Irish forestry – an investment for prosperity

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Old Houses were scaffolding once and workmen whistling

(T.E. Hulme, 1883-1917)

Summary

Following centuries of deforestation, the eighteenth century saw the first move towards reafforestation. This involved the earliest known state planting grant scheme, which was administered by a private organisation. The Land Acts from 1881, transferring land ownership from landlord to tenant, led to a further phase of deforestation. The current afforestation programme was begun in 1919. Planting was slow until the late 1940s, when the Government set an annual planting target of approximately 10,000 ha. That was reached in 1959, but after 1964 there followed a gradual decline until funds from Brussels in the 1980s triggered an accelerating rate of planting, both state and private, in the 1980s and '90s. It exceeded 23,000 ha in 1995. The expansion of planting in the 1950s is currently reflected in increasing harvest volumes. State investment in forestry, adjusted for inflation, was initially directly proportional to the planting programme but continued to increase up to the 1980s. The position since the establishment of Coillte Teoranta in 1989 has not been examined. Published valuations of the state forests vary within the range £600-£1,100 million.

Prelude

The deforestation of Ireland is a fact of history – the causes and influences may be debated and argued but the end result was a landscape which was largely treeless. The regrets expressed by contemporary and recent observers may be generally classified as the 'Kilcash Syndrome'¹, and need not be discussed further here. I hope to deal with the developments which, over time, have helped the reverse the process.

This refers to the well-known Irish poem (c.18th century) usually translated under the title "Kilcash" with its interminably quoted opening lines (in Frank O'Connor's translation) "What shall we do for timber?/The last of the woods is down".

The eighteenth century

In eighteenth century Europe, the age of enlightenment, the vulnerability of forests was coming to be recognised and the need for sustainment of production led to the development of scientific forest management. It was natural that well-informed citizens in all countries should be conscious of this as a general climate of opinion, even without any knowledge of the details. Thus in Ireland we find Jonathan Swift, in a personal letter of 1732, describing County Tipperary as "like the rest of the whole kingdom, a bare face of nature, without houses or plantations". His public attitude, however, was a very positive one. In a pamphlet written in 1729 we find: "I do not believe that a greater or quicker profit could be made than by planting large groves of ash a few feet asunder" (Swift, 1765). In the last of the Drapier's letters, written in 1725, he regrets the absence of felling controls: "If men were restrained from that unlimited liberty of cutting down their own woods before their proper time, as they are in some other countries, it would be a mighty benefit to the kingdom. For, I believe there is not another example in Europe, of such a prodigious quantity of excellent timber cut down, in so short a time, with so little advantage to the country, either shipping or building" (Swift, 1735) (in the event, we had to wait for our own Forestry Act in 1928 before any felling controls were introduced). Swift was perhaps looking even further ahead in his suggestion that the bogs be improved by drainage and that the margins of the drainage canals might be planted with "quickens, [i.e. rowan or mountain ash] birch and other trees proper to such a soil" (Swift, 1765).

Swift was a skilled and effective communicator, and an articulate promoter of the enlightened thinking of his time. The more widespread acceptance of the need to plant trees was converted into action when the Dublin Society (now the Royal Dublin Society) set up a scheme in 1741 to promote planting by the award of medals and premiums (cash grants). In 1761, money to support the awards was voted by the Dublin parliament, thus creating what was probably the first state planting grant scheme anywhere. The vote-in-aid was cancelled by the Imperial parliament in Westminister soon after the Act of Union (1801), thus emphasising the specifically Irish nature of the grants.² During the period of operation of the scheme, a total of about £20,000 in grants (perhaps £2 million in today's money) was paid out (Moss, 1908).

The nineteenth century

Private investment in planting continued during the nineteenth century, but in the absence of incentives there was little provision for a record of progress. Professor William Smyth, in a recent presentation to the Society of Irish Foresters, gave some details of the procedures which tenants in that period had to follow in order to establish their ownership of any trees they planted, and quoted from some of the surviving records. McCracken (1971) cites records showing that, by 1841, there was a plantation area, in addition to natural forests, of 140,000 ha, or 1.7% of the land area.

George O'Brien (1918) has suggested that grants for public works and development by the Dublin parliament at this period arose from a determination by that parliament to avoid revenue surpluses which it would have been compelled to surrender to the Crown.

This trend went into reverse with the implementation of the successive Land Acts from 1881 onwards. While this reverse was widely known, there was no formal means to articulate the public concern, until a departmental committee was set up by the Department of Agriculture and Technical Instruction (DATI) in 1907 to assess the forestry situation and to suggest what might be done about it.

