Presidential Address

LAND USE AND FORESTRY

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INTRODUCTION

The object of the Institute, its very reason for existence, has always been succinct — "to further the development of forestry and the interests of the profession of forestry in New Zealand". Brief though the object is, it has permitted the Institute to engage in a wide range of interests which are confirmed by the interpretation in our constitution of the term “forestry”, “to include all those activities involved in the management of forest land, the object of which is the production of wood or other forest benefits and the maintenance of the environment in its most beneficial form”.

The broadening of criteria for membership in recent years has extended the range of skills and occupations represented in the Institute, so that there are a great many subjects of forestry interest which might properly be discussed at our annual conferences and by presidents in their addresses. However, the number of topics considered has not been great and some recur. The subject of forestry and land use has recurred most of all because the relationship has been an uneasy one, at best.

REVIEW

Previous Presidential Addresses provide a useful window on the past, and may still be a guide to the future:

In 1958 at Napier, the then President A. L. Poole spoke on “Exotic Afforestation and Land Use in New Zealand”\(^1\). He noted that well over half New Zealand’s forest produce was coming from recently established (exotic) forests and the proportion was increasing. This very fact was leading to questioning of land use and nowhere was the questioning more contentious than on the eastern strip of the North Island from Cook Strait to East Cape.

Poole recognised that the history of land settlement and economic development “have given the community at large a dominantly agricultural outlook . . . Agricultural production, knowledge and investigation have grown in stature to place New Zealand in a pre-eminent position throughout the world in several respects in

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these fields. As a corollary, land use has come to be regarded by many as almost synonymous with agricultural use. Forests are something to be cleared to make way for agriculture.”

Poole noted that the indigenous forests cleared for agriculture “contained few of the ingredients upon which permanent forest management is normally based”. He instanced the lack of prospect of developing a large more or less permanent industry such as a pulp industry by way of contrast to North America and its indigenous forests. Nor, he said, were farm woodlots based on the indigenous forest even contemplated although this was a form of forest and source of forest production, both common and important in European and North American countries. And so forest clearance for farmland was unusually complete.

Some of the points brought out by Poole were:

- “Agriculture possessed the organisation, the wealth, the manpower, public sympathy and the ability with which to present its case.”
- By the late 1950s, despite the need to provide a replacement resource for the fast dwindling indigenous one, the public felt New Zealand was “overplanted” because more raw material could be produced than could be absorbed domestically.
- The boundaries of economic farming were expanded greatly by the crawler tractor and aeroplane and soon included areas which had been looked at askance by the forester.
- Farmers could quote national exhortations to increase production and had the backing of legislation and finance to assist development of marginal land.
- Government policy, for some years, had been that it would not acquire land for afforestation that was suitable for farming.

Poole concluded that foresters would have to learn to use for afforestation substantial areas of cutover and second growth land, would have to encourage farmers to practise woodlot forestry, would have to include afforestation as an integral part of land development of “difficult” land, and would have to consider for production “afforestation carried out primarily for the purpose of curing soil erosion and improving stream flow”.

In 1960, D. Kennedy² said that, despite the recently announced policy of increasing the forest estate by another two million acres

during the next 65 years, foresters would have an onerous task convincing the man in the street that future timber needs would not take care of themselves and must be provided for right away.

J. Henry followed this up in 1962¹, arguing the benefits to be obtained from increasing the rate of planting, and the intensity of management needed. Because the public know so little about forestry "professional foresters must sell the principles of good forestry" and he reminded the meeting that selling was a "continuous and continuing job, because governments change, management change and public opinion needs constant reminders . . .".

A. P. Thomson devoted his address in 1964⁴ to lessons which could be learned from the Eyrewell Forest windblows of March 1964. Of relevance to this meeting, he said that there was a salutary lesson which would be forgotten at our peril — "Forests can only be grown safely and satisfactorily within fairly closely defined climatic and edaphic limits". He warned that in Canterbury the limits were the prevalence of gale force north-west winds and compacted river shingles. In Central Otago they included the arid zone. In the South Island generally, afforestation should not be taken too far up snow-prone mountain slopes. In New Zealand generally, limits included soils too degraded by past or present forest crops to give an economic response to fertiliser treatment, and soils too waterlogged and too infertile to respond economically to drainage and chemicals.

Thomson made a further observation about plantation forestry which is relevant to land use by urging that it "must adhere, in part at least, to the classical concept of normality in age class distribution". He gave examples of major forestry problems which were a consequence of short periods of "boom era" planting.

