country pastoralism being compatible with wild natural tussock lands will be difficult to change. Images of vast golden tussock country are part of the national psyche. The task of identifying sustainable natural landscapes of national importance, and protecting these, becomes even more urgent. Meanwhile the ecological and economic potentials of forestry and other landuse options for dry high-country landscapes need to be clarified and the information widely disseminated so that reasoned landuse decisions can be made.

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INSTITUTE NEWS

Government has key role to play in future of plantation forestry

W.R.J. Sutton

I have found quite disturbing the recent documentary series on the rise of Japan (Monday evenings on TV1). The way the Japanese Government has been deliberately and successfully focused in the efforts of industry (often at high social costs) provides a counter to those who argue the Government has little or no part to play in the industrial development of a nation. Japan has demonstrated that a lack of energy and natural resources is not necessarily a disadvantage. That the Australian and USSR economies have problems also shows that being well endowed with natural resources does not necessarily ensure continued prosperity.

Where does this leave New Zealand, especially New Zealand plantation forestry?

We have the land, the species, technologies and experience to grow quality trees as fast as almost anyone else in the world. And we can do that with more certainty than anyone else.

We have good reasons for our confidence in plantation forestry. Wood is man's most versatile commodity and is required in massive volumes. For most of man's history wood has been a natural

resource to be "mined" in the same way as minerals. We are fast moving to a time when we can no more mine our forests and we must deliberately create the forests to grow our wood. New Zealand is uniquely placed because we were among the first to have done this and we have done much to achieve a leadership position.

From the President

As the natural forest resource becomes exhausted, or locked up for environmental reasons, we have little to fear from competition from other producers because the potential market is large and there are few other potential entrants (the lead time in plantations is very long).

Since all the substitutes for wood are more energy intensive, substitution of wood on any scale will not be possible unless energy becomes very cheap and very readily available. Plantation forestry and wood are very environmentally friendly. One other major advantage of forestry is that it is fairly labour intensive. Although the work does require more skill than is generally appreciated, a high level of education is not a prerequisite. For an economically advanced country New Zealand has one of the lowest levels of schooling achievements. Plantation forestry is an ideal way of meaningfully employing a large number of semiskilled people.

Plantation forestry offers New Zealand a significant and sustainable competitive advantage in one of the world's major commodities. Although in the long term plantation forestry can solve many of New Zealand's problems it is naive to believe that the market place alone can turn this opportunity into a reality. Right now the companies have difficulty raising capital for expansion and the market heavily discounts any long-term investments. Even if they could get the capital there will be major opposition to forestry companies buying up large numbers of the nation's farms and converting them into plantation forests. There is a need for us to diversify away from farming and some land suitable for forestry should not be in farming. However, the farmers also are desperately short of capital and lack of confidence in, and knowledge about, the market.

Government now has a key role in developing processes and mechanisms by which some of our farmland can be converted to plantation forests.

The forestry companies, contractors, consultants and the Ministry of Forestry have plantation forestry know how, trees etc.; other groups (like super funds and investors) have the capital; the farmers have the land and some may be willing to input their labour; unemployed are paid to do nothing when many of them would be willing to be meaningfully employed. What we lack is a means by which all these groups could be brought together to achieve the plantation opportunity.

We urgently need a government-led initiative to begin a major plantation forestry effort.



The NZ Institute of Forestry Council is pictured at its meeting in the boardroom of the NZ Forestry Corporation on the last day of the Corporation's existence.



NEW INFORMATION



Sometimes forecasting and reality do coincide

Mike Colley*

Some in the forest industry spend their time forecasting the likely future output of forest estates. The subsequent years then set about demonstrating how good these forecasts are. An example of a remarkably close coincidence on a large scale between forecast and subsequent reality is at hand in New Zealand.

In 1986 Burrows, Levack and Novis (1) produced a forecast based on simulation of the New Zealand plantation estate. Basic data were sourced from the 1985 edition of the National Exotic Forest Description (as at April 1, 1984) (2). Simulations were carried out under the following conventions:

- the State resource was modelled using the NZ Forest Service's Harvesting and Marketing Strategy (3) as a guide;
- the private resource was modelled using regional harvesting estimates made by the NZ Forest Service for 1984/85 and 1985/86 as starting points;
- non-declining yield;
- rotation lengths tending toward 30 (radiata), 55 (D. fir), and 35 (other species) years;
- three levels of new land planting

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(none, 20,000 ha per annum, 50,000 ha per annum). This article is concerned with the period up to 1995. The level of new land planting is therefore irrelevant as it has practically no effect on yields during the first ten years.

The outcome was a forecast of production as follows:

ESTIMATED N.Z. PLANTATION HARVEST

