

1933.
NEW ZEALAND.

NATIVE LAND DEVELOPMENT.

AOTEA MAORI LAND DISTRICT.

Presented to both Houses of the General Assembly by Leave.

Native Department, 20th October, 1933.

The Hon. the Native Minister, Wellington.

HEREWITH is the report from the Supervisor for the Aotea District Native Land Development Schemes (Mr. H. Marumarū) covering the development work carried out on the Ranana Development Scheme during the year ended 31st March, 1933, and including the following data:—

1. General report by Supervisor.
2. Schedule of units and operations undertaken.
3. Summary of above schedule.
4. Summary of accounts.
5. Graph showing butterfat production.

R. N. JONES, Under-Secretary.

REPORT.

RANANA DEVELOPMENT SCHEME. (See Plan 38, G.-10.)

The blocks affected are the Ngarakauwhakarara, Ranana, and Morikau No. 1, comprising seventy-two subdivisions of an area of 4,516 acres 3 roods 14 perches, and include the Ranana and Hiruharama Settlements.

Location.—This area is situated on the left bank of the Whanganui River, the southern boundary being about forty-three miles from the City of Whanganui by river, Ranana and Hiruharama being two miles and seven miles respectively farther up the river.

The Whanganui River Road is formed to within ten miles of Ranana, and the completion of the Ruapirau Stream bridge in August will permit motor-traffic access to Ranana, Hiruharama, and Pipiriki during the summer months.

Conformation.—This area is mostly easy undulating country with steep and broken faces along the banks of the Whanganui River, Mangoihe and Whatauma Streams.

Soil Formation.—The lower country is of a medium loam formation overlying papa, while the higher levels and the area north-east of the Hiruharama pa is of very light loam.

The pastures over the whole of the area respond to top-dressing.

Climate and Shelter.—The westerly and north-westerly winds prevail, but the winds from the south, though not prevalent, are severe. The rolling nature of the country protects the stock to some extent, but this does not obviate the necessity for shelter-belts, which should be planted as soon as possible. Snow is experienced on the higher levels, with frosts and fogs during the winter months; but on the whole I do not consider the climate severe.

Access.—All of the sections are served by clay roads (formed); the Ngarakauwhakarara Block sections by the Mokonui Road, the Ranana Block sections by the Morikau Farm Road (which is metalled for about 50 chains), and the Morikau No. 1 Block sections by the Otaranoho, Aorangi, and Ohineiti roads. All of these roads need metal, especially on the inclines. They all connect with the Whanganui River Road, excepting the Ohineiti Road.

Number of Farmers.—Twenty-seven, with 135 dependants. Area occupied by scheme units 2,718 acres 1 rood 38 perches.

Pasture.—Rough mixed pasture, 1,554 acres; sown down by scheme, 170 acres: total, 1,724 acres.

A portion of the old pasture here and there has run out in the sections in the three blocks, but taken on the whole it is holding well, especially in the lower rolling country. The mixture prescribed for use and sown down has proved quite successful.

Hay and ensilage, which will be of immense value during the winter months, have been harvested on most of the holdings.

Weeds.—Gorse: Area grubbed, 217 acres. Area in gorse, 180 acres. This year's operations will reduce the area in gorse to 87 acres. Of this area 21 acres will be over all of the sections actually under development, and the balance will be over sections not being developed so far, but are on our list for the reason that each is carrying certain liabilities for boundary fencing and other small expenditure.

Ragwort: Ragwort is scattered lightly over some of the sections in Ranana and Ngarakauwhakarara blocks, but it has a very strong hold on the sections in the Morikau No. 1 Block. During the past two seasons I have watched very closely the progress of the method employed by us on Section 1 Morikau No. 1 Block, occupied by A. V. Waitford—that is, small paddocks, sheep, and sodium chlorate. I am satisfied that small areas, sheep, sodium chlorate, and an industrious farmer are the only combination that can check the spread of ragwort on the sections under our control.

