The Exotic Forest Estate

A year ago the Minister of Forests announced that policy will aim at the establishment of an additional two million acres of exotic forest by the year 2025. This decision is a momentous one; it could have far-reaching and beneficial effects on New Zealand’s economy, and it raises many issues of direct concern to all sections of the community. While it is hoped that much of the new forest will be grown by farmers on already-occupied land, the taxpayer at large will undoubtedly be called on to finance the lion’s share. Success in attaining the objective is therefore more likely if the public are fully informed of the need for creating these additional forest resources.

In terms of world living standards New Zealand’s traditional exports – wool, meat, dairy produce – are luxury items. They are within the economic reach of technically advanced nations, but generally beyond the purchasing power of the world’s great population masses of the underdeveloped countries. Our prosperity thus rests somewhat fortuitously in the fact of low production costs and high selling prices for a narrow range of animal products. But we are constantly being reminded that because of the world-wide trend to economic nationalism, particularly in the field of agriculture, this prosperity exists in the shadow of a Damoclean sword.

The exhortation to diversify our primary production is usually meant solely in the agricultural sense. And diversification presupposes not only adequate markets for a greater variety of products, but the producer’s ability to compete in those markets. It is generally conceded that agriculturally we have only limited room for manoeuvre in this direction. Regardless of what can be done on the farming front, there is a real need to develop alternative export industry able to sell at parity in the world’s markets and make a profit.

Looking to the future and its demands for higher export earnings to finance the essential imports needed by a rapidly increasing population, New Zealand has one trump card for which the prospects could scarcely be brighter. To the north we have more than a thousand million comparatively near neighbours, the bulk of them still illiterate but unlikely to remain so. The Asian peasant may be a poor sales prospect for our butter or mutton; but teach him to read and his consumption of wood in the form of paper could well increase tenfold. There can be nothing surer than a continually
rising world consumption of pulp and paper, with much of the increased demand coming from today's underdeveloped countries. Where does New Zealand stand in relation to the industrial and commercial possibilities presented by this inevitable development?

A fortunate combination of equable climate and responsive soils has been a potent factor in establishing our agricultural pre-eminence. The same combination has produced exotic forests, capable of yielding an almost unlimited range of timber, pulp, and paper products, at a rate unsurpassed anywhere. These products, locally grown and processed, are even now earning valuable overseas exchange in the world's markets and yielding a monetary return that, acre for acre, is considerably higher than the comparable figure obtained from agricultural production. The facts add up to a strong case for a searching reappraisal of national policy in respect to the allocation of land between agriculture and forestry.

Exotic forestry in New Zealand can claim to have attained its majority. Although it is likely to occupy only a minor fraction of the total rural land, it offers, in proportion to the area occupied, an ultimate economic potential far greater than that possessed by any other primary industry. Realisation of this potential depends on the timely establishment of adequate forest resources, which in turn depends on the availability of land and finance.

Forestry has been forced, and was in fact usually content, to accept the least attractive areas, on the basis that agriculture should have a pre-emptive right to all land that can be farmed. But with scarcely even a hair-line distinction between farm and forest land, and with the economic relationship between the two industries changing rapidly, there are now valid grounds for challenging this assumption. The traditional outlook towards land use, with its strong agricultural bias, will not readily alter. Forestry will need to make an incontrovertible case, and to present that case ably, if it is to obtain a reasonable share of the land and monetary resources necessary for the desired expansion.

Soil Conservation and Rivers Control Amendment Act 1959

This Act, to amend the Soil Conservation and Rivers Control Act 1941, was based upon recommendations contained in the report of a Select "Soil Conservation" Committee of Parliament. This committee was set up to "hear representations relating to soil conservation and catchment-board administration and legislation". Some apparent dissatisfaction on these matters led to the setting-up of the committee.

Far from being an indictment, the amendment Act is in effect a strong endorsement of the principal Act and its administration and the work carried out under it by catchment boards. It contains two principal sets of provisions: first, the inclusion of all those areas not already in catchment districts in catchment areas, for
each of which a commission can be set up; and secondly, stringent safeguards against erosion and flooding.

It seems that further progress in the setting up of catchment boards was proving difficult because of objections to rating. This lack of progress is delaying the planning of urgent river-control measures in such areas as the Bay of Plenty and the Wairoa catchments.

