



A photograph of two men standing in a field of tall grass. The man on the left is wearing a white shirt and is looking towards the man on the right. The man on the right is wearing a blue polo shirt and light-colored trousers, and is holding a dark clipboard or folder. They appear to be engaged in a discussion or inspection of the field. The background shows a line of trees under a clear blue sky.

Farmers' Attitudes to Forestry

**Á. Ní Dhubháin
and J. J. Gardiner**

Summary

This paper presents some of the results of a survey of farmers carried out in 1992. This survey established the factors that influence a farmer's decision to plant trees. It also determined farmers' attitudes to forestry in general. The impact of the conversion of agricultural land to forestry on agricultural output and workload on the farm was also established.

1. Introduction and Background

The Republic of Ireland has the smallest percentage of land area (8%) under forest of all European Union (EU) countries. However, over the last decade the forestry sector in Ireland, in particular the private forestry sector, has expanded considerably. Planting rates in the private sector have risen from a mere 498 hectares in 1982 to 9,617ha in 1992. An estimated 23,000ha were planted by farmers during the five year period from 1988 to 1993. It is expected that by the year 2000 an additional 3 percent of the land area in Ireland will be afforested.

The continued expansion of the forest estate depends ultimately on farmers' willingness to either convert some or all of their land to forestry or to sell land for forest development. This paper presents the results of a survey of farmers carried out in 1992. This survey established the factors that influence a farmer's decision to plant trees. It also determined farmers' attitudes to forestry in general. The impact of the conversion of agricultural land to forestry on agricultural output and workload on the farm was established.

2. The Farm Survey

The survey was carried out in July, 1992. It concentrated on the west of Ireland which was defined for the purposes of this work as those parts of the country that were deemed to be either

severely disadvantaged or disadvantaged under EC Directive 268/75. Thus

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the survey area consisted of eleven entire counties, i.e. Donegal, Sligo, Leitrim, Mayo, Roscommon, Longford, Cavan, Monaghan, Galway, Clare, Kerry, and parts of Cork. On average, forty-five farmers were interviewed at random in each county yielding a total sample of 542 farmers.

The objectives of the survey were as follows:

- (a) to establish the factors that influence a farmer's decision to plant trees;
- (b) to determine farmers' attitudes to forestry;
- (c) to determine the impact of the conversion of agricultural land to forestry on agricultural output and workload on the farm.

3. Results

The following is a selection of the results from the farm survey.

3.1 Farmers who have planted trees

Of the 542 respondents interviewed

Table 1.
Main reason for planting trees in the past

<i>Reason</i>	<i>% of respondents</i>
Shelter provision	45
Aesthetic reasons	8
Use up wasteland	15
Financial reasons	23
Other reasons	9

only 12% had planted trees on their land (excluding individual trees and hedgerows). While the average area planted was 7.1 ha, the vast majority of these woodlands were less than 5 ha. The average age of the woodlands was 10 years. Most of the farmers that had planted had done so on bogland or on land that had previously been used for rough grazing (i.e. 76% of those that had planted).

The respondents were asked their main reason for planting trees and their responses are shown in Table 1. The majority stated that they had planted in order to provide shelter (45%). A further 23% gave financial reasons (i.e. availability of grants and long-term income). Only thirty-eight percent of these "tree planters" received grant-aid for planting.

The woodlands were described as shelterbelts (in 48% of cases) or as commercial blocks of woodland in 40% of cases. The vast majority had planted conifers, with broadleaves accounting for only 14% of planting. Of the conifers planted, pure stands of Sitka spruce were most common (i.e. 37% of conifer planting).

Most of the respondents considered that their woodlands were managed and it was most commonly the owner who carried out the management.

The uses to which the woodlands were being (and will be) put varied. Some respondents indicated that their woodlands were used for only one purpose while others indicated that their woodlands had a number of uses. Shelter provision was the most popular use of the woodlands (i.e. 57% of respondents) (Table 2). Forty-five per cent listed the production of timber for sale as a function of their woodlands.

The impact of planting trees on farm output was queried. Eighty-four

<i>Use</i>	<i>% of respondents</i>
Shelter	57
Timber for sale	45
Landscape	32
Timber for domestic use	28
Recreation	12
Cover for game	13

Table 2.
Uses to which the woodlands are being put

per cent of respondents indicated that their farm output had not been affected by planting part of their land with trees. Furthermore, the majority of respondents (i.e. 73%) indicated that planting trees had not affected the workload on the farm.

3.2 Farmers who did not plant trees

The eighty-two per cent of respondents who had not planted trees were asked to give their reasons for not planting. Lack of suitable land and a limited land resource were the two most popular reasons given (35% and 15% of the respondents respectively). Many of those giving the former reason indicated that their land was "put to better use in agriculture" or was not "bad enough" for forestry. Nineteen percent of the respondents stated that they had never considered planting trees. The long time period associated with the returns from forestry and other financial reasons deterred 15% of the respondents from planting trees. Only 4% indicated that they did not like trees. Twelve percent gave other reasons for not planting.

Forty-one per cent of these respondents were unaware of the availability any grant-aid for forest development.

