

Diversity and Irish Forestry Policy

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The purpose in this paper is to stimulate some thought on the role which forestry might play in the social and economic life of Ireland in the future, say 50 years from now; a consideration of what our objectives should be and how they might be achieved will be used as the means of cerebral stimulation.

Demand for both wood and outdoor recreation is very income elastic i.e. as *per capita* real incomes increase, people tend to spend an increasing fraction of that increase on forest products (lumber, pulp, paper, hiking, orienteering, etc.). We can observe this phenomenon in Ireland, where for example, lumber imports have increased (in terms of quantity) by 33 percent from 1964 to 1968 (CSO, 1966 p. 157; CSO, 1970 p. 15).

As we anticipate a growing economy and perhaps also a growing population in the years ahead, we can expect an accelerating rate of increase in wood based imports, becoming an increasingly burdensome element in our balance of payments deficit.

We know that forestry, through its strong forward linkage generates much income and employment off the land. In the highly integrated U.S. economy typically 10 percent or less of wood based employment is comprised of forest workers (Moak, 1971, p. 10).

Further, we know that much of the income and employment generated by forests is located in rural areas, because forest industries are resource based.

These are good reasons for society to invest in forests, but there is another, namely *diversity*; forests can add another prop to what has traditionally been a very unstable Irish rural economy. It is a well known principle in ecology that diversity adds stability to any biological system. It is no less true where economic systems are concerned: the economy of Washington State in the U.S. for example has been devastated by the slow-down at the Boeing Corporation's plant in Seattle, and we are all familiar with less spectacular examples in Ireland. Where an economy is based on a biological system lacking diversity and therefore stability, the economy will obviously be likewise unstable. Examples abound. The cotton industry in the Southern U.S., on which the region's

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prosperity was based was virtually eliminated in the 1930's by the boll weevil, and the regional economy has begun to show signs of strong recovery only in the past 10 years; coincidentally enough, this recovery has been achieved on the shoulders of a dynamic pulp and paper industry. We are of course familiar with the tragic role played by a potato dependent economy in Irish history.

Looking to the future now we can I think anticipate that laws of comparative advantage in a European context will continue to nudge Irish farming in the direction of milk and beef; this in turn will leave the Irish rural economy very susceptible to destabilization in the event say of a foot and mouth disease epidemic, or other perhaps unknown pathogen. Forestry, with its very flexible production functions (you can vary inputs and outputs as to quantity, type and composition over a wide range) can provide a useful social mechanism to dampen cyclical tendencies in a single commodity rural economy.

As already mentioned, outdoor recreation is a very income elastic good, and the types of recreation provided in forests add greatly to the diversity of offerings in this area by the tourist industry; again a stabilizing factor in a rural economy where certain types of outdoor recreation e.g. salmon fishing are susceptible to disease or faddish changes of taste.

We have up to this point avoided the chief obstacle to fulfilling these rosy expectations for forestry, namely the time lag involved (ranging usually from 20-50 years) to achieve these effects which because time is money makes forestry also quite a capital intensive operation in a country where capital is scarce.

Notwithstanding this problem, successive governments have undertaken substantial and sustained investments in afforestation: Why was this so?

First of all the favourable points listed above were doubtless recognised and forestry was correctly if vaguely perceived as being a "good thing". More important than this perhaps was the fact that an interest group developed in the form of the Forest and Wildlife Service, which had a stake of sorts in the expansion of the forest area. The Forest and Wildlife Service, no less than other government agencies, is not proof against Parkinson's Law and "has expanded to fill the available space". (Perusal of the offices in Merrion Street will show that even space which was not available has also been filled!).

This expansion could continue almost of its own momentum because there were not any significant countervailing forces in its path. The urbanites favoured forestry in a vague romantic sort of way, and because afforestation efforts have been largely confined

to marginal agricultural land, the rural community, if less enthusiastic, saw no reason to oppose it. Forestry then for the past 40 years has been, as the Americans would say, like "motherhood and apple pie"; it was not opposed by any significant political power block or national interest group.

What of the future? If we accept that further investment of resources in forestry would be of net benefit to our society, can we be sure that the expansion of State Forests will continue as it has in the past?

I am inclined to think not. Entry into the EEC has already had a dramatic impact on rural land prices in Ireland, and even if we accept that the present agricultural price structure is unlikely to be maintained, this upward movement in land prices is likely to continue as more and more of our land area is purchased for "amenity" or simply speculative purposes. As land values move upward, intervention by the Forest and Wildlife Service in the market, even for previously sub-marginal agricultural land, will arouse resentment as farmers try to expand their own holdings. At the other end budgetary considerations will make an annual rate of expansion of 10,000 hectares increasingly difficult to maintain. Thus if my analysis is correct we can anticipate for the first time a strong and politically potent force (farmers) developing in opposition to State forest expansion, and that sooner or later this influence will be reflected politically in a slowing down of the afforestation program.

