

1938.  
NEW ZEALAND.

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## GUARANTEED PRICES ADVISORY COMMITTEE, 1938.

(REPORT OF THE).

*Laid on the Table of the House of Representatives by Leave.*

The Hon. the MINISTER OF MARKETING, Wellington.

SIR,—

We have the honour to submit the report of the Committee that was set up to advise the Government regarding the prices to be paid for butter and cheese manufactured from cream and milk supplied to dairy factories from 1st August, 1938, to 31st July, 1939, and placed on board ship for export with the concurrence of the Primary Products Marketing Department.

The personnel of the Committee was :—

Hon. Sir Francis Frazer (Chairman), Deputy-Chairman, Executive Commission of Agriculture :

Mr. C. P. Agar, Managing-Director, Tai Tapu Co-operative Dairy Co., Ltd. :

Mr. H. M. Caselberg, Supervising Valuer, State Advances Corporation of New Zealand :

Mr. G. A. Duncan, Director, Dairy-produce Export Division, Primary Products Marketing Department :

Mr. W. Marshall, Acting-Chairman, New Zealand Co-operative Dairy Co., Ltd. :

Mr. N. H. Moss, Barrister and Solicitor, Stratford :

Professor A. H. Tocker, Professor of Economics, Canterbury University College.

Messrs. Caselberg, Duncan, and Moss were appointed directly by the Government, and Messrs. Agar and Marshall and Professor Tocker were appointed by the Government on the nomination of a committee representing the dairying-industry organizations. The Hon. Sir Francis Frazer was appointed as Chairman after the Government had conferred with the industry organizations and had ascertained that his appointment would be acceptable to the industry. Mr. G. M. Pottinger, Secretary of the Dairy-produce Export Division of the Primary Products Marketing Department, was appointed as Secretary of the Committee.

The Committee met the Hon. the Minister of Marketing on 27th July, 1938, when the Minister outlined the order of reference and the general lines of the procedure to be adopted. The order of reference was contained in subsections (4) and (5) of section 20 of the Primary Products Marketing Act, 1936. Regarding procedure, the Hon. the Minister stated that the proceedings of the Committee would be confidential until released by the Government, that the Committee might at its discretion call as witnesses any persons who in its opinion were competent to give evidence that might assist it in its deliberations, and that any information available from Government sources would be placed at the disposal of the Committee as required. The Hon. the Minister indicated that the Committee, in interpreting the order of reference, was at liberty to consider any matters that it deemed to be relevant to the issues before it, and to attach to them such weight as it deemed proper.

### PROCEEDINGS OF COMMITTEE.

The Committee sat continuously from 27th July, 1938, until it had completed its deliberations. It circularized dairy-industry organizations and dairy-factory companies, inviting them to submit evidence regarding costs and other matters, and heard the evidence of the following witnesses :—

- (1) Messrs. W. W. Mulholland and A. P. O'Shea, representing the New Zealand Farmers' Union ;
- (2) Messrs. G. R. Herron, G. H. Smith, F. Paul, and B. Clearwater, representing the dairying interests of Southland ;
- (3) Messrs. W. E. Hale, Chairman, and T. C. Brash, Secretary, representing the New Zealand Dairy Board ;

- (4) Messrs. F. O. R. Phillips and R. A. Candy, representing the New Zealand Dairy Board and the New Zealand Co-operative Dairy Co., Ltd. ;
- (5) Mr. C. H. Courtney, representing the Eltham Co-operative Dairy Factory Co., Ltd. ;
- (6) Mr. J. W. Butcher, Government Statistician ;
- (7) Messrs. E. J. Fawcett (Acting Director-General) and W. N. Paton, of the Department of Agriculture ; and
- (8) Messrs. E. S. Smith (Deputy Commissioner) and H. A. Smith, of the Land and Income Tax Department.

The Valuer-General forwarded a statement regarding values of land suitable for dairy-farming in the different land districts. A number of communications were received from dairy-factory companies concerning local cheese sales, low cheese-yields in certain districts, the provision of a sliding scale of costs' allowances for cheese-factories according to volume of output, the probable reduction in the number of dairy cows, and the difficulty of obtaining labour for dairy-farms and cheese-factories.

### REPORT UNANIMOUS.

The Committee submits a report unanimous on all points. The evidence, both general and statistical, was carefully and closely scrutinized and analysed, and the knowledge possessed by the members of the Committee of the various phases of the dairying industry in the different parts of the Dominion enabled apparent conflicts of evidence to be reconciled and the influence of local conditions to be allowed for. The members of the Committee realized the desirability of deciding on standards of efficiency and of costs' measurement which, though probably not applicable in detail to any particular farm, could, nevertheless, reasonably be applied as general standards to an efficiently managed farm in any part of the Dominion. With regard to many matters of detail, evidence of facts was available, on which a decision could be reached after each item of evidence had been given its proper value. In respect of some other matters, however, insufficient factual data were available to enable a decision to be based upon them. These were largely, and of necessity, matters of opinion, and the members of the Committee freely exchanged their views and the reasons for those views, and finally reached decisions that they all could unreservedly accept.

### FUNCTIONS AND PROCEDURE.

#### (a) INTERPRETATION.

The order of reference of the Committee is set out in subsections (4) and (5) of section 20 of the Primary Products Marketing Act, 1936, which are as follows :—

(4) In fixing prices under this section in respect of dairy-produce exported after the thirty-first day of July, nineteen hundred and thirty-seven, regard shall be had to the prices fixed under this section in respect of dairy-produce exported before that date, and to the following additional considerations, namely—

- (a) The necessity in the public interest of maintaining the stability and efficiency of the dairy industry ;
- (b) The costs involved in the efficient production of dairy-produce ;
- (c) The general standard of living of persons engaged in the dairy industry in comparison with the general standard of living throughout New Zealand ;
- (d) The estimated cost to the Department of marketing the dairy-produce concerned, and also the cost of the general administration of this Act ;
- (e) Any other matters deemed to be relevant.

(5) Due regard having been paid to the several matters mentioned in subsection four hereof, the prices fixed in respect of any dairy-produce exported after the thirty-first day of July, nineteen hundred and thirty-seven, shall be such that any efficient producer engaged in the dairy industry under usual conditions and in normal circumstances should be assured of a sufficient net return from his business to enable him to maintain himself and his family in a reasonable state of comfort.