In 1966, A. D. McKinnon, speaking to the theme that forestry is important only as its products meet the needs of the community, echoed earlier presidents in saying⁵, "All that I have learned of the history of forestry in New Zealand has shown that in the past there was widespread ignorance of the value and purpose of forestry". His succeeding remarks did not suggest there had been any change in the public. He questioned farmers' knowledge of forestry as a land use and inferred they saw it merely

as competition for land, for growing an inferior product (wood) and as an interference with their own burning-off operations. He questioned whether the commercial world of the city might see forestry “merely as a source of supply of goods that could be imported if not available locally”.

M. J. Conway addressed the Institute in 1969 on the subject “Forestry — A Legitimate Form of Land Use”. He spoke of the annual planting target of 52,000 acres (plus a crash programme of 5,000 acres per year for five years) recently adopted by the Forestry Development Conference and contrasted it with the 25,000 acres per year programme of 1961 and with the previously undesirable pattern of massive plantings only in years of high unemployment. Having noted the social stigma which might have been attached to forestry and the emergence of forestry “from the obscurity of the category ‘other’” in recent government statistics, he concluded that forestry now had a place in the sun; that it had “emerged from under the agricultural umbrella and is a contender for the economic use of a portion of the remaining underdeveloped land in the country”.

Speaking of the Crown allocation of land, he said that in practice forestry had tended to get the fag end of the land from agriculture but that recently it had been conceded “that there may be merit in assigning to forest use, not merely sub-marginal or marginal land, but good agricultural land, particularly where it adjoins an established forest unit which would be more economic if enlarged”.

Having spoken of the future needs of developing countries, Conway concluded: “Just as agriculture is more efficient on good land, so is forestry, and it is not too soon for recognition to be given to the concept that in selected locations land should be farmed until such time as it is put into forest in perpetuity.” He looked forward “to the day when old antagonisms, born early in our history when forests were a hindrance to land development, are removed; to the days when the word ‘conflict’ is replaced by ‘partnership’.”

Notwithstanding that hope, J. J. K. Spiers addressed the Institute in 1973 on “Conflict in Land Use”. He spoke of the “back to nature” movement engendered by public concern for the en-

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vironment wherein the natural and untended is preferred to the cultivated and tended. He, too, suggested that the public, products of an urban environment, failed to understand the value of managed forests as a land use. He was critical of the pronouncements of academics from other disciplines portraying forests as "biological deserts" and "dangerous monocultures" and said that "The only way the world can support its wildly escalating population is by selective breeding and intense cultivation of various monocultures" and instanced rice, wheat, sugar cane, cotton and pines, teak and eucalypts for food, clothing, fuel and shelter.

Even so, Spiers suggested that the forest industry and our profession could improve both its practice and its image. He gave examples of both and was particularly critical of the little which had been contributed by the forestry profession to public understanding. He concluded by outlining the major advantages of wood on which the profession should be enlightening the public. These included —

- Wood is virtually alone, of major world resources, in being renewable.
- It is an eminently manageable resource which can be processed with less pollution and energy requirement than most other materials.
- It can be recycled and is biodegradable.
- In New Zealand, exotic forest can grow ten times or more faster than native forests and can contribute substantially to economic health through essential diversification.

In 1975, P. J. McKelvey gave his presidential address, "Pacific Forestry". He suggested that the fundamental environmental dilemma faced by the world is the conflict between production or use of resources for a good living standard and preservation to make living worth while.

Until recently, production had dominated but the position was now often reversed and in New Zealand "because of the richness of our country and our relative affluence, we (have been) able to lean a long way towards the persuasions of the preservers and so alienate a large segment of our forest resources from wood production". McKelvey suggested that ultimately foresters here

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might be able to have it both ways, that they can “use and renew the resource and sometimes with calculated losses in wood productivity, can preserve, indeed even enhance, environmental values”.

In his 1976 speech, McKelvey addressed the subject of “Forestry and Society” because there had been some discussion on whether we were competent as foresters to discuss the social implications of forestry schemes. He argued strongly in the affirmative. In doing so, he examined the needs which motivate human behaviour and which he described as security, stimulation, aesthetic satisfaction and creative activity. To take just the last, creative activity, he suggested that forest managers could offer people many opportunities, of which public consultation on forest management plans was only one example.

It is probably reasonable to assume that presidential addresses give an indication of the prevalent views and attitudes of their societies, and a careful review of the addresses to the Institute of Foresters over a 23-year period shows some changes and some areas of constancy.

