



## Stakeholders' perceptions of forestry in rural areas—Two case studies in Ireland

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### ABSTRACT

Ireland has undergone a substantial afforestation programme in the last 20 years, resulting in the forest cover increasing from 4.8% of the land area in 1983 to a current level of 10%. This paper presents the results of a study undertaken to assess stakeholders' perceptions of forestry in two case study areas in Ireland. The two areas, Shillelagh and Newmarket, were chosen because their demographic characteristics varied as did their history of forestry development. However, the current forest cover is similar in the two areas both in terms of species composition and extent. Qualitative techniques, involving interviews with stakeholders, were used. There were striking differences in the perceptions of forestry in the cases study areas. In Shillelagh, which had a longer history of forest cover and a more urbanized population than Newmarket, forestry was considered part both of the local history and traditional landscape. Forests were valued for their amenity and recreation functions rather than their economic function. In contrast, perceptions of forestry in Newmarket were negative. Forestry was considered to be an isolating agent which was not part of the landscape of the area. The forests were also considered to have negligible amenity value. These negative perceptions in Newmarket seem to be linked to the dominance of Sitka spruce, an exotic conifer, in the forests. Stakeholders expressed the desire that if forestry was to expand further in the area that it would be through the planting of broadleaf species rather than conifers. The fact that these negative perceptions did not emerge in Shillelagh despite it having a similar species composition is attributed to the more gradual rate of afforestation and thus landscape change in the area. The lack of consultation and approach to planning regarding afforestation proposals was identified as a key issue in Newmarket with stakeholders expressing the wish that they should be consulted more when afforestation was planned. Greater community involvement in the planning of afforestation proposals is recommended as a means of improving consultation and to help dispel negative perceptions. The paper concludes by highlighting that perceptions of forestry within an area are dynamic and are influenced by the history of forestry development in that area.

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### Introduction

Rural areas in Europe have gone through a period of profound change. The agricultural sector is no longer the primary economic driver in these areas with secondary and tertiary sectors gaining in importance (Roberts, 2002). The rural demographic structure is also changing as the average household size declines and the population ages (Roberts, 2002). The net result of these changes is that the diversity in rural areas has widened (Elands and Wiersum, 2003) and the divide between rural and urban has become less clear (Roberts, 2002). Some rural areas, particularly those that are

remote, have been unable to respond to the reduced significance of agriculture and have experienced a decline in population and services. In other rural areas, especially those close to metropolitan areas (Elands and Wiersum, 2003), a process of semi-urbanization has taken place coinciding with increasing integration of economic activity between rural and urban centres (Roberts, 2002). These “newly” urbanized areas have experienced an extension of residential areas, inhabited, more often than not, by middle-class dwellers who do not have local occupations (Roberts, 2002) and who have urban-oriented lifestyles (Elands and Wiersum, 2003).

As a result of these changes in rural areas, the role of forests is also changing (Elands and Wiersum, 2001). For much of the early part of the last century, the ‘industrial’ timber-production model of forestry dominated and the primary role of forests in rural areas was to provide employment, income and raw material. However, with increasing urbanization and the reduced economic reliance on the primary sector, new roles for forestry have emerged. The primacy of

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the production role of forests is diminishing and greater emphasis is being placed on forestry's role in creating ecological and amenity services (Elands and Wiersum, 2001). In a trans-European study O'Leary and Elands (2002) found that the stakeholders surveyed identified the protection of air, water and soil as the most important benefit of forests, while the provision of business activities was ranked as the least important. Nearly all European countries are now committed to sustainable, multiple-use forest management policies (Jeanrenaud, 2001) which involve the management of forests in a way that will fulfill now, and in the future, ecological, economic and social functions.

Studies concerning the social impacts of forestry have been less numerous than those dealing with the ecological and economic impacts of forestry, primarily because of the earlier over-riding emphasis placed on the economic aspects. Yet, as Slee et al. (2004) outlined, forests may generate social values, or be connected with people's lives, in ways that contribute or deduct from social well-being. In areas where forests are established for the first time, they can sometimes be perceived to negatively contribute to quality of life. O'Leary et al. (2002) found this to be the case in an area in the north-west of Ireland where afforestation was often carried out on land sold to outside interests leading to a sense that forests were replacing people thereby threatening cultural identity. Thus in examining whether forests are being sustainably managed, it is necessary to take into account social impacts. One of the means of assessing these impacts is to investigate how local stakeholders perceive forestry as a part of their social and physical environment (Wiersum and Elands, 2002). Typically this is done using a combination of qualitative and quantitative data collection methods. For example, Parkins (1999) in his socio-economic study of a forest industry host community in Alberta, collected both qualitative data in the form of primary narrative data (i.e. interviews) while also consulting local secondary sources (e.g. local newspapers). In Ireland, much of the research on the social impacts of forestry has used quantitative methods where members of the population are interviewed and questionnaires regarding their attitudes to forestry completed (e.g. Kearney and O'Connor, 1993; O'Leary et al., 2000). Only a small number have used a mixture of qualitative and quantitative methods (e.g. Wiersum and Elands, 2002; Ní Dhubháin et al., 2006). The use of qualitative methods allows a richer and wider range of worldviews concerning forestry and afforestation to be captured than is the case with a purely quantitative or hypothesis testing approach (Flécharde et al., 2007).

