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REPORT

OF

TRIBUNAL OF INQUIRY

INTO THE

MILK SUPPLY

FOR THE

DUBLIN SALE DISTRICT

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Houses of the Oireachtas



ÉIRE

# REPORT

of

THE TRIBUNAL APPOINTED BY ORDER OF THE  
MINISTER FOR LOCAL GOVERNMENT AND PUBLIC  
HEALTH, DATED THE 1ST DAY OF MARCH, 1945,  
TO INQUIRE INTO AND REPORT AND MAKE  
RECOMMENDATIONS TO THE MINISTER FOR  
LOCAL GOVERNMENT AND PUBLIC HEALTH UPON  
THE SUPPLY OF MILK TO DISTRIBUTORS AND  
CONSUMERS IN THE AREA CONSISTING OF THE  
COUNTY BOROUGH OF DUBLIN, THE COUNTY OF  
DUBLIN, AND THE URBAN DISTRICT OF BRAY.

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ÉIRE

# REPORT

The cost of preparing this Report is estimated at £650 of which £130 is the estimated cost of printing and publication.

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## ORDER OF APPOINTMENT AND TERMS OF REFERENCE

WHEREAS a resolution in the following terms was passed by Dáil Eireann on the 30th day of November, 1944, and by Seanad Eireann on the 6th day of December, 1944 :

“ That it is expedient that a tribunal be established for inquiring into the following definite matter of urgent public importance, that is to say :—

the supply of milk to distributors and consumers in the area consisting of the county borough of Dublin, the county of Dublin, and the urban district of Bray, including in particular :—

(a) the existing arrangements :—

- (i) for securing that such supply is adequate, pure and wholesome,
- (ii) for the economical and efficient marketing and distribution of such supply,
- (iii) for making such supply available to consumers at reasonable prices, and
- (iv) for safeguarding the interests of the persons (including consumers) concerned in such supply, marketing and distribution ; and

(b) the improvements (if any) which are practicable and desirable in such arrangements.”

NOW THEREFORE, the Minister for Local Government and Public Health in pursuance of the said recited resolution and in exercise of the powers vested in him by the Tribunals of Inquiry (Evidence) Act, 1921, and of every other power in this behalf enabling him, hereby orders as follows, that is to say :—

1. A tribunal is hereby appointed to inquire into, report to and make recommendations to the Minister for Local Government and Public Health upon the following matters that is to say :—

the supply of milk to distributors and consumers in the area consisting of the county borough of Dublin, the county of Dublin, and the urban district of Bray, including in particular :—



(a) the existing arrangements :—

- (i) for securing that such supply is adequate, pure and wholesome,
- (ii) for the economical and efficient marketing and distribution of such supply,
- (iii) for making such supply available to consumers at reasonable prices, and
- (iv) for safeguarding the interests of the persons (including consumers) concerned in such supply, marketing and distribution ; and

(b) the improvements (if any), which are practicable and desirable in such arrangements.

2.—(1) The following persons are hereby nominated to be members of the tribunal appointed by this Order, that is to say :—

JUSTICE MARTIN C. MAGUIRE,  
PROFESSOR ROBERT A. O. O'MEARA, M.D., F.R.C.P.I.,  
WILLIAM C. KENNY, B.Comm., F.C.R.A.

(2) The said Justice Martin C. Maguire is hereby nominated to be Chairman of the said tribunal.

(3) Thomas J. Brady, an official of the Department of Local Government and Public Health, is hereby nominated to be Secretary of the said tribunal.

3. The Tribunals of Inquiry (Evidence) Act, 1921, (as adapted by or under subsequent enactments) shall apply to the tribunal appointed by this Order.

GIVEN under the Official Seal of the Minister for Local Government and Public Health this first day of March, One Thousand Nine Hundred and Forty-five.

(Signed) F. C. WARD,

Parliamentary Secretary to the  
Minister for Local Government and Public Health.

L.S.

# REPORT OF THE TRIBUNAL OF INQUIRY INTO THE SUPPLY OF MILK TO THE DUBLIN SALE DISTRICT

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*To the Minister for Local Government and  
Public Health :*

We the undersigned, Martin C. Maguire, Judge of the High Court, Robert A. Q. O'Meara, M.D., Sc. D., F.R.C.P.I., F.T.C.D., and William C. Kenny, B.A., B.Comm., F.C.R.A., nominated by Order, dated the 1st day of March, 1945, to be members of the Tribunal to inquire into the matters of public importance set out in the order of appointment desire to report as follows :—

## PRELIMINARY

1. On the 6th day of March, 1945, an advertisement was inserted in three Dublin daily newspapers giving notice of the first public sitting of the Tribunal and requesting all persons interested and wishing to give evidence or to make representations to the Tribunal to be in attendance at that sitting, in person or by their solicitor or counsel. A copy of this advertisement appears in Appendix ' A '. Similar advertisements were repeated in the same newspapers on the 26th day of March, and the 9th day of April, 1945.

2. The first public sitting of the Tribunal was held in the Court Room, Irish Land Commission, on Monday, the 16th day of April, 1945. Further public sittings were held on following days. The public sittings concluded on the 29th day of May, 1945. In all, 22 public sittings to take evidence and 91 private sittings to consider the evidence and submissions and draft this Report, were held.

3. A list of the interests represented during the whole or part of the proceedings and the persons by whom they were represented is set out in Appendix ' B. '



4. A list of the witnesses examined before the Tribunal is given in Appendix 'C.' 78 witnesses were examined.

5. A verbatim report was taken of the evidence. A copy of this verbatim report is attached.

6. We have felt it necessary and desirable to interpret our terms of reference broadly. We have taken the view that the conditions in the Dublin Sale District are affected by conditions prevailing outside the District. We have received evidence as to conditions in the creamery areas from which supplies are drawn for the Dublin Sale District. The supply of cows and young stock and general supplies for the dairy industry within the Production District depend much on sources outside the District.

7. The Report which follows has been divided into three parts. The first part contains a survey of the existing position in relation to the supply of milk for the Dublin Sale District under the headings: Previous Investigations, Legislative and Administrative Control, Production, Distribution, Consumption, Control of Prices, and Diseases of Animals. Then follows a section which is devoted to an examination of the existing arrangements, in the same order as they are set out in the preceding part except for Diseases of Animals, the portion dealing with this subject in the first part of the Report being in itself comprehensive. The conclusions of the Tribunal and the recommended improvements which are considered practicable and desirable to ensure an adequate, pure and wholesome supply of milk in the Dublin Sale District are set out in the final part of the Report.



## PART ONE

### EXISTING ARRANGEMENTS GOVERNING THE SUPPLY OF MILK TO THE DUBLIN SALE DISTRICT

#### *I. Introductory—Previous Investigations*

8. From time to time special investigations have been made by committees and commissions in endeavours to attain a clean, wholesome, adequate supply of milk. Important investigations, extending to the whole country, were carried out by the Irish Milk Commission, 1911, and the Committee on Milk Supply set up in 1926.

##### (i) REPORT OF IRISH MILK COMMISSION, 1911

9. Amongst their recommendations the Irish Milk Commission advocated an extension of winter dairying and indicated the measures considered necessary to safeguard the purity of the supply. The Commission was not satisfied with the then existing procedure for the enforcement of the Dairies, Cowsheds and Milkshops (Ireland) Order of 1908, and considered that it was open to serious objection on the ground that there was no uniform standard of administration and that there was duplication of work. Certain alterations of the order in regard to licensing and its application to home butter-makers were suggested. The steps necessary to secure the uniform and efficient administration of the order were indicated by the Commission. The report of the Commission was published in 1913. Having regard to conditions in Europe and in this country in the following years, no effective action appears to have resulted from its recommendations.

##### (ii) REPORT OF COMMITTEE OF INQUIRY INTO THE DUBLIN MILK SUPPLY, 1918

10. In 1918 a Committee was set up to consider and report on the supply of milk in the city of Dublin. It reported on the 10th day of January, 1919, on the inadequacy of the supply and the uneconomic system of distribution then existing and recommended, *inter alia*, that a wholesale milk distribution agency be set up for Dublin to ensure an adequate milk supply. No effective action followed this recommendation.



## (iii) REPORT OF COMMITTEE ON MILK SUPPLY, 1926

11. In 1926 a Committee on Milk Supply was set up by the Minister for Local Government and Public Health. This Committee reported in 1928 and its principal recommendations were as follows :—

“ All cows should be subject to veterinary inspection at least twice a year.

“ The ‘ Accredited Herd ’ system should be introduced as funds permit and as a supplementary method Bang’s system should be encouraged with the provision of free tuberculin testing and increased compensation for animals slaughtered but subject to the condition that reactors to the test should not be disposed of for further use for dairy purposes. The slaughter of cows affected with tuberculosis should be concentrated under the Bovine Tuberculosis Order by the repeal of Section 18 of the Tuberculosis Prevention (Ireland) Act, 1908.

“ Clause 2 (1) of that order should be extended to include any cow showing clinical signs of tuberculosis and excreting tubercle bacilli.

“ The manufacture and application of tuberculin should be officially controlled.

“ Experimental work in connection with vaccination against tuberculosis and prevention of contagious abortion in cattle should be developed.

“ The use, for human food, of milk from cows suffering from specified conditions should be restricted.

“ A revision of the Dairies, Cowsheds and Milkshops (Ireland) Order of 1908, should be undertaken with special regard to the inspection of cattle, the grooming of cows, the lighting, floor construction and drainage of cowsheds, the washing and sterilisation of utensils, the wearing of clean overalls and the observance of personal cleanliness.

“ A system of graded milk should be introduced. The sale of Pasteurised milk should be permitted only in accordance with defined conditions.

“ Persons employed in the production of Graded and Pasteurised milk should be medically certified.

“ The milk supply of urban districts should be controlled by systematic bacteriological examination.

“ Bacteriological results obtained in cases of individual suppliers should be open to public inspection.

“ Instruction as to the importance of clean milk should be given to producers in rural areas by agricultural and dairy instructors and similar advice should be conveyed to consumers by public lectures, by the practice and example of local authorities, by clean milk demonstrations at agricultural shows and through the school curriculum.

“ Bottling of milk should be undertaken only on registered



premises and bottles used should be stamped with the measure of their capacity."

12. Subsequent to the recommendations of this Committee, the Milk and Dairies Act, 1935, was enacted.

## *II. Legislative and Administrative Control*

13. Three Ministers of State are at present concerned with the several aspects of the legislative and administrative control exercised over the supply and sale of milk: the Minister for Local Government and Public Health, the Minister for Agriculture and the Minister for Industry and Commerce. The Minister for Local Government and Public Health is concerned with the purity and wholesomeness of milk reaching the consumer. The Minister for Agriculture is responsible for the agricultural aspects of milk production. He administers the measures in force for the control of animal diseases. He also fixes the minimum prices at which milk may be sold wholesale by producers in the Production District. Control over retail prices and the prices chargeable by wholesalers is exercised by the Minister for Industry and Commerce.

14. It will be convenient to consider separately the statutory functions of these three Ministers. The powers in regard to price control now exercised by the Minister for Industry and Commerce were not utilised prior to the Emergency and are dealt with in the section on Emergency Control.

### A. CONTROL BY MINISTER FOR LOCAL GOVERNMENT AND PUBLIC HEALTH

15. From the hygienic and qualitative standpoint the production, distribution and sale of milk for human consumption is at present mainly governed by the Milk and Dairies Act, 1935, the Sale of Food and Drugs Acts, 1875 to 1936, and regulations made thereunder.

16. Prior to the enactment of the Milk and Dairies Act, 1935, the public health supervision of milk was derived from special provisions in a number of unrelated Acts and orders which did not represent any co-ordinated or comprehensive system of control.

#### (i) MILK AND DAIRIES ACT, 1935

17. This Act provides for the comprehensive supervision of milk supplies from the farm to the consumer and repeals previous



enactments dealing with these aspects of milk supply. The Act became law on the 14th June, 1935, and its various provisions came into operation on days appointed pursuant to the Act.

18. The Act follows on the lines of modern legislation in other countries. It provides a series of enactments for the regulation and control, from the point of view of public health, of the production, distribution, sale and consumption of milk and confers powers on the Minister for Local Government and Public Health to make statutory regulations for the purpose of carrying out its provisions. The scheme of legislation by statutory regulations embodied in the Act has much to recommend it from the point of view of flexibility and adaptability to changing conditions. The Act is divided into nine parts which may be outlined briefly :—

PART I contains provisions of a general nature in regard to administration. The Act applies only to milk intended for sale for human consumption in the form of milk and in no other form. Milk, except in Part IV, includes whole milk, skimmed or separated milk, cream or buttermilk. The duty of enforcing the Act is imposed on sanitary authorities, who are empowered to appoint officers for the purpose.

PART II provides for the registration of dairymen and dairies. No person may carry on the business of dairyman unless he and his premises are registered under the Act.

PART III confers extensive powers on the Minister to make regulations in relation to the construction and cleanliness of dairies, vessels, machines and vehicles used in connection with the production, storage and distribution of milk ; the inspection of dairies and of the animals therein ; the precautions to be taken against contamination or infection, and the methods of handling and distributing milk. Power is also conferred on the Minister to make regulations prohibiting the sale, except under special designation licence, of Pasteurised milk or milk which has been heated to a temperature higher than a specified temperature. The Minister may also, on the application of a sanitary authority, prohibit the sale of milk in a sanitary district except under a special designation licence.

PART IV contains provisions empowering the Minister to make regulations prescribing the designations which may be used in connection with the sale of milk ; the grant of licences to sell milk under the special designations ; the authorities to grant such licences, and the terms and conditions subject to which the licences may be granted. It is an offence for any person to sell milk under a special designation unless he is duly licensed.

PART V deals with the prevention of disease likely to be caused by infected milk. The diseases specified are :—tuberculosis,



typhoid fever, paratyphoid fever, diphtheria, membranous croup and scarlatina. Further diseases may be added by order of the Minister. Medical officers of health are granted wide powers to enable them to prohibit the sale of milk, the consumption of which has caused, or is likely to cause, disease. Penalties are provided for dairymen who knowingly sell infected milk or milk to which an infected person has had access.

PART VI prohibits the sale of milk from an animal suffering from any of the diseases specified therein, viz. certain forms of tuberculosis, acute or chronic mastitis, foot and mouth disease, anthrax, any septic condition of the uterus, actinomycosis of the udder, suppuration of the udder, retained placenta and every other disease to which, by order, Part VI of the Act may be applied. Heavy penalties are provided for any person who sells milk from any animal suffering from any of these diseases, if it be proved that he knew, or by the exercise of ordinary care could have ascertained, that such animal was suffering from the disease.

PART VII provides for the appointment of bacteriological examiners by the Minister and the submission of milk for bacteriological examination.

PART VIII deals with the appointment of sampling officers and the procedure and methods to be adopted by sampling officers in sampling milk.

PART IX contains provisions of a miscellaneous nature. The sale of contaminated or dirty milk is prohibited, and it is also provided that any milk that has an offensive taste or smell, or which on being tested in a prescribed manner is found to contain visible offensive matter, or a number of bacteria greater than a number to be specified by the Minister, shall be deemed to be contaminated.

#### (ii) REGULATIONS UNDER MILK AND DAIRIES ACT, 1935

19. Regulations under the Act were made from time to time by the Minister. The principal regulations may be outlined :—

- (1) The Milk and Dairies Regulations, 1936, which contain detailed rules for the maintenance of hygienic conditions in dairies in regard to lighting, ventilation, drainage, water supply, and other matters.
- (2) The Registration of Dairymen Regulations, 1936, which prescribe the form of application for, and other matters relevant to, registration.
- (3) The Milk and Dairies (Prohibition Order) Regulations,



1936, which prescribe the form of order which may be made by a medical officer when it is considered necessary to prohibit the sale of milk which has caused, or is likely to cause, disease.

- (4) The Milk and Dairies (Bacteriological Examination) Regulations, 1936, which fix a permissible maximum of 500,000 bacteria per cubic centimetre for milk before sale and prescribe the methods of carrying out bacteriological examinations and tests on milk samples.
- (5) The Milk and Dairies (Milk Sampling) Regulations, 1936, which prescribe the method of taking milk samples under the Act.
- (6) The Milk and Dairies (Special Designations) Regulations, 1938 and 1939, which prescribe the special designations which may be used, viz:—Highest Grade milk, Standard milk and Pasteurised milk.

*Highest Grade milk* must be produced from animals which pass tuberculin tests and clinical examinations at intervals not greater than six months and must be sold in bottle or in unventilated sealed containers. The milk must pass a methylene blue reduction test and must not contain coliform bacillus in one-hundredth of a cubic centimetre. An amending regulation made in 1939 provided that the fat content must be at least 3.1% in respect of each sample with an average of 3.25% for samples taken during any continuous period of six months.

*Standard milk* must be produced from cows which are clinically examined at intervals not greater than three months. A bulk sample of the milk of the entire herd must be submitted at least once a year to biological examination for the presence of the tubercle bacillus. The other conditions for this graded milk are similar to those for Highest Grade milk save that the reduction time permitted for the methylene blue test is shorter.

*Pasteurised milk* must have been heated to a temperature of between 145° and 150° Fahrenheit, held at this temperature for at least thirty minutes, and then cooled immediately to a temperature not higher than 50° Fahrenheit. Milk before pasteurisation must not contain more than 500,000 bacteria per cubic centimetre and after pasteurisation not more than 100,000 bacteria per cubic centimetre.



A licence is required in respect of the use of a special designation in connection with the sale of milk and the following licences may be granted :—

Producers' licences for Highest Grade and Standard milk, Pasteurisers' licences, Milk Bottlers' licences and Dealers' licences.

All licences are issued by the Minister for Local Government and Public Health with the exception of Dealers' licences which are obtainable from the sanitary authorities.

(7) The Milk and Dairies (General Designations) Regulations, 1938, prescribe the general designations which may be used. These are milk, new milk and fresh milk. No licence is required in respect of the use of a general designation.

(8) The Milk and Dairies (Sale of Heated Milk) (Restriction) Regulations, 1938, prohibit the sale of any milk which has been heated to a temperature higher than 110° Fahrenheit other than Pasteurised milk sold in accordance with the appropriate licence. The only exemption allowed is in respect of heated milk sold for consumption as hot milk, for example, in hotels and restaurants.

### (iii) SALE OF FOOD AND DRUGS ACTS, 1875 TO 1936

20. Milk must also conform to standards laid down as to chemical quality under the Sale of Food and Drugs Acts, 1875 to 1936. The Sale of Food and Drugs (Milk) Acts passed in 1935 and 1936 together with certain sections of the earlier Sale of Food and Drugs Acts provide for the fixing of standards for milk and the procedure to be adopted for taking samples. The effect of section 2 of the Act of 1935, as amended by the Act of 1936, is to make it an offence to sell milk which does not reach a prescribed standard of quality. The Minister for Agriculture is empowered to prescribe the percentage of milk-fat and solids, other than fat, in milk. Similar provisions apply to cream, skimmed milk, separated milk and buttermilk.

21. Regulations made by the Minister for Agriculture under section 2 of the 1935 Act, as amended by the Act passed in 1936, prescribe :—

- (a) that in whole-milk the minimum percentage of milk-fat shall be 3% and the minimum percentage of milk solids other than milk-fat shall be 8.5% ;
- (b) in skimmed or separated milk the minimum percentage of milk solids other than milk-fat shall be 8.6% ;



- (c) in cream the minimum percentage of milk-fat shall be 25 % ;
- (d) in buttermilk the minimum percentage of milk solids shall be 6.2 %.

(iv) PUBLIC HEALTH (REGULATIONS AS TO FOOD)  
ACT, 1907

22. Under the Public Health (Preservatives, etc. in Food) Regulations, 1928 and 1943, made pursuant to the above Act, the use of preservatives in milk or cream is prohibited. The addition of certain colouring matters considered to be deleterious to the health of the consumer is also prohibited.

(v) PUBLIC HEALTH (IRELAND) ACT, 1878

23. This Act, which still forms the basis of public health law in this country, provides in section 132 that any sanitary officer of a sanitary authority may, at all reasonable times, inspect and examine any animal, carcase, meat, poultry, game, flesh, fish, milk and other foods exposed for sale and intended for the food of man, and if found to be diseased or unsound or unwholesome or unfit for the food of man, it can be seized in order to have it dealt with by a justice. Under the terms of section 133 of the Act the justice may condemn the animal, carcase or other food and order it to be destroyed or to be disposed of so as to prevent its sale or use for human food. The owner or person in possession of the condemned article is liable to a penalty not exceeding £20, or alternatively, to imprisonment for a term not exceeding three months.

(vi) THE TUBERCULOSIS PREVENTION (IRELAND)  
ACT, 1908

24. Special provisions relating to milk supplies and to cows suffering from tubercular disease of the udder were included in this Act. Some of these provisions have been repealed. Under section 16 of the Act which is still in force, a medical officer or other authorised person is empowered to take samples of milk for bacteriological analyses in a county where a bacteriologist is appointed under the Act. In addition the Act empowers any sanitary authority, if they think fit, to cause to be slaughtered, subject to compensation, any milch cow certified by a veterinary surgeon to be affected with tubercular disease of the udder.

## B. CONTROL BY MINISTER FOR AGRICULTURE

(i) DISEASES OF ANIMALS (IRELAND) ACTS, 1894 TO  
1945

25. A separate code of legislation deals with the control of disease in livestock. Animals in herds of dairymen registered under the Milk and Dairies Act, 1935, in common with other



livestock, come within the scope of the Diseases of Animals (Ireland) Acts, 1894 to 1945. The Minister for Agriculture is the responsible Minister for the purpose of these Acts. Duties under the Acts and orders made thereunder are carried out by veterinary officers attached to the Department of Agriculture and veterinary and other officers employed by local authorities. Orders made under the Acts are designed to prevent and to suppress outbreaks of certain contagious animal diseases, to provide for the veterinary examination of animals exported from this country and the protection of animals from unnecessary suffering during transit. A survey of the main provisions of the Diseases of Animals Acts and orders made thereunder is included in the Third Interim Report of the Committee of Inquiry on Post-Emergency Agricultural Policy. It is not proposed to go into details of these orders in this Report, with the exception of the Bovine Tuberculosis Order of 1926 and the Epizootic Abortion Order of 1925 which are of special importance in relation to the supply of milk for human consumption.

*(a) The Bovine Tuberculosis Order of 1926*

26. Several orders dealing with bovine tuberculosis have been made from time to time but have been revoked by the existing Bovine Tuberculosis Order of 1926.

27. This order provides that a person having any bovine animal which is suffering from or appears to be suffering from tuberculosis of the udder, indurated udder or other chronic disease of the udder, tuberculous emaciation, chronic cough with definite clinical signs of tuberculosis, should without avoidable delay, notify the *Gárda Síochána* who shall inform the local authority and the Department of Agriculture of the matter. A veterinary surgeon who examines any animal and is of the opinion that it is suffering from one of the above forms of tuberculosis shall notify the local authority and the Department of Agriculture. The order makes provision for the examination of the suspected animal by a veterinary officer and for slaughter, disposal and assessment of compensation. Compensation is paid at the following rates :—

- (1) For animals suffering from advanced tuberculosis—one-quarter of the market value or 30/- whichever is the greater.
- (2) For animals suffering from tuberculosis not in an advanced stage, the compensation is three-quarters of the market value or the sum of 30/- whichever is the greater.

*(b) The Epizootic Abortion Order of 1925*

28. Under the Epizootic Abortion Order of 1925 a cow or heifer which has aborted within the preceding two months may



not be exposed in a market, neither may such an animal be sold without notifying the purchaser of the fact or sent for service without notifying the owner of the bull. The order also contains provisions regarding the grazing of infected animals on lands. Local authorities are responsible for the enforcement of the order.

(ii) MILK (REGULATION OF SUPPLY AND PRICE) ACTS,  
1936 AND 1941

29. The Milk (Regulation of Supply and Price) Acts, 1936 and 1941, provide a series of enactments for regulating the supply and price of milk. The Minister for Agriculture is empowered to make statutory regulations for the purpose of carrying out the provisions of the Acts. Particular areas may be set up by the Minister as Sale and Production Districts which may be administered by boards representative of producers, retailers and wholesalers. Not less than half the members of each such board must consist of producers. The chairman is nominated by the Minister for Agriculture.

30. Each board is required to keep registers of producers, retailers and wholesalers. Registered wholesalers or retailers are persons engaged in wholesale or retail business in milk in the sale district. Prior to registration with a milk board producers, wholesalers and retailers must be registered with the sanitary authority under the Milk and Dairies Act, 1935. Milk may only be sold in the district by persons who are also registered with the board. The Acts provide for the cancellation of registration in certain circumstances and for the keeping of prescribed records and returns by registered persons. Inspectors of the board and members of the *Gárda Síochána* have power of inspection in relation to premises where milk is sold or kept or is believed to be sold or kept.

31. A district milk board is required from time to time to determine equitable prices to be paid to registered producers by registered retailers and registered wholesalers. In regard to this determination it is provided that if the members of the board do not reach a unanimous decision the determination may be made by the chairman. When prices have been determined in accordance with the Acts the determination is forwarded to the Minister for Agriculture and the Minister on consideration may make an order fixing minimum prices. Under the 1941 Act the Minister has power to determine minimum prices notwithstanding the fact that a determination has not been made or communicated to him by a milk board.

32. Sales of milk by producers to retailers and wholesalers must be on a basis of contract the terms of which are approved by the chairman of the milk board. Where the board sees fit



licences may be granted to registered retailers or wholesalers to purchase milk from unregistered producers.

33. The funds of milk boards are derived from a levy on each gallon of milk sold in their districts.

34. The Minister for Agriculture was empowered to fix retail prices, after consultation with the Minister for Industry and Commerce.

35. The Act passed in 1941 amended the principal Act in several respects. In addition it provided that certain creameries which had complied with a direction of the Minister, or a person authorised by him, to sell milk in Dublin during a specified period in 1939 could become registered. The supplies from creameries were limited by quota. Another provision of the Act was that a licence might be issued by the Minister for Agriculture to any person, duly registered in a register of dairymen, to sell milk in a sale district.

36. In September, 1936, the Minister for Agriculture declared the area consisting of the county borough of Dublin and the administrative counties of Dublin, Wicklow, Kildare, Meath and Louth, to be the Production District for the sale of milk to the Dublin Sale District which was defined as the county borough of Dublin, the administrative county of Dublin, and the urban district of Bray. The Dublin District Milk Board was established to administer the Act in relation to the joint Sale and Supply District. The Production District was later extended to cover portions of counties Wexford and Carlow.