What strategies are available to us to maintain forestry's momentum?

The first one which comes to mind is to broaden the political base, to give more citizens and groups beyond civil servants and the forest industries a direct stake in forestry and its outputs. The opening up of the forests to the public for recreation a few years ago, whether consciously or not could be regarded in part as an attempt to convert some of the urban community to the merits of forestry.

Something more will be required. What I have in mind is a partnership between the public and private sectors to expand the forest area. I am aware that there exists an incentive program for private afforestation at present, and that it has made very modest progress. This results I think because (1) It has not been given top priority by forest service personnel, and it has not consequently received their fullest attention. (2) Landowners are not approached directly and encouraged to engage in forestry. The initiative rests with the land owner. In a cultural milieu to which forests and the practice of forestry are quite alien, it is hardly surprising that

success has been limited. Agricultural advisors are not aware of and may not be sympathetic to the idea of integrating forestry into the farm management plan. (3) The program has been inflexible as to requirements such as spacing of trees, species selection, etc. (4) Farm incomes have been so low that little surplus was available for investment in tree planting and culture. (5) Competing uses for land normally regarded as suitable for forest production, such as the various drainage and mountain lamb schemes have been heavily subsidized.

This last point argues the case very strongly for an integrated approach to rural land use planning in Ireland. Ideally the impacts of various land use "mixes" should be estimated, and then the government's incentive scheme could be tailored to generate these desired impacts. Impacts would include employment and income generated and their distribution, balance of payments effects, return on invested capital, environmental and aesthetic considerations such as ecosystem stability, species diversity, extent of open and green space, water and air quality etc., together with the costs at which all of these impacts can be generated. In the absence of such an inclusive rural land-use policy, I will concentrate on the more "parochial" options available at this stage to encourage private afforestation.

As an economist of sorts I'm aware that small private forest holdings have often proved uneconomical to "manage" in other countries and therefore form an unreliable source of wood fibre at best.

What can be done to overcome some of the objections listed above?

Since farmers' incomes can be expected to increase quite rapidly in the future, they will be more financially able to invest in trees, *if* encouraged to do so. Thus I would favour an intensification of personal contact and encouragement to plant for their family's future.

The participation of insurance companies might be engaged in this effort: for young farmers especially trees are a solid hedge against inflation and afforestation could conceivably be sold as a life assurance policy.

A strategy which I find appealing is some form of State-private co-operation, say where the land is planted and maintained by the State, but remains in the ownership of a private individual, who receives some fraction (say 30 per cent) of the net proceeds for permitting afforestation of his or her land.

Flexibility would be essential; where at all possible the "whims" of the land owner should be indulged as to species, tree spacing, etc.

The lack of participation of the wood industries in tree growing in Ireland is in marked contrast to practice in other countries. In the U.S. for example companies own forest land, sponsor tree farming on small farms, etc. I believe that the larger Irish forest industries should be encouraged, pushed or if necessary blackmailed into the tree growing business.

As a provisional goal I would like to see the following afforestation ownership picture: 1 million acres (400,000 ha) in State ownership, 500,000 acres (200,000 ha) in industrial ownership, and 500,000 in joint state-private ownership, to yield a total of 2 million acres, which at 11% of our total land area will still leave us one of the least forested countries in Europe.

The important thing to note is that such a picture would not result in simply "more of the same".

Firstly the average land quality of the private plantations is likely to permit a much wider range of species to be planted than is presently possible on government lands. This would be a very significant gain; forestry dependent on one species is no more stable in the long term than Southern cotton or the potato. If hardwood culture were to be revived, both our hardwood-using industries and the aesthetic quality of the countryside would gain.

Another important contribution would be the creation of a powerful source of ideas concerning forestry and forest practice which would be external to the Forest and Wildlife Service. The type of very creative tension thereby generated can be observed in the Southern U.S., and all of forestry profits.

Lastly, the co-option of a powerful interest group, i.e., farmers, to the forestry cause, together with the goodwill already in evidence elsewhere and the "natural" expansionary momentum of government programs should assure us of firm political support for the future.

To summarize, I'm suggesting that in diversity of species, ideas, interest groups and power bases lies the best hope of sustaining and expanding a viable Irish forestry estate.

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