore opportunities on this land for:

- **Creating woodlands in association with other land uses** such as farming, ponds and access paths. Some funding is available for this in East Ayrshire through the East Ayrshire Environment Initiative.
- **Planting SRC crops** which could be used to supply wood energy plants.

6.30. What actually happens will depend on the owner; any land use conditions that may be

attached to their operating licence; and the landscape plans that are developed and followed. One operator has indicated that perhaps 20% of their reinstated land (100ha) may go to conventional woodlands and 10% (50ha) may be planted with SRC. We have not contacted other companies but they may be thinking about similar percentages. The total areas are not large.

6.31. There are also some areas of vacant and derelict land, and degraded agricultural land in Ayrshire which would benefit from some environmental enhancement. One area identified in the Ayrshire & Arran Woodland Strategy is the Garnock Valley where there are potential opportunities for planting new woodlands and SRC.

ECONOMIC IMPACT & DRIVERS

6.32. There will be a direct economic impact irrespective of whether conventional woodlands or SRC are planted as part of the land restoration process. The actual impact looks as if it will be relatively small based on the indicative site restoration plans of one opencast mining company because the areas they plan to plant will be small. Where woodlands are created in association with a variety of other land uses then the economic impacts are likely to be smaller, indirect and longer term and the tourism industry could benefit from the improved landscape.

7. CONSTRAINTS TO WOODLANDS' RURAL ECONOMIC CONTRIBUTIONS

7.1. In previous sections of this report the contributions that woodlands in Ayrshire and on Arran are making to the rural economy have been described and it was also shown that there are opportunities for them to make further contributions to diversifying the rural economy. The issue therefore arises as to why the present contributions have not been greater, or what constraints may exist to prevent the opportunities that have been identified in this report being taken up.

7.2. In addition to funding being recognised as a significant constraint in a number of cases, consultees identified the following as being actual or potential constraints:

- A lack of awareness of the full range of ways that woodlands can contribute to the rural economy.
- The necessity to provide value for money in the public sector rather than to positively support local employment.
- A lack of knowledge of the size of these markets. For example, farmers' families may not know the size of some of the woodland related activities so they are not in a position to assess whether it might be worth exploring these potential off-farm employment opportunities.
- Some confusion caused by the wide variety of organisations that they can turn to for business advice.
- The current uncertainty of the future level and type of funding available under the new Tier 3 of Land Management Contracts in Scotland.

- The absence of a 'one stop shop' source to contact within Forestry Commission Scotland to discuss technical market / forestry business issues that cannot be provided by other organisations that offer more broadly based business support and advice.
- A shortage of people with the skills to undertake various forestry related jobs such as manual tree felling in smaller woods where mechanical harvesting is not possible, certain types of silvicultural operations, and footpath construction and maintenance.
- The need for some exemplar small scale wood fuel projects to allow people to get a better understanding of what is involved.
- South Ayrshire Council has a policy for examining the case for installing wood fired boilers in public buildings when the time comes to replace heating schemes, but North and East Ayrshire Councils do not. The adoption of positive policies similar to South Ayrshire by both North & East Ayrshire would provide valuable leadership in this important area of the Scottish Executive's renewable energy policy.
- The perceived absence of any one organisation responsible for developing specific tourism and recreation projects.
- The need for people to consult a number of organisations, and in some cases must get their approval or funding, before they can take any action.

There was no one constraint that all consultees identified as being of critical importance.

7.3. The ways in which these constraints might be overcome are proposed in the next section.

8. CONCLUSIONS

8.1. The existing woodlands in Ayrshire and on Arran cover almost 76,000 ha and they, along with the associated wood using industries, directly generate approximately £200 million of sales and employ about 860 people. The total sales are similar to those generated by the tourism industry. One method of valuing the indirect economic benefits of woodlands in Ayrshire and Arran suggests that these could be worth at least an additional £56 million per annum as well as being associated with the provision of some further 2,300 jobs. In addition the woodlands and trees also provide considerable environmental and social benefits that have no direct market value.

8.2. The study has identified that there are opportunities to increase the contributions that woodlands make to diversifying and strengthening the rural economies of Ayrshire and Arran and these can be broadly associated with:

- Existing Coniferous Woodlands.
- Existing Broadleaved Woodlands.
- Creation of New Woodlands.