### C. EMERGENCY CONTROL

37. During the Emergency it was found necessary to bring into force a number of special provisions designed to safeguard the interests of the community during that period. Shortage of supplies, transport restrictions, the necessity for increased tillage and other emergency difficulties made it imperative that special powers be invoked. Under powers derived from the Emergency Powers Act, 1939, the main Emergency Powers Orders which were made dealing with different aspects of the milk supply were as follows :—

Emergency Powers (No. 95) Order, 1941.

Emergency Powers (No. 145) Order, 1942.

Emergency Powers (No. 247) Order, 1942.

Emergency Powers (Dublin District Milk Board) Order, 1943.

Emergency Powers (No. 247) Order, 1942, (Amendment) Order, 1944.

Emergency Powers (No. 342) Order, 1944.

Emergency Powers (No. 247) Order, 1942, (Second Amendment) Order, 1946.



38. For convenience the above orders will be grouped according to the Minister responsible for their administration.

(i) MINISTER FOR LOCAL GOVERNMENT AND  
PUBLIC HEALTH

39. Emergency Powers (No. 95) Order, 1941, and Emergency Powers (No. 145) Order, 1942, modified in several respects the provisions of the Milk and Dairies Act, 1935, and regulations made thereunder. The first-mentioned order permitted persons and creameries in certain areas (not being "restriction districts") to sell milk in limited quantities without being registered. Restriction districts were defined as county boroughs, boroughs, urban districts, towns having town commissioners and centres of population in excess of 400.

40. Owing to the inadequacy during certain winter months of the supply of milk from registered sources, the Minister for Local Government and Public Health was empowered by Emergency Powers (No. 145) Order, 1942, to grant special temporary licences to certain creameries not in possession of the type of pasteurisation plant normally required by the Milk and Dairies (Special Designations) Regulations, 1938 and 1939, so as to permit such creameries to sell milk in the Dublin Sale District. Licences in pursuance of that order were granted in 1943 and following years.

(ii) MINISTER FOR AGRICULTURE

41. The most important of the Emergency Powers Orders which related to functions of the Minister for Agriculture, were those which altered the constitution and extended the powers of the Dublin District Milk Board. To enable the Board to cope with transport and other difficulties liable to arise from emergency conditions, the Board was reconstituted in accordance with the provisions of Emergency Powers (No. 247) Order, 1942, and given extended powers and functions. Under the terms of the order the Board consisted of six members, a chairman and five ordinary members appointed by the Minister for Agriculture. It was empowered within or without the Production District to engage in the business of selling milk and for that purpose could purchase, prepare and sell milk and milk products, acquire premises and equipment, establish depôts for the sale of milk and do all such things as might be necessary for the purpose of carrying on such business. In addition, wide powers for regulating, restricting or prohibiting the treatment, keeping, storage, movement, transport and disposal of milk by registered dairymen were granted to the Board. It was empowered to require the keeping of certain records and to inspect premises. Any producer or person dealing in or storing milk could be required by a direction to deliver to the Board or its agent such quantities of milk as might be specified. Provision was also made for the establishment



of a consultative council to advise the Board in relation to its powers and duties. By an amending order made on the 19th May, 1944, [Emergency Powers (No. 247) Order, 1942 (Amendment) Order, 1944] it was provided that the Board would consist of a number of members not exceeding five as the Minister for Agriculture might direct from time to time. From the date of that order the Board consisted of three—a chairman and two members.

42. The major contingencies provided for in these Emergency Powers Orders did not arise. The wider powers afforded to the Board were not exercised to any considerable extent.

43. An Emergency Powers Order made by the Dublin District Milk Board in December, 1943, (No. 406), provided for the issue of licences to persons who purchase milk from creameries.

44. In pursuance of Emergency Powers (No. 342) Order, 1944, creameries were exempted from the provisions of the Milk (Regulation of Supply and Price) Acts, 1936 and 1941, in regard to the signing of contracts.

45. On the 28th August, 1946, an order entitled the Emergency Powers (No. 247) Order, 1942, (Second Amendment) Order, 1946, was made by the Government revoking portions of Emergency Powers (No. 247) Order, 1942. This order provided for the restoration of the Dublin District Milk Board as constituted prior to 1942. Powers conferred on the Board by the 1942 order to control by licence the supplies of milk from creameries and to engage in the business of dairyman were retained.

### (iii) MINISTER FOR INDUSTRY AND COMMERCE

46. The powers relative to the fixing of retail prices conferred by the Milk (Regulation of Supply and Price) Act, 1936, on the Minister for Agriculture were not exercised by him. At the commencement of the Emergency the price of milk, as of other commodities, was stabilised by a Standstill Order made by the Minister for Industry and Commerce. The price-fixing powers in section 52 of the Milk (Regulation of Supply and Price) Act, 1936, were transferred from the Minister for Agriculture to the Minister for Supplies by an order made by the Government on the 21st January, 1941, under the Ministers and Secretaries (Amendment) Act, 1939. This order was entitled the Minister for Supplies (Transfer of Functions under section 52 of the Milk (Regulation of Supply and Price) Act, 1936) Order, 1941.

47. From May, 1941, maximum retail prices for milk in the Dublin Sale District have been fixed by order of the Minister for Supplies and later by the Minister for Industry and Commerce.



48. Maximum prices for milk sold to retailers by wholesalers were fixed from May, 1943.

49. Maximum prices for Highest Grade milk are also fixed by the Minister for Industry and Commerce.

#### D. ENFORCEMENT OF LEGISLATION

##### (i) MINISTER FOR LOCAL GOVERNMENT AND PUBLIC HEALTH

50. The main enactments relating to the control of milk supplies which are administered by the Minister for Local Government and Public Health are the Milk and Dairies Act, 1935, and the Sale of Food and Drugs Acts, 1875 to 1936. It will be sufficient for the purposes of this section of the Report to review the manner and extent of the enforcement of these main enactments. The other statutory provisions dealt with by the Minister for Local Government and Public Health relate to special aspects of the problem.

##### (a) *Milk and Dairies Act, 1935*

51. The supervision of milk supplies under the Milk and Dairies Act is subject to the general administrative control of the Minister for Local Government and Public Health. Direct control is exercised by the Minister in relation to special designation licences for the sale of Highest Grade, Standard and Pasteurised milk. In the performance of his functions under the Act and in public health matters generally, the Minister has the advice of medical and veterinary officers on the staff of the department.

52. Sanitary authorities are responsible for the enforcement in their particular areas of the provisions of the Act and regulations made thereunder concerning the sale of milk under a general designation, and the grant of Dealers' licences for the sale of milk under a special designation. The functions of the sanitary authorities are discharged through the medium of their medical officers, veterinary inspectors and other sanitary officers. Most of the work of inspection arising under the Act is carried out by veterinary inspectors.

53. In general, supervision in the Production District over the premises and herds of dairymen and over the quality of milk produced for sale is inadequate. Transport and other difficulties during the Emergency have affected adversely the enforcement of the Act in all areas. Apart from difficulties due to the Emergency the existing supervisory arrangements are not sufficient. The prevailing conditions of milk production



in most counties render proper enforcement of the Act and regulations extremely difficult.

54. The supervision of milk supplies by the local authorities in the Production District is subject to the control of the county medical officer of health for the county concerned. The county medical officer of health generally has the assistance of part-time veterinary inspectors and other sanitary staff in carrying out duties arising under the Act. Most of these veterinary inspectors are engaged in private practice and discharge additional duties, on a part-time basis, for the local authority under the Diseases of Animals Acts. Whole-time veterinary officers have been appointed by the Dublin Corporation and by Dún Laoghaire Borough Corporation. In Dublin county a whole-time officer has been appointed as chief veterinary officer. The remaining veterinary appointments in that county are on a part-time basis. The administration of the Act in these areas is more satisfactory than in other parts of the Production District.

55. In Dublin County Borough the enforcement of the Milk and Dairies Act and regulations is entrusted to the veterinary branch of the public health department of the Corporation under the supervision of the medical superintendent officer of health. The staff of the veterinary branch, which performs many other duties in relation to the supervision of food supplies and the Diseases of Animals Acts, consists of a chief veterinary inspector and superintendent of abattoir, six veterinary inspectors, two part-time veterinary inspectors, three dairy inspectors, one milk sampling officer, and one detention officer. During the period 1944-45 there were in the city 160 dairy yards occupied by 171 cowkeepers with a total of 4,050 cows. There are 1,100 milk shops and 127 milk stores in the city.

56. In Dublin county health district the supervision of milk supplies is subject to the control of the county medical officer of health. There is a chief veterinary officer who performs his duties on a whole-time basis. There are four part-time veterinary inspectors. The veterinary inspectors in county Dublin are assisted by sanitary inspectors who carry out inspections of dairies, slaughter-houses and meat in addition to their ordinary sanitary duties. There are 600 registered producers in the county with approximately 10,000 cows, and 124 other persons engaged in the milk trade otherwise than as producers.

57. As an example of the constructive effect of the Milk and Dairies Act a summary of the improvements supervised and approved in county Dublin since the passing of the Act may be set out:—



<i>Nature of Alterations</i>	<i>No.</i>
New byres ... ..	77
Complete interior reconstruction ... ..	179
Partial interior reconstruction ... ..	103
Lighting ... ..	213
Ventilation ... ..	159
Drainage ... ..	141
Can stores ... ..	79
Water supply ... ..	34
Yards ... ..	30
Pits ... ..	22
Sterilising equipment ... ..	11
Milking machines and auto-recorders ...	17

58. In county Kildare the general supervision of arrangements under the Milk and Dairies Act is subject to the control of the county medical officer of health with a staff of five part-time veterinary inspectors and two sanitary inspectors. Since 1940, owing to transport difficulties, inspections in the county have been greatly restricted. There are 227 registered dairymen in the county with herds amounting to about 3,000 cows, of which 2,000 supply milk to Dublin.

59. In county Wicklow the supervision of milk supplies is subject to the control of the county medical officer of health. There are three part-time veterinary inspectors for public health duties in the county, one of whom performs duties in relation to the Bray urban district for which a sanitary inspector has also been appointed. There are 432 registered dairymen in the county health district with registered herds totalling approximately 5,100. During 1944, 609 visits of inspection were made by the veterinary inspectors.

60. In county Louth the administration of the Milk and Dairies Act is subject to the supervision of the county medical officer of health. There is a staff of three part-time veterinary inspectors. No sanitary inspector has been appointed for the rural part of the county but Drogheda borough and Dundalk urban district each have one. There are 262 registered dairymen in the county with approximately 2,480 cows.

61. The supervision of milk supplies in county Meath is subject to the control of the county medical officer of health who has the assistance of four part-time veterinary inspectors. A sanitary inspector has also been appointed in this county. The number of registered premises totals 436 with approximately 6,600 cows. During 1944, 716 inspections of premises, etc., were carried out by the veterinary inspectors.



62. Portion only of county Carlow is in the Production District for the sale of milk to Dublin. The administration of the Act is subject to the control of the county medical officer of health. A part-time veterinary inspector carries out the duties arising under the Milk and Dairies Act in that portion of the county which supplies Dublin. The veterinary inspector has the assistance of two sanitary sub-officers. A sanitary inspector has been appointed in this county. The number of registered premises in the part of the county included in the Production District is 31, with herds totalling about 430 cows.

63. The portions of county Wexford which are in the Production District are the areas around Gorey and Enniscorthy. The administration of the Act is under the control of the county medical officer of health with the assistance of two part-time veterinary inspectors. The total number of registered dairymen in the area supplying Dublin is about 110 with approximately 1,500 cows.

64. Although the Act and regulations provide a satisfactory framework for the control of milk supplies, there are several important provisions of the Act and regulations which have not been adequately enforced in any area. Uniformity of enforcement of the provisions of the Act and regulations over the various administrative areas is lacking.

(b) *Sale of Food and Drugs Acts, 1875 to 1936*

65. These Acts are enforced by local authorities. With the exception of Dublin county borough and Drogheda borough the sampling officers employed by local authorities in the Production District for the purposes of the Acts are members of the Gárda Síochána. In the two areas specially mentioned the work is done by sanitary officers of the local authority. A substantial number of samples of milk is taken annually. On the results obtained by chemical analysis the quality of the milk so tested may be regarded as generally satisfactory.

(ii) MINISTER FOR AGRICULTURE

(a) *Diseases of Animals (Ireland) Acts, 1894 to 1945*

66. The administration of the Diseases of Animals Acts is subject to the control of the Minister for Agriculture. Many functions arising under the Acts are exercised directly by the Minister. A considerable veterinary staff has been appointed to the Department of Agriculture to advise the Minister as regards the exercise of his functions under the Acts and to assist in their enforcement. Important duties under the Acts are also carried out by local authorities by whom veterinary inspectors are employed, mainly on a part-time basis. The



administration of these Acts has been examined by the Committee of Inquiry on Post-Emergency Agricultural Policy and it is not proposed to cover the same ground again in this Report. There are however two orders made under the Acts which should be of great importance from the public health standpoint. These are The Bovine Tuberculosis Order of 1926 and The Epizootic Abortion Order of 1925. The evidence submitted to the Tribunal indicated that neither of these orders is effectively enforced. In addition their provisions are quite inadequate. The position regarding animal diseases is examined in a separate section of the Report.

*(b) Milk (Regulation of Supply and Price) Acts, 1936 and 1941*

67. The day to day administration of these Acts in the Production District is dealt with by the Dublin District Milk Board which was set up by the Minister for Agriculture pursuant to the Act of 1936. The functions of the Board relate mainly to the registration of producers and other persons concerned in the sale of milk and the making of contracts between producers, retailers and wholesalers. It is also concerned with the submission of determinations or recommendations to the Minister for Agriculture in regard to the minimum prices to be paid for milk to producers. A levy of one-seventh of a penny on every gallon of milk sold in the Sale District is collected by the Board. At the time of the public sittings of the Tribunal a sum of approximately £30,000 had accumulated from this levy and was held in reserve by the Board. It is the duty of the Board to ensure that the minimum prices fixed from time to time by the Minister for Agriculture are paid to producers. This duty is discharged through the Board's officers who include outdoor inspectors. In the early years of the Board a number of prosecutions was initiated for breaches of the minimum price orders, but producers now receive the minimum price in all cases. The functions of the Dublin District Milk Board do not extend to the organisation of the production and marketing of milk in the area coming within its control. Until 1942 it had no powers to deal in milk. Wider powers then conferred on the Board were not used to any significant extent as the emergency conditions for which they were designed did not arise. During the winter months, when supplies of milk for the Sale District are at their lowest, special efforts have to be made by the Milk Board to ensure that available supplies are distributed evenly over the Sale District. In such periods milk is purchased directly by the Milk Board which arranges for its distribution through the usual channels. These purchases by the Board are a balancing factor during periods of shortage.



## (iii) MINISTER FOR INDUSTRY AND COMMERCE

68. The control over milk prices now exercised by the Minister for Industry and Commerce first came into operation during the Emergency. The nature of this control is referred to in the section of this Report dealing with Price Control. In addition to the ordinary staff of the department the Minister has the assistance of extern inspectors to ensure compliance with the price-fixing orders made by him from time to time.

*III. Production of Milk*

## (i) AREA OF SUPPLY

69. Since 1936, when the Milk (Regulation of Supply and Price) Act was enacted, the sale of milk in the Dublin Sale District has been controlled in pursuance of the Act and orders made thereunder by the Minister for Agriculture. The Act empowered the Minister to make orders declaring Sale and Production Districts for milk. In September, 1936, the Minister declared the area consisting of the county borough of Dublin and the administrative counties of Dublin, Wicklow, Kildare, Meath and Louth, to be the Production District for the supply of milk to the Dublin Sale District which was defined as the county borough of Dublin, the administrative county of Dublin, and the urban district of Bray. The Dublin District Milk Board was established to administer the Act in the joint sale and supply district. The Production District was subsequently extended to include portions of counties Wexford and Carlow.

## (ii) SOURCES OF SUPPLY

70. The existing sources of the supply of milk for the Dublin Sale District are as follows:—

- (1) Certain registered milk producers in the counties of Louth, Meath, Dublin (including Dublin county borough), Kildare and Wicklow, together with part of county Carlow consisting of the former rural district of Baltinglass (No. 2) and the district electoral divisions of Ballintemple, Grangeford, Kilbride, Killerrig, Tankardstown, Tullowbeg, Tullow Rural and Tullow Urban and part of county Wexford consisting of the urban district of Enniscorthy and the former rural districts of Enniscorthy and Gorey (including the town of Gorey). In 1945 the number of registered producers in the above areas was 1,715.

- (2) Certain registered milk producers located outside the Production District in counties Westmeath (7),



Cork (2), Kilkenny (1), Cavan (2), Tipperary (2), Offaly (1), Laoighis (11) and Kerry (1), who regularly supplied milk to the Sale District before the passing of the Milk (Regulation of Supply and Price) Act, 1936, and who were entitled by that Act to continue supplying. The total number of such producers in 1945 was 27.

- (3) Certain creameries in counties Cork (9), Limerick (8), Kilkenny (1) and Kerry (2), which either supplied milk to the District before the passing of the Milk (Regulation of Supply and Price) Act, 1936, or which became qualified to supply under the amending Act of 1941. The total number of such creameries in 1945 was 20. These creameries are either registered with the Dublin District Milk Board or licensed by the Minister for Agriculture under the Milk (Regulation of Supply and Price) (Amendment) Act, 1941.
- (4) Certain other creameries which do not normally sell milk in the Sale District but which, as an emergency measure, have been granted special temporary licences by the Minister for Local Government and Public Health to enable them to do so during periods of shortage in the winter months. The number of these creameries varies from year to year.

### (iii) QUANTITY OF MILK SOLD

71. The average daily quantity of milk sold in the Sale District in each year during the period 1940-1945 was as follows:—

			Average Daily Amount	From Creameries	From Producers
			Gallons	Gallons	Gallons
1940	..	..	38,035	2,464	35,571
1941	..	..	39,981	4,792	35,189
1942	..	..	40,532	4,679	35,853
1943	..	..	43,335	5,625	37,710
1944	..	..	43,910	4,561	39,349
1945	..	..	46,437	4,106	42,331

72. Of the average daily quantity of 43,910 gallons supplied by producers and creameries in 1944, 17,948 gallons were supplied to wholesale pasteurising firms, 6,066 gallons to other wholesalers, 5,850 gallons to registered retailers and 14,046 gallons direct to consumers. Corresponding figures for 1945 were: to wholesale pasteurising firms 20,413 gallons; to other whole-



salers 6,238 gallons ; to registered retailers 5,702 gallons ; direct to consumers 14,084 gallons.

73. Figures compiled in 1942 showed that the proportions of the supply drawn from different areas according to distance from the city were approximately as follows :—

	No. of Producers	Daily Quantity of Milk Supplied	Percentage of Total Supply
		Gallons	
Within 10 mile radius ..	626	14,169	35
Between 10 and 15 mile radius	168	5,415	13
Between 15 and 20 mile radius	119	2,384	6
Over 20 mile radius .. ..	602	14,887	38
Creameries .. .. .	16	3,375	8

A slight all-round increase in the number of producers and the quantity of milk supplied may be presumed since these figures were compiled.

#### (iv) REGISTRATION OF PRODUCERS WITH THE DUBLIN DISTRICT MILK BOARD

74. Producers and creameries supplying milk to Dublin are registered with the Dublin District Milk Board. The total number of registered producers (including registered and licensed creameries and registered producers outside the Production District) was 1,762 in 1945.

#### (v) CONTRACTS

75. Milk may only be sold wholesale by producers in accordance with annual contracts, the terms of which have been approved by the chairman of the Milk Board. A form of written contract has been approved and is in general use. The form of contract is set out in Appendix 'D.' The actual provisions of these contracts are not fully observed in most cases. Frequently the stipulated amounts are not delivered.

#### (vi) LOCATION OF PRODUCERS

76. The following table shows the location by county, in 1943, of the producers in the Production District. Estimates made in that year of the total daily amount supplied from each county and the average daily amount supplied by producers in each county are also shown. The figures show those producers only who are registered with the Dublin District Milk Board for the supply of milk to the Dublin Sale District and do not include all the persons engaged in milk production in the area specified :—



	Average No. of Registered Producers	Average Daily Amount Supplied	Average Daily Quantity Supplied per Producer
		Gallons	Gallons
Dublin City and County	694	20,447	29
Meath .. .. .	295	7,147	24
Wicklow .. .. .	249	4,816	19
Kildare .. .. .	106	3,011	28
Louth .. .. .	64	1,478	23
Wexford .. .. .	30	649	22
Carlow .. .. .	12	307	25

From the foregoing table it will be seen that the greatest number of producers is situated in Dublin city and county and the counties adjoining Dublin. In much of the Production District there is no widespread dairying tradition and the interests of farmers are centred mainly on other branches of farming. The existence of a permanent and expanding market for liquid milk in the Dublin Sale District has not of itself attracted farmers in general to engage in the production of milk for the liquid milk market.

#### (vii) SUPPLY POSITION

77. For only about two months of the year, in summer, are the registered producers able to supply the present daily needs of the Sale District. During these months the producers have on hands a surplus of milk, a portion of which is unsaleable. With the approach of autumn local production decreases and supplies are drawn to an increasing extent from the 20 registered and licensed creameries. It may be noted that some of these creameries send milk to the Sale District, even during the period of maximum production. During the winter months the combined supplies of registered producers and registered and licensed creameries have not been sufficient in recent years to meet all the requirements of the Sale District. To supplement the supply during such periods recourse has been had, during the Emergency, to milk supplied by creameries which are granted special temporary licences by the Minister for Local Government and Public Health to enable them to sell milk in the Dublin Sale District. The milk from the latter creameries is purchased direct by the Dublin District Milk Board and is distributed by the Board to the trade.

#### (viii) CATEGORIES OF PRODUCERS

78. The sources of milk supply for the Dublin Sale District may be divided into four categories:—

- (1) Farmer producers who dispose of their milk to wholesalers and retailers.



(2) Producer-retailers (including cowkeepers).

(3) Creameries which became qualified under the terms of the Milk (Regulation of Supply and Price) Acts, 1936 and 1941, to sell milk in the District.

(4) Creameries specially licensed by the Minister for Local Government and Public Health to sell Pasteurised milk during periods of shortage.

(ix) PRODUCTION BY FARMER PRODUCERS WHO DISPOSE OF MILK TO WHOLESALERS AND RETAILERS

79. Approximately 57 per cent. of the Dublin milk supply is obtained from producers who come within the first-mentioned category. The majority are located outside a radius of 15 miles from the city. Some of them however are situated within quite short distances from the city.

(a) *Premises*

80. The Milk and Dairies Act, 1935, and regulations prescribe the requirements for premises on which milk is produced for sale. In general the premises of producers may be regarded as fulfilling at least the minimum structural requirements. Premises in which clean milk could not be produced may not be passed by the veterinary inspectors of the local authority. The maintenance of premises in a hygienic condition is important. Insufficient attention is sometimes paid by producers to this aspect of milk production. Ventilation of premises is usually adequate. The provision of artificial light, particularly in the cow-sheds, has been affected by difficulties of supply during the Emergency. Drainage of cow-sheds and dairies is usually adequate. The methods of disposal of drainage and storage of manure are frequently unsatisfactory. The surroundings of dairy premises are generally badly surfaced as the provision of concrete-surfaced yards is exceptional. In general the drainage arrangements for dairy yards could be improved.

81. In many cases the water supply on farms for the washing of sheds and animals, sterilisation of utensils and for cooling purposes is not adequate. Steam sterilising plant and proper cooling equipment are not generally available. Most producers scald vessels with hot water. The imperfect sterilisation of vessels used as receptacles for milk is a well recognised source of bacterial contamination. Lack of proper equipment is frequently responsible for such imperfect sterilisation. The lack of cooling equipment compels farmers to use methods of cooling which are inadequate, and even sometimes open to objection on hygienic grounds.



*(b) Size of Farms*

82. The type and size of dairy farm supplying the Sale District vary considerably. The production of milk is for many farmers auxiliary to general farming. Any farmer in the Production District who is registered as a dairyman with the sanitary authority is eligible for inclusion on the register of producers for supplying the Dublin Sale District. From available figures it appears that the average daily quantity supplied by individual producers in 1945 did not exceed 25 gallons.

83. The average daily amounts supplied by farmer producers in 1944 and 1945 were as follows :—

	1944	1945		1944	1945
	Gallons	Gallons		Gallons	Gallons
January ..	22,773	24,366	July ..	27,181	31,009
February ..	23,659	25,179	August ..	27,298	30,867
March ..	24,283	26,721	September ..	25,773	28,160
April ..	25,755	28,921	October ..	24,992	27,856
May ..	28,389	31,271	November ..	23,895	27,097
June ..	29,007	31,927	December ..	23,983	27,469

*(c) Level Milk Supplies*

84. Farmers who contract to supply milk to the Dublin Sale District aim to maintain a level supply all the year round. For this purpose it is necessary to have a number of cows calving in the autumn and winter months. Recently calved cows, as herd replacements, are usually purchased by producers in the open market. As a rule, producers do not rear their own heifer calves for breeding purposes. In consequence there are very few self-contained herds in the Production District.

*(d) Type of Cattle*

85. The prevailing type of milch cow in the Production District is the Dairy Shorthorn. Reasons for this are that it is the predominant breed in the country and the number of animals of special dairy breeds available to producers in the District is very limited. Another reason frequently given for the use of the Dairy Shorthorn is that the bull calves of this breed realise better market prices than the corresponding progeny of the purely dairy breeds. Many cows owned by registered producers in the Production District are inferior and uneconomic. The average annual yield per cow is estimated at between 380 gallons and 450 gallons. The number of cows in the area tested by cowtesting associations is insignificant.

86. No general attempts have been made by farmers to establish a strain or line of high-yielding cows. Little encourage-



ment has been given to the development of pure dairy strains. An important factor in this connection brought out by the Report of the Committee on Post-Emergency Agricultural Policy is the early disposal of high-class dairy bulls, which generally leave the herd before any information can be obtained as to the milk yields of their progeny. The Committee recommended that Dairy Shorthorn bulls of high milk inheritance or of proved merit, as shown by the milk records of their progeny, which are no longer required by their owners but are still serviceable and healthy, might be acquired by the Department of Agriculture and offered at reduced prices to other breeders or to dairy cattle improvement associations. The export of high-class heifers militates against production. Valuable animals are being sent out of the country. In view of the high prices prevailing, dairy-men find it difficult to compete with the prices paid by exporters.

#### *(e) Winter Feeding*

87. For winter production proper winter feeding is essential. In addition to a maintenance ration of hay and roots it is necessary, for the purpose of maintaining satisfactory yields, that cows should receive a ration related to the yield. This ration usually consists of home-grown cereals supplemented by mill offals, sugar-beet pulp, brewery and distillery by-products, etc. In order to provide the protein portion of the ration these foods were frequently supplemented in normal times by certain imported cakes. Although experience has shown that even high-yielding cows may have their production ration provided almost entirely by well-made grass ensilage, the use of ensilage is exceptional.

