

Some of the more important schemes in hand during the year were the Taupiri and the Te Kawa drainage schemes in the Auckland District, the Ngaruroro and Tutaekuri Rivers control in Hawke's Bay, the Karamea River control scheme on the West Coast, and the Ashley River control scheme in North Canterbury.

Large areas of sand-dune country are being reclaimed or arrested along the west coast of the Auckland and North Auckland districts.

SETTLEMENT OF UNEMPLOYED WORKERS.

The development of land for the Small Farms Board was continued satisfactorily, although the number of blocks was gradually reduced as the Board established and extended its own organization.

The number of men employed on this particular scheme varied throughout the year from 925 to 1,185.

The gross total expenditure from vote, "Settlement of Unemployed Workers," was £460,264, but this figure included wages, part of which were recovered from subsidies provided by the Consolidated and Employment Promotion Funds.

At 31st March, 1938, 73,000 acres were under development, the highest total since the scheme started, and this did not include 27,840 acres in 394 farms already allotted to tenants.

PLANT AND MECHANICAL EQUIPMENT.

For the year under review the Government's policy of mechanization of construction works again shows a striking comparison with the methods adopted in the past, both in the costs of the work performed, time saved in completion of various projects, and the increased number of men absorbed in these national undertakings.

In all cases this plant was purchased on competitive tenders from New Zealand, British, and foreign manufacturers, and the successful selection of machinery suitable for the varied and arduous conditions found in New Zealand is reflected in the actual performances of these machines in the field.

For the information of honourable members, and to emphasize the benefit that has accrued to the country through the Government's policy in this regard, I would quote only a few instances from the outstanding performances by these various modern machines on construction works throughout New Zealand.

On the Kaipara Harbour reclamation works a large crawler-type Diesel tractor and angledozer were used to clear an area of heavy mangrove swamp. The use of the machine not only showed an 83·3 per cent. saving in cost, but is estimated to be twenty times as fast as manual labour for the same work.

At Turangi it was found necessary to cut a channel averaging 40 ft. in width and 3 ft. in depth in the Tongariro River. A large Diesel crawler-type tractor and angledozer were employed for this work, the material excavated including boulders of a size up to $\frac{1}{3}$ cubic yard.

The actual machine cost per cubic yard against the estimated cost by manual methods showed a saving of 97·5 per cent., but as the water of this river is mainly derived from melting snow and ice it has a very low temperature and with a surface velocity of the stream through the cut of 5 ft. per second, the actual employment of manual labour under such extreme conditions would, it is considered, have greatly increased the estimated cost of £1 per cubic yard. Moreover, the men employed would have been subjected to unreasonable working-conditions.

Again, on the irrigation works in Canterbury a Diesel crawler tractor and grader were employed on stripping turf for racebank foundation at a 93 per cent. saving on the cost of manual methods, and, in addition, it is estimated that the machine does this work ten times as fast as a gang of eight men, and makes a better job.