Blackberry: 72 acres. Blackberry is to be found mostly on the Ngarakauwhakarara Block sections, and a little scattered over some of the Ranana Block sections, but it is not serious. This year's operations will clean up the whole of this area, but it will be necessary for mowing and cutting to be attended to regularly.

Scrub and fern: Scrub is scattered over the Morikau No. 1 Block sections along the steep faces. The small patches to be found on the sections in the other blocks are not serious.

Fern is more in evidence on the sections north-east of Hiruharama, due, no doubt, to the light nature of the soil in those parts; but I anticipate no difficulty in keeping it under control when the areas are ploughed and sown down.

Bush (62½ acres).—Of this area 30 acres are on one section, the balance of the area being distributed over the remaining sections. At present I have no intention of felling all the bush, but the 30 acres referred to will need attention when brought under development.

Fencing.—Total, 3,320 chains (41½ miles).

Fencing erected since 1st April, 1930, 1,337 chains; fencing repaired since 1st April, 1930, 567¼ chains: total, 1,904¼ chains.

The new and repaired fences are substantially built of 7 wires, approximately 4½ posts per chain, 22–25 battens per chain, the posts being of totara and silver-pine, the battens of rimu and white-pine tarred at the ends, and the strainers of totara, silver-pine, and chestnut. The old fences are in fair order, but as matai and rimu posts were used, in addition to totara, silver-pine, kowhai, maire, and other good fencing timber, further repairs will be required from time to time.

Water.—The holdings are all provided with a good supply, and those sections not actually supplied are within easy distance of a source of supply.

The Mairchau and Tamakehu water schemes are in operation, and meet a necessity, especially during the summer months.

Carrying Capacity.—The present average carrying capacity is about one cow to 2½–3 acres of grass land, and with sowing-down, smaller paddocks, tripod harrowing, and top-dressing same can be increased to one cow to 2 acres, and in some parts to two cows to 3 acres.

Milking-sheds.—The building of new sheds and the renovating and concreting of shed-floors have been carried out on all of the sections excepting four, and the benefit of this work is appreciated by the workers, especially during the wet and cold weather. The benefits are further reflected by the marked improvement of the cream-grading figures as shown by the graph attached to the data submitted by the Registrar.

Living Quarters.—Cottages (two and three rooms) 11, ponga whares 7, shacks 7.

The ponga whares and shacks are not weather-proof, and are consequently detrimental to the health of the occupiers, especially the women and children. I am hopeful that something can be done to improve these conditions in the near future.

Live-stock of Units.—Condition of live-stock, good.

Dairy cows, 610: The majority of the old stock has been disposed of and the present herds are now of better quality, the majority being from Taranaki pedigree stock of high producing strain. The increased production during the past year as shown by the graph is to some considerable extent due to this fact.

In-calf heifers number 116 and weaner heifers 177. I anticipate from forty to fifty milkers being rejected at the end of the season, but on the basis of from 15 per cent. to 20 per cent. of empties, deaths, &c., we have sufficient heifers coming in to meet the herd requirements, and a small surplus to assist new units.

Weaner heifers number 177, which shows an increase of sixty-one on the previous year's figures, due to better attention.

Bulls, thirty-five (pedigree): Three bulls will be disposed of this season, but we have sufficient on hand to replace same.

Plant and Equipment.—The three milking-plants are working satisfactorily. The separators are all in good working order, while the other dairy utensils are also in order. The section-holders have a very limited number of implements, which are in fair order only.

Harness and tools: All have a fair supply.

Butterfat.—The graph shows a marked improvement in quantity and quality as is indicated:—

Grade.	Season 1930-31. lb.	Season 1931-32. lb.	Season 1932-33. lb.
Second	24,799	14,143	9,579
First	15,822	32,468	49,267
Finest	432	395	6,940

The improvement in grade is due to better milking-sheds, better methods, water-supply, and more regular delivery of cream at factory, and as there is a premium of 1d. per pound butterfat on first grade as against second grade, the past year's returns have been considerably increased.

Cream-coolers will be needed to further assist grade improvement, but I do not anticipate a very high percentage of "Finest Grade" until the factory lorries are able to collect the cream daily, especially during the summer weather.