In Ireland, rural areas have experienced similar changes to those experienced throughout the rest of Europe. In response to the decline in agriculture, an afforestation programme among private land owners has been financially encouraged since 1980. Forest cover has increased from 4.8% of the total land area in 1983 (328,000 ha) to a current level of 10% (Forest Service, 2007). Given the unprecedented rate of afforestation in Ireland and changing global perceptions of the role of forestry, it was timely to undertake a study investigating the social impacts of forestry. In this study qualitative techniques, involving interviews with stakeholders, were used to assess these impacts in two case study areas in Ireland – Shillelagh and Newmarket.

## Materials and methods

The Shillelagh case study (CSA) was located in the south-east of Ireland and encompassed an area within a 20-mile radius of Shillelagh village. The Newmarket case study, which was located in the south-west of Ireland, was centred on the town of Newmarket and was of similar size to that of Shillelagh. The areas were chosen primarily because of their contrasting history of forest cover.

The Shillelagh CSA has a mature forest cover with second rotation forests present. It also has an extensive forest infrastructure (i.e. nurseries, sawmills, etc.). The Shillelagh area was also included as a case study in a comparative European study of the nature and dynamics of landowners' and the public's attitudes to forestry (Wiersum and Elands, 2002). The Newmarket CSA has a young forest cover, and afforestation is expected to increase in the area. Furthermore, local community groups within this case study have opposed recent afforestation development.

A profile of each case study was generated using secondary demographic, economic and forestry data. Stakeholder perceptions of forestry were ascertained in the CSAs using semi-structured interviews.

The sources of the secondary data collected for each case study included the Central Statistics Office (CSO) which provided information related to the demography of the area, as well as employment and farming data. Forestry data were extracted from both the Forest Service's and Coillte's databases. Coillte (the Irish Forestry Board) is a semi-state body, set up in 1989, to manage state forests on a commercial basis. Other sources of information available locally were also consulted including history reports from libraries in the CSAs and county council publications such as development plans and reports from farming and local development organisations. A search of the websites of local newspapers was undertaken to extract references related to forestry issues. When available, published research articles were also included.

### Profiles of the two case study areas

The key socio-demographic and land use characteristics of the two case study areas are presented below.

### Geographic location and demography

The Shillelagh CSA encompasses parts of counties Carlow, Wexford, Wicklow and a small area of County Kildare in the south-east of Ireland. Although situated in a rural area, the centre of the Shillelagh case study, i.e. Shillelagh village, is located at commuting distance from Dublin and is close to Wexford town which is an important pole for employment. Population levels within the CSA increased by 28% during the period 1946 through to 2002 (Table 1) probably as a consequence of the proximity to the capital, and the growing commuting pattern of people working in the capital but living in the southern counties (i.e. counties Wicklow, Carlow and Wexford).

**Table 1**  
Socio-demographic and forestry characteristics of the case study areas.

Characteristic	Shillelagh	Newmarket
Change of population over the period 1946–2002	+31,053 (+28%)	–10,400 (–8.6%)
Population density (persons/km <sup>2</sup> ) for year 2002	47	27
Percentage of total area farmed (year 2000)	73.6	72.9
Average farm size (ha)	42.2	35.3
Percentage of total area under forest (year 2002)	9.6	13.4
Percentage of forest area comprising conifers	81	87
Percentage of total forest estate privately owned	27	34
Share between economic sectors		
Primary	8.5	10
Secondary	27	28
Tertiary	64.5	62

The second case study, Newmarket, takes in parts of counties Cork, Limerick and Kerry. Although the area is essentially rural, with three towns situated at the periphery of the case study, the south-east border is no more than 10 miles from Cork city. The central part of the case study, known as the Duhallow region, is designated as a disadvantaged area *vis à vis* the allocation of EU structural funds. The population density is quite low reflecting the rural character of the area. From 1946 through to 2002, the population declined by 8.6%.

#### *Rural landscape and farming*

There are important landscape and farming variations in the Shillelagh CSA. In the north of the CSA, where uplands dominate, sheep farming is the main activity. Moving to the southern and eastern parts, tillage becomes predominant, often associated with drystock farming. Farm holdings over 50 ha are well represented in the area and the average farm size is 42.2 ha (Table 1). These variations in farming activity reflect important differences both in soil quality and landscape elevation: the uplands are dominated by podzols while brown earth soils compose half of the land in County Carlow at the eastern part of the CSA.