In view of the many considerations involved in the legislation, the Committee thinks it desirable to make a detailed examination of its order of reference.

Subsection (5) contains the overriding consideration, and for that reason is dealt with first. It is to be noted that the requirement is that an *efficient* producer, engaged in the dairying industry under usual conditions and in normal circumstances, is to be assured of a net return sufficient to maintain a reasonable state of comfort. What constitutes a reasonable state of comfort is to be ascertained by reference to the state of comfort for the time being of the community generally, for a reasonable standard of comfort is related to the size of the fund available for distribution throughout the community and to the shares of that fund enjoyed by other sections of the community performing comparable services. It is to be regarded as a standard higher than that which provides merely for the necessities of existence or the necessities of efficiency ; but the extent to which it exceeds such a standard cannot be laid down in fixed and final terms, but must necessarily depend upon the rate and amount by which the national income expands.

Consideration must be given to all relevant circumstances before arriving at a conclusion as to what may be considered a reasonable net return for the efficient producer described in subsection (5). In this connection regard must be had to the protection against world market fluctuations that is afforded to dairy-farmers by the guaranteed prices system, which is designed to provide a " buffer " between the market and the producer by fixing economic prices for the producer and assuming a collective responsibility for the payment of those prices. It is necessary to consider, too, the relative

security of tenure of occupational income enjoyed by an efficient dairy-farmer under usual conditions and in normal circumstances, as compared with that of artisans, storekeepers, professional men, and others whose capital and income may be imperilled through casualness of employment, slackness of trade, competition, and other contingencies. Regard should also be had to the fact that the dairy-farmer is assured of housing accommodation, and can provide on his own property for certain of the food requirements of himself and his family.

It is to be noted that the term “efficient *producer*” is used in subsection (5). This means something more than a man who is efficient in himself: it means a man who is *producing* efficiently. That this is the intention of the Legislature is made clear when subsection (5) is read with paragraph (b) of subsection (4), which requires that regard shall be had to the costs of efficient production. Subject to the provisions of subsection (4), it is necessary to decide on standards of productive efficiency “under usual conditions and in normal circumstances.” Conditions are the pre-requisite factors of production, and circumstances are the more adventitious, accessory, environing factors that may influence results. “Usual conditions” relate to the suitability of the land farmed, the quality of the management of the farm, the methods of farming used, the adequacy of the labour employed, the provision of stock, plant, and equipment of a reasonable standard, and similar matters. “Normal circumstances” include such factors as ordinary seasonal and weather conditions and an average incidence of pests and animal diseases.

Subsection (4) sets out certain considerations to which regard must be had before prices are fixed under subsection (5). The general requirement of subsection (4) that regard is to be had to prices fixed in respect of dairy-produce exported on or before 31st July, 1937, is necessarily linked with paragraph (e), which requires consideration to be given to “any other matters deemed to be relevant.” These matters include the prices fixed for the 1937–38 season and the prices realized by the Department for that season. Regard should also be had to the trend of the United Kingdom market and the general trend of world trade, and their probable effect on future realizations.

Paragraph (a) of subsection (4) refers to the necessity of maintaining both the stability and the efficiency of the dairying industry. It is accepted that the dairying industry is an essential industry, and that therefore it must be maintained. Stability is both internal and external. Within the industry itself, it is important that stability should be maintained between butter-production and cheese-production, for it is desirable that New Zealand should retain her share of the cheese market of the United Kingdom and that the butter market should not be overloaded as a result of a change-over from cheesemaking to buttermaking. Prices, therefore, should not be fixed at levels so low as to endanger the external stability of the dairying industry as a whole by rendering it uneconomical in relation to other industries; and the relative prices of butter and cheese should be so adjusted as to enable a balanced production to be maintained and the internal stability of the industry to be preserved. It is necessary, too, that prices should not be fixed at levels so high as to lead to inefficiency through neglect of pig-rearing, non-utilization of by-products, employment of wasteful methods, &c.

Paragraph (b) requires that regard shall be had to the costs involved in the efficient production of dairy-produce. These cover farm and factory costs to f.o.b. The use of the word “efficient” renders it unnecessary for the purposes of this paragraph to consider the costs of farms, farmers, and factories that are not efficient in themselves or are not employing efficient methods.

Paragraph (c) should be contrasted with subsection (5). The latter, as has been shown, requires the fixation of prices designed to provide a reasonable state of comfort for an efficient producer. The former requires that regard shall be had to the general standard of living of all persons (employers, members of employers’ families, and hired employees) engaged in the dairying industry in comparison with the general standard of living throughout New Zealand—that is, the general standard of living of the community generally. Paragraph (c) requires, in broad terms, that the reward of persons engaged in the dairying industry should, as far as possible, be sufficient to enable them to maintain, in their several degrees, a standard of living commensurate with that of the rest of the community, regard being had to the relative value of the services rendered by each section of the community. It must be remembered in fixing prices that if prices are fixed at an unduly high level in relation to sales realizations, the persons engaged in the dairying industry may have their standard of living raised above that of the rest of the community, for a continued and cumulative deficit in the Dairy Industry Account must be borne by the community as a whole.

Paragraph (d) requires that regard shall be had to the Department’s cost of marketing and the cost of the administration of the Act. These matters call for no special comment.

Paragraph (e) covers all other matters deemed to be relevant. Specific references to such matters have been made earlier in this report. An important relevant matter is the necessity of attracting to and retaining on dairy-farms an adequate supply of suitable labour. A further relevant matter is the necessity of ensuring that prices shall not be fixed at such levels as will cause the breakdown of the system of guaranteed prices, which has been designed to stabilize the incomes of persons engaged in the dairying industry and to afford an insurance against the seasonal and inter-seasonal fluctuations of a world market. It will be impossible to ensure the continuance of a reasonable state of comfort if prices are fixed at levels so high as to render it impossible to avoid deficits in the Dairy Industry Account of such magnitude as necessarily to react to the detriment of the general standard of living of the community, though it is accepted that the community as a whole will bear such deficits as it may be necessary to meet in order to maintain the persons referred to in subsection (5) in a reasonable state of comfort.

