

## Sectoral Road Map: Forestry

### Market and policy issues

The National Strategic Plan for Forestry has a target to expand forestry to 17% of the land area with most new planting on farmer-owned land.

- The EU Rural Development Regulation recognises the multiple benefits of forestry and the need for the provision of extension for the multiple use of forests.
- New markets for timber are emerging as farmers' plantations reach thinning stage. These include wood energy.
- New technologies for the high-value use of conifers and small-dimensioned broadleaves are also developing.
- Despite difficult conditions, the sawmilling sector continues to develop a strong market in the UK, as well as in Europe.
- Afforestation and other grant schemes will continue to play an important role in the promotion of farm forestry and in the encouragement of increased productivity in conifers and quality broadleaf forests.
- Forest management and chain of custody certification schemes, as well as EU timber regulations, have increased in significance.

### Shape and size of sector in 2020

- By 2020 there will be over 820,000 hectares of forest: 12% of the total land area. Over 50% will be privately owned and the contribution of the private sector to overall timber supply will be greatly increased.
- The average forest parcel size will increase to ten hectares.
- The number of forest owners will increase by 500 per year, reaching 19,000 by 2020.
- Private sector timber production (including energy wood), currently at 400,000m<sup>3</sup> per annum, has the potential to increase to 1.5 million m<sup>3</sup> per annum by 2020.

### Technical performance

Production levels on forest sites can be maximised by site selection and use of appropriate genetic material. Appropriate management interventions can increase



profitability and increase the availability and supply of timber products to new and growing markets. Reductions in costs and increases in efficiencies can be achieved in forest operations by creating economies of scale, through the use of producer networks or grouping of forestry activities.

Species	Soil type	Yield class	Benchmark returns NPV €/ha	Optimum returns NPV €/ha
SS	Wet mineral lowland	20-24	€8,528- €13,130	€9,303- €14,223

Management intervention is required to produce high quality, high value forest products. These interventions include shaping, early tending and thinning, and high pruning, to produce valuable saw log and other forest products (e.g., hurley ash).

Species	Soil type	Yield class	Increase in financial return with management*
Ash	Grey-brown podzolic	10	+50%

\*Increase in revenue due to more valuable forest products available as a result of forest management.

## Forestry (continued)



### Environmental and land use implications

Forests will play an important role in protecting and enhancing biodiversity, water quality and wildlife habitats. The adoption of sustainable forest management practices, which include timber production, will allow for long-term development of a sustainable forest industry, which can meet the challenges of climate change, greenhouse gas (GHG) mitigation and external environmental drivers.

- The annual accounted carbon sequestration rate under article 3.3 of the Kyoto Protocol was over 3.5 million in 2011 and accounts for approximately 6% of our required reduction. This will increase to over 4.6 million tonnes of CO<sub>2</sub> per year by 2020.
- Further exploration will take place of the potential for carbon sequestered by forests planted before and since 1990 to be used to offset GHG emissions.
- An annual afforestation programme of 15,000ha up to 2030 is required to maintain the current contribution of Irish forests to counteracting climate change.

### Research and advisory actions

- Promote further afforestation using quality planting stock, robust economic analyses and sound silvicultural practices.
- Provide advice and encourage the adoption of new innovative technologies to improve profitability and output from the forestry sector.

- Develop initiatives to improve the competitiveness of small-scale forest growers.
- Build on expertise and develop management regimes to optimise and ensure maximum value from the forest resource.
- Promote the non-timber benefits of forestry, including tourism, recreation and non-wood forest products.
- Develop protocols for close to nature forestry and other novel silvicultural systems, such as agroforestry, riparian buffers, etc.
- Provide training and upskilling of forest owners to build capacity to optimise management for multiple-use objectives.
- Facilitate forums where private forest owners and the timber industry can discuss the development of the private timber resource.

### Comment

- Maximum timber production from the private sector will come on stream post 2015. By 2030 it is predicted that timber output will be in the region of 6.5 million m<sup>3</sup> per annum.
- It is anticipated that other non-timber benefits of forestry may have value. These include ecosystem services, tourism and recreation.
- The wood energy market will be well developed and technologies will have been adopted.
- The development of producer groups/clusters will ensure that many farm forests will be thinned.
- Forest owners with plantations close to thinning stage will have them certified as complying with the principles of sustainable forest management.
- Landowners and forest planners should consider adapting species selection and management to deal with likely climate change scenarios.
- Direct employment alone of up to 20,000 in forestry is possible by 2025. This would approximate to 38,000 jobs supported when the multipliers are applied.

### Contact

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*The road map for forestry is available on [www.teagasc.ie](http://www.teagasc.ie).*