DOES OUR FOREST POLICY NEED AN OVERHAUL?

By T. CLEAR, B.Agr.Sc.

The Food and Agricultural Organisation of U.N.O. is devoting a major part of its efforts to the shaping of a world forest policy. It has created a Division of Forestry and appointed a Director and staff to organise the collection and dissemination of information on forestry. In its reports and in its new magazine *Unasylva* the need for a vigorous effort for the creation of a world forest consciousness is stressed. In view of these trends in forestry a discussion of forest policy generally, and of Irish forest policy in particular, in our Journal should not be considered inopportune or out of place. There is a natural reticence on the part of our members to entering into this somewhat controversial field. Further, foresters, preoccupied with day to day problems of silviculture and forest management, may feel that questions of general policy are best left to politicians and special committees. It should not be forgotten, however, that it was largely as a result of the activities of a forestry society at the beginning of this century that state afforestation became a reality. Mr. Forbes recalls in his recent account of "the revival of Forestry in Ireland" how the Irish Forestry Society "sat on the Government's doorstep" and would not be moved until something was done. In Mr. Forbes' words: "It was not until the Irish Forestry Society was brought into existence by Dr. Cooper that the question had to be seriously considered by the Government." In these days when the state is active in every sphere of economic development it may be unnecessary for a forestry society to use "suffragette" methods to publicise the part which state afforestation might be made to play in the development of the country. There is always need, however, for publicity for forestry more so, perhaps, than for any other enterprise requiring the expenditure of state funds. During recent years there has been a notable lack of reference in the press to Irish forestry. On the other hand we have had reports and papers on housing, health, rural electrification and peat development. The professions are vocal in the advocacy of their achievements; the engineers, the architects, the farmers are telling of their great works and making, with success, ever increasing demands on the public purse. The forester alone is inarticulate. Our Society, if it is to be faithful to the objects for

which it was constituted and if it is to serve the best interests of forestry in Ireland, should come more into the open and bring the case for forestry more before the public. Only too few realise the importance or value of the work being done, only too many have never heard of forestry—to say nothing of having considered views on forestry policy in this country.

FACTORS INFLUENCING DEVELOPMENT OF FOREST POLICY.

Forest policy has been defined as the attitude of the state towards the existing woodland area and its reduction or extension as the case might be. The past century has witnessed a steady and, in some cases, a spectacular exploitation of the virgin forests of the Northern Hemisphere. At the same time there has been a growing recognition of the importance of forest cover in the protection of land from the influences of erosion and the value of timber as a raw material for native industry. The recognition of these facts has led practically every country to take active measures to prevent further. forest devastation and to endeavour as far as possible to become self-supporting in regard to timber supplies. The need for the adoption by the state of a definite forest policy has long been recognised in continental European countries. The reason for this is not far to seek. In the mountainous parts of Europe the evils of forest destruction on mountain slopes have brought home more closely to the public and the authorities the necessity for preserving forest cover in regions subject to avalanches, flooding and erosion in times of melting snow. Thus Switzerland, France and Germany came early to recognise the value of protective forests and for some centuries past have followed a policy of preventing forest clearances for agriculture or stockraising in areas designated protective forest.

Another factor influencing the early adoption of a policy of forest conservation was the necessity for maintaining a supply of timber and firewood to meet the needs of the local populations. Prior to the development of railways and roads central Europe was poorly served with overland transport and, coal being scarce, fuelwood was of vital importance in view of the length and severity. of the winters. Those of us who had to provide for fuel during the continental cold of the winter and spring of 1947 can readily appreciate the preoccupation of the average European with the fuel supply position. In the North and East of Europe, the forest constitutes the primary crop and the industrial development of Norway, Sweden, Finland and Russia depends to a great extent on the orderly exploitation of the virgin timber and the regeneration of the forest. The climate over much of these regions limits agriculture and stock raising to a considerable degree. Much of the land is too light and infertile for tillage, while heavy winter snow and summer drought combine to prevent the management of permanent pasture as we know it here.

Thus we see in central and northern Europe there were many incentives to encourage the early adoption of a policy of forest conservation, which policies, with the growing enlightenment of the people, readily became constructive as well. The science of forestry became a matter for study and received as much attention as the sister industry of agriculture. The growing populations and increasing standards of living created increasing demands for food, timber and fuel. Only by more intensive cultivation and the reclamation of waste land could these be obtained from the limited areas of land.