The functions of the Committee were (i) to investigate as fully as possible, and in accordance with its order of reference, the several matters that it was required to consider, (ii) to determine reasonable standards of efficiency, and (iii) to make recommendations based on the results obtained from a consideration of all relevant data.

## (b) EVIDENCE.

The Committee had available to it a more comprehensive range of evidence and statistical data than was available to the Committee set up to recommend prices for the 1937–38 export season, and had the benefit of the experience of that season's operations. In particular it had placed before it a survey, prepared for the New Zealand Dairy Board, of 2,487 dairy-farms in the Waikato and surrounding districts, and a more detailed analysis of costs and returns for 156 dairy-farms in the Waikato and Te Aroha districts. Statements regarding capitalization, costs, and standards applicable to the industry generally were submitted by the New Zealand Dairy Board. The New Zealand Farmers' Union, the South Island Dairy Association, and representatives of the Southland dairy-farmers also submitted statements bearing on these and cognate matters. Evidence as to the movement of dairy-factory costs was given on behalf of the New Zealand Co-operative Dairy Co., Ltd., and the Eltham Co-operative Dairy Factory Co., Ltd., and information collected from dairy-factory companies by the Primary Products Marketing Department on this subject was made available to the Committee. The Valuer-General supplied details of current valuations of dairy-farm land in the different land districts. The Land and Income Tax Department supplied tabulated data regarding the returns of income made for Employment Tax assessment purposes by dairy-farmers the unimproved value of whose farms did not exceed £3,000. The Government Statistician presented further statistical data relating to the survey, covering 19,307 farms, made by him in 1936–37 for the former Committee. The Department of Agriculture submitted details of a comprehensive analysis of returns from a number of representative dairy-farms in different parts of the Dominion. A large percentage of these farms were included in the farms surveyed by the Department for the Dairy Industry Commission of 1934, and the survey and analysis had been amplified and brought up to date. In practically every case the written statements and statistical data submitted by the different bodies and departments were supplemented by oral evidence given before the Committee.

A number of industry witnesses were inclined to question the representative nature of the farms covered by the returns submitted by the Department of Agriculture. The Committee recognizes the extremely valuable nature of the information collected by the Department, and recognizes also the important bearing that the method of collection and checking has on accuracy. The only serious objection that can be made to the Department's returns is that the selection of farms, though doubtless made with perfect fairness, does not satisfy all sections of the industry as to its representative nature. It is therefore recommended that in future years specially appointed representatives of the dairy industry organizations be associated with the Department in the selection of farms and the checking of data on the farms.

In weighing the evidence it was necessary to make allowance for certain factors. Owing to variations in soil, climate, types, and methods of farming, and other matters, it was impossible to accept statistics relating to any single locality as typical of the Dominion. The information submitted by the Department of Agriculture was the most complete and accurate, all returns from individual farmers having been carefully checked, both on the farm and in the Department's offices, by experienced officers. The number of farms (486) included in the sample was, however, too small to justify a definite conclusion as to their representative nature, though the Committee was satisfied that the Department had endeavoured to select farms that were reasonably representative of the districts in which they were situated. The larger number of farms (19,307) included in the Government Statistician's Dairy-Farm Survey of 1936–37 was more representative, but it included farms on which, to a greater or less degree, mixed farming was carried on. The survey was conducted through the post, and the results could not be checked as fully as those of the survey conducted by the Department of Agriculture through its officers. A measure of estimation and inaccuracy must be allowed for, because most dairy-farmers do not keep sufficient books and records to enable them to supply the detailed information required by the Government Statistician. The evidence given by the Deputy Commissioner of Taxes illustrates the tendency of dairy-farmers to overstate items of expenditure and understate items of revenue, though it is not suggested that in the majority of cases there is any deliberate attempt to mislead.

Regarding the standard of living of the dairy-farmer as compared with that of other sections of the community, the Committee desires to point out that the only evidence tendered as to the net income of the dairy-farmer was that of the Deputy Commissioner of Taxes, but that the figures submitted by that officer included, under the heading of "net income," the value of unpaid family labour and interest on the farmer's own capital.

In the determination of the prices required to be paid for butter and cheese in order to give the efficient producer a net return sufficient to ensure the state of comfort intended by subsection (5), regard must be had to the operation, during the past few years, of factors beyond the farmer's control. The return referred to in the subsection is a net return, which represents the margin between the costs he has to meet in production and the prices he receives for his product. Over the past two years wages throughout the Dominion have risen substantially, and the wage-increases have been accompanied by a reduction of hours of work and a more liberal provision for holidays, &c. This has affected costs of production generally.

The first effect on the dairy-farmer has been to increase the cost of materials entering into his working and maintenance costs, and to increase the cost of manufacturing his product. The increase in manufacturing costs is particularly noticeable in the case of cheese-factories. The second effect is that this change has raised substantially the wages the farmer has to pay and has necessitated an improvement in the conditions as to holidays, &c., that he must offer to meet competition for labour and to attract labour to the farm and to the dairy factory. The third effect is that the general raising of standards has meant that the farmer must be given a higher net return, after all his costs have been met, in order to ensure to him a standard of living comparable with that of the rest of the community.

All this must necessarily be covered by the prices to be fixed, if the provisions of the Act are to be implemented.

The Committee applied its own knowledge and experience to the consideration of the evidence, and determined standards of efficiency and standard allowances that would enable it to construct a foundation for its recommendation.

### STANDARDS OF EFFICIENCY AND STANDARD ALLOWANCES.

The Committee had before it the standards of efficiency determined by the Committee that advised the Government regarding the guaranteed prices to be fixed for the export season 1937-38. It considered itself as being at liberty to revise those standards where it appeared, in the light of the more complete evidence and information available to it, necessary and proper to do so. The Committee considers, however, that it is undesirable that, in the absence of specially cogent reasons, standards of efficiency once definitely established should be altered from year to year. As a general rule, these standards should remain constant for a term of years, and should be revised only when there is evidence of changed conditions.