The main opportunities are identified below along with an estimate of their possible economic impact in terms of the jobs created or the income that they might inject into the local economy.

MAIN WOODLAND DIVERSIFICATION OPPORTUNITIES

8.3. **Woodland Management & Harvesting Operations.** As a result of increasing coniferous roundwood production the contributions of harvesting and woodland management activities to the rural economy can be expected to increase because of the increasing maturity of the woodlands and the necessity to re-stock after felling. If some of the gaps in the skills base are filled and greater positive support is given to employing contractors who are based in Ayrshire then up to 20 additional jobs could be created by 2015.

8.4. **Adding Value to Forest Products.** Most of the businesses in Ayrshire involved with the processing of roundwood from woodlands in Ayrshire and on Arran already recognise the need to add value to their products and services in order to remain competitive. It seems unlikely that any significant number of new jobs will be created as a result of adding further value to forest products or taking costs out of the supply chain through improving rural roads and coastal shipping facilities. Any action taken may be far more important for maintaining existing jobs in these industries.

8.5. **Developing Woodland & Related Area Based Recreation & Tourism.** Woodland based recreation activities are presently very underdeveloped, but there are a number of other recreational & leisure based developments that are being planned. There is a major opportunity in an area in southern Ayrshire which might attract up to 100,000 visitors per year by 2015 if all the proposed developments take place. This could contribute some £3.3 million per annum through the expenditure of visitors and its multiplier effect. Implementation of present plans on Arran, which envisage a move to the establishment of native woodlands as the present coniferous woodlands are felled, could result in an injection of a further £85,000 per annum into the local economy by 2015. A smaller development of an expanded visitor centre at Whitelee might result in about £33,000 to the local economy.

8.6. **Supplying Wood to the Energy Market.** At present there are no wood fired boilers installed in Ayrshire, but the Scottish Executive is keen to see more energy being generated from renewable energy sources. Wood has been recognised as having significant potential to generate energy but no wood-fired boilers have so far been installed in Ayrshire or on Arran in response to the Executive's policy initiatives. If some 20 boilers are installed to supply heat to public buildings then by 2015 up to 20 new jobs might be generated in the wood fuel supply chain.

8.7. **Contributing to Farm Diversification Opportunities.** Existing woodlands, and the creation of new woodlands, can indirectly assist with the successful diversification of farm businesses through the establishment of on-farm businesses. They can also open up off-farm employment opportunities for farmers' families. The impact of any indirect woodland related farm diversification activities is likely to be one of maintaining jobs rather than the creation of a significant number of new ones, which can be just as important for the economy.

8.8. **Encouraging More Hardwood Utilisation.** There are two existing hardwood sawmills operating in Ayrshire and there may be opportunities to expand their production if they are interested in doing this. The potential for developing other markets will require further information about the broadleaved woodlands to discover where felling is permitted and what the quantity and quality of the timber in them is as the total broadleaved woodland area in Ayrshire and on Arran is relatively small. Subject to more detailed evaluation of the woodland survey results, it may be possible for two further very small businesses to operate successfully

sawing and further processing this material. If so up to a further 10 jobs might be created by 2015.

8.9. ***Developing the Markets for Non-Timber Forest Products.*** These products have little or no commercial value but they can be of considerable interest to people. They are unlikely to be able to support the creation of any jobs.

8.10. ***Providing an Alternative Land Use.*** At a time when agricultural incomes are facing considerable pressure and the agricultural sector is undergoing major change, the creation of woodlands provides an alternative land use to agriculture. The scale of any new planting on agricultural land is impossible to predict, but the chances of it taking place on any scale seem very low. Where it does occur it will be an important contribution towards stabilising the rural economy, but there is unlikely to be a net gain in jobs.