Scheme Live-stock and Plant.—Cattle: On hand—3 two-year pedigree Jersey bulls (Paraparamu purchases); 21 in-calf heifers (Eltham purchases); 4 two-and-a-half-year in-calf heifers.

The above stock are all in good condition and will be issued out this season.

Working-horses 6, foals 2.

The working-horses are working on the group sections at Hiruharama.

Sheep: 208 ewes, 7 rams.

I anticipate a fair net profit from the sheep purchased, and I have no hesitation in stating that without sheep to assist in checking the ragwort on the badly infested areas dairying on those areas is hopeless, and from present indications more sheep will be required.

Scheme Plant, Tools, and Equipment.—The whole of the plant, &c., is in working-order.

Labour.—There is ample offering at our contract rates.

Freights.—On butterfat the rate is $\frac{3}{4}$ d. per pound per river steamer, but $\frac{1}{2}$ d. of this amount is paid by the Dairy Company.

On fertilizer the rate at present is 15s. per ton, but was previously 30s. per ton, and on all other goods 60s. per ton.

Freights will not be reduced until the river road is completed as far as Ranana and later to Hiruharama. It will be some time before this work will be completed, but every endeavour should be made to expedite it.

Cost of Living.—Groceries: The main items are flour, sugar, tea, baking-powder, salt, and soap. These are necessities to any community, and in our instance the cost to the consumer is high, due to the high freight charges, and it is reflected in the higher rate on some of the contracts, but does not leave much to buy clothing. The section-holders are in a better position although the returns for butterfat have been low.

Work done.—On the whole the work done has been well carried out. Fencing, buildings, roadway, tracks, gorse and other weed clearing jobs completed being evidence of same; but it is absolutely necessary that maintenance work must be at all times attended to.

The People.—Those under the scheme are now assisting each other more than they had done before, due, without doubt, to the recent visit paid by several of our farmers, foreman, and secretary to other schemes.

The hapus in general are taking more interest in the progress of the scheme, and many are clamouring for sections and assistance.

Foreman and Secretary.—Mr. Tapa, the foreman, is carrying out his duties well, and also the secretary, Mr. Ngene Takarangi. They are working in harmony with the people, the Office, and myself.

Outlook and Prospects.—The scheme is no doubt one of the most beneficial movements ever inaugurated for the good of the Maoris on the Whanganui River. They have the land and the manpower, together with sufficient foresight to realize that the settlement of their lands is the only avenue with sufficient scope to meet the needs of the majority of them. This land-development has given them a new hope. Those under the scheme as a whole are doing their share. The young people are uniting with their elders in an effort to make good. Imbued with this spirit, together with some assistance by the Government, I am confident that the Ranana Development Scheme will be a success.

Administration.—Judge Browne has given us every assistance and consideration. He is keenly interested in the progress of the scheme and the welfare of the Maori people of this district in general.

Mr. Brooker, Acting Registrar, who is in charge of the accounts and general business, has assisted the scheme in every way, and has endeavoured to see the Maori's point of view in most things, and he is sympathetic.

The staff in general has also given us every assistance.

On behalf of the scheme farmers, the Management Committee, and the Whanganui Tribe, I wish to extend to Judge Browne and his staff our thanks.

SUMMARY OF ACCOUNTS.

The attached summary of accounts sets out the allocation of the expenditure and receipts to 31st March, 1933.

Item 1. Units Account.—The supporting statement sets out the allocation of the expenditure under various headings as far as available information permits. Included in the unit accounts are accounts covering expenditure on sections which are not at present active units but which are liable for a proportion of costs of expenditure, chiefly boundary fencing.

Item 4. Water-supply.—It is anticipated that the respective schemes will be completed and the total cost of the water-supply will be apportioned to the sections benefited during the current year.

Items 5 and 6. Horses and Equipment.—Some difficulty has been experienced in the past in ascertaining the extent to which units have used the horses and equipment. This is particularly the case in respect of operations conducted in Mr. Guthrie's time. Charges to the extent of £50 Os. 3d. have been brought into account, and the instructions issued to the foreman are calculated to overcome this difficulty in the future.