There has been a continuing recognition of the dominant role of agriculture and of the way in which it has produced a public attitude that equates agriculture with good land use.

There have been continuing pressures and incentives to develop more farm land and to produce more agricultural products. Production forest planting targets have increased rapidly in the last 20 years, but the public is not convinced of the need for more exotic forest. Indeed, it remains ignorant of the benefits of increasing forest production despite the continuing confidence in forestry shown by the industry. Forestry interests are continually failing in their duty to inform and educate the public.

Because land which has generally been considered by foresters as suitable for forest production is also generally suitable for pastoral farming, there has been competition and conflict between the two land uses and examples of their complementary development remain few.

Government policy has been to not make land available for forestry if it could be used for agriculture. For a time, from 1969 it seemed this policy might change, but this has not proved to be the case.

Farmers, and the community generally, have not recognised that production forest should be grown within fairly closely defined limits. Indeed, as a consequence of the country's dominant pastoral outlook and the government policy on allocation of Crown land, there has developed a widespread view that forest grows best on land which is sub-marginal for farming.

Public concern for the environment has developed only recently and presently leans toward preservation rather than production; but forestry has the great advantage of allowing production from the use of resources whilst preserving the resource itself.

Forestry has a great advantage in this land-use dilemma since it permits the productive use of the forest resource while preserving many of the resource values and the potential for continued use.

PRESENT INSTITUTE INVOLVEMENT IN LAND USE

Land-use matters in one form or another occupy much of the Institute's and its Council's time.

Management plan drafts are now published by the N.Z. Forest Service for many forests, forest parks and forest regions. Some other organisations have also published their intentions (e.g., N.Z. Forest Products Ltd in respect of the King Country). The drafts with their invitations to comment give the public and the Institute excellent opportunities to participate in and be better informed about forest management. They certainly enable the Institute to contribute towards better long-term management of forests.

As a recent example, Institute members have given their attention to a draft management plan for North Westland and proposals for the forests of South Westland. Council made two visits to Westland and its most important conclusions were to reaffirm its belief that large areas of indigenous forest in Westland, both podocarp and beech, can and should be managed for production in perpetuity although this will bring closer by several years an inevitable period of major social disruptions.

District and regional schemes prepared by counties and united or regional councils have also been given considerable attention, particularly since 1979. Since district schemes usually provide for the control of land-use activities, there is a continuing need to make counties aware of and recognise the benefits which forestry can provide.
It is largely because the Institute has perceived the need for a better informed public and body of land-use decision-makers that Council has taken an active interest in forums where policies are discussed, formulated and disseminated. Accordingly, it has been represented at each of the five seminars sponsored by the Land Use Advisory Council over the past year with the aim of developing better sectoral policies within a set of national land use guidelines.

Our appreciation of the lack of detailed knowledge on forestry matters, not only amongst the farmers who make up the majority of rural county councils but also amongst the planners who undertake the preparation of district schemes, has caused us to initiate a series of seminars. These seminars have been organised in conjunction with the N.Z. Planning Institute to enable a group of foresters and planners to spend two days discussing the place of forestry in district and regional schemes, seeking to satisfy the questions which arise and to dispel the misconceptions of both groups. Great credit is due to the local sections which have organised the seminars to date. The first was in Rotorua rather more than a year ago and this last year there have been two, in Christchurch and Auckland. Both institutes see value from the series continuing.

The Forestry Council too has recognised the need to obtain better information on forestry matters and to disseminate it to the public and to organisations involved in land use. Several council members have joined ad hoc committees of Forestry Council dealing with subjects such as district schemes, transport of forest products, or environmental concerns.

All Council members and a number of other Institute members have contributed to the 1981 Forestry Conference.

DISTRICT SCHEMES

Attention has been given so far to land-use matters in a general sense. One or two specific examples might help to focus interest more sharply.

Wairoa County produced its first district scheme review in 1977 which appeared to establish that farming is the best use that rural land can have. It zoned the land, prohibited forestry from the fertile alluvial river flats and made it a conditional use on hill country with some or considerable erosion problems. Objections by forestry interests were disallowed and appeals were
subsequently heard before a Planning Tribunal\(^\text{10}\) which, by an interim decision in September 1979, required the county to rewrite parts of its scheme to recognise that forestry should be encouraged as a predominant use on land “which is not demonstrably more suitable for sustained pastoral production, provided that more than 50% of the land subject to any forestry proposal is denoted as class V, VI or VII on the New Zealand Land Resource Inventory worksheets”.