The safeguards against erosion and flooding provide that “the occupier of any land in any catchment district or catchment territory shall carry out every operation affecting land in such manner and by such method as will conform to prudent land use practices”. A list of things which the Soil Conservation Council can enforce with regard to land use is given in the Act. Included are provisions to enforce topdressing where necessary and such a wide provision as “to improve the fertility and structure of the soil by the liming, fertilising, and cultivation practices specified in the notice”. These provisions were previously contained in regulations to be enforced by catchment boards, which, however, have shown a marked reluctance to enforce them. It is regrettable that in transferring the provisions to the amendment Act the legislation has been written in a most cumbersome manner. For this reason it will be difficult to arrive at a practical formula for their application. The only solution seems to be much simpler legislation.

Forestry Research

The theme and place, Forestry Research at Rotorua, for the 1960 annual meeting of the Institute were well matched and attracted a record attendance. The Institute meeting was closely followed by the ninth New Zealand Science Congress, when a wide-ranging programme was presented in the forestry section. The publicity thus given to forestry research has revealed the breadth of the field of interest encompassed by the term “forestry” and focussed attention on the number of agencies making valuable contributions. It has also highlighted the necessity for effective coordination. Field foresters and private plantation owners contribute a quota of “applied” research, much work of considerable direct and indirect value is done by Government departments other than the Forest Service, and some investigations of interest are carried out at the universities. The main burden of coordination must fall on the Forest Research Institute, and the question must be asked, “How can it best be done?” The Research Institute itself is developing a tradition of research, stimulated by the competition arising from the gathering in one institution of workers in so many different fields. It is rapidly gaining in stature and reputation. There is a steadily increasing flow of publications; the inquirer can confidently approach the authors for advice and help in matters related to their particular specialities.
It is suggested that this gives a lead to a practical method of securing the necessary coordination – personal contact between research workers in related fields. This is likely to be far more effective than the coordination that can be achieved by an Olympian committee. It will ensure that the field forester can bring his local problems for discussion on a practical level. He can obtain guidance in his planning and help in interpretation of his results as well as a repository for his records where they will be accessible to future investigators. These services are available now and will expand with demand; if advantage is taken of them liaison between the specialist and the forester with local problems to solve will be established on the best possible basis. The same type of link is required between scientists with the same interests in different institutions and it is clearly one of the main duties of the research administration to ensure it, both through conferences and more intimately between individuals.

Asia-Pacific Forestry Commission

Following a preliminary conference held in Mysore, India, in 1949, an FAO Forestry and Forest Products Commission was set up in order “to examine particular problems in the fields of forestry and forest products, both of immediate urgency and long-term significance; and to make recommendations to governments through the Council of FAO”. In order to organise the work of the commission, the Director-General of FAO established a permanent secretariat at the FAO regional office for Asia and the Far East, Bangkok.

New Zealand was represented at the original Mysore conference but for reasons not adequately explained it did not attend any of the first four sessions of the commission, held in Bangkok (1950), Singapore (1952), Tokyo (1953), and Indonesia (1957). The balance was more than redressed in 1960 when, to the fifth session, held in New Delhi, New Zealand sent a particularly strong delegation, led by no less a person than Hon. (now Sir) Eruruia Tirikatene, Minister of Forests. This change of heart may have been caused by a growing realisation on the part of the Government not only of the technical and professional assistance which New Zealand can now offer countries of the region – worker training and the development of exotic forests for pulp industries are outstanding cases in point – but also of the enormous future potential for trade in forest products between New Zealand and the Asian countries, a trade which for different reasons could be of extreme importance to all participants.

The reports of the fifth APFC session indicate that this aspect of the interdependence of New Zealand and the East was fully examined and discussed. The session had placed before it ample evidence of how the generally low standard of living of the people in the
region is reflected in, and in part caused by, the extremely low per-
capita consumption of wood and wood products such as pulp and
paper; of how this situation is worsening through an explosion
of population without a corresponding increase in forests and forest
industries; and of how the already low economic and cultural
standards are therefore likely to be depressed further still. Expressed
in its simplest form, there are already hundreds of millions of Asians
who cannot read; the chances of their children being able to read
are likely to dwindle through sheer lack of available paper.

By contrast, the basic factors of soil, climate, and (despite
the pressure from agricultural interests) land availability, are all so
favourable in New Zealand that this country has the potential to
produce a large exportable surplus of pulp and paper and moreover
to produce it at prices which would enable it to be marketed in
Asian countries. By so doing New Zealand could on the one hand
diversify and strengthen its economy, and on the other hand make
a positive and major contribution to the future well-being of the
Asian peoples. The session was well aware of New Zealand’s pos­
sible role in this matter, as is evidenced by the following quotation
from its final report: “New Zealand’s study on future wood re­
sources and requirements was quoted as an excellent model that
other countries of the region might usefully imitate. It was felt,
in this connection, that owing to the favourable conditions obtaining
in that country for the growing of pulping species, and in view
of the severe deficit in wood supplies, especially newsprint, expected
for the region in the years to come, it would avert a bottleneck
in economic growth and the spread of literacy for the region
as a whole if sufficient land were made available for afforestation
purposes in that country.”