Item 8. Implements.—The position in regard to this item is somewhat similar to items 5 and 6, but charges to the extent of £63 11s. 9d. have been brought into account.

Item 10. Roothing.—No action has yet been taken to apportion the cost of rooding to units as additions are contemplated. It is proposed, however, that the cost should be recovered by means of a levy based on the unimproved value of the area affected directly and indirectly, the levy to be spread over a period of years.

Item 14. Stores Suspense.—This item covers the apparent shortage on stores at cost price. While the majority of the items covered by this amount represent issues not accounted for in Mr. Guthrie's time, it is not considered that the whole amount should be treated as a loss. In fact data obtained for the purpose of this report will assist in bringing to charge many items at present not accounted for.

Item 15. Horse-feed.—This item covers chaff used for various development operations but in respect of which the data available does not permit its being specifically charged. In this respect a measure of blame must be attached to the supervision particularly in the early stages. As all units benefited directly or indirectly by the use of the chaff, it is not considered that an injustice is done by including this item for apportionment by means of an "On cost." Adequate measures have been adopted to prevent a recurrence in the future.

Item 16. Miscellaneous Expenditure.—These amounts are largely made up of miscellaneous wages which could not be specifically attached to individual units or operations, chiefly in the initial operations.

Item 19. Stores Account.—This item represents the equivalent to a gross profit on the stores account occasioned by the policy of adding a percentage on cost price of purchases.

Item 20. Sheep Account.—This represents the net profit on the sheep acquired primarily for the eradication of ragwort at Jerusalem.

Item 21. "On Cost."—Various methods have been explored in an endeavour to apportion this Item 21 in an equitable manner, and it is considered that a combination of the following is the most equitable method to adopt:—

- (a) Percentage on stores issued.
- (b) Percentage on wages paid.
- (c) Percentage on butterfat returns.

The first method has been applied and is reflected in Item 19. The ratio on which the balance of "On cost" is to be met under (b) and (c) would depend on the supervision necessary. While development is proceeding the ratio would be higher in (b) than in (c), for as time goes on supervision of farming will become the principal overhead charge. In the present case a ratio of approximately $\frac{2}{3}$ and $\frac{1}{3}$ is considered applicable to the present position. In the attached summary of unit accounts "On cost" has been calculated and added in the manner indicated above. If there is no objection to the principle adopted I will have the relative entries passed through the respective accounts affected, as at the 1st April, 1933. The result has, however, been incorporated in the summary of unit accounts which is attached. While the "On cost" may appear somewhat high, it must be borne in mind that a period of three years is covered by this "On cost," and a large percentage of non-recurring expenditure has been brought to charge. The sum of £189 12s. carried forward, together with overhead charges for the current year, should result in a very small "On cost" this year. I might add that every endeavour and inquiry has been made to bring into account items directly apportionable to units as distinct from "On cost."

Item 22. Calf-pens.—This item will ultimately be met by a charge on returns from bobby calves.

Item 23. Units Surplus Stock (Agistment and Sundry Expenses Account).—This item will be apportioned to units affected when total costs are ascertained. It covers expenses incidental to grazing surplus stock of units pending replacement of culls or disposal of surplus.

Item 24. Salary of Supervisor.—No apportionment has been made regarding this item at present. It could be included with the "On cost" under Item 21, but it is suggested that it might be met from any surplus resulting from the interest charged to units at 6½ per cent. and the interest payable on advances from the Native Land Settlement Account.

SUMMARY OF ACCOUNTS AS AT 31ST MARCH, 1933.

