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Agrekon

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Deserving articles in the field of agricultural economics, for publication in this journal, will be welcomed.

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A General Review of the Dairy Products Market in South Africa¹⁾

by P.J.H. Maree, manager of the Dairy Industry Control Board

The Problems

The problems confronting the dairy industry⁽²⁾ at present render it necessary to review the situation, particularly with a view to determining future policy. The most important problem at the moment arises from the large overproduction of dairy products for which only a limited outlet exists, and if the current trends in the production and consumption were to continue, the industry would be heading for a situation which could lead to a complete collapse.

These problems are not new to the dairy industry. In the twenties already, after the economic set-back that followed on the First World War, the existence of the industry was rendered difficult as a result of surpluses. The position became so serious that a commission of enquiry was appointed by the then Government with a view to finding a possible solution to the industry's problems. The commission's recommendations led to the establishment of the Dairy Board in 1930. The main function of the Board was to co-ordinate, as far as possible, the primary production, manufacture and marketing of dairy products and to regulate the export of the annual surplus in such a manner as would ensure that prices on the local market would be maintained at a reasonably stable level in accordance with demand and supply. To cover the export losses, a levy was imposed on production and the funds were utilised to pay a bounty on export. The Board attained a reasonable degree of success, but it was unable to control prices in order to prevent speculation and promote the necessary rationalisation in the industry.

The Marketing Act which was placed on the Statute Book in 1937, offered the necessary possibilities and with the institution of the Dairy Products Marketing Scheme in 1940, the Dairy Board was vested with the necessary powers to deal more effectively with the problems with which the industry was still confronted. By the fixation of prices from the producer to the consumer -

- (a) the producer has been assured of a definite price which is not subject to wide fluctuations;
- (b) the manufacturer's margin has been stabilised at a level which, in view of the security he enjoys, cannot be regarded as being unreasonable;

(1) The views expressed are those of the author, and not necessarily those of the Dairy Board.

(2) For the purpose of this article, the expression "dairy industry" covers only industrial milk and industrial milk products, and does not include fresh milk.

- (c) the retailer's margin has been restricted, and
- (d) the consumer has been assured of the lowest possible price under the particular circumstances.

By registration, the number of factories has been restricted and the manufacturing industry has been rationalised to such an extent that unit costs in the dairy industry now compare favourably with those of any other country. Compared with the pre-war period, the turnover per factory has increased more than fourfold in the case of butter and almost sevenfold in the case of cheese.

The introduction of the Dairy Products Marketing Scheme coincided with the outbreak of the Second World War, when conditions in the industry underwent a radical change. Surpluses made way for serious shortages, mainly on account of the sharp increase in the demand. To prevent inflation and to keep the cost of living within bounds, a conservative price policy was followed. Moreover, in the light of what had happened after the First World War, care was exercised to guard against an over-stimulation of production. Prices were only increased in line with increases in production costs. Fortunately, the then expected economic slump after the war never materialised. Production continued on an upward tendency and, slowly but surely, overtook the demand.

Post-war Developments

In the early 'fifties it again became necessary to export sporadic surpluses. The quantities involved were, however, very small and created no problem, but nevertheless sounded a warning which did not go unheeded, and the price policy was immediately modified. Despite the fact that production costs were still increasing, prices were slightly reduced as from 1953 and, except for minor adjustments, maintained at a lower level. Only in 1959 did prices again reach the level that they had obtained six years previously. The managerial allowance, based on the production costs of industrial milk as determined by the Division of Economics and Markets in 1949, was reduced from 25c in 1953 to 8c per 100 lb. of milk in 1961.

In spite of this decline in the profitability of dairying - a decline that was, however, also experienced in the other branches of agriculture - production continued to reflect a rising trend. This might have been due to increased efficiency on the part of the farmer, as well as due to more favourable weather conditions, but possibly also reflected an effort by the producer to maintain his gross income.

It is noteworthy that, after the first price reduction in 1953, the tendency towards an increased production declined but that, with only a moderate increase in price and a smaller profit margin in recent years, it rose sharply and led to the present critical

situation in the industry. It is mainly since the winter months of 1960 that this sudden increase in production began to assume unexpected proportions and, with minor fluctuations between the winter and the summer seasons, it has continued unchecked. It must be accepted that weather conditions, particularly in the high-producing areas, such as the Eastern Free State, were exceptionally favourable, especially during the winter months of the past two seasons.