8.11. ***Improving the Environment of Towns & Communities.*** Some work has already been done very successfully by East Ayrshire Woodlands through an ILM training scheme. There are still towns and communities which would benefit from the creation of woodlands in association with greenspaces. If the work on a similar scale to that carried out by East Ayrshire Woodlands over the last 10 years was continued at a similar level up to 2015, then it would result in the training of almost 200 people and the creation and management of an additional 500 ha of woodlands around towns and communities. In the longer term the improved environment may encourage the residents and younger people to stay in the towns and communities and it may also attract the establishment of new businesses. This will help stabilise the local economy, but funding will be required for the subsequent management and maintenance of these woods.

8.12. ***Restoration of Open Cast Mining Sites.*** One opencast mining operator estimates that they may have to re-instate 5,000 ha of land in Ayrshire in the next 10 years. Although this land could subsequently be used for creating new woodlands in a mix of land uses or for growing SRC crops, it appears that woodlands or SRC are not a major feature in their present restoration plans. Even though the woodland related areas may be small there will be some small direct economic benefits from this activity.

DELIVERY

8.13. The major challenge is to realise the opportunities that have been identified. The scale of the potential contributions that the sector can make to the rural economies of Ayrshire and Arran is not very large, but if all the opportunities are realised they will help to deliver a sustainable rural economy and sustainable communities.

8.14. The Ayrshire & Arran Woodland Partnership members are already actively supporting and encouraging the use of woodlands to diversify the rural economy through their existing programmes. Examples include the Farm Business Diversification Scheme and the promotion of wood energy opportunities by FCS. In some cases the delivery of opportunities are to a degree outside their control such as land use changes, the use of land after it is being re-instated following open cast mining; and raising the awareness of the existence of non-timber forest products.

8.15. The study has also identified seven reasonably discrete potential new projects whose implementation would benefit from the active support of some or all of the partners. These are summarised in table 8.1

Table 8.1 Potential Woodland Diversification Projects

Potential Project	Partner Support Required
Southern Ayrshire Recreation Development Project	Councils, the Ayrshire Tourism Partnership, FES, SNH, SE Ayrshire, Visit Scotland & other private sector recreation developers
Whitelee Visitor Centre	FES, SNH, East Ayrshire, East Renfrewshire & South Lanarkshire Councils
Development of 2 exemplar local wood fired heating schemes	FES, Councils, Scottish Executive
Further improving the environment around towns & communities	Councils, SE Ayrshire, FES
Encourage the establishment of a wood fired energy plant on Arran	North Ayrshire Council & FES
Survey the broadleaved woodlands in Ayrshire & on Arran to see what the potentially available volume of commercially utilisable timber is after taking account of landscape and planning constraints and accessibility for timber extraction	Council, FCS, SNH
Investigate the viability of further businesses setting up to process or add value to sawn hardwood timber after the survey is completed	FES & Councils

8.16. It is recommended that each of the Councils' Community Planning Partnerships is given the opportunity to consider these projects and to decide whether they wish to incorporate them in their plans.

8.17. Various constraints were identified in section 7 which were thought likely to have some influence on the scale of the contributions that woodlands were making to the rural economy. The actions that are required to overcome these are shown in table 8.2 along with the partner organisation that is best placed to carry them out.

Table 8.2 Actions to Overcome Constraints

Action Required	Partner Organisation
Develop a leaflet that identifies the woodland diversification opportunities & promote the leaflet.	FCS, SEERAD
Councils to adopt policies that support evaluation of wood fired energy opportunities and the installation of boilers where practical	North Ayrshire Council & East Ayrshire Council
Identification of a local market development adviser in FCS who can provide advice on the size of potential markets within the sector for local businesses	FCS
Further investigate the South Scotland Forest Industry Cluster employment / skills base survey results for Ayrshire & on Arran to identify gaps both in numbers and skills	SE Ayrshire, Forestry Commission Scotland, private sector companies
Improve the GIS data on woodlands in Designed Landscapes & on the principal existing and proposed cycleways and footpaths in Ayrshire so that a strategic overview of each can be obtained	North, East and South Ayrshire Councils and SNH

8.18. This section has identified where woodlands and the forest industry can increase their contributions to the rural economy and what the size of those contributions might be. The members of the Ayrshire & Arran Woodland Partnership will need to work closely together to deliver them. In achieving successful delivery the woodlands should also provide significant environmental and social benefits.

