60. Communications.—Fourteen miles of new telephone-line were erected, bringing the total to 385 miles. At Whakarewarewa Forest, Rotorua Conservancy, the remaining earthed circuit-line was converted to metallic, but the shortage of materials has restricted the progress of this work on other projects.

61. Village Planning.—A self-contained village similar to that envisaged for Kaingaroa Forest Headquarters is being planned for Waiotapu as a key project in the Department's rehabilitation

activities, and all the necessary surveys are in progress

CHAPTER VIII.—EXTRACTION AND COMMERCIAL DEVELOPMENT.

62. State Forest Block Sales and Permits.—The number of appraisals decreased from 156 in 1940-41 to 123 in 1941-42, and the quantity of timber cruised from 134,200,000 board feet to 102,062,000 board feet. Twenty-two of the appraisals were for other Departments and covered 13,062,000 board feet. Six Head Office check appraisals were made over representative areas involving 9,700,000 board feet, in addition to regional checks by senior officers.

Although sawn timber was in keen demand, block sales show a decrease on the previous year, the quantity falling from 94,124,000 board feet to 80,637,000 board feet. The main species comprising the sales (in board feet) were rimu, 64,276,000; kahikatea, 4,631,000; miro, 2,412,000; matai, 3,770,000; totara, 1,070,000; beech, 3,715,000; kauri, 300,000; and others, 463,000, with a total

value of £111.040.

The quantity of sawn timber produced from State forest and warden areas also decreased, the recorded cut being 108,858,000 board feet, as compared with 112,512,000 board feet in 1940-41.

Permits to cut indigenous fencing material, poles, railway-sleepers, firewood, and mining timbers were in good demand. Timber cut and sold under this form of license comprised 285,780 posts and stakes, 13,665 strainers, 5,525 stays, 221,570 battens, 2,269 poles, 3,106 pole blocks, 12,835 sleepers, 2,086 house blocks, and 59,046 pieces of mining timber. The forest produce cut under permit from exotic forests includes 7,050 posts and stakes and 67,970 pieces of mining timber.

63. State Forest Log Sales.—In the Auckland Conservancy indigenous log sales comprising kauri 35,350 cubic feet, rimu 98,615 cubic feet, kahikatea 57,516 cubic feet, totara 9,676 cubic feet, and matai 1,187 cubic feet, realized £8,049. In the Rotorua Conservancy rimu 503,048 cubic feet, kahikatea 166,363 cubic feet, matai 143,376 cubic feet, totara 15,719 cubic feet, and miro 7,918 cubic feet, a grand total of 836,424 cubic feet, were sold for £21,107, while 660 cubic feet of rimu and 22,776 cubic feet of kahikatea were sold for peeler logs. Salvage operations in the Rotorua worked-over areas

produced 13,882 posts and strainers, 6,575 battens, and 70 cords of firewood.

Exotic logs aggregating 123,067 cubic feet, together with fencing material, firewood, and mining timber obtained from thinnings and windthrows were sold for £11,823, as compared with £6,248 from similar sales last year. Of these, Rotorua contributed 9,069 cubic feet of logs, 43,800 stakes, 14,100 pieces of mining timber, and 99 cords of firewood, valued at £1,582; and Nelson 48,660 stakes and 2 cords of firewood, valued at £1,433. Canterbury's quota included 2,998 cubic feet of logs, 39,948 posts, stakes, and rails, 90 poles, and 1,840 cords of firewood, valued at £4,496; and Southland's 111,000 cubic feet of logs, 24,557 stakes, 943 pieces of mining timber and 531 cords of firewood, valued at £4,313.

In addition, the Rotorua Conservancy produced articles for conversion into sawn timber, creosoted posts, poles, &c., and manufactured 1,040,874 cubic feet of logs, 5,582 poles, 123,053 posts and stakes, 1,638 strainers, 310 stays, 85,834 pit-props, 133,350 stakes and pickets, and 20 cords of firewood.

64. Sale of Departmental manufactured Forest Produce.—Departmental logging, milling, boxmaking, and wood-preservation activities have been operated as integral units of the timber industry, and made to conform to award conditions, to timber-control policy, and to Price Investigation Tribunal

65. Whakarewarewa Log-production.—Round forest produce from the Whakarewarewa State Exotic Forest now includes pines, larch, and eucalypts. Logging operations in the usual sense are confined to the clear cutting of insignis pine and larch, although considerable quantities of round produce are secured from thinning operations. The insignis-pine logging is on heavy sidling country in which even main roads have ruling gradients of 1 in 10. Due to the average tree yielding only 200 board feet of legs averaging less than 11 in. in diameter, the cost of felling and delivery to mill skids is still 9s. per 100 board feet, including a payment to the Whakarewarewa Forest Account of 2s. 6d. per 100 board feet for royalty which is sufficient to pay off the accumulated charges against these compartments. Having regard to the small size of the logs, the total labour element in the logging-cost amounting to 4s. 3d. per 100 board feet compares favourably with figures from 3s. 6d. to 6s. commonly operating in private logging units in indigenous and exotic forests.

66. Departmental Milling Operations.—Departmental production of sawn timber concentrated in the Rotorua Conservancy totalled 7,053,000 board feet for the year, as compared with 5,491,000 board feet for the previous year. Sales for the two periods amounted to 4,092,000 and 3,411,000 board feet respectively. The year ended 31st March, 1942, represents the first complete year of operation for the Waipa log-frame mill, its production of 6,346,000 board feet representing three times as much as that of any other exotic-timber sawmill in the Dominion. The small portable Waiotapu mill, originally installed to cut timbers for the large Waipa mill buildings, ceased operations on the 31st October, having completed the salvage of timber from a compartment threatened with serious windthrow.

The Waipa sawmill costs from mill skids to green sorting chain amount to 6s. 6d. per 100 board feet, including a labour element of 4s. per 100 board feet, which compares favourably with sawmill labour-costs of between 4s. and 7s. in indigenous- and exotic-timber mills. The combined logging and milling labour-costs for Waipa amount to 8s. 3d. per 100 board feet, as compared with a range

of between 7s. and 15s. in private indigenous and exotic operations.

The Department's commercial accounts showed a loss during the initial operating period ended 31st March, 1941, amounting to £4,249 (sawmill only). This was due to the usual operating difficulties experienced in the breaking-in of any new plant, particularly when operatives have to be trained to the use of equipment never previously employed in the country. For the year ended 31st March, 1942. The accounts show a profit of £4,397.