88. There is a lack of system in the winter feeding of cattle in the Production District. Many cattle in the area are not adequately fed. Wasteful methods of feeding are general, and large quantities of unbalanced ration are fed in some cases. The cow with a low yield often receives as much food as the high-yielding animal, which in many cases is not receiving food to the extent that its high-yielding capabilities would justify. The absence of concentrates, rich in protein, during the Emergency has aggravated the situation. Even when such feeding-stuffs were obtainable the feeding of the animals was not properly balanced and much good food was wasted on cows of low yield.

89. While the amount of tillage has increased during the Emergency, difficulty has been experienced in the growing of high-protein foods and the amount of these foods available has not made up for the absence of concentrates. The limited quantities of brewery and distillery grains which have been obtainable by some dairymen have been of great value in this connection.



(f) *Milking*

90. Sufficient attention is not generally paid to the training and cleanliness of the milker and to the methods of milking. Where dry milking is not practised it is very difficult to prevent contamination of the milk. Some producers achieve a high standard but the methods of others leave much to be desired. In summer the milking of cows is frequently carried out in the fields. This practice is undesirable. It renders very difficult, if not impossible, the proper washing of cows, the cleanliness of milkers and the prompt straining and cooling of milk. Milking machines are little used.

(g) *Labour*

91. There is a shortage of trained and suitable farm labour. This has been caused in recent years by temporary emigration and a noticeable disinclination for work on dairy farms. Work on such farms involves long and inconvenient hours on every day of the week at rates of pay insufficiently attractive by comparison with other more congenial occupations.

92. No evidence was tendered and no representations were made to the Tribunal on behalf of labour engaged in the industry.

93. Greater knowledge of the care of animals and the technique of milking would be desirable both among farmers and farm labourers. No system of training or apprenticeship exists for personnel employed on dairy farms.

(h) *Surplus Milk*

94. There are no proper arrangements for the disposal of surplus milk during periods of maximum production during the summer. Only a limited quantity of such milk is taken by the wholesalers. The producers complain that large quantities of milk are left on their hands. This is a source of waste and loss to the producers and community.

(i) *Production of Highest Grade Milk*

95. When considering farmer producers it will be convenient to include producers of Highest Grade milk. The number of producers of Highest Grade milk in the Production District is declining, as will be seen from the following figures :—

				No. of Producers	Annual Production
					Gallons
1939	..	..	..	30	1,178,583
1940	..	..	..	29	1,022,451
1941	..	..	..	25	938,157
1942	..	..	..	21	866,434
1943	..	..	..	23	892,997
1944	..	..	..	20	794,406
1945	..	..	..	22	780,913



96. Producers of Highest Grade milk have no difficulty in disposing of the milk produced on their farms. The demand for it is in excess of the supply. Highest Grade milk is generally supplied to the consumer in bottles. A number of producers enter into contracts for the supply of the milk, in bulk, to various institutions.

97. The most important feature of the production of Highest Grade milk is that the animals in the herd must be tubercle-free and must be subjected to periodic tuberculin tests and clinical examination. Reactors to the tuberculin test must be removed from the herd. The appropriate regulations stipulate standards of structure and cleanliness higher than those applicable to premises of producers of other grades of milk in the Production District. Producers of Highest Grade milk must have proper cooling and sterilising equipment installed on their premises. The farm lands must be properly fenced to ensure proper segregation of the tested herd and to prevent contact with untested animals. This requires a substantial holding of land.

98. With few exceptions, highest grade herds are not self-contained. The extent to which producers rely on replacements, from outside the herds, varies. The animals also vary, some herds containing cows of several breeds.

99. The double intradermal tuberculin test is generally adopted, the material used being a precipitated tuberculin from an approved source. Cases of variations in the potency of the tuberculin in use have come to light. Difficulties have arisen in regard to the interpretation of the results of these tests, in some instances from this cause, and also from lack of uniformity in the application of the tests.

#### (x) PRODUCER-RETAILERS

100. Producer-retailers form the next important category supplying milk to the Dublin Sale District. The average daily quantity supplied by producer-retailers in 1944 was 13,762 gallons or approximately 32 per cent. of the total. The following table shows the daily average supplies of milk sold by such producers direct to consumers :—

		1944	1945			1944	1945
		Gallons	Gallons			Gallons	Gallons
January ..		13,329	13,144	July ..		14,115	14,578
February ..		13,613	13,299	August ..		13,693	14,186
March ..		13,951	13,781	September ..		13,108	13,484
April ..		14,343	14,232	October ..		12,840	13,254
May ..		15,083	14,891	November ..		12,942	13,401
June ..		14,931	14,944	December ..		13,198	13,651



101. The producer-retailers are, with few exceptions, located within a radius of 15 miles from the city, the majority being not more than 10 miles distant. They are, to a large extent, farmer producers with their own land. Many of them find it necessary to take additional land for grazing purposes.

102. The system of production by producer-retailers with their own farms is generally similar to that of other farmer producers in the Production District. As, however, they retail the milk to individual customers whose demands do not vary very much with the different seasons of the year they are under a greater obligation than the ordinary farmer producer to maintain level production. While, in some cases, producer-retailers rear their own heifer calves, in almost all cases they find it necessary to purchase cows in milk to keep up the supply to their customers during the winter period. In addition, it is sometimes found necessary in winter to purchase milk, from other farmers or pasteurising firms, to supplement their own supplies.

#### (xi) COWKEEPERS

103. The producer-retailers known as cowkeepers are a special feature of the Dublin milk supply. Producers of this type supply from 6,000 to 7,000 gallons per day or approximately 13 per cent. to 16 per cent. of the total. They depend in the summer mainly upon land rented for grazing at high prices, the cows being brought into city premises during the winter period. The herds vary in size from 25 to 125 cows. Owing to the seasonal increase in yield during the summer months the number of cows is reduced to suit trade demands. Later in the year, as the milk yield declines, the cowkeepers purchase fresh milking stock to maintain their required gallonage. As cows go dry or decrease in yield they are replaced by cows in milk so as to maintain a stall average of two gallons per day. During the winter months, when the herds are maintained in the city premises, they are fed on brewery and distillery grains, roots, hay, bran, pollard and other foods. Feeding-stuffs are not generally grown by the cowkeepers but are mainly purchased in the open market. These arrangements, together with the extensive herd replacements, make this type of milk production unduly costly.

#### (xii) SUPPLIES FROM REGISTERED AND LICENSED CREAMERIES

104. Creameries, registered and licensed in pursuance of the Milk (Regulation of Supply and Price) Acts, 1936 and 1941, supplied during 1944 an average of 4,463 gallons per day representing 10 per cent. of the total daily supply. The corresponding figures for 1945 were 3,996 gallons and 8.6 per cent. A list of these creameries is given in Appendix 'E' of this Report. The amounts supplied at different times of the year varied



considerably as will be seen from the following table showing the average daily amount supplied in each month in 1944 and 1945:

	1944	1945		1944	1945
	Gallons	Gallons		Gallons	Gallons
January ..	4,545	4,010	July ..	3,978	2,704
February ..	4,499	4,622	August ..	4,691	2,924
March ..	4,274	4,385	September ..	7,151	7,577
April ..	2,781	2,205	October ..	6,057	6,449
May ..	1,666	971	November ..	6,733	6,298
June ..	2,428	2,404	December ..	4,790	3,545

105. The amount of milk sent by each creamery is limited by quota. There is a reduction in deliveries of milk from creameries during the summer period. In the winter, when production in the Production District falls to its lowest level, all milk available in these creameries is sent to Dublin, and even this has been insufficient in recent years to meet the demands. Sixteen creameries are registered with the Milk Board. Six of these were registered in 1936 in pursuance of the terms of the Milk (Regulation of Supply and Price) Act of that year. A further ten creameries were registered on the passing of the Amendment Act in 1941. Four other creameries, which were not eligible for registration with the Milk Board, were granted licences to supply milk to Dublin, by the Minister for Agriculture under the terms of section 32 of the 1941 Act.

106. Some of the creameries referred to above have been supplying milk to Dublin for as long as twenty years. They are all holders of special designation licences for the sale of Pasteurised milk under the Milk and Dairies Act, 1935. These creameries derive their milk supplies from farms in their area. Their suppliers are exempted from the provisions of the Milk and Dairies Act, 1935, relating to the registration of dairymen and dairies with the sanitary authority, and the regulations concerning dairies and milk and the inspection of animals. Consequently the herds and premises of these farmers are not governed by the provisions of that Act and they are not subject to inspection by officers of the sanitary authority in the same manner as registered dairymen. Inspectors of the Department of Local Government and Public Health inspect the pasteurisation plant in the creamery. Samples of the Pasteurised milk and of milk prior to pasteurisation are taken for bacteriological test from time to time.

107. Milk received by the creameries for pasteurisation and transmission to Dublin is subject to inspection on the platform as to odour and taste. Samples are taken to determine fat



content. There is no reliable test as to quality. During the spring and summer months the milk is relatively fresh when received. During the winter period, milk from farmers is in many cases accepted on only a few days each week. After pasteurisation it is consigned, in large cans, by rail to Dublin. In present circumstances it takes about ten hours for such milk to reach the railhead in Dublin from creameries in county Cork. In normal times the journey was completed in approximately six hours. At one period during the Emergency, when transport conditions were very difficult, milk from these creameries sometimes took two days to reach Dublin. Creamery milk on arrival in Dublin during the winter is often 36 hours old or more.

(xiii) SUPPLIES FROM OTHER CREAMERIES

108. During the Emergency, the Minister for Local Government and Public Health was empowered by Emergency Powers (No. 145) Order, 1942, to grant special licences to certain creameries in which the pasteurisation plant was not of the type approved by the Milk and Dairies (Special Designations) Regulations, 1938 and 1939, so as to permit them to sell Pasteurised milk in the Dublin Sale District. Pursuant to these powers the Minister granted temporary licences to certain creameries. Such licences were granted only for short periods when supplies from other sources were at a very low level. Without supplies from creameries so licensed, a shortage of milk would have resulted during winter periods.

109. The number of creameries which supplied milk under this arrangement over the last three years, the period of supply and the average daily amount supplied are indicated in the following table :—

Year	Number of creameries	Total amount supplied	Period of supply	Average daily amount supplied	Percentage of total daily supply (approx.)
1942/43	21	Gallons 72,607	10th January— 4th March (54 days).	Gallons 1,344	3
1943/44	11	43,671	15th November— 27th February (105 days).	415	1
1944/45	7	39,733	3rd January— 9th March (67 days).	593	1.5



In interpreting the above average figures, allowance has to be made for the fact that the amount of milk supplied varied considerably from day to day.

Milk supplied from these sources has not been satisfactory.

#### (xiv) DRIED MILK.

110. By way of provision for possible emergencies, stocks of dried milk were held in reserve in recent years. It was only necessary to draw upon these stocks to a very small extent and on a limited number of occasions when supplies of liquid milk were exceptionally short.

#### (xv) GRADES OF MILK SOLD

111. Three grades of milk are available to consumers in the Dublin Sale District.

- (1) Highest Grade milk.
- (2) Pasteurised milk.
- (3) Ordinary milk or milk sold under a general designation (milk, new milk or fresh milk).

112. No Standard milk is produced or sold in the Production and Sale Districts.

##### (a) *Highest Grade Milk*

113. Highest Grade milk is produced by twenty-two producers in the Production District, the average daily quantity sold being estimated at about 2,000 gallons or less than 5 per cent. of the total daily supply.

##### (b) *Pasteurised Milk*

114. Approximately 50 per cent. of the milk sold in the Sale District is in the form of Pasteurised milk. Milk is pasteurised by 5 pasteurising firms in the Sale District. Pasteurised milk is also obtained from creameries.

##### (c) *Milk Sold Under a General Designation*

115. Ordinary milk which accounts for the balance (45 per cent.) consumed is, for the greater part, sold by producer-retailers. Substantial quantities are consigned by other producers in the Production District, to wholesalers who have no pasteurising facilities. This milk is usually bulked, and is not subject to heat treatment before being placed on sale.

#### (xvi) QUALITY OF MILK

116. Quality of milk at the time of sale is, to a large extent governed by its quality at the source of production. Neverthe-



less no system of control of production is practised by taking at the farms samples for bacteriological and chemical examination. Reliance is placed on such inspections of premises as are made before registration is granted under the Milk and Dairies Act, and on subsequent routine inspections by officers of the local authorities. Information as to the quality of milk at the source of production, save in the case of occasional samples from highest grade producers, is, therefore, lacking.

#### (xvii) COSTS OF PRODUCTION

117. Milk producers maintain that present costs of production are high in relation to the prevailing wholesale and retail milk prices. Certain estimates and statements of cost of individual producers were submitted to the Tribunal. These data were not sufficiently representative of producers' costs generally to justify any general conclusion. The absence of reliable data was admitted in evidence by representatives of the milk producers. The Association of Milk Producers had no reliable costings for milk production. In making representations to the Dublin District Milk Board for an increase in milk prices, statements showing estimated costs of production have been submitted by producers. Such statements have been generally drafted to present a figure which allowed for bargaining and they cannot therefore be accepted as proper costings. The difficulty of obtaining reliable and representative data was stressed by several witnesses.

118. The absence of proper statistics is not confined to the producers. No surveys of the cost of milk production in the Production District have been made in recent years on behalf of the price-fixing authority. In fixing producers' prices relative costs from year to year have been taken into account because no scientific costings were available. Cost of production has increased during the Emergency and the minimum prices payable to producers for milk have also risen.

### *IV. Distribution of Milk*

#### (i) COLLECTION AND TRANSPORT

119. Producers in the Production District, who are not also retailers, consign their milk to wholesalers and retailers. The greater part of such milk is sold to the five pasteurising firms in the Sale District. The remainder is consigned to other wholesalers and a limited number of retailers. Wholesalers may be divided into two classes, those who pasteurise, and those who do not pasteurise milk.



## (ii) COLLECTION BY PASTEURISER-WHOLESALEERS

120. In general, the pasteurising firms arrange for the collection of milk from producers, using road transport. In some cases transport by road is arranged by the producers themselves. A quantity is also consigned by rail and some use is made of public road transport services as well. The pasteurising firms maintain their own lorries to collect milk from different parts of the Production District. The route of each lorry is planned to serve the maximum number of supplying farms. Some of the firms have special areas in which they operate. A certain amount of over-lapping of areas occurs. The development of the Production District has not been uniform. Some districts in a position to supply milk are not included in the itinerary of any firm.

121. One of the large pasteurising firms confines its collection area to the counties of Meath, Louth and North Dublin. Milk is collected by this firm from 310 farms with an average total daily load of 6,000 gallons and the distance travelled from the city does not exceed 30 miles. One lorry can transport from 900 to 1,200 gallons. By another firm, milk is collected in Kildare, West Dublin, South Wicklow, East Meath and East Wicklow. A lorry serves each of these five areas and the total number of farms from which milk is purchased is about 250. The daily quantities supplied by farmers range from 8 to 60 gallons. Quantities of 20 gallons or less are supplied by 100 farmers.

122. Milk is generally brought to agreed collecting points by the producers, who usually leave the cans on raised wooden platforms at the roadside. These cans are collected by the wholesaler's lorry which returns empty cans from the previous day's supply at the same time. It was stated, on behalf of one of the firms, that most of the milk purchased by them is collected between the hours of 7 a.m. and 10 a.m. The lorries in general use are not specially equipped to keep the milk cool during transit. Generally they are open lorries. About 18,000 gallons of milk per day were received, in 1944, by the pasteurising firms. This is equivalent to about 41 per cent. of the average daily supply in that year.

## (iii) COLLECTION BY OTHER WHOLESALEERS

123. The smaller wholesalers, who number about 25 and who do not pasteurise milk, receive over 6,000 gallons per day or approximately 14 per cent. of the total daily supply. These 25 firms do not operate their own lorries but depend mainly on the public road and rail services to collect milk from the producers with whom they have contracts. At certain periods of the year they purchase milk from creameries. This is consigned to them by rail.



## (iv) RAIL TRANSPORT

124. Substantial amounts of milk are transported to Dublin by rail. Figures to indicate the amounts were submitted to the Tribunal on behalf of Córas Iompair Éireann and the Great Northern Railway. The summarised figures of milk transported by the Great Southern Railway in the years 1942, 1943 and 1944, distinguishing between rail and road services are as follows :—

Year	Up to 10 miles	11-20 miles	21-30 miles	Over 30 miles	Total
	Gallons	Gallons	Gallons	Gallons	Gallons
1942 Rail ...	25	15,905	19,869	2,749,087	2,784,886
1943 „ ...	168	7,391	24,467	3,367,998	3,400,024
1944 „ ...	65	7,691	4,975	2,334,561	
„ Road	—	2,098	40,147	649,047	
	65	9,789	45,122	2,974,608	3,029,584

Most of the milk thus transported comes from localities more than 30 miles distant from the city. Consignments from creameries constitute a large proportion of the supplies transported.

125. The following figures were supplied by the Great Northern Railway Company. The figures are given in respect of the months of July and January, 1942, 1943, and 1944 :—

Month	10-19 miles		20-29 miles		Over 30 miles	
	Cans	Gallons	Cans	Gallons	Cans	Gallons
July, 1942 ..	559	7,995	89	790	2,853	30,920
„ 1943 ..	388	5,045	51	783	3,190	36,001
„ 1944 ..	526	7,508	5	62	3,152	37,257
January, 1942	663	9,622	62	472	2,270	24,259
„ 1943	349	3,311	—	—	2,062	22,118
„ 1944	467	6,622	2	28	2,528	29,455

126. Evidence was tendered that milk traffic forwarded by rail is, as far as possible, conveyed in vehicles in which no other traffic is loaded. Particular care is taken to ensure that milk is not loaded near other goods such as fish which are liable to cause tainting. Passenger train wagons and vans are used for milk and they are cleansed before loading. Rail transport of milk was adversely affected by the Emergency. Milk consigned by rail from the creameries is generally collected by the wholesaler at the railhead. During the periods of greatest shortage when milk is purchased by the Dublin District Milk Board, from creameries specially licensed, it is brought to the Milk Board Dépôt, whence it is distributed to wholesalers.



(v) TREATMENT AND DISTRIBUTION BY PASTEURISER-WHOLE-SALERS

127. Pasteurisation is carried out in the Dublin Sale District by five firms holding pasteurising licences under the Milk and Dairies (Special Designations) Regulations, 1938 and 1939. On arrival at the premises of these firms the milk is generally tested at the receiving platforms for odour and taste. Chemical and bacteriological tests may be carried out by some firms but are not compulsory or usual. The pasteurisation plants in use have been brought into compliance with the requirements laid down in the Milk and Dairies (Special Designations) Regulations. These regulations prescribe that milk must be heated to a temperature of between 145° Fahrenheit and 150° Fahrenheit and held at that temperature for at least 30 minutes and then cooled immediately to a temperature of not more than 50° Fahrenheit. After pasteurisation the milk is filled into bottles or delivery cans. Milk sold in quantity to wholesale customers, institutions, restaurants, hospitals and food centres is placed in cans. Milk intended for sale retail is bottled, or if intended for sale loose in small quantities in retail shops, is placed in cans. The following analysis of distribution was submitted in evidence in respect of one firm: 25 per cent. bottled milk delivered to retail customers; 30 per cent. bottled milk delivered to wholesale customers; 45 per cent. milk delivered in bulk to wholesale customers, institutions, restaurants, hospitals and food centres.

(a) Premises

128. The premises of pasteurisers have not been sufficiently spacious in most cases for the amount of business carried on. In recent years important additions and alterations to premises have been undertaken by some pasteurising firms.

(b) Plant

129. The existing plant of the pasteuriser-wholesalers is of the holder type. In certain instances it is in need of replacement. New plant of the High Temperature Short Time type has been ordered by some firms. This type of plant may not be used without amendment of the regulations, or an exemption order by the Minister for Local Government and Public Health. High Temperature Short Time plant of approved type has been in use in England and America for some years. Bottle washing and filling machines also need replacement in some cases. Such replacement, in common with the replacement of pasteurisation plant, has been delayed by the Emergency. The existing arrangements for the sterilisation of cans are defective, particularly in the case of cans which are returned to farmers. Storage and refrigeration facilities are generally inadequate.



(c) *Personnel*

130. The personnel in charge of the pasteurisation plants in the Sale District is not specially trained and experienced in dairy technology. Persons employed in the pasteurisation depôts are not subject to medical examination by the sanitary authority.

(d) *Control*

131. The premises and plant of holders of pasteurisers' licences are subject to inspection and samples of milk for testing purposes are taken from time to time.

## (vi) DISTRIBUTION BY OTHER WHOLESALERS

132. These wholesalers, in general, bulk, but do not process milk. Some of them, with the aid of brine coolers, cool the milk when received from the producers. The milk is then placed in the wholesalers' cans for distribution. Some wholesalers carry out tests for dirt in milk and notify the producer if the results are unsatisfactory. Refrigeration apparatus is installed in some premises for the purpose of storing milk. These wholesalers distribute the milk in quantity to retailers. In some instances, wholesalers engage in the retail sale of milk.

## (vii) RETAIL SALE

133. Milk is sold both loose and in bottles (a) by house to house delivery and (b) retail in shops. Shops which sell milk must be registered under the Milk and Dairies Act, 1935. The Milk and Dairies Regulations, 1936, provide that milk, whether loose or in bottles, shall not be sold from premises in which are kept articles of a nature likely to contaminate or impart a taste to the milk. The sale of milk loose in shops satisfies a great need. It is sold at lowest prices often in very small quantities at a time, particularly in the poorer districts.

## (viii) DELIVERIES

134. The main agencies of delivery are the pasteurising firms and the producer-retailers. The retail delivery services of the large pasteurising firms operate over the city and adjoining areas. The milk is delivered, mainly, in bottles. The producer-retailers are largely located within a radius of ten miles from the city, and milk from their herds is delivered by motor vans, horse-drawn vehicles or bicycles to their retail customers in the Sale District. These retailers, in the main, deliver milk loose from cans, but a limited number of them bottle all, or part of, their supplies. Producer-retailers tend to develop areas adjacent or convenient to their premises but they are in no way confined to such areas. A considerable amount of overlapping and duplication of deliveries takes place. One instance may be quoted of



a small area in which milk was delivered by about 15 to 20 different dairymen. In some districts as many as a dozen dairymen deliver milk in the same street. The delivery of milk twice daily is a common practice.

135. Milk is also delivered by persons, without premises of their own, who purchase milk from wholesalers and deliver it from house to house. These vendors of milk mainly use bicycles for delivery purposes. In order to comply with the Milk and Dairies Regulations they are registered at the premises of the wholesalers from whom they purchase milk. Sterilisation of utensils owned by the vendor is generally carried out using the wholesalers' plant and the utensils are stored at the latter's premises.

#### (ix) CONTROL OF QUALITY

136. It is during distribution that samples are taken for bacteriological and chemical analysis to enable control of quality to be exercised. A complete control of quality during distribution necessitates the taking of frequent samples at different stages, including samples from milk vendors, to determine the quality of milk delivered to consumers. Frequent samples also require to be taken as the milk reaches wholesalers, in order to check their methods. This check is particularly necessary for milk which is to be pasteurised. Chemical examination of the milk gives information about its composition in relation to nutritive quality. Bacteriological examination is of two kinds, that related to the total number of bacteria which the milk contains, and therefore to its keeping quality, and that related to the presence or absence of disease-producing bacteria especially tubercle bacilli.

137. Control of chemical quality is exercised under the provisions of the Sale of Food and Drugs Acts, 1875 to 1936. In recent years this control has been successfully applied and, in general, has revealed that milk sold in the Sale District is up to the required standard.

138. The bacteriological control of milk, as at present exercised under the Milk and Dairies Act, 1935, is inadequate. Biological tests of milk for tubercle bacilli are carried out only to a very limited extent.

139. Bacteriological control in relation to Highest Grade and Pasteurised milk is mainly exercised by the Minister for Local Government and Public Health. Of 520 samples of Highest Grade milk which were subjected by the State Chemist to the prescribed tests in the Dublin area during the period 1942-1944, 321 or 62 per cent. passed the two tests prescribed. During the same period 538 samples of Pasteurised milk were tested by the



State Chemist and 371 samples or 69 per cent. satisfied the prescribed test. Very few samples of milk prior to pasteurisation were tested. Of 40 such samples tested in the years mentioned only 11 or 28 per cent. passed the prescribed test. During 1944 officers of the Dublin Corporation took 36 samples of milk from holders of Dealers' licences for the sale of Pasteurised milk, issued by the sanitary authority. The number of samples which satisfied the standard laid down in the regulations for such milk was 22, or 61 per cent.

140. Local authorities are responsible for the taking of samples for bacteriological test in the case of milk sold under a general designation. In most counties in the Production District the number of samples of milk so tested has been insignificant. During 1944, 381 samples of such milk were taken by the Dublin Corporation for bacteriological test. Of that number 342, or 90 per cent. passed the prescribed test.

141. During the period 1935 to 1944 biological tests for tubercle bacilli were carried out, on behalf of the Dublin Corporation. Of 202 samples of Highest Grade milk so tested, none was found to be positive for tubercle bacilli. The figures for Pasteurised milk were, one sample positive out of 70 tested, and for milk sold under a general designation, 4 positive out of 90 tested.

#### (x) COSTS OF DISTRIBUTION

142. Little reliable information was forthcoming for the Tribunal regarding the cost of distribution, whether wholesale or retail. The data submitted could not be accepted as satisfactory or of general application. Such data were, moreover, abnormal owing to emergency conditions. The charges for distribution appear unduly high in relation to the prices paid to producers and the prices paid by consumers. There is generally no co-ordinated scheme for distribution. As with production so with distribution, the data are not available which would enable specific deductions to be made in relation to costs.

### *V. Consumption of Milk*

#### (i) AMOUNT CONSUMED

143. The average daily amount of liquid milk supplied to the Dublin Sale District in 1944 was 43,910 gallons. In 1945 the corresponding figure was 46,437 gallons. Milk is consumed as liquid milk, cream, and milk incorporated in manufactured articles such as ice cream, chocolate, butter, cheese and confections.



144. The following figures indicate how the gross consumption has increased from 1936 to 1945:

Year	Average Daily Amount supplied to Sale District	Population Dublin City	Population Sale District
	Gallons		
1936 ..	38,837	472,935 (Census)	597,036 (Census)
1937 ..	38,880	472,000 (Estimated)	—
1938 ..	38,606	477,000 „	—
1939 ..	38,435	482,300 „	—
1940 ..	38,035	487,500 „	—
1941 ..	39,981	491,800*	629,809
1942 ..	40,532	489,300 „	—
1943 ..	43,335	500,300*	629,677†
1944 ..	43,910	505,600 „	—
1945 ..	46,437	502,600 „	—

† According to Register of Population.