The diversity of landform and elevation also results in a variety of farming practices in the Newmarket CSA. Three mountain ranges characterise this area and the south of the case study is crisscrossed by the Blackwater River system. Dairying is a major farm enterprise in this area. There are strong regional variations in terms of farm-scale and incomes. Farms located on lower grounds that are mainly specialised in dairying and tillage production tend to be bigger and more economically viable than smaller scale farms located in the hills that rely on cattle and sheep farming. The central part of the CSA (i.e. the Duhallow region) served as a case study area for research relating to low-income farming and rural poverty (Frawley et al., 2002). This research showed that 36% of the farmers in the Duhallow area were in poverty. The average farm size held by “impoverished” farmers was 28 ha. The study further showed that those most at risk of poverty were drystock farmers, as well as those farming less than 20 ha and/or operating hill farming.

#### *Forestry*

Forestry has a strong legacy in County Wicklow in which over one-third of the Shillelagh CSA is based. The development of a forestry based industry in the county has been an important support to many rural economies, and in some areas of rural Wicklow, forestry still accounted for 40% of household incomes in 1999 (Wicklow County Council, 1999). Part of the forest estate in the county consists of the remains of old estate plantings that are of significant amenity value. Since the mid 20th century, planting shifted from hardwoods to exotic conifers, the latter of which are essentially concentrated on upland areas. The age-class structure of the forest estate is normal with similar areas in each age-class.

The variation in soil quality referred to above also has an influence on forestry. In Ireland, the vast majority of afforestation sites occur on higher grounds and are characterised by podzols and bog land soils. The situation in this CSA is quite different as afforestation carried out by the state occurred essentially on podzolic soils (33%) and also for a large part on brown earth soils (22%). The latter are considered the best soils for forestry. Recent developments in private afforestation show that better quality soils are also now being afforested in the south of the CSA (i.e. South Wicklow and North Wexford) allowing a shift in planting from conifers to broadleaved species. There were 17 sawmills, 4 forest nurseries and 13 establishment and harvesting contractors operating in the case study in 2003 (Ní Dhubháin et al., 2006).

In the Newmarket CSA forestry is essentially confined to high grounds (80% of state afforestation was carried out at elevations greater than 200 m). Thus the main soil types on which forests were established were podzols and bog lands (28% and 54%, respectively, of Coillte afforestation sites). Private afforestation accounts for 34% of the total afforestation in the case study. It was predominantly carried out on poor soils and high grounds, as well as on steep valley slopes which are often difficult to cultivate. The majority of the forest estate has been established since 1980. No timber processing units or harvesting contractors were operating the area in 2003 while only four establishment contractors were working there at that time (Ní Dhubháin et al., 2006).

Afforestation in this area has been subject to controversy since the early 1990s when the Coillte estate started to expand. Increased demand for the land for afforestation resulted in an increase in land prices. Farmers who wished to extend their holdings could not afford it and forestry was then perceived as a depopulating agent (Crowley, 1998). In 1993, an action group based in the Cork/Kerry border also started to challenge what they called the “blanket afforestation” of the area and its associated ecological and social impacts (The Kingdom Newspaper, 1993). Similar concerns were brought up in the neighbourhood of Rockchapel village, which is located approximately 10 km north of Newmarket. More recently another dispute related to afforestation in Coolea at the southern border of Newmarket CSA was highlighted (Lucey, 2003). In this case a local resident group objected to the afforestation of a 33 ha site by Coillte, in partnership with a local farmer, on the basis of the absence of a consultation process with the local community.

#### *Choice of stakeholders and data analysis*

Current perceptions of forestry were assessed using semi-structured interviews. In order to reflect the variety of opinions and concerns in the community, stakeholders were divided into three categories, namely:

1. Producers (P): people deriving their living from the land (e.g. farmers and foresters);
2. Consumers (C): people living or using the area but not deriving their incomes from the land (e.g. community members and visitors);
3. Decision makers (DM): people involved in public policy and lobbying (e.g. councillors, officers from administrations, local group representatives, NGOs, etc.).

The identification and selection of individuals in each stakeholder category was initially done using local and regional key informants. These included representatives from organisations such as Teagasc (The Agriculture and Food Development Board), the Forest Service, County Boards and Councils, and locally based rural development organisations. The initial group of respondents then guided the interviewer to further contacts, a process known as snowball sampling. An *aide-mémoire* was used to conduct the interview but the discourse was essentially a co-construction between the interviewer and the interviewee. The interviewer aimed to cover the objectives of the research including:

- What is the perception of the person of the rural environment she/he lives in?
- What role(s) does forestry play in it?
- How can this role be optimised or reinforced?

