Piu Settlement.—Since the commencement of operations on this scheme in June, 1936, the progress of developmental work is as under: 341 ch. new fencing erected, 405 ch. old fencing renewed, 515 acres of fern was cleared of which 114 acres have been ploughed. 45 acres have been top-dressed, 57 acres have been sown in permanent pasture, 40 acres have been cropped. 220 ch. of new drains were dug. 94 ch. of road formation and metalling has been completed.

Owen Block.—Working operations for the development of this block have been carried out by approximately thirty single men since the inception of this scheme. 566 ch. of new fencing has been erected, 524 acres of fern and ragwort has been successfully cleared, 295 acres has been ploughed, 314 acres grassed, 62 acres planted in turnips, 248 acres of old pasture has been top-dressed. 34 ch. of new drains were dug. Road formation to an extent of 280 ch. has been

completed, of which 160 ch. has been metalled.

Ngatamahine Block.—This block is opening up very well, and with the work carried out during the last year there is now completed 1,716 ch. fencing, 328 ch. old fences repaired, 120 ch. of shelter-belts planted, 57,000 battens has been split on the scheme for fencing. 790 acres of land has been cleared, 372 acres ploughed, 516 acres sown in permanent pasture, and 212 acres have been cropped. A water-supply of 1,800 yd. has been laid on. 2,200 acres of permanent pasture has been top-dressed. Draining, which is a big problem in this farm scheme, has received much attention, 510 ch. of main and subsidiary drains being completed and 156 ch. old drains opened up. Access roads are now practically completed, a total of 213 ch. being metalled and formed to date.

Pururu Block.—Much progress has been made in the development and opening up of this block. 2,063 ch. of boundary and subdivisional fencing has been completed. 20 ch. of shelter-belts were planted, and 750 posts and 40,000 battens have been split and used on this farm scheme. 900 acres have been cleared, 879 acres ploughed, 564 grassed, 399 acres cropped, and 477 acres of permanent pasture has been top-dressed. 134 ch. of new drains were excavated. 2,200 yd. of water-suply has been laid on to nearly all the cottages, cow-bails, and watering-

places on the farm. 162 ch. of road has been formed and metalled.

Waitanguru Block.—Settlement work is still being carried out on this block, and to date 1,940 ch. of new fencing has been erected and 571 ch. of existing fences repaired, 49 ch. of shelter-belts have been planted. 750 posts and 52,500 battens were split and used in the fencing of this block. 258 acres have been felled, 532 acres stumped and cleared, 281 acres ploughed, 691 acres sown in permanent pasture, 220 acres cropped, and 820 acres of pasture has been top-dressed. 210 yd. of water-supply has been laid on. 42 ch. of formation and metalling of access roads has been completed. 151 ch. of new drains were excavated and 115 ch. of old drains repaired.

Kihikihi Block.-Work has only recently been commenced on this block.

Kaiteringa Block.—Access roading has been commenced on this block, 1 m. 30 ch. of formation being completed.

Patolo Block.—Three miles of access roading has been re-formed and metalled, and a commencement made on the development-work, 100 acres of scrub being cut.

## NAPIER DISTRICT.

Ahuriri Lagoon Reclamation.—The reclamation of the Ahuriri Lagoon, comprising 7,500 acres of land, formerly part of the sea-bed, besides being the largest undertaking of its kind in the Dominion, is of particular interest because of its close connection with the Napier earthquake of 3rd February, 1931. When that took place the whole bed of the lagoon which was then a shallow arm of the sea, was raised 5 ft. in the space of a few seconds, causing the greater part of the water to rush through the outlet to the sea, leaving approximately half the bed dry and the remainder covered by shallow pools.

The Napier Harbour Board, in whom control of the lagoon was vested, eventually entered into an agreement with the Small Farms Board with the object of having the land reclaimed and settling thereon

unemployed men and their families.

The Public Works Department was entrusted with the drainage-work, which was commenced in June, 1934. Efforts were at once concentrated upon the construction of the eleven miles of stop-bank necessary to control the water draining from the 16,000 acres of rugged hill country behind the lagoon, and this has now been completed with the exception of making up a small amount of subsidence.

Provision was also made for two electric pumping-stations to drain the flat land enclosed by the stop-banks, and they were completed simultaneously with the stop-banks and put into operation during the past year. The total capacity of the three pumps in the north station is 28,000 gallons per minute and that of the two in the south station 2,800 gallons per minute. The areas drained by each station

are 5,000 acres and 600 acres respectively.

To bring the land to a state of productivity the first and most essential step was to rid it of excessive salt left there by the sea. In the present undertaking this is being achieved by a system of close drainage, which comprises small drains 3 ft. deep and 12 in. bottom width dug in parallel lines 2 ch. apart over the whole area. To date, 207 m. of these drains have been completed. By periodical analysis of soil samples under the supervision of the Department of Agriculture valuable information has been obtained regarding the reduction in salt content and other soil changes resulting from the drainage-work. The indications so far are that the drains are bringing about a very rapid and marked improvement. The results of the last two sets of samples taken in April and August of 1936 show an average reduction in salt and magnesium of about 50 per cent. during the intervening four months. The maximum reduction in that time was at the rate of 9 tons of salt per acre.

A section of the block comprising 2,000 acres has now been completely drained and over a further 2,000 acres of this work is well advanced.