Table 3.
*Main reason for
planting trees in
the future*

<i>Reason</i>	<i>% of respondents</i>
To use up poor ground	58
Shelter provision	8
Landscape reasons	8
Financial reasons	16
Conservation reasons	4
Other reasons	6

3.3 Farmers who will plant trees in the future

All respondents were asked to indicate whether they will plant trees on their farm in the next 10 years. Only ten per cent stated that they will plant

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(of these, one third had planted trees in the past). A further 31% said that they were unsure about planting while the remaining 59% will not plant trees. The average area to be planted per

Table 4.
*Uses to which
the woodlands
will be put*

<i>Use</i>	<i>% of respondents</i>
Timber for sale	77
Shelter	33
Timber for domestic use	19
Landscape	17
Cover for game	15
Recreation	13
Don't know	2

holding is 7.8 hectares with 63% of future woodlands less than 5 hectares.

The most popular reason given for future planting was to use up poor ground which was “good for nothing else” (i.e. 58% of cases). Financial reasons were also popular (16% of cases). The responses are presented in Table 3.

Land used for rough grazing or cut-away bog/peatland was most likely to be planted with trees (80% of respondents).

Almost half of the respondents said that they will carry out the planting and management of these woodlands themselves. A further 40 per cent stated that they will use contractors to carry out this work.

Some respondents stated that their future woodlands will only have one use while others stated that their woodlands will have a number of uses. As Table 4 shows the most popular use to which these future woodlands will be put is the production of timber for sale (77% of respondents). Shelter provision will also be an important use of these woods.

Seventy-five percent of the respondents intending to plant trees expected that the output from other agricultural enterprises will not be affected. Forty-six percent expected the workload on the farm to be the same, thirty-three percent expected it to increase.

Only 31% of those intending to plant, knew the current level of grant-aid for forestry.

3.4 Farmers who will not plant trees in the future

Fifty-nine percent of the respondents stated that they will not plant trees in the next ten years. The most common reason given for not planting was lack of suitable land (i.e. 39% of cases). In many instances the respon-

dent indicated that he/she had no "bad" land. The second most popular reason was scarcity of land (17%). The long delay in receiving returns from forestry appears to continue to deter many farmers. Over 11% of the respondents indicated that this was the reason they will not convert land to forestry. A further 10% considered themselves too old to plant trees. Six percent stated that they did not like trees and five percent stated that they had never considered planting trees. Twelve percent gave other reasons.

Farmers who will not plant trees were asked to identify any factor that would encourage them to plant. Over 67% could not identify any factor while a further 17% stated that an increase in financial support would encourage them to plant.

Only 11% of those who will not plant, knew the current level of grant-aid for forestry.

3.5 Attitudes to forestry

A series of statements of frequently expressed attitudes to various forms of forestry development were presented to the respondents, who were asked to indicate whether they agreed or disagreed with the statements. They were also given the option to indicate that they didn't have an opinion regarding the statement. The forms of development included state forestry development (which has now become semi-state), commercial private forestry development which concerns the development of forestry by financial institutions and other such large groups, and farm forestry. Table 5 lists the responses given by all the respondents

Analysis of the responses showed that the number of respondents who felt that state forestry generated

State forestry	No	Yes	D.K.*
Generated employment	25	68	7
Caused population decline	50	40	10
Caused isolation of farm houses	41	51	8
Used up land that should have been distributed among farmers	44	48	8
Allowed small farmers to stay in business	44	41	15
Made land prices increase	44	40	16

Commercial private forestry (CPF)	No	Yes	D.K.
Generated employment	31	54	15
Caused population decline	25	55	20
Caused isolation of farm houses	38	51	11
Used up land that should have been distributed among farmers	38	49	13
Allowed small farmers to stay in business	39	44	17
Made land prices increase	37	46	17

Forestry on farms	No	Yes	D.K.
Kept people on the land	50	36	14
Generated additional income for farmers	31	60	9
Caused isolation of farm houses	51	43	6
Used up land that should have been used for agriculture	53	41	6

* *D.K.* = *Don't know*

employment was significantly greater than those who felt that CPF generated employment. In addition, more respondents considered that CPF caused population decline than considered that state forestry caused popu-

Table 5.
Attitudes to state and private forestry

lation decline. The number of respondents who felt that CPF had caused land prices to increase was significantly greater than those who felt state forestry had increased land prices.

Sixty percent of respondents agreed that forestry on farms generated additional income for farmers but only 36% agreed that it kept people on the land.

A comparison of the attitudes of those that had planted with the attitudes of non-planters showed that planters had a more positive attitude to all forms of forest development. In particular, significantly less of the planters considered that state forestry had caused population decline. Similarly, significantly less of the planters considered state forestry had used up land that should have been distributed amongst farmers.

With regard to the impact of private forestry on employment generation there was a major difference in attitude between the planters and non-planters. Significantly more of the planters considered that private forestry had generated employment. Furthermore, significantly less of the planters considered that private forestry led to isolation of farm houses or used up land that should have been distributed among farmers.

