

lost through disease to a satisfactorily low percentage would reduce dairying costs, or, rather, raise labour-unit efficiency to a point where fertilizer-costs, the main maintenance expenditure of the dairy-farmer, could be offset. In sheep-farming, also, if the vitality of young and breeding stock were brought to a satisfactory point, farming-costs would be appreciably reduced. The maintenance of animal health is so vitally concerned with reduction in costs of our two great primary industries that the means to an end—namely, research into all phases of diseases under conditions existent in New Zealand—should be vigorously prosecuted by the best brains procurable. The Department has already moved in this direction by improving the research facilities at Wallaceville, and the action of the Dairy Board in being prepared to subsidize extensively research into cow diseases should enable real progress to take place.

AVERAGE EFFICIENCY.

The average efficiency of our farming is being seriously lowered by the percentage of low efficiency farms involving high unit-production costs brought about by a variety of circumstances, such as low stage of development, insufficient working capital, and non-standardization of farming methods. The non-standardization of farming method, with its variants and modifications that must exist, dependent on soil, climate, topography, size, transport, and marketing, represents one of the main reasons for our very wide divergence of efficiency. Non-standardization is largely due to the lack of endeavour that has been devoted in the past to a real study of what should constitute scientific farming under our conditions or, better, what are the factors that must be directed and controlled whereby high efficiency is realizable.

High farming efficiency in most cases results in high production efficiency per unit of labour employed, and this combination is the essential in lessening production-costs. The raising of the average to a higher level than at present will therefore tend to stabilize the farmer and thereby stabilize the Dominion economy. Standards representing real efficiency are urgently required to be defined and attained throughout the whole range of agricultural products. The Department has already efficiency standards in dairy production, and dairy-farming progress has been largely influenced by these standards being used as regular measuring-rods that the dairy-farmer applies to check up his practices.

REGULATIONS.

In the earlier stages of the history of the Department regulatory measures were invoked to protect others from the consequences of the inefficient farmer or to protect the inefficient farmer himself.

Agricultural legislation, however, may be directed either to the products of farming or to the processes of production. The first has in most cases reference to the quality or type of product, and the other to what the farmer should or should not do in the production of his goods. Agricultural legislation directly relating to products can be viewed in general as of great value, inasmuch as it can be made generally applicable, and can be satisfactorily and successfully administered. Enactments compelling the farmer to observe regulations at the production end often fail to achieve their objective, due largely to their having been enacted in advance of the standardization of farming method that would enable such legislation to function satisfactorily. The most notable example on our statute-book is the Noxious Weeds Act.

An intensification of regulation governing farm products would appear to be desirable, leading to standardization at a high level, and at the same time the development of standardization at as high a level as possible of the products the farmer buys, such as stock, seeds, fertilizers, and labour. On the other hand, regulation of what the farmer should or should not do in the actual production of his goods should be avoided until such time as the real standards of farm-management are accurately determined by organized research. There is, however, already available a large store of knowledge on the problem of farming efficiency, and it should be one of the main objectives of the Department, by intensive extension work, generally to promulgate better farming methods in every direction where they can be applied. At the production end the objective must be educational. Steady improvement can be brought about by the amassing and dissemination of knowledge based on accurate farm-management study, rather than by regulation, and the administration of the Department of Agriculture is gradually being moulded along these lines.

A. H. COCKAYNE, Director-General.