## IRISH FORESTRY

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## Afforestation and National Planning

Much has been heard recently of the need for National Planning and Reconstruction, and there is no doubt that there are many unsatisfactory features in our social structure calling for immediate remedy. It is not proposed to discuss in detail the various proposals for improvement which have been put forward, nor to enter into any controversy regarding their practicability or order of priority, but it must be pointed out that their accomplishment will call for vast expenditures of money, material and human energy. In this connection it must be remembered that our present standard of life must be mantained and will absorb a large proportion of our natural resources and the potential productivity of our people. Only the surplus—after these current needs have been met—will be available for reconstruction and improvement. A brave new world will not emerge overnight, and some years must elapse before our planners reach their goal.

It has to be borne in mind that, unlike other more favoured peoples, we do not possess under our land surface large deposits of coal and iron, which are the basic necessities for heavy industry. The lack of these has meant that this community cannot become highly industrialised, and will be mainly agricultural. It is, therefore, inevitable that the future well-being of our people will be bound up with the land. National planning must be for the good of all and not one particular section of the community, so the inescapable fact must be faced that the principal task will be the amelioration of conditions for our rural population, which forms the greater part of the whole.

It is gratifying to observe that afforestation occupies a prominent place in the minds of our planners, and it will not be inopportune to examine its potentialities and the benefits it may be expected to confer on the countryside. It is difficult to draw a strict analogy between afforestation and the lighter industries, such as the manufacture of consumer goods, but comparisons can be made in a general way by considering such points as capital investment and replacement, labour content of current expenditure, location of labour, raw materials and additional work created by the disposal and distribution of the finished products. Unfortunately, it is not feasible to compare profit-earning capacity, as profits can be determined from year to year in industry, whereas, no matter how efficient the forester may be in establishing his plantations and bringing them to maturity, his profits can only be expressed as an annual rental on the land he uses and this is determined by the rate of interest charged throughout the rotation, something quite outside his control. It may, however, be assumed that the planners are not concerned with the profit motive.

Capital investment in a manufacturing concern has to cover the costs of erecting buildings and installing machinery, both of which are subject to continual depreciation and renewal. In afforestation capital expenditure consists of the purchase of land and its preparation for the initial planting. The land is not a wasting asset, as its value continually improves with the creation of a forest condition in the soil with benefit to future rotations. In the course of a century the

factory building and the machinery may have to be written off and renewed several times, whereas the forest land will have improved in value.

In manufactured goods the labour or wage content of the finished product may be subject to wide fluctuations dependent upon the introduction of improved machinery raising the output per worker. Afforestation, on the other hand, is a selective process depending upon the co-ordination of hand and brain in a way that no machine could possibly reproduce. Improvements in planting methods will tend to reduce costs, and thereby the labour content of operations, but not to such an extent as would be possible in industry. In establishing new plantations it is generally agreed that the labour content is never less than eighty-five to ninety per cent. of the total expenditure. Unlike manufacture, afforestation is not subject to violent fluctuations of demand, and the amount of employment given tends to remain steady.

Afforestation is almost completely independent of imports except for such tools and fencing materials as are not made in the country and supplies of seed from some of the North American species. In the course of time the latter can be superseded by home-collected seed, so there would be little or no strain upon the country's external assets. This is an obvious advantage where many of the raw materials of industry may have to be imported.

Factories have to be located in centres convenient to power, transport and a plentiful supply of labour. These factors tend to make them urban in character, and the labour force is drawn from within a comparatively restricted radius. Forests, on the other hand, are more diffuse and are generally established in the hinterlands. The very fact of their spreading over the countryside and not being pinpointed on the map greatly increases the range from which their labour force may be drawn. It is true, to a certain extent, that forestry is a seasonal occupation, but its periods of maximum activity coincide with the slack times in agriculture and vice versa. It is, therefore, a valuable factor contributing to steady employment all the year round.

