

of New Zealand agriculture or some particular section of it. It is of no use conducting experiments on lines that can never prove of any possible advantage to New Zealand agriculture. Neither is it any use doing anything on lines that are already widely known and universally adopted. Improvements on existing New Zealand methods of farming and the introduction of improved methods must always be the object in view. There is, too, a matter of extreme importance—viz., plant-breeding—which includes the improvement of our various grains and fodder plants by means of selection or cross-fertilization, and this work must be extended.

The carrying-out of ordinary commercial farming on any of its well-known and widely adopted lines should not be the work of an experimental farm. Farming is divided into many branches, and the best practice in any branch is attained only by specialists. The work of a specialist in any of the known branches of farming can seldom, if ever, be equalled by an experimental farm. Nor can it be looked upon as a directly profit-earning venture or be expected to show direct profits. The practical farmer works on known lines, and he knows at the outset that certain conditions will give him certain results. He may—and if at all enterprising probably does—experiment in a small way, but these experiments will not be on a large enough scale to seriously affect the financial results of his farming operations if the hoped-for result is not obtained. It must always be remembered that failure to produce the expected result may teach as much as success. The very word “experiment” indicates that the result is doubtful. In the case of the Government experimental farms the information obtained is given free to the public. It would be as reasonable to expect a primary school giving free education to show by a profit and loss account a profit balance as to expect a profit balance from an experimental farm. We should only expect from them what we expect from our schools—namely, that they should be economically and efficiently run. The profit lies in the increased production which is the result of the investigations, thereby benefiting the Dominion through the farmer. Many experiments require scientific knowledge, and this must be available and must be drawn on freely if the experiments are to be a success. With experiments it is essential that there should be accurate and complete records. Inaccurate or incomplete records are worse than none at all, because they are frequently misleading and cause wrong deductions to be made. Again, the results of an experiment may be largely influenced by the previous treatment of the soil, and unless the history of such soil from its original state has been kept, inferences may be extremely misleading. The results of all experiments should be carefully recorded and clearly tabulated and made freely available to the public. Unless the public has this information put before it and the deductions therefrom clearly stated the educational value is lost.

The objective and policy of these farms has never been clearly laid down, and there have been so many Ministers with various views as to what should be attempted that constant changes have left much ground for criticism. But criticism of past mistakes is not the object of this report, and it cannot be denied that all the farms have served some good purpose. Ruakura has shown by top-dressing experiments how greatly the production of the land can be increased by manuring, and the farming community has greatly benefited by these experiments. The system of testing dairy cows and keeping and publishing exact records of every cow milked has shown the value of herd-testing. This lesson has not yet been widely learnt, but the practice is spreading each year. Plant-breeding and selection has been carried out at Ruakura, and the demonstration of lucerne-growing at Moutmahaki may yet prove of value, though it is too early yet to speak definitely on the point.

ACCOUNTS AND RECORDS.

We have had the advantage of one of our members with a complete knowledge of accountancy to go through the accounts of the various farms. When the members of the Board first glanced over these accounts they were astonished to find that the cost of training lads was so high. The net cost shown in the balance-sheet for the year 1914–15 is as follows:—

	£	s.	d.
Twelve lads at Ruakura	1,939	17	8
Six lads at Moutmahaki	614	17	2
Six lads at Weraroa	368	13	3

When this matter was looked into by the above-mentioned gentleman he found that the account was charged with many items which do not seem justifiable, and that the cost per head at the different farms varies according to the difference in the method of keeping the accounts. It was found, too, that the wages of the lads (which run up to 17s. 6d. per head per week) were charged to this account, while no credit was given for the work which the learners did. This is an instance of how records may be made misleading unless carefully and accurately kept.

The Board considers that the learners should not receive wages.

There has been an inclination to unjustifiably write up in some cases the value of the stock, which should remain in the stock-sheets at a fixed value.

Whereas the records of the production of the cows milked seems to be carefully and accurately kept, this is not so with the records of the various experiments, which are incomplete, and there are no continuous records of the work done in the various fields. Although a few entries have been made at Ruakura and Moutmahaki they are not continuous, and are therefore of little value. It will be well, while Managers and employees who have had to deal with these fields are yet available, to have the history of each field written up as far as possible from the time it was first brought in. Unless this is done all knowledge of previous experiments will be lost. Failing such a history as we have suggested, a careful analysis of the soil and a record of the original growth should be made, and a start made from that point. This history would be continued every year. At Rothamsted such a complete history has been kept for sixty years,