

The opinion is sometimes expressed that deep drainage is now causing excessive drying of the soil, but it must not be overlooked that in the fine-grained alluvial soil deep drainage is the only means of preventing the saturation of the soil and harmful "poaching" of the grass lands in winter by prolonged and heavy rainfall. In peat land the required height of the water-table varies according to the widely differing characteristics of the peat. Well decayed surface peat requires deep drainage during winter, and checks or dams in the lateral drains during summer to maintain favourable moisture conditions. In certain areas it is exceedingly difficult to control the water-level in peat lands, but the matter is of sufficient importance to receive the attention of the settlers on this class of land.

Rainfall records for Kerepehi since 1915 are given below:—

RECORDS OF DAILY PRECIPITATION, KEREPEHI, HAURAKI PLAINS.

Year.	Number of Days, with given Daily Precipitation in Inches.												Total Days.	Total Fall.	Wettest Month.	Driest Month.	
	0.00 to 0.49.	0.50 to 0.74.	0.75 to 0.99.	1.00 to 1.24.	1.25 to 1.49.	1.50 to 1.74.	1.75 to 1.99.	2.00 to 2.49.	2.50 to 2.99.	3.00 to 3.99.	4.00 to 4.99.	5.00 to 5.99.					6.00 to 7.00.
1916 ..	109	12	9	7	2	3	..	1	..	..	1	..	..	144	52.19	Nov. 6.65	Feb. 1.05
1917 ..	131	11	4	4	3	..	1	1	1	..	..	..	..	156	45.61	Feb. 6.26	Jan. 0.65
1918 ..	145	14	6	4	..	1	..	..	1	..	..	..	..	171	44.06	Oct. 7.47	May 2.24
1919 ..	122	9	1	3	2	..	2	..	..	..	..	..	..	137	27.36	July 4.52	Dec. 0.89
1920 ..	85	7	10	3	1	1	3	2	..	..	..	..	..	112	43.16	Feb. 6.10	July 1.73
1921 ..	93	12	5	3	2	..	..	1	..	..	..	..	..	116	34.41	Oct. 5.89	Feb. 0.72
1922 ..	101	17	9	3	..	1	1	..	1	..	..	..	..	133	42.81	Feb. 6.62	April 1.73
1923 ..	151	6	5	4	..	1	1	..	..	..	..	..	1	169	47.04	April 9.76	Mar. 1.72
1924 ..	132	8	10	5	2	5	1	1	..	2	..	..	..	166	60.37	April 8.55	July 1.87
1925 ..	142	15	4	2	..	..	..	..	..	..	..	..	..	164	37.64	June 6.67	April 0.84
1926 ..	149	15	6	4	5	2	2	..	..	..	..	..	..	183	55.53	May 8.86	Feb. 1.79
1927 ..	159	10	6	5	..	4	..	..	..	..	..	..	..	184	45.33	July 6.29	April 2.01
1928 ..	125	7	9	2	3	2	2	1	..	..	..	..	..	151	47.30	May 7.52	Jan. 0.01
1929 ..	124	19	8	3	1	..	..	..	..	..	..	..	..	155	41.05	April 5.09	Feb. 0.74
1930 ..	131	4	2	2	3	..	2	2	..	..	..	..	..	146	37.72	Jan. 6.87	Dec. 0.80
1931 ..	144	10	7	..	4	..	..	..	..	2	..	..	..	167	43.23	July 7.80	Mar. 0.98
1932 ..	126	7	5	4	..	1	..	..	..	..	..	..	..	143	32.05	Feb. 4.95	Nov. 0.93
1933* ..	38	2	1	3	..	..	..	1	..	..	..	..	..	45	12.01	Feb. 6.54	Mar. 1.20

* First three months of year only.

Average annual rainfall over seventeen years is 43.34 in.

Under the provisions of the Land Laws Amendment Act, 1932, a fire district was constituted comprising the peat lands within the Hauraki Plains District, and the value of this legislation is apparent in the entire absence of serious damage from swamp fires since the fire district regulations came into force. In the past destructive swamp fires have annually caused considerable loss to the Crown and individual settlers. With the co-operation of the settlers the fire district principle will be an effective protection policy.

There are, on the Hauraki Plains, extensive areas of naturally grown and planted flax, and protection from fire is the first essential for the preservation of these valuable assets. The price position of the staple farm products to-day indicates the need for more diversified production, and with reasonable security against loss by fire the development of the latent possibilities of the flax lands in the district is a work that would provide reproductive employment for a large number of idle men.

As the outcome of economic conditions and the unemployment situation radical changes have been made in the Department's construction methods during the last few years. The immediate problem has been to determine how, within the reduced appropriations, the progressive development of the district could be continued and employment provided for the largest possible number of workers. Stage construction programmes have been rearranged so that the cost of works undertaken would be absorbed in labour, and, where possible, manual labour has been used in place of machinery. With the co-operation of the Unemployment Board and local bodies, eight relief work camps have been established in different parts of the district, and arrangements have also been made for the conveyance of about forty workers daily from Thames and Kerepehi to relief work jobs.

The number of men employed at the commencement of the financial year was 130, and at the end of the year the number had increased to over 230. All of the men are engaged on works of real importance and public benefit that sooner or later must be done to develop the resources of the reclaimed land. They comprise drainage, flood protection, road construction, also clearing and grassing of Crown lands in preparation for settlement. A large proportion of the cost of the work is provided by the Unemployment Board. Approximately 90 per cent. of the expenditure to-day on land reclamation and development goes to the wage-earner. There is exceptional scope for economically sound development work on these lines on the Hauraki Plains, and the continuation and extension of the Department's activities can be urged with sound reasons backed by past achievements.

DREDGES.

During the past year plant investment has shown considerably reduced earnings. Six dredges were operating until the end of July, when for reasons of economy four plants were laid up, and only two dredges have been working during the last eight months of the year. The improvements to the Piako River were stopped during the year, but it is to be hoped that funds will be made available shortly to enable the length between Kerepehi and Kaihere Landing to be completed.