## APPENDIX III.—LAND-DRAINAGE AND LAND-DEVELOPMENT OPERATIONS.

(R. G. MACMORRAN, Chief Drainage Engineer.)

In accordance with statutory requirements, separate reports deal with (1) Hauraki Plains, (2) Rangitaiki, and (3) Swamp Land Drainage Districts—viz., Kaitaia, Hikurangi, Waihi, and

Poukawa Drainage Works.

Land-development operations have been carried out on ten areas under the Small Farms Act, whilst development operations on the Galatea Estate, purchased under the Land for Settlements Act, have been steadily pushed forward. The number of development blocks has been increased by one during the year, whilst in addition detailed proposals have been prepared for an extension of the Tarawera Block, as well as a neighbouring block, which will be known as Edgecumbe. Both these new blocks are similar to the land on the Tarawera Block, being pumice soil with a covering of Tarawera ash from the eruption of 1886.

Operations on the majority of the small-farms blocks reached such a stage during the year that completed farms were handed over to the Commissioners of Crown Lands for the two Auckland Land Districts. These farms, in most cases, were all grassed, fenced, stocked, and provided with the necessary buildings and, where required, with water-supplies.

The following schedule shows the number of completed farms handed over in the respective blocks:-

Mangatete	 	5 during previous year.	
Wharere	 	5	
Tarawera	 	10	
Murupara	 	11; in addition, two B class applicants were sett	iled.
Broadlands	 	7	

On all the above farms dairying was carried out under the control of the Commissioner of Crown Lands, whilst on another twelve milking was carried out on a wages basis.

The available returns of butterfat from the blocks were as follows:-

					Butterfat.		
					lb.		
Kaitaia	•		 	 	24,056		
Mangatete		 	 	 	30,500		
Wharere		 	 	 	20,635		
Tarawera	***	 	 	 ٠	54,770		
Murupara		 	 	 	53,000		
Broadlands		 	 • 1.	 	41,000		
					223, 961		

These returns show an increase of output of butterfat from the respective blocks varying from 50 per cent. to 110 per cent. over the corresponding period for the previous year. The returns from the Tarawera and Broadlands Blocks have been particularly gratifying, those from the former being very even from the respective farms. The highest return was from the farm occupied by J. Marshall at Murupara with 7,322 lb., whilst the next was that of T. W. James at Broadlands with 7,072 lb.

A study of the figures from the respective farms shows that some of the occupiers are not

obtaining the desired results, and in these cases a weeding-out process is necessary. The following schedule shows the stock on the blocks at the end of the year:

			Cows.	Dry Stock.	Heifers.	Calves.	Horses.	Sheep.	Bullocks
Kaitaia			135	48	50	32	4		
Mangatete-		]							
Settlers			186		26	29	12	92	
Department			30	4		10	2	467	
Hoe-o-tainui*			6	6	152		17	304	
Wharere—								· .	
Settlers			138	5	30	15	5		••
Department				2	91		5	759	341
Tarawera-		-		· ·		/			
Settlers		, .	285	10	60	42	10		
Department			32	11	6		1		27
Murupara-									
Settlers			301	11	66	69	11		
Department			25	28		5	1		35
Broadlands-									
Settlers			186	7	18	44	5		
Department			22		• •	6	2		38
Grand total			1,346	132	499	252	75	1,622	441
Department	total		109	45	97	21	12	1,226	441

<sup>\*</sup> At the close of the year the value of departmental stock on hand was £6,790. The recoveries from sales, together with stock issues to settlers and departmental stock on hand, amount to £25,110, and in all cases of stock in hand the values are on a conservative market basis.