Various reasons are advanced for the marked increase in production during recent years, such as, for example, the encouragement of the animal factor and the assistance rendered to the farmers by way of hypothec loans, which were largely spent on the purchase of dairy cows; also greater efficiency in the production of milk, and fresh milk surplus. Although these factors all contributed towards the increased production, one should guard against over-emphasizing the factors that could have played only a minor rôle. Thus, for instance, the cows acquired with the assistance of the Land Bank must no doubt have been in production, and only the enhanced production that possibly resulted from better feeding and management could have been a factor, unless the cows that were acquired were all cows which would normally have been slaughtered. In the case of fresh milk it is true that the surpluses increased, but that was not one of the most important reasons for the rapid increase in production. The largest production increases occurred in the Eastern Free State and the Northern Cape, where fresh milk plays a relatively minor rôle.

Favourable weather conditions (and, in consequence, an abundance of grazing for the animals), coupled with a general tendency, especially under financial stress, to pay more attention to dairying on account of the more regular income which it offers as against the inconstancies of cash crops, must be accepted as the main reasons for the exceptionally high production during the past two seasons. Greater efficiency may possibly be a factor, but there is not, as yet, clear proof that this is indeed a factor. The main yard-stick is the yield per cow. The surveys conducted by the Division of Economics and Markets in the main dairying areas in 1949 and 1957 did not, however, reveal any improvement in this respect.

If it is borne in mind that, since 1910, the production of butter and cheese has been increasing in accordance with an exponential curve, (determined by Dr. A.J.V. Rörich in 1952)⁽³⁾, and that this is still the case, and if it is also remembered that the potential for further development is practically unlimited, it must be accepted that this trend will continue. Price reductions which coincide with reductions in the prices of other agricultural products will hardly arrest it.

Marketing Problems

If potential markets had existed for this ever-increasing production, the problem would not have been so serious. Until the recent price reduction, however, the per capita consumption of butter has been declining, and in the case of cheese,

⁽³⁾ A.J.V. Rörich: A Study of Controlled Marketing of Dairy Products in South Africa, p. 101 et. seq.

consumption could only be increased at a high cost and by means of an intensive advertising campaign. Even a reduction of 5c (14.3%) per lb. in the price of butter could not bring about an increase of more than .5% in the consumption of choice butter, which merely proved once again how price-inelastic the consumption of butter as a spreading fat is, and that, in the case of the ordinary household, consumption has already reached saturation point. The average increase of 7.5% in the overall consumption of butter of all grades was largely the result of an increased consumption of the lower grades of butter by the less privileged section of the population and by industrial users. The tendency throughout the world seems to be towards a lower per capita consumption of butter, and in the case of the higher income groups who can indeed afford to use more butter, it will be difficult to alter this tendency.

The export market does not offer any better prospects, quite apart even from the uneconomic prices at which the products have to be marketed. The London market, which has been the traditional outlet for the country's surpluses, has now been closed to South Africa until March, 1963. The quota of 2,000 tons which was allocated to the Republic is insignificant in relation to its possible future surpluses. It is doubtful whether the position will improve materially, having regard to the fact that the United Kingdom will no doubt be obliged to make provision for countries such as New Zealand and Australia in the event of its becoming a member of the European Economic Community and the protective policy that this will entail. This also applies to Germany and Italy, who import supplies only when shortages are experienced. With the emigration of the white population from the other African Territories, also there markets are becoming smaller for South Africa. The East does not yet offer any worthwhile prospects, owing to its traditional dietary habits and a lack of purchasing power. In this field, strong competition must also be expected from Australia and New Zealand, who are concentrating on these markets in an attempt to solve their own dairying problems.

It is only in the case of cheese that exports to the United Kingdom can still continue without restriction, albeit at a considerable loss. However, rumours are already circulating about possible restrictions to prevent a further drop in prices.

Future Policy

In the light of these circumstances, which point to an ever-increasing production and a restricted market, the question arises as to what the future policy of the dairy industry should be.

