



# 56th ANZAAS CONFERENCE SELECTED PAPERS

### **NEW ZEALAND TIMBER FOR THE NEW ZEALANDERS: REGULATORY CONTROLS AND THE PACIFIC RIM TIMBER TRADE IN THE 1920s AND 1930s**

**M.M. Roche, Massey University**

Australia was an important but insecure market for New Zealand timbers during the 1920s and 1930s. In this same period Canadian and US timbers were also imported in quantity and displaced significant amounts of New Zealand wood in the construction industry in the major urban centres. These events occurred against a backdrop of falling production of sawn timber in New Zealand and a growing realization that supplies were limited. The Government acted on the initiative of Sir Francis Bell by instituting export restrictions and price controls. Later tariff charges were aimed at protecting the local industry from imports. Simultaneously a Forest Department was established and this agency set about exerting greater control over the sawmillers and placing the harvesting of the country's remaining forests on a new basis.

### **AN APPROPRIATE FRAMEWORK FOR MODELLING THE NEW ZEALAND FOREST SECTOR**

**A.G.D. Whyte, University of Canterbury**

The rationale for forest sector planning is reviewed. It confirms suspicion that the commitment to it in New Zealand needs to be strengthened. The historical evolution of responsibility for forest sector studies in New Zealand is described and the likely future role of the proposed Ministry of Forestry critically examined. The need for sound structuring and proper co-ordination of models employed to analyse facets of the sector is discussed. Attempts along these lines, knowledge about which is likely to be buried along with the New Zealand Forestry Council on December 31, 1986, are summarized. An appropriate framework for New Zealand and a tentative one for all Australasia is proposed. Emphasis is given to the suggested struc-

ture of the overall system and not the modelling methodology per se. Implications for adopting this recommended approach are examined and a set of guidelines on commitments to gathering, analysing and reporting nationally vital data are presented.

### **THE FRI CONVERSION PLANNING MODEL SYSTEM — ITS DEVELOPMENT AND USE**

**J.A. Kininmonth, B.R. Manley and I.D. Whiteside, Forest Research Institute**

An Integrated Conversion Planning Model System developed by the Forest Research Institute is described which links forest growth and yield, processing options and market considerations for radiata pine. It is designed to help users in the forestry sector realize the opportunities arising from the changing quality of the resource and the greatly increased volumes that will become available for processing.

Parts of the system have already been used to investigate issues such as forest estate modelling, forest valuation, silvicultural and forest management options, and design and performance of sawmills.

### **PRODUCTION AND MARKETS OF NEW ZEALAND PULP AND PAPER**

**A.F. Wilson, N.Z. Forest Products Limited**

There has been surprisingly little growth in pulp and paper output in New Zealand over the past 10 years. The lack of additional wood supply has been the main constraint to capacity increases and hence increased production but industrial relations problems have caused significant lost production over the period. Rarely have market conditions been a factor in limiting output.

Recent FAO projections show that paper and paperboard consumption in the S.E. Asian region will grow by many millions of tonnes annually in the next 14 years. New Zealand is very well placed with relatively low-cost wood, prospects for increased wood supply, and good market ties with most S.E. Asian nations, to see the pulp and paper indus-

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try develop profitably. Because of the hundreds of millions of dollars required for new operations or revamps and expansion of existing facilities, it is imperative that the best possible planning decisions be made on the pulp and paper grades to be manufactured.

### **AN APPRAISAL OF EXPORT MARKETS FOR FOREST PRODUCTS**

**I.J. Bourke, Forest Research Institute**

Predictions of world consumption of industrial roundwood suggest that demand will grow from the 1984 level of 1.2 million cubic metres, to around 1.8 million cubic metres by 2000 (i.e. 2.5% per annum). Within world level predictions such as these, and their product and regional breakdown, New Zealand must identify those products able to be produced from our own resource, and the most attractive markets. Markets in the Asia-Pacific region are seen to offer most potential for New Zealand products. In addition to the continuing importance of Japan and Australia, markets such as the People's Republic of China, Korea, Taiwan and India are likely to be of major significance. To profitably sell products in these and other export markets in competition with other suppliers New Zealand must develop extensive market information on which to base processing and marketing decisions. The extent of information available on these markets, their operation and future requirements is currently rather limited.

### **THE PROFITABILITY OF FORESTRY AND AGROFORESTRY**

**P.F. Olsen, P.F. Olsen and Co.**

The profitability of forestry and agroforestry in New Zealand and the sensitivity of profitability to some important factors is discussed in general terms. The rates of return for pure forestry in New Zealand are presently 6% to 8% real before tax and 4.5% to 7.0% real after tax. Land tax at present serves as a disincentive to new planting of trees relative to other land-based investments. There is a lack of data available to confidently compare the likely profitability of for-

estry and agroforestry on the same type of land. The value of simulation models to test the sensitivity of profitability to various assumptions is acknowledged but it would be unwise to base investment decisions on the absolute results of research to date without first checking the validity of that research to a specific property being considered.