#### 1. STANDARD OF EFFICIENT FARM.

A survey of the butterfat production per acre in all districts from North Auckland to Southland disclosed a wide range of extremes. Production per acre depends on a number of factors apart from the more generally recognized factors of soil and climate. The Committee found that in some districts allowance had to be made for a large percentage of dairy-farms being in an early developmental stage. Allowance had to be made, too, for a relatively high return from sales of surplus stock in the case of dairy-farms within the lower butterfat-production groups. It was necessary also to allow for returns from sheep (particularly in Southland), stock-fattening, and crops. In some districts, more especially in the South Island, pure dairy-farming was found to be the exception, dairying being merely a single item in a system of mixed farming.

The individual farms differ in rough correspondence with the condition of the districts in which they are found, and range from pure dairy-farms, large in some districts and small in others, to dairy-farming mixed in varying degree with sheep-raising, cattle-fattening, cropping, &c. Further, no two farms are exactly alike. The human equation enters into the problem, and each individual farmer has to adapt his organization and management to his own resources and to the conditions he has to meet. The consequent differences in farm organization apply to both land-management and herd-management, and the results of these differences are seen in the wide range of butterfat-production per acre and per cow, and in the variation in the supplementary returns received for pigs, stock, &c.

It is from this field, with its extensive range, and almost infinite variation, that the Committee has had to choose those standards which will approximate most closely to the requirements of the Act, and which will give the efficient producer, working under usual conditions and in normal circumstances, a net return sufficient to provide a reasonable state of comfort. The method followed has been to choose appropriate standards, and after full consideration of costs and returns, to provide the equivalent of piece rates for production on pure dairy-farms, where the costs of dairy-production can be most effectively isolated, and then to apply those rates to dairy-production on farms on which dairying is associated with other farming activities, and in respect of which the effective separation of costs and returns for the different farm activities is impracticable.

It was impossible for the Committee to be dogmatic within narrow limits on the matter of a Dominion standard of per-acre efficiency for dairy-farms; and, after a full consideration of all available data, it accepted the range adopted by the former Committee, of 100 lb. to 175 lb. of butterfat per acre, as the standard of farm efficiency.

#### 2. STANDARD OF LABOUR EFFICIENCY.

Here again the range of efficiency variation is very wide, and the Government Statistician's average figure of 4,540 lb. of butterfat per full-time male adult equivalent is far below the average figures of 6,095 lb. (cream farms) and 7,396 lb. (whole-milk farms) supplied by the Department of Agriculture. The volume of labour devoted to development work, sheep, cropping, and other farming activities involves, in many cases, a low butterfat-production per unit of labour employed. At the other end of the scale, however, there are cases in which a butterfat-production of more than 10,000 lb. of butterfat per unit of labour is attained. In considering the figures given by witnesses it is necessary to allow for a considerable margin of error, for "part-time employment" of a woman or a child may range between occasional assistance in the flush of the season and regular daily duty in the milking-shed. The Committee has accepted for whole-time adult male labour a weighting of 7. This weighting applies to the labour of youths who are full-time employees. A weighting of 6 has been applied to full-time female labour, and a weighting of 3 to all labour, whether of males or females, adults or juniors, employed only in the milking-shed. These differ from the weightings adopted by the Government Statistician (Year-Book, 1938, pages 440 and 441).

As in the case of the assessment of farm efficiency, so also in the case of the assessment of labour-unit efficiency, the Committee has endeavoured to translate into terms of butterfat-production the labour devoted on mixed farms to activities other than dairying. The problem has been a very difficult one, but the Committee has arrived at the conclusion that a reasonable standard of efficient production per full-time male adult labour equivalent is 5,750 lb. of butterfat. This is somewhat lower than the figure of 6,250 lb. of butterfat adopted by the majority of the former Committee, but is accepted by all members of the present Committee as being in conformity with the weight of the evidence now available to it.

## 3. STANDARD OF PER-COW EFFICIENCY.

The range of butterfat-production per cow is exceedingly wide. The Government Statistician (Year-Book, 1938, page 435) schedules groups ranging from under 100 lb. per cow to over 360 lb. per cow. Eight out of ten members of the former Committee accepted the figure of 258 lb. quoted by the Department of Agriculture as a reasonable standard of per-cow efficiency. The present Committee has had the advantage of having more detailed information for its assistance, and has decided not to adopt a unit figure, but to take a group figure as its standard of per-cow efficiency. The group figure that it has decided to adopt is that for 220 lb. to 260 lb. of butterfat per cow. This is a factory figure, not a gross farm figure. It is thought that the adoption of a group figure instead of a unit figure is more appropriate for the purpose of assessing a Dominion standard, more especially because no one standard can be separately applied in the case of any particular farm or district, and because all the standards adopted by the Committee are inter-related.

## 4. STANDARD OF CAPITALIZATION PER COW.

The former Committee adopted a capitalization of £73 per cow. The present Committee finds this standard to be approximately correct, but the information now available leads to the conclusion that £75 per cow is a more exact figure. The Committee has accordingly fixed £75 as the standard of capitalization per cow.

## 5. STANDARD RATE OF INTEREST.

The Committee, after considering the varying interest rates properly applicable to the producer's own capital employed in dairy-farming and to capital borrowed on the security of land, stock, and plant, and making a due apportionment among the different items, adopted a standard interest rate of  $4\frac{1}{2}$  per cent., to be applied to the capitalization of £75 per cow. This is the same rate as was adopted by the former Committee, and is equivalent to 3·375d. per pound of butterfat.

## 6. STANDARD WORKING AND MAINTENANCE COSTS.

The Committee devoted considerable time to the consideration of a standard measure of working and maintenance costs. Every item that could properly be regarded as coming within this category was separately discussed and was given its due weight. Certain items which bulk largely in the costs of particular classes of farms in certain districts are of less importance in the case of other farms in other districts, and accordingly an endeavour was made to construct a standard measure, which, though not applicable in detail to any particular farm, would in gross be of general application to all reasonably efficient farms. The Committee has decided that the standard amount per pound of butterfat to be allowed for working and maintenance costs, including depreciation, is 5·695d. An ascertained increase in costs since 1936-37 and the inclusion of new items have brought the figure unanimously adopted by the former Committee from 5·07d. to 5·695d. The amount allowed for depreciation is 0·95d. per pound of butterfat. The Committee is of the opinion that this is a reasonable amount to fix as a standard, and that the allowance for depreciation should be regarded as a fixed allowance, especially when it is borne in mind that depreciation in respect of any farm is an item that does not vary in amount in exact ratio to increases and reductions in the volume of butterfat produced on that farm.