\* According to Registers of Population, 1941 and 1943, the figures were, Dublin City, 1941, 494,833; 1943, 495,074.

The above figures relate mainly to milk used in liquid form in the household or employed in cooking. A small proportion of the milk supplied to the Sale District is, however, utilised in the other ways already mentioned.

145. These figures do not indicate any significant increase in the average consumption per head, owing to increases which have taken place in the total population. The consumption of milk in Dublin city in 1945 was estimated at 35,000 gallons per day. This represents an average consumption of about .56 pint per head per day on the basis of a population of approximately 500,000. In the homes of well-to-do persons the consumption per head is greater than the average figure. It follows that the average consumption amongst the poorer sections of the population is considerably less. This conclusion is supported by information supplied by mothers of children during surveys carried out in recent years in Dublin. Of 800 young children examined, less than half were receiving as much as three-quarters of a pint per day. The mothers usually maintained that these young children got considerably more than would have been their share if the milk taken in the home had been divided equally between all the members of the family. The older children and adults in the house, therefore, must have been receiving substantially less.

#### (ii) DESIRABLE CONSUMPTION

146. The consumption of milk in the Dublin Sale District is low when examined from the point of view of public health or the desirability of milk as a human food. Evidence from



authoritative witnesses established that an average daily consumption of one pint per head was the minimum overall requirement. This would necessitate a total daily consumption in Dublin city of about 63,000 gallons or a daily consumption in the Sale District of about 80,000 gallons. The reasons which appear to be responsible for the present low consumption are discussed in paragraphs 277 and 278 of this Report.

### (iii) MILK IN THE HOME

147. Complaints are frequently made by householders that milk supplied to them is dirty and that it turns sour prematurely. In assessing these complaints allowance has to be made for the fact that the householder is sometimes to blame, in view of the way that milk is stored in the home. An examination made by one witness of the milk jugs presented by persons who purchase loose milk in shops, demonstrated that the jugs frequently contained sour milk residue. Some of the vessels handed to dairymen in the course of their daily rounds are unwashed and most unsuitable to act as milk containers. It appears that, in many households, insufficient attention is given to the proper cleansing of utensils and to conditions of storage.

## *VI. Control of Prices*

### (i) PRODUCERS' PRICES

148. Until 1936 there was no statutory control over the price paid to producers for milk. The prevailing practice until then was for the various interests to negotiate and arrive at an agreed price. With a view to improving the producers' position power was conferred on the Minister for Agriculture under the Milk (Regulation of Supply and Price) Act, 1936, to fix minimum prices for milk sold wholesale by producers. Since the coming into operation of that Act, and the consequent establishment of the Dublin District Milk Board, minimum prices have been fixed each year by the Minister. Details of the prices applicable for the various years from 1936 to 1945 are set out in Appendix 'F.' It will be noted that since 1939, there has been a steady increase in the prices paid to producers.

#### *(a) Determination by Milk Board*

149. Each year a determination is made by the Milk Board, of what it considers would be an equitable price for producers, and this is furnished to the Minister for Agriculture.



150. The Minister takes into account the determination of the Board. He considers such reports as producers may make to him. He is also furnished with an estimate of the cost of production of milk in the Production District, prepared for the Minister's information by a committee of technical officers. This estimate is based on the production costs of producers who normally produce on their holdings all, or the bulk of, the food required by their herds. It is considered of primary importance that the price should be one, which while as fair to the consumer as possible, would be acceptable to producers and would encourage them to maintain and, perhaps, to increase supplies. In considering the average price for the year the basic figure decided upon is the average price for milk delivered to a wholesaler's premises in the city and this is subject to deduction for haulage, according to distance from the city. The prices fixed are applicable equally to milk consigned from creameries and to milk sold by farmer producers.

#### *(b) Prices Fixed*

151. Two prices are generally fixed: (1) for milk sold to registered retailers, and (2) for milk sold to registered wholesalers, the latter being lower by  $1\frac{1}{2}$ d. per gallon. Despite the price difference in favour of sales to retailers, farmer producers sell mostly to the wholesalers. The wholesaler is usually the more extensive purchaser and in a better position to accept regular supplies. He is generally better known and his business organisation is better established than that of the retailer.

#### (ii) WHOLESALE AND RETAIL PRICES

152. The powers in relation to the fixing of retail prices which were conferred on the Minister for Agriculture by the Milk (Regulation of Supply and Price) Act, 1936, were not exercised by him. Since September, 1939, however, control has been exercised over the retail price of milk by the Minister for Supplies and the Minister for Industry and Commerce.

153. From May, 1941, until the present time, maximum retail prices for milk in the Dublin Sale District have been fixed by statutory orders. These orders were made under section 52 of the Milk (Regulation of Supply and Price) Act, 1936. The powers conferred by that section had previously been transferred from the Minister for Agriculture to the Minister for Supplies by an order of the Government under the Ministers and Secretaries (Amendment) Act, 1939, and are now exercised by the Minister for Industry and Commerce. Maximum retail prices are fixed for milk for a period of one year, beginning on the 1st May in each



year. From May, 1943, maximum prices were fixed for milk sold to retailers by wholesalers.

(a) *Method of Price Fixing*

154. Retail prices are determined by adding to the producers' prices margins considered reasonable to cover estimated distribution cost and profit. Evidence submitted on behalf of the Minister for Supplies indicated that the control on retail prices is at present exercised on an emergency basis.

(b) *Prices Fixed*

155. The prices actually fixed by the Minister for Supplies since 1938-39 are detailed in Appendix 'G.' For purposes of comparison the following figures relating to the years 1938-39 and 1944-45 are set out below:—

(a) *Loose Milk sold through Wholesale Agency—Prices per gallon*

Year	Price paid Producer by Wholesaler	Price charged Retailer by Wholesaler	Price charged to Consumer	
			(1) Not delivered	(2) Delivered
1938/39 :	s. d.	s. d.	s. d.	s. d.
Summer ..	0 9 $\frac{1}{4}$	—	1 6	1 8
Winter ..	1 4 $\frac{1}{4}$	—	2 0	2 2
1944/45 :				
Summer ..	1 3	1 5 $\frac{1}{2}$	1 10	2 4
Winter ..	2 0	2 2 $\frac{1}{2}$	2 8	3 0

(b) *Bottled Milk sold through Wholesale Agency—Prices per gallon*

Year	Price paid Producer by Wholesaler	Price charged Retailer by Wholesaler	Price charged Consumer by Wholesaler and Retailer	
			s. d.	s. d.
1938/39 :	s. d.	s. d.	s. d.	s. d.
Summer ..	0 9 $\frac{1}{4}$	—	2 0	2 0
Winter ..	1 4 $\frac{1}{4}$	—	2 4	2 4
1944/45 :				
Summer ..	1 3	2 2	2 6	2 6
Winter ..	2 0	2 10	3 2	3 2



(c) *Milk sold without Intervention of a Wholesaler—Prices per gallon*

Year	Price paid to Producer by Retailer	Price charged to Consumer		
		(1) Loose in Shop	(2) Loose Delivered	(3) Bottled delivered or in Shop
1938/39 :	s. d.	s. d.	s. d.	s. d.
Summer ..	0 11 $\frac{1}{4}$	1 6	1 8	2 0
Winter ..	1 5 $\frac{3}{4}$	2 0	2 2	2 4
1944/45 :				
Summer ..	1 4 $\frac{1}{2}$	1 10	2 4	2 6
Winter ..	2 1 $\frac{1}{2}$	2 8	3 0	3 2

(iii) SUMMARY OF PRICE MARGINS, 1944/45

156. (1) For wholesalers who sell milk to retailers the margin was 2 $\frac{1}{2}$ d. per gallon.

(2) In the case of wholesalers who sell loose milk retail (undelivered) the margins were summer, 7d.; winter, 8d. per gallon.

(3) In the case of wholesalers who process milk and who deliver bottled milk to consumers the margins were summer, 1/3d.; winter, 1/2d. per gallon.

(4) Producer-retailers were allowed for distribution a margin over production prices of 1/1d. in summer and 1/- in winter in respect of loose milk delivered. In the case of bottled milk delivered, the margins were 1/3d. and 1/2d. respectively per gallon.

(5) Where bottled milk was sold by wholesalers to retailers, evidence was given that the allowance to retailers, by the wholesalers, was 4d. per gallon.

(6) No separate price was fixed for Pasteurised milk, whether sold loose or in bottles, the margins being as at (2), (3), and (5) above.

(iv) PRICES FOR HIGHEST GRADE MILK

157. From January, 1941, prices for Highest Grade milk were determined by the Minister for Supplies after consultation with the Highest Grade Milk Producers' Association. On the 24th September, 1945, the Minister for Industry and Commerce, to whom the powers, functions and duties of the Minister for Supplies have been transferred, made an order fixing maximum retail prices for Highest Grade milk. The retail prices which have prevailed for Highest Grade milk from 1938-39 to 1944-45 are set out in Appendix 'H.' Over that period, the price allowed has varied from 4d. to about 7 $\frac{3}{4}$ d. higher than that fixed for ordinary milk.



## *VII. Diseases of Animals*

### (i) GENERAL

158. Diseases of dairy cows are of great importance for two main reasons. Firstly, some of the diseases are transmissible to human beings. Of these, tuberculosis is the most important. Secondly, these diseases constitute a serious source of economic loss by rendering the animals unfit for milk or meat production or by lowering milk yields.

159. The principal diseases of cattle are listed in Part VI of the Milk and Dairies Act, 1935, which prohibits the sale of milk from cows suffering from tuberculosis of the udder, any tuberculous condition of the uterus, any form of tuberculosis in which tubercle bacilli are excreted, any septic condition of the uterus, acute mastitis, chronic mastitis, actinomycosis of the udder, anthrax, foot and mouth disease, suppuration of the udder and retained placenta. Of the diseases therein mentioned, some are of little importance in practice, such as actinomycosis of the udder because of rarity, and others, such as foot and mouth disease and anthrax, are exotic or sporadic and are adequately dealt with, when they occur, by enforcement of existing legislation. On the other hand, tuberculosis and contagious abortion are enzootic diseases very important both economically and in relation to transmission to human beings. To these may be added mastitis, which is of great importance economically. Another condition worthy of consideration when dealing with diseases of animals is malnutrition which, in minor forms, is probably fairly constant in certain areas, and in major manifestations is very prevalent in many areas during the winter months.

### (ii) BOVINE TUBERCULOSIS

160. The prevalence of tuberculosis in cattle varies greatly in different parts of the country, being highest in the creamery areas. The detection of tuberculosis in animals supplying milk to the Sale District, except in relation to the production of Highest Grade milk, depends upon clinical examination. For animals used in the production of Highest Grade milk a tuberculin test is employed. No method of detecting tuberculosis in cattle is perfect but clinical examination can only detect relatively advanced disease. On the other hand, the tuberculin test applied efficiently, using the double intradermal technique with reliable tuberculin, will detect early as well as late tuberculosis. It is, therefore, clear that in the present state of our knowledge, the tuberculin test is the indispensable method of detecting tuberculosis in cattle.



161. Unfortunately the tuberculin available for the tests is not sufficiently well standardised to be completely reliable in its results. The Committee on Milk Supply (1926) drew attention to the problem of providing reliable tuberculin and it must again be mentioned now. It may be noted that, although the manufacture of tuberculin is to be undertaken in a Government laboratory as soon as possible, no provision is to be made for its independent standardisation. At present, no such provision is made for the standardisation of tuberculin imported from abroad. All tuberculin, no matter where prepared, which is to be used for the testing of cattle for tuberculosis should be subjected to the test of independent standardisation for potency, before it is permitted to be used by practitioners.

162. In order that the tuberculin test may be applied successfully for the detection of tuberculosis it is necessary that a sufficient number of practitioners should be specially trained in the technique of applying the test.

163. No suitable arrangements are made for the disposal of reactors to the test. The present system whereby known reactors are freely sold in the open market should be prohibited under severe penalties. On the other hand, facilities should be provided for their proper disposal without serious loss to the owners.

164. Tuberculosis in cattle constitutes the greatest single menace provided by milk to the health of consumers. The exclusion of bovine tubercle bacilli from milk sold to the consumer is of far greater importance than the exclusion of any other bacteria derived from the cow. Tuberculosis in cattle is, moreover, a source of very great economic loss to the country each year. Either of these reasons would be sufficient for the enforcement of suitable measures to ensure its eradication. The existing legislative and executive arrangements to deal with eradication constitute a negligible contribution to the problem. The ultimate aim should be the elimination of all tuberculous cattle from the country. This aim necessarily cannot be achieved within a very short time. Nevertheless a definite time-limit should be set, by which virtually all tuberculous cattle will have been eliminated. There are several tried methods which have given satisfactory results in other countries and which could be applied here. Bang's system as recommended by the 1926 Committee, or a modification of it suited to the special needs of this country, could be successfully used for the purpose.

165. Pending the enforcement of planned eradication the establishment of tubercle-free herds should be encouraged. The extension of the present tubercle-free herd system cannot, however, by itself be regarded as a probable contribution of real



value to the eradication of tuberculosis. The expense to the individual involved in the establishment and maintenance of the herds is too great. Moreover the chances of herds, so established, remaining tubercle-free for any appreciable length of time are small in the absence of a policy directed to the total eradication of tuberculosis in their neighbourhood.

### (iii) CONTAGIOUS ABORTION

166. Contagious abortion is a disease of great economic consequence to the owners of dairy herds and to the country as a whole. The organism responsible for the condition is transmissible to human beings in whom it may cause undulant fever. Despite the prevalence of contagious abortion in cattle, undulant fever is not very common in Ireland although its occurrence is well recognised. It is a temporarily disabling disease, but has a low fatality rate and cannot compare in seriousness with tuberculosis.

167. In cattle, contagious abortion is an exceedingly infectious disease, and, once the organism responsible has gained access to a herd, it is liable to infect all the cows of calf-bearing age and cause them to become "slingers." Contagious abortion is most difficult to cure or to prevent. In the course of time infected animals become immune to the organism and are able to carry their calves to term. Such animals, none the less, are often carriers of the organism. If introduced into a herd free from the disease, they bring the organism with them and infect the normal animals of the herd. The effects are often disastrous. Bulls may carry the organism, having acquired it from infected cows and may subsequently introduce it into normal herds. There is no effective specific remedy for the disease when it has become established. Preventive control, by isolation and similar measures, is almost impossible to apply successfully in practice.

168. In recent years a specific preventive for the disease has been developed and represents the best hope of controlling it up to the present. The method of prevention consists in the inoculation of heifer calves with a vaccine prepared from a special strain of the causal organism. Vaccines of this strain have been found, experimentally, to give good protection when administered to calves early in life. If this method is to be adopted in this country as a general measure of prevention, constant vigilance will be required to ensure that the vaccine used is potent. At present no control over potency is exercised, the position being similar to that of tuberculin.

### (iv) BOVINE MASTITIS

169. Bovine mastitis is not, in general, a serious menace to the health of consumers of milk from the infected cows. It is,



however, a cause of serious economic loss by reason of the loss of milk, depreciation in the value of the animals and the low milk-yields subsequent to an attack of the disease. Bovine mastitis is exceedingly prevalent throughout the country and in the Production District. It is a disease of highly contagious character peculiarly difficult to control or eradicate. There is no proved method of specific prophylaxis which can be applied to all animals with a view to prevention. The slaughtering of infected animals is of no practical assistance since the disease is so widespread and contagious. Doubtless more could be done to limit the disease by better methods of animal husbandry and more instruction of the farmers in the principles of animal hygiene. The best results thus obtained would, none the less, fail to eradicate the disease and would constitute only a small contribution towards keeping it in check.

170. The principal hope of conquering mastitis would appear to reside in early recognition of the disease, isolation of infected animals and vigorous treatment by one of the newer remedies such as the sulphonamide derivatives and penicillin. Some striking successes have been claimed for penicillin treatment, and research work directed to determining its efficacy should be undertaken without delay. Treatment should be bacteriologically controlled to ensure that cases do not remain carriers of the organism responsible, after apparent cure. In other words, this disease of animals should be controlled by application of the well-established methods whereby many infectious diseases, for which there is no specific preventive, are controlled in human beings.

#### (v) MALNUTRITION

171. The undernourished condition of many cattle during the winter months has often been the subject of comment in reports from previous committees and commissions, and it is well to emphasise it once more. Adequate nutrition is essential to the maintenance of the health of cattle and probably contributes substantially towards their resistance to disease. Sufficient food of proper ingredients requires to be provided for milch cows to maintain yield. It is generally agreed that most cows in the country take a considerable time to recover from their winter period of low food intake once grass becomes available for them in the spring and early summer. During the winter and the subsequent period of recuperation the milk yields are much lower than they would be on a more liberal allowance of food.

172. There are indications that in some areas there is a permanent deficiency of certain mineral constituents in the soil. Such deficiencies react unfavourably on the health of cattle



and may lead to the production of milk which is, in certain respects, deficient as well.

#### (vi) VETERINARY SERVICES

173. A note on the inadequacy of the veterinary services may be added. One reason why so little has been achieved in the elimination of diseases of cattle is the lack of veterinary personnel to do what is necessary. Merely for the purpose of illustration, a comparison of the medical and veterinary services of the country will indicate how great is the deficiency. For a population of 2,968,420 persons the country has about 2,000 doctors. The number of domesticated animals, subject to diseases similar to those of human beings, far exceeds the human population and yet there are only about 400 veterinary surgeons. The comparison is rendered still less favourable when it is recalled that there are no animal hospitals and virtually no animal clinics corresponding to those which form an essential part of the medical services.



## PART TWO

# CONSIDERATION OF EXISTING ARRANGEMENTS FOR THE SUPPLY OF MILK TO DUBLIN SALE DISTRICT

### *I. Introductory—Previous Investigations*

174. The reports of the Committees which reported in 1913, 1919 and 1928 contained valuable recommendations, and made important suggestions for the improvement of conditions generally in the milk industry. It is regrettable that, save as to the 1928 Report, many valuable recommendations were not implemented.

175. More recently the reports of the Committee of Inquiry on Post-Emergency Agricultural Policy, particularly the reports on

(1) Cattle and Dairying Industries, dated 5th August, 1943,

(2) Veterinary Services, dated 28th July, 1944,

contain relevant considerations and recommendations.

176. These reports covered some of the ground of this Inquiry. For that reason it has not been necessary to include in our Report a consideration of many matters already reported upon by the Committee of Inquiry on Post-Emergency Agricultural Policy. Taking into consideration the menace of bovine tuberculosis to the public health, we are not satisfied that the recommendations of the Committee in regard to the control of this disease are sufficient.

### *II. Legislative and Administrative Control*

#### A. GENERAL

177. The dual system of control by the Minister for Local Government and Public Health and the Minister for Agriculture appears to be unavoidable. The dairy industry, the production, quantity, quality, distribution, and sale of milk are primarily matters of agriculture. Milk is a most valuable human food. Hence the quantity, quality, distribution, sale and consumption of milk are of great importance from the public health point



of view. The sanitary authorities entrusted with the duties of enforcing the provisions relating to public health are under the control of the Minister for Local Government and Public Health.

178. This dual system of control involves overlapping of public services, and inconvenience in administration. Departmental control tends to work in water-tight compartments. Lack of co-ordination between departments may occur and failure to co-operate as well. Such lack of co-ordination and co-operation may react detrimentally on producers, distributors, and consumers. These difficulties are not peculiar to Ireland. They appear to be the common experience of other countries in so far as we have been able to ascertain from various reports which have been before us.

179. The dairy industry and milk production generally are only part, though a very important part of agricultural production, which must be made to fit in the general scheme of agriculture. It is hard to see how they can be divorced from agriculture. On the other hand, the public health aspect of the matter is of great importance particularly in the area covered by this Inquiry. In this area large centres of population are dependent upon the adequacy, purity and wholesomeness of the milk supply.

180. The Tribunal considers that the dominant consideration must be that of the public health. The present difficulties of administration can be largely, if not entirely, eliminated by closer co-operation between the two departments concerned. Closer co-ordination of services, both central and local, is necessary. This should extend to supervision of production, inspection, sampling, examinations and legal proceedings. In the administration of these services, a helpful and sympathetic approach is more desirable than one which has the enforcement of penalties as its objective. In view of the importance of preventing infection of human beings by contaminated milk, the sanitary control over this food should remain with the public health authorities. Effective control over diseases which may be transmitted by milk and maintenance of the quality of milk can best be achieved in that way. The public health authorities must be able to approach and deal directly with both the sources of infection and the means of transmission. Otherwise they cannot successfully discharge their responsibility for the control of diseases milk-borne to human beings.

181. In evidence submitted on behalf of the Minister for Agriculture it was intimated that the Minister was prepared to accept, with some modifications, the recommendations, in regard to veterinary services, of the Committee of Inquiry on Post-Emergency Agricultural Policy. Re-organisation of the veterinary services on a county basis would be preferable. This would



include the appointment of one county veterinary officer, who would be a whole-time official and would be responsible for the administration of veterinary services in his area, both in relation to public health and in relation to animal diseases. The establishment of a suitable liaison with the Department of Local Government and Public Health in regard to hygiene and fitness of products for human consumption would be necessary.

182. The Tribunal considers advisable the setting up of a permanent joint committee consisting of representatives of both departments. This committee should meet frequently and keep the departments advised fully on all relevant matters with the object of securing full co-operation between the two departments and more effective administration in all the services.

## B. MINISTER FOR LOCAL GOVERNMENT AND PUBLIC HEALTH

### (i) THE MILK AND DAIRIES ACT, 1935

183. This Act marked a distinct advance in providing a comprehensive code for the supervision of milk supplies from the sources of production to the consumer. It contains all the statutory provisions that are reasonably necessary for that purpose. By the adjustment of statutory regulations provision can be made for circumstances arising out of changing conditions. The Act has worked satisfactorily in many respects, particularly in those areas where serious effort has been made by the sanitary authorities to carry out their statutory duties. The enforcement of the Act has not been uniformly effective and practicable. For this there are two main reasons :—

- (1) the Act was somewhat ahead of its time and much in advance of conditions in the dairying industry ;
- (2) certain sections of the Act were found in practice to be insufficiently clear. In consequence prosecution was rendered difficult, and in certain cases ineffective.

184. The adjustment of the dairy industry to the new conditions and higher standards required by the Act has been only partially achieved, and must necessarily take a long time. The period necessary for reform of the industry, so as to bring it up to the standard demanded by the Act, will be longer or shorter, depending on the amount of assistance provided by way of education, encouragement and finance whether by loan or subsidy. The assistance provided hitherto has been very slight.

185. The following provisions of the Act appear not to have been adequately enforced in any area—

Part VI—sections 47 and 48, sale of milk from diseased animals ;



Part VII—section 51, and Part VIII, sections 54 and 56, dealing with the exercise of powers relating to sampling and bacteriological testing of milk ;

Part IX—section 59, prohibition of sale of contaminated and dirty milk.

186. Sections in the Act which require minor amendment have been the subject of considerable evidence before the Tribunal. It is not necessary to review these in detail. The amendments which are considered desirable have been set out in Appendix 'I' of this Report.

187. Apart from the important considerations referred to above there is a lack of uniformity in carrying out the provisions of the statute and regulations in the local administrative areas. Administration is unsatisfactory in some areas. The standard of administration and enforcement should be uniformly high as soon as circumstances will permit.

188. Inadequacy of inspection is noticeable in all areas. This is due mainly to :—

- (1) insufficient number of veterinary inspectors, and the unduly large districts which have to be covered by inadequate staff ;
- (2) the small numbers of sanitary inspectors employed by local authorities, and the lack of technical training among sanitary sub-officers ;
- (3) the lack of co-ordination of services administered by the Department of Local Government and Public Health and the Department of Agriculture.

#### (ii) SALE OF FOOD AND DRUGS ACTS, 1875 TO 1936

189. The administration of these Acts, in so far as milk is concerned, appears to be generally satisfactory. There are nevertheless several features of the Acts which might, with advantage, be reviewed. The effect of section 2 of the Sale of Food and Drugs (Milk) Act, 1935, as amended by the Sale of Food and Drugs (Milk) Act, 1936, is to make it an offence to sell milk which does not reach prescribed standards of quality. Many prosecutions under the Acts appear to be based on the assumption that the person prosecuted has adulterated the milk or abstracted fat therefrom. In many cases brought under these Acts no such abstraction or adulteration occurs. It should be made clear that if a person sells milk which does not satisfy the prescribed standards he is deemed for the purposes of the Acts to have sold, to the prejudice of the purchaser, an article of food which was not of the nature, substance and quality of the article demanded by the purchaser.



190. Milk from healthy cows should, as a general rule, reach the standards fixed by the Minister for Agriculture. On occasion, however, the milk of an apparently healthy cow may fail to satisfy these standards, either as regards fat content or amount of solids not fat. Evidence was given to the Tribunal that prosecutions under the Acts in respect of failures on test, where the cause of failure was not due to the milk being tampered with, represented a great hardship and reacted adversely on the business interests of the person prosecuted. It is understood that the Minister for Agriculture has been considering the most appropriate manner of dealing with cases of such deficiency and that efforts are being made to devise a more suitable, and at the same time, simple system of testing samples under the Acts. It is desirable, in the interests of dairymen, that an improved procedure be adopted as soon as possible. Any new test or tests to be applied should be carefully examined as to accuracy and reliability, before adoption.

191. Consideration should be given to the desirability of having the testing of milk for chemical quality withdrawn from the scope of the Sale of Food and Drugs Acts and brought within the scope of the Milk and Dairies Act, 1935. The qualitative control, both chemical and bacteriological, of milk would thereby be merged under one code of legislation. The opportunity could also be availed of to deal similarly with the other isolated statutory provisions relating to the public health control of milk which are still in force. To achieve this an amendment of the Milk and Dairies Act, 1935, would be required.

### C. MINISTER FOR AGRICULTURE

#### (i) DISEASES OF ANIMALS (IRELAND) ACTS, 1894 TO 1945

192. The attention of the Tribunal has been directed mainly to the provisions of these Acts which are of special importance from the public health point of view. These provisions, as already indicated, are The Bovine Tuberculosis Order of 1926, and The Epizootic Abortion Order of 1925. Both these orders are ineffective. The position regarding the prevalence of bovine tuberculosis, contagious abortion and other diseases has been set out in the section of this Report dealing with diseases of animals. In view of the unsatisfactory position revealed it is a matter of grave concern that adequate measures have not been adopted before now to control the spread of these diseases. The initiation of such measures is a matter of the greatest urgency in the interests of public health and on grounds of agricultural economy.

193. The scope of the measures to be taken in respect of tuberculosis should be such as to provide for the planned eradica-



tion of this disease over a determined period. No approach based on the scheme of the present Bovine Tuberculosis Order is likely to have any appreciable effect on the incidence of the disease. Action of a comprehensive and radical nature is essential if the disease is to be brought under control within any reasonable period.