Thirty-one persons were interviewed in total in each case study. Unless interviewees opposed it (which was the case for two interviewees) each interview was recorded and subsequently transcribed. In order to avoid bias, the transcripts of the interviewees who refused to be taped were not used during the analysis process described below but the issues brought up were incorporated in the results. The transcripts were examined using a technique derived from a widely used framework for analysing qualitative data known as 'grounded theory'. The method builds an increasingly complex representation of the social phenomena under study through responses to interview questions. Typically, observed patterns emerge early in the data collection and are then tested with additional observations. These patterns form an index into which the recurrent subjects and themes in each interview are allocated. Data collection is suspended only when patterns stabilize and no novel information is forthcoming from later observations (Charmaz, 2000). These qualitative methods were used in order to capture a range of views concerning forestry and afforestation that could not be captured with a purely quantitative or hypothesis testing approach.

## Results

The analysis of the interviews allowed various issues and perceptions in relation to forestry within each of the case study areas to be identified. These issues are collated under three main themes:

- Forestry and the local community;
- Forestry and the environment;
- Forestry and its potential.

It is important to note that what is recorded in these results are the opinions and perceptions of those surveyed. Where appropriate, direct quotes from those interviewed are presented to illustrate the perceptions. The case study area and the stakeholder group from which the quote arises are indicated.

Overall, the opinions of those interviewed of forestry varied between the two case study areas. In the Newmarket case study strong opposition to forestry was expressed. This opposition was based on a number of perceptions including the limited impact of forestry on the local community as well as its negative impacts on the environment. In Shillelagh, the view of forestry was generally positive.

### *Forestry and the local community*

The themes that emerged when discussing forestry and local communities included employment, local tradition and history, planning and consultation, and amenity.

### *Employment*

One of the key positive impacts attributed to forestry is that it generates employment in rural areas (Ní Dhubháin, 1995). During the field survey a number of small sawmills and forest nurseries were identified in Shillelagh. The employment that these sectors generated, in the past, was recognized by those interviewed.

You will probably look at 600 people working between those 5 units back in the 1960's". . . In addition around 50 foresters would have been working in this area. (S)(P)

Sawmilling activity is everywhere. Particularly around Shillelagh and Aughrim. These give a lot of employment, particularly in Aughrim which is a rural location where you wouldn't have

too much activity. This will have a very significant impact on the spending power of the local economy. (S)(P)

However, there was clear recognition that employment levels have fallen.

There wouldn't be that many people employed in forestry now compared to 10 to 20 years ago because there is not that much planting going on now. There are just a few people involved in forest maintenance and most of the harvesting and cutting is done by contractors. Not necessarily local people. . . So I suppose the forest economy is very small even in this area. (S)(C)

This lack of current employment was also identified in the Newmarket area.

Going back 20 years ago, when Coillte more or less started forestry development, I remember 22 people from this parish working for Coillte. For all the forestry here now there is only one full-time and two part-time jobs. (N)(DM)

Professional foresters interviewed indicated that the changing nature of forest work in Newmarket meant that harvesting work was now taking over from establishment work in the area, involving more machine-based operations and less labour intensive work. Furthermore, in Newmarket, unlike Shillelagh, no reference was made to the forest-related employment generated in downstream and in allied sectors. Given the absence of such industries in the CSA this is not perhaps surprising.

### *Local tradition and history*

The interviews in Shillelagh revealed a sense that forestry was part of the local history and rural landscape. The CSA comprises a number of old wooded demesnes that are now essentially managed for amenity and conservation purposes. This type of forestry cohabits with conifer plantations which are most commonly located on uplands. During the course of the interviews a number of people (both foresters and local inhabitants) mentioned about the quality of the hardwood timbers – essentially oak – that once grew in the CSA and their use in prestigious buildings such as the Westminster Hall or in supplying timber for the British navy. These testimonies generate an impression of pride but also a feeling of loss in that the management practices and skills that were once associated with those forests are now gone. This feeling is, in part, shared by some foresters that have been involved in the area and know about its history.

You feel that in addition to losing the quality of those timbers you also lost the skill of knowing how to grow them. If you go and ask a forester: would you mind putting this woodland back into full production potential- I don't know anybody that could do it. (S)(P)

In contrast there was no sense of tradition of forestry in the Newmarket area or no sense that forestry was part of the rural landscape. In fact, forestry was seen as an isolating agent.

I remember the time when the landscape was totally open and when you could see over the valley, keeping a visual contact with your neighbours. The expansion of forestry – especially down the valley, is creating a feeling of isolation. (N)(C)

This perception of isolation was often associated with the representation people have of the landscape they live in.

