

The Need for a Village Dairy Factory System in India.

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BEFORE dealing with this question in the light of India's requirements, it is worth while to study briefly what has been found necessary in the direction of dairy factory development in other countries in the world outside of Asia. The result of such a study reveals some remarkable facts and clearly proves:—

- (1) That all the more modern countries in the world outside of Asia, farmed by small-holders, have greatly developed the dairy industry within the last half century.
- (2) That all the foremost dairying countries in the world, whether farmed by large or small-holders, have adopted a system of village dairy factories.
- (3) That those small-holding countries which have increased their wealth by the development of the dairy industry have adopted the co-operative type of dairy factory organization.
- (4) That in countries of small-holders, in no case was any real progress made in the improvement of the dairy cattle until after the dairy factory system had been firmly established. In other words, the permanent improvement of the dairy cattle of the country was not possible until the dairy factory system had proved to the cow-owner the potential value of the heavy milking cow.

In the first place let us look at those countries of the world which have made the greatest progress in the advancement of agriculture during the past fifty years. They are Great Britain and Ireland, France, Germany, Norway, Denmark, Sweden, Holland, Belgium, Italy, Finland, United States of America, Argentine Republic, South Africa, New Zealand and Australia. Dairy development on a gigantic scale has taken place in every one of these countries, and without exception they have adopted a dairy factory system.

The most up-to-date small-holding parts of the world to-day are Denmark, Ireland, Holland, Sweden, Finland, Northern France, Northern Italy, Latvia and Lithuania, and by comparison with other Colonies, New Zealand is rapidly becoming a country of small-holders. In every one of these countries where a great part of the land is divided into small lots and farmed by peasant proprietors, dairying has been the main line of development and the co-operative village dairy factory is almost universal.

In all the dairying countries in the world, whether farmed on a basis of small-holdings or large farms, the village factory is universal, and it is a remarkable fact that in every case the establishment of the dairy factory system was the forerunner of that great movement for the improvement of dairy cattle which has swept over the world within the last half century, and which in the more advanced countries like Holland, Denmark and Great Britain has more than doubled the efficiency and profit earning capacity of the *average cow*. This fact when considered is only reasonable. Milk is such a perishable article, its handling for sale and its manufacture into edible and storable products is such a highly technical matter that the small producer of milk in any part of the world cannot possibly deal with the small quantities he produces and it took the village dairy factory to prove to the cow-owner the commercial value of the milch cow and the added profit which cows of improved efficiency would mean to him. Not only so, but the creamery or the village dairy factory, especially when worked on a co-operative basis, provided a means whereby the agricultural propagandist could get into direct touch with the cow-owners and bring home to them in their collective capacity as owners of a milk factory and in their individual capacity as milk producers the benefits of improved cattle-breeding, feeding and management.

India does not differ fundamentally from those other countries mentioned. She owns something like 100,000,000 adult cows and female buffaloes, most of them grossly inefficient as milkers and most of their owners technically ignorant of the first principles of scientific milk production. Whenever there is sufficient milk produced to support it, we need the co-operative dairy factory in India more than any other country to:--

- (a) Educate our cattle owners as to the value of the milk they now produce and the necessity of producing more milk;
- (b) Secure for the milk producer the profits from the milk industry;
- (c) Improve our methods of breeding, feeding and rearing of cattle;
- (d) Improve our methods of handling milk for urban consumption;
- (e) Improve our methods of manufacturing milk products.

Indian dairy factories need not be expensive or elaborate, but they must be efficient and up to date. In some cases they might be worked by hand power as was done in the case of the earlier creameries in Western Siberia.

There is no use attempting to teach a cow-owner in a tropical country how to manufacture a conserved and marketable product from the 10 or 20 lb. of milk he produces daily. He cannot possibly do it successfully. What we must urge him to do is to unite with all his neighbouring milk producers, and under the aegis of the co-operative movement equip, manage, and work a village factory for the utilization of all the milk of the village area.

The present methods of *ghi* manufacture by individual milk producers in India are so wasteful that they are costing this country a direct wastage in butter fat alone of not less than Rs. 160,000,000 per year, to say nothing of the colossal waste that is taking place in the non-utilization of the by-products of *ghi*. There is no room in India for individual dairying so far as handling of milk is concerned, and, as has been found in all those countries in the world who have developed and improved their dairy cattle, there will be no real progress made in the improvement of our dairy cattle until a system of village dairy factories is established. Beef has little or no value here. Indian cows are not killed, and consequently all our cows must be dairy cows. The inauguration of a co-operative dairy factory system throughout the country is the first and most urgent step in the direction of Indian cattle improvement. The rural cow-owner in India must be taught the money value of milk before we can expect him to make any serious attempt to improve his methods of breeding, feeding and handling cows. This must be done here as elsewhere by means of the village dairy factory.

The Government of the Irish Free State, a country of small-holder dairy farmers, are at the present moment buying out the few proprietary creameries in that country and converting them into co-operative organizations, so convinced are they of the value of the co-operative dairy factory as an element in the economic development of the country. India lags far behind in this matter, but she must start on right lines and she cannot afford to ignore the lessons which other parts of the world have learned in the hard school of experience.—*The Journal of the Central Bureau for Animal Husbandry and Dairying in India*, Vol. I, Part 3, 1927.