

## H. LAND IMPROVEMENT AND PROTECTION

The three problems of land drainage\*, river protection, soil erosion, and catchment control are closely connected. Land drainage is a positive attempt to render fertile or maintain in production land of a swampy character, or land which is subject to periodic flooding. River protection is a negative approach to the same problem, because it involves control of rivers which tend to flood to the detriment of the surrounding country after the erosion or deforestation of the back country. Both these problems may be, and frequently are, essentially local, but the problem of soil erosion and catchment control is fundamental to the long-term protection of the fertile soil on the plains.

Historically, land drainage and river protection were antecedent to soil erosion and catchment control, which is essentially a twentieth century problem resulting from the steady destruction of native vegetation on the high country.

## (1) DRAINAGE DISTRICTS

There are 47 Drainage Boards† in operation at the present time. No statistics are available to show the area of Drainage Boards. Forty-one of the Boards are in the North Island; only six in the South Island. Nearly 30 of the Boards are in the Auckland Province. Some idea of the size of the Boards can be obtained from the following figures, showing revenue in 1938-39 (this year is taken as being the last full normal year), and from the figures for 1941-42:—

*Table showing Total Receipts (both Capital and Revenue) by Drainage Boards in the Year 1938-39 and 1941-42*

Amount. £						Number of Boards.	
						1938-39.	1941-42.
Under 100	..	..	..	..	..	6	2
100- 199	..	..	..	..	..	8	7
200- 299	..	..	..	..	..	2	3
300- 399	..	..	..	..	..	4	5
400- 499	..	..	..	..	..	2	4
500- 749	..	..	..	..	..	7	6
750- 999	..	..	..	..	..	5	5
1,000-1,999	..	..	..	..	..	4	6
2,000-4,999	..	..	..	..	..	4	2
5,000 and over	..	..	..	..	..	7	7
Totals	..	..	..	..	..	49‡	47

Thirty-four out of the 49 Boards (69 per cent.) in 1938-39 and 32 out of 47 Boards in 1941-42 (68 per cent.) have receipts under £1,000 per annum—14 in 1938-39 and 9 in 1941-42 under £200 per annum.

The situation is more clearly set out in the next table, which shows the revenue receipts of these Drainage Boards.

*Table showing Receipts from Rates and Licenses, Rents, and other Sources§ of Drainage Boards in the Years 1938-39 and 1941-42*

Amount. £						Number of Boards.	
						1938-39.	1941-42.
Under 100 ..	..	..	..	..	..	7	2
100- 199	..	..	..	..	..	8	7
200- 299	..	..	..	..	..	3	3
300- 399	..	..	..	..	..	4	6
400- 499	..	..	..	..	..	1	4
500- 749	..	..	..	..	..	6	7
750- 999	..	..	..	..	..	8	5
1,000-1,999	..	..	..	..	..	5	5
2,000-4,999	..	..	..	..	..	2	3
5,000 and over	..	..	..	..	..	5	5
Total	..	..	..	..	..	49	47

Thirty-seven out of the 49 Boards (75 per cent.) in 1938-39 and 34 out of 47 (72 per cent.) in 1941-42 have a revenue under £1,000 per annum—15 in 1938-39 and 9 in 1941-42 have a revenue under £200.

It is probably fair to say that in some of the Boards where receipts, and hence expenditure, are very low that the major work has been done, and meantime little maintenance work is necessary, but this very fact raises doubt as to the necessity for the retention of Boards in these cases. Another important point is that in the year 1938-39, £23,336 was available from the Employment Promotion Fund for capital works.

\* The problem of urban drainage districts is not discussed herein: see pages 18-19.

† The problem of urban Drainage Boards is not discussed herein: see pages 18-19.

‡ Note.—Since 1938-39 two of the Boards under the class "under £100" receipts have gone out of existence.

§ Nearly 96 per cent. of the revenue is from rates; only a little over 4 per cent. is from other sources.

|| Since 1938-39 two of the Boards in class "under £100" have gone out of existence.