## 7. STANDARD OF PIG RETURNS.

All costs of pig-rearing are covered by the allowances made for general working and maintenance costs and for capital charges, and the amount to be credited as representing the return from pigs must accordingly be a gross figure. The former Committee had less complete information than is now available regarding the returns obtainable from pigs on whole-milk producing farms. A majority of its members adopted a figure of 1·54d. per pound on butterfat-production as representing pig returns on cream-producing farms. This Committee is satisfied that that figure is correct, and it has adopted it. It finds, however, that pig returns on whole-milk producing farms are higher than was considered last year to be the case, and that they represent approximately 0·75d. per pound on butterfat-production. However, in view of the fact that all standards are based on cream-producing farms only, milk-producing farms being protected by the provision of an assumed differential butterfat margin of 2d. per pound, this aspect need not be elaborated in this section of the report, but will be referred to later.

The figure of 1·54d. per pound of butterfat for pig returns represents a Dominion average of returns from cream-producing farms of all degrees of efficiency, including farms on which no pigs are kept. It is exceeded where conditions are suitable and management is efficient. In many cases low returns from pigs are balanced by high returns from sales of surplus stock and other miscellaneous sales. In other cases low returns from pigs are due either to inferior management of pigs or to failure to keep as many pigs as can be efficiently handled, or to both causes. The Committee is satisfied that the figure of 1·54d. per pound of butterfat for pig returns on cream-producing farms represents a reasonable standard of efficiency.

## 8. STANDARD ALLOWANCE FOR HOUSING AND PERQUISITES.

The Committee has decided to adopt the existing allowance of £1 10s. per week as fairly representing the value of housing and items of food requirements available on the farm for the dairy-farmer and his family.

### 9. STANDARD OF DAIRY-FACTORY COSTS.

The Committee had placed before it evidence regarding a general increase in dairy-factory costs during the season 1937–38. It also took into consideration the effect on costs for the 1938–39 season of increased wages rates and improved conditions of labour prescribed by recent awards of the Court of Arbitration.

In the case of manufacture of butter, the Committee considers that, even with these increases, the present standard allowance of 2·25d. per pound of butterfat for costs from farm gate to f.o.b. ocean steamer is sufficient to meet the costs of a reasonably efficient butter-factory. It considers, also, that the existing standard manufacturing overrun of 21·75 per cent. should remain unaltered.

In the case of the manufacture of cheese, the present standard allowance of 3·25d. per pound of butterfat for costs from factory stage to f.o.b. ocean steamer is insufficient to meet for the season 1938–39 the increase in costs that has taken place during the 1937–38 season. This is due largely to the fact that the labour requirements of a cheese-factory are, per unit of butterfat, considerably greater than those of a butter-factory and that the processes of cheese-manufacture involve labour conditions less capable of calculation and control. There is the further circumstance that, on the average, cheese-factories have smaller outputs than butter-factories. This tends to raise costs per unit of butterfat. The Committee considers that the standard allowance for cheese-factory costs from factory stage to f.o.b. ocean steamer should be raised to 3·50d. per pound of butterfat, to meet ascertained costs increases. The present standard net cheese yield of 2·45 lb. of cheese per pound of butterfat should not, in the opinion of the Committee, be varied.

### FURTHER CONSIDERATIONS AFFECTING STANDARDS.

The Committee has already expressed the opinion that standards, once definitely established, should not be varied at short intervals and without cogent reasons. This applies particularly to standards of pure efficiency, for progressive reduction of such standards tends to encourage inefficiency, and progressive raising of such standards imposes a penalty on improved efficiency.

#### 1. PER-COW AND PER-ACRE PRODUCTION.

The evidence considered by the Committee led to the conclusion that low butterfat-production per cow and per acre was often associated with relatively high returns from sales of surplus stock and other sources. In adopting as a standard the butterfat-production range of 100 lb. to 175 lb. per acre, the Committee allowed for the rearing of 20 per cent. of replacement stock. The evidence indicates that, over the Dominion as a whole, replacements are more than balanced by sales of surplus stock, but it is found that, where butterfat-production per acre is high, there is a tendency to purchase replacement stock as a matter of farm-management policy.

#### 2. BUTTERFAT-PRODUCTION PROSPECTS.

Some well-informed witnesses who appeared before the Committee were concerned about the trend and the prospects of butterfat-production. The season 1936–37 was an exceptionally favourable one, and both total production and production per cow achieved new high records. The 1937–38 season has been less favourable, total production has declined somewhat, and it is estimated that production per cow will be less than in the preceding year. There is also evidence of some change-over from dairying to sheep-farming. While few farmers have made the complete change-over, many are running more sheep than formerly and are giving relatively more attention to sheep.

A further matter affecting production, and meriting investigation, arises from the opinion expressed by a witness that production per cow had now reached its maximum under present conditions. The grounds for this opinion are, first, that the average butterfat per cow supplied to factories from tested cows is now little higher than the New Zealand average from all cows; and, second, that the production from average pedigree herds is little, if any, higher than that from grade herds. If this is correct, it means that the present average pedigree sire cannot be expected substantially to increase the butterfat-production of the average herd. It would appear that, in order to obtain a further increase, methods must be devised for improving the butterfat standard of herd sires.

#### 3. DIFFERENTIAL PAYMENTS AND ALLOWANCES.

The Committee was requested by some cheese-factory interests to recommend, in the case of small cheese-factories, an increase in the existing differential margin of 2d. per pound in favour of butterfat supplied for cheese-making, or, alternatively, to recommend the adoption of higher costs allowances for those cheese-factories. The Committee considers that it would be impracticable to adopt standards varying with the outputs of factories. It is to be noted that it frequently happens that the higher costs of a small cheese-factory are balanced by a higher cheese-yield. The Committee recognizes that any differentiation made in favour of the smaller cheese-factories, whether in regard to the marginal butterfat allowance or to the factory costs, would lead logically to similar claims being made on behalf of the smaller butter-factories. In the final issue, it is conceivable that claims for special consideration would be made for some factories in every district.