The committee reported, in the first instance, that "forestry has been deplorably neglected by Government in Ireland", and that even the existing area of forest "is being wastefully diminished...chiefly under the influence of the Land Purchase Acts". The position was that, while the acts did provide for the transfer of purchased land to trustees, including the Department or County Councils, to plant the lands or preserve the woodlands, no funds were provided to put this provision into effect. The end result was that woods and plantations were clearfelled either by the owner before the estate was transferred, or by the new tenant purchaser immediately after the transfer, and nothing could be done to stop either of these practices (Departmental Committee on Irish Forestry, 1908). It may be pointed out here that something of the spirit which motivated and permitted those clearances continued to be reflected in Irish forest policy for some years afterwards. No land which was considered to be of agricultural value was to be planted. This policy was implemented very simply; it was decreed that the maximum price which the state could pay for forest land would be £10 per ha (£4 per acre). This limit remained in force until it was doubled in 1949, and the £20 limit continued to apply until 1969. After that, the price was more closely related to the forestry value of the land, although still strictly constrained. Table 1 shows the equivalent in 1995 money values of the earlier price limits. While direct comparisons would not be reasonable, it is still relevant to advert to these values when judging the success of the state investment in forestry.

Table 1. Maximum prices payable for land for state planting, 1922-1969, expressed in 1995 money values.

Price	£10	£20
1922	£337	
1949	£200	£399
1969		£185

The Departmental Committee recommended the planting of about 300,000 ha, either by the state directly or by funds given to County Councils to do so. It also indicated appropriate sources of funds to implement this³, and suggested that a return of 4.5% on the capital invested might be expected.

It proposed that the project should be funded from the proceeds of the Irish Quit and Crown Rents. These were hereditary revenues of the Crown, being rents arising from grants of confiscated Irish land from the reign of Henry VIII to that of Charles II. The Committee established that while those revenues were intended for the public benefit, almost none had been reinvested in Ireland. The proposal that this money should now be used for the reafforestation of Ireland displayed a nice historical symmetry.

In the meantime, the DATI had begun to promote private forestry, but something about the nature of its target clientele may be deduced from a public notice in 1905 offering advice on the management of existing woods or on proposed planting operations "for a fee of £2... where the visit does not entail an absence from headquarters of more than 3 days", in which case a special fee might be arranged.

State forest enterprise

The first statutory provision for a state forest enterprise in Ireland was the Forestry Act, 1919, which established the Forestry Commission. The powers of the Commission were subsequently transferred to the Irish Department of Agriculture upon its inception. The state scheme of planting grants was provided for in the Forestry Act, 1928, which repealed the act of 1919 in so far as it applied to the Irish state.

Irish state investment in forestry in the 1920s was cautious. For example, by 1930, just over 8,000 ha had been planted. Research summarised by Rea (1985) records the development of planting policy from the 1930s. Before 1948, the annual planting target was 4,050 ha (10,000 acres), to be planted over a period of 50 years. In 1948, the newly-elected inter-party government adopted a policy of planting 10,120 ha (25,000 acres) per year for 40 years. It is interesting that this large increase was the result of the direct influence of Sean McBride, who, as Minister for External Affairs in that Government, had no responsibility for forestry policy other than that deriving from his position within the Cabinet.⁴ The adoption of that policy and its implementation, however patchy from time to time, may reasonably be identified as the birth of the Irish forestry industry and its downstream derivatives.

The long term commitment to an annual 25,000 acre planting programme until 1 million acres had been planted was removed by a Dáil motion in December, 1956. In 1982, the Government reconfirmed the planting programme at 10,000 ha per year, but now it was to include the reforestation of clearfelled land and private afforestation. The millionth acre of afforestation was achieved in 1991.

A Research Branch within the Forest Service was established in 1957. As a former researcher, I am conscious of the danger of assuming causality in relation to a succession of events ("post hoc ergo propter hoc"), but I can have no hesitation in claiming that the work of the Forest Service Research Branch contributed substantially to the more recent success of the state forest enterprise.

The next major influence on the rate of planting, particularly but not exclusively on private planting, was the Western Package Scheme, introduced with the aid of European funds in 1981. That was the first of several EU schemes which have hugely stimulated Irish afforestation in recent years.

Gerard Sweetman, Minister for Finance at that time, must also be credited with providing the necessary funds from the Exchequer.

Progress

Figure 1 shows planting progress from 1923 to 1995, together with the total volume of logs harvested. The data for areas planted do not include data for reforestation (the routine replanting of clearfelled areas). Historical events can be seen reflected here, e.g. the greater availability of land caused by the 'economic war' of the 1930s, the wartime scarcity of seed and fencing material, the steady increase in planting after the Government decision of 1948, etc. Readers may wish to supply their own interpretation of later fluctuations. It will not be necessary to emphasise here that the rapid increase in harvest volumes from the 1970s reflects the increased planting in the late 1940s and '50s. The decline in planting after 1960 will have its inevitable effect on future production, while it is to be hoped, assuming adequate maintenance, that the recent sharp increase in planting will, in time, be echoed by a proportionate increase in harvest volumes.