It is somewhat unusual for a conference of this nature to make
such a direct and specific recommendation to a member govern­
ment. The fact that it was done is some measure of the importance
 accorded by the session to New Zealand’s potential role in Asia and
Pacific forestry. It is to be hoped that governments in New Zealand
 will take heed, and will in fact make more land and more money
 available for exotic forest expansion.

Farm Forestry Dis-incentives

The use of trees as a crop on the thousands of hard-to-farm
areas in occupied holdings throughout the country has been preached
for many years but critical farmers could not accept it as an eco­
nomic proposition. The Forest Service, in the belief that farm
plantings were the means of obtaining a proper dispersal of forested
lands, especially in districts of predominantly good land, has, since
the Second World War, battled continuously for removal of the
dis-incentives.

The first step was the amendments of 1949 which allowed (a) all
expenditure on planting, protection, and maintenance of trees to be charged against farm income for tax purposes, and (b) income from the intermittent sale of trees to be spread over up to 5 years to mitigate the effects of the graduated scale of income tax.

There still remained the bogey of death duties, which, together with the tax on income from a forced sale to liquidate the duties, could exceed the total value of the plantation. This bogey has now been laid to rest by the announcement on Budget night “that on the death of the owner of land on which trees are growing the timber value of the trees will be exempted from estate duty”.

The Poison 1080—Sodium Monofluoroacetate

The use of this chemical by the Forest Service for the experimental poisoning of deer was the final act which led to the conference called by the Minister of Forests in October 1958. An editorial note on this conference is contained in last year’s Journal. The use of the poison also led to the largest petition ever placed before Parliament. After the hearing, which was open to the public and to the press, at the request of the N.Z. Deerstalkers’ Association, the petition was reported to the House without comment. This was the most unfavourable report it could have received.

A feature of the hearing was that the press and the public ignored the issue almost entirely, which was quite contrary to the interest aroused by the deerstalkers at the time of the 1958 conference. It would have been unexpected by the Deerstalkers’ Association, which from the evidence presented obviously hoped to reopen all issues concerned with deer control. The association had complained of receiving an unfair hearing at the 1958 conference, but had ample opportunity, during a long and patient hearing of the petition, to make the most of any issue it wished. There is very little doubt, however, that, as at the 1958 meeting, misleading statements and quotations taken out of context served them ill.

Delicensing of the Pulp and Paper Industry

Without warning, in July 1960, the Government announced the delicensing of the pulp and paper industry. While it is too early yet to foresee the full effect of this measure, it is evident that it will place increased responsibility in the hands of the forest owners and user industries to achieve the optimum long-term development of our forests. Obviously enough the Government has been and will continue to be vitally interested in the orderly planning of this major industry both as a matter of national importance and as the principal forest owner. From the earliest years of establishment of our major exotic forests, their potential has been recognised as not only a source of timber and pulpwood for domestic requirements but also as an important means of earning overseas exchange. It has also been borne in mind that the capital costs of the pulp
and paper industry are extremely high and that only very large plants are capable of competing on world markets. Hence, the premature development of the industry or the establishment of pulp mills in regions which are incapable of a large sustained yield has been viewed as a matter to be avoided.

It is to be hoped that the delicensing of the industry will not only promote greater competition, which licensing plus protective import controls and tariffs have tended to limit, but also help to improve industrial efficiency. Should exotic-forest utilisation be allowed to develop haphazardly, however, it could seriously limit the high potential for exotic forestry which exists in this country. Much therefore depends on the development of balanced wood-using industries which are capable of meeting competition at world prices both at home and overseas.

Report on the West Coast

The report of the West Coast Committee of Inquiry has now been published. The committee was set up by Government in May 1959 to investigate and report on the industrial possibilities of the West Coast region – the Buller, Inangahua, Grey, and Westland Counties. This region comprises 8% of New Zealand's land area, but supports less than 2% of the total population.