John Clegg Consulting Ltd
 Laurence Gould Partnership Ltd
 Cawdor Forestry Ltd

September 2006

ANNEX A – STUDY OBJECTIVES & METHODOLOGY

1. This annex sets out the background to the study; the policy context and its objectives and is taken directly from the project brief.

INTRODUCTION

2. This study will seek to assess the economic potential for diversification of woodland and forest industries to contribute to rural development in Ayrshire and Arran. This will include the wider utilisation of the woodland and forest resource for leisure activities. The study will specify a range of real opportunities and identify the best way to produce tangible business development and other outcomes which are capable of delivering significant positive impacts locally.

3. Ayrshire's rural areas are a key economic asset and appear to offer significant potential to sustain and encourage rural business development and diversification. Improving rural Ayrshire's economic performance will be vital to improving the performance of Ayrshire as a whole. The rural economic base and particularly agriculture are undergoing a period of considerable change and it is essential that rural areas increase their capacity to adjust to, accommodate and exploit this change while protecting and enhancing the environmental quality which will increasingly underpin future economic development. This will be essential if local benefits in the form of new and higher quality jobs and additional sources of income are to be created to underpin the sustainable regeneration of rural communities.

4. While many traditional rural activities primarily in agriculture and forestry will continue to develop and diversify, adding value locally to their outputs, many new business opportunities will either be in the service sector or have an increasing knowledge content. Although these activities can often be accommodated with limited visual impact, there are likely to be benefits from locating within those settlements that are already providing services and where accessibility and opportunities for linkage and shared infrastructure and other support services are highest.

Woodland in Ayrshire

5. Woodlands and the forest industries are important to Ayrshire. Woodland is a very significant land use, covering 21% of Ayrshire's total area. It is economically and visually significant with a diverse range of woodland types – large scale commercial plantations; biologically important native woodlands; policy woodlands and designed landscapes – providing a range of environmental and social benefits and potentially offering a varied range of opportunities for economic diversification.

6. Ayrshire is unique amongst the well wooded areas of Scotland because of its resident timber processing industry – ranging from large paper mills to small family run saw mills. These businesses not only add significantly to the value of the raw material grown in Ayrshire but also provide more than 2,000 jobs directly.

7. Ayrshire & Arran Woodland Partnership (2003) in recognition of the industry's importance specifies a range of objectives for woodlands to contribute to the sustainable development of Ayrshire by delivering the Strategy's vision:

“To develop the woodland of Ayrshire and Arran as a model of integrated and sustainable use of land that supports the local economy, contributes to community well-being and promotes environmental excellence”

8. The Ayrshire and Arran Woodland Partnership has now been formed to promote and support the implementation of tangible outcomes from the strategy. To this end the Partnership has initiated an investigation to identify how more could be done to support delivery of the vision and implementation of the strategic objectives. The investigation focused on a number of priority objectives including:

- Agricultural Diversification
- Maximising woodland employment in rural communities

9. The key barrier to the implementation of these key objectives was identified as the lack of information on specific opportunities in Ayrshire and how support can be targeted to encourage their exploitation.

10. The exact scale of this potential contribution is not known in Ayrshire. This study is seen as the first step in the process to improve forestry's contribution and identify how the Partnership's member organisations can support its delivery.

POLICY CONTEXT

Rural Development

11. Support for rural development is a clearly stated aim and objective of the Scottish Executive. The Executive is committed to ***“support and enhance rural life, rural communities and the rural economy”***. The 2003 Partnership Agreement commits the Scottish Executive to ***“maintaining strong, prosperous and growing communities in rural Scotland”***. The Executive's Spending Proposals 2005–2008, Building a Better Scotland, aims ***“To improve prosperity in rural Scotland”***. This is expanded as an objective for the ***“Promotion of sustainable growth in the rural economy and sustainable rural communities by supporting the agricultural, food and forestry sectors, pursuing land reform and improving rural services”***.