The attention of the Committee was specifically drawn to the generally higher costs of cheese-manufacture in Southland. For the 1936–37 season the Dominion average of cheese-factory costs was 3·139d. per pound of butterfat, and the Southland average was 3·616d. per pound of butterfat. However, notwithstanding the higher manufacturing costs, the average pay-out per pound of butterfat of the

Southland cheese-factory companies was approximately 15·125d., while the Dominion average butterfat pay-out for cheese was approximately 15·05d. per pound. This indicates that the higher manufacturing costs in Southland were on the average more than offset by a cheese-yield in excess of the Dominion average. The complete returns of cheese-manufacturing companies for the 1937–38 season are not yet to hand, but the indications are that the comparison made in respect of the 1936–37 season will hold good for the 1937–38 season.

This Committee notes that the former Committee regarded approximately  $\frac{1}{4}$ d. of the increase to 2d. per pound in the marginal butterfat payment for cheese-milk as attributable to the factor of low cheese-yields, but suggested that provision for this factor should be treated “as a temporary expedient until a solution of the yield problem is found.” This Committee considers that a further increase, to offset a continued lowering of the cheese-yield, is open to objection. It therefore recommends that the price fixed for cheese for the 1938–39 season should not be augmented on account of a cheese-yield lower than the standard net yield of 2·45, even though cheese-factory companies on the average do not show the anticipated margin of 2d. per pound of butterfat.

The whole question of the relation of the net return to suppliers of milk for cheese-manufacturing to the net return to suppliers of cream for butter-manufacturing involves a consideration of the nature of the milk-supply for cheesemaking, the yield of cheese per pound of butterfat, economic cheese-manufacturing conditions, the method of payment for milk for cheesemaking, and the net return to cheese-milk suppliers per cow and per acre. These factors cannot appropriately be considered in this report, but the Committee is of the opinion that, if the conditions in respect of cheese yield are such that a yield allowance of 2·51 gross or 2·45 net is insufficient to enable the 2d. per pound differential payment for butterfat to be generally realized, then an investigation of the factors referred to must be made by the industry.

#### 4. THE RELATION BETWEEN BUTTER AND CHEESE.

The Committee recognizes that, in order to maintain the balance of production between butter and cheese, a calculated differential marginal payment in favour of butterfat supplied for cheesemaking must be allowed for. It is of opinion, however, that, in view of the evidence respecting the pig returns of efficiently managed cheese-milk farms, it is unnecessary to increase the existing margin of 2d. per pound of butterfat, more especially as the provision of that margin has had the effect that it was intended to produce, for cheese-production during the past season has more than maintained its relative balance with butter-production. The gradings of cheese for 1937–38 showed a decrease of 3·12 per cent. from those of 1936–37, while those of butter showed a decrease of 7·59 per cent.

#### 5. THE RELATION TO OTHER INDUSTRIES.

It is equally necessary to avoid unbalanced production between dairy-produce and other primary products as it is to preserve balanced production between butter and cheese within the dairy-produce group. It is essential that the prices to be paid should provide sufficiently for all costs and charges relating to production and for an adequate reward for management and labour, for otherwise land that can be utilized for other purposes will not be used, or will be less intensively used, for dairying purposes, and it will become increasingly difficult to obtain the necessary labour in competition with non-farming industries. On the other hand, it is essential that prices should not be so high as to attract producers from other primary industries.

#### 6. EFFECT ON LAND AND STOCK PRICES.

The Committee desires to point out that the prices paid for butter and cheese, due regard being had to costs and charges of production and to the reward of management and labour, have a direct effect on the movement of prices of land and stock. If the latter prices are to be kept reasonably stable, the prices of butter and cheese must be fixed in relation to carefully ascertained standards.

#### 7. PROBABLE EFFECT OF PRICE ON DOMINION PRODUCTION.

In the case of butter, the overseas market is extremely sensitive to variations in the volume of supplies. The opinion has been authoritatively expressed that a variation of 2½ per cent. in the total supplies from Empire countries affects the average returns by 7s. 6d. to 10s. per hundredweight. The stability of the industry and the capacity of the Dairy Industry Account to bridge a widening gap between prices paid and prices realized by the Government are therefore threatened if an over-generous price leads to over-production.

#### 8. TONE AND TREND OF THE MARKET.

The United Kingdom still enjoys relatively prosperous conditions, but it is uncertain whether the improvement will be maintained. World conditions generally are difficult to assess, and it is impossible to predict their possible effects on the United Kingdom market. The Committee quotes the following annotated cablegram, dated 20th July, 1938, received from the London Manager of the Dairy Sales Division of the Primary Products Marketing Department :—

## A. Butter.

1. “*In broadest general terms we see no reason why imports should be less than present season.*”

NOTE.—Imports, in tons, into United Kingdom for twelve months ended 30th June :—

—			Total.	New Zealand.	Danish.	Australian.	Others.	Home Production.
1938	..	..	475,054	139,670	112,860	83,845	138,679	43,000*
1937	..	..	486,444	143,843	113,827	72,149	156,625	50,000*
1936	..	..	473,534	136,016	107,001	87,565	142,952	50,000*

\* Estimated.

2. “*Will start season with higher stocks.*”

NOTE.—Stocks in United Kingdom at 1st August (tons) :—

—					Total.	New Zealand.
1938	..	..	..	..	37,825	6,440
1937	..	..	..	..	25,765	5,503
1936	..	..	..	..	29,932	4,974

New Zealand : Afloat and in store in New Zealand at 1st August (tons) : 1938, 16,686 ; 1937, 23,795 ; 1936, 21,607.

Australian gradings and shipments (tons) :—

—					Gradings.	Shipment.
Season ended 30th June—					Tons.	Tons.
1938	..	..	..	..	94,813	81,930
1937	..	..	..	..	80,863	71,929
1st July to 1st August—						
1938	..	..	..	..	3,278	4,467
1937	..	..	..	..	1,637	1,674

3. “*Average prices have been as high as consumers will pay for this quantity. See increased margarine sales.*”

NOTE :—

Retail Price, United Kingdom.		Consumption of Imported Butters.	
Season 1938 (average)	1s. 3d. per lb. (from 1s. 2d. to 1s. 6d.)	Year 1938 (to date)	8,800 (approx.) tons per week.
Season 1937 (average)	1s. 1d. per lb. (from 11d. to 1s. 3d.)	Year 1937 ..	9,200 tons per week.