The disposal of manufactured products is through the medium of the distribution and retail trades. These are mainly urban and not of great benefit to the countryside except in an indirect way by giving the townsman greater power to purchase agricultural produce. By contrast the finished product of the forester consists of mature woods which provide the raw material of many important industries. The mere harvesting of these timber crops would provide a great deal of rural employment which would be further increased if the forest blocks were sufficiently large in extent to justify the erection of permanent saw-mills in their locality.

So far, in endeavouring to present the case for afforestation, as against other forms of industry for rural areas, the chief argument has been left to the last. Timber is an essential raw material which can not possibly be done without and for which the need will continually increase. This country imports on an average between 100,000 and 120,000 Petrograd standards of sawn timber yearly, mainly in softwood species from Scandinavia and the Baltic. These species are all successfully grown at home, and the experience of timber users during the present emergency has shewn that plantation-grown native timber is in no way inferior to the imported material. No matter how much or how little timber we may require in future these imports will have to be financed from our external assets with consequent detriment to our power of purchasing raw materials required for other industries. The extent to which we shall be able

to replace these imports by produce from our own woods is, at present, a matter for conjecture, but it is merely stating the obvious to say that the more we can do so the better it will be in the long run.

It has been stated that the final aim should be 700,000 acres of forests, of which 600,000 acres would be productive and 100,000 acres protective. These figures can only be regarded as tentative in the light of present knowledge. They may have to be modified or increased as time goes on. However well plans may look on paper, they have eventually to come down to earth, and this is literally true in the case of the forests. Land capable of growing economic crops of timber will require to be found. In this connection it is instructive to turn to the Report of the Minister for Lands on Forestry for the period 1st April, 1933, to 31st March, 1938. In that Report, on page 7, the following paragraph runs:

"Owing to the absence in Eire of large areas of plantable land in the hands of individual owners the process of building up forest units of sufficient extent and sufficiently compact to be economically workable is a slow, complicated and difficult matter which involves initial acquisition of small areas and the gradual enlargement of these by subsequent repeated small additions. This process is unique as far as State afforestation is concerned."

That paragraph puts the whole problem in a nutshell. This tedious process, comparable to fitting together the pieces of a jig-saw puzzle, will not stand the strain of the accelerated progress envisaged by our planners, some of whom dream of a total of 2,000,000 acres under forests.

Whatever the ultimate total may prove to be, the problem of land acquisition must be solved if the forest area considered necessary for our needs is to be established within a reasonable time. It is not merely a question of acquiring a specific area of plantable land. It should be acquired either in blocks sufficiently extensive to justify the creation of independent forest units, or so located that continual additions can be made to existing centres and enable them to carry on regular annual planting programmes until the earlier established plantations have reached the thinning stages.

Such requirements will not be easily met and the attempt to satisfy them will bring to a head the long controversy between growing timber and the production of mutton and wool. Many arguments have been advanced in support of one side or the other of this question, and it is quite probable that finality will never be reached. Afforestation is expensive, but a strong argument in its favour at the present time is the amount of gainful employment it provides. Whatever may be the annual expenditure outside the actual purchase of land it may be taken as certain that no less than four-fifths would go to provide a rural wages bill. In comparison with this, grazings can make no showing at all. The transfer of the comparatively small percentage of our total land area from grazing to timber production could be accomplished gradually and without hardship. Even so, a few individuals may have to sacrifice their own immediate personal interests for the ultimate good of the community.

The impact of the present emergency upon our native woodlands has been almost disastrous. Although they have had to meet a demand which has been considerably below normal, they may now be approaching exhaustion. Unless timber imports can be resumed within a comparatively short time the situation is bound to become serious. It should not be allowed to repeat itself if such can possibly be avoided. The question is not so much whether we can afford to sacrifice a proportion of our exports of mutton and wool and also incur a heavy annual expenditure in afforestation, as can we afford to do without a vital raw material which we can produce ourselves?