

Forest Economics and Policy

FORPOLEC

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The policy arena in which forestry operates has changed dramatically in recent years. Increasingly, the public benefits that forestry delivers, such as recreation, landscape, water quality, biodiversity and carbon sequestration, are being recognised. Furthermore, the range of tradable goods and services generated in the forestry sector has expanded beyond timber production in Ireland to include, inter alia, cut foliage and marketed recreational activities. New policy initiatives such as the Rural Development Programme, the introduction of the Single Payment Scheme as part of Common Agricultural Policy Reform, the on-going review of the National Climate Change Strategy along with the downturn in the construction sector may all influence forestry. Alongside these policy initiatives is the need to meet the afforestation targets as laid down in the Government's strategic plan for forestry.

The FORPOLEC programme consists of three projects which set out to address some of the issues arising from this changing policy environment, including:

- How policy changes are likely to affect afforestation levels and planting objectives of farmers. The FIRMEC project will explore how policy changes are likely to affect afforestation levels using the RERC-FAPRI farm-level model. This will be expanded to include forestry and will be used to determine the optimum enterprise mix for each farmer subject to given constraints such as the availability of land and labour. The project will also identify the socio-economic characteristics of farmers who planted trees in the past. The POLFOR project will survey farmers to explore their reactions to the changing policy environment and to determine their planting intentions. The combination of the outputs of both projects should help to identify strategies to encourage afforestation by farmers in the context of the changing policy environment.
- The need to place a value on public goods provided by forestry. The FORECON project will explore the interaction between different approaches to forest management and the values assigned to recreation, biodiversity, landscape, water quality and carbon sequestration. The FIRMEC project will focus on modelling the demand for recreation using existing Teagasc data sets and the Teagasc RERC-SMILE model. The model will also identify where the demand for recreation in farm forests exists. The combination of both outputs will facilitate the generation of cost-benefit analysis of forestry recreation.
- The impact of forestry on regional and local economies. FORECON will estimate the value of all of the tradable goods of forestry. Input-output analysis will be used to calculate the direct and indirect contributions of tradable goods and services to national, regional and local economies. The FIRMEC project will project future afforestation levels under a variety of scenarios using the Teagasc RERC-FAPRI forestry model. The outputs of this process will feed into the input-output model to explore the economy-wide impacts of these scenarios (FORECON). The Teagasc RERC-SMILE microsimulation model, which contains a spatial and micro picture of where economic activity takes place in Ireland, will be used to identify the local impacts of these scenarios (FIRMEC).

The FOREPOLEC programme comprises the following projects:

- **FIRMEC:** Modelling the economics of forestry in Ireland.
- **FORECON:** An economic evaluation of the market and non-market functions of forestry.
- **POLFOR:** Forestry in a changing policy environment.