



Comparisons between forestry and agriculture

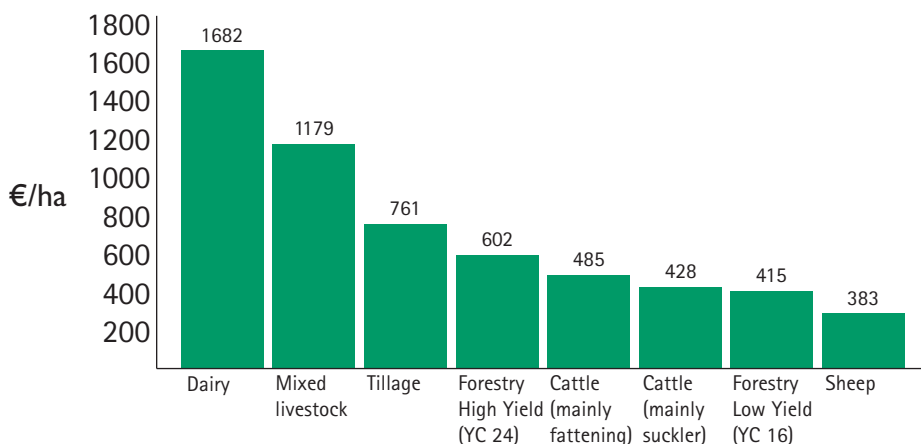
Forestry income exceeds sheep farming and many cattle rearing systems

Donal Magner

Approximately 1% of the land area of Ireland changes from farming to forestry every decade. It is not a major land use shift considering that forest cover in Ireland is only 11% with at least a further 7% of the land area suitable for forestry without negatively impacting on agriculture.

Changing land use from traditional farm systems to a permanent land use such as forestry is a major decision for farmers. However, an increasing number of farmers and other landowners are exploring forestry as a viable option due to Ireland's high growth rates, State supports, excellent log prices and positive tax regime. These are major incentives although issues such as the replanting obligation and the long time lead in before forests reach productivity are viewed by some as disincentives.

Figure 1: Estimated annual gross margin incomes (€/ha) for selected land uses excluding Single Farm Payments.



Source: D. Magner (2015) based on Teagasc National Farm Survey and FIVE Model with timber prices sourced from ITGA Forestry & Timber Yearbook 2004-2015).

Note: Figure 1 is my interpretation based on approximate average income per hectare for forestry over a period of at least 10 years compared with actual income from agricultural systems averaged for 2012, 13 and 14. Yield Class (YC – m³/ha/annum) is based on two Sitka spruce averages: YC 24 or high yield forestry and YC 16, low to average yield.



While Irish farmers are seen as conservative when making land use changes, they are not alone in this approach. For example, landowners in New Zealand who are perceived as being radical in switching to new land uses annually convert approximately 0.16% of mainly grassland to forestry compared to Ireland's 0.10%. However, it should be remembered that for the period 1993 to 2002, Irish farmers converted close to 0.20% of land annually to forestry. A return to this afforestation rate would result in an annual programme of 14,000 ha which is close to the target recommended by COFORD – The National Council for Forest Research and Development.

Converting more land to forestry in Ireland is now a priority at national level because of its role in climate change mitigation including the potential to benefit agriculture production through carbon sequestration and wood energy. Finally, Ireland is waking up to its international responsibility to tackle green house gas emissions. We face major annual EU fines if we don't meet current targets after 2020.

The Taoiseach announced during 2015, that forestry is an important land use for Ireland to achieve carbon reduction targets. What this amounts to in terms of planting programmes hasn't been agreed but the best available target has been presented by COFORD. The Council recommended that an afforestation of 15,000ha could play a major role in reducing greenhouse gas emissions as well as providing direct economic and social benefits.

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This afforestation target would require a further annual injection of €100m by the State into the afforestation programme, a modest investment compared to possible annual fines. This State support would be matched by farmers' investment in land and other inputs. However, convincing farmers and other landowners to plant will require more than outlining the carbon sequestration and environmental benefits of forestry.

While farmers will be cognisant of the non-wood benefits of forestry, they will ultimately base their decision on financial return on their investment. The economic benefits of forestry have long been acknowledged by timber growers but it may come as a surprise to many that forest income exceeds many farming systems as outlined in the Teagasc article by Tom Houlihan and John Casey (page 29).



To achieve a 15,000-ha planting programme will require an assessment of all marginal land not in viable agricultural production including at least 200,000ha of productive unenclosed land which is now once again being reconsidered for viable forestry. This is land in the yield class (YC) range 14 to 18 (cubic metres per hectare per annum). It is medium to low yield forestry but provides far greater income than sheep farming and also a comparable income with many cattle rearing systems as outlined by Teagasc.

High yield forestry income (€602 per annum) averaging YC24 is 57% higher than sheep farming, 41% higher than predominantly suckler farm production and 24% higher than systems where cattle fattening is the dominant enterprise. Lower yield forestry (€415) averaging YC16 is 3% below suckler cattle systems and 14% below predominantly cattle fattening systems but 8% higher than sheep farming.

It should be noted that annual farm income for high yield forestry (€602) and medium to low yield (€415) are based on at least 10-year estimates compared with actual data for other systems in years 2012 to 2014.

Although timber prices information is based over a long period this has inbuilt benefits as it proves that the timber market continues to hold its value and current forecasts indicate that demand is likely to increase especially in Ireland where there is overcapacity in the sawmilling industry. In addition to attractive income from premia and timber sales, forest owners once again enjoy tax-free income as announced in Budget 2016.

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Many farmers opt for forestry because of lifestyle reasons as basic work such as brashing inspection paths, checking performance and general maintenance during the early years are not particularly onerous while there is now a good network of contractors to carry out heavy duty work such as road construction and harvesting.

Farmers, other landowners and investors who are thinking about forestry should first seek out all the relevant information. ITGA provides a wide range of information through its website (www.itga.ie), Yearbook (www.forestryyearbook.ie), field days, forestry demonstrations and other events while Teagasc and producer groups are available to provide advice.