

APPENDIX III.—LAND DRAINAGE OPERATIONS.

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As usual, separate reports have been forwarded dealing with Hauraki Plains and Rangitaiki Drainage Works, and also the works coming under the scope of the Swamp Drainage Act—viz., Kaitaia, Hikurangi, Waihi, and Poukawa.

Various inspections and reports on suitable schemes for unemployed also have been made during the past year. Work done under grants and subsidies by local bodies has been supervised and inspected, and expenditure totalling £9,053 8s. has been certified for payment under this heading.

Exclusive of the main drainage-works mentioned above, hereunder is a short summary of some of the general work undertaken during the period.

Galatea Estate Drainage.—Work undertaken comprised construction of new drainage outlets for an area of 500 acres of virgin swamp, also improving existing drains and construction of additional outlets for a further area of 1,500 acres of partly drained swamp lands. 5 miles 4 chains of new drains were constructed, 13 miles 76 chains old drains improved, and 2 miles 7 chains stream straightened and deepened.

Miranda Drainage.—This scheme of drainage is intended to provide main drainage for 4,000 acres of rich littoral swamp near Waitakaruru, and presents some interesting and in some respects unusual features.

The main drainage channel is 3 miles 37 chains in length, varying in width from 10 ft. to 32 ft., and is being constructed entirely by manual labour in order to relieve the shortage of employment.

The work is being carried out on behalf of the Hauraki Plains County Council and is subsidized by the Unemployment Board. Work was commenced in November and excellent progress is now being made.

Koromatua Block Development.—This comprises an area of 941 acres of Crown land, divided into six sections adjoining Otway Settlement near Te Aroha, on which development work was commenced last year. 1 mile 55 chains of access road has been completed, also the primary construction of a drainage system that will be progressively improved as the land consolidates. The conversion into pasture of raw swamp land of this nature can only be undertaken by a settler possessing capital, and before offering the land for selection four sections have been cultivated, manured, and sown. These four sections will be offered for selection at an early date. By the end of March some 232 acres had been cultivated with swamp ploughs and tractors, disks, harrow, and roller; 50 acres sown in grass, 164 acres cleared of scrub; 6 miles 21 chains new drains constructed; and 2 miles 2 chains fencing erected.

Patetonga Riding Roads Metalling, Hauraki Plains.—This scheme commenced in 1929, entailing metalling and improving 9½ miles of roading, was completed in July. During the year, 1,674 cubic yards of metal was laid on Patetonga main roads and 919 cubic yards, together with 1,440 cubic yards clay ballast was spread on the Patetonga Landing Road.

Onepu Block Development.—This is an area of 2,446 acres near Te Teko, of which the development was commenced in the autumn of 1931. The land being handled was generally considered to be undrainable and worthless, and a portion had previously been handed over to the Whakatane County Council for tree-planting purposes.

The drainage system was linked up with the Rangitaiki drainage scheme, and the bulk of the area has been successfully drained.

Development operations were commenced with a view to testing the possibilities of all classes of land found on the block. The results obtained have been satisfactory, and the prospects of the better-quality land being farmed is assured. Four sections, aggregating 378 acres in area, will be opened for selection early in the coming year. The lighter lands will require a longer period and more careful handling to ensure success, but the progress already made indicates that within a reasonable time this class of land can be successfully developed. The liberal and continued use of fertilizers is the dominant factor influencing the progress of the land. Advantages are enjoyed which to a great extent offset the heavy expenditure under this heading as compared with that required for heavier and more naturally fertile lands—viz., (1) the absence of poaching, which allows full use of pastures in wet seasons; (2) the ease of cultivation; (3) comparative freedom from weed-growth. The indications are that the Onepu land responds readily to treatment with fertilizers, and all classes of stock appear to thrive on its pastures.

Different methods of handling the several classes of land were adopted at the outset. Of the 1,071 acres now in grass, 220 acres was surface-sown in the autumn following a burn of the heavy manuka-growth, 80 acres adjoining carrying lighter growth, being harrowed, and a further area of 60 acres being ploughed and cultivated before sowing. The following spring a further area of 115 acres was disked and harrowed, and 109 acres ploughed and cultivated before sowing. This autumn an area of 515 acres has been ploughed and cultivated, and the sowing of this was nearing completion at the end of the period. All land sown was given a dressing of 3 cwt. of ammoniated superphosphate at time of sowing and a further 3 cwt. of superphosphate in the spring and autumn following. The results obtained here have given a good lead as to most the successful method of handling the various classes of land.

During October one hundred head of yearling heifers and four pedigree bulls were purchased by the Department and grazed through the year. These have done well, and should show a good return when disposed of later in the year for dairying purposes.