

short of expectations, a result that has undoubtedly been brought about by the keen demand for labour in all other forms of enterprise, particularly in the centres of population, and also by the general shortage of satisfactory accommodation at the sawmills. The estimated excess of losses over gains is 150 to 200 men. Last year's estimate of a requirement of 1,500 to 2,000 additional men before the desired production can be attained is still applicable, but it is expected that new labour will be attracted to the industry as a result of improved accommodation that will become available as a result of the legislation passed last year (see paragraph 101).

The production for the year must be regarded as very satisfactory when the difficult man-power situation is taken into consideration, and sawmillers are to be congratulated on the way in which their output has been increased. (Additional reference to man-power will be found in paragraph 102.)

73. *Equipment for Timber and Allied Industries.*—Because of the heavy wear-and-tear on sawmilling equipment, sawmillers have been seriously inconvenienced by the current shortages of parts and replacements. Maintenance of vehicles and tractors particularly caused much concern, and it was only the timely arrival of equipment from the Pacific and new machines from the United States that enabled production to be maintained. Even so, the number of machines which could be made available was insufficient to meet requirements.

Present indications for the supply of additional new equipment and parts from overseas are not encouraging, but every effort is being made to expedite delivery of orders already placed. Some sawing equipment has been obtained from the Pacific islands, although not complete sawmills, and will, after sorting, be made available to the industry.

Owing to the heavy demand for tractors, trucks, and roadmaking machinery by many industries, Timber Control officers have been busily occupied in deciding priorities and it is desired to record appreciation of the co-operation of other Departments concerned, particularly the War Assets Realization Board, the Ministry of Works, and the Public Works and Transport Departments.

74. *Domestic Markets.*—The difficulties described at some length under this heading in last year's report appear to have increased, despite the fact that timber-production has expanded.

In the North Island, where the timber shortage is in every respect more severe than in the South Island, frequent and widespread appeals were made to the State Forest Service for assistance in locating timber-supplies. In all zones there were periodic or continued shortages of finishing grades for flooring, weatherboarding, and furniture and in some zones the shortages covered practically the entire range of building grades.

This continued shortage of timber has served to consolidate the substitution of exotic species for indigenous timbers over a wide field of timber usage, and the use of insignis pine has expanded enormously. In door-manufacture, for example, there has been wide acceptance of the flush-type door, permitting the use of low-grade knotty insignis pine as core material and at the same time achieving the desirable feature of lightness. Again, in shoe-heel manufacture it has been found that, by using the clear timber between knots, exotic timbers can satisfactorily replace indigenous woods.

For house-building and furniture-manufacture, which have been the two principal uses of rimu, the application of insignis pine continues to expand steadily. That still larger quantities were not used in these industries can be attributed more to a shortage of insignis pine than to other reasons. However, the acceptance of exotic timbers for finishing purposes in house-building and the wider use for exposed parts of furniture now depends upon the establishment of grading and seasoning standards appropriate to such uses. The State Forest Service at its Waipa Sawmill carried out considerable pioneer work during the year in the production of acceptable grades for flooring, weather-