Rural Diversification

12. The National Planning Framework stresses that the future of rural Scotland lies in economic diversification allied to a strong commitment to environmental stewardship. SPP 15, Planning for Rural Development acknowledges the changing economic structure of Scotland's rural areas and encourages planning authorities to support a wide range of economic activity. It has a vision of ***“a more confident forward looking and diverse rural Scotland”*** which is ***“both accepting change and benefiting from it the countryside should be able to absorb more people content to live and able to work there.”***

13. PAN 73, Rural Diversification, emphasises the variety that makes up Scotland's rural areas – across the countryside, villages and small towns – from remote rural to pressurised greenbelt, and the varied challenges and different policy approaches that may be necessary to diversify the economy. Rural diversification includes traditional land based sectors like farming and forestry which are essential to retaining rural character. However, while agricultural and farm diversification are part of rural diversification, nearly all of the businesses and services we find in urban areas can be found to some extent in rural areas and offer opportunities for diversification.

14. A common theme across these various documents is the recognition of the diversity of

rural Scotland, the differing needs of rural communities and need for a sensitive and flexible approach to respond to each community's particular circumstances.

Spatial Dimension

15. As well as a realisation that simple urban-rural typologies are an insufficient basis for policy, there is growing recognition of an emerging policy gap between the city-region and the remote sparsely populated rural areas agendas. The so called accessible rural areas, which cover most of Ayrshire, are increasingly seen as being in danger of falling into this gap, simply providing the backcloth against which the city-region develops but lacking the support that the remoter areas enjoy. They have not yet been identified as a focus for policy in their own right.

16. Similarly market towns and other small towns which serve as rural service centres, lack a policy focus at national level in Scotland. This contrasts with the success of the RDA/Countryside Agency's Market Towns Initiative (MTI) and Rural Regeneration Zones (RRZ) in England and Wales. MTI has provided a process and tools for community engagement in recognising the specific needs of individual small towns within their rural hinterlands and a vehicle for tackling the issues by funded action.

17. Small towns in accessible rural areas are unlikely to retain the viability of their service role by simply continuing to provide basic consumer services. These are increasingly under intense competition from large retail formats and the centralising tendencies of scale economies in service provision in the main urban centres.

18. Small towns, however, offer the potential for an additional role in providing a range of higher added value services which would complement the reputation and attractiveness of the city-region. The recent SE research report on the 'Economic linkages Between Small Towns and Surrounding Rural Areas in Scotland' (2005), highlights that growth in towns is a pre-requisite for sustaining and revitalising surrounding rural areas. This confirms the MTI experience which has demonstrated the role of small rural towns as catalysts in regenerating the local rural economy. Conversely if small towns fail in their service role this will knock on to the detriment of economies in surrounding rural areas.

Local Policy Context

19. The changing policy context at the local level – community plans; development plans; access strategies – needs to be taken into account, particularly in relation to any new and emerging opportunities such as landscape enhancements; development in the countryside; green networks; opencast restoration; derelict land; energy crops; tourism, leisure & recreation etc. to identify and help capture beneficial linkages between them and the contribution that forestry can make to them.

DIVERSIFICATION OPPORTUNITIES

20. Evidence presented to the recent Environment and Rural Development Committee Inquiry into Rural Development (2005, Volume 1 & 2) has indicated that Forestry is one of 5 key sectors offering real potential and opportunity for rural diversification:

- Forestry
- Agriculture & Food
- Tourism

- Renewable energy
- Retail & Other Services

21. While the primary focus of the proposed study is Ayrshire's woodlands and forest industries, it is felt that this should not be viewed in isolation and that there is merit in taking a wider view giving consideration to linkage with other diversification opportunities and within the context of rural development generally.

Forestry

22. The Scottish forestry strategy, Forests for Scotland highlights the economic potential of a diverse forestry resource and seeks to ensure that communities benefit from woods and forests.

23. In a working paper commissioned by the Scottish Forestry Forum on the role of Scottish Forestry in rural development (2004), forestry's potential role was described as:

[playing] "a catalytic role in releasing community economic potential and increasing the sustainability of fragile rural communities.to generate targeted local rural development benefits through value-adding activities [e.g.] local processing of timber or exploitation of wildlife-tourism opportunities".

24. However, the paper then highlights the barriers to exploiting these opportunities and what must be done to overcome these obstacles:

- Improve ability to **recognise the full economic value** of local and small scale activity;
- Forestry sector should adopt more **outward looking language and culture** and involve itself in the mainstream rural development agenda;
- Improve **local support infrastructure** for forestry related businesses; and
- Improve **joined-up agency working** and public policy integration.