Margarine Sales—Annual weekly average (tons) : 1938, 3,813 (to date) ; 1937, 3,527 ; 1936, 3,458.

4. “*Present indications spending power unlikely improve further. Meantime tendency rather reverse.*”

5. “*In our opinion should anticipate lower rather than higher prices next year.*”

NOTE.—Average of weekly top prices New Zealand to 30th June (per hundredweight) : 1938, 120s. 7d. ; 1937, 104s. 1d. ; 1936, 97s. 9d. ; 1935, 78s. ; 1934, 80s.

## B. Cheese.

*“ Know of no circumstances at present which would cause next season’s average to vary substantially from present.”*

NOTE.—Imports, in tons, into United Kingdom :—

	30th June,	Total.	New Zealand.	Canada.	Others.	Home-produced Cheese.
1938	.. .. .	149,306	85,031	37,074	27,201	38,000*
1937	.. .. .	134,197	81,608	30,201	22,388	50,000*
1936	.. .. .	131,197	84,474	26,099	20,624	50,000*

\* Estimated.

Average of weekly top prices for New Zealand cheese year ended 30th June (per hundredweight) : 1938, 69s. 4d. ; 1937, 65s. 2d. ; 1936, 54s.

## C. Butter and Cheese.

*“ Variation of 2½ per cent. in total Empire countries affects average returns by 7s. 6d. to 10s. per cwt. Other conditions being equal, therefore, weather vital factor.”*

## SUMMARY OF STANDARDS.

The standards of efficiency and the standard allowances adopted by the Committee are as follows :—

(1) An efficient dairy-farm is one that falls within the production range of 100 lb. to 175 lb. of butterfat per acre.

(2) An efficient “ whole-time adult male unit of labour equivalent ” represents, on a production basis, 5,750 lb. of butterfat per annum.

(3) An efficient average per-cow production is within the range of 220 lb. to 260 lb. of butterfat per annum.

(4) A dairy-farm is efficiently capitalized at an average of £75 per cow.

(5) A reasonable all-over average allowance for interest on the above per-cow capitalization is 4½ per cent. per annum.

(6) The standard measure of working and maintenance costs, including depreciation allowance, is 5·695d. per pound of butterfat, as set out in the subjoined schedule, in which a butterfat-production of 240 lb. per cow has been used as an arbitrary working basis—

	d.
(a) Manure (including cartage), seeds, cultivation, and harvesting	1·600
(b) Power : Shed, heat, and pumping .. .. .	0·400
(c) Car and lorry (farm only) .. .. .	0·340
(d) Freight and cartage (excluding manure) .. .. .	0·160
(e) Shed requisites, veterinary, drainage, noxious weeds, saddlery, covers, herd-testing, telephone, and sundries .. .. .	0·405
(f) Pig and stock food .. .. .	0·365
(g) Repairs and maintenance—	
(i) Implements, plant, and water supply .. .. .	0·380
(ii) Fencing .. .. .	0·300
(iii) Buildings including piggeries .. .. .	0·255
(h) Rates and insurance .. .. .	0·540
(i) Depreciation .. .. .	0·950
Total working and maintenance costs .. .. .	5·695

(7) The standard return from pigs on cream-producing farms is 1·54d. per pound of butterfat.

(8) The standard allowance to represent the value of housing and other perquisites enjoyed by a dairy-farmer and his family is £1 10s. per week.

(9) The standard allowances for dairy-factory costs are 2·25d. per pound of butterfat for butter, with an overrun of 21·75 per cent. ; and 3·50d. per pound of butterfat for cheese, with a net yield of 2·45d. and a whey butter return of 0·75d. per pound of butterfat.

### APPLICATION OF STANDARDS.

When the foregoing standards of efficiency and standard allowances, with the exception of that for housing and other perquisites, are translated into costs' items to be included in the calculation of the price per pound for butterfat produced on cream-producing farms, the result is:—

			d.
Working and maintenance costs (including depreciation)	..	..	5·695
Capital charges (interest)	..	..	3·375
			<hr/> 9·070 <hr/>

To this total of 9·070d. must be added an amount to cover the management and labour reward of the producer and the appropriate labour reward of the male and female labour, whether family or hired, employed by him; and from the gross total must be deducted the allowance of 1·54d. for pig returns.

### REWARD OF MANAGEMENT AND LABOUR.

The Committee recognizes that the assessment of the reward of management and labour cannot be decided on statistical data alone, but that the consideration of non-monetary factors is also involved.

Importance must be attached to the fact that, if prices are based on the standards of efficiency adopted by the Committee, the costs and charges of every efficient farmer, other than labour-costs, are completely covered. Further, any excess of per-acre, per-cow, and per-labour-unit efficiency above those standards represents an additional return to the producer. The converse, of course, is equally true. If usual conditions and normal circumstances exist, the efficient producer cannot make a loss, and he is assured of making an additional return for every degree of increased efficiency.

The Committee realizes that the hours worked by dairy-farmers are longer than those worked by employees in urban industries, and that the dairy-farmer exercises in addition a managerial function. While no entirely satisfactory comparison can be made, it is possible to attempt a comparison between the dairy-farmer and the small storekeeper, whose hours are longer than those prescribed for his employees, and who has also the responsibility of management, though without any protection against the vicissitudes of trade and business. The security of tenure enjoyed by a dairy-farmer and the protection afforded to him against market fluctuations are important non-monetary factors that can properly be set off against the long hours required to be worked by him. The Committee realizes, too, that in the majority of cases a man will cheerfully work longer hours than his fellows if he is working for his own interests and maintaining his independence and improving his position.

It is recognized that the major difficulty with which those dairy-farmers who are dependent for the working of their farms on being able to engage hired labour are at present faced is that of obtaining and retaining adequate suitable labour. Though some weight must be given to the relative permanence and continuity of employment on a dairy-farm, as contrasted with the casual and non-continuous nature of work in other avenues of employment, in which a worker loses time between engagements and also loses time during his periods of engagement owing to weather conditions, slackness of trade, &c., and though weight must also be given to the fact that some men prefer farm life to any other, and are desirous of saving money and acquiring experience of farm-work with a view to becoming independent farmers, it must nevertheless be conceded that the higher wages and shorter hours now being offered in other avenues of employment more than balance these considerations. The result is that labour is being attracted from the dairy-farms, and an adequate supply of fresh labour to replace it is not forthcoming. It is essential, if the dairying industry is to be stabilized, that it should be in a position to pay wages reasonably in line with those offered in other occupations, due allowance being made for the considerations that lead men to prefer farm-work to other classes of work.