IRELAND'S TIMBER DEMANDS SUBNORMAL.

In Ireland the necessity for maintaining forests for the protective, fuel and industrial needs of the country has only recently, if even yet fully, been conceded by our legislators. Not indeed that Ireland ever lacked forestry advocates. Since the time of Arthur Young or Hayes of Avondale, forestry "Sinn Feiners" have sought to interest the nation in a self-sufficiency forest policy for Ireland. Their efforts were unavailing largely because they were made at a time when social, political and economic conditions seemed to conspire to prevent the development of a forestry consciousness here. When growing populations and industrialisation led to an appreciation of forestry values in every country in Europe Ireland was being denuded of people by famine and emigration. When countries like Denmark, France and Holland were reclaiming lands for forests and holdings, the mud-walled cabins of Ireland were being levelled to make room for sheep and cattle and the Irish D.P's. were filling the growing cities of Britian and the New World. For over a century now the population has been dwindling and with this has been associated a decline in agriculture and industries based on the soil. A minimum of new buildings or repairs to houses or fencing or shelter for stock are marked features of rural Ireland and the liberal use of timber was never a feature of our economy. It is, therefore, apparent that, with a falling population and a low marriage rate, and a housing legacy as bad as in any country in war-scarred Europe, Ireland's timber demands have been subnormal for a very long time. There is an estimated shortage of 100,000 dwellings to house those urgently needing accommodation. In addition it is no exaggeration to say that in many a town more than 60 % of the houses could do with stripping and retimbering if not complete rebuilding. Ireland's position with regard to timber needs is therefore unique in many respects. The social and industrial trends associated with the decay of the nation have fostered an old and well founded belief that our forest needs are not to be measured by continental or, for that matter, any other standards.

Any discussion on a self-sufficiency policy for this country must take into consideration not alone these and past trends in timber consumption and the factors influencing them but the desirable and probable future line of economic and social development. It is this factor which makes for such wide divergence of opinion as to what constitutes an adequate forestry programme for the country. Any forestry plan should recognise minimum timber consumption standards just in the same way as minimum food standards are recognised. Further, future uses and not past uses should be studied and our requirements should be assessed not on pre-war standards but in the new, it is hoped, improved conditions of to-morrow.

PRESENT POLICY. IS IT ADEQUATE?

In the report of the Departmental committee of 1908 Ireland's needs in respect of timber supplies are discussed as follows: "The more Ireland develops industries in which wood is used, the more she raises her standard of comfort, the higher these needs will rise. . . There is, however, one point of view from which this question may be looked at more definitely. To conduct her agriculture and her industries and to maintain the life of her people at a normal level of efficiency and comfort, a nation requires to consume a certain quantity of timber. How much timber does Ireland consume? And how much for this purpose ought she to consume." After comparing figures for timber consumption in different countries including Denmark, 26 cu. ft., Holland, 22, the report goes on to say "Ireland if she is to advance in efficiency and prosperity must consume a very great deal more timber than she does now . . . even if consumption of 10 cubic feet per head of population is to be met from home supplies, it would call for a woodland area of from I,000,000 to I,200,000 acres to meet it."

Present stated policy aims at the creation of a forest area of 600,000 acres and it has even been suggested that a smaller acreage

say of 400,000 acres would be sufficient for our needs.

The future needs of this country are now put at far less than was anticipated in 1908, this in spite of the fact that every development points to the contrary. In a time of growing world scarcity of forest products, the consumption of timber in Ireland has risen steadily reaching something like 10 cu. ft. per head in 1938. That there is room for considerable expansion in this direction can be gauged from the fact that the *per capita* consumption of timber in Denmark is more than twice ours and that in Finland over 10 times.

It would appear that our forestry programme is designed only to meet our minimum or emergency needs from home woods. Now unless we visualise a considerable fall in our standard of living or a static or declining population any self sufficiency forestry plan should be based rather on a greatly increased total and *per capita* consumption since at present we use less timber than any comparable country in Europe. That a forest area of 600,000 acres is far from adequate, if reasonable self sufficiency is the aim, can be adduced from a further comparison with Denmark. The latter country with

a forest area of over 900,000 acres of the most productive forest in Europe has still to import an average of 30,000,000 cubic feet of primary forest products each year.

Progress Falls Short of Target.