25. The paper concludes by proposing three main areas for action:

- **Adding local value:** local use and processing of wood, tourism / recreation, improve local and national marketing of local companies;
- **Contributing to sustainable communities:** employment, quality of life and community capacity building;
- **Developing the exemplar role of public bodies:** supporting rural development by increased use of local wood products, wood energy, improving local infrastructure for forestry related businesses and delivering joined-up solutions.

26. As discussed in the paper forestry, woodlands and wood products are not a panacea for delivering rural development and economic diversification, but they do have the potential to act as a catalyst by offering exciting opportunities to help regenerate rural areas and stimulate the development of thriving and sustainable rural communities.

Agricultural and Farm Diversification

27. A Forward Strategy for Agriculture (2001) underpinned the Scottish Executive's support by stating that *"farming should be part of rural development, not separate"* and that an aim of the agricultural sector is to develop *"healthy, growing rural communities with farming playing*

its part [by]:

- *making the most of farm businesses and their links to other rural businesses; and*
- *developing new employment opportunities”*

[This report was superseded in March 2006 when the Scottish Executive prepared a revised strategy and action plan called A Forward Strategy for Scottish Agriculture – Next Steps].

28. Further promotion of the role of farming and farmland in rural development is provided under the CAP reform process with support for farmland environmental enhancement and the introduction of Land Management Contracts supporting a broader range of land management activities e.g. farm woodland management.

29. The political commitment to encourage farming's contribution to rural development has been supported financially with the introduction of grant schemes, such as the 'Farm Business Development Scheme'. These schemes offer grants for the restructuring and diversification of farm businesses.

30. In Ayrshire, an additional grant – Ayrshire and Arran Woodlands Locational Premium – is available to encourage eligible farmers to establish farm woodlands delivering agricultural diversification benefits.

31. Other key sectors offering potential for opportunities linked to the woodland and forest industry sector:

Leisure, Recreation & Tourism

32. Leisure, Recreation and Tourism already make a significant contribution to Ayrshire's economy but could contribute more to diversification in the rural areas. Rural Ayrshire offers significant potential which could be developed to increase the range, geographic spread and quality of accommodation, facilities and attractions. The area's improved connectivity regionally and with the rest of the UK and Europe; the quality of the environment; open access tourism; the development of local quality food/tourism products; the promotion of its cultural; natural resources and green tourism markets and their associated attractions and accommodation all offer opportunities for development. Creating networks of linked activities/facilities utilising service provisions centred on small towns are likely to maximise opportunities locally.

Renewable Energy

33. The development of a sustainable renewables sector presents an important opportunity for economic diversification and rural development in Ayrshire. The area has significant potential in its assets, particularly in biomass and co-firing (forest resource and energy crops) but also in wind, and small scale hydro, and in its proximity to energy end users and transmission networks, to gain significant local benefit from a range of technologies. There are also small scale and micro-renewable potential at the community and individual user level which offer business development potential in developing the supply chains and in systems installation and maintenance.

Retail & Other Services

34. Development of retailing and other services capable of retaining existing trade and attracting additional expenditure to rural areas may offer potential for diversification. Market

towns and other local service centres need additional activity to attract new sources of income. Local periodic markets either specialised or themed offer obvious links and provide marketing opportunities for local products, particularly in the traditional sectors. Niche markets and specialised services where a cluster of related retail/service offers can create a self sustaining critical mass serving a particular market sector or justify common business support infrastructure. This could be based on existing traditional sectors adding value in wood products and food & drink or in cultural connections or in entirely new sectors.

SCOPE & PURPOSE OF THE STUDY

35. The aim of the study is to identify the **real** potential for forestry to contribute towards economic diversification and rural development in Ayrshire. In addition specific investigation is required to highlight which opportunities have potential to support farm diversification and income security.

36. The opportunities reviewed should include examples from the broad spectrum of activities associated either directly or indirectly with woodlands and/or wood products for example specific opportunities in forestry services and consultancy, forestry contracting, handicrafts, tourism, woodland foodstuffs, wood-fuel, landscape setting etc.