Item.	£	s.	d.	£	s.	d.
1. Unit accounts .. .. .	..	..	..	..	9,185	7 8
2. Stores unissued .. .. .	..	..	..	563	14	11
3. Stock unissued .. .. .	..	..	..	208	1	10
					771	16 9
4. Water-supply—						
Mairehau .. .. .	..	..	..	244	7	1
Jerusalem .. .. .	..	..	..	138	12	4
					382	19 5
5. Horses and equipment .. .. .	..	..	..	233	14	8
6. Maintenance of horses and equipment .. .. .	..	..	..	16	10	8
				250	5	4
Less credits for use of above .. .. .	..	..	..	50	0	3
					200	5 1
					70	1 9
7. Loose tools .. .. .	..	..	..	..	..	..
8. Implements .. .. .	..	..	..	296	4	10
Maintenance of implements and equipment .. .. .	..	..	..	17	11	9
				313	16	7
Less credits for use of above .. .. .	..	..	..	63	11	9
					250	4 10
					18	2 11
9. Telephone installation .. .. .	..	..	..	..	..	..
10. Roothing—						
Jerusalem .. .. .	..	..	..	120	11	0
Mokonui .. .. .	..	..	..	216	8	8
Ranana .. .. .	..	..	..	202	1	0
					539	0 8
					18	11 2
11. Wool on hand .. .. .	..	..	..	..	90	11 0
12. Sheep on hand—208 ewes at 8s. ; 7 rams at £1 1s. .. .. .	..	..	..	..	16	17 8
13. Sundry debtors .. .. .	..	..	..	..	205	9 4
14. Stores suspense .. .. .	..	..	..	..	..	..
15. Horse-feed unapportionable .. .. .	..	..	..	256	1	2
16. Miscellaneous expenditure unapportionable .. .. .	..	..	..	114	7	9
17. Loss on turnip crop, 1930 .. .. .	..	..	..	14	16	0
18. General supervision, including wages of foreman and clerk .. .. .	..	..	..	458	5	9
				843	10	8
Less—				£	s.	d.
19. Transferred Stores Reserve Account	203	5	8			
20. Profit on Sheep Account	63	0	4			
				266	6	0
				577	4	8
21. Charged as "On cost" as under—						
Units and development, at 10 per cent.						
gross wages	271	17	8			
Units, at £0.075 per cent. per 100 lb.						
butterfat	115	15	0			
				387	16	8
					189	12 0
					5	3 11
22. Calf-pens (3) .. .. .	..	..	..	..	..	..
23. Units, surplus stock (Agistment and Sundry Expenses Account) .. .. .	..	..	..	..	60	16 10
24. Supervisor's salary .. .. .	..	..	..	..	309	1 0
					£12,314	2 0

SCHEDULE OF UNITS AND OPERATIONS.