The Committee adopts the view expressed by the majority of the former Committee regarding the essential nature of the organization of labour on dairy-farms. It is primarily organized on a co-operative family-unit basis. There is nothing essentially reprehensible in the utilization, within reasonable limits, of family labour, and it is generally regarded as a means of building up the dairy-farmer's equity in his farm or stock. It is recognized, too, that it is impossible to equate the production of most farms to the capacity of an integral number of whole-time adult male labour-units, and that the fractional labour-units required are usually made up by the employment of family labour. The Committee accepts the existence of a certain amount of family labour as a fact, and in its consideration of the problem of labour reward it has made full allowance for all labour, family or hired, employed on a dairy-farm. At the same time, however, the Committee has recognized the necessity of fixing the labour reward at a rate sufficiently high to attract an adequate supply of hired labour and thereby render it unnecessary to make undue use of family labour. It has also recognized the impossibility, even with an undue use of family labour, of maintaining production on the larger dairy-farms without an adequate supply of hired labour.

The Committee has reached the conclusion that the standard allowance to be made for the reward of management and labour, when related to the standards of productive efficiency that have been adopted, should be at the rate of 9·22d. per pound of butterfat.

This allowance, in the case of a typical efficient dairy-farm on which the dairy-farmer and one adult male hired worker are employed on a full-time basis, represents the equivalent of £6 per week (£4 10s. money reward, and £1 10s. representing the money value of housing and perquisites) for the farmer, and £4 per week, including 17s. 6d. for board and lodging, for the hired worker. For every additional unit or fraction of a unit of labour employed a further allowance for management and labour is made at a rate equivalent to £221 for each additional 5,750 lb. of butterfat produced. In

the opinion of the Committee the allowance for labour, which is applicable to both hired and family labour, removes any possible justification for the utilization of unpaid labour or the undue employment of family labour on any efficient dairy-farm in New Zealand. The precise ratio in which the management and labour reward is divided between the farmer and his employees is, subject to any statutory requirements, a matter of arrangement.

The Committee thinks it advisable, before leaving the question of labour on dairy-farms, to draw the attention of the Government to the desirability of providing means whereby assistance may be given towards providing houses for married employees on dairy-farms. It is thought that the drift of men from the farms might be arrested if married men, to whom permanence of employment and family life in healthful surroundings would be an attraction, could be suitably housed.

### RECOMMENDATION AS TO PRICES.

Evidence was submitted supporting prices ranging from 17-889d. per pound of butterfat to 19-919d. per pound of butterfat. After giving the fullest consideration to all the evidence presented, the Committee has come to the conclusion that the price of butter, assessed in conformity with its order of reference, should be calculated on a basis designed to provide a butterfat payment of 16-75d. per pound. The Committee therefore recommends that the prices of butter and cheese manufactured from cream and milk supplied to dairy factories between 1st August, 1938, and 31st July, 1939, and placed on board ship, with the concurrence of the Primary Products Marketing Department, for export from New Zealand shall be as set out hereunder. It is also recommended that the differential premiums for quality remain as at present.

Costs.							Per Pound Butterfat for Butter.
							d.
Working and maintenance costs (including depreciation)	..	..	..	..	..	..	5-695
Capital charges (interest)	..	..	..	..	..	..	3-375
Labour reward	..	..	..	..	..	..	9-220
							18-290
Less pig returns	..	..	..	..	..	..	1-540
Butterfat price for butter	..	..	..	..	..	..	16-750
Equivalent f.o.b. basic purchase price per pound of butter	..	..	..	..	..	..	15-605
							Per Pound Butterfat for Cheese.
							d.
Butterfat price for cheese	..	..	..	..	..	..	18-750
Equivalent f.o.b. basic purchase price per pound of cheese	..	..	..	..	..	..	8-775

The present basic f.o.b. purchase prices for butter and cheese are 13-66d. and 7-75d. per pound respectively. It is reasonable to estimate that the average market realizations for the 1937-38 season will be 118s. per hundredweight for butter and 68s. 6d. per hundredweight for cheese. If it be assumed that during the 1938-39 season the same average market realizations, neither more nor less, will be obtained as in the estimate for the season now ended, and for approximately the same quantities of butter and cheese, the deficit on the season's operations may be estimated at:—

							£
On butter	..	..	..	..	..	..	2,030,000
On cheese	..	..	..	..	..	..	794,000
Total	..	..	..	..	..	..	£2,824,000

Against this estimated deficit is to be set any surplus for the season 1937-38.

In submitting its report the Committee recognizes that its functions are purely investigational and advisory. It recognizes also that, owing to the impossibility of forecasting, even approximately, market realizations for a year ahead, it cannot make a definite finding regarding the possible financial implications involved in the payment of the prices it has recommended. The decision as to both the prices to be paid and the extent of the financial implications involved is necessarily dependent on general considerations of Government policy regarding finance, and the Committee can therefore only submit its recommendations in accordance with its order of reference.

**RECORD OF PROCEEDINGS.**

A copy of the official record of the proceedings of the Committee, with copies of all statements handed in, is forwarded herewith.

**ACKNOWLEDGMENTS.**

The Committee desires, in conclusion, to place on record its appreciation of the valuable assistance it has received from the several representative organizations of the dairy industry, from dairy-factory companies, from Government Departments, and from individual witnesses. In particular, it wishes to express its thanks to the Secretary, Mr. G. M. Pottinger, whose services have been invaluable.

We have the honour to be,

Sir,

Your most obedient servants,

F. V. FRAZER, Chairman.  
C. P. AGAR, Member.  
H. M. CASELBERG, Member.  
G. A. DUNCAN, Member.  
W. MARSHALL, Member.  
N. H. MOSS, Member.  
A. H. TOCKER, Member.

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