PLANTATION FORESTRY: LANDSCAPE AND RECREATIONAL ASPECTS

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SOCIAL CHANGE

In discussing the future of forestry we are also considering the future of the people who come into contact, one way or another, with our plantations.

It is appropriate, therefore, to examine the changes in society which may have some effect on the expectations of people in regard to our forests.

An inspection of the New Zealand Official Yearbook yields some appropriate indicators of social change over time.

1. Population

The population of the North Island has increased at a rate more than 1¼ times that of the South Island, for the period 1971-6.

\[
\begin{array}{llllll}
\% \text{ increase} \\
1971-6 & & & & & \\
\hline \\
\text{North Island} & & & & & 10.6 \\
\text{South Island} & & & & & 6.1 \\
\text{Total New Zealand} & & & & & 9.3 \\
\end{array}
\]

The population of North Island cities is increasing at a rate greater than that of South Island cities and of rural areas of both Islands.

We have a drift to the North Island and in particular to North Island cities.

\[
\begin{array}{llllll}
\% \text{ Population Increase} \\
1971-6 & & & & & \\
\hline \\
\text{North Island cities and boroughs} & & & & & 11.7 \\
\text{South Island cities and boroughs} & & & & & 5.0 \\
\text{North Island counties} & & & & & 6.6 \\
\text{South Island counties} & & & & & 8.2 \\
\end{array}
\]

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2. **Purchasing Power**

Despite periodic downturns in the purchasing power of our incomes, the general trend over the last 20 years has been for an increase averaging about 1.5% per annum. We are becoming increasingly affluent.

<table>
<thead>
<tr>
<th>Year</th>
<th>Index of Purchasing Power†</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>712</td>
</tr>
<tr>
<td>1955</td>
<td>754</td>
</tr>
<tr>
<td>1960</td>
<td>754</td>
</tr>
<tr>
<td>1965</td>
<td>771</td>
</tr>
<tr>
<td>1970</td>
<td>815</td>
</tr>
<tr>
<td>1975</td>
<td>968</td>
</tr>
</tbody>
</table>

†The index is (Nominal Wage Rate ÷ All groups Consumer Price Index) × 1000.

3. **Mobility**

Over the last 11 years there has been a 50% increase in our ability to move about the countryside.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Private Motor Vehicles per Head of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>0.26</td>
</tr>
<tr>
<td>1970</td>
<td>0.30</td>
</tr>
<tr>
<td>1975</td>
<td>0.37</td>
</tr>
<tr>
<td>1976</td>
<td>0.38</td>
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</tbody>
</table>

4. **Education**

Over the last 20 years there has been an 8% per annum increase in the proportion of New Zealand citizens attending university.

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Population Enrolled at University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>0.51</td>
</tr>
<tr>
<td>1960</td>
<td>0.61</td>
</tr>
<tr>
<td>1965</td>
<td>0.85</td>
</tr>
<tr>
<td>1970</td>
<td>1.22</td>
</tr>
<tr>
<td>1975</td>
<td>1.37</td>
</tr>
</tbody>
</table>

If one accepts these indicators as valid measures of social change one can conclude that nationally we are becoming city dwellers, more affluent, better educated and increasingly mobile.
Changes in society bring about changes in the demands which people make on their environment. Altered economic and educational status affects the ambitions of people and motivates them towards different goals. Economically advantaged people tend towards social goals such as participation in a group, or the need for relief of tension, or the need for adventure.

RECREATION

One of the means of achieving social goals is through recreation. Increased demands in this direction have recently been recorded in several of our exotic forests. Visitor days at Whakarewerewa State Forest Park have soared from 1200 per annum in 1967-8 to in excess of 100 000 per annum in 1973-4. The little statistical information that is available for other areas supports this trend. Generally, however, the collection of data on recreational usage of our exotic forests is not carried out with the vigour that is necessary for good planning.

It is reasonable to anticipate that greater increases in the demand for recreation facilities will be felt at forests close to growing centres of population. Forests on the outskirts of cities, or within day-tripping distance of cities, will be particularly pressured to provide recreational opportunities for the urban dwellers.

The exotic forest is best able to provide for pursuits which are limited in their requirements of space, and which are not unduly disrupted by rapid and dramatic changes in the character of particular sections of the forest. Such pursuits are more dependent on the supportive facilities of signs, tracks and watercourses than they are on the forest itself — the forest is largely a backdrop for these user-oriented activities.

Pursuits which are dependent on forest character — such as tramping and natural history — can be undertaken in our exotic forests but to a limited extent. These resource-based activities are hence of less import to the planners of future recreational facilities than are the activities which are user-oriented.

One of the characteristics of user-oriented pursuits is that they demand a high degree of facility input. The user himself provides the portable equipment. The forest manager is obliged to supply and maintain the balance — such facilities as signs, tracks and parking space. The bulk of this cost to the forest cannot readily be passed on to the user and hence becomes an expense of management. Many forest managers
are already accepting such expenses as part of routine financial planning.

The issue of how best to manage our forests in taking due regard of the social needs of people is a complex one. We have already in this country adopted the whole spectrum of possibilities — from management with a purely recreational objective, through multiple use management, to planning with no regard at all to recreational aspects.

What is required for the future is a balanced approach. This can be brought about through co-operation of forest managers on a regional or national scale. Co-operative data collection, analysis and long-term planning to utilise the recreational resource to best satisfy the social needs of people will become increasingly necessary.

LANDSCAPE

The landscape of the forest is one of the resources utilised for "passive" recreation. Changes in social conditions can increase demands on this recreational resource.

Landscapes are the visual result of our manipulation of the topography, vegetation and structures of the forest environment. The resultant landscape is often an indicator of the skill with which the forest environment is managed.

Two aspects are important to future landscape management. The first is the need for education in all phases of landscape design and management. Such planning is highly demanding of technical knowledge and requires a large measure of training input. It is desirable that such training be afforded foresters in all organizations in order that the correct planning decisions be made.

It will not be sufficient to adopt broad proposals, such as slow-growing species at road margins or retention of open spaces along public highways, without rigorous examination of their landscape impact. The need for forest development in harmony with topography and neighbouring land use, particularly in areas of newly acquired land, will be increasingly felt.

Secondly, there exists a grave need for education of the public at large. Exotic forests have been a component of the landscape for at least three generations — time enough for them to be accepted. Yet this does not seem to be the case. The industry needs to be more positive in its dealings with the public, and especially with the pressure groups who currently influence public opinion.

Affirmation of the full range of forest benefits, social and economic, rather than concentration on the forest's contribu-
tion to GNP and the like, may well be a reasonable approach. By increasing public awareness of the positive landscape appeal of our forests, managers could do much to reduce public opposition to their efforts.

CONCLUSION

By way of conclusion it can be stated that change in society increases the demand for social benefits from forests. In order to fully satisfy the goals of people, the forest manager must be aware of these changes and plan his activities accordingly. Failure to take note of these changing demands may result in increasingly negative attitudes in people, to the inevitable detriment of plantation management as a whole.

LITERATURE CONSULTED