Figure 2 illustrates state investment in forestry from 1933 to 1988, together with revenues, both converted to 1995 money values. In both cases, gross sums are reported. Thus, the expenditure includes all functions of the Forest Service, both authority and enterprise, including expenditure on private forestry, research, etc. It may be noted that the expenditure data are slightly exaggerated after 1970 by game development and wildlife conservation costs, but not so as to significantly distort the general trend. Likewise, the revenue data include a small amount for game licences and, in the last years, for payments from Brussels. The display of these data is stopped at 1988, due to the following reasons.

- 1. The establishment of Coillte represented a major change in the management of the state investment in forestry.
- 2. Significant quantities of private assets, including land, not easily quantifiable, began to flow into forestry.
- 3. Rapidly increasing sums of EU funding became involved.

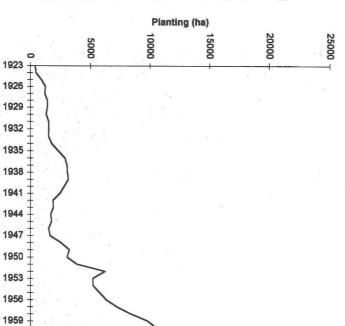
Valuation

The question of how to value forests has been much debated. The practice in Britain and Ireland until recently has been to use the method of net discounted revenue (NDR) with an arbitrarily selected discount rate. This remained the position until 1994, when the Forestry Commission (Great Britain) (1994) altered its practice to accept an open market valuation based on a hypothetical assumed sale between a willing seller and a willing buyer. Some long-established commercial forestry companies value their forest asset at cost.

The first published valuation of Irish state forests was that produced by the Review Group (1985). This value covered a range of assumptions in respect of stumpage prices,

⁵ The Forestry Act, 1946, presumes the continuation of afforested land as forest. The provision for a General Felling Licence (the normal "licence to practise forestry") specifies that "there shall be attached" to each such licence, a replanting condition, and there is no power, at any level, to rescind that obligation.

The sharp dip for 1974 represents the nine month transition between government accounting periods from year ending 31st March to year ending 31st December.



Harvest (millions m3)

- Planting

····· Harvest

1962 1965

1968 | 1971 | 1974 | 1977 | 1980 | 1983 | 1986 | 1989 | 1992 | 1995 | 0

0.5

Figure 1. Planting and harvesting, 1923-1995.

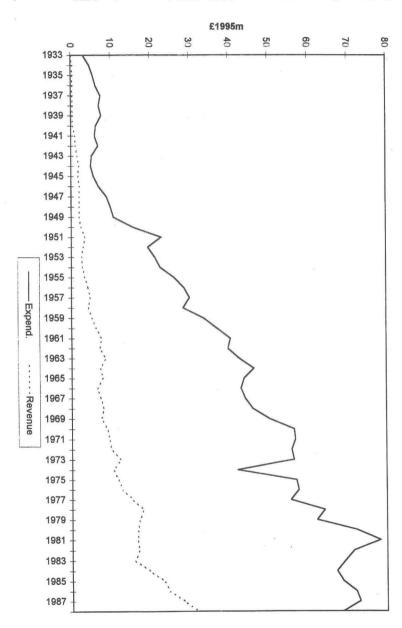


Figure 2. Expenditure and revenue, 1933-1988 (converted to 1995 money values).

productivity increases and discount rates. It also included only those items of expenditure specifically related to the planting and management of the state forests, as costs related to forestry authority functions were excluded. The central values ranged from £354 million (at a discount rate of 4%) to £2,659 million (at a discount rate of 1%). The central values, at discount rates of 2% and 3%, were £1,104 million and £606 million respectively. The discount rate at which the net revenues and the net investment most nearly coincided was 2%, with an investment of £1,243 and a valuation of £1,104 million (in considering this outcome, the land price limits shown in Table 1 ought to be borne in mind). A consultant familiar with the British market situation indicated a 1985 value of £819 million.

Subsequent valuations for the years after 1989 are published in Coillte's Annual Reports (taking the value shown for "forests and land") (Coillte, 1990-1995). These are listed in Table 2.

Table 2. Valuation of state forests, 1983-1994.

Year	Source	Value (£ million)
1983	Review Group	606-1,104
1985	Consultant	810
1989 (1st Jan.)	Coillte	568
1989 (31st Dec.)	"	619
1990	,,	670
1991	22	724
1992	22	755
1993	,,	795
1994	"	708

Note: The reduction in value from 1993 to 1994 is ascribed to the implementation of Financial Standard No. 3.

Conclusion

I have tried to record the main steps which have led to the creation of a viable state forest estate and the prospect now of a considerable area of privately owned forest. It may be assumed that the success of the former has provided the public confidence which is giving rise to the latter. Among the indicators of this success are the present annual forest outputs of about £170 million, employment for 12,000 people and annual exports of approximately £80 million. If the future as indicated by the graphs in Figures 1 and 2 can be achieved, then a prosperous future is indeed to be expected.

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