But first let us consider the progress already made on the road to self-sufficiency in timber supplies. It is now almost 40 years since the state began its afforestation programme. In that time approximately 100,000 acres have been planted. Now any forester knows that, at this rate of planting, we could not hope to maintain even our present forest acreage. A study of the felling statistics would appear to show an actual diminution of the area under forest and these statistics do not reveal the true position by any means. In the last 10 years at least 160 million cubic feet of timber has been felled in Ireland, or say the equivalent of 50,000 acres of mature timber. Over the whole period from 1908 it is not inconceivable that more than the equivalent of 100,000 acres has been felled and much of the land still recorded as forest is forest in name only. On the credit side we have 100,000 acres of new plantation, mostly under 20 years of age and a not inconsiderable portion of this is on poorly productive and inaccessible land. Forest devastation has been going on apace and many cleared or devastated areas, the belts, groves and small woodlands, our most productive and accessible woodlands in fact, are not being restocked. We are poorer in timber resources than ever before in our history. So far as timber supplies are concerned the road to self-sufficiency has become a veritable treadmill for the Irish forester. In spite of much ado and seeming progress all the steps taken so far have just barely kept him and his woods from going under. The official prophesies and warnings in the 1908 report of an approaching timber famine have been only too well fulfilled.

The early plantations too have come nearly to fruition and stand now as mute witnesses of the things that might have been if the nation had had the courage and foresight to do the recommended thing for forestry. If the nation had adopted a truly well planned forestry programme in 1908, instead of a few hundred acres of truly remarkable timber stands as at Baunreagh, Camolin, Avondale and Rathdrum, there would be many thousand acres of such crops and more to come. Instead of looking anxiously at a future barren as far as this generation is concerned, of home timber supplies and hardly daring to consider the consequences of another emergency, we could be planning to take advantage of the wonderful new developments in timber utilization to create new and thriving industries, industries which need not terminate in time of crises,

because of the cessation of the supply of raw material.

NEED FOR BOLDER MARGINAL LAND USE POLICY.

Due to the absence of a constructive land use policy, large acreages very suitable for afforestation and which are entirely

non-arable and of little grazing value have been carved up and parcelled out among a multitude of smallholders. The State has been even more irresponsible than the displaced landlords in its attitude towards marginal land. Instead of retaining control over such land so as to ensure that its productivity would be maintained or improved, it was passed on, very often, to those least able to reclaim or improve it. This policy of division of marginal land has resulted in a situation where most land suitable for forestry is held by tenant farmers and can only be acquired after tedious and expensive legal transactions. It is now extremely difficult to develop an orderly scheme of afforestation or land improvement. The result of this lack of policy can be seen in many mountainy areas to-day, where large numbers of half starved stock range over a wide area of uncultivated land, which ought, under a proper system of management to be producing several times as much in various forms of produce. The living conditions and housing accommodation are often primitive and there is evidence of wholesale deterioration in the productivity of the land. In County Wicklow it is evident from comparison with earlier surveys that bracken and furze are spreading at an alarming rate over the rough grazings attached to the small holdings that dot the glens. This development is doing more to make the holdings uneconomic than the acquisition for forestry would have done and, unlike forestry, is providing no alternative to emigration. If the apellation "Cromwellian" is to be applied to any form of land policy it suits best the one that is condemning the population of the glens and hills to slow annihilation. The growing depopulation of those areas most suited to large scale forestry development is a matter of grave concern. Most foresters complain that it is no longer possible to find enough men to carry out the work of tending plantations already established to say nothing of new afforestation. The day seems to be fast approaching when land acquisition will be the least difficult problem confronting the forester. The failure to recognise in time the usefulness of this land as forest must now result in a complete change in social structure. That hitherto reliable pool for the recruitment of the best forest labour, the small holding, is no longer providing its quota. The houses from which the forester expected his future workers are now very often inhabited by old people or bachelors. The holdings they occupy will fall eventually as ripe plums into the hands of the forester but, perhaps by that time there will be no local labour to do the work of afforestation. The marginal farmer grazier is disappearing and unless steps be taken to replace him by permanent forest workers on suitable holdings it may be impossible to recruit or maintain a forest working staff. The change is so insidious that the arable land suitable for these holdings may be planted up if this present piecemeal acquisition policy be adhered to.