## **URBAN FORESTRY — DREAM OR REALITY?**

**C.L. Miller, Palmerston North City Corporation**

Some of the problems planners and others face in trying to introduce and establish the concept of urban forestry in New Zealand cities are identified. The problems are discussed in the context of experience in attempting to establish a programme for urban forestry in Hamilton. This paper also attempts to examine some attitudes to forests and forestry which appear to be current in urban areas.

## **THE CHALLENGE FOR DOMESTIC PROCESSING IN AN EXPANDING FOREST INDUSTRY**

**W.R.J. Sutton, Tasman Forestry Limited**

While New Zealand's export surplus will increase manifold over the next 25-30 years, New Zealand will still be a small producer by world standards. Her total harvest now (around 10 million cubic metres) is equivalent to that of Macmillan Bloedel in Canada. A harvest of 25-30 million cubic metres, which could be achieved early next century, will make New Zealand the equivalent of the present Weyerhaeuser company in the USA.

To provide a large enough base to undertake overseas market development, further consolidation of industry within New Zealand seems likely. This concentration of industry may be in conflict with the need for innovation (large companies traditionally have not been noted for their innovation).

The local market will be invariably dominated by export considerations. As with other export industries within New Zealand, there will eventually be little difference between local market suppliers and exporters. Some of the consequences of a greatly increased export proportion will be:

- far less emphasis given to framing timber (New Zealand has no comparative advantage as almost all countries can grow trees that produce excellent framing timber. Our currently important Australian market will be increasingly satisfied with locally grown

high-quality framing timber.)

- greater premiums for clears and clear-cuttings (present New Zealand premiums for quality are low by world standards)

- greater diversity of exports (countries and products).

Many innovations in local use can be turned into export opportunities — the use of preservative treated wood is a good example. A further challenge ahead for New Zealand processing will come from developing countries, such as China and India, wanting to buy logs and to do their own processing.

## **FORESTRY AS A LAND USE: EXPERIENCES IN TAUPO COUNTY**

**Peter Crawford, Taupo County Council**

The current debate on planning and its impact on the market place is illustrated using forestry as a land use in the Taupo district. The premise that land-use planning, as currently practised under the Town and Country Planning Act 1977, has a detrimental influence on the free market operation, is discussed. Highlighted are the issues of negligence in local planning, role of the local authority in forward planning, provision of services, the legal concept of nuisance as applied to good and bad neighbour philosophy, the importance of information theory and other matters in local and regional development. The conclusion is reached that players in the field of development should fully appreciate the nature of the market place before embarking upon interference in the market place.

## **GOVERNMENT FISCAL AND TAXATION POLICY AND ITS IMPLICATIONS FOR FARM FORESTRY**

**G.R. McKenzie, Ministry of Forestry**

New Zealand's productive exotic plantation forest estate, totalling some 1,100,000 hectares, has been established and maintained during a period of active government encouragement through fiscal and taxation policies. The estate has been expanding at an increasing rate since the early 1960s and ownership is shared almost equally between the State and the private sector.

The announcement by Government in late 1985 that a revised taxation policy would be introduced which would remove the direct fiscal encouragement from forest growing and would substitute a profitability based decision-making process has sent ripples through the industry. The long investment time-

frame under which forestry operates makes the current negative reaction understandable. Indications are that further planting by landowners, including farm foresters, will decline in the immediate future, and that acceptance of the change will be a gradual process affected by the results of change in other sectors of the economy.

## **SOME OF THE OTHER PAPERS PRESENTED WERE:**

G.D. Burrows, H.H. Levack and J.B. Novis (Ministry of Forestry), National Forestry Planning Model for New Zealand.

R. Houghton (University of Otago), Household Spending Patterns of Forestry Workers: Bruce County (Otago).

D. Bush-King (Ministry of Works and Development), Forestry and District Planning Schemes: What was all the Fuss about?

T. Parore (Department of Maori Affairs), Social and Economic Perspective on Forests and Agroforestry: Socio-Economic Impacts of Forestry on Maori Land: Opportunities and Constraints.

W. Mason (Ministry of Transport), The Importance of Transport for Forestry.

P. Clough (Massey University), Beware Logging Trucks — Some Observations on the Financial Implications of Forestry Logging Traffic on Rural Roads.

R.S. McArthur (Soil Conservation and Forestry Consultant), Protective Logging of Steeplands with the Wyesen System.

D. Neilson (Tasman Forestry Limited), The Marketing Perspective in Forestry.

B.N.P. Smith (Forest Research Institute), Socio-Economic Perspectives in Forestry.

H. Moore (Development Finance Corporation), Joint Venture Forestry.

H. Esbenshade (University of Western Australia), Agroforestry in Australia and New Zealand: An International Perspective on Definition and Evaluation.

P. Mahoney (Department of Conservation), Identifying Historic Sites of National Importance to the Timber Industry.

D. Wije-Wardana and M.W. Lee, Australia and New Zealand Forest Products Trade.

R.L. Knowles, Development of an Agroforestry Model for Radiata Pine.

O. Garcia, B. Manley and J. Threadgill, Experience with Folpi, a linear Programming System for Forest Management Planning.