Section.	Number.	Occupier.	Area.			Total	Fenc-	Dairy	Heifers.	Weaners.	Bulls.	Milking
			A.	R.	P.	Pasture.	ing.	Cows.				Plants.
Ngarakau ..	1	Tahu Paetaha	83	3	10	51	Ch.	No.	No.	No.	No.	Cow.
Ngarakau ..	2	Hori Paamu	78	3	10	50	145	24	4	7	1	..
Ngarakau ..	3	Hatana te Ua	49	1	18	34	125	27	11	12	1	..
Ranana N.R. ..	14	Hatana te Ua	6	2	20	..	117	16	6	5	1	..
Ngarakau ..	6	T. Marshall	75	0	4	45	19½	..	..	..	..	..
Ngarakau ..	7	Robert Tanginoa Tapa	90	3	8	30	114	39	5	10	1	..
Ranana ..	3A	Robert Tanginoa Tapa	54	0	0	50	81	..	..	..	..	..
Ngarakau ..	8	Winiata Pauro	70	2	13	40	181½	40	10	10	1	..
Ranana ..	2	Winiata Pauro	187	0	21	147	70	..	..	..	..	..
Ngarakau ..	11	George Hunt and R. Poumua	61	2	20	58	190	68	11	15	2	3
Ranana ..	3B	Ngene Takarangi	54	0	0	39	135	27	5	11	1	..
Ranana N.R. ..	10A	Ngene Takarangi	10	1	0	10	85	21	3	6	2	..
Ranana ..	{ 4A	} Wiari te Patu	100	0	0	83	49¾	..	..	..	..	..
Ranana ..	{ 5 (pt.)											
Ranana ..	5 (pt.)	Haimona te Oti (George Symon)	152	0	0	85	153¾	48	8	12	1	3
Ranana N.R. ..	5	Haimona te Oti (George Symon)	33	1	10	30	134½	..	..	..	..	..
Ranana N.R. ..	13	Haimona te Oti (George Symon)	22	2	25	18	75	40	11	12	1	2
Ranana ..	6	Henare Aterea	47	1	0	26	43	..	..	..	..	..
Morikau ..	1	Albert V. Waitford and Uta Tauri	57	3	6	46	84	19	3	7	1	..
Morikau ..	4A	Pua Menehira	26	2	20	..	114	15	2	..	1	..
Morikau ..	4B	Pua Menehira	32	0	0	23	28	..	..	..	..	..
Morikau ..	5A	Neri Poutini	28	0	0	..	46	..	..	..	..	..
Morikau ..	5B	Neri Poutini	36	3	31	23	62	..	..	..	..	..
Morikau 1 ..	17	Puke Rangitaurira	88	3	28	64	40	10	1	1	1	..
Morikau 1 ..	18 (pt.)	Muta Keepa	{ 6	{ 0	{ 0	{ ..	{ 99	{ 20	{ ..	{ ..	{ ..	{ ..
Morikau 1 ..	19B 2	Whata Karauti	27	0	16	..	101	..	..	..	..	..
Morikau 1 ..	20A	W. Taputoro	14	1	0	7½	5	..	..	2	..	..
Morikau 1 ..	21	Tame Piripi	98	0	0	70	54	9	2	3	..	..
Morikau 1 ..	22	Pukenamu Takutai	103	0	0	80	58	16	3	10	1	..
Morikau 1 ..	26A	Rangimotuhia Katene	77	0	2	50	58	6	1	1	1	..
Morikau 1 ..	28	Moari Wharehoka	91	3	16	70	6	4	1	10	1	..
Morikau 1 ..	29	Rangiwahakateka and Turanga Karauria	99	1	15	69	22	4	..	3	1	..
Morikau 1 ..	30	Rangi Tamakehu	98	3	0	71	14	..	..	8	1	..
Ngarakau ..	12 (pt.)	Roku Tamehana	103	0	0	98	114	33	10	8	1	..
Ranana ..	4 (pt.)	Peti Poumua	{ 56	{ 0	{ 0	{ 45	{ 119¼	{ 19	{ ..	{ 7	{ 1	{ ..
Morikau 1 ..	10	Mahia Potaka	12	3	24	..	12	..	..	..	..	..
Morikau 1 ..	9	Tingi te Waati	6	0	28	6	13	..	..	..	..	..
Morikau 1 ..	11	Rangi Wheato	12	3	21	..	20	..	..	..	..	..
Morikau 1 ..	19B 3	Nepe Box	77	0	28	64	15	..	..	..	..	..
Ngarakau ..	4	Parete Wreeta	79	0	18	..	79	..	..	..	..	..
Ngarakau ..	12 (pt.)	Scheme	60	0	0	58	16	..	..	..	..	..
Ngarakau ..	5	Bull-paddock	88	3	14	60	43	..	..	..	..	..
Ranana Pap. ..	15	Horse-paddock	23	3	2	3	65	..	..	..	..	..
Ranana Pap. ..	10B	Scheme, office	4	0	10	..	56	..	..	..	..	..
			2,718	1	38	1,724½	3,320	610	116	177	25	3 3-cow. 1 2-cow.

SUMMARY.