194. It will also be necessary to take effective action to control the other diseases of animals which are transmissible to human beings through milk or which constitute a source of serious economic loss.

(ii) MILK (REGULATION OF SUPPLY AND PRICE) ACTS, 1936  
AND 1941

195. The enactment of these measures marked the initial steps in the control of the supply and price of milk on a wholesale basis, in certain areas. In the Dublin Sale and Production Districts the powers conferred on the Milk Board, though limited under the Acts, brought about an improvement in the prices paid to producers, and provided also a measure of protection to producers by limiting the Production District for the sale of milk to Dublin. Much useful work was done by the Milk Board, following the alteration in its constitution and powers in 1942. Production has not however proved sufficient to ensure an adequate supply of milk from the adjacent areas, at all times of the year. Production of milk in the area has not been properly organised. The powers conferred on the Milk Board, prior to and subsequent to 1942 were not such as to enable such organisation to be undertaken under normal conditions. During winter periods the amount produced is inadequate for the needs of the Sale District and during summer, when production is at its maximum, considerable quantities are generally left on the farmers' hands. The absence of regular arrangements for the disposal of the summer surplus has the inevitable effect of discouraging farmers from increasing their winter production. Any substantial increase in winter production would generally have the effect of increasing the summer supply and thus aggravating the problem of disposing of summer surplus. The limited and intermittent efforts made to dispose of portion of this surplus do not represent a satisfactory solution of the problem and it is evident that stable arrangements should be made to deal with it.

196. It appears evident to the Tribunal that the existing permanent legislation comprising the above Acts governing the supply and price of milk is inadequate to meet the present needs of the District. The present Production District is capable



of supplying the full needs of the Dublin Sale District on the basis of a much larger *per capita* consumption than now prevails, but an adequate increase in the amount produced is not likely to be achieved without proper organisation of the District and without the introduction of efficient facilities for the marketing, at all times of the year, of the milk produced in the area.

197. Such organisation of production and marketing can only be achieved by the establishment of a new milk board with greater independence and much wider powers in relation to the hitherto neglected aspects of the milk industry. Such a board would supervise the fulfilment of contracts between producers and wholesalers and retailers and make proper arrangements for the disposal of surplus milk in the summer. It would be responsible for the stimulation of production in the area *pari passu* with consumption and would take steps to attract potential milk producers, give advice to producers on stocking and feeding, and provide financial accommodation and insurance facilities in certain cases. Powers to rationalise wholesale and retail distribution of milk in the Sale District should be granted to the board, which should also be empowered to process milk and to undertake publicity work to encourage consumption. The Minister for Agriculture would continue to fix producers' prices, but recommendations in this regard, based on proper costings, would be submitted to him by the board.

198. The Milk (Regulation of Supply and Price) Acts provided for the establishment of milk boards representative of producers, wholesalers and retailers. The extensive powers now recommended to be given to the board to be responsible for the production and supply of milk in the Production and Sale Districts could not be efficiently administered by a large board, consisting of several contending interests. Evidence was given to the Tribunal of the difficulties experienced in practice regarding the determination of prices by the members of the Milk Board prior to 1942. Apart from such difficulties, the needs of the Production District require the services of a board consisting of members who would, for a substantial period, be required to give whole-time service, if the milk industry in the district is to be organised properly and efficiently in all its branches. It would be desirable for such a board to consult the several interests of the industry on major matters concerning them. The members of the board, while having knowledge and experience of the special problems of the industry, would not be appointed as representatives of any particular branch of the industry. The board should consist of a chairman and two members. A representative consultative council, meeting frequently to advise the board on different aspects of its activities, should also be appointed.



## D. MINISTER FOR INDUSTRY AND COMMERCE

199. The control over retail prices and the prices charged by wholesalers now exercised by the Minister for Industry and Commerce was first applied during the Emergency and was administered on an emergency basis. In the absence of generally reliable data *ad hoc* methods of determining price margins were depended upon by the department concerned. The aim was to adhere as closely as possible to the margins which existed prior to the Emergency and only to allow such increases as appeared to be justified by increased costs known to have taken place.

200. The Tribunal considers that control of retail prices and the prices charged by wholesalers should be continued as a permanent measure. The methods of price fixing hitherto adopted by the Department of Supplies and later continued by the Department of Industry and Commerce, while not open to serious criticism in the special circumstances of the Emergency, are not regarded as adequate for the exercise of control of a permanent nature over the prices already mentioned. The Tribunal has already adverted to the absence of reliable data in relation to the costs of production and distribution. Any permanent system of price control, if it is to be efficient and equitable, must be based upon periodic investigation of the relevant costs by or on behalf of the departments concerned.

### *III. Production of Milk*

201. In considering further the existing arrangements it will be convenient to follow the general order in which they have been set out in Part One of this Report.

#### (i) AREA OF SUPPLY

202. The Production District as now established is generally satisfactory as regards location and size. It has much to recommend it from the point of view of proximity and convenience to the Sale District. At present the area is unevenly developed, but with proper development, uniformly distributed, the area should be adequate to supply all the milk required. Extension or reduction of the area of supply may be expedient as circumstances arise. The advantages of developing thoroughly the existing area are obvious.

#### (ii) SOURCES OF SUPPLY

203. The production of milk by farmer producers in the Production District should be encouraged. Despatch of raw milk to the Sale District from long distances by certain producers outside the Production District does not commend itself to the



Tribunal. The gradual elimination of milk from creameries, which are the holders of Special Designation Licences under the Milk and Dairies Act, 1935, should be aimed at. Milk from other creamery sources should not continue to be sold in the Sale District.

### (iii) QUANTITY OF MILK SOLD

204. Over the period 1936 to 1945 there has been a steady annual increase in the amount of milk sold in the Sale District. Production in the Production District has also increased. Most of the milk supplied from the District is obtained from two areas—

- (1) within a 10 mile radius of the city, and
- (2) outside a 20 mile radius.

The figures quoted already for supplies from the area lying between 10 and 20 miles from the city indicate that this portion of the Production District has not been fully developed. For geographical and economic reasons the prospects of extensive development in this area are limited. The southern part is mountainous and the northern portion is to a considerable extent devoted to market gardening and beef production. The Production District outside the 20 mile radius is much under-developed and affords the best possibilities for increased sources of milk supply.

### (iv) REGISTRATION WITH THE DUBLIN DISTRICT MILK BOARD

205. All producers should be registered both with the sanitary authorities and with the Milk Board. No liquid milk should be sold for human consumption in the form of milk except by producers so registered.

### (v) CONTRACTS

206. The form of contract approved by the Milk Board for use by the producer is set out in Appendix 'D' and is generally satisfactory. The chief objection to the contracts, as at present entered into, is that they have not been regarded as binding on the producers to supply, or the purchasers to accept, the amounts entered on the contract. Producers usually enter into agreements to supply an even monthly gallonage throughout the year. This means in practice that they commonly fail to provide the amount stipulated in the contract in periods of shortage during the winter and are in a position to exceed the supply stipulated in the contract for the period of maximum production during the summer months. The uncertainty of deliveries in the winter period makes it difficult for the wholesalers and the Milk Board to make arrangements to meet their demands.

207. Producers should estimate carefully the quantities they can produce over the varying periods and should contract for



quantities related to their production capacity. The quantities thus contracted for should be reasonably adhered to by the contracting parties and the contracts should be reasonably enforced.

208. There is a surplus of milk in the Production District during the summer period. Owing to the lack of proper arrangements for dealing with this, a serious loss from waste results. If the terms of the contract, on a reasonable contractual basis, are to be fulfilled arrangements of suitable character will have to be made for the proper disposal of surplus milk produced during the summer. A method of dealing with the problem which suggests itself is the provision of arrangements to dry surplus milk during this period.

#### (vi) LOCATION OF PRODUCERS

209. Dublin city and county show the highest number of producers and supply the greatest quantity of milk to the Sale District as compared with the other adjoining counties. The possibilities of expansion in the Dublin city area are negligible. Reduction of supplies of milk drawn from this area is more probable. The county of Dublin is not fully developed for milk production, but the possibilities of further development in that area are limited. Some of the other counties adjoining the Sale District are only developed to an extent which provides a fraction of what they would be capable of supplying. The desirability of keeping production as close as possible to the Sale District has already been mentioned. It is clear that by fostering production of milk in Meath, Kildare and Louth and in the other counties, as far as circumstances permit, all the requirements of the Sale District for many years to come could be provided.

210. The following table shows particulars of cattle in the Production District in 1944 and 1945 :—

	Milch Cows and Heifers in Calf		Total Cattle		Percentage of Milch Cows and Heifers to Total Cattle	
	1944	1945	1944	1945	1944	1945
Dublin ..	23,091	22,666	67,456	63,604	34.2	35.6
Wicklow	23,564	23,861	75,091	75,376	31.4	31.6
Kildare ..	23,377	22,941	115,977	114,418	20.1	20.1
Meath ..	36,173	35,714	211,492	209,209	17.1	17.1
Louth ..	15,194	14,681	57,606	56,004	26.4	26.2
*Wexford	38,951	39,171	142,307	142,573	27.4	27.4
*Carlow ..	14,990	14,921	56,681	57,093	26.5	26.1

\* Only portion of this county is included in the Production District ; particulars are in respect of the whole county.



211. According to information furnished to the Tribunal, there are, in the five counties adjoining Dublin city, about 120,000 dairy cows. It is estimated that between 40,000 and 45,000 cows with an average yield of 600 gallons per annum would provide an all the year round supply of 60,000 to 62,000 gallons of milk daily.

#### (vii) SUPPLY POSITION

212. To ensure an adequate and safe milk supply the registered producers should be in a position to supply all the milk required for the Sale District. There should, moreover, be no need to have recourse to unregistered producers in order to supplement supplies in periods of shortage. The ideal producer is one with adequate land and premises who preferably rears his own heifer calves. The higher the proportion of the milk sold which is produced by such farmers the easier it will be to ensure a safe milk supply. In order to arrange for a supply adequate in quantity and safe in quality a considerable amount of organisation will clearly be necessary. There is at present no authority or body with adequate powers whose responsibility it is to encourage milk production in the Production District or to induce farmers to go in for milk production by providing secure conditions for the disposal and marketing of their produce at a reasonably profitable price.

#### (viii.) PRODUCTION BY FARMER PRODUCERS WHO DISPOSE OF MILK TO WHOLESALERS AND RETAILERS

213. In order to stimulate production by farmer producers and to ensure that milk of the highest quality is produced at reasonable cost, advice and assistance must be provided to enable them to make such improvements in their premises, cattle, methods of feeding and equipment as may be necessary to reach the standard envisaged by the Milk and Dairies Act, 1935. It would be unreasonable to expect that they could reach this standard unaided. Up to the present, little has been done to help them. In consequence many of the provisions of the Act are not enforced strictly, since an immediate shortage of milk would result from such enforcement. Producers of very small quantities of milk should be encouraged to take up some other branch of farming unless they have sufficient land or can acquire sufficient land to be able to produce about 10 gallons of milk daily.

214. Those farmers who are in a position to produce milk should be instructed in the most economical methods of production, as well as in safe milk production. They should receive encouragement to eradicate tuberculosis from their herds, to build up herds of high-yielding cows by cow-testing and the eradication of cows which are uneconomic. Moreover, they



should be guided in the proper methods of feeding cows, especially during the winter period.

215. Labour for the purposes of the dairy farm presents a problem of increasing difficulty. It would appear that the only way in which this problem can be adequately met is on a vocational basis. Those who are entrusted with the care and milking of cows should be instructed in the work and should show some inclination for it. In proportion to their ability and experience they should receive remuneration commensurate with what is undoubtedly an exacting and unattractive occupation from many points of view. By concentrating milk production as far as practicable in the areas adjoining the city, it should not be impossible to organise relaxation for the labourers which would help to make their calling more attractive. In a properly organised system of production and distribution the greater employment of women in dairying, an occupation for which they are traditionally well suited, would seem to merit consideration.

#### (ix) SURPLUS MILK

216. The necessity for organised arrangements to handle and process surplus milk is evident. An increase in winter production will in practice lead to a supply in excess of immediate requirements during the summer months. The fact that some or all of the summer surplus might be left on their hands has undoubtedly had the effect of discouraging some producers from engaging in more extensive winter dairying. If the production of milk is to be increased it will be necessary not alone to assure the producer of an equitable price but to ensure that the surplus milk produced during the summer months by those who sell to wholesalers, shall not be left on the producers' hands. Representatives of the producers have given evidence that relations with the wholesalers are sometimes unsatisfactory. Each of the four big wholesalers who collect the bulk of the milk from farmer producers has almost a monopoly in his area. Complaints have been made of certain irregularities, such as unsatisfactory measure, the return of "alleged" sour milk, and the leaving of milk on the farmers' hands during the summer season. One producer stated in evidence that all the milk produced on his farm was left on his hands on two occasions within eight days.

217. Evidence has been given that these practices do not prevail with all wholesalers. Surplus milk is in some cases used for manufacturing purposes. There is little or no co-operation between wholesalers, and consequently no means of estimating the extent of the surplus and arranging for its collection and disposal. There appears to be inequality of treatment of suppliers, depending on the degree of reasonableness with which the individual wholesalers approach the problem.



218. Wholesalers are concerned with obtaining from producers, and later distributing to customers, supplies of milk sufficient to keep their established plants working to capacity and no more. Under existing arrangements they are in no position to deal adequately with the surplus supplies which may reach them. It follows that some of them may on occasion treat producers in a way which might not be considered fair.

219. We have had evidence to the effect that producers are to a large extent in the hands of wholesalers and that they are not in a position to make complaints or take legal action for the redress of their grievances, since this might result in victimisation. An individual farmer, whose surplus milk will not be taken and who has no alternative arrangements for dairying, cannot generally utilise this surplus except for the feeding of pigs or calves. As already mentioned, a substantial amount of milk is forwarded to Dublin from creamery districts during the summer months, when surplus milk in the Production District is either not taken, or is returned to farmers. This is a serious defect in the existing arrangements. Creameries have every facility for the churning of all milk received, the butter either being sold for immediate consumption or placed in cold storage for winter use.

#### (x) PRODUCTION OF HIGHEST GRADE MILK

220. It is regrettable that the amount of Highest Grade milk produced in the Production District is so limited. Highest Grade milk achieves the standard which all milk for human consumption in liquid form should reach. The present regulations governing the production of Highest Grade milk are generally adequate and, if complied with exactly, should result in a milk which is in a high degree safe, nutritive and bacteriologically pure.

221. Much of the expense in the production of Highest Grade milk is due to the cost of keeping the herds free from tuberculosis. If tuberculosis in cattle were to be eradicated throughout the country as a whole the cost of production of Highest Grade milk would differ little from that of ordinary milk. Furthermore, the eradication of bovine tuberculosis in the country as a whole would enable milk of highest grade to be produced by those who, at present could not comply with the many regulations directed primarily towards the prevention of access of tuberculosis infection to the highest grade herds. Many of those who find it impossible to comply with these regulations are small producers. Others are in the category of cowkeepers. A few of these producers are even now producing a milk which is sold as ordinary milk but comes very close in quality to Highest Grade milk. Highest Grade milk production should, therefore, be expanded and encouraged. Moreover, the establishment of tubercle-free



herds should be the general aim even of those producers who are unable to conform with the regulations as they now stand.

222. In order that such improvements may be made, guidance, control and financial assistance are clearly necessary. Unfortunately, there is no authority or body with adequate powers whose responsibility it is to take positive action to encourage Highest Grade milk production or to induce milk producers to improve their animals and premises so as to raise the general standard of milk production to a level comparable with that of Highest Grade milk.

223. The regulations provide that animals should pass a tuberculin test before entering on the premises of the highest grade producer. This rarely happens in practice in view of the absence of facilities for obtaining tested animals. As a result animals are either bought unconditionally and then tested by the producer, or alternatively, are purchased subject to passing the tuberculin test. In the latter case the purchase price is higher.

224. In order to reduce the likelihood of an unfavourable reactor to the tuberculin test, highest grade producers generally discriminate in favour of animals from parts of the country where they have found from experience that the percentage of reactors is low, and they are reluctant to purchase animals from the creamery areas.

225. In general the producer has the purchased animals tested on his own farm. Segregation is necessary for animals brought in, until they are tested and the result of the test is known. When the preliminary test is passed, the regulations provide that the animal should be isolated for a further period of two months, and then tested again. This test must be negative to permit the animal to become part of the herd. It is doubtful if effective isolation is achieved in all such cases. The disposal of the milk from cows during the two months isolation period before entry to the herd and of the milk of cows which are purchased and fail to pass the test, but which are nevertheless on the farm premises for some time before removal, presents difficulties. The sale, as Highest Grade milk, of milk from cows which have passed the preliminary tuberculin test and are in isolation is not prohibited by the regulations. The regulations on the other hand prohibit the sale, as Highest Grade milk, of milk from cows which have failed to pass a prescribed test.

226. Where a cow fails on test the producer has had the expense of purchasing the animal, the veterinary expense of having the animal tested, and subsequently the cost of transferring the cow to market for disposal, and a probable loss on sale. The sale for milk production of cattle known to be tuberculous,



following a tuberculin test, is to be deplored and should be prohibited. The disposal of such animals should be brought into line with a comprehensive scheme for the eradication of tuberculous cattle.

227. At present the producer of Highest Grade milk has no means of purchasing tuberculin-tested animals except from other tested herds. Under the regulations only animals from a highest grade herd may enter, without delay, another highest grade herd. If facilities were available whereby animals could be purchased which had already been tested and were certified as having successfully passed such tests, much of the present difficulties of the producer of Highest Grade milk would be obviated. Various proposals have been put forward for the purpose of ensuring the availability of such animals. Reference has been made already to the practice of highest grade producers purchasing in areas where experience has taught them that the numbers of reactors are relatively low. A start might be made towards the establishment of a reserve of tested animals for dairy purposes in one or more such areas. A register of tubercle-free animals which have successfully passed a test or periodic tests could be set up. Testing should be done without cost to the owner of the animals. Such steps would enable producers of Highest Grade milk to obtain replacements and remove one of the main difficulties of this class of producer—the reactor on initial test.

228. Producers of Highest Grade milk do not appear to have given much consideration to the question of collective insurance to cover losses on reactors. Insurance would provide a great safeguard against individual loss. The losses under existing conditions, suffered by eight prominent producers of Highest Grade milk are shown in Appendix 'J'.

229. Proposals for the testing of all cattle and the elimination of reactors in areas where the incidence of tuberculosis is low have been put before the Tribunal. The establishment of special markets for tuberculin-tested cattle was also recommended. The Tribunal is of opinion that, as an initial measure, the setting up of the suggested register would be preferable. Doubtless the other steps mentioned would form part of a national campaign for the eradication of bovine tuberculosis from cattle, which is the only satisfactory solution. The establishment of special markets for tuberculin-tested cows would, in view of the limited number of such animals now required, appear to be premature.

230. The Highest Grade Milk Producers' Association made representations to the effect that their producers are subject to disproportionate expense in relation to veterinary attendance. If the regulations are to be complied with, this is unavoidable in existing circumstances. With the general eradication of bovine



tuberculosis a considerable saving in veterinary expenses should be achieved by general herd tests at six-monthly intervals. Tests of this type would, in addition, make for easier administrative control over the herds. Where self-contained herds, which are ideal for Highest Grade milk production, are in existence, this problem does not arise. Improved veterinary services in relation to the testing of highest grade herds and special facilities for the carrying out of tuberculin tests are necessary for the extension of Highest Grade milk production.

#### (xi) PRODUCER-RETAILERS AND COWKEEPERS

231. The producer-retailers with land sufficient for their needs are in a favourable position for milk production. They are in the same position as the farmer producers, with the added advantage in most cases of proximity to the city. The production of milk in densely populated urban areas by producers in this category is objectionable. Unlike the milk of farmer producers which is generally sold to wholesalers and pasteurising firms the milk of producer-retailers and cowkeepers is not subjected to heat treatment before sale. It is therefore of the greatest importance that this milk when produced should reach the highest standards of safety. Only milk which has been produced in accordance with the highest grade standards or which has been efficiently pasteurised can be regarded as being safe and free from the risk of contamination by living organisms of bovine tuberculosis. The number of producer-retailers in a position to change over to the production of Highest Grade milk is limited, owing to the difficulty of complying with the regulations. Not many cowkeepers could afford to do this as it would be necessary for them to leave the city area and acquire land outside. For those who wish to transfer to rural areas and continue milk production, financial assistance should be provided to acquire suitable land. Efficient pasteurisation of the milk of producer-retailers and cowkeepers as of the milk of farmer producers, other than highest grade producers, appears to be the only practicable method by which the milk can be rendered safe.

#### (xii) SUPPLIES FROM REGISTERED AND LICENSED CREAMERIES

232. The supply of milk from registered and licensed creameries provides a convenient method of making up the quantity required for the day-to-day needs of the Dublin Sale District. In this way these creameries have fulfilled a useful purpose. Objections to the creamery milk supplies are well founded. They are (1) the conditions prevailing at the source of production ; (2) lack of any supervision of the producers ; (3) the long distance travelled and the time taken before the milk reaches the consumer. With increased production in the Production District it should be possible to reduce very considerably the quantity of milk obtained from the creameries. Full production in the Production District,



properly organised, should be aimed at with a view to dispensing gradually with this source of supply.

#### (xiii) SUPPLIES OF MILK FROM OTHER CREAMERIES

233. The granting of special licences to other creameries to enable them to supply milk to the Dublin Sale District was adopted as an expedient to avert exceptional shortage during the period of the Emergency. Milk from these sources has been found unsafe. Recourse to such supplies should cease. With proper organisation of milk production these supplies should not be needed in the future.

#### (xiv) DRIED MILK

234. Dried whole milk if properly processed is an excellent and safe food corresponding closely, when reconstituted, to fresh whole milk in its nutritive qualities. The use of dried milk should be encouraged. The drying of milk requires that the milk for this purpose should be very fresh and milk of good quality only should be used. Subject to such arrangements as would be necessary to ensure the use of milk of a proper quality for drying, the processing of milk in this manner provides a method of disposing of a summer surplus by converting it into a form which is both storable and saleable. Milk so dried could be used to supplement supplies during periods of winter shortage. It would also be invaluable as a reserve in times of emergency.

#### (xv) GRADES OF MILK

235. There can be no advantage in having a multiplicity of designations for milk. The objective should be the production of milk which is both safe and nutritive. To ensure these essentials it should be either Highest Grade milk or Pasteurised milk. It is a debatable question whether Highest Grade milk should be pasteurised.

236. In favour of compulsory pasteurisation of milk produced in accordance with highest grade standards is the additional protection which such pasteurisation provides against the spread of diseases, other than tuberculosis, from the cow and of epidemic diseases from human sources. On the other hand, the available evidence shows that the spread of such diseases by raw milk in the Dublin area is rare, so that little danger is likely to be associated with raw milk of highest grade quality. In addition Highest Grade milk is free from the danger of spreading bovine tuberculosis. An extension of its production is clearly desirable on account of its contribution to the eradication of bovine tuberculosis. It would thus appear that the aim should be a gradual transition of all liquid milk sold in the area to Highest Grade or Pasteurised milk.



## (xvi) QUALITY OF MILK

237. More attention requires to be paid to the quality of milk at the source of production in dairy premises. A system of educative inspection which would include the taking of samples for the detection of bacteria and dirt, and for chemical examination, combined with helpful instruction, would aid producers to reach a higher standard of quality. By the introduction of a competitive spirit, with suitably arranged contests, and awards for the best producers, a very high standard would ultimately be reached. The keeping quality of milk depends in the highest degree upon its bacteriological content at the source of production. Little has been done to instruct producers in the precautions necessary to exclude bacteria from milk at this stage.

238. The freedom of milk from tubercle bacilli is of greatest importance in relation to the question of quality.

239. It is also most important that those engaged in milk production should be free from the infecting organisms of communicable disease.

## (xvii) COSTS OF PRODUCTION.

240. It is essential for the maintenance of milk supplies that producers shall receive a price which will cover the cost of production and afford a fair margin of profit.

241. The segregation of the costs of milk production from those of other products when general farming is also undertaken is not an easy matter. Even when segregation can be achieved it is difficult to reach an agreed basis for computing the value, for costing purposes, of the feeding stuffs and other elements of cost arising on the farm. This problem can be approached from several different angles, which substantially influence the results obtained.

242. The factors influencing the cost of production are—(1) the cost of feeding stuffs ; (2) costs incurred owing to the incidence of disease and replacement of herds ; (3) labour costs ; (4) miscellaneous expenses. Under the latter heading allowance has to be made for rates, costs of management and upkeep of land, premises and equipment, transport charges and interest on invested capital. These costs vary extensively as between different districts of supply and between producers of different types and also even between producers of the same type in the same district producing under apparently similar conditions. Milk yield is of the highest importance in the economics of milk production. Milk yields have, however, also to be compared with the relative costs. Increased yields may not necessarily mean higher profits nor increased costs lower profits.



243. Allowance must also be made for the increased cost incurred by special care directed to the production of milk of high quality. In this respect special allowance must be made for the production of Highest Grade milk from tuberculin-tested cows. Exceptional conditions, due to the Emergency, have prevailed in recent years leading to increased production costs in all categories. It is therefore not possible to make specific deductions in respect of production costs since the necessary data are not available.

244. There is no authority or body charged with the duty of assessing costs. It is desirable that the costing of milk production should be placed on a rational basis. Since the elements of cost tend to vary, a costing system or systems should be established which would enable the actual costs to be ascertained from time to time.

#### *IV. Distribution of Milk*

##### (i) COLLECTION AND TRANSPORT

245. The collection of milk from producers and its transport to the premises of wholesalers, in order to be efficient and economical demands a high degree of organisation. This has been lacking up to the present. If it be granted that in a well organised system of production within the Production District a producer of milk of high quality would have the right to dispose of all the milk which he could produce in accordance with his contract, then the arrangements necessary to ensure that none of this milk would be left on his hands should not be impossible of achievement. Under existing circumstances owing to the absence of proper sterilising and cooling facilities on the premises of many producers, it is very difficult to ensure, with only one daily collection, that all milk will reach the wholesalers in a condition which complies with the regulations.

##### (ii) COLLECTION OF MILK BY PASTEURISER-WHOLESALEERS

246. The collection of milk by wholesalers is arranged from the point of view of their respective business interests. The collection lacks co-ordination between firms and in some instances neglects the interests of producers. This involves overlapping and is responsible for failure of the Production District to develop uniformly.