Although the county went to some lengths to question the interpretation and thus alter the requirements of the decision, the Tribunal in its final decision gave the wording for the scheme statement and ordinances which confirmed the substance of its interim decision.

The Town and Country Planning Act 1977 does not provide for appeals against the decision of a Tribunal and so it might be expected that the place of forestry in the Wairoa district is now resolved. The process of public consultation and review has provided for forestry and other land uses. But, if a meeting of the Wairoa County has been correctly reported\(^\text{11}\) the council’s chairman and its consultant planner cannot tolerate the decision and will initiate changes to the scheme for which it will soon be seeking information. The information will include “the effects of large-scale forestry on the country’s economy, social structure and environment.” Matters to be studied would include “the level of agricultural production and the time between planting and harvesting of a pine crop, the fact that the profits would probably go outside the county unlike the profits from farming and the implications for the general business community. On the social side the county should investigate the population growth structure and the implications of rural depopulation,”. An important ecological factor to be studied was the impact of sustained forestry on the soil structure.

It is clear that Wairoa County is seeking to use the district scheme, not to ascertain and plan the wise use of the county’s resources when development takes place, but to control the use of resources to fit the county’s preconceptions and prejudices.

As one more brief example, the Taumarunui County has gone further than most other counties which state their priorities for


development by reference to section 4 of the Town and Country Planning Act 1977. Taumarunui has given its general philosophy thus: "The Council will aim to support the operation of private free enterprise as the primary means of achieving the development of the county in such a way as will most effectively tend to promote and safeguard the health, safety, convenience and the economic, cultural, social and general welfare of the people and the amenities of every part of the district."

Having espoused the philosophy of private free enterprise, the county then proceeded to include land-use controls in its statement and ordinances. It disallowed objections from forestry interests which contended that unless it could be shown to be positively disadvantageous to county development, forestry should be a predominant use and able to compete for land on a free market.

**DISCUSSION AND CONCLUSIONS**

There is a long-standing conflict between farming and forestry interests, where there should be co-operation. The two land uses should complement each other in the rural landscape, but that is presently the exception rather than the rule. The way in which farming and forestry continue to press their own interests is not conducive to resolution of conflict. Meanwhile as time passes the apparent resource of land for development continues to dwindle and makes each interest press its claims more urgently. Both sides claim they are disadvantaged: forestry by the dominance of pro-farming attitudes which produces restrictive planning controls and beliefs that production forestry should only be practised on land which must be planted to control erosion; farming by land aggregation controls, the limited availability of finance for land purchase by individuals compared with that available for big companies, and the tax credits which are available to companies operating in a loss situation.

It is true that forestry has been able to make great strides in a developing atmosphere of antagonism and there is little to suggest it will not go a good deal further in the immediate future. But the signs certainly suggest that for the longer term forestry must seek new ways to gain acceptance, for farming will surely remain the dominant land use in the decades ahead.

There are some hopeful signs. Discussion with farmers does not reveal an antipathy to trees. Quite the contrary. Most farmers like and grow them. Many, though still a small minority, grow their own plantations, usually of radiata pine, and enjoy their
benefits. But few think of them as forests, which they perceive to be large, owned by big impersonal companies or the State, and managed and tended by people who are not of the district but who have come into it, threatening their way of life and their security.

Some farmers have recognised that within their pastoral holdings, even those which on the whole are decently productive, there are differences in land quality. They can see that if the available effort is put into areas with greater potential, rather than spread over the whole farm, then higher pastoral production can be achieved.

They can see that a plantation grown on the remaining land, land which might still be thought of as reasonable for pasture, can provide additional long-term benefits and might even provide vocations for sons who would otherwise be forced to leave the area.

Forestry interests would do well to consider how they might encourage forestry on farms to a much greater degree.

If forestry is to continue to advance, then it is clear that a great deal more attention must be given to its public relations and to increasing the public's knowledge and appreciation of forestry. The active participation of involved farmers from the dominant land-use sector must make this task easier.

As an Institute we should be still more active in fostering a wider public understanding of the benefits of forestry. But more importantly, we should be helping in the further development of both farming and forestry.

It is not even beyond the bounds of imagination to believe that there is much greater scope for active public participation in forestry enterprises. There are already groups of people who have taken the initiative to develop their own plantations, not merely as investors in a company, but as active workers. There is much more scope for there are many farmers who know they have the land to plant but who lack the time and desire to do so.

If these opportunities can be seized, then the land actually available for forestry will come much closer to that which farm statistics have shown to be potentially available.