The time is ripe for a revision of marginal land use policy in

Ireland. The plantations of exotic conifers laid down in the past 40 years now provide ample evidence of the timber producing potentialities of such soils. Our Associate members were duly impressed by their visit to the Slieve Blooms in June, 1947. Here indeed is an area which shows the tree growing possibilities of our hill climates. Such areas are the "shop windows" for Irish Forestry and the Society is to be complimented on its efforts to make them known to the public. It comes as a shock to anyone standing under the spruces at Baunreagh to learn that in spite of these self-evident forest possibilities we rank even behind the desert states of the near East and North Africa in native timber resources and percentage of forest cover. It is time we started earnestly to exploit more fully these forest potentialities and to make tree growing a live national

issue rather than an interesting and praiseworthy sideline.

It is now over 40 years since there was a full review of the forest possibilities of the country. Many things have happened since 1908 which make a review of the whole position very desirable. There seems to be a considerable lack of unanimity among legislators as to the forestry prospects in this country. The absence of reliable publications and the infrequency of the official reports on forestry progress have contributed to the general ignorance and apathy that prevails. Two great world wars have come and gone leaving behind a host of new problems social, political and economic. Is it not desirable that forest policy should be reviewed in the light of this new situation? There is indeed an urgency about the country's timber situation that could not have been visualised in 1908, an urgency that calls for a new approach to the problem. After an exhaustive examination of the timber supply position in the world to-day the F.A.O. report states that everything leads to one significant conclusion, "A world wide wood shortage exists and threatens to become critical." No one can deny that the possibility of another war is something with which we have to reckon or that a future emergency causing a stoppage of imports would have a disastrous effect on our economy and standard of living.

CHEAP LAND POLICY IS BAD ECONOMICS.

The varying measure of success achieved with exotic conifers in state forestry is also worthy of review. The increasing cost and scarcity of labour would make it desirable in the interest of national economy to seek means of lowering the cost of timber production. In this connection the flourishing stands of Sitka, Japanese larch, Tsuga and other new conifers to be seen in every forest district are in marked contrast to the many stands of Scots pine and European larch which are a veritable eye-sore to the forester. The fast growing conifers have, where conveniently situated, been of inestimable value to the community and, though immature, have already contributed no mean quota of useful timbers. On the other hand the large areas of heath-covered and pan-bound land afforested with pines during the "boom" period of afforestation, with little attempt to provide the cultivation and manuring requisite to success, are even more worthy of attention in these days of high labour costs. We cannot afford this waste and disappointment and more attention must be given to such matters as productive capacity of land and its location relative to existing or prospective markets. The annual growth of timber in our plantations varies from 250 cubic feet or more per acre to less than 30. The former yields are possible on suitable soils with the western American conifers, while returns approaching the latter figure are all too probable on exposed and uncultivated heatherclad hills. The difference between the profitability of afforestation on good quality sites with such conifers as Sitka, Japanese larch or Norway spruce as compared with Scots pine on exposed heather ground has to be calculated to be believed. It would appear that the cultivation of spruce on spruce ground is a very attractive proposition and that an early harvest in the shape of pulpwood or boxwood is a distinct possibility. The cultivation of Scots pine on the other hand seems a doubtful proposition at best. In view of this it is amazing to note that almost 50 % of the planting done in the past has been with pine. Is there some good reason for this pine policy or is it a question of land acquisition, seed supply or sheer sentiment? The arbitrary maximum price for forest land fixed in pre-war days still holds in these days of grossly inflated land values and much suitable land is thereby put beyond the reach of forestry. There is very good reason for a review of this policy. Cheap land will not produce cheap timber. Any policy which forces forestry on to light, gravelly, panbound mountain tops when, for the sake of a pound or two more, the bracken-covered loams or waterlogged clays or fertile peats admirably suited to spruces could be purchased instead, is demonstrably bad and wasteful in the light of our present needs. In the past Governments have strictly adhered to the unwritten policy that forest land should be cheap land. Now it can be discovered by simple actuarial tests that the price of forest land, when divorced from the productive capacity and accessibility of that land has no meaning. Good class spruce ground would be cheap at fio an acre and poor pine ground is dear at any price. It may be claimed that if the ceiling price at which the State is permitted to acquire land is raised this would upset land values and cause hardship to the farming community. This problem would be avoided by recognising definite forest regions and the question of the best use of the land, whether as farm or as forest, could be decided on the basis of an approved land use policy. It would be better and fairer in the long run for the occupier to receive a worth-while price and be able to purchase, perhaps, a more suitably located holding than to have to wait until the pressure of circumstances, economic or social, force him to sell. By adhering to an unreasonably low and arbitrarily fixed maximum price for forest land the Government can condemn state forestry to the role of a subsidized or at best economically marginal industry and anyone connected with it, be he forester or labourer, will suffer as a result. Given reasonable scope to develop, Irish forestry could be a sound national investment and could support its workers at a reasonable level of comfort. It is simply a question of output per acre, per man, or per unit of capital.