Anyone with a knowledge of the economic facts pertaining to the West Coast will know that such an investigation was needed. The region's easily won gold has long since gone; its main industry, coal mining, is threatened by contracting markets; its forest resources have suffered destructive exploitation on a widespread scale, and their replacement is proving an extremely difficult problem; farming development has been slow and restricted; there is virtually no secondary industry; a large proportion of the young people leave the area permanently; and its human population is slowly declining. Against this somewhat depressing background the committee of inquiry undertook the task of examining the region, listing its assets, actual and potential, and recommending practicable measures for reversing its economic decline.

The committee's report with appendices is a document of 90 pages. It surveys the region in detail and makes thirty-five recommendations which cover the gamut of West Coast economy. Foresters will naturally be interested in that section of the report dealing with land use; it is contained in two chapters “Land Development and Farming” and “Forestry”. As a major potential industry, farming in the West Coast region is confronted with the initial handicap that only 530,000 of a total of more than 5½ million acres are classed as farmable or marginal land, a mere 9.4% of the total. And much of the most fertile land is under constant threat of flooding or river erosion. So while the report is emphatic that a
substantial expansion in farm production can be achieved, and even mentions quadruplication as a possibility, the inference is that farming is unlikely to use more than a minor fraction of the total land area.

The report and recommendations on forestry and the forest industries show that the committee has grasped the salient facts of the West Coast situation. These facts are, briefly: diminishing forest resources still being exploited faster than they are being replaced, a continuing increase in the area of cut-over land completely unsuitable for farming, and acute technical difficulties in reforesting cut-over land whether with exotic or indigenous timber species. Superimposed on this infirm basis is a timber industry, which, as the committee somewhat bitingly observes, “is conducted on colonial lines by east-coast interests”, exporting virtually the whole of its cut to other parts of New Zealand in green rough-sawn condition, and thus yielding the minimum economic return to the district of origin.

The committee has made a number of recommendations which it considers should help materially in redressing the present unsatisfactory state of affairs. Those dealing with adequate noxious-animal control, increased planting of exotics, and investigation into the possibilities of local industries based on waste wood are to be expected and are duly recorded. The recommendations dealing with the existing timber industry are less orthodox, and their implementation would require a change in the timber-sales policy of the principal forest owner, the State. The committee is of opinion that local processing of sawn timber – drying, machining, preservative treatment, etc. – should be carried out to the maximum extent possible before the timber is sold outside the region, and that directions to this end should be incorporated in sawmilling licences. It is also recommended that sawmilling licences be issued for periods up to at least 10 years of cutting, with provision for periodic review of stumpages, and that preference be accorded to applicants giving proof of intention and ability to carry out local timber processing to the utmost practicable limits, even though these applicants are newcomers to the local industry. The committee also states that it will deal with timber-utilisation industries in more detail after receipt of proposals from a firm of industrial consultants whose report is, rather vaguely, “due within several months”.

In attempting to diagnose and prescribe for the economic ills of the West Coast region the committee of inquiry accepted an assignment for which the term “difficult” would be gross underdescription. The forest and forest-industries field is a complex one, and the committee’s recommendations, theoretically unexceptionable, are likely to encounter many practical obstacles in the path of their execution. For instance, the sawmills already working in the region
are producing far more timber than is being currently replaced by growth. And this timber is being processed to the stage of final usage by presumably adequate plants already installed and operating at the consuming centres. This situation raises queries. Is it prudent to encourage new entrants to an industry already overcutting its raw-material resources? Admittedly the bulk of the forest resources of the region are Crown owned, and some two-thirds of its annual timber production comes from State forests. Thus the forest authority has a large measure of control over the volume of timber cut, and could justifiably impose conditions to ensure that timber coming from State forests is used to meet essential demands. Some control is in fact exercised along these lines. But could the forest authority demand that a sawmiller with a large investment in processing plant elsewhere – as many have – set up a parallel operation at his West Coast sawmill? However, in view of the supplementary report on the subject promised by the committee, these and similar matters of doubt may well be left for later resolution.

Foresters will have no difficulty in reading the lesson pointed by the committee's report. It is simply the age-old one: overexploitation of natural resources ultimately brings economic retribution; and the cost of restoration is inevitably greater than the benefits gained from the original temporary yield. The resources of the West Coast region are, or were, limited in both extent and variety; but they have contributed much to the development of other parts of New Zealand. To restore the region to full productivity will make heavy demands on human, material, and financial resources. Some of these should be forthcoming within the region itself, but the rest of New Zealand, through Government, will undoubtedly be required to contribute substantially – rightly so. It is to be hoped the report will be read and its lesson learned in the right quarters.