

(11) It is pertinent to remark at this juncture that only by adoption of the completely integrated sawmill and pulp and paper plant as a whole can exploitation of the enormous Kaingaroa State Forest, representing an expenditure of several million pounds, be justified. Anything less, either by way of a smaller integrated unit or of a sawmill alone, cannot be regarded as having any hope of economic success. This is an unequivocal statement stemming from basic economic facts. It must be realized that as a saw log development alone, the Kaingaroa State Forest could not very well be poorer, largely due to the trees having been planted too widely apart, and left without any silviculture treatment in the interim. The only way in which any significantly large saw-log production can be organized from Kaingaroa State Forest is by having an integrated pulp and paper plant which will absorb both the small-diameter and the rough knotty logs which cannot be converted into sawn timber at a profit. Neither would it be economic to extract only the larger straight logs, owing to the much higher cost of logging involved. Admittedly, the project has called for a courageous decision, but, on the other hand, it is doubtful if any project in the world has been submitted to a more intensive and searching examination, both technically and economically, as a basis for authorization.

DEMAND FOR FOREST PRODUCTS

(1) The Dominion is witnessing the early stages of what it is hoped will be a Commonwealth immigration movement of some magnitude, and it is important to examine the probable trend of timber production and to prepare to meet the high level in demand that may prevail for the next twenty years or more. There is little doubt that any significant flow of immigration will greatly increase the demand for all forest products. Large immigration movements always involve a considerable extension of building and other capital construction; and timber is certain to remain one of the principal building-materials. Immigration is reflected also in a greater demand for consumer goods and general services; and wood is required in various forms and to a significant extent. Past immigration movements show that *per capita* timber-consumption rises with an increasing intensity of immigration, and falls as the rate of immigration slackens off. This, of course, is not to imply that immigration is the sole or even principal determinant of the rate of timber usage. By no means; but the fact that there is an obvious tendency for the unit demand for wood products to rise as the immigration wave gathers momentum indicates that New Zealand is likely to be confronted with a significant increase in the demand for sawn timber and other forest products. Forest policy must be concerned with the problem of satisfying such demand; and the Service intends to investigate in detail the incidence of production over the next twenty years, the effect of mills cutting out, and what specific action, if any, is required to ensure the ability of the timber industry to meet a high level of demand. That there must be radical changes is obvious.

(2) The general position is vastly different from that which existed during the course of the immigration movements of the second half of last century and the early years of the present century. There was then no problem of timber-supply, for timber was so plentiful as to appear more of a hindrance than an asset. To-day the country faces a prospective demand for timber and wood products far in excess of any previous level of consumption, but with very limited resources remaining of the original indigenous forest, though supplemented, it is true, by a fairly extensive area of exotic forests. The really significant point, however, is that the expansion in timber-consumption will synchronize with a difficult transition period in the timber industry, for, despite the rising demand, production from the indigenous forests must soon be curtailed; in fact, drastically curtailed. Sawmills will be cutting out at an increasing rate, and fewer of them will be able to secure further areas of indigenous timber. Nor can such units move automatically or easily to the exotic forests, for their sawmilling equipment and technique are not suited to the relatively small type of log characteristic of the latter forests.