247. The collection of milk from producers by pasteurising firms which operate their own lorries is open to no objection provided that there is no overlapping of areas. It is, in fact, the most rational system and that likely to lead to the most economical results, unless public haulage contractors would do the



necessary work by contract at a lower cost. If overlapping be prevented so that a given firm operates in one area only, a provision requires to be made to protect the producers in the area from the danger of victimisation by the wholesaler operating in the area. There is at present no authority or body which possesses the powers necessary to enforce and guide the rationalisation of such transport and the powers necessary to protect the producers.

### (iii) COLLECTING POINTS

248. The present method of collection in uncovered lorries from uncovered and unprotected collecting points is open to objection.

249. With proper development of the Production District it should be possible in certain areas to establish properly equipped collecting stations, served by local transport. The milk, on receipt at such stations, would be kept in readiness for transport to Dublin in properly constructed lorries. Facilities for cooling and testing milk at such collecting stations might also be provided.

### (iv) RAIL TRANSPORT

250. Rail transport is generally more efficient for substantial quantities over considerable distances. The Emergency has adversely affected rail transport owing to the shortage of trains, and the time taken in deliveries. In normal times the railway companies should be capable of providing at economical rates, in properly equipped vehicles, the road and rail services necessary for efficient transport of milk from the producers to Dublin.

### (v) PASTEURISATION.

251. The existing facilities for pasteurisation are inadequate. The plants in some cases are old and in need of replacement. Some plants are too limited in their capacity. The premises are, in most cases, too restricted. Insufficient attention is given to dairy technology amongst the personnel.

252. Experience has established the necessity for extreme care in pasteurisation at all stages of the process. The danger of the release, as Pasteurised milk, of milk which has not been properly pasteurised cannot be too strongly emphasised. The danger of contamination at any stage subsequent to heat treatment must never be overlooked. Close supervision by the public health authorities is necessary.

253. The personnel employed in the pasteurisation plants should be subject to such medical enquiry and examination as the medical officer of health may require. Furthermore, a list of the names and addresses of all those employed in such plants



should be held by the sanitary authority and no additions to the staff should be made without notification to the medical officer of health, who should be satisfied as to the health of the person to be employed.

254. If the scheme of pasteurising all milk, save Highest Grade milk, be adopted it will be necessary to set up additional pasteurising plants at convenient centres. The granting of licences for the establishment of such plants should be limited, save in special circumstances, to :

- (a) the existing pasteurising firms ;
- (b) the producers on a co-operative basis ;
- (c) the non-pasteurising wholesalers on a co-operative basis ;
- (d) a new milk board with wider powers.

#### (vi) DISTRIBUTION BY NON-PASTEURISING WHOLESALERS

255. The bulking of raw milk and its subsequent distribution without heat treatment is fraught with danger to the consumer owing to the increased risk of infection from such milk. All milk bulked in this fashion should be pasteurised.

#### (vii) RETAIL SALE

256. Pasteurised milk should not be supplied in bulk to retailers for sale as loose milk in small quantities. The removal frequently of small quantities of milk from large containers, by means of a dipper, is open to objection. All Pasteurised milk for sale in shops should be delivered in sealed bottles or waxed cartons of not more than one quart capacity. For the sale of milk in small quantities in poorer districts special arrangements, by way of subsidy or otherwise, should be made to enable such milk to be sold in hygienic containers.

#### (viii) DELIVERIES

257. Existing methods of delivery are uneconomic and unplanned. It is essential, in the interests of consumers and producers alike, that a rational system of delivery be devised. If the grades of milk available to the consumer be restricted to two—Highest Grade and Pasteurised—and the quality be standardised, rationalisation of deliveries to the consumers should be readily capable of achievement. Distributors' licences should be issued only to persons with their own premises and adequate equipment for sterilisation and delivery. The delivery of milk by persons without such premises should be prohibited.

#### (ix) CONTROL OF QUALITY

258. The existing arrangements prescribed by the Sale of Food and Drugs Acts for the control of the chemical quality of milk



during distribution are generally adequate. Sufficient tests are not carried out. More frequent sampling and testing of milk is necessary. The control of bacteriological quality by bacterial counts, methylene blue tests and biological tests, requires to be explained in order to be generally understood.

259. Bacteria in milk may be divided into two classes, those which are harmful (the pathogenic bacteria) and those which are not (the saprophytic bacteria). The saprophytic bacteria by growing in milk cause it to become sour. Souring is a natural and harmless, if not beneficial, process. The pathogenic bacteria capable of causing specific diseases may be derived from the cow or from human sources. With the exception of the tubercle bacillus and the organism of contagious abortion, they are rarely looked for in milk. Tests for such bacteria do not form part of the usual routine for bacteriological examination of milk.

260. The numbers of saprophytic bacteria present in milk determine its keeping quality which is related to the cleanliness of the conditions under which it has been produced and processed and the efficiency with which it has been distributed. It has been suggested that saprophytic bacteria, if present in sufficiently large numbers in milk, may cause illness, especially among children. The evidence on which this theory is based is inconclusive and may be countered by the therapeutic benefit many persons have derived from the free consumption of sour milk containing enormous numbers of these bacteria. The most that can be said in favour of the theory, therefore, is that the presence of these bacteria, in numbers vastly greater than are permitted by law at the time of sale, may cause disturbance to the health of young children. It is, however, accepted that bacterial growth in Pasteurised milk causes putrefactive changes less desirable than natural souring.

261. The usual methods employed for the examination of milk intended for human consumption in liquid form are the plate count and the methylene blue tests. The methods used, in compliance with the regulations, for counting living bacteria by the plate count test are such as reveal only a fraction of those present. This is irrational and the methods used should clearly be designed to reveal, as nearly as possible, the total number of viable organisms present, if the bacterial analysis is to have any scientific meaning. The methylene blue test provides much less information than may be obtained by a properly conducted plate count for total living organisms. It is prescribed only for Highest Grade milk and Standard milk, neither of which forms any appreciable proportion of the total milk consumed in the Sale District. Its use for a small fraction of the milk supply which is supposed to reach exceptionally high bacteriological standards is, therefore, without scientific reason.



262. In these circumstances, the continuation of the methylene blue test as an official test of quality to be applied to milk at the time of distribution does not appear to be just fied. The limit of 30,000 bacteria per cubic centimetre which was at one time regarded as satisfactory for milk in the highest grade category may be difficult of attainment if methods of counting bacteria which reveal the true total be adopted. On the other hand a limit of 50,000 or 100,000 bacteria per cubic centimetre with the improved methods would appear both reasonable and attainable.

263. Pasteurised milk is at present controlled by the plate count test. The regulations prescribe that not more than 500,000 bacteria per cubic centimetre shall be present in milk prior to pasteurisation, and not more than 100,000 per cubic centimetre after pasteurisation. In practice the milk very frequently contains more than the permitted number of bacteria, prior to pasteurisation. The regulations do not provide for prosecution if Pasteurised milk be sold with a bacterial content in excess of 100,000 per cubic centimetre. Pasteurised milk is, for purposes of prosecution, brought under the requirements of the general provisions of the Act whereby no milk may be sold which contains more than 500,000 bacteria per cubic centimetre. This is a defect in the law. With improvements in production, transport, processing and distribution of milk it should be possible, in time, to maintain a strict standard whereby 500,000 bacteria will be the permissible maximum count obtained by the best technical methods, for milk prior to pasteurisation and 100,000 bacteria will be the corresponding permissible maximum at the time of sale.

264. It is desirable that a check on the condition of the milk prior to pasteurisation should be permitted to be applied to milk at the time of sale. The plate count for total living organisms combined with the microscopic method of Prescott and Breed which reveals the total number of organisms living and dead in the milk, often enables an estimate of the goodness of the milk prior to pasteurisation to be made. The method of Prescott and Breed will reveal especially those milks in which the permitted maximum at the time of pasteurisation has been grossly exceeded. All the more, therefore, should it be permitted as evidence when a prosecution is brought for the sale of bacteriologically defective Pasteurised milk.

265. In the Milk and Dairies Act, and the regulations under it, bacteria were not defined. Other forms of life, such as yeasts and moulds, which are present in milk grow on the media prescribed for the testing of milk. The bacteriologist has no ready method of distinguishing them from bacteria, during the enumeration of the organisms. Hence it is not possible for him to state the number of bacteria present. The proper procedure would



be to substitute in the Act, and the regulations made under it; a term such as "living organisms" or "organisms" for the terms "living bacteria" or "bacteria."

266. In conducting the bacteriological tests it is impossible for the bacteriologist to carry out all stages of preparation, testing, incubation and enumeration himself. This fact although allowed for to some extent by the wording of section 58 of the Act has been the reason for failure of prosecutions to succeed in cases where there has been a flagrant breach of the provisions of the Act.

267. The present regulations as regards sampling are in many respects adequate. In some respects they require modification. Improved sampling apparatus should be provided for. The number of samples taken for examination should be increased.

268. The most important organism liable to be found in milk is the tubercle bacillus. The milk from a herd of cattle containing a single tuberculous animal may do great harm and be responsible for much human suffering but there is no method by which the presence of tubercle bacilli in the milk can be certainly detected without difficulty, expense and delay. The presence of this organism cannot be revealed by any of the bacteriological tests referred to above. A special biological test which takes several weeks to provide a result is necessary.

269. The number of samples of milk taken for biological examination for the tubercle bacillus is insignificant. The examination is troublesome and expensive and the results of the examination have a very limited practical advantage since the local authority which examines the samples has no right of inspection outside its own boundaries. In fact the examination of milk for tubercle bacilli makes no significant contribution to the eradication of tuberculosis from bovine sources. The prevention of the spread of tuberculosis by milk has to be achieved by the eradication of tuberculosis from cattle. Short of the total eradication of tuberculosis from the herds supplying milk, adequate pasteurisation is the only safeguard. The application of the biological test for tubercle bacilli to milk from highest grade herds and from pasteurising plants should form part of a system of bacteriological control. It should, however, be regarded as supplementary to other methods of preventing the spread of the tubercle bacillus by milk.

270. For the control of the process of pasteurisation, with a view to ensuring that the milk which has been processed has been heated to a sufficiently high temperature for a sufficient time to kill the tubercle bacillus, and to ensure that no unheated milk has been added, after pasteurisation, the phosphatase test has been



much used in recent years. This test is proving itself reliable and should be adopted officially as an important check on the process of pasteurisation.

271. Together with the methylene blue test for Highest Grade and Standard milk a test for the presence of coliform bacilli is also prescribed. The presence of these organisms in milk is assumed to indicate contamination of the milk with faecal material from the cow. There is some justification for this assumption but there are many exceptions. Nevertheless, the test is probably of some value as a method of control applied to milk intended to be of exceptionally good quality, such as Highest Grade milk.

272. Milk of good quality should be free from visible dirt. There is no prescribed test to detect such dirt. The Minit test is quite satisfactory for this purpose. It requires no technical knowledge and should be more generally employed.

273. The prescribing of official tests tends to limit unreasonably the use of many excellent unofficial tests which have valuable application in the milk industry, as a check to be applied at various stages of production and processing. Many of these tests such as the resazurin test and tests for acidity have the advantage of being rapid in application. Their use should be encouraged as a means of checking the various stages of production, processing and distribution.

#### (x) COSTS OF DISTRIBUTION

274. A co-ordinated scheme of distribution would undoubtedly achieve substantial economies. The charges for distribution appear unduly high in relation to the prices paid to the producers and the prices paid by consumers. Increased costs of distribution naturally arise from special demands made by consumers, such as for two deliveries a day, and also from overlapping of services. Sufficient data were not available from witnesses who came before the Tribunal to enable a definite opinion to be formed as to whether distribution costs were excessive, having regard to the services rendered.

275. The large distribution costs, or profits, as compared with producers' prices are the subject of frequent comment and criticism in relation to agricultural products generally. Savings achieved under a rational scheme of distribution may not always result in lower prices to the consumer but may be applied in raising the standards of quality, safety and service. A reduction of at least 2d. per gallon is necessary to enable the retail price to be reduced by one farthing per pint. The elimination of waste and the achievement of efficiency are essential. Any saving achieved thereby, which could not be passed on to the consumer,



would go to help the producers to meet increased costs, or to offset the higher costs which would result from the raising of the standards of cleanliness, safety and service over those which at present exist.

276. It is highly desirable that the question of costs of distribution generally, the factors affecting such costs, and the extent to which they could be reduced, should be periodically investigated in accordance with recognised methods of costing. While economies may be achieved by the elimination of overlapping services, such a reform may involve the elimination of competition. Curtailment of competition to the detriment of the consumer should be avoided.

### *V. Consumption of Milk*

277. The consumption of milk in the Sale District is relatively low. The reasons generally assigned to this may be stated. The supply is inadequate to meet the demand particularly during the winter months. The price is high in relation to the purchasing power of families at present. Some persons have a personal distaste for milk. There is generally insufficient appreciation of its nutritive value as food.

278. The desirability of milk as a human food should be emphasised. Medical evidence established that milk is a source of the materials from which energy is produced and which are essential for the building up of tissues. These materials are present in milk in easily digested forms and in well-balanced proportions. It contains all the essential vitamins. Its nutritive constituents are rich in proteins, fats and mineral salts, including calcium. In relation to other common articles of food its value may be estimated from the following generally accepted equivalents expressed in terms of calorie value :

One quart of milk is equal in food value to	{	Approximately 1 lb. lean meat.
		4 lb. cabbage.
		10 eggs.
		2 lb. potatoes.
		Over 1 lb. chicken.
		5 lb. turnips.
		Approximately 2 lb. sole.
	{	3 lb. codfish.

Considering the nutritive value of milk, its price, even at present levels, compares favourably with that of other foods.

279. For children and pregnant and nursing women, milk is indispensable. A reasonable daily allowance for pregnant and nursing women would be  $1\frac{1}{2}$  to 2 pints of milk. A minimum daily



allowance of  $1\frac{1}{2}$  pints should be available for growing children. To provide this and a reasonable allowance for other adults it would be necessary to increase the daily milk supply to approximately 80,000 gallons on the basis of the present population of the Sale District, to ensure a satisfactory consumption per head.

#### (i) MILK IN THE HOME

280. Milk should be delivered to the householder in good condition and in properly sterilised sealed containers. The storage and use of milk in the home should receive careful attention, if its keeping qualities and freshness are to be preserved. Helpful instruction in this regard appears to be necessary.

### *VI. Price Control*

281. The continuance of control over producers' prices, retail prices and the prices charged by wholesalers would appear to be necessary and desirable. The existing system of price control if properly co-ordinated and modified in certain respects could be made to operate satisfactorily in the interests of producers, distributors and consumers. There will always be a difficulty, under any system of fixing prices, in deciding to what extent a producer or distributor can be regarded as representative. Factors other than those of actual income and expenditure must be taken into consideration. Costs vary widely between individual businesses, working apparently under similar conditions, and it is necessary to ensure that those submitted for consideration are not the least efficient and consequently the most expensive types of business unit. Costs of production have tended to increase. Unless producers receive reasonably remunerative prices there is a danger that they may go out of production. If the problem of dealing with surplus milk in periods of maximum production can be satisfactorily solved it will help the producer appreciably. Even if this milk is only saleable at a lower price for manufacturing purposes, it will provide a higher net return per cow over the year. The prices paid to producers and the distribution margins must, of course, ultimately be borne by the consumer. Where the purchasing power of the latter is low, any undue increase in prices may have the effect of restricting consumption.

282. It may be possible to reduce retail prices appreciably by re-organisation of wholesale and retail distribution. From the schedule of prices it may be seen that the total distribution margin forms a very high percentage of the total paid by the consumer.



## PART THREE

### CONCLUSIONS AND RECOMMENDATIONS

#### *I. General Conclusions*

283. We have endeavoured in the preceding portions of this Report to describe the existing arrangements governing the supply of milk to the Dublin Sale District and to discuss these arrangements. The examination of the existing arrangements which we have carried out reveals much that is good but many unsatisfactory features also. Measures taken over the last decade or so to improve the quality of the milk supplied to the Dublin Sale District have contributed to considerable improvement in this regard, but much still remains to be done. On the public health side, the bringing into force of the Milk and Dairies Act and regulations, marked a step forward in the sanitary control of milk supplies. Adequate measures to enforce the provisions of the Act and regulations were not taken by all the sanitary authorities concerned. Transport and other difficulties during the Emergency undoubtedly had a great retarding effect on progress under the Act. Many of the regulations did not come into force until 1938 and the local bodies therefore did not have much opportunity to enforce the provisions of the Act for any considerable period under normal conditions. They doubtless would have enforced the Act more effectively under such conditions. We are, however, of the opinion that due to fundamental errors in the approach to many aspects of the problem, local bodies by themselves could not have brought about the considerable improvements in quality which are still necessary if the supply is to be uniformly safe and wholesome.

284. The production of milk in the Production District has not received adequate attention from the agricultural point of view. The amount of milk produced in the District has been increasing in recent years but this has not occurred as a result of any planned policy for the stimulation of such production. It has been brought about, mainly, by the attractiveness of a steady return to producers in an area close to a large centre of population, where there is a constant demand for milk and to a less extent by private enterprise, principally on the part of the large wholesale firms. The Dublin District Milk Board as reconstituted by Emergency Powers Order in 1942 has rendered very useful service in protecting the interests of the milk producer.



It has assisted in other ways, too. It arranged for the equitable distribution of available supplies during periods of shortage and to a limited extent for the disposal of surplus milk during periods of maximum production. As originally constituted the Board had very limited powers. The wider powers later conferred by Emergency Powers Order, were designed for use under conditions which, fortunately, did not arise. Nevertheless our investigations have convinced us that a critical situation through breakdown in the milk supply and distribution may occur even under normal conditions. Some authority must be entrusted with the necessary powers to deal with it. The board as originally constituted in 1936 had no responsibility to stimulate and organise by positive action the production and marketing of milk in the Production and Sale Districts. The provision of improved conditions as to distribution and marketing would do much to induce persons engaged in other branches of farming to change over to milk production and would help to relieve the winter scarcity which has occurred in recent years and which has resulted in large quantities of milk being obtained from creameries. The necessity for the disposal of surplus milk is a natural consequence of increased winter production. In a properly organised milk scheme, the disposal of surplus milk should provide little difficulty.

285. Insufficient attention has been paid to the quality of milk produced on the farm. Some improvement in cleanliness has resulted in recent years but this improvement is insufficient. Above all, the freedom of milk from pathogenic organisms is of the highest importance and is closely related to the health of the animals. It is in this respect that the control of milk supplies has exhibited the most serious deficiencies. Provision exists in the Milk and Dairies Act to prohibit the sale of milk from animals suffering from certain diseases, including tuberculosis, but these provisions have not been adequately enforced. The problem, however, requires more radical attention than the enforcement of the provisions of the Milk and Dairies Act. These provisions will only have effect if they are part of a comprehensive and well-organised plan to eradicate, or at least to control and reduce to a minimum, diseases amongst cattle. It is fundamental that the Department of Local Government and Public Health and the Department of Agriculture work in the closest co-operation and co-ordinate the measures to be taken towards that end.

286. In general it appears that there is great scope for increased efficiency in many aspects of milk production. The selection of high-class dairy stock is neglected in favour of dual-purpose animals, a policy which on the average has not resulted in cows of sufficient milk yields. Present practice as regards breeding, feeding of cattle, cow testing and the grading up of herds leaves much to be desired.



287. In view of the heavy incidence of bovine tuberculosis it is necessary that all milk, apart from milk of tubercle-free herds, should be pasteurised, at least until this disease is virtually eliminated. General pasteurisation of milk will necessarily involve radical alteration in the existing arrangements for distribution. Unhygienic methods of distribution can thus be eliminated.

288. At present extensive overlapping of collections and deliveries occurs. Proper organisation in this sphere should enable economies in distribution costs to be achieved.

289. Milk when it reaches the consumer is in many cases not kept in clean, covered vessels or in cool surroundings. Much needless waste and contamination of milk is occasioned by neglect of these precautions. The need for instruction and advice to housewives on the proper storage of milk in the home, is evident.

290. While drawing attention to the shortcomings in the existing arrangements the Tribunal desires at the same time to pay a tribute to the manner in which producers and distributors with the co-operation of the Milk Board managed to maintain a constant supply of milk for the Dublin Sale District during the Emergency. The milk industry, like other branches of the national economy, was seriously affected by emergency difficulties, shortage of feeding-stuffs, dairy equipment, fuel and transport shortages ; but nevertheless, despite all these disabilities, the various branches of the industry combined to maintain a regular milk supply. It is no small achievement that in those years the producers in the District increased considerably their production. The difficulties involved in providing milk regularly for the breakfast table of consumers in the Sale District during the Emergency, may not be fully understood by all, but the Tribunal desires to record its appreciation of the manner in which the many difficulties were overcome by those concerned.

291. With the termination of emergency conditions, a great opportunity will be provided for a scheme of reform and improvement in all aspects of the milk industry. In the sphere of agriculture the need for comprehensive and effective measures to improve animal health and farming economy has been stressed by the Committee of Inquiry on Post-Emergency Agricultural Policy. The Tribunal desires to endorse the need for effective measures directed towards that end. The production of milk for butter manufacture has hitherto been regarded as the main aspect of the milk industry requiring regular supervision and assistance by the central agricultural authority. This attitude has been to the detriment of production for the liquid milk market. Milk consumption in the Sale District has been increasing in recent years and the wider use of this valuable food is likely to be an important feature of any scheme for the improvement



of the nutrition of urban populations. It is of the greatest importance, therefore, that the production of milk for the liquid milk market should receive from the Department of Agriculture the supervision and assistance which its importance merits. There is likely to be an expanding market for liquid milk, dried milk, ice cream and other milk products. Taking all this into account, the liquid milk trade represents an industry of increasing importance in the national economy.

292. In the Production District the industry has been growing considerably for many years. It has developed in a haphazard manner to meet increasing demands from consumers in the area and it has many features which reflect the unplanned and unco-ordinated nature of its expansion. It has become complex with interdependent units. Any measures to improve the service rendered by it to the community must be carefully considered so as not to disrupt its operation and bring about a breakdown in supplies. In arriving at recommendations for improving the existing arrangements the Tribunal has borne in mind these features of the industry and the many interests involved.

293. It has not been deemed advisable in this Report to cover certain matters relevant to our Inquiry which have been considered and reported on by the Committee of Inquiry on Post-Emergency Agricultural Policy. In relation to our Inquiry the conclusions set out in paragraph 156 of the Third Interim Report of that Committee are especially relevant and in consequence we desire to emphasise their importance.

294. In the following section an indication will be given in outline of the various measures necessary for the re-organisation and improvement of the existing arrangements in the area covered by our terms of reference, for production, distribution and consumption of milk. Some of the measures can only be put into gradual operation as part of a new comprehensive milk policy. There are several important matters which, however, lend themselves to early improvement.



## *II. Recommendations*

### (i) NEW MILK POLICY

295. The milk supply to the Dublin Sale District relies on an unco-ordinated system of production and distribution comprising a number of different methods quite unrelated to one another, all of which are, at present, essential to the maintenance of supply. No recommendation of a general nature can be made which, put into effect, could be relied upon to bring about an immediate and radical improvement in the position.

296. The existing conditions under which the production and distribution of milk are left to develop in an uncontrolled and haphazard fashion should be replaced by a proper system. Production is primarily a matter of agriculture. A new outlook is called for which should recognize the importance from the point of view of agriculture of the liquid milk market in the Sale and Production Districts. Steps should be taken to provide a proper organisation for the production and distribution of milk and for the improvement of animal health and the elimination of loss occasioned by animal diseases.

297. A new comprehensive milk policy must be planned.

298. Any plan to improve production, distribution and quality must be related to a time factor whereby an entirely new policy of production and distribution will be made effective in such a way as to improve the quality of milk reaching the consumer within a reasonable period of time and, during the period of transition, cause as little disruption of supply as possible.

299. A change in policy can only be brought about by co-operation between those engaged in the industry and the Government departments concerned and by the establishment of a milk board with adequate powers to organise and direct milk production and distribution. With proper co-operation and direction of this kind an appreciable improvement should result soon after the new milk policy is put into operation.

### (ii) NEW MILK BOARD

300. A board to deal with the production, distribution and consumption of milk in the Production and Sale Districts should be established. This board should have much wider powers than the board originally established in 1936. It should be



primarily responsible for the organisation of the milk industry in the Production and Sale Districts.

301. The board to be established for that purpose should consist of three persons, a chairman nominated by the Government, and two other members, one member to be nominated by the Minister for Agriculture and the remaining member to be nominated by the Minister for Local Government and Public Health. The personnel of the board should be chosen from persons of outstanding ability, knowledge and experience.

302. This board should have the assistance of a Consultative Committee, meeting frequently, to advise the board on matters of production, distribution, consumption and prices. The committee should be constituted in the following manner:—

three producers to be elected by registered producers in the area;

three distributors to be elected by registered retailers and distributors in the area;

three consumers to be nominated by the Minister for Local Government and Public Health; and

three other members with specialised scientific knowledge and experience of the problems of the milk industry to be nominated jointly by the Minister for Local Government and Public Health and the Minister for Agriculture.

303. The board should have, in addition to the powers conferred by the Milk (Regulation of Supply and Price) Acts, 1936, and 1941, all the powers which were conferred by Emergency Powers (No. 247) Order, 1942, and such other powers as may be necessary to enable it to organise and direct effectively the production, distribution and sale of milk in the Production and Sale Districts and to encourage its consumption.

304. The duties of the board should include the development and fostering of milk production in the Production District and the stimulation of increased consumption *pari passu* with increased production. It should rationalise and co-ordinate production and distribution. It should also deal with surplus milk and should provide and operate pasteurisation plants and other plants for drying milk and the manufacture of milk products, where necessary.

305. The board should supervise the fulfilment of contracts and the relations generally between producers and distributors. It should be enabled to prevent victimisation or similar abuses.

306. Costings of milk production and distribution in the District



should be compiled by the newly-established milk board to ensure a fair price for producers and effect economies where feasible.

307. The board should take over the assets and liabilities of the existing Milk Board. It should be financed generally by a levy on milk. It should have extensive borrowing powers to be used for its purposes. If necessary, monies should be made available by repayable advances from State funds. It should be non-profit making.

308. In the exercise of its powers the board should have due regard to the sensitive nature of the milk industry and should aim at a process of planned transition in achieving the necessary reforms and reorganisation.

309. It will be necessary in the initial stage for this board to undertake a very comprehensive reorganisation of the different aspects of the milk industry and until this reorganisation is complete and the new milk policy is in full operation, the three members of the board will have to devote their whole time to the duties required of them.

### (iii) LEGISLATIVE AND ADMINISTRATIVE CONTROL

310. Legislation will be necessary to make effective many of the recommendations contained in this Report. We also recommend certain minor amendments to the Milk and Dairies Act, 1935, and the regulations thereunder which are necessary to carry out the intentions of that Act and to implement its procedure and practice. These amendments are set out in Appendix 'I' of this Report.