As all the planters were involved in some form of farm forestry it was expected that their attitudes to farm forestry would be more positive than those of the non-planters. The responses confirmed this, i.e. significantly less of the planters considered farm forestry caused isolation of farm houses while significantly less thought that it used up land that should have been used for agriculture.

3.6 Factors affecting the decision to plant in the future

There are many factors which may influence the decision to plant trees. In this section the impact of some of these factors is examined.

(a) Socio-demographic factors

Factors included in the analysis were age and education level of the farmer, his/her marital status as well as his/her off-farm employment status. The effect of farm size was also examined. The relationship between each of the factors and the decision to plant trees was examined using logistic regression. This analysis showed that only farm size significantly influenced the decision to plant trees, i.e. respondents with large farms were more likely to plant trees than those with small farms.

(b) Knowledge of grant-aid

Analysis showed that those respondents who knew the current level of grant-aid were almost three times as likely to plant than those who did not.

(c) Planting in the past

Analysis was carried out to investigate whether the likelihood of planting trees in the future was related to planting in the past, i.e. were those who had already planted, more likely to plant in the future than those who had never planted at all. The analysis showed that farmers who had planted in the past were significantly more likely to plant (i.e. more than three times more likely) than those who had never planted.

4. Discussion

It is clear that the vast majority of farmers interviewed considered fores-

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try to be a land use suitable only for poor ground. The land on which trees had been most commonly planted was bogland or land that had been previously used for rough grazing. Indeed the most popular reason given by the farmers as to why they intended planting trees was to use up waste ground which was frequently described as being "land good for nothing else". With so many planting on poor quality land it is not surprising that the vast majority of farmers stated that the output from their other farm enterprises had not changed as a result of planting trees. Extensive grazing is commonly carried out on poor ground and farmers who converted such land to forestry could maintain the same livestock levels on a smaller area of land. These results are similar to those from a survey of Irish farmers who had applied for grant-aid for forestry (Kelleher, 1986). The majority intended planting only small areas of "waste-ground". Nearly 90% of the respondents in that survey stated that their plans regarding forestry would have no effect on their farm activities.

In the future it seems that farmers will continue to plant trees on poor quality land, thus the impact on their agricultural output will remain limited. However, some changes are evident. The percentage of respondents expecting their agricultural output to be unaffected as a result of planting trees is 75%. This is somewhat less than the 85% who indicated that their output had not been affected by past planting. However, any reduction in agricultural output will be compensated by an increase in forestry output from farms as more farmers plant for commercial timber production. Recent changes to the forestry grant scheme makes planting on non-disad-

vantaged land more attractive from a financial viewpoint. However, attitudes to forestry will have to change before most farmers consider forestry for this type of land.

One of the functions of this research was to identify factors that influence the decision to plant trees. The analysis showed that farm size was an important factor, with those farming large farms much more likely to plant trees than those on small farms. This might be due to the fact that large farms are more likely to have land available for forestry. At the same time, other work on diversification has shown that those on bigger farms are most likely to invest in alternative farm enterprises (Phelan *et al.*, 1994). The survey also showed that farmers who had already got involved in forestry were much more likely to plant more areas of their land than those that had never planted. This would suggest that the experience of these farmers with forestry has been positive.

Knowledge of current levels of grant-aid was another important factor influencing the decision to plant. Those who knew the current level of grant-aid were more likely to plant than those who did not. The vast majority of those who will not plant trees, did not know the current level of grant-aid. Furthermore, forty per cent of those that did not plant trees in the past were not even aware that grants were available for forest development. Thus it is clear that farmers are not being adequately informed of the availability and value of grants for forestry despite the fact that this a major factor influencing the decision to plant trees. If more farmers are to get involved in forestry it is necessary that this information gap be bridged.

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Recently, forestry development has been receiving considerable media attention in Ireland. Some of this coverage has been negative. Claims have been made that forestry forces people off farms and leads to isolation of farm houses. When statements reflecting various perceptions of forestry were put to farmers in this survey, opinion was divided. For many statements the number of positive responses equalled the number of negative responses. It was clear however, that farmers' attitudes to state forestry were more positive than their attitudes to commercial private forestry. This was particularly evident in their responses to employment generation and population decline. The majority of farmers had a positive attitude toward farm forestry. In particular the majority of farmers thought that farm forestry had generated additional income for farmers. Not surprisingly, the attitudes to forestry of those farmers that had planted trees were more favourable than those that had not planted. This was true for all forms of forestry development.

5. Conclusion

This study has described farmers' attitudes to forestry. It shows that the vast majority of farmers remain uninterested in converting parts of their farm to forestry. It also shows that farm forestry, to date, has had little impact on agricultural production. Unless farmers consider planting better land, agricultural production will remain largely unaffected by farm forestry. While the financial incentives

for farmers to afforest good land are now quite attractive, attitudes to forestry will have to change before most farmers consider forestry for this type of land. This survey highlighted that fact that most farmers are not aware of the level of financial incentives for farm forestry. Therefore increased awareness of these incentives is a priority.

Á. Ní Dhubháin: Researcher, Department of Crop Science, Horticulture and Forestry, Faculty of Agriculture, University College Dublin.

J. J. Gardiner: Professor of Forestry, University College Dublin.

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