

SIR,—

Department of Lands, Wellington, 3rd July, 1911.

I have the honour to forward herewith a comprehensive report on State afforestation in this Dominion. For convenience sake, it has been divided into two parts, each of which deals thoroughly with phases of the subject.

Part I contains a clear statement of the reasons which induced the Government to commence and continue tree-planting operations in New Zealand, and shows the methods adopted in each Island at the State nurseries and plantations.

Part II comprises the annual reports by the officers in charge of tree-planting operations, showing what has been done in this respect during the year ended 31st March, 1911.

Plans showing the areas planted with the principal species of timber trees at the chief North Island stations are attached. There are also numerous illustrations which indicate in an effective manner the modern methods of tree-planting. Finally, a plan of each Island is attached, showing the locality of the various nurseries and plantations belonging to the Afforestation Branch of this Department.

I have, &amp;c.,

WILLIAM C. KENSINGTON,

Under-Secretary for Lands.

The Right Hon. Sir J. G. Ward, Bart., K.C.M.G., Minister of Lands,  
and Commissioner of State Forests.

## PART I.—STATE AFFORESTATION IN NEW ZEALAND, 1911.

### REASONS FOR AFFORESTATION.

CONSIDERING the apparently vast extent of our indigenous forests, the fine quality of our principal timbers, and their varied usefulness, it has often been the subject of much comment that it is considered necessary by the Government of this Dominion to inaugurate a policy of reafforestation. It can, however, readily be understood that the full facts of the case must be known and comprehended before it is possible to demonstrate clearly and cogently the reasons that have actuated the Government in the past and at the present time.

In the report on "Forestry in New Zealand," published in 1909, statistics were given showing in detail the present estimated supply of timber from all classes of native trees, and the probable demand for timber in the future, and the conclusions then arrived at apply with even greater force at the present day. Before recapitulating them, however, it is desirable to explain briefly the nature of our indigenous trees, and their various drawbacks and good qualities.

New Zealand possesses a large variety of trees in its native forests, there being no less than eighty-six different varieties known to botanists. The majority of these are, unfortunately, useless for commercial purposes to any great extent, through various causes, and, as a matter of fact, the following trees are practically the staple supply of the timber trade :—

*Kauri (Agathis australis).*—Grows only in the Auckland District. The girth of marketable trees range from 4 ft. to 30 ft., and sometimes more, the general average being about 12 ft., and the contents about 3,000 ft. There is no pine in the world superior for all-round use. It is used for joinery, furniture-making, house-building, ship, yacht, and boat building, wharves, bridges, railway, and other works, but is well adapted for high-class joinery, and internal fittings, carvings, &c. When converted into veneers it is highly prized. Unfortunately, it takes from six hundred to three thousand six hundred years to attain its full size, and as it is very inflammable, its growth and preservation is a matter of considerable difficulty.

*Totara.*—Totara is found throughout the whole of New Zealand except in the Nelson District, though the bulk of the supply is in Wellington, Auckland, Hawke's Bay, and Westland. It is very durable, and of all New Zealand timbers is the best for resisting the ravages of the teredo, and consequently has been largely used in the construction of wharves, bridges, &c. It also lasts well in contact with the ground, and is utilized largely for general building and joinery purposes, telegraph-posts, railway-sleepers, fencing-posts, &c. The mottled variety is much sought after for panels, furniture, inlaying, &c. Its chief drawback is that it is somewhat brittle, but it is probably the best timber for general building purposes in the Dominion.

*Rimu, or Red-pine.*—This is the principal timber in the New Zealand forests, and is extensively used for building, joinery, &c. The figured variety is often beautifully grained, and is much in demand for furniture. It is a most valuable wood, owing to its wide adaptability and comparative cheapness. Though not equal to totara or kauri, yet, owing to its greater cheapness, it is more largely used.

*Kahikatea, or White-pine.*—This timber is also in great demand throughout the whole of the Dominion. It is found chiefly on low-lying or swampy land, and grows in all parts of the Dominion. Its lasting qualities vary, but, unfortunately, the dry rot and borer find it comparatively easy prey, and therefore it is not much used for general building purposes. Its greatest use is for making butter-boxes, for which purpose no substitute has yet been found, and large quantities are exported to Australia for this purpose.