NATIONAL SECURITY DEMANDS A REVISED PLANTING PROGRAMME.

The immediate aim of any forest policy in this country should be to secure the vital timber supplies of the nation in the shortest possible time. Early returns from young plantations indicate that there is definite possibility of achieving a measure of security in a relatively short time. This security, however, can only be achieved by a drastic revision of our current afforestation and land acquisition policy. The sooner we bring our afforestable land under production the better. In the past afforestation programmes have been influenced by adherence to the strictly orthodox plan of an equalised annual programme over a long rotation. Thus we are told that the aim is to afforest 600,000 acres at the rate of 10,000 a year so that after 60 years it is presumed that there will be 10,000 of mature forest fit to fell and replant annually. This system is all right in a country blessed with a store of virgin forest but by no means meets the case of a country with absolutely no reserves of timber. There is no longer any need to think in terms of a 60 years rotation. Forest crops are utilizable from 20 years and every new development in wood use is increasing the relative value of small sized timbers. In addition to early security, we could achieve a real industrialization on a wood base in a very short time if afforestation could be accelerated and confined to reasonably productive land. By accelerating the rate of planting to 20,000 or 30,000 acres a year it should be possible to plan directly for industries based on wood, such as pulp, fibreboard, woodwool and boxboards, in view of the advanced state of many of the present plantations. At present our woods are too small to provide a sufficiency of raw material for any new home industry and we may of necessity have to seek outside markets to dispose of thinnings. Difficulty of marketing can be due as much to having too little as to having too much of a particular grade of material.

Alterations in policy are not a sign of weakness or admission of inadequacy of past policy, they are a recognition of changed times and needs. Overseas we find Britain planning to increase her annual planting programme from 20,000 acres to 100,000 acres, South Africa has adopted a revised programme of 35,000 acres as against 15,000 before the war. The same story comes from every source. Ireland alone, though poorer in timber resources than any comparable country, is holding to an admittedly inadequate pre-war policy

which, it is seen, has fallen far short of achieving even the modest aim set for it. Due to one thing and another, be it emergencies, lack of funds, or staff, the progress towards self-sufficiency is painfully slow.

It is time we had a reaffirmation of the country's belief in the value of the forest as a source of wealth and enjoyment for the nation. If forestry is to play its appropriate role in the future welfare of the country we must plan anew the road ahead with vision and courage. The great need is to set an objective worthy of achievement. At present there is evidence of a spirit of lethargy which was foreign to Irish forestry in its early pioneer days. Our older members will agree that the spirit of adventure, the eagerness to try new methods or species, the pride and enthusiasm in the profession that were part and parcel of the earlier years are not so evident to-day. In the opinion of thinking foresters there is a growing feeling that forestry is an unwanted thing, a cinderella. It is apparent to the forester and the labourer that forestry in Ireland has all the marks of a relief scheme, poor wages, poor equipment, hand-to-mouth planning, absence of research.

In these days the labourer knows that he can only expect decent wages in a mechanised or properly equipped industry. While he continues to scratch out roads with pick and shovel and bare hands, to plant the untilled heath or haul out timber on his bare back he knows in his heart and soul no industry worthy of the name could thrive on such "coolie" methods. The need is for constant improvement in technique and equipment with research going on all the time. Only in this way can the necessary go-ahead spirit be revived in the organisation.

Our Society has been fortunate in gathering into its ranks the most enthusiastic and courageous members of the profession and it has the spirited support of a fine body of associate members. There is a danger, however, that for want of an ideal or a vision the Society will lose its appeal. The younger foresters are not joining and this in itself is symptomatic of the state of affairs. One forester stated recently that all he could look forward to from our Society—or from forestry for that matter—was an obituary notice in our Journal. Is this the general feeling towards forestry and forestry progress in this country? If it is, the sooner the obituary notice of Irish forestry is written the better; the body is there but the spirit is gone. Our Society should set itself the task of reawakening professional, general and State interest in forestry, to bring back the spirit of enthusiasm, to create an aim or a vision towards which to strive. "Without a dream a people perish!"