The open Irish landscape is the reflection of the Irish personality. . . Traditionally the landscape was open and people could see each other's houses and farms. Now the view is blocked by forests and people feel displaced by trees. (N)(C)

### Planning and consultation

In Newmarket dissatisfaction was expressed with the planning and consultation process that pertains to forestry development.

There are problems and certain areas get too much forestry. With a little more sensitivity in the planning process I think we can reach a balance that will be satisfactory for everybody. (N)(DM)

In particular, opinions were expressed that afforestation developments that are not currently subject to an impact assessment procedure (i.e. developments less than 50 ha) should still be subjected to some form of appraisal as they too have impacts for people living nearby. Related to the issue of planning is the consultation process. For local communities, the placement of adverts in local newspapers (which is the official way people are notified of an afforestation proposal in their community) as part of the consultation process is not satisfactory. In general, the need for a much more straightforward approach to consultation was expressed.

At this point in time planning should involve more consultation with local communities. Consultation is the key to comprehension on both sides. (N)(DM)

Some foresters interviewed agreed with this sentiment and even took it a step further.

The lack of communication with locals has led to negative perceptions from the general public. The forestry sector should be supported by foresters through for example their involvement in environmental education and through direct consultation with the public. (N)(P)

Those interviewed from the farming community in Newmarket also expressed concern about the intensification of afforestation in this area and most of them would like to see some form of monitoring attached to future development. They also indicated that they would not consider planting good quality land and some complaints were made about the lack of monitoring regarding land quality considered for afforestation.

You never see anybody come to visit and monitor the land before the agreement is given. Some of the lands allocated to forestry could have been of better interest to the community. Even some lands given to forestry could have been used for fattening cattle or even dairying. (N)(P)

One form of monitoring that was mentioned is the one that prevailed in the early 1970s in Ireland. The Land Commission, a state agency, was then operating as a regulator ensuring that lands afforested were not suitable for farming. Indeed, on some occasions, lands bought by the government for afforestation were handed back to farmers. Many of those from the farming community expressed a wish that such a regulation system prevailed today in relation to forestry.

### Amenity

The area in the Shillelagh CSA is of major importance for amenity, recreation and tourist activities. In particular the sceneries of the Wicklow Mountains attract a considerable number of foreign tourists but are also an important leisure area for urban dwellers living in the Dublin area. This is reflected in the fact that there are nine forest parks present in the CSA managed by Coillte specifically for recreation purposes. In general terms people seem to consider that forestry is part of what makes the place attractive although they find it hard to evaluate its contribution.

This area is a recreational area for 25% of the country and there is a very good synergy between all the activities. So is that because the forest is there? I don't know but they go well together. (S)(DM)

In addition to their amenity and recreational value, landscapes in the area are attractive to the film industry. This industry has become an important component of the economic activity in County Wicklow as about half of the films shot in Ireland are in this county and the presence of forestry in the landscape seems to play a role in that attraction.

In Newmarket, few of those surveyed referred to the amenity value of forests. Those who did were negative.

The Sitka spruce forests are of no interest as amenity woodland for people. . . would be more acceptable for people if they had amenity woodlands with broadleaved species or with a mixture. (N)(C)

The low amenity value of forests in general in the Newmarket area was confirmed by the foresters interviewed.

Forests in the area have a very low use for amenity; the main objective so far has been timber production. But the situation now is changing and we try to develop opportunities such as picnic areas and marked roads. We are also developing horse riding and long distance trails and we encourage a mixture with broadleaves in new afforestation sites. (N)(P)

The one exception to the negative commentary on the amenity values was the case of the "Island Forest" in Newmarket. This forest initially owned by Coillte has been handed over to the local community. The forest is now jointly owned by the community and Coillte, the latter still benefiting from the extraction of timber from the woodland. This initiative was perceived very positively, not so much because an amenity area had been created close to the village, but for the benefit gained from Coillte and the local community working together on one common project.

### Forestry and the environment

The two key issues that emerged in the context of forestry and the environment related to landscape integrity and watercourses.

#### Landscape integrity

In Newmarket, there was an overall perception among local people that forestry does not belong to the traditional Irish landscape or rather to the representation they have of the Irish landscape. However, forestry in this context almost always referred to commercial Sitka spruce plantations and the perception of mixed and broadleaved forests is generally more positive. Some relate this issue with the one regarding the planning process as they feel that the procedure does not take enough account of the uniqueness of the Irish landscape.

There should be more cohesion in planning over the whole area; there should be a holistic approach to it. There is a strong sense that there is a loss of the traditional open Irish landscape and that should be considered too. (N)(C)

In Shillelagh, forestry is an accepted part of the landscape and those interviewed were happy with the current level of forest cover. Yet, even here, people alluded to the importance of keeping forestry development under control so as to not negatively impact on the natural environment and the sceneries in this area. These are highly valued not least because of the economic value that they indirectly generate through the tourism and film industries. The current level

of forestry development seemed acceptable to those interviewed and many felt that the Indicative Forest Strategy (IFS) developed for the county played a crucial part in maintaining the appropriate balance in land use.