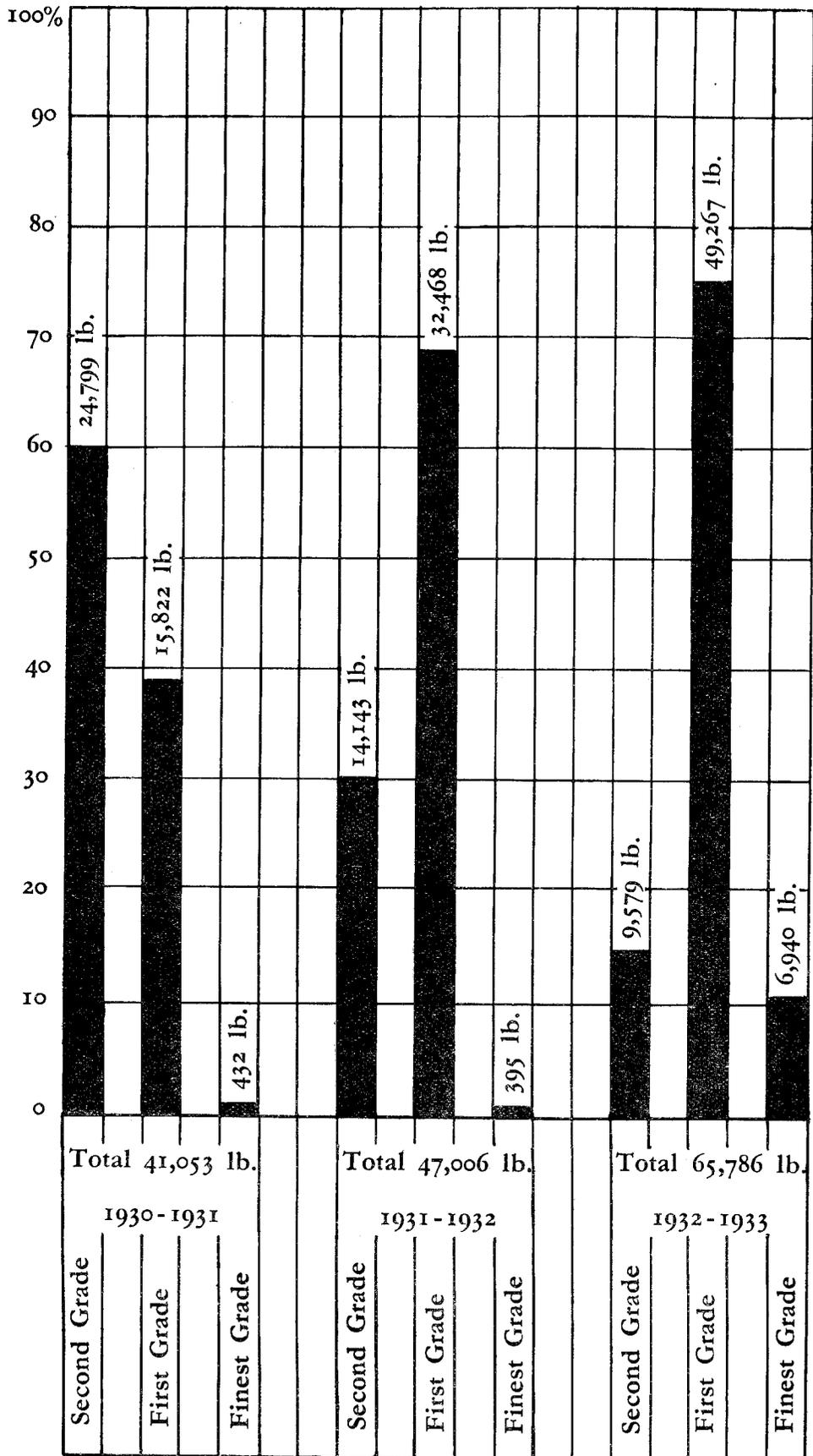
Total area in scheme .. ..	..	..	..	..	..	A.	R.	P.
Area occupied by scheme units .. ..	..	..	..	..	..	4,496	3	14
						2,718	1	38
Number of farming units .. ..	..	..	..	..	..	Number.		
						27		
Area in pasture (including 170 acres since 1930) .. ..	..	..	..	..	..	A.	R.	P.
Area ploughable .. ..	..	..	..	..	..	1,724	0	0
Area gorse grubbed since 1st April, 1930 .. ..	..	..	..	..	..	1,024	0	0
Area still in gorse .. ..	..	..	..	..	..	187	2	0
Area blackberry cleared .. ..	..	..	..	..	..	180	0	0
Area still in blackberry .. ..	..	..	..	..	..	130	0	0
Area fern cleared .. ..	..	..	..	..	..	72	0	0
Area fern to be cleared .. ..	..	..	..	..	..	45	0	0
Area scrub cut .. ..	..	..	..	..	..	127	0	0
Area scrub to be cut .. ..	..	..	..	..	..	42	0	0
Area bush felled .. ..	..	..	..	..	..	103	0	0
Area in bush .. ..	..	..	..	..	..	13	0	0
Area in swamp .. ..	..	..	..	..	..	62	2	0
						17	2	0
Tracks formed .. ..	..	..	..	..	..	58 chains.		
Fencing—								
Total boundary .. ..	..	..	..	..	..	2,221½ chains		
Total internal .. ..	..	..	..	..	..	1,098½ chains		
						3,320 chains.		

