

## DEVELOPMENT OF THE DAIRYING INDUSTRY IN NEW ZEALAND.

### 9. Early History :

Development of the dairying industry in the Dominion can be dated from the first successful shipment of refrigerated meat from New Zealand in 1882, for the building up of any appreciable export trade in butter and cheese depended entirely upon transport equipped with freezing facilities. Coincidentally with technical improvements in the transport of perishable foodstuffs, rapid progress was being made in the improvement of ocean transport, particularly through the change-over from sailing-ships to power-driven vessels, with a resultant lessening of the period required to place produce on the markets of Great Britain.

The year 1882 was also of importance in the history of the co-operative factory system as we now know it. Although such factories were operating previously to that date, the New Zealand Government in 1882 offered a prize of £500 to the co-operative cheese-factory which first reached an output of 50 tons of cheese in one season. Within ten years 214 co-operative factories of various kinds were erected. The results of this movement are to be seen to-day in the fact that for the past season proprietary factories manufactured for export less than 8,000 tons of butter out of a total of approximately 140,000 tons, and less than 2,000 tons of cheese out of a total of 101,000 tons.

The establishment of new outlets for dairy-produce, and the consequent rapid development of the factory system, resulted in the application of scientific knowledge to the processing of milk and cream, such services being regarded as a State function in the encouragement of the industry. Concurrently with this movement, the country was being rapidly settled and developed, the former through the introduction of an assisted immigration policy, and the latter by the spending of money, borrowed mainly in England, on public works commenced pursuant to the Vogel Public Works policy of 1870. In 1895 the first enumeration of dairy stock was made, the total herd numbering 257,140 cows.

In 1892 the Liberal Government, under the Hon. John Ballance, introduced the lease-in-perpetuity system of land tenure. This system, which enabled settlers to obtain land on most favourable terms, was fostered by the Seddon régime subsequently to the death of Hon. John Ballance, but was abolished in 1907. A progressive land-settlement policy was continued after the abolition of the lease-in-perpetuity system. With a steady increase in population and an apparently insatiable English market with reasonable returns to producers, a rapid deforestation of the Dominion took place, and by 1918 approximately 43 million acres were in occupation, this being the apparent limit of economic land-settlement.

### 10. Phases of Development :

The development of the dairying industry can be conveniently treated in three phases:—

- (1) Previously to 1920, the system of farming adopted was extensive, in that we depended mainly on a highly favourable climate and the natural fertility of the soil. Thus, increased production was achieved through the breaking-in of more land rather than by the full exploitation of land already in production. Although artificial fertilizers were used for pasture top-dressing to some extent, the practice was not general. Supplementary crops such as turnips, swedes, and rape were used to augment grass in the feeding of dairy stock. Concurrently with the utilization of increasing areas of land, internal transport facilities were rapidly improving, and labour-saving machinery was being developed. Similarly, great improvements were being made in dairy sheds and yards. Lack of good roads confined cheese manufacture to limited areas, and butter-factories were also limited in scope until the introduction of home separation, which enabled farmers in isolated districts to undertake milking for butter-factory supply. Milking-machines were becoming very generally used, and these improvements, combined with concrete yards and walk-through sheds, contributed to the removal of prejudices against milking large herds as a sole means of livelihood.
- (2) The repatriation of troops at the close of the war, and the subsequent soldier-settlement policy adopted for their absorption, combined with an attractive but unsound price-position for dairy-products, greatly increased the demand for and valuation of land, and reinforced the tendency towards land speculation. The temporary decline in prices of butter and cheese during the 1921-22 season, following a slump in meat and wool prices, stopped the speculative buying of land, and recent purchasers of farms faced the necessity of increasing production and reducing milking-costs in order to meet their liabilities. A new era of land utilization set in, and dairy-farm management changed rapidly from extensive grass utilization, supplemented with root crops, to intensive pasture utilization through the use of artificial fertilizers as a top-dressing, subdivision of paddocks, and the conservation of surplus grass in the form of hay and silage.

It was realized that large areas, particularly in the North Island, where rainfall was adequate and well distributed and where the topography of the land was suitable, were suitable for dairy cows provided fertilizers were judiciously used. New Zealand rapidly attained a world-wide reputation as the outstanding example of improved pasture-management methods, and holds pride of place in this respect up to the present time. Improvements in pasture-management were accompanied by improvements in stock. In this connection, the introduction of herd-testing and the development of instruction in live-stock management were of great importance, and it can be fairly stated that the quality of our dairy cows at the present time is, on the average, better than the efficiency displayed in their management and feeding.