37. The geographic scope of the study must include the East, South and North Ayrshire unitary authority areas and must take account and address specific local variations across mainland Ayrshire as well as for Arran and Cumbrae. The focus of the study is on Ayrshire based businesses, and should include opportunities for developing markets and operations both inside and outside the Ayrshire boundary.

38. The question the consultant must answer is:

“HOW CAN AYRSHIRE’S WOODLANDS AND FOREST INDUSTRY INDIVIDUALLY OR IN COMBINATION WITH OTHER KEY SECTORS OFFERING POTENTIAL FOR ECONOMIC DIVERSIFICATION – AGRICULTURE; TOURISM, LEISURE & RECREATION; RENEWABLE ENERGY; AND SERVICES – MAXIMISE THEIR CONTRIBUTION TO ASSIST THE DIVERSIFICATION OF THE ECONOMY AND SUPPORT SUSTAINABLE RURAL DEVELOPMENT?”

OPERATIONAL OBJECTIVES

39. The Study's operational objectives are to:

- Identify a range of commercial opportunities for woodland related businesses;
- Identify specific opportunities for farm business diversification and/or income security for those involved in the agricultural sector;
- Identify specific opportunities in higher value added, knowledge and service businesses;
- Identify specific constraints restricting development of these opportunities;
- Assess the feasibility of each opportunity and the potential impact both financially and in terms of Full Time Equivalent employment;
- Specify the existing and additional support (advice, information and/or grants) available and needed to encourage the future exploitation of opportunities;
- Identify examples of best practice in terms of delivery and outputs; and
- Recommend the most effective and efficient delivery of public funding to support the

development of opportunities.

40. The consultant is encouraged to apply experience and learning gained in other areas of the country and consult widely with farmers, practitioners, customers, support service workers and policy makers in Ayrshire to validate their recommendations.

ANNEX B – CONSULTEES & CONTACTS

Ian Johnson	Ayrshire Joint Structure Plan Team
Nigel Wallace	Ayrshire Joint Structure Plan Team
Elizabeth Neill	Ayrshire Joint Structure Plan Team
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Louise Kirk	North Ayrshire Council
Stuart Gibson	North Ayrshire Council
Kathleen Don	North Ayrshire Council
Neil Feggans	South Ayrshire Council
David Gray	South Ayrshire Council
William McKissock	South Ayrshire Council
David Hewet	East Ayrshire Council
Julian Thorp	East Ayrshire Council
John Spooner	East Ayrshire Council
Anneke Freel	East Ayrshire Council
Bruce Davidson	East Ayrshire Woodlands
Nick Prower	East Ayrshire Woodlands
John Dougan	Forestry Commission Scotland
Neil Murray	Forestry Commission Scotland
Keith Muir	Forestry Commission Scotland
Keith Wishart	Forestry Commission Scotland
Trevor Blackburn	Forestry Commission Scotland
Marion Currie	SEERAD
Robin Turner	SEERAD

John Flanagan	National Farmers Union for Scotland
Chris Savage	Factor, Cassillis Estate
Angus Campbell	Dalhanna Farming Co
Catriona Mcleod	Scottish Enterprise Ayrshire
Dorothy Simpson	SNH
Peter Finnie	Business Gateway Ayrshire
Douglas Cowan	Argyll & Islands Enterprise
Jamie Farquhar	Forestry & Timber Assn
Catriona Mackie	Visit Scotland
Stewart Farmer	Federation of Small Businesses
Pip Tabor	Southern Uplands Partnership
Tommy Loudon	FWAG
Howard Wilkinson	Ayrshire Food Network
Mark Gibson	Craigengillan Estate
Glenn Heggs	UPM Tilhill
Steve Lavery	UPM Tilhill
Alistair Menarry	Scottish Woodlands
Eammon Wall	Eammon Wall Associates
Mike Arthur	Scottish Biofuels Ltd
Pat Hunter-Blair	Blairquhan Estate
John Patterson	Egger (UK) Ltd
Alan Christison	Adam Wilson & Sons Ltd
Charlie Fulton	South Scotland Forest Industry Partnership
Tricia Irving	Girvan Horizons