As indicated above, the prospects of limiting production in the long term by means of price reductions, are not favourable, particularly where these reductions are coupled with a general reduction in the prices of other agricultural commodities. Downward price adjustments may retard development temporarily but will not prevent increasing attention being paid to dairying, having regard to the monthly cash income derived therefrom and the relative stability of offers. Production control by means of physical restrictions on the quantities of milk or cream which producers are permitted to supply, or on the number of cows which may be kept, cannot be regarded as very practicable. It must be expected, therefore, that the production of dairy products will possibly continue to expand, even if only gradually. Even if there is no increase in the

number of cows that are kept, the yield per cow can still be increased appreciably. Unless, therefore, an outlet for the enhanced production can be found, the future for the dairy farmer does not appear bright.

It has already been pointed out that a restricted and fluctuating export market exists for butter. To rely on this market as a solution to the industry's problems would be too great a risk. To a lesser extent, the same applies to cheese, although, in this case, the long-term prospects appear to be more favourable. Cheese does not have to contend with a cheap substitute, such as margarine; it is still the ideal protein food and in many countries its consumption can still be increased. The size of the market for cheese is, however, much smaller than that for butter and any change-over in the production from the one to the other can only be effected very gradually.

One is forced to the conclusion, therefore, that the dairy farmer will have to rely on the South African market as the only permanent outlet for his products, and that this market will have to be developed to the fullest extent.

With this end in view, the price of butter was reduced by 5 cents per lb. as from the 1st December, 1961, with the results already indicated. This reduction is now equivalent to the overall Government subsidy on butter, and it can hardly be expected that the subsidy should be increased still further.

Further price reductions aimed at increasing the consumption amongst the white section of the population would, owing to the price-inelasticity of the demand, hardly be justified, but in the case of the non-white section there is still a huge potential market that can be exploited. Because the non-whites, particularly in the peri-urban areas, are adopting the eating habits of the whites to an increasing extent, there is already some demand for butter, but economic considerations prevent the non-whites from using butter on the same scale as the whites. In the non-white market the price factor is accordingly of paramount importance. Surveys conducted by the Dairy Board indicate that the non-white cannot afford to pay more than 25 cents per lb., which is still 3 cents below the subsidised price of table butter. The potential sale of cheese is proportionally even greater, but at a price much lower than the current price of 28 cents per lb. The price will possibly have to be reduced to 20 cents per lb. in order to develop the market. The prices realised on the overseas market are sometimes even lower than 20 cents per lb.

With the higher incomes which the non-whites are expected to earn in the future, a local market will be created which may offer great possibilities, provided it is developed along the right lines and the products are offered at prices that the non-white can afford. The Dairy Board's experience is that there are many problems connected with this market, but they are problems which can, in due course, be overcome. This market, together with any additional sales which the Dairy Board is able to effect amongst the white section of the population by means of special schemes, will have to absorb the additional production.

In order to be able to sell at the lower prices, locally as well as overseas, the industry will have to reduce its production costs appreciably. As a result of the

rationalisation policy followed by the Board through the years, manufacturing and distribution costs have already been brought to a level where any further savings cannot contribute materially to a reduction in price, - in view of the slight percentage which these constitute in the cost of the end product. The primary producer is the one who is best able to effect important savings, although few producers will admit this fact. In this connection, however, it is merely necessary to refer to the most important item that determines unit costs, viz. the yield per cow. In the recognised dairying areas in South Africa the yield amounts to only 300 gallons per year, which compares very unfavourably with the yields in any recognised dairying country - even Australia, where conditions generally are no better than in South Africa and where the average yield per cow amounts to approximately 450 gallons. With better breeding, feeding and management, this figure can be exceeded - many industrial milk producers obtain even better results. In South Africa dairying is unfortunately still regarded as a sideline by many farmers, with the result that the authorities have also not yet given it that attention in respect of research work and intensive guidance in regard to production and the economic aspects, which the size of the industry merits. The extensive herd survey which is being carried out by the Department of Agricultural Technical Services to expose the limiting factors to more economic production of milk is a welcome step in the right direction.

Lower production costs are not only possible but also an essential requirement for the development of a market for the future production of the dairy farmer.

INDICES OF THE PRICE OF BUTTERFAT AND THE PRODUCTION OF INDUSTRIAL MILK

(Base: 1947/48 - 1949/50 = 100)