If there were to be a major change in land use to forestry that will of course involve the county council. So that's why we have the Indicative Forest Strategy in order to guide people in the area. (S)(DM)

The IFS for Wicklow was drawn up by forest authorities and local authorities. It sets a common land strategy for the county by identifying and recording areas that are suitable for afforestation and areas that are sensitive to it for environmental, aesthetic and/or archaeological reasons. The strategy serves as a common reference document for the various administrations and for the stakeholders.

There was also a concern that not only should forestry development be kept under control in Shillelagh but that a balance in species mixture should be achieved in order to respect the traditional character of the forest landscape.

Hardwoods are mainly the legacy of the former demesnes, the old estates. . . When the forestry programmes started in the late 40s, early 50s, 90 to 95% of what was planted was conifers. That's mainly what's there if you look around Wicklow. But now and again broadleaves are encouraged. . . We wouldn't want to see just a continuous line of conifers all over the place. (S)(P)

#### *Watercourses*

Only in Newmarket concerns were expressed about the detrimental effects intensive afforestation developments have on the main river system present in this area: the Blackwater river system. People perceive that as a result of afforestation on bog lands flooding is becoming more frequent downstream. Acidification is another issue people are concerned with. It is of particular concern because the Blackwater river system is renowned for fishing activities and is an important natural asset that local communities value. It also generates income locally through fishing/angling tourism.

We have floodings in the area that are more frequent than in the past. Forests were established essentially on uplands and on bog soils. These soils don't operate anymore as a water regulator. (DM)

#### *Forestry and its potential*

One of the aspects teased out during the course of the interviews related to the future role of forestry in the case study areas. What emerged was that many of those who had expressed negative opinions of forestry in the Newmarket area were able, and willing, to describe a form of forestry that was acceptable to them. It was felt that more space should be given to broadleaved and mixed forests and that farm forestry should continue to be encouraged albeit on land not suitable for agriculture. The view that there should be "more control" exerted over forestry development in the future was also expressed. In Shillelagh, the wish that more broadleaves be planted was also expressed. However, here the opinions of the future role of forestry were much more positive with interviewees hoping that the existing knowledge and management skills within the area would be built on and exploited to a greater extent.

#### *Forest management and species*

It was a commonly expressed opinion in Newmarket that some space should be left for another type of forestry other than commer-

cial forestry. In fact people seemed to object as much to the main species planted in commercial forestry as they did to the objective of that type of forestry.

There is no place for such type of forestry. We would have no objections to the normal forests: the oak, the ash, and the broadleaves. We would have no difficulties with that. But we have difficulties with this massive growth of Sitka spruce. (N)(C)

Broadleaved woodlands were considered to offer the potential for amenity activities.

The Sitka spruce forests are of no interest as amenity woodland for people. . . It will be more acceptable for people if they had amenity woodlands with broadleaved species or with a mixture. (N)(C)

There is a generally a good understanding within the consumer group in Shillelagh of the economic rationality of conifer plantations. However, there were some concerns that conifer plantations should not be extended any further. In addition, people were in favour of seeing more broadleaved planting to balance conifer plantations.

I see forestry as a way of farming as well as an industry in itself. But I would like to see more indigenous trees. I understand the economic reasons for growing Sitka spruce but I would much prefer to see, especially in this area where there is a history of oak, more broadleaves. (S)(C)

#### *Farm forestry*

Among those interviewed in Newmarket from the farming community there was an almost unanimous agreement that forestry should be restricted to marginal lands that are unsuitable for farming. Even within Shillelagh the opinion prevailed that forestry should be restricted to lower quality land. However, despite the negative views expressed in Newmarket, there is recognition that afforestation schemes offered farmers the possibility to increase farm incomes. This was particularly true for those operating hill farming and/or small-scale farms.

When an afforestation programme started it offered a means to farmers to complete their incomes and to obtain revenue from lands that were not suitable for farming. It was especially appropriate in the north of the county where farming has always been small-scale and with low incomes. (N)(P)

Among some of the farmers interviewed, who had afforested part of their land, concern was expressed about the future of their plantations. These concerns were mainly to do with the value of the final crop.

Back 10 years ago afforestation was the only viable option but I won't do it anymore. The outlook for Sitka spruce is very poor and there is very little added-value to the final product. (N)(P)

The timber produced here is of very low quality. It is cheaper to import wood from Eastern Europe than to harvest local forests. (N)(P)

The management of plantations was seen as a means to increase the value of the output but feelings were expressed by some that not enough was being done in this direction.

