

60. *Communications*.—Four miles of new telephone-line were erected, bringing the total to 389 miles. Revolutionary developments in the use of radio are being evolved for fire-protection work, and extensive applications are being planned as a post-war activity.

61. *Village Planning*.—Employee demand for rental housing following the successful development of the Waipa Village settlement has increased to an extent not previously contemplated, and the improved results from this experiment in added efficiency, protective availability, and other indirect benefits are such as to encourage further developments elsewhere for forest workers. Such possibilities are now the subject of a comprehensive survey at Whakarewarewa and Waiotapu, having as its objective the grouping and extension of our forest-worker communities and the improvement of existing settlements. These communities will be served with water-supply, sewerage, and artificial light, as well as all modern village amenities not hitherto available. It is hoped that such schemes will be self-supporting, but the indirect benefit is considered to amply outweigh any considerations of profit.

Waipa Village has added two house units during the period, and the use of a large number of one-man hutments to supplement the wholly inadequate hostel accommodation has been also necessary. At Reporoa detailed surveys have been made of sites suitable for communities associated with the proposed sawmill and other projects, and plans are now in preparation for this work. A noteworthy, if not unexpected, feature has been the fine public spirit shown by staff and employee tenants in the development of communal amenities.

CHAPTER VIII.—EXTRACTION AND COMMERCIAL DEVELOPMENT

62. *State Forest Block Sales and Permits*.—Timber appraisals numbered 130 (123) covering 101,460,000 board feet (102,062,000 board feet); 42 (22) appraisals were for other Departments and comprised 23,009,000 board feet (13,062,000 board feet). One Head Office check appraisal was made and several by regional senior officers. Reconnaissance was carried out over 15,700 acres affecting 67,000,000 board feet of timber.

The wartime demand for forest supplies has been sustained. The volume sold in board feet was 74,710,000 (80,637,000), the principal species being rimu and miro 56,035,000, kahikatea 6,914,000, matai 5,723,000, totara 2,478,000, beech 2,423,000, and others 1,137,000, with a value of £103,413 (£111,040).

The quantity of sawn timber produced from State forest and warden areas was 111,190,000 board feet (108,858,000 board feet). Miscellaneous indigenous forest produce cut under permit comprised 161,789 posts and stakes, 3,862 stays, 9,695 strainers, 116,803 battens, 6,234 poles, 16,267 rail sleepers, 20,775 house and pole blocks, 97,526 pieces of mining timber, and 215 cords of firewood. The produce cut under permit from exotic forests include 13,960 pieces of mining timber and 23 cords of firewood.

63. *State Forest Log Sales*.—Indigenous forest log sales aggregated in volume 1,451,247 cubic feet (1,038,768 cubic feet) with a sale value of £51,053 (£29,156). Of this quantity, 21,288 cubic feet were sold for peeling purposes. Sales of logs were confined to Auckland and Rotorua Conservancies; and in the latter conservancy also sales of produce from cut-over forests covered 14,394 posts, 9,530 battens, 49½ cords firewood, 3 butchers' blocks, &c. Log sales were made from exotic State forests in Rotorua and Southland, the total quantity being 1,293,638 cubic feet, the major quantity of which was converted at Waipa mill.

A vast quantity of miscellaneous produce was also extracted and sold from the exotic forests—viz., 82,570 mine-props, 44,470 posts, 12,456 telephone-poles, 357 radio masts, 93,000 stakes, 6,040 tent-poles, 3,740 cords firewood, 32,400 tent-pegs, &c.

Round timber made available for creosoting aggregated 118,007 cubic feet.

64. *Commercial Policy*.—The major departmental logging, milling, and boxmaking and wood-preservation activities at Waipa are managed as ordinary commercial industrial units and required to conform to both peace and war time control affecting all other units in the timber industry. A strictly commercial system of accounts is maintained, while rates of depreciation as determined by expert engineers for all items of equipment are subject to periodical scrutiny.

65. *Whakarewarewa State Forest Production*.—The production of round forest produce in the form of eucalypt logs for bridge-strengthening, harbour-works, &c., and of larch and Douglas fir logs and spars for posts, poles, and masts and for cutting into tunnelling and mining timbers, &c., reached extraordinarily high levels as a result of defence demands and occupied the bulk of the forest staff at Whakarewarewa.

The production of sawlogs attained a new record, as evidenced by the output of the Waipa State mill reviewed below, but due to the logging of poorer timber on much higher country than was logged last year, the cost of sawlogs delivered from the principal area being clear-felled increased somewhat. Including the payment to the Whakarewarewa Forest Account of a stumpage of 2s. 6d. per 100 board feet to cover the cost of growing, the clear-felled logs delivered to the mill cost 9s. 10d. per 100 board feet, or 10d. more than last year, but of this 5d. is accounted for by extra wage costs resulting from the award agreement to pay for Xmas-New Year holidays and the Arbitration Court granting of a cost-of-living bonus.

Much misapprehension exists regarding the nature of the wastage of round material in the Whakarewarewa State Forest, which is an excellent demonstration of what occurs when silvicultural improvement measures are not carried out over appropriate periods of the forest's growth. Had funds been available for thinning purposes many years ago, the pine stands now being clear-felled would have contained virtually no dead trees or useless stems, whereas to-day, for every 250 green trees felled per acre for sawlogs, an average of 416 dead and decayed trees are knocked down, constituting what appears as avoidable waste, but in reality is useless. In larch stands, too, there is a measure of similar waste, but in addition it is a virtual impossibility always to balance exactly