SUMMARY—continued.

Fencing—continued.

Erected since 1st April, 1930—						
Boundary	..	..	..	..	910 chains	
Internal	..	..	..	..	427 chains	
						1,337 chains.
Repaired since 1st April, 1930—						
Boundary	..	..	..	..	447 $\frac{3}{4}$ chains	
Internal	..	..	..	..	119 $\frac{1}{2}$ chains	
						567 $\frac{1}{4}$ chains.
						Number.
Number of paddocks	..	..	..	..	..	106
Gates	..	..	..	..	..	70
Buildings on area—						
Wooden cottages (two and three room)	..	..	..	..	..	11
Ponga whares	..	..	..	..	..	7
Shacks	..	..	..	..	..	7
Buildings constructed since 1st April, 1930—						
Wooden cottages (two-room)	..	..	..	..	..	2
Additions to cottages (two rooms)	..	..	..	..	..	1
Implement-store and office	..	..	..	..	..	1
Live-stock of units—						
Dairy cows	..	..	..	..	..	610
Heifers	..	..	..	..	..	116
Weaners	..	..	..	..	..	177
Steers	..	..	..	..	..	35
Bulls	..	..	..	..	..	25
Horses	..	..	..	..	..	84
Pigs	..	..	..	..	..	81
Plant and equipment of units—						
Milking-machines	..	..	..	..	..	3 3-cow. 1 2-cow.
Separators—						
35-gallon	..	..	..	..	..	2
44-gallon	..	..	..	..	..	10
50-gallon	..	..	..	..	..	6
70-gallon	..	..	..	..	..	5
90-gallon	..	..	..	..	..	1
Cream cans	..	..	..	..	..	87
Milk buckets	..	..	..	..	..	55
Ploughs—						
Single-furrow	..	..	..	..	..	2
Double-furrow	..	..	..	..	..	5
Harrows—						
Disc	..	..	..	..	..	4
Tine	..	..	..	..	..	2
Tripod	..	..	..	..	..	1
Mowers	..	..	..	..	..	8
Manure-distributor	..	..	..	..	..	1
General development—						
Roading—						
Formation—						
Ranana	..	..	..	..	..	50 chains.
Mokonui	..	..	..	..	..	145 chains.
Jerusalem	..	..	..	..	..	23 chains.
Metalling—						
Ranana	..	..	..	..	..	75 chains.
Water schemes—						
Mairehau—						
Gravity (dam)—						
Main pipe-line	..	..	..	..	..	6,962 ft.
Subsidiary pipe-line	..	..	..	..	..	1,783 ft.
Units connected	..	..	..	..	..	5
Extension possible to	..	..	..	..	..	5 units.
Jerusalem—						
Hydraulic ram—						
Main pipe-line	..	..	..	..	..	4,429 ft.
Subsidiary pipe-line	..	..	..	..	..	132 ft.
Units connected	..	..	..	..	..	3

BUTTERFAT PRODUCTION CHART.—SEASONAL GRADING.



Approximate Cost of Paper.—Preparation, not given; printing (550 copies, including graph), £10 5s.