There is a lack of training regarding plantations over 10 years. Once the establishment and maintenance stage is over there is nothing really done in terms of management to improve the quality of the timber. (N)(P)

However, other farmers still saw forestry as a suitable alternative to farming, and were hoping for the development of a market for small diameter timber.

#### *Skills and knowledge of forest management*

There is a general agreement among the consumer and producers group in the Shillelagh CSA that the knowledge associated with the history of forest management in this area as well as the skills in wood craft and wood processing that are associated with it should be preserved and built on. The tradition of forestry that prevails through the area is associated with a *savoir-faire* related to the use of timber for woodcraft, furniture making, garden sheds, etc. This economic activity, though local and generally small-scale, is well developed in the area. There have been a few initiatives locally to try and organise this activity in a more consistent way and to create a sort of trade-mark for the area. Some initiatives have been set up in the past but did not prove conclusive. It is a recurrent concern, mainly in the Wicklow part of the CSA, that forest production as well as the professional skills associated with forest management should be capitalised on so that the benefits from the added value of locally produced timber be experienced locally.

Knowledge associated with the forest industry also extends to the expertise associated with the management of forests. A number of foresters that already exercised their profession back in the 1960s expressed concerns over the fact that today's forestry offered only a limited scope for silviculture.

Silviculture has gone out of forestry and I think it is a great pity. Back in the 60's when I moved into forestry, the woods were thinned, the drains were kept free and you had very little wind throws. (S)(P)

#### **Discussion**

Afforestation programmes in Ireland have been, for the large part, supported by the European Union through the various instruments put in place as accompanying measures of the successive CAP reforms. In this context forestry in rural areas is asked to fulfill a wider role than purely timber production by satisfying other mandates such as amenity and recreation as well as maintaining and providing ecological benefits. This study reveals not only the variation of perceptions of forestry between two areas but also indicates the range of benefits that local stakeholders expect from the management of one similar natural resource. These variations are linked with the history of the place, the history of forest cover and the geographical and socio-economic characteristics of the area. The use of open interviews with various stakeholders, representing and supporting a wide range of interests, allowed the predominant issues relating to forestry that were specific to each of the case studies to be identified.

There were striking differences between the two CSAs with the general perception of forestry clearly more positive in the Shillelagh CSA than in the Newmarket CSA. In the former, forestry was considered to be part of both the local history and traditional landscape and there was a clear expression of pride associated with the forest history of the place. Elands and Wiersum (2003, p. 64) similarly found that in traditional forestry areas, such as Shillelagh, existing forests are considered as a "characteristic element of the rural landscape, and part of the rural identity, which should be maintained". Thus the attachment to forests is higher than in afforestation areas and perceptions of forestry more positive. In comparison the negative perception of forestry in Newmarket CSA was strong, with even farmers who have participated in forestry schemes showing, if not opposition, at least reticence towards the expansion of forestry.

Elands and Wiersum (2003) also noted that perceptions of forestry in afforestation areas, such as Newmarket, are generally less positive than in traditional forestry areas. However, the depth of the negative perceptions in Newmarket is surprising. While most of these were associated with the species planted, conifers comprise a similar proportion of the forest estate in Shillelagh, yet those interviewed there seem content with the composition of the estate. The key difference between the two areas is the rate at which afforestation has progressed. In Newmarket, over 13% of the land area is forest, the majority of which is less than 20 years old, reflecting a very rapid change in land use. In contrast, the age-class of the forest estate in Shillelagh is more balanced arising from the longer history of forest cover in the area and the more gradual rate of afforestation. Hellström and Reunala (1995) have studied the origin of forest conflicts in Europe and the USA over the period 1950–1983 and found that the speed of intensification was often a source of conflict and that this intensification was frequently associated with the "desolation of the countryside" (i.e. in Scandinavian countries and France). Similar terminology describing forests as "isolating" communities was used by some of those interviewed in Newmarket. The authors emphasize the importance of public involvement in overcoming conflicts.