### (iv) DEPARTMENTAL FUNCTIONS

311. Generally the powers and functions of the Department of Agriculture, of the Department of Local Government and Public Health and of the Department of Industry and Commerce should be retained by those departments. In the interests of both producer and consumer, control by the respective Ministers of State should continue over milk prices.

### (v) INTER-DEPARTMENTAL COMMITTEE

312. An Inter-Departmental Committee representative of the Department of Agriculture and the Department of Local Government and Public Health should be set up as a permanent committee to secure complete co-operation and co-ordination of the work and services of the two departments in relation to legislative and administrative control over the milk supply including, in particular, the effective control of diseases of animals. This



committee should act in an advisory capacity to the respective departments with a view to ensuring the enforcement of the provisions of Acts and regulations governing the production, distribution and sale of milk, particularly the Milk and Dairies Act, 1935, and relevant regulations. It should be an active committee vigilant in all matters relating to the industry.

313. A co-ordinated scheme of inspection and helpful instruction should be arranged. The results of inspections, testing of samples and other relevant matters should be communicated to both departments and the local authorities concerned.

#### (vi) IMPROVEMENT OF DAIRY STOCK AND FARMS

314. Schemes should be initiated by the Department of Agriculture for the improvement of dairy stock and farms including improved housing for dairy cattle and all young stock. Such schemes should aim at securing the support of the industry and should provide for:—

- (a) the improvement of dairy stock by cow testing and the elimination of low-yielding or uneconomic cows ;
- (b) facilities to enable farmers to specialise in good dairy cattle ;
- (c) the promotion of self-contained herds ;
- (d) the prevention of improvident crossing of high-class dairy cows with non-proven sires or sires without good milk ancestry ;
- (e) the retention within the area of high-class dairy cows and their heifer calves ;
- (f) economic feeding of milch cows, with particular regard to winter feeding ;
- (g) structural improvements in cow-sheds, dairies and dairy yards ;
- (h) improvement in equipment in dairies particularly sterilising and cooling facilities, water supplies, and lighting ;
- (i) the eradication of faulty methods of milking ;
- (j) improvements in the care and transport of milk ;
- (k) instruction in the above items to those concerned in the production of milk.

#### (vii) VETERINARY SERVICES

315. Veterinary services in the Production District require immediate augmentation and improvement. These services should be completely reorganised and modernised. An important objective should be to provide an efficient veterinary service to all producers at a reasonable cost. The health and productivity of herds should be the first care of veterinary surgeons. There



must be a sufficient number of veterinary officers to enable periodic visits to be made to the farms for examination of animals and control of disease.

316. Schemes should be introduced providing for :—

- (a) vaccination service at nominal charges for contagious abortion and a number of other diseases, and free tuberculin testing service ;
- (b) facilities for the treatment of bovine mastitis and for the limitation of its spread ;
- (c) the education of stock owners in up-to-date methods of animal hygiene and disease prevention and in the treatment of the simpler diseases ;
- (d) the more efficient administration of legislation relating to the control of animal disease and to the inspection of milk supplies.

317. The veterinary services should be organised on a county basis so as to bring about a unification, in the field, of the services related to agriculture and public health. There should be no duplication of services or appointments. The officers appointed should be responsible both for public health duties and for duties under the Diseases of Animals Acts. Each county in the area should have a whole-time chief veterinary officer together with an adequate staff of whole-time or part-time veterinary assistants. Sub-districts should be of a convenient size. Trained sanitary officers and dairy technologists should be employed for the assistance of medical officers of health in the supervision of milk production and distribution.

#### (viii) CONTROL OF CATTLE DISEASE

318. Schemes should be initiated by the Department of Agriculture for the effective control of the undermentioned diseases :—

##### (a) *Bovine Tuberculosis*

319. We recommend the planned eradication of bovine tuberculosis in the Production District by the application of one or more of the well-recognised methods of bringing this about. We recognise that the Production District presents certain special difficulties in relation to eradication unless the scheme adopted be part of a general scheme for the eradication of the disease throughout the country. The measures to be taken should be such as to achieve appreciable results in a period of not more than ten years.

320. For the detection of tuberculous cattle the tuberculin test should be generally employed. All tuberculin used should be



independently standardised. Special training in tuberculin testing should be provided for veterinary surgeons. The cost of tuberculin testing should not be borne by producers.

321. All cases of tuberculosis should be notified to the county veterinary officer. Reactors should be put under immediate control by the veterinary services. Reactors should not be disposed of for further use for dairy purposes. Arrangements should be made to ensure that the owners of such animals do not suffer undue financial loss.

322. Registers should be established of cows which have passed the tuberculin test, to aid in the eradication of tuberculosis and to provide, readily available, tubercle-free animals.

323. The Bovine Tuberculosis Order of 1926 should be revoked and replaced by measures which will enable the above recommendations to be made effective.

#### *(b) Contagious Abortion*

324. Notification to the county veterinary officer of the occurrence of bovine abortion in a herd should be made compulsory. The Epizootic Abortion Order of 1925 and the provisions concerning this disease which are included in the Milk and Dairies Act, 1935, should be enforced. The Epizootic Abortion Order of 1925 should be modified from time to time to bring it into line with modern knowledge of the disease.

325. Vaccination of heifer calves with vaccines prepared from Strain 19 or such other strains as may from time to time be proved effective should be generally employed as a preventive measure. The vaccine should be under constant control for potency.

#### *(c) Bovine Mastitis*

326. Notification to the county veterinary officer of the occurrence of bovine mastitis in a herd should be made compulsory. Treatment of cases of mastitis should be instituted without delay and, as far as possible, isolation should be practised. The penicillin, sulphonamides or other specifics used for treatment should be provided free. Bacteriological control of convalescent cases should be considered.

#### *(d) Malnutrition*

327. Malnutrition should be treated as a deficiency disease. Overstocking and underfeeding of stock on farms should receive attention.



## (ix) GRADING OF MILK

328. All milk, other than Highest Grade milk, should be pasteurised. Standard milk should no longer be officially recognised as a special grade of milk. We recommend that milk for sale be limited to two designations (1) Highest Grade milk and (2) Pasteurised milk. Pending the setting up of pasteurising plants adequate and sufficient to pasteurise all milk, other than Highest Grade milk, it will be necessary to permit the sale of ordinary milk.

329. The production of Highest Grade milk should be fostered and expanded as part of agricultural policy.

330. The transition to the new position to be established by the limitation of milk to two grades must be gradual so as to cause as little dislocation in the milk industry as possible.

(a) *Highest Grade Milk*

331. Highest Grade milk should conform to the standards set out in the Milk and Dairies (Special Designations) Regulations, 1938 and 1939 except that the methylene blue test should be abolished as an official test and a plate count test substituted.

(b) *Pasteurised Milk*

332. Pasteurised milk should conform to the standards set out in the Milk and Dairies (Special Designations) Regulations, 1938 and 1939. The phosphatase test should be adopted as an official test in the control of pasteurisation.

(c) *Bottling of Milk*

333. Highest Grade milk and Pasteurised milk intended for sale retail should be bottled at the source. Highest Grade milk and Pasteurised milk should not be sold retail in small quantities from large containers. It may not be possible to adopt this recommendation fully for some years.

334. The bottling of milk should only be permitted under licence, and in approved premises.

## (x) SOURCES OF SUPPLY OUTSIDE THE PRODUCTION DISTRICT.

335. The aim should be to concentrate on production within the Production District, with the objective of reaching a stage when it would be unnecessary to obtain supplies from outside the District. In existing circumstances it is necessary to draw upon certain creameries for supplies. The producers supplying the milk to these creameries for sale in the Dublin Sale District



should be registered with the sanitary authority. No milk should be sold by creameries which have not pasteurisation plants approved under the Milk and Dairies (Special Designations) Regulations, 1938 and 1939.

#### (xi) SOURCES OF SUPPLY IN THE PRODUCTION DISTRICT

##### (a) *Producer-Retailers and Cowkeepers*

336. The scheme of pasteurisation recommended will not interfere with existing producer-retailers, except to the extent that all milk sold by them must be pasteurised unless it is produced from tubercle-free cows. It will be open to producer-retailers to make arrangements with a pasteurising plant for the treatment of their milk. Facilities must be provided for pasteurising the milk of producers in the cowkeeper and producer-retailer classes with a view to avoiding loss to such producers.

337. Cowkeeping in enclosed and built-up urban areas should not be encouraged. No registration or licensing of new premises for this purpose should be granted in such areas. It should be recognised that cowkeepers have been a valuable source of supply over difficult periods. Cowkeepers in the city built-up areas who wish to transfer their business should be given financial assistance by way of loan, on special terms, to enable them to purchase lands on milk routes leading to the city, provided that they have been in production since the coming into operation of the Milk and Dairies Act, 1935. It should be a condition of the granting of such loan that the premises vacated by the cowkeeper should cease to be used for keeping animals. This would enable those who have a tradition of dairying to acquire land and premises in rural areas for the purpose of continuing in milk production.

#### (xii) DISTRIBUTION OF MILK

338. The distribution of milk, involving collection, transport, treatment and delivery, would be readily simplified by delivery to pasteurisation depôts and from thence to retailers and consumers. On reorganisation along these lines great economy could be effected.

339. Details of a co-ordinated wholesale and retail distribution scheme designed to eliminate wasteful distribution should be drawn up by the newly constituted milk board. Existing distributing agencies should as far as possible be utilised in such a scheme. Overlapping of services should be eliminated. Distribution of milk by dairymen without premises of their own should be discontinued. Registration of such persons by the sanitary authority should cease.



340. During the transition period unnecessary disturbance of existing arrangements should be avoided. In the settlement of revised arrangements for distribution special regard should be had to (1) economy, (2) convenience of consumers, (3) technical training, health and cleanliness of personnel.

#### (xiii) PASTEURISATION OF MILK

341. Additional pasteurising plants are necessary. Pasteurisation by the High Temperature Short Time method, with approved plants, should be permitted. Existing pasteurising plants should where necessary be replaced or modernised in order to ensure efficiency.

342. Constant supervision of all pasteurising plants is necessary.

343. In the setting up and supervision of such plants, regard should be had to the matters already referred to in paragraphs 251 to 254, inclusive, of this Report.

#### (xiv) CONTROL OF QUALITY

344. More attention should be paid to the control of quality on the premises of producers and wholesalers. The fact that a certain test is specified for purposes of legal control at the time of sale should not be interpreted as precluding the use of other rapid and valuable tests at various stages of production and distribution.

345. With a view to raising the standard of quality at the sources of production, tests of quality which are especially suitable for ready use, such as the Minit test and resazurin test should be freely employed both by instructors and by the sanitary authorities. For the control of the quality of milk in the city area, bacteriological counts should continue to be used and to a greater extent than heretofore.

346. More tests as to the chemical quality of milk should be carried out under the Sale of Food and Drugs Acts, 1875 to 1936.

##### (a) *Highest Grade Milk*

347. The regulations governing the control of the quality of Highest Grade milk should be altered to provide that a method of estimating the total count of viable organisms in the milk should be substituted for the methylene blue test and an appropriate standard fixed, which should not exceed a maximum of 100,000 organisms per cubic centimetre.

348. The regulations should provide that milk from cows which



have passed only the preliminary tuberculin test should not be sold as Highest Grade milk. It should be an offence to sell, as Highest Grade milk, milk which contains a number of viable organisms per cubic centimetre in excess of the maximum number permitted by the regulations.

*(b) Pasteurised milk*

349. The existing standards for the bacteriological content of milk (a) prior to pasteurisation and (b) after pasteurisation should be enforced.

350. The regulations governing the sale of Pasteurised milk should be altered to provide :—

- (a) that it should be made an offence to sell milk which after pasteurisation contains more than 100,000 viable organisms per cubic centimetre ;
- (b) for the use of the Prescott and Breed method of enumerating organisms in order to determine, after pasteurisation, the bacteriological quality of Pasteurised milk prior to pasteurisation ;
- (c) for the use, as a prescribed test, of the phosphatase test to control the efficiency of pasteurisation and to detect the addition of raw milk to Pasteurised milk.

351. Amendment of the Milk and Dairies Act, 1935, may be necessary to give effect to some of the amendments to the regulations, recommended above.

352. The addition to milk of any colouring matters or other adulterants should be prohibited.

(xv) CONSUMPTION OF MILK

353. Milk consumption should be encouraged until approximately 80,000 gallons are being utilised daily in the Sale District, or one pint per head on the basis of the present population.

354. The consumption of milk by persons in low income groups should be stimulated either by differential prices to such persons or by an extension of social services. Adjustments might be made in price to render it possible for a supply of the necessary quantities of milk to be available in poor districts at minimum prices.

355. Instruction to consumers in the care and use of milk is required. Such instruction should emphasise the nutritive value of milk including dried milk and milk products and their importance as human food. It should be undertaken by the newly constituted milk board.



## (xvi) PRICE CONTROL AND COSTINGS

356. We recommend the continuance of price control in relation to milk.

357. Such control should be based on thorough investigation of costs of production and costs of collection, processing and distribution.

358. Price control, in relation to producers' prices should be retained by the Minister for Agriculture, and in relation to retail prices and prices charged by wholesalers, should be retained by the Minister for Industry and Commerce.

359. The costs of production and distribution, the factors affecting such costs and the extent to which they can be reduced, should be periodically investigated in accordance with recognised methods of costing by, or on behalf of the departments concerned in the control of prices.

360. In conclusion we desire to express our great appreciation of the very able assistance rendered us throughout by our Secretary, Mr. Thomas J. Brady of the Department of Local Government and Public Health. We cannot speak too highly of the efficient manner in which he arranged the public sittings and carried out the arduous duty of collating material for our Report, and the help which he has rendered us in its preparation.

MARTIN C. MAGUIRE, *Chairman.*

ROBERT A. Q. O'MEARA.

WILLIAM C. KENNY.

T. J. BRADY, *Secretary,*

30th day of December, 1946.



## APPENDIX A

ADVERTISEMENT GIVING NOTICE OF COMMENCEMENT OF  
PUBLIC SITTINGS

Binse Fiosruithe Sholáthair Bhainne Bhaile Átha Cliath.  
Tribunal of Inquiry into Dublin Milk Supply.

## NOTICE OF FIRST PUBLIC SITTING

Notice is hereby given that the Tribunal appointed by the Minister for Local Government and Public Health, by Order dated the 1st day of March, 1945, to enquire into the following matters, that is to say:—

the supply of milk to distributors and consumers in the area consisting of the county borough of Dublin, the county of Dublin and the urban district of Bray, including in particular:—

(a) the existing arrangements—

- (i) for securing that such supply is adequate, pure and wholesome,
- (ii) for the economical and efficient marketing and distribution of such supply,
- (iii) for making such supply available to consumers at reasonable prices, and
- (iv) for safeguarding the interests of the persons (including consumers) concerned in such supply, marketing and distribution; and

(b) the improvements (if any) which are practicable and desirable in such arrangements,

will hold its first Public Sitting in the Courtroom, Irish Land Commission, 23 Upper Merrion Street, Dublin, on Monday the 16th April, 1945, at 11 a.m.

All persons interested are requested to be in attendance at the above time and place in person, or to be represented by their Counsel or Solicitor.

Any persons desiring to give evidence or to make representations to the Tribunal, or to be represented at the Tribunal may communicate to that effect to the Secretary to the Tribunal, Room 34, Customs House, Dublin.

By Order of the Tribunal,

T. J. BRADY,  
Secretary to the Tribunal.  
Department of Local Government  
and Public Health.

3rd March, 1945.



## APPENDIX B

LIST OF INTERESTS REPRESENTED AND PERSONS BY WHOM  
THEY WERE REPRESENTED

Interest	Names of Counsel or Solicitor (if so represented)
Association of Milk Producers (Dublin Sale Area).	Senator Gerard Sweetman, Solicitor.
Carlow County Council. .. ..	—
Córas Iompair Éireann. .. ..	—
Council of Child Health. .. ..	—
Craigie Bros. (Merville Dairy, Finglas).	Senator T. C. Kingsmill Moore, S.C., instructed by Messrs. Gerald Byrne & Co., Solicitors.
Department of Agriculture. ..	—
Department of Local Government and Public Health.	—
Department of Supplies. .. ..	—
Dietetic Council of the Medical Association of Éire.	—
Dublin Corporation. .. ..	Mr. I. J. Rice, Corporation Law Agent.
Dublin County Council. .. ..	Mr. Thomas Early (Messrs. Thomas Early and Son, Solicitors).
Dublin Cowkeepers' Association...	Mr. John J. Sheil, Solicitor.
Dublin District Milk Board. ..	—
Dublin Wholesale Milk Distributors' Association.	Mr. Liam Cosgrave, T.D., instructed by Messrs. Walsh, Cosgrave and Co., Solicitors.
Dún Laoghaire Borough Corpora- tion.	Mr. E. J. Kenny, Solicitor.
Great Northern Railway Co. (Ire- land).	—
Highest Grade Milk Producers' Association.	Mr. M. Binchy, S.C., with The O'Rahilly, instructed by Mr. H. B. Fottrell, Solicitor.
Hughes Bros., Ltd. .. ..	Mr. E. C. Micks, instructed by Mr. F. W. Koenigs, Solicitor.
Irish Housewives' Association. ..	—
Irish Red Cross Society, Anti- Tuberculosis Section (Veterinary Sub-Committee).	—
Kildare County Council. .. ..	—
Louth County Council. .. ..	—
Lucan Dairies, Ltd. .. ..	—
Meath County Council. .. ..	—
Model Creamery, Ltd. .. ..	Mr. M. O'Driscoll, S.C.
National Agricultural Association.	Mr. R. Sainsbury, instructed by Mr. A. T. Ellis, Solicitor.
Pasteurised Milk Creameries Asso- ciation, Ltd.	Mr. M. O'Driscoll, S.C., and Mr. W. Binchy, instructed by Messrs. J. Binchy and Son, Solicitors, Ráth Luirc.



Interest	Names of Counsel or Solicitor (if so represented)
Retail Grocery, Dairy and Allied Trades' Association.	Mr. P. McGilligan, T.D., instructed by Messrs. Lemass and Moore, Solicitors.
Retail Milk Vendors' Association.	Mr. B. E. MacQuaid, instructed by Messrs. Banim, Egan and Mul- downey, Solicitors.
South County Dublin and Bray Producer-Retailers' Association.	Mr. J. P. Tyrrell, Solicitor.
State Laboratory. . . . .	—
Veterinary Medical Association of Ireland.	—
Wexford County Council. . . . .	—
Wicklow County Council. . . . .	—

Evidence was also given by individual consumers and producers.



## APPENDIX C

## LIST OF WITNESSES WHO APPEARED BEFORE THE TRIBUNAL

Arup, Dr. P. S.	..	..	Analyst, Department of Agriculture.
Beckett, Dr. G. P. G.	..	..	County Medical Officer of Health, Wicklow.
Bigger, Professor J. W.	..	..	Professor of Bacteriology, Trinity College, Dublin. (Highest Grade Milk Producers' Association).
Bradley, Mrs. F.	..	..	Lucan Dairies, Ltd.
Bradley, H.	..	..	Managing Director, Lucan Dairies, Ltd.
Breen, J. H.	..	..	Principal Officer, Department of Agriculture.
Brennan, J. J.	..	..	Dublin Cowkeepers' Association.
Brennan, Pk.	..	..	Ditto.
Brickenden, F.	..	..	Producer.
Byrne, James	..	..	Chairman, Dublin Wholesale Milk Distributors' Association.
Casey, Martin	..	..	Secretary, Highest Grade Milk Producers' Association.
Coakley, T. F.	..	..	Principal Officer, Department of Supplies.
Conway, S., M.R.C.V.S.	..	..	Veterinary Inspector, Wicklow.
Craigie, Eric.	..	..	Merville Dairy, Finglas, Co. Dublin.
Daly, F. J., M.R.C.V.S.	..	..	Veterinary Medical Association of Ireland.
Daly, Dr. M. F.	..	..	County Medical Officer of Health, Wexford.
Deeny, Dr. J. A.	..	..	Chief Medical Adviser, Department of Local Government and Public Health.
Dempsey, J.	..	..	Senior Inspector, Department of Agriculture.
Dockeray, Dr. G. C.	..	..	Dietetic Council of the Medical Association of Éire.
Dolan, P. F., M.R.C.V.S.	..	..	Chief Veterinary Inspector, Dublin Corporation.
Donnelly, A. A., M.R.C.V.S.	..	..	Veterinary Inspector, Louth and Meath.
Doyle, P.	..	..	Producer.
Elcock, Dr. F. N.	..	..	Resident Medical Superintendent, Verge-mount Fever Hospital, Clonskeagh.
Fahy, Dr. J.	..	..	Acting County Medical Officer of Health, Louth.
Flynn, J. A., M.R.C.V.S.	..	..	Chief Veterinary Officer, Dublin County Council.
Foley, P. A.	..	..	District Superintendent, Great Northern Railway.
Fottrell, H. B.	..	..	Highest Grade Milk Producers' Association.
Glenn, Herbert	..	..	Highest Grade Milk Producers' Association.
Graham, R.	..	..	Secretary, Dublin Cowkeepers' Association.
Grimes, Professor M.	..	..	Professor of Dairy Bacteriology, University College, Cork.
Hannigan, Dr. J., T. C.	..	..	Chairman, Dublin Corporation Tuberculosis Committee.



Harbison, Dr. J. A.	..	County Medical Officer of Health, Dublin.
Harborne, Pk.	..	Secretary, Retail Milk Vendors Association.
Harnett, P., M.R.C.V.S.	..	Superintending Veterinary Inspector, Department of Local Government and Public Health.
Hatch, J. A.	...	Chairman, Highest Grade Milk Producers' Association.
Hernon, Dr. P. J.	..	City Manager and Town Clerk, Dublin.
Hollinshead, C. F.	..	Consumer.
Hurley, P. J.	...	State Laboratory.
Hyland, Edw.	..	Herd Manager, Gragarnagh Dairy Farm (Highest Grade Milk Producers' Association).
Jessop, Professor W. T. E.		Dietetic Council of the Medical Association of Éire.
Kenny, Wm.	..	Dublin Cowkeepers' Association.
Litton, J. G.	..	South County Dublin and Bray Producer-Retailers' Association.
Loughney, C.	..	Secretary, Retail Grocery, Dairy and Allied Trades' Association.
Lynch, R.	..	Senior Inspector, Department of Agriculture.
Maguire, T. J., M.R.C.V.S.		Veterinary Inspector, Dún Laoghaire Borough Corporation.
Meredith, H.	..	Vice-Chairman, Association of Milk Producers (Dublin Sale Area).
Mernagh, T. A., M.R.C.V.S.		Veterinary Inspector, Wexford.
Morrow, R.	..	Dublin Cowkeepers' Association.
Mowbray, Dr. J.	..	Dietetic Council of the Medical Association of Éire and Council of Child Health.
Mullally, M. J.	..	Chairman, Dublin District Milk Board.
Mullen, Mchl.	..	Association of Milk Producers (Dublin Sale Area).
Murphy, J. M., M.R.C.V.S.		Veterinary Inspector, Dublin Corporation.
McCarthy, Dr. W.	..	County Medical Officer of Health, Kildare.
McCulloch, J. F.	..	Highest Grade Milk Producers' Association.
McDonald, T. J., M.R.C.V.S.		Veterinary Inspector, Carlow.
McInerney, G. F.	..	Director, Model Creamery Ltd.
McKean, Mrs. M.	..	Chairman, Infant Aid Society, Dublin. (Highest Grade Milk Producers' Association).
MacMahon, Dr. A. D.	..	County Medical Officer of Health, Carlow.
McSweeney, Dr. C. J.	..	Medical Superintendent, Cork Street Fever Hospital, Dublin. (Highest Grade Milk Producers' Association).
O'Connor, Professor J. J.	...	Veterinary sub-Committee, Anti-Tuberculosis Section, Irish Red Cross Society.
O'Donovan, S., M.R.C.V.S.		Veterinary Medical Association of Ireland.
O'Higgins, Dr. T. F.	..	County Medical Officer of Health, Meath.
O'Keeffe, Cornelius	..	Chairman, Pasteurised Milk Creameries Association Ltd., Mallow; Manager, North Cork Co-Operative Creameries, Ltd.
O'Kennedy, J. J.	..	Chairman, Association of Milk Producers (Dublin Sale Area).



O'Neill, Wm.	..	..	Accountant (Dublin Cowkeepers' Association).
O'Reilly, T. F., M.Sc.	..	..	Consumer.
Power, P. J.	..	..	Manager, Ballyclough Co-Operative Creamery Ltd., (Secretary, Pasteurised Milk Creameries Association Ltd., Mallow).
Russell, Dr. M. J.	..	..	Medical Superintendent Officer of Health, Dublin Corporation.
Ryan, D. J.	..	..	Manager, Lombardstown Co-Operative Dairy and Agricultural Society Ltd. (Dublin Wholesale Milk Distributors' Association).
Ryan, Pk.	..	..	Secretary, Association of Milk Producers (Dublin Sale Area).
Slater, J.	..	..	Secretary, Hughes Bros., Ltd.
Stewart, D.	..	..	Traffic Manager, Córas Iompair Éireann.
Tweedy, Mrs. M. H.	..	..	Joint Honorary Secretary, Irish Housewives' Association.
Tyrell, J.	..	..	Secretary, South County Dublin and Bray Producer-Retailers' Association.
Walsh, D.	..	..	Assistant Law Agent, Dublin Corporation.
Watson, J.	..	..	Dublin Cowkeepers' Association.
Whitty, J. D., M.R.C.V.S.	..	..	Chief Veterinary Officer, Department of Agriculture.
Wilkie, R.	..	..	South County Dublin and Bray Producer-Retailers' Association.



## APPENDIX D

FORM OF CONTRACT PRESCRIBED BY THE MINISTER FOR  
AGRICULTURE UNDER SECTIONS 4 AND 47 OF THE MILK  
(REGULATION OF SUPPLY AND PRICE) ACT, 1936.

---

Producer's Registered No.....  
 Wholesaler's Registered No.....  
 Retailer's Registered No.....  
 Contract Approved.....  
 Seal Affixed.....  
 Original despatched to the Purchaser.....  
 Counterpart despatched to the Vendor.....

---

NOTE: Upon execution, the original and the counterpart and a copy of the Contract shall be sent by the Purchaser to the Chairman of the Board.

Contract made the            day of            194    between  
 the Registered Producer Mr./Mrs./Miss.....of  
 .....having registered premises  
 at..... (hereinafter called the  
 Vendor) and the registered Wholesaler/Retailer Mr./Mrs./Miss  
 .....of .....  
 having registered premises at.....