Another important difference that emerged between the two case studies related to the perceived role of forests. Likewise, Elands and Wiersum (2003) discovered differences in the perceived role of forests among the stakeholders they interviewed in a number of European case studies. They found that the main variable explaining the variations in perceptions was the rurality class to which the case study had been assigned. They defined five of these classes including "agriculture areas in decline" and "diversified rural areas". The former were areas where agriculture was still economically a key sector and where depopulation was occurring. The latter were areas where population levels were rising; where the main land use was agriculture but where the importance of the secondary and tertiary sectors was increasing. Elands and Wiersum found that, in general, in diversified rural areas, the recreation function of forests was rated high as was the production function while in agriculture areas in decline the highest priority was assigned to the production and protective functions of forests. In contrast, in our study we found that the production function was not emphasized in Shillelagh (which can be classed as a diversified rural area) and when interviewees mentioned economics and employment it was in the context of the past when forestry had a vital role in maintaining local rural economies. Forestry was essentially associated with amenity and recreation and was seen as an attribute of the landscape rather than as an economic sector. Shillelagh was one of the case studies included in Eland and Wiersum's (2003) study and in a more detailed outline of the results for the area, it was noted that the economic benefits of forestry were ranked lowest in Shillelagh compared to other functions and that the protective role of forestry along with its role in nature conservation and making the landscape attractive were ranked the highest (O'Leary and Elands, 2002). In the Newmarket case study, the current forests were perceived to contribute little to employment and amenity. Employment levels in forestry in the area were considered low and a number of farmers expressed doubts about the final value of their forest crops. The absence of processing activity within the CSA probably contributes to this negative image. Elands and Wiersum (2003) similarly found that in afforestation areas, that are based primarily upon fast-growing exotic monocultures, the perception prevailed that these new forests had little to offer in terms of employment creation. Furthermore, O'Leary and Elands (2002) found that the economic benefits of forestry were ranked low amongst stakeholders in areas where afforestation had recently occurred. It is interesting to observe that direct employment was

not what people necessarily perceive as the most important benefit associated with forestry even though this is one of the standard criteria used to assess the socio-economic benefit of the forest sector. In Newmarket, many stakeholders do not want commercial forests and instead of emphasizing the production function of forests they placed priority on the landscape and amenity functions. This contrasts with Elands and Wiersum's (2003) findings that those in agriculture areas in decline placed high priority on the production and protective functions of forest. However, the fact that Newmarket is an afforestation area as well as agriculture area in decline may confound the issue, in that it is difficult for stakeholders to appreciate the production function of forests when the forests are so young.

The strong negative feelings against forestry that prevail in Newmarket seem to be an impediment in considering forestry as a potential alternative land use and the forest sector as a potential provider of employment for the area. However, it can be argued from the content of the interviews that it is perhaps not forestry as a land use *per se* that is being challenged, but rather the approach to afforestation. Specifically, the lack of consultation and the approach to planning were criticized. Even the foresters surveyed in Newmarket recognized that greater consultation with the public is required. However, it is not clear whether consultation meant the same thing to foresters and the general public. As was evident from some of their comments, the general public, including farmers, wanted to influence which lands should be afforested and with what species. From the foresters' perspective consultation may have meant greater dialogue with the local community as to the choice of species planted but without giving the local community the power of veto. Nevertheless, a key element of sustainable forest management is community participation and consultation with stakeholder groups. It is a well documented fact that the lack of consultation can lead to increased conflicts and misunderstandings (Hellström and Reunala, 1995; Hellström and Ryttilä, 1998) and that a more collaborative and participatory approach can help in resolving them (Daniels and Walker, 2001). Slee (2001, p. 29), reporting on the use of "Regional Forest Agreements" in Australia, in solving production-environment conflicts, points out that taking account of stakeholders interests and using a participatory approach in a regional policy process can help to improve the public perception of forest policy issues: "policy determination can thus be seen as a negotiated outcome between different communities of interest and public agencies, and less as a top-down dictate". However, Slee also warns of the importance of not giving greater weight to any one stakeholder group over another in respect of equity. Models of community involvement exist in neighbouring countries to Ireland. For example, in Scotland, community participation in forestry issues has been strongly advocated and has given rise to the Scottish Rural Development Forestry Program (Jeanrenaud and Jeanrenaud, 1997). Furthermore, in Wales, the national forest strategy "Woodlands for Wales" seeks to provide opportunities for communities to have their say in the management of nearby woodlands. Another approach that could be used to minimise conflicts would be to implement a national indicative forest strategy. Such a strategy has already been developed for County Wicklow which might explain why the lack of consultation was not highlighted in Shillelagh.

## Conclusion

The use of qualitative methods in assessing the social impacts of forestry in two rural communities in Ireland allowed issues to be identified that are specific to each case study. It also provided valuable information on the nature of benefits communities may expect from the management of a natural resource. It is clear that

substantial differences existed in the impacts in the two areas but as others have noted (e.g. Niskanen and Lin, 2001) regional differences within a country can be higher than the differences between regions in different countries. In this context extrapolation from one region to another can prove to be distorted and dangerous.

Forests as a land use are dynamic and their social impacts change as they change. The social impacts of forestry in the Newmarket area have been mostly negative so far. However, results from the other case study area show that the age of the forests has a major bearing on their social impacts. It is possible that, as the forests in Newmarket mature and younger forests are established with a greater diversity of species, more positive social impacts will emerge. Yet society's view of forests is also dynamic. Increasing pressure for the multi-functional forests may mean that in time the level of satisfaction felt by those in Shillelagh about their forests may reduce. It would be very interesting to test these hypotheses in ten years time.

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