(hereinafter called the Purchaser) WHEREBY the Vendor agrees  
 to sell to the Purchaser and the Purchaser agrees to buy from the  
 Vendor from the 1st day of October, 19    to the 30th day of  
 September, 19    inclusive a daily delivery of pure whole milk  
 sweet clean and marketable with all its cream, complying with all  
 statutory requirements for the time being in force (and pro-  
 duced on the registered premises of the Vendor) to the quantity  
 of

..... gallons daily/weekly during the period 1st  
 October, 19    , to 31st October, 19    .  
 ..... gallons daily/weekly during the period 1st  
 November, 19    , to 30th November, 19    .  
 ..... gallons daily/weekly during the period 1st  
 December, 19    , to 31st December, 19    .



.....	gallons daily/weekly during the period 1st January, 19 , to 31st January, 19 .
.....	gallons daily/weekly during the period 1st February, 19 , to 28th February, 19 .
.....	gallons daily/weekly during the period 1st March, 19 , to 31st March, 19 .
.....	gallons daily/weekly during the period 1st April, 19 , to 30th April, 19 .
.....	gallons daily/weekly during the period 1st May, 19 , to 31st May, 19 .
.....	gallons daily/weekly during the period 1st June, 19 , to 30th June, 19 .
.....	gallons daily/weekly during the period 1st July, 19 , to 31st July, 19 .
.....	gallons daily/weekly during the period 1st August, 19 , to 31st August, 19 .
.....	gallons daily/weekly during the period 1st September, 19 , to 30th September, 19 .

Provided always that a delivery on any day/week of not less than 90 per cent. of the quantity hereby contracted for on any such day/week shall be a good delivery under this Contract. The Vendor warrants each and every consignment of milk under this Contract to be in accordance with the foregoing description, and it is hereby agreed by and between the Vendor and the Purchaser as follows :

1. The milk shall be supplied by the Vendor in sealed churns/bottles in one/two consignments daily not later than a.m. in the morning and p.m. in the evening. Each and every consignment shall be delivered at.....and shall be deemed to be accepted by the Purchaser (subject to examination) upon delivery there.

2. (a) The Vendor/Purchaser shall be responsible for providing and maintaining in good condition at the point of delivery a sufficient quantity of clean containers for the delivery of the milk.

(b) All empty containers shall be cleaned and sterilised by the Purchaser before return to the point of delivery.

(c) Delivery of empties shall be made in sufficient time to allow of normal use by the Vendor.

(d) Delivery churns shall be made of tinned iron or steel, and none shall be used which, by reason of wear, roughened surface, cracks or other causes are difficult to clean thoroughly.

3. In the event of any day's/week's delivery being above the quantity hereby contracted for, the Purchaser shall subject as aforesaid, accept the milk up to the quantity hereby contracted for, but may reject or accept the excess.

4. (a) The Purchaser shall accept any quantity delivered if it is less than the quantity hereby contracted for, and shall, subject to the following provisions, pay therefor the price hereby contracted to be paid.

(b) If the aggregate quantity of milk supplied by the Vendor under this contract in any 3 consecutive days/2 consecutive weeks or in any 3 days out of 5 consecutive days/2 weeks out of 3 consecutive weeks is less than the quantity hereby contracted for for such 3 days/2 weeks the Vendor shall, if required in writing by the Purchaser or the Chairman, furnish a written explanation setting out the reason or reasons for the shortage.

(c) If such reason or reasons are, in the opinion of the Chairman, insufficient the matter shall be investigated by the Board and after such investigation the Board may give permission to either party to terminate



the contract on the expiration of a specified notice or forthwith; and on the Contract being terminated pursuant to such permission the other party shall not thereby be entitled to any rights or remedies to which he would be entitled in the event of a breach of any of the provisions of this Contract by the party so terminating the Contract.

5. The Vendor shall supply with each consignment of milk a written ticket signed by him or his authorised agent stating the date, the number of containers in the consignment and total quantity in pounds or gallons of milk supplied in the consignment. The Purchaser shall not be entitled to make any deduction in respect of any alleged deficiency in the quantity of the consignment as stated on the Vendor's ticket unless he gives or sends by post to the Vendor written notice of such alleged deficiency so as to reach the Vendor within 48 hours (excluding Sundays and public holidays) of acceptance of the consignment.

6. The Purchaser and his representatives shall, at all reasonable times have free access to the cowhouses, farms and premises where milk is, or has been produced, and full power to examine into the health of the cows, the suitability of the water supply and the sanitary condition of the premises.

7. The price per gallon to be paid by the Purchaser to the Vendor for each and every consignment of milk hereby contracted to be sold and for any consignment or portion of a consignment in excess of or less than the quantity hereby contracted to be sold shall be not less than the appropriate statutory minimum price for the time being in force at the time of delivery of each and every such consignment of milk or

(i) [the sum of                      shillings and                      pence  
per gallon or the appropriate statutory minimum price for  
the time being in force whichever shall be the greater at  
the time being at the time of each such delivery]

or

(ii) [the sum of                      shillings and                      pence per gallon from 1st October, 19     , to 30th April, 19     , and the sum of                      shillings and                      pence per gallon from 30th April, 19     , to 30th September, 19     , or the appropriate statutory minimum price for the time being in force whichever shall be the greater at the time of the delivery of each and every such consignment of milk].

8. The Purchaser shall pay the Vendor the amount due under this contract for the milk supplied in each week/month not later than the Friday/15th day of the following week/month and when making such payment shall furnish to the Vendor a detailed account of the quantity of each consignment and the price or prices paid.

9. If the Purchaser shall at any time fail to pay any sum due by him to the Vendor on or before the fourth day after the due date then, and in that case, the Vendor may (without prejudice to any other available remedies) give to the Purchaser and to the Board, written notice of his intention to determine the contract, and unless the Purchaser shall, on or before the fifth day after receipt of such notice pay the amount due, the said contract shall be deemed to have been determined at the expiration of the said fifth day. In this respect time shall be of the essence of the contract. Upon the termination of the contract the Vendor shall notify the Board without delay.

10. The Vendor may (without prejudice to any other remedies available



to him) by written notice to the Purchaser and the Board forthwith terminate this Contract in either or any of the following cases :

- (a) if any cheque drawn by the Purchaser in favour of the Vendor shall be dishonoured ;
- (b) if the Purchaser shall become subject to the bankruptcy laws or make any arrangement or composition with his creditors or permit any execution to be levied against him or being a company shall enter into liquidation whether voluntary or compulsory (not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction), or permit any execution to be levied against it ;
- (c) if the Purchaser shall at any time unlawfully refuse or fail for two consecutive days or for four days in any period of fourteen days, to accept any milk tendered to him by the Vendor pursuant to this contract.

11. If the Board cancels the registration of the Vendor or the Purchaser the Contract shall be deemed to have terminated on the date of such cancellation.

12. The Contract is subject to any contingencies beyond the control of the parties hereto, such as strikes, lockouts, riots, fire, Act of God, pollution or contamination of water supply, infectious disease among the Vendor's livestock or among the Vendor's or Purchaser's employees or families, including a prohibition order duly made pursuant to Section 41 of the Milk and Dairies Act, 1935, and in case either party shall thereby be prevented from fulfilling the duties imposed upon him or them by this Contract or the Purchaser shall be unable, in consequence, to deal with the milk, then, and in such case, so far as is necessary, the operation of the Contract shall on written notice by either party to the other, be suspended during the continuance of the contingency or contingencies in question. In the case of infectious disease the parties shall take all reasonable steps to overcome the risk of infection and to resume or accept full supply as soon as possible. Provided, however, that should the operation of the Contract be suspended for a continuous period of three calendar months the party upon whom notice of suspension was served may at any time thereafter and before the Contract is again being operated terminate the Contract by giving notice to the party who caused notice of suspension to be served.

13. The benefits and obligations of the Contract may, with the previous consent in writing of the other party and of the Chairman, be assigned by the Vendor to another registered Producer or by the Purchaser to another registered Wholesaler/Retailer and every such assignment so consented to shall relieve the assignor of his obligations to supply or accept milk under this Contract after the date of the said assignment.

14. This Contract is subject to the approval of the Chairman and shall become null and void upon the Chairman refusing to approve of it.

15. The Purchaser shall be responsible for sending the original, and counterpart, and a copy of this Contract to the Chairman.

16. In the construction of this Contract :

" Vendor " and " Purchaser " shall where the context permits include respectively the Vendor's or Purchaser's executors, administrators and permitted assigns, or in the case of a Company its successors and permitted assigns ;

" the Board " means the Dublin District Milk Board ;

" the Chairman " means the Chairman of the Board ;



other expressions have the meanings assigned to them in the Milk (Regulation of Supply and Price) Acts, 1936 and 1941. Save where the contrary intention appears words importing the masculine gender shall include females, words importing a person shall include a company, words in the singular shall include the plural and words in the plural shall include the singular.

"Written Notice" shall be well and sufficiently made or given if and when delivered by one party or his employee acting in the course of his employment to the other party or any employee of such party acting in the course of his employment or if sent by post properly addressed in a letter and prepaid and any such notice sent by post shall unless the contrary is proved be deemed to have been received at the time at which such letter would be delivered in the ordinary course of post.

IN WITNESS WHEREOF the parties hereto have hereunto signed their names, the day and year first herein written.

Vendor's signature.....

Signed by the Vendor in the presence of:

Witness's signature.....

Witness's address.....

Purchaser's signature .....

Signed by the Purchaser in the presence of:

Witness's signature.....

Witness's address.....

SEAL OF THE BOARD.

Signed.....

*Chairman.*

Date .....



## APPENDIX E.

CREAMERIES REGISTERED OR LICENSED UNDER THE MILK  
(REGULATION OF SUPPLY AND PRICE) ACTS, 1936 AND  
1941, TO SELL MILK IN THE DUBLIN SALE DISTRICT.CREAMERIES REGISTERED UNDER THE MILK (REGULATION OF SUPPLY  
AND PRICE) ACT, 1936.

Kantoher Co-Operative Agricultural and Dairy Society, Ltd., Killeedy,  
Ballagh, Co. Limerick.

Kilkenny Co-Operative Creamery, Ltd., Thomas Street, Kilkenny.

North Cork Co-Operative Creameries, Ltd., Strand Street, Kanturk,  
Co. Cork.

Lombardstown Co-Operative Dairy and Agricultural Society, Ltd.,  
Lombardstown, Co. Cork.

Ballyclough Co-Operative Creamery, Ltd., Mallow, Co. Cork.

Mourne Abbey Co-Operative Dairy Society, Ltd., Mourne Abbey,  
Mallow, Co. Cork.

CREAMERIES REGISTERED UNDER THE MILK (REGULATION OF SUPPLY  
AND PRICE) (AMENDMENT) ACT, 1941.

Drombanna Co-Operative Creamery, Ltd., "Four Elms," Limerick.

Shandrum Co-Operative Creamery, Ltd., Newtown, Ráth Luirc,  
Co. Cork.

Mount Collins Co-Operative Creamery, Ltd., Brosna, Co. Kerry.

Rathmore Creamery (Dairy Disposal Company, Ltd.), Rathmore,  
Co. Kerry.

Castlelyons Co-Operative Creamery, Ltd., Castlelyons, Fermoy, Co.  
Cork.

Kilcorney Co-Operative Dairy Society, Ltd., Rathcool, Banteer, Co.  
Cork.

Milford Co-Operative Creamery, Ltd., Milford, Ráth Luirc, Co. Cork.

Dromtariffe Co-Operative Creamery, Ltd., Banteer, Co. Cork.

Belville Deel Bridge Co-Operative Dairy Society, Ltd., Belville,  
Kilmeedy, Co. Limerick.

Ballyagran Co-Operative Creamery, Ltd., Ballyagran, Co. Limerick.

CREAMERIES LICENSED BY THE MINISTER FOR AGRICULTURE IN  
ACCORDANCE WITH THE MILK (REGULATION OF SUPPLY AND PRICE)  
(AMENDMENT) ACT, 1941.

Feenagh Co-Operative Dairy and Agricultural Society, Ltd., Feenagh,  
Co. Limerick.

Tournafulla Co-Operative Creamery, Ltd., Newcastle West, Co. Limerick.

Castlemahon Co-Operative Dairy Society, Ltd., Castlemahon, Newcastle  
West, Co. Limerick.

Ardagh Co-Operative Dairy Society, Ltd., Ardagh, Co. Limerick.



# APPENDIX F

## MINIMUM PRICES PER GALLON FIXED BY MINISTER FOR AGRICULTURE FOR MILK SOLD WHOLESALE BY PRODUCERS

Period	Milk Sold to Registered Retailers						Milk Sold to Registered Wholesalers								
	At Producers' Premises			Delivered Elsewhere			At Producers' Premises			Delivered Elsewhere					
	November to April	May to August	September to April	November to April	May to August	September to April	November to April	May to August	September to April	November to April	May to August	September to April			
November, 1936 to April, 1938	s. d. 1 2½	s. d. 0 10½	s. d. 1 2½	s. d. 1 3½	s. d. 0 11½	s. d. 1 3½	s. d. 0 11½	s. d. 0 8½	s. d. 1 0½	s. d. 1 0½	s. d. 1 0½	s. d. 0 9½	s. d. 1 1½		
	At Railway Station nearest to Purchasers' Premises						At Railway Station nearest to Purchasers' Premises						Delivered at Purchasers' Premises		
	1st May to 31st July	1st August to 30th Sept.	1st October to 30th April	1st May to 31st July	1st August to 30th Sept.	1st October to 30th April	1st May to 31st July	1st August to 30th Sept.	1st October to 30th April	1st May to 31st July	1st August to 30th Sept.	1st October to 30th April	1st May to 31st July	1st August to 30th Sept.	1st October to 30th April
	s. d. 0 11 0 10½ 1 0 1 0½ 1 2½ 1 4½	s. d. 1 1 1 0½ 1 2½ 1 4½ 1 7½ 1 7½	s. d. 1 5½ 1 5½ 1 6½ 1 6½ 1 10½ 2 1½ 2 1½	s. d. 0 11½ 0 10½ 1 0½ 1 1 1 1 1 2½ 1 4½	s. d. 1 1½ 1 1 1 2½ 1 3 1 5 1 7½ 1 7½	s. d. 1 5½ 1 5½ 1 7 1 7 1 11 2 1½ 2 1½	s. d. 0 9 0 9 0 10½ 0 11½ 0 11½ 1 0½ 1 2½	s. d. 0 11½ 0 11½ 1 0½ 1 1½ 1 3½ 1 5½ 1 5½	s. d. 0 11½ 0 11½ 1 0½ 1 1½ 1 3½ 1 5½ 1 5½	s. d. 1 4 1 3½ 1 5½ 1 5½ 1 9½ 1 11½ 1 11½	s. d. 0 9½ 0 9½ 0 10½ 0 11½ 0 11½ 1 1 1 3	s. d. 0 11½ 0 11½ 1 1 1 1½ 1 3½ 1 6 1 6	s. d. 1 4½ 1 4 1 5½ 1 5½ 1 9½ 1 11½ 1 11½	s. d. 1 4½ 1 4 1 5½ 1 5½ 1 9½ 1 11½ 1 11½	
1938-39*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1939-40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1940-41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1941-42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1942-43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1943-44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1944-45†	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTES.—\* In May, 1938, and subsequently, prices were fixed by the Minister for Agriculture for milk collected at the producers' premises or at an agreed collecting station. Varying prices were fixed according to the distance between the point of collection and the purchaser's registered premises.

† An alteration in the periods was made in the year 1944-45, the month of July being added to the August-September period for price-fixing purposes.



## APPENDIX G

### PRICES OF FRESH MILK (OTHER THAN HIGHEST GRADE): DUBLIN SALE DISTRICT

[illegible]



## APPENDIX G—continued

## PRICES OF FRESH MILK (OTHER THAN HIGHEST GRADE): DUBLIN SALE DISTRICT—continued

Prices per Gallon	1942-43			1943-44			1944-45		
	1/5/42 31/7/42	1/8/42 30/9/42	1/10/42 30/4/43	1/5/43 31/7/43	1/8/43 30/9/43	1/10/43 30/4/44	1/5/44 30/6/44	1/7/44 30/9/44	1/10/44 30/4/45
Producer to Wholesaler (Minimum Prices)	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Producer to Retailer... (Minimum Prices)	0 11½	1 3½	1 9½	1 1	1 6	2 0	1 3	1 6	2 0
Maximum Retail Prices	1 1	1 5	1 11	1 2½	1 7½	2 1½	1 4½	1 7½	2 1½
Bottled Delivered: Per Gal. ...	2 2	2 6	2 10	2 4	2 10	3 2	2 6	2 10	3 2
„ Pint ...	0 3¼	0 3¾	0 4¼	0 3½	0 4¼	0 4¾	0 3¾	0 4¼	0 4¾
Margin ...	1 2½	1 2½	1 0½	1 3	1 4	1 2	1 3	1 4	1 2
Loose Delivered: Per Gal. ...	2 0	2 4	2 8	2 2	2 8	3 0	2 4	2 8	3 0
„ Pint ...	0 3	0 3½	0 4	0 3¼	0 4	0 4½	0 3½	0 4	0 4½
Margin ...	1 0½	1 0½	0 10½	1 1	1 2	1 0	1 1	1 2	1 0
Loose Not Delivered: Per Gal. ...	1 8	1 10	2 4	1 8	2 2	2 8	1 10	2 2	2 8
„ Pint ...	0 2½	0 2¾	0 3½	0 2½	0 3¼	0 4	0 2¾	0 3¼	0 4
Margin ...	—	—	—	0 4½	0 5½	0 5½	0 4½	0 5½	0 5½
Maximum price to Retailers (Dept. of Supplies) Order Wholesalers' Margin	—	—	—	1 3½	1 8½	2 2½	1 5½	1 8½	2 2½
	—	—	—	0 2½	0 2½	0 2½	0 2½	0 2½	0 2½



## APPENDIX H

## STATEMENT SHOWING PRICES OF HIGHEST GRADE MILK AND ALSO COMPARISON OF SUCH PRICES WITH THE PRICE OF ORDINARY MILK BOTTLED AND DELIVERED.

Period	Highest Grade Milk per Pint			Bottled Milk per Pint, Delivered (Dublin)			Differential Highest Grade and Ordinary Milk
	May/July	Aug./Sept.	Oct./Apl.	May/July	Aug./Sept.	Oct./Apl.	Per Gallon
1938-39...	d. 3½	d. 3½	d. 4	d. 3	d. 3	d. 3½	d. 4
1939-40...	3½	4	4	3	3½	3½	4½ <sup>6</sup> <sub>8</sub>
1940-41...	4	4½	4½	3½	3½	3½	4½ <sup>6</sup> <sub>8</sub>
1941-42...	4	4½	4½	3½	3½	3½	6½ <sup>6</sup> <sub>8</sub>
1942-43...	4	5	5	3½	3½	4½	6½ <sup>6</sup> <sub>8</sub>
1943-44...	5	5	5½	3½	4½	4½	7½ <sup>6</sup> <sub>8</sub>
1944-45...	May/June 5	July/Sept. 5½	5½	May/June 3½	July/Sept. 4½	4½	7½ <sup>6</sup> <sub>8</sub>



## APPENDIX I

## RECOMMENDATIONS REGARDING AMENDMENTS TO THE MILK AND DAIRIES ACT, 1935, AND REGULATIONS MADE THEREUNDER.

## (a) AMENDMENTS TO THE ACT

Number of Section and Description	Proposed Amendment	Observations
6. Definitions ...	Amend this section to provide for the inclusion of a definition of "bacteria" for the purposes of the Act.	Reference paragraph No. 265 of this Report.
20. Temporary exclusion of certain dairymen from Part II of the Act.	Amend this section to provide that Part II of the Act shall apply to producers of milk from whom creameries, holding special designation licences, receive milk for sale under such licence.	Reference paragraphs No. 232 and 233 of this Report.
30. Temporary exclusion of certain dairymen and dairies from Part III of the Act.	Amend this section to provide that Part III of the Act shall apply to producers of milk from whom creameries, holding special designation licences, receive milk for sale under such licence.	Reference paragraphs No. 232 and 233 of this Report.
42, 44, 46 and 48. Prohibition of sale of infected milk or milk exposed to infection.	Amend these sections to provide that they will be extended to cover "the exposing or offering for sale of milk."	Amendment of these sections was the subject of evidence before the Tribunal, tendered on behalf of the Dublin Corporation, indicating defects in these sections of the Act.
52. Duty of bacteriological examiner.	Amend this section by addition of provision that the bacteriological examiner shall be deemed to have examined and tested each sample of milk in the prescribed manner where he certifies that the examination and test have been carried out under his general supervision and direction. Amend section, also, to empower Minister to prescribe a form of bacteriological certificate.	Reference paragraph No. 266 of this Report.



Number of Section and Description	Proposed Amendment	Observations
54 and 57. Power to take samples of milk, and division of, and dealings with, samples.	Amendment of these sections is necessary to ensure that full effect be given to the purposes of the Act as regards the taking of samples.	Amendment is necessary because the Act at present does not provide for a satisfactory procedure for the taking of samples of milk when sold, otherwise than by retail sale, in containers of small capacity. This matter was subject of evidence tendered on behalf of the Dublin Corporation.
58. Service and evidence of bacteriological certificate.	Amend this section to provide that the party desiring to have the bacteriological examiner called as a witness should arrange therefor and notify the other party. A proviso should also be added that in proving the bacteriological certificate it will be sufficient for the bacteriological examiner to establish that the test was carried out under his general supervision and direction.	Reference paragraph No. 266 of this Report.
60. Sale of milk in public places.	Amend section to provide for addition of " or at any premises " after " public place."	This matter was the subject of evidence tendered to the Tribunal on behalf of Dublin Corporation.
General.	Recommended that hotels and restaurants as purveyors of milk should have their premises brought within the provisions of the Act.	This matter was the subject of evidence tendered on behalf of Kildare County Council.
General.	Act should be amended to provide that sanitary authorities in the Sale District are empowered to take and examine samples of milk produced or sold outside their areas, where such milk is intended for delivery in the Sale District, irrespective of the place where the contract of sale for such milk was made. Where such milk is found, on test, defective, the sanitary authorities should be enabled to prosecute the vendor.	This was the subject of evidence before the Tribunal submitted on behalf of Dublin Corporation.



## (b) AMENDMENTS TO MILK AND DAIRIES REGULATIONS, 1936

Number of Article and Description	Proposed Amendment	Observations
8. (2) & (3) General duties of dairyman.	Where there is <i>prima facie</i> evidence that an offence has been committed, proof that he has taken all reasonable steps to prevent commission of offence should be produced by dairyman.	These amendments were the subject of evidence tendered to the Tribunal on behalf of Dublin Corporation.
22. Vessels and appliances used with milk.	Recommend that regulations be amended to provide that dairyman should satisfy sanitary authority that he has necessary facilities for providing boiling water or steam for cleansing of utensils.	
24. Offensive substances in milk stores and milk shops.	Recommend addition of words "or sold" after "kept" in this article.	
General.	Recommended that consideration be given to a standardised or prescribed form of clinical examination of cows.	This was the subject of evidence tendered to the Tribunal on behalf of Dublin Co. Council.

## (c) AMENDMENTS TO MILK AND DAIRIES (MILK SAMPLING) REGULATIONS, 1936

	Proposed Amendment	Observations
General.	Regulations should be revised with a view to permitting the use of improved sampling apparatus.	Reference paragraph No. 267 of this Report.



APPENDIX J

TABLE A.—ESTIMATED COST OF TUBERCULIN TESTING FOR PERIOD COVERING LAST FOUR YEARS

PRODUCERS WHO BUY COWS "SUBJECT TO TEST"

	Approx. size of Herd	Initial Test			Two Months' Test		Total Additional Expense and Loss Reactors Two Months' Test	Normal 6-Months' Test		Total Additional Expense buying subject to test and Loss on Reactors	Veterinary Expenses, testing only	Cost Tuberculin Testing including loss on Reactors, Additional Expenses, buying subject to test and Veterinary Expenses testing	Average annual cost per Cow in Herd
		No. Cows tested	No. of Reactors	No. Cows bought	Additional Expense buying subject to test, estimated £5 per Cow	No. of Reactors.	Loss Estimated £20 per Cow	No. of Reactors	Loss Estimated at £10 per Cow				
A. 4 years ... Average ...	230	463 116	46 12	417 104	£ 2,085 521	9 2	£ 180 45	25 6	£ 250 62	£ 2,515 629	£ 790 197	£ 3,305 826	£ s. d. 3 11 10
B. 4 years ... Average ...	140	594 148	101 25	493 123	£ 2,465 616	29 7	£ 580 145	70 18	£ 700 175	£ 3,745 936	£ 748 187	£ 4,493 1,123	8 0 5
C. 4 years ... Average ...	100	426 106	109 27	317 79	£ 1,585 396	25 6	£ 500 125	45 11	£ 450 112	£ 2,535 634	£ 484 121	£ 3,019 755	7 11 0
D. 4 years ... Average ...	165	No Rec ords	304 76	304 76	£ 1,520 380	9 2	£ 180 45	27 7	£ 270 67	£ 1,970 492	£ 549 138	£ 2,519 630	3 16 4
E. 4 years ... Average ...	50	No Rec ords	29 7	29 7	£ 145 36	9 2	£ 180 45	3 1	£ 30 7	£ 355 89	£ 240 60	£ 595 149	2 19 7



## APPENDIX J—continued

TABLE B.—ESTIMATED COST OF TUBERCULIN TESTING FOR PERIOD COVERING LAST FOUR YEARS

PRODUCERS WHO BUY COWS IN THE ORDINARY MANNER, THAT IS, NOT SUBJECT TO TEST

	Approx. size of Herd	No. of Cows bought	Initial Test		Two Month Test		Total of Initial and 2-Month Test		Normal 6-Months' Test		Total of all Tests		Veterinary Fees for testing only	Cost of Tuberculin Testing including Loss on Reactors and Veterinary Fees for testing	Average annual cost per Cow in Herd
			No. of Reactors	Loss Estimated at £5 per Cow	No. of Reactors	Loss Estimated at £20 per Cow	No. of Reactors	Loss per Cow	No. of Reactors	Loss Estimated at £10 per Cow	No. of Reactors	Loss			
F. 4 years Average	190	297 74	65 16	325 80	31 8	620 155	96 24	945 236	16 4	160 40	112 28	1,105 276	£ 720 180	£ 1,825 456	£ 2 8 0
G. 4 years Average	75	290 72	77 19	385 96	20 5	400 100	97 24	785 196	37 9	370 93	134 33	1,155 289	400 100	1,555 389	5 3 9
H. 4 years Average	90	220 55	62 15	310 77	14 4	280 70	76 19	590 147	16 4	160 40	92 23	750 188	242 60	992 248	2 15 2

Above information supplied by the Highest Grade Milk Producers' Association (